Miranda House

University of Delhi

Self Study Report 2016

Submitted to

National Assessment and Accreditation Council
Bangalore

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MIRANDA HOUSE
मिरांडा हाऊस

Dr Pratibha Jolly
Principal

Declaration by the Head of the Institution

I certify that the data included in this Self-study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Pratibha Jolly

Signature of the Head of the institution

Place: Delhi
Date: 16 June 2016

MIRANDA HOUSE
मिरांडा हाऊस

Dr Pratibha Jolly
Principal

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This is to certify that Miranda House, University of Delhi fulfils all norms

1. Stipulated by the affiliating University and/or
2. Regulatory Council/Body [such as UGC, NCTE, AICTE, MCI, DCI, BCI, etc.] and
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Pratibha Jolly

Principal/Head of the Institution

Place: Delhi
Date: 16 June 2016

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Contents

Preface		iv
Abbreviations		v
Executive Summary: SWOC Analysis of the Institution		1
Profile of the Institution		9
Criteria-Wise Analytical Report		
Criterion I	Curricular Aspects	19
Criterion II	Teaching-Learning and Evaluation	45
Criterion III	Research, Consultancy and Extension	89
Criterion IV	Infrastructure and Learning Resources	131
Criterion V	Student Support and Progression	164
Criterion VI	Governance, Leadership and Management	195
Criterion VII	Innovation and Best Practices	222
Evaluative Reports of the Departments		
Social Science and Humanities		
x Department of Bengali		243
x Department of Economics		249
x Department of Elementary Education		263
x Department of English		273
x Department of Geography		284
x Department of Hindi		299
x Department of History		310
x Department of Philosophy		323
x Department of Political Science		335
x Department of Sanskrit		349
x Department of Sociology		357
Sciences		
x Department of Botany		369
x Department of Chemistry		384
x Department of Computer Science		396
x Department of Mathematics		405
x Department of Physics		416
x Department of Zoology		435
x Department of Physical Education		451
Supporting Documents		457

NAAC Steering Committee

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Report

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Dr. Mallika Pathak	Chemistry	
Dr. Janaki Subramanyan	Botany	
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Preface

Miranda House, College for Women at University of Delhi feels deeply privileged to participate in the process of accreditation by NAAC. The process of preparing the Self Study Report has been intensely reflective and has triggered a 360^0 look at all aspects of college life since its inception and unleashed brainstorming at all levels. It has meant delving into the college archives, overlaying the rich montage of current activities and carving the plans for a future. The institutional memory at the college is as strong as its traditions. Even as the college moves forward, it casts a backward glance to check how the new trajectory dovetails with the old and is fired by its mission and past accomplishments. Close to completing seven decades of excellence, the college views its SSR as a landmark document that celebrates and archives its journey so far. The last decade has been particularly rewarding as, in keeping with the times, the college has strengthened its infrastructure and all facilities; realigned its teaching-learning programmes and introduced a culture of research and innovation. It has also seen a major turnaround in its demographic profile. About two thirds of the faculty has joined the college in the new millennium, making it one of the youngest colleges on the campus. They have had sufficient time to create new benchmarks and set new milestones. Proud of its past and committed to creating a bright future, the college takes great pride in this continuum of excellence.

The SSR has helped the college to evolve a new vocabulary and set in motion many new practices. Already a deeply bonded, self organized community of learning, it has set new standards for collaborative work. The Steering Committee enjoyed free wheeling conversations and in depth discussions that often covered the whole landscape of education in the country. This perspective was extremely important to position the college on the global map, weaning it away from the usual university centric focus. All departments undertook a major reflective exercise of probing and deconstructing their own histories and practices. Reports bordering on tomes were created. Best practices were shared across departments, critically evaluating current practices and mapping the future. Quality Assurance was the common denominator in all these discussions. This led to organic evolution of an Internal Quality Assurance Cell at the College. Its mandate is to thoroughly evaluate the college through a broad lens and a detail-oriented approach, to reflect upon and examine the ways in which the college engages with the defined standards, and to assess institutional effectiveness. The college would like to capitalize on its achievements and use these as a catalyst for the future.

The task of preparing the Self Study Report was onerous and taken up by another group. It required sifting through enormous data and finding innovative ways of presentation while retaining a storyline that would capture the essence of manifold of activities and the underpinning sense of mission. On behalf of the college, it is my privilege to thank them for producing a report that will be a valuable archival resource. It will also motivate and inspire each member of the community to reaffirm their commitment to the larger cause of education.

Pratibha Jolly

ABBREVIATIONS

ACBR	Dr. B.R. Ambedkar Centre for Biomedical Research
ADDRC	Amba Dalmia Digital Resource Centre for Visually Challenged Students
AECC	Ability Enhancement Compulsory Course
AIESEC	*Association internationale des étudiants en sciences économiques et commerciales* (International Association of Students in Economic and Commercial Sciences)
AIIMS	All India Institute of Medical Sciences
ALAF	Australian Leadership Awards Fellowships
AMC	Annual Maintenance Contract
APS	American Physical Society
APU	Accelerated Processing Unit
ASAP	Additional Skill Acquisition Programme
ASHA	Accredited Social Health Activist
ASI	Archaeological Survey of India/ Australasian Society of Immunology
ASM	American Society of Microbiology
ASPEN	Asian Physics Education Network
ASSOCHAM	Associated Chambers of Commerce and Industry of India
ATBS	Association of Teachers in Biological Sciences
ATE	Accounting Technician Examination
AusAID	Australian Agency for International Development
AWS	Automated Weather Station
B.A. (H)	Bachelor of Arts (Honours)
BD India Pvt. Ltd.	Becton Dickinson India Private Limited
B.Ed.	Bachelor of Education
B.El.Ed.	Bachelor of Elementary Education
BHEL	Bharat Heavy Electricals Limited
BITS	Birla Institute of Technology & Science
BOYSCAST	Better Opportunities for Young Scientists in Chosen Areas of Science & Technology
BRS	Board of Research Studies
B.Sc. (H)	Bachelor of Science (Honours)
B.Tech.	Bachelor of Technology
CADD	Computer Aided Drug Designing
CARE	Cooperative for Assistance and Relief Everywhere
CAT	Common Admission Test
CATC	Combined Annual Training Camps
CBCS	Choice Based Credit System
CBSE	Central Board of Secondary Education
CCC	College Complaints Committee
CEERI	Central Electronics Engineering Research Institute
CEO	Chief Executive Officer
CERN	European Organization for Nuclear Research
CFAR	Centre for Advocacy and Research
CFL	Compact Fluorescent Lamp
CIC	Cluster Innovation Centre
CIE	Central Institute of Education

CIET	Central Institute of Education Technology
CII	Confederation of Indian Industry
CLRA	Centre for Legislative Research and Advocacy
CLRI	Central Leather Research Institute
CME	Continued Medical Education
CMO	Chief Medical Officer
CNI	Colonialism and Nationalism in India
COD	Chemical Oxygen Demand
CP	Comparative Politics
CPDHE	Centre for Professional Development in Higher Education
CPO	Civil Preventive Orders
CPR	Centre for Policy Research
CREST	Centre for Research and Education for Social Transformation
CRY	Child Rights and You
CSDS	Centre for the Study of Developing Societies
CSE	Centre for Science and Environment
CSEC	Centre for Science Education and Communication
CSIR	Council of Scientific and Industrial Research
CSR	Corporate Social Responsibility
CSSS	Centre for the Study of Social Systems
CTET	Central Teacher Eligibility Test
CV	Curriculum Vitae
CWDS	Centre for Women's Development Studies
DAAD	Deutscher Akademischer Austausch Dienst (German Academic Exchange Service)
DBFO	Design Build Finance Corporate
DBT	Department of Biotechnology
DCCC	Discipline Centred Concurrent Course
DDMA	Delhi Disaster Management Authority
DELNET	Developing Library Network
DLSA	Delhi State Legal Services Authority
DMRL	Defence Metallurgical Research Laboratory
DNA	Deoxyribonucleic Acid
DNYS	Diploma in Naturopathy & Yogic Sciences
DRC	Digital Resource Centre
DRDO	Defence Research and Development Organization
DRP	Disaster Research Programme
DRRM	Disaster Risk Reduction Management
DSC	Delhi School of Communication
DSE	Discipline Specific Elective
DSKC	D S Kothari Centre for Research and Innovation in Science Education
DST	Department of Science and Technology
DTU	Delhi Technological University
DU	University of Delhi
DULS	Delhi University Library System
DUWA	Delhi University Women’s Association
ECOSOC	United Nations Economic and Social Council
EFI	Environmentalist Foundation of India
ELPC	English Language Proficiency Course

e-LSl	e-Yantra Lab Setup Initiative
EMBL	European Molecular Biology Laboratory
EOC	Equal Opportunity Cell
ER	Essential Repeat
ERDAS	Earth Resources Data Analysis System
ERP	Enterprise Resource Planning
ESMAP	Energy Sector Management Assessment Programme
EYSD	Educating Youth for Sustainable Development
FICCI	Federation of Indian Chambers of Commerce and Industry
FIMSA	Federation of Immunological Societies of Asia-Oceania
FOSS	Free and Open Systems Software
FRI	Forest Research Institute
FSA	Foreign Students Association
FTP	Faculty Training Programme
FYUP	Four Year Undergraduate Programme
GATE	Graduate Aptitude Test in Engineering
GE	Generic Elective
GGSIPU	Guru Gobind Singh Indraprastha University
GIFA	Great Indian Football Action
GIS	Geographical Information System
GMAT	Graduate Management Admission Test
GMU	George Mason University
GNCT	Government of National Capital Territory of Delhi
GRE	Graduate Record Examination
GRIHA	Green Rating for Integrated Habitat Assessment
GWU	George Washington University
HBCSE	Homi Bhabha Centre for Science Education
HCL	Hindustan Computers Limited
HEP	Higher Education Policy
h-index	Hirsch index
HPCL	Hindustan Petroleum Corporation Limited
HRD	Human Resource Development
HRI	Harish Chandra Research Institute
HSSC	Health Sector Skill Council
IAPT	Indian Association of Physics Teachers
IAS	Indian Administrative Service
IASRI	Indian Agricultural Statistical Research Institute
IBS	ICFAI-Business School, Hyderabad
ICC	Internal Complaints Committee
ICCE	International Centre for Culture and Education
ICCR	Indian Council for Cultural Relations
ICCSR	Indian Centre for Corporate Social Responsibility
ICGEB	International Centre for Genetic Engineering and Biotechnology
ICHR	Indian Council of Historical Research
ICMR	Indian Council of Medical Research
ICPA	Indian Pollution Control Association
ICPE	International Commission on Physics Education
ICPO	Institute of Cytology and Preventive Oncology

ICRIER	Indian Council for Research on International Economic Relations
ICSSR	Indian Council of Social Science Research
ICT	Information and Communication Technology
ICTP	International Centre for Theoretical Physics
IDC	Interdisciplinary Concurrent Course
IDSA	Institute of Defence Studies and Analyses
IEG	Institute of Economic Growth
IFS	Indian Foreign/Forest Service
IGIB	Institute of Genomics and Integrative Biology
IGIPESS	Indira Gandhi Institute of Physical Education and Sports Science
IGNCA	Indira Gandhi National Centre for the Arts
IGNOU	Indira Gandhi National Open University
IGP	Indian Government and Politics
IICT	Indian Institute of Chemical Technology
IIM	Indian Institutes of Management
IIPA	Indian Institute of Public Administration
IISc.	Indian Institute of Science
IISER	Indian Institutes of Science Education and Research
IIT	Indian Institute of Technology
IJHCS	International Journal of History and Cultural Studies
ILLL	Institute of Lifelong Learning
IL & FS	Infrastructure Leasing & Financial Services
IMF	International Monetary Fund
INFLIBNET	Information and Library Network
INFONET	Information Network
INGAF	Institute of Government Accounts and Finance
INMAS	Institute of Nuclear Medicine and Allied Sciences
INSA	Indian National Science Academy
INSCR	Indian Network for Soil Contamination Research
INSPIRE	Innovation in Scientific Pursuit for Inspired Research
INTACH	Indian National Trust for Art and Cultural Heritage
IPCL	Indian Petrochemicals Corporation Limited
IPS	Indian Police Service
IPT	Indian Political Thought
IR	International Relations
IRS	Indian Revenue Service
ISBN	International Standard Book Number
ISCA	Indian Science Congress Association
ISI	Indian Statistical Institute
ISID	International Society for Infectious Disease
ISRO	Indian Space Research Organization
ISRD	Institute of Social Research and Development
IT	Information Technology
IUIS	International Union of Immunological Sciences
IUPAP	International Union of Pure and Applied Physics
IUSSTF	Indo-US Science & Technology Forum
IWMI	International Water Management Institute

JENESYS	Japan-East Asia Network of Exchange for Students and Youths
JIMS	Jagan Institute of Management Studies
JNCASR	Jawaharlal Nehru Centre for Advanced Scientific Research
JNU	Jawaharlal Nehru University
JSTOR	Journal Storage
KAUSHAL	Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood
KPMG	Klynveld Peat Marwick Goerdeler
LAN	Local Area Network
LCD	Liquid Crystal Display
LED	Light-emitting Diode
LIBSYS	Library Management, Automation Software System
LIGO	Laser Interferometer Gravitational-Wave Observatory
LISAA	Lady Irwin School Alumni Association
LPS	Law, Politics and Sociology (Department of University of Sussex)
LSE	London School of Economics and Political Science
M.A.	Master of Arts
M.B.A.	Master of Business Administration
M.C.A.	Master of Computer Applications
MEA	Ministry of External Affairs
M.Ed.	Master of Education
MGIEP	Mahatma Gandhi Institute of Education for Peace
MH	Miranda House
MHA	Ministry of Home Affairs
MHAA	Miranda House Alumnae Association
MHCC	Miranda House Cultural Council
MHRD	Ministry of Human Resource Development
MIHER	Max Institute of Health Education and Research
MI Lab	Miranda Instrumentation Lab
MIT	Massachusetts Institute of Technology
MNRL	Multidisciplinary Nanoscale Research Laboratory
MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MOOCS	Massive Open Online Courses
MoU	Memorandum of Understanding
M.P.Ed.	Master of Physical Education
MRC	Medical Research Council
M.Sc.	Master of Science
NAAC	National Assessment and Accreditation Council
NASA	National Aeronautics and Space Administration
NASI	National Academy of Sciences, India
NBHM	National Board for Higher Mathematics
NBT	National Book Trust
NCAER	National Council of Applied Economic Research
NCBI	National Centre for Biotechnology Information
NCBS	National Centre for Biological Sciences
NCC	National Cadet Corps
NCERT	National Council of Educational Research and Training

NCMAMS	National Conference on Microscopy & Advances in Material Sciences
NCR	National Capital Region
NCSTC	National Council for Science and Technology Communication
NCT	National Capital Territory
NCTE	National Council for Teacher Education
NEDF	North East Development and Finance Corporation
NET	National Eligibility Test
NGO	Non-Governmental Organization
NIAS	National Institute of Advanced Studies
NIC	National Integration Camp
NIDM	National Institute of Disaster Management
NII	National Institute of Immunology
NIIT	National Institute of Information Technology
NIOS	National Institute of Open Schooling
NIPFP	National Institute of Public Finance and Policy
NIPGR	National Institute of Plant Genome Research
NISCAIR	National Institute of Science Communication and Information Resources
NIT	National Institutes of Technology
NIUA	National Institute of Urban Affairs
NIUS	National Initiative on Undergraduate Science
NKN	National Knowledge Network
N-LIST	National Library and Information Services Infrastructure for Scholarly Content
NLSC	National Level Standing Committee
NMA	National Monuments Authority
NMEICT	National Mission on Education through Information and Communication Technology
NPL	National Physical Laboratory
NPTEL	National Programme on Technology Enhanced Learning
NRHM	National Rural Health Mission
NSD	National School of Drama
NSDC	National Skill Development Corporation
NSO	National Sports Organization
NSS	National Service Scheme
NUEPA	National University of Educational Planning and Administration
OBR	One Billion Rising
OMR	Optical Mark Recognition
ONGC	Oil and Natural Gas Commission
OPAC	Online Public Access Catalogue
OR	Operations Research
OSA	Optical Society of America
OSDD	Open Source Drug Discovery
OSS	Open Source Software
OTA	Officers Training Academy
PC-PNDT	Pre-Conception & Pre-Natal Diagnostics Techniques
PCR	Polymerase Chain Reaction
PDS	Public Distribution System

PET	Polyethylene Terephthalate
PFC	Patenting Facilitating Centre
PG	Post-graduate
PI	Principal Investigator
PIO	Public Information Officer
PMB	Plant Molecular Biology
POBE	Project Oriented Biological Education
POCE	Project Oriented Chemical Education
PPC	Project Purchase Committee
PPP	Public-Private Partnership
PUDR	People's Union for Democratic Rights
PwD	Persons with Disabilities
RAM	Random Access Memory
RCB	Regional Centre for Biotechnology
RCE	Regional Centre of Expertise
REALM	Resources for Enhancing Active Learning with Multimedia
RESCO	Renewable Energy Service Company
RIPE	Research and Innovation in Physics Education
RRCAT	Raja Ramanna Centre for Advanced Technology
RRI	Raman Research Institute
RTI	Right to Information
SAP	Self Appraisal Proforma
SCERT	State Council of Educational Research and Training
SCL	Semi Conductor Laboratory
SDS-PAGE	Sodium Dodecyl Sulfate Polyacrylamide Gel Electrophoresis
SEC	Skill Enhancement Course
SEWA	Self-Employed Women's Association
SIFE	Students in Free Enterprise
SJR	Scimajo Journal & Country Rank
SLET	State Level Eligibility Test
SNIP	Source Normalized Impact per Paper
SO	Section Officer
SOAS	School of Oriental and African Studies, University of London
SOL	School of Open Learning
SPIC MACAY	Society for the Promotion of Indian Classical Music and Culture Amongst Youth
SPIE	Society for Photo-optical Instrumentation Engineers
SQL	Structured Query Language
SSA	Sarva Shiksha Abhiyan
SSR	Self Study Report
STEM	Science, Technology, Engineering and Mathematics
SUEC	Students Union Executive Council
TEAL	Technology Enhanced Learning Environment
TED	Technology, Entertainment, Design
TERI	The Energy and Resources Institute
THSTI	Translational Health Science and Technology Institute
TIFAC	Technology Information, Forecasting and Assessment Council
TIFR	Tata Institute of Fundamental Research
TISS	Tata Institute of Social Sciences
TOEFL	Test of English as a Foreign Language

TSC	Thal Sainik Camp
TYUP	Three Year Undergraduate Programme
UDSC	University of Delhi South Campus
UG	Undergraduate
UGC	University Grants Commission
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDPI	United Nations Department of Public Information
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children's Emergency Fund
UNISDR	United Nations International Strategy for Disaster Reduction
USIC	University Science Instrumentation Centre
UWEC	University of Wisconsin, Eau Claire
VPCI	Vallabhbhai Patel Chest Institute
WiFi	Wireless Fidelity
WIN	Women's International Network
WPT	Western Political Thought
WUS	World University Service
WWF	World Wide Fund for Nature
YFLO	Young Ficci Ladies Organization
YUVA	Youth Unite for Voluntary Action

Executive Summary
SWOC Analysis of the Institution

EXECUTIVE SUMMARY

STRENGTHS

Legacy: Established at dawn of independence on 07 March 1948 by the then Vice Chancellor of University of Delhi, Sir Maurice Gwyer, Miranda House chronicles the history of women's education in India. Coincidentally, the Founder's Day just precedes the International Women's Day. The college has a rich legacy. Its creation provided a unique opportunity to young women for quality higher education. For many it was a dream come true. A generation of young women entered the portals of the college with the image of a new life opening up before them. They set for themselves high goals and ideals. They worked for a new society in which women would enjoy equal opportunity with men in professional and public fields. In this, they were aided by the founding faculty who were independent minded, and belonged to the select group of highly educated women in independent India with a deep concern for quality of education they imparted. They were also charged with a spirit of adventure, steeped in idealism, and committed to women empowerment and the task of building a nation. From its inception, all those associated with the college believed that they had been entrusted with the task of nurturing a tender sapling and help it grow to have strong roots. Proud of their mission as early pioneers, they worked with single minded devotion in setting the Miranda traditions. These attributes of total dedication have contributed in a large measure to the position of distinction occupied by MH. Over near seven decades of its existence, MH has grown from strength to strength, continuing to provide an atmosphere of high academic excellence and rich cultural activities to its students. It has established a niche for itself amongst the globally recognized premier institutions of higher learning.

University Campus College: Being a college established and maintained by the University, Miranda House has a special place among the women's colleges of the University of Delhi. Its location in the heart of the University Campus, and its close interaction with the various Departments of the University and other campus colleges gives it a unique advantage. Although a women's college, it is not a cloister. It welcomes interaction with other educational organizations across the country, and occasionally the world, actively engaging both men and women in all its extramural activities, competing with the best on equal terms.

Distinguished Alumnae List: The extremely distinguished list of alumnae imparts a sense of confidence and pride in students. They view themselves as torchbearers of great traditions. This propels them to explore uncharted territory, think unfettered, and bend traditions in a bid to create a better world, especially for women.

Liberal Arts and Basic Sciences: Miranda House offers liberal education in social sciences, humanities and basic sciences to more than 3500 students. Its strength lies in the sweeping range of courses at both undergraduate and postgraduate level. By design, the college has focused on providing degree programmes in basic disciplinary domains in preference to those with early specialization or a vocational thrust. The distinctive feature is the strong emphasis on academic rigour with crosscutting interdisciplinary explorations that meticulously widen the horizon and connect the world of knowledge to the world of praxis. This has proved to be a good strategy as students armed with sound conceptual foundations are able to pursue many divergent

and nonlinear paths, critical for innovative pursuit of knowledge and professional careers in the higher echelons. This is especially true as boundaries between disciplines have become fuzzy but require mastery over the fundamentals, and capacity for in depth learning in emerging areas.

Exceptional Community of Students, Faculty and Staff: The stimulating active learning environment of the college and its eclectic reputation attracts young women with exceptional desire to make a difference to the world. The demographic profile of the college is increasingly that of the country, reflecting the rich socio-cultural diversity. About 60% students are from outside Delhi. Many are first generation learners. The number of those from remote areas and economically weaker sections is on the rise. Having met the high eligibility criteria of admission to the college on their own merit, they dream of a bright future. The college takes great pride in providing culturally sensitive, inclusive and equalizing educational environment that upholds the core values of respect for diversity. Strong foundations are provided by dedicated and responsive faculty of scholars who assist each student fulfill aspirations and reach milestones. Indeed, MH faculties are known for their meritorious profile, versatile talent, and dedication to the cause of liberal education. The administrative and support staff is also competent, meticulously trained and able to keep up with the fast pace of highly diversified, action packed academic and cultural calendar that is the hallmark of the college. Together, the faculty, students, support staff and other stakeholders constitute a unique group that elevates Miranda House to being more than a college. It is best described as a micro cosmos, a self learning organization, a closely bonded, networked community of practice that works towards leveraging the best the world of education has to offer.

Heritage Building: An important facet of the unique enabling environment is the charm of the Miranda House campus itself, hailed as amongst the most aesthetic and well maintained. Originally designed by the renowned architect Walter George, the college is built in warm red brick with long, cool spacious corridors. The sprawling well maintained lawns, the rich plant diversity add to its appeal. The unique architecture of the hostel building makes it a cinematographers delight and inspires all round creativity. Indeed it is a privilege to spend foundational years in the halls of residence. As the college has grown, several new buildings have been added in consonance with the original design. Special care has been taken to preserve the heritage of the pristine architectural glory.

State-of-Art Infrastructure: The advantage of a beautiful building is redoubled by the exceptional state-of-art infrastructure and modern facilities. The college has a strong IT backbone. The entire campus is on NKN and WiFi enabled. The library has the most advanced digital facilities and provides access through Web OPAC. The student computer ratio is 2:1. There are several Digital Resource Centres, innovatively designed Learning Studios, Project-based Learning Labs, and Seminar facilities augmented by a Student Activity Centre. The science departments have sprawling wings and large state-of-art laboratories with equipment in multiple sets required for teaching large classes and additionally, at advanced level for projects and research work, rarely found in UG institutions. All facilities are shared and augment resource access of all departments.

Student Centric Teaching-Learning Environment: The defining attribute of excellence at Miranda House is the quality of its teaching-learning programmes that are not restricted only to the classroom but include the staggering range of enrichment activities. Although MH functions within the constraints of the overarching curricular framework prescribed by the parent university, it exercises its relative autonomy to create uniquely enabling experiences for the student to help each one accomplish the generic goals of education, and specific course objectives and learning outcomes. Teaching-learning is student centric, highly interactive and innovative, blending a variety of methods including ICT as deemed suitable. Tutorials and continuous assessment are used to identify students' learning difficulties and special needs so that no student is left behind and receives adequate support through remedial and bridge courses. Enhancement of language proficiency and communication skills through specially designed courses is high priority.

Skill Development and Contemporary Value Add-on Courses: All departments organize vibrant beyond the class enrichment programmes to consolidate learning and introduce students to the frontiers of knowledge and application. MH has strong linkages with highly acclaimed scholars and leverages its vast network with other organizations and institutions across all sectors. To add value to the curriculum, interdisciplinary enquiry is encouraged. MH also offers several Add-on Courses in areas of contemporary interest, such as Bioinformatics and *in Silico* Medicine; Medical Biotechnology; Green Chemistry; and Operations Research. These help build competencies for new domains of knowledge and the future of work in a globally connected world. In response to national mission on Skill development for youth, MH has introduced several courses that cater to student diversity in collaboration with the National Skill Development Corporation (NSDC). On the other end of the scale, MH nurtures its gifted and advanced learners. It runs the King's College International Sumer School in Delhi at MH to provide exposure to new pedagogic approaches adopted by international faculty. Students are admitted to reputed universities based on MH's reputation. MH has agreements for bilateral exchange with several global institutions and is fast moving towards internationalization.

D S Kothari Centre for Research and Innovation in Science Education: MH has established a strong research culture. In 2008, DST invited MH to set up the DSKC in project mode. The entire science faculty became associated with this initiative to set up state-of-art laboratories, initiate UG research and science education outreach activities. The one week long DST INSPIRE Mentorship Programme organized each year for more than 250 top one percentile school students from about 40 schools, with active help by faculty and hundred UG mentors is highly regarded. It has been showcased by the government to international visitors and policy makers, such as a delegation led by the Senior Advisor to President Obama on Science and Technology. Nobel Laureates Dr. Venkataraman Ramakrishnan and Sir Paul Nurse have addressed this gathering. The 6-week long Summer Camp *Flavor of Research: Investigative projects in multidisciplinary contexts* draw students from across the colleges of DU and across the country.

Advanced Research Laboratories: The enhanced facilities have given a head start to research by faculties and they have used initial work as basis for setting up research in frontier areas, with award of substantial grants from funding agencies to the tune of Rs.2446.20 lakh. The college was invited by CSIR to set up the Open Source Drug

Discovery (OSDD) programme. Five science departments have received grants under the DBT Star College Scheme. The college has been awarded 22 DU Innovation Projects and 3 DU Star Innovation Projects with funding of Rs. 330.95 lakh since 2011, which is amongst the highest for any college. Some of these have received awards. Dr. Monika Tomar, Department of Physics was the only college teacher to receive the Teaching Excellence Award on the DU Annual Day in May 2016. With many peer reviewed publications to her credit in the frontier area of Material Science, she has applied for two patents.

Vibrant Co-curricular and Extracurricular Activities: At the heart of Miranda House are the hallmark vibrant co-curricular and extracurricular activities that keep the college suffused with energy and make it the cradle of leadership. It is through these self propelled forums that students develop soft skills and network with students of other academic institutions in the league, not just in DU and the country but globally. The NOS, NCC and NSS volunteers are the pride of the college. Extension activities link the college to the world of work and communities. KPMG sponsored *Enactus* team of students has exemplary social entrepreneurship projects that are steering marginalized women communities towards economic self reliance. The Entrepreneurship Club is creating a new culture with students conceptualizing their own Start Ups and Business Plans. The Cultural Societies at MH have always been strongly competitive and bring laurels. Theatre is the voice of the social conscience as students often choose women centric themes, script, direct and produce in addition to acting. The Parliamentary Debate *Manzar* attracts the best debaters from across South Asian Countries. On one occasion the final debate was live telecast by NDTV. The *Zenith* Model UN is spectacular in its intellectual depth and oratorical elegance.

Environment Consciousness, Social Responsibility and Leadership: It is the socially empowering societies that give to MH its unique identity and impact student lives as responsible citizens. MH Vatavaran, the Environment Society, has given the *Green Miranda, Clean Miranda* campaign a tangible outcome. MH is a leader in solid waste management with its own Compost Plant and Paper Recycling Plant that also produces high quality hand-made paper and fashions them into products. The college has been awarded the DU Star Innovation *Project 3R: Reduce, Reuse, Recyle* with a grant of Rs. 40.88 lakh in recognition of its research efforts in this direction. Under the Swachh Bharat Abhiyan, National Institute of Urban Affairs brings Municipal Commissioners and Officers to visit the MH Plants as example of best praxis.

Inclusive Education and Women Empowerment: The Equal Opportunity Cell, the forum for North East Students, *Lakshita*, the Enabling Society and the Women Development Cell are the four pillars supporting the inclusive edifice of the college. With great sensitivity, they enable students to overlay a new identity, that of the institution, irrespective of their background. This new identity empowers and gives them innate confidence. The Visually Challenged students of MH have year after year swept the Competitive Sports Awards in prestigious para events sending a strong message that there are no impediments and no limit to what a MH student can achieve. WDC in particular ensures that students have a forum for voicing their concerns and can seek timely help when distressed. It leads several campaigns, foremost the international campaign One Billion Rising (OBR) on violence against women. Proud to be a Women's College, MH addresses directly issues related to

Gender, Human Rights and Diversity. It ably fulfills its mission of working towards building an equal world for women, launching them on unique career trajectories.

Engaged Citizens and Leadership Roles: MH's success in its mission is gauged by the illustrious alumnae list, difficult to match by any other educational institute in the same league. It does not shy away for its social responsibility in producing engaged citizens. It is the only college that feels that to produce leaders for the country, it has to allow students to take intellectual risks and experience the tumult of Indian politics. Then it is the rare Women's College that is a part of Delhi University Students Union and does not shy away from taking strong stands for betterment of the system. Its belief that women should hone their merit and will power to lead from the front and head political organizations, corporate houses, Research and Development institutions, especially in the rarefied fields of higher academia and the sciences translates into reality. It is this reaffirmation of faith in women and its own dedication that gives to MH its formidable reputation and credibility.

WEAKNESSES

Systemic Constraints: As a constituent college of DU, MH shares the preeminence as well as the systemic weaknesses of not just the parent university, but the educational ecosystem of the country. As the country makes rapid economic progress, access to higher education is seen as extremely important. The young students from across the country aspire to study at reputed institutions such as at MH. Strongly committed to the cause of women empowerment and also the task of nation building, the college considers itself duty bound to convert each systemic weakness and difficulty into an opportunity for finding constructive solutions.

As a reputed institution, MH is well aware that it cannot afford to be complacent and rest on its laurels. Well established traditions can often become an impediment to progress. To retain its cutting edge, the college remains reflective and responsive to the paradigmatic changes in education, and in particular the needs of the new generation of students. In order to continuously raise the bar and achieve high standards, it identifies and addresses dynamically its situational weaknesses.

As part of a large system, MH faces several problems. The admission policy has inherent fault lines. Even when the demand-supply ratio is high, the policy mandates that every student who meets a declared cutoff or entry level percentage should be admitted. This often leads to over admission which stretches all resources.

Curricular Constraints: There are curricular constraints on account of the prescribed curriculum. Pertinent changes can be affected only through the university system, following procedures that are often tedious. The college feels there should be more interdisciplinary opportunities. There is a felt need for introducing more application courses and those of contemporary interest. These are offered as non-credit, self financing, short duration courses certified by the college. Although the college leverages the relative autonomy in design and delivery of these high quality courses, offered in collaboration with experts drawn from other institutions, the outreach can be scaled up only when these can be placed on the formal platter of credit courses.

Lead-Lag in Policy Implementation: The lead-lag between policy and its implementation is pervasive. Faculty recruitment is often much delayed due to reasons beyond control. To ensure there is no shortfall of faculty, the college appoints *ad hoc* and guest faculty. Although in interest of organization of teaching-learning, arrangements are made in a timely manner, the system is inherently not very stable. Many teachers tend to teach as they were taught, often by traditional methods. Student centric teaching requires a different orientation. With large scale adoption of ICT and creation of Technology Enabled Learning Environment in the college, continuous professional development of all teachers, including the *ad hoc* and guest faculty is a vital requirement, not always fulfilled to satisfaction.

OPPORTUNITIES

Education for Globally Connected Millennium's Generation: These are exciting times for the college as it is well prepared to meet the educational needs of the millennium generation that will enter its portals in 2017. It is ready to leap frog to the future of education that will leverage diverse technologies to build communities of globally connected learners. These are also exciting times for the young students as irrespective of their demographic background, inclusive liberal education at MH will throw open for them a world full of opportunities with unprecedented range of career choices to match their individual aspirations. It will also empower them as young women capable of overcoming all barriers to build successful professional and personal lives; to be achievers and leaders with capacity to give wings to their dreams.

Technology Enabled Active Learning Environments: Having built an excellent ICT infrastructure and deployed blended learning, the college is now focused on how best to leverage the opportunities offered by the National Knowledge Network and the full potential of connectivity. Faculty and students increasingly make discerning use of MOOCs and lessons available from the best institutions across the world, integrating these in a structured manner to complement and supplement the existing courses. Online transnational collaborations have become feasible. MH offered a 1- semester Add-on Course titled Rethinking the Obvious: Examining the Rhetoric of Development in collaboration with George Washington University, USA, that was designed cooperatively entirely through videoconference calls; ran almost in tandem at the two institutions; and the student cohorts collaborated online on projects. The success of this model has opened up enormous possibilities.

Linkages, Networks and Collaborations: The college is networked more than ever before through various enrichment activities with other organizations in the academic, corporate and social sectors. The Add-on courses have cooperative teaching by experts from these organizations. There are formal agreements for cooperation such as the *Science Setu* Programme with National Institute of Immunology (NII) where scientists from the premiere research institution volunteer to mentor the undergraduates through lectures and other interactive programmes, providing access to advanced research laboratories. The Career and Education Advancement Centre is using more effective channels for creating enhanced industry interactions, internship and apprenticeship opportunities. The college is registering for these services with startups matching student interest and merit to opportunities available across sectors.

Innovation, Research and Entrepreneurship: With increasing emphasis on project-based learning, Innovation Projects, UG Research and Advanced Research Programmes at the college, students have a head start. Faculty and students are forging productive collaborative teams, increasingly availing opportunities to present their work at seminars and conferences, and focusing on producing novel work publishing it in peer reviewed journals. The eye is on patents. MH students are tuned in to the Digital India, Start up India, Stand Up India initiatives of the government. Many have started their own entrepreneurial ventures soon after leaving college, such as *Ghoomophiro.com* and *Wishberry*. The range of sectors on which young alumnae are leaving a mark is a matter of great pride for the college.

CHALLENGES

Rapidly Changing Educational Landscape: The higher education system in the country is undergoing unprecedented transformation. As a top ranked central university, DU and its premier colleges are at the vanguard of innovation and change, as also key partners in the process of rebooting higher education. While MH upholds modernization of antiquated educational systems and is committed to the national agenda on excellence, equity and expansion of higher education, it often experiences the challenge of inherent contradictions in implementation. These arise because of lead-lag between the adoption of change and the preparedness of the systems on ground to carry out implementations without compromising on quality.

Rapidly Changing Demographic Profile: There are challenges that arise from uneven quality of educational background of students at entry level despite them meeting the eligibility criteria. There is a felt need for normalization of marks awarded by different senior secondary boards; changes in policy so that scholastic talent and not marks are the criteria for admission. Diversity in academic standards, variable pre-requisite academic preparation, and deficits in language proficiency require concerted remedial action. Rising aspirations and heightened student mobility across the country that makes the young to gravitate towards urban centres of excellence requires strengthening of support structures. MH is the preferred college for a large number of outstation women. Only 10% can be provided on campus accommodation. Committed to security of all its students, MH proactively works towards creating safety networks. With changes in demographic profile, there is also need to raise student bursaries, and endowment funds for greater financial support.

Leveraging Full Potential of CBCS: Macro-level curriculum reform requires well thought out policies; micro-detailed courses of study; well-defined changeover of statutes, ordinances, rules and guidelines; and well-calibrated modification in all collateral processes. Foremost, these require adequate infrastructure, teaching-learning resources, and training of faculty so that the curricular changes are not merely accommodated but also efficiently assimilated by the community of stakeholders. Any shortfall on these counts prevents effective implementation to the detriment of the students. Specifically, over the last four years, the overarching framework of the degree programme has undergone radical changes. MH has tried its level best to uphold its legal and moral obligations in letter and in spirit, often in the face of great difficulties. With forbearance, each challenge has been converted into an opportunity. The college has used the intellectual capital of its own faculty to make up for lacunae detected in prescribed curriculum. Creative teaching-learning within the

classroom and enrichment activities beyond the classroom have ensured successful achievement of learning outcomes. With peer support and formal capacity building programmes, the faculty have been adequately motivated, oriented and professionally enabled to handle changes in the syllabi. Under CBCS, the college has leveraged the system to provide students maximum available flexibility in choice of courses. Proper monitoring and timely procurement has ensured students have the necessary course material. The college has taken a quantum leap in digital infrastructure to remain on the leading edge as a knowledge based community, leveraging e-resources. It has evolved as a networked community with *Learning Anytime Anywhere* as its motto. Its own proclivity towards converting the gardens, arcades and unconventional spaces into classrooms has helped the college to overcome the impediments of shortage of brick and mortar classrooms. The Wi-Fi enabled campus and excellent student-computer ratio has given the additional boost. Well trained in use of computer-based management systems, administrative staff has been able to provide glitch free logistical support.

MH views beyond the classroom activities as essential for nurturing talent and developing a sense of social responsibility, soft skills and leadership qualities. It also encourages UG research. Constraints on time and cognitive overload often prevents many students from taking benefit of all the opportunities provided. There is need to introduce Credits for co-curricular activities and also Research Credits so that education can become more student centric.

Leveraging Full Potential of Global Opportunities: With increasing globalization of education, MH has established bilateral exchange progammes with several foreign universities. However, pending implementation of credit transfer scheme and mobility, it is not possible for students to avail the full potential of the partnerships. MH then takes recourse to creating short duration bilateral exchange programmes. Students who cannot afford to travel abroad can experience international immersion through programmes wherein MH hosts the international visitors.

Enhancing and Maintaining Infrastructure: MH has ably overcome several major infrastructural crises in the last decade. The terrain is the lowest lying region of the university and has a high water table that has impacted existing construction and resulted in major degeneration of certain building blocks. The Principal's Residence declared unsafe in 2004, was reconstructed in 2010 with UGC grants. In 2011, a block of non teaching staff quarters was declared unsafe and 16 families had to be evacuated and accommodated in quarters borrowed from the SOL, DU. UGC has sanctioned funds for reconstruction of these quarters and work has been awarded. Other residential quarters for both, teachers and non teaching staff also require continuous maintenance for safe habitation. The work on construction of a new academic block was delayed due to MH's proximity to a protected heritage monument and challenges in procuring statutory clearances from civic agencies; the work is on in full swing. Once completed this building will be the first GRIHA rated green building in DU. In September 2015, structural faults were noticed in the auditorium and it is currently being repaired and retrofitted. MH has found technical solutions to these inherent problems by working relentlessly to meet all construction challenges; it has raised adequate funds and also used its own resources to undertake development and maintenance. MH takes pride that it continues to have the best infrastructure and state-of-art facilities.

Profile of the Institution

Miranda House
NAAC Self Study Report

Section B: Preparation of the Self-Study Report

1. Profile of the Constituent College

Name:	Miranda House		
Address	Patel Chest Marg, University of Delhi		
	City: Delhi	Pin: 110 007	State: Delhi
Phone	+91-11-27666983, 27667367, 27666201		Fax: +91-11-27667437
Email	principal@mirandahouse.ac.in office@mirandahouse.ac.in		
Website	www.mirandahouse.ac.in		

2. For Communication

Principal	Dr. Pratibha Jolly	
	Mobile:	+91-9811600386
	Email:	principal@mirandahouse.ac.in pratibha.jolly@mirandahouse.ac.in
Vice Principal	Dr. Purnima Roy	
	Mobile:	+91-9310094655
	Email:	purnima.roy@mirandahouse.ac.in
Steering Committee Coordinator	Dr. Manjari Kiran Srivastava	
	Mobile:	+91-9899228986
	Email:	ssr@mirandahouse.ac.in manjari.srivastava@mirandahouse.ac.in

3. Status of Institution

Affiliated	
Constituent College	✓
Any Other (specify)	

4. Type of Institution

(a) By Gender

i. For Men	
ii. For Women	✓
iii. Co-education	

(b) By Shift

i. Regular	✓
ii. Day	
iii. Evening	

5. Is it a recognized minority institution? No

6. Source of funding Government

7. a. Date of establishment of the college 7 March 1948

b. University to which the college is affiliated/ or which governs the college if it is affiliated University of Delhi

c. Details of UGC recognition

Under Section	Date, Month, Year	Remarks, if any
i. 02 (f)	01.01.1957	Supporting Documents page 515
ii. 12 (B)	01.01.1957	

d. Details of recognition/ approval by statutory/ regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

	Under Section/ Clause	Recognition/ Approval details Department Programme	Day, Month, Year	Validity	Remark
i.	14 (1) of NCTE Act 1993	NCTE approval of Four Year B.El.Ed. Course (sanctioned intake 35)	28.06.2005 page 516-517		
ii.	Clause 20 (1), Chapter 4 of AICTE Act 1987	AICTE one time special approval of Four Year B.Tech. Course (sanctioned intake 36)	Ex Post Facto approval from July 2013. page 518-519	Four Academic Years 2013-17	Only for one batch admitted under the erstwhile FYUP in 2013-14

8. Does the affiliating University Act provide for conferment of autonomy (as recognized by the UGC), on its affiliating colleges?

Yes ☐ No ☑

If yes, has the College applied for availing the autonomous status?

9. Is the college recognized

a. by the UGC as a College with Potential for Excellence (CPE)?

Yes ☐ No ☑

b. If yes, date of recognition: NA

c. For its performance by any other governmental agency? NA

d. If yes, Name of the agency: NA

e. Date of recognition: NA

10. Location of the campus and area in sq. mts

Location	Urban
Campus area in sq. m.	61160.86 sq. m.
Built up area in sq. m.	30062.03 sq. m.

11. Facilities available of the campus

- **Auditorium:** ✓

  The college auditorium is a unique facility. Recently it was discovered that due to aging, beams have developed structural faults. After scientific testing and expert advice, preliminary retrofitting and reinforcement work is going on. Proposals seeking a major grant for complete renovation including installation of air-conditioning have been submitted to various agencies. Before being declared unsafe, the auditorium had the following facilities:

  – Seating Capacity: 450
  – Area Size: 406 sq. m.

- Green Room with attached Washroom and Changing Room
- Stores for Stage Property, Lockers, Storage Cupboards
- Acoustic Paneling, Control Room, Theatre Quality Light and Sound System,
- Lecterns (02)
- High Luminosity 5000 Lumen XGA Projector
- Multimedia Display Screen (Size: 16' x 12'); Remote Controlled Automated Drop Down
- Internet Connectivity: WiFi and access to DU Servers through node
- 1 Main Entrance Door and 8 Side Entrance/ Exit Doors; Fire Fighting Equipment

- **Seminar Hall:** ✓
  This air-conditioned facility is the preferred venue for most events, be they lectures academic seminars, conferences, workshops, discussions, film screening, or other extra-curricular activities.
  - Seating Capacity: 125
  - Area Size: 122 sq. m.
  - Slightly elevated stage with conference table and chairs that comfortably seat a panel of five
  - High quality sound system with wall mounted speakers, conference table mikes, roving mikes, lapel microphone, provision for recording
  - Roof mounted high luminosity projection facility, drop down projection screen
  - Dedicated video-recording camera with tripod for fixture
  - Lectern incorporating RJ Connector to link laptop to multimedia projector and power outlet for charging
  - Buffer Corridors, White boards, Pin-up Boards, both inside and outside the hall.
  - Fire Extinguishers

- ***Heritage Hall*, Seminar and Extracurricular Activities Venue:** ✓
  It is used as a Learning Studio, furnished from time to time in accordance with needs of the activity being held.
  - Area Size: 201sq. m.
  - Seminar Seating Capacity: 200
  - Banquet Style Conference: Capacity of 150 with 10 Round tables seating 12 to 15 persons (In-house Furniture available; capacity can be increased to 200 with rented furniture).
  - Multimedia Projection, High Quality Sound System
  - Video Recording: As required using equipment available with college.

- **Student Activity Centre:**✓
  This spacious hall is again a Learning Studio used in a variety of ways. It is furnished to suit the need of any specific event.
  - Area Size: 299 sq. m.
  - Seminar Seating Capacity: 125
  - Banquet Style Conference: Capacity of 150 with 10 Round tables seating 12 to 15 persons (In-house Furniture available).

  - Multimedia Projection, High Quality Sound System,Video Recording: As required using unmounted equipment available with college.
  - Storage Section with Cupboards for property belonging to Cultural Societies in addition to furniture that is variously used etc.
- Sports Facilities: ✓
  - Play Ground:
  - Swimming Pool: ×
  - Gymnasium: There is a small Gymnasium facility with essential fitness equipment including Tread Mills, Exercise Bike, Weights etc.
- Hostel: ✓
  - Boy's Hostel: ×
    i. Number of Hostels: NA
    ii. Number of inmates: NA
    iii. Facilities available: NA
  - Girl's Hostel: ✓
    i. Number of Hostels: 01
    ii. Number of inmates: 366
    iii. Facilities available:
  - Rooms: 172 rooms on twin-sharing basis, 01 single room, 03 rooms with triple-sharing, 03 rooms with four-sharing. The latter two have with attached washrooms. Ergonomically designed furniture.
  - Toilet Blocks (17): Hygienic facilities, Geysers, Solar Heaters Pantry (7): Pantry in each block with Water Cooler, Refrigerator, Microwave Oven, Kettle, Induction Cooker
  - Industrial RO water supply for drinking and cooking purposes
  - Dining Hall: Seating capacity of 200; High Table for special guests
  - Dining Hall Kitchen: Fully equipped with industrial burner stoves, cookers, ovens, tandoor, automated grinders, mixers, dough kneader, vegetable peelers
  - IFB Industrial Dish washer
  - Launderette with 06 IFB Washing Machines and 06 IFB Dryers
  - Two Common Rooms with television and home theatre, Visitors Arcade
  - Reading Room, Digital Resource Centre, WiFi, Public address system
  - Two well furnished air conditioned Guest Suites
  - Hostel Office, Warden Residence, Counselor Room, Medical Unit with Doctor's Room and Sick Room
  - Dedicated round-the-clock security guards, sanitation and garden staff
- Working Women's Hostel: ✓
  i. Number of inmates: Currently Nil
  ii. Facilities: Two Resident Tutor's air conditioned rooms with attached toilet, pantry equipped with essential gadgets for single faculty or long duration women visitors
- Residential Facilities for Teaching and Non-teaching Staff: ✓
  - Principal Residence: ✓
  - Teaching Staff: On campus 20 flats
  - Non-teaching Staff: On Miranda House campus 16 flats; On DU campus 20 flats. A grant of Rs. 3 crore has been received from UGC for construction of 12 more flats on campus. The work has been awarded.

- Cafeteria: ✓
  - In addition to the main Cafeteria, other Food outlets are the Nescafe Kiosk, Pizza and More Outlet, Mother Dairy Kiosk, Quick Bite Kiosk at front gate, Hostel Night Dhaba, Hostel Tuck Shop run independently by resident students
- Health Centre:✓
  - Medical Unit managed by NuLife Hospital with provision of free medicine.
  - First Aid: ✓
  - Inpatient, Outpatient, Emergency Care facility: ✓
  - Ambulance: Tie up with WUS, NuLife and neighbouring hospital ✓
  - Health Centre Staff

Qualified Doctor:	Full Time		Part Time	✓
Qualified Nurse:	Full Time	✓	Part Time	

- Banking: ✓
  - On Campus State Bank of India, Miranda House Branch, ATM
- Post Office: ✓
  - Easy access to DU Post Offices(05 min walk); DU School of Open Learning (3 min walk)
- Book Shops
  - Easy access to University Cooperative Stores, Neighborhood Book Shops
- Transport Facilities to cater to need of students and staff: ✓
  - Swaraj Mazda 40 Seater Bus; Toyota Qualis
- Animal House: Not allowed. The facility has been dismantled.
- Biological Waste Disposal: ✓
- Generator or other facility for management/ regulation of electricity and voltage: ✓
  - Diesel Generator Set; Power rating 320 kVA.
- Solid Waste Management Facility: ✓
  - Compost Plant for converting kitchen and horticulture waste to good quality compost
  - Paper Recycling Plant producing high quality handmade paper and paper products
- Waste water management: ✓
  - Hydrophonic system using grey water from Laundrette installed as a pilot project
  - Hydrophonic system using grey water from Dishwasher and Hostel Kitchen installed as a pilot project
  - Innovative Anerobic Sewage Treatment Plant (STP) and Rain Water Harvesting System planned in New Academic Block under construction
- Water Harvesting: ×
  - Not recommended because of high subsoil water. Water recycling will be undertaken for the entire campus along with ongoing construction for New Academic Block.

12. Details of programmes offered by the college (Data for the current Academic Year 2015-16)

The College does not have any Integrated Programmes at PG Level, M.Phil., Ph.D., UG Diploma and PG Diploma. However, faculty guides M.Phil., Ph.D. within the framework of DU rules for constituent colleges. Hence these rows have been removed from the following prescribed table given on next page.

S. No	Level	Course	Duration (Years)	Entry Qualification	Medium of Instruction	Sanctioned Student Strength	Students Admitted
1.	UG						
		B.A.Programme	3	Grade XII	English	185	218
		B.El.Ed.	4	Grade XII	English	54	51
	B.A. (H)	Bengali	3	Grade XII	Bengali	08	04
		Economics	3	Grade XII	English	62	69
		English	3	Grade XII	English	62	84
		Geography	3	Grade XII	English	46	55
		Hindi	3	Grade XII	Hindi	62	70
		History	3	Grade XII	English	46	96
		Music	3	Grade XII	English	15	13
		Philosophy	3	Grade XII	English	46	43
		Political Science	3	Grade XII	English	54	64
		Sanskrit	3	Grade XII	Hindi	31	22
		Sociology	3	Grade XII	English	52	52
	B.Sc. (H)	Botany	3	Grade XII	English	31	34
		Chemistry	3	Grade XII	English	62	79
		Mathematics	3	Grade XII	English	70	76
		Physics	3	Grade XII	English	69	109
		Zoology	3	Grade XII	English	31	38
	B.Sc.	Life Science	3	Grade XII	English	35	46
		Physical Science	3	Grade XII	English	34	38
2.	PG						
	M.A.	English	2	B.A./B.Sc.	English	31	34
		Hindi	2	B.A./B.Sc.	Hindi	23	22
		History	2	B.A./B.Sc.	English	23	21
		Music	2	B.A./B.Sc.	English	15	11
		Philosophy	2	B.A./B.Sc.	English	15	14
		Sanskrit	2	B.A./B.Sc.	Hindi	20	15
	M.Sc	Anthropology	2	B.A./B.Sc.	English	31	12
		Botany	2	B.A./B.Sc.	English	31	23
		Chemistry	2	B.A./B.Sc.	English	22	36
		Mathematics	2	B.A./B.Sc.	English	30	37
		Physics	2	B.A./B.Sc.	English	31	36
		Zoology	2	B.A./B.Sc.	English	31	25
3.	Certificate Courses	French	1	Grade XII	English	50	45
		Spanish	1	Grade XII	English	50	28
		German	1	Grade XII	English	50	35

13. Does the college offer self-financed Programmes?

Yes		No	✓	If Yes, how many?	NA

14. New Programmes introduced in the college in the last five, if any.

Yes		No	✓	Number:	NA

15. List of Departments:

(respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes, similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty	Departments	UG	PG	Research
Arts	Bengali	✓	✓	
	Economics	✓	✓	
	English	✓	✓	✓
	Geography	✓	✓	
	Hindi	✓	✓	✓
	History	✓	✓	
	Philosophy	✓	✓	
	Political Science	✓	✓	✓
	Sanskrit	✓	✓	✓
	Sociology	✓	✓	
Science	Botany	✓	✓	✓
	Chemistry	✓	✓	
	Computer Science	✓	✓	
	Mathematics	✓	✓	✓
	Physics	✓	✓	✓
	Zoology	✓	✓	✓
Any Other	Elementary Education	✓		
	Physical Education	✓		

16. Number of Programmes offered under (Programme means a degree course like B.A., B.Sc., M.A, M.Com.)

a.	Annual system	01	B.El.Ed.
b.	Semester system	06	B.A. Programme, B.A. (H), B.Sc. (H), B.Sc., M.A., M.Sc.
c.	Trimester system		

17. Number of Programmes with

a.	Choice Based Credit System	04
b.	Inter/ Multidisciplinary Approach	05
c.	Any other (specify and provide details):B.Tech. (one batch of erstwhile FYUP)	01

18. Does the college offer UG and/or PG Programmes in Teacher Education?

Yes ✓ No

If yes,

a. Year of introduction of the Programmes: 2005
and number of batches that completed the Programme: 06

b. NCTE recognition details (if applicable): NA
Notification No.: F.NRC/NCTE/F3/DH.193/2004/5208; APN02320
Date: 28.06.2005

Validity: Permanent

c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?

Yes [ ] No [✓]

19. Does the college offer UG and /or PG Programmes in Physical Education?

Yes [ ] No [✓]

If yes,

a. Year of introduction of the Programmes and number of batches that completed the Programme: NA

b. NCTE recognition details (if applicable): NA
Notification No.: NA
Date: NA
Validity: NA

c. Is the institution opting for assessment and accreditation of Physical Education Programme separately?

Yes [ ] No [✓]

20. Number of teaching and non-teaching positions in the institution

Positions	Teaching Faculty						Non-teaching Staff		Technical Staff	
	Professor		Associate Professor		Assistant Professor					
	M	F	M	F	M	F	M	F	M	F
Sanctioned by the UGC *Recruited*				54	03	87	50	10	25	
Yet to recruit					19		48		12	
Sanctioned by Management etc. *Recruited*	NA									
Yet to recruit	NA									

M-Male; F-Female

21. Qualifications of the teaching staff:

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent Teachers							144
D.Sc./D.Litt							
Ph.D.				44	01	59	104
M.Phil.				08	01	23	32
PG				02	01	05	08
Temporary Teachers							02
Ph.D.						01	01
M.Phil.						01	01
PG							
Ad Hoc Full time Teachers							56
D.Sc./D.Litt							
Ph.D.					07	06	13
M.Phil.					12	16	28

PG					02	13	15
Part Time Guest Teachers							24
D.Sc./D.Litt							
Ph.D.					02	12	14
M.Phil.						07	07
PG						03	03

22. Number of Visiting Faculty/ Guest Faculty engaged with the college: 80

23. Number of students admitted to the college during the last 4 academic years

Categories	2012-2013		2013-2014		2014-2015		2015-2016	
	M	F	M	F	M	F	M	F
SC		165		189		202		227
ST		87		90		94		104
OBC		323		322		454		398
General		724		692		643		713
Others		25		29		39		49
PwD		22		24		28		32
Foreign Students		23		18		25		24

24. Details on students enrollment in the college during the current academic year:

Type of students	UG	PG	M.Phil.	Ph.D.	Total
Students from the same state where the college is located	382	105			487
Students from other states of the college	854	179			1033
NRI students					
Foreign students	20	03			23
Total	1256	287			1543

25. Dropout rate in UG and PG (average of last two batches)

UG	2.95	PG	7.90

26. Unit cost of education

(Unit Cost=total recurring expenditure (actual) divided by total number of students enrolled)

(a) Including the salary component	Rs. 101592.49
(b) Excluding the salary component	Rs. 7665.43

27. Does the college offer any programme (s) in the distance mode (DEP)?

Yes [ ] No [✓]

(a) Is it a registered centre for offering distance education programmes of another university?

Yes [ ] No [✓]

If yes,

(a) Is it a registered centre for offering distance education programmes of another university?

Yes [ ] No [✓]

(b) Name of the University which has granted such registration: NA

(c) Number of Programmes offered: NA

(d) Programmes carry the recognition of the Distance Education Council: NA

28. Teacher-Student ratio for each course offered

PROGRAMME WISE STUDENT TEACHER RATIO		
Course		Ratio
B.A Programme		18:1
B.A. (Honours)		
	Bengali	7:1
	Economics	18:1
	English	17:1
	Geography	12:1
	Hindi	18:1
	History	15:1
	Philosophy	16:1
	Political Science	15:1
	Sanskrit	12:1
	Sociology	18:1
B.Sc.	Life Science	12:1
	Physical Science	14:1
B.Sc. (Honours)		
	Botany	11:1
	Chemistry	16:1
	Mathematics	16:1
	Physics	13:1
	Zoology	12:1
B.El.Ed.		13:1

29. Is the college applying for
Accreditation : Cycle 1 [✓] Cycle 2 [ ] Cycle 3 [ ] Cycle 4 [ ]
Re-Assessment: NA

30. Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only): NA

31. Number of working days during the last academic year (2014-15): 295

32. Number of teaching days during the last academic year (2014-15): 167

(*Teaching days means days on which lectures were engaged excluding the examination days)*

33. Date of establishment of Internal Quality Assurance Cell (IQAC): 10.12.2015

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC:

35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information): NA

Criterion I

Curricular Aspects

1.1 Curriculum Planning and Implementation

1.1.1 State the vision, mission and objectives of the college and describe how these are communicated to the students, teachers, staff and other stakeholders.

Vision: *Swadhyayanna pramaditavyam* – steer students towards introspection and self-learning- the *Upanishadic* maxim in the college logo enshrines its vision of what college must accomplish.

MH envisions a world where women have their rightful place and are given due recognition as leaders to reach the top positions in all sectors of human endeavour. To give shape to this vision, MH continually reaffirms and embraces its responsibility to build on its historic legacy of leadership in education of women. It remains strongly committed to addressing issues of gender in all their complexity and preparing the young women to

- lead professionally successful lives enriched by the love of learning
- build personally fulfilling lives radiating integrity and strength of character
- sustain purposeful engagement with the world with an open mind and balanced perspective
- meet with confidence the challenges they will encounter in their lives
- flourish in different cultural milieus in an increasingly interconnected world
- uphold the core collegeal values of respect for diversity, inclusiveness and humanism
- emerge as leaders charged with new ideas and the capacity to make a difference

Mission: The stated mission of the college is to provide

- a stimulating active learning environment attracting young women with an exceptional desire to make a difference to the world
- highest quality liberal arts and basic science education through distinctive academic programmes that instil rigour in the pursuit of knowledge
- culturally sensitive inclusive environment upholding core values of respect for diversity
- enriching co-curricular activities linking education to the world of work and communities
- dedicated and responsive faculty of scholars to assist each student fulfill aspirations and reach milestones
- competencies for new domains of knowledge and the future of work in a globally connected world
- early mentoring for leadership, instilling capacity to explore new ideas, take intellectual risk and usher paradigm change.

Objectives: MH envisions itself as a globally recognized premiere institution of higher education for women. It cherishes the desire to be the very best in the foreseeable future. In consonance with this vision, it visualizes a bright future for all its students, expecting them to go forth into the world as pioneers and achievers, bringing laurels to the college. The objectives affirm and uphold the stated vision and mission of the college. To that end, they are not mere symbols of aspirations of the college. Instead, they are sufficiently well grounded, clearly articulated set of attainable goals, reflected by the strategies the college adopts to give shape to its dreams for the student community. All departments have their own discipline centric learning objectives. Right from the time that the student joins the college, she is apprised of the prescribed curriculum, its stated objectives and its learning outcomes.

In the larger context of mission accomplishment of the vision of the college, the objectives entail

- creating a vibrant and joyous teaching-learning environment that seamlessly integrates all its units and all its members into a 'community of practice' and a 'self-learning organization' with a shared identity that is distinctively unique and well recognized by the name of the college.
- providing an enabling environment that reinforces inclusiveness, democratic values, social and cultural diversity, fostering mutual respect, personal integrity, high standards of social and academic accountability to create responsible and responsive citizens.
- impacting the intellectual life of all students through academic rigour that fosters critical, creative, independent habits of thought and expression.
- providing well crafted enrichment programmes to deepen academic engagement and active learning on new frontiers of knowledge.
- provide new academic challenges through interdisciplinary and advanced add-on courses with avenues for research and innovation in the college.
- focusing on learning outcomes and academic success to ensure all students achieve personal satisfaction and professional goals.
- creating state of art infrastructure enabled by the best in contemporary technology, connecting the students to knowledge systems across the world.
- contextualizing learning through community engagement and extension activities that connect the student to the real world and the workspace.
- nurturing talent and developing soft skills through a wide spectrum of extracurricular and co-curricular activities.
- fostering self-discipline and the spirit of selfless service through the well established co-curricular activities.
- strengthening existing networks and linkages with industry, social sector and organizations of higher learning and research to enhance professional opportunities.
- challenging students to explore uncharted territories to train them to take intellectual risks and launch them into leadership roles.

1.1.2 How does the institution develop and deploy action plans for effective implementation of curriculum? Give details of the process and substantiate through specific example (s).

The college views the teaching-learning process as the single most important function it performs. Then the primacy of the overarching curriculum cannot be overstated. MH considers itself a bridge between the school system and the professional work place. It understands the need to wean away students from the prevalent marks-oriented approach that paradoxically opened the portals of higher education for them in the first place. The college holds itself responsible for generating transformative changes that create per se a love for learning and the world of ideas; and further, a robust capacity for independent pursuit of knowledge. The ultimate aim is to lay a strong scholastic foundation that helps launch each student on a unique trajectory as a discerning lifelong learner. The student also needs to be trained to negotiate the highly nuanced, subtle and complex landscape of higher academia. It is necessary to impart a sustained capacity for not just assimilating but also creating knowledge through research and innovation. The college takes pride in accomplishing these goals through successful implementation of all formal educational processes. This is evidenced by

the success of alumnae and their immense contribution to all fields of human endeavour.

Fig. 1.1.2: Curriculum Implementation: Academic Planning and Schedule

Department Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Admissions												
Formulation of Admission Policy												
Admission of Students												
Planning for next Semester												
Student Survey for Course Options												
Calculation of Workload												
Distribution of Teaching												
Formulation of Timetable												
Recruitment of Faculty												
Semester Activities												
Outreach/Enrichment Programmes												
Classroom Teaching/Lab/Tutorials												
Continuous Internal Assessment												
Examinations												
Setting Examination Papers												
Conduct of Examination												
Evaluation of Examination Scripts												
Review												
Analysis of Results												
Infrastructure Requirement												
Overall Performance												
Year-round Activities												
Student Mentoring and Guidance												
Grievance Redressal												
Individual Scholastic Pursuits												

The curricular framework is as approved by various statutory bodies of DU. As outlined in Item 1.1.3, the college and all faculty members are important stakeholders and valued members of the DU ecosystem, having contributed at each stage of curriculum design and its development; periodic reviews; and any subsequent reform and change. The college and its faculty remain closely knit with the academic wings of DU through the parent departments. It also works in close association with the executive and administrative wings of DU to ensure compliance with policies and guidelines for effective interpretation and implementation of the curriculum. This covers the full gamut from (i) setting admission criteria that defines the prerequisites for various courses; (ii) organization of classroom teaching-learning; (iii) formative and summative assessment; and (iv) scheduling all academic and administrative support systems in accordance with the DU academic calendar. Under the common edifice, the college judiciously leverages its relative autonomy to add value and augment the curriculum by (i) matching courses to student need and inclination; (ii) offering a wide range of optional courses; (iii) developing effective teaching-learning methods and pedagogies; (iv) dynamic monitoring and iterative refinement; and (v) enrichment activities beyond the classroom.

Planning with acumen is the key to successful implementation of the curriculum. The Staff Council with the Principal in chair lays down the policy that is implemented through the Academic Committee consisting of the teachers-in-charge of all departments. Each department is expected to uphold sustained institutional excellence through scholastic achievement of teaching-learning goals by students under their charge. As torchbearers of the legacy of seven decades of excellence, each department understands this unambiguous mandate. The Academic Committee and its various multidisciplinary working groups oversee planning. It ensures that all faculties function in tandem according to a pre-defined schedule at all stages of the process. Fig. 1.1.2 gives a simple overview of the processes entailed.

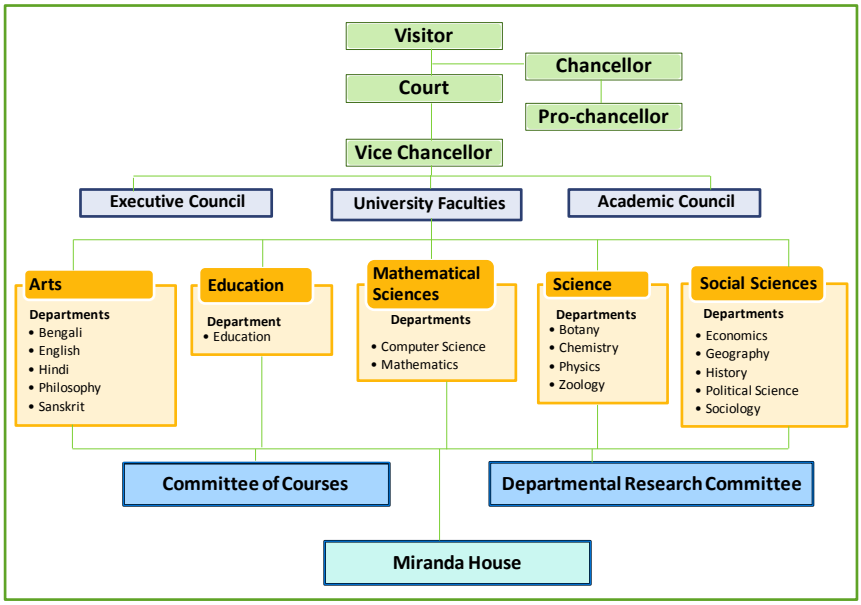
The administrative teams, with associated support staff and faculty in-charges, work closely to ensure robustness of the underpinning systems and their glitch-free implementation. Hidden beneath are many complex steps that are innovatively managed on daily basis. Illustrative examples of what it takes to deliver well on the curriculum are collated herein.

- The workload, distribution of courses amongst faculty, and class schedules in accordance with a 'Timetable' are completed and announced before the start of the academic semester.
- Student choices of various electives and optional papers are garnered in advance through surveys following appropriate orientation activities to help students make informed choices.
- Issues pertaining to cooperative teaching of certain courses are addressed for appropriate apportioning.
- Work Groups are constituted for coordinating and moderating teaching-learning, especially of courses such as the foundation, interdisciplinary, concurrent, generic electives, ability enhancement and skill development, and so on. These are taught to multidisciplinary multi-section groups and maintaining uniformity is critical.
- Individual faculty members are required to upload their class schedules on the College Portal. These are automatically made available variously as Faculty, Department, and Room specific Timetable.
- Faculty members are academically well prepared to begin classes from the first day of the academic session.
- All teaching, be it lecture, laboratory or tutorial, takes place in accordance with the announced schedule; changes if necessary are informed to the department teacher-in-charge and the Principal's office.
- The college has a carefully designed Faculty Register for marking student attendance and continuous assessment of assignments and evaluation outcomes. The schedule for communicating to the office is clearly printed. Perforated sheets ease submission. These registers however are quickly being phased out with most faculty members opting for the alternate technology platform developed by the college.
- The college has in 2015-16 designed, developed and beta tested in association with a commercial partner a Student Attendance Mobile-App that allows faculty members to upload class records dynamically on the college portal.
- Students with attendance shortfall, inadequate academic performance or backlog are sent timely alerts and mentored by faculty.
- The DU examination process being intricate on account of the size of the college system, students are provided complete administrative support to ensure accuracy in the Examination Enrollment/Registration Form.

Streamlined execution of the outlined processes allows individual faculty members to focus on the academic intricacies of the curriculum and efficacy of teaching-learning over the duration of the semester. Here they are encouraged to adopt proven best practices and innovate as deemed fit to help students attain course objectives and learning outcomes.

1.1.3 What type of support (Procedural and practical) do the teachers receive from the University and/or college for effectively translating the curriculum and improving teaching practices?

Fig. 1.1.3: Miranda House – An Integral Part of DU Ecosystem



As a constituent college, MH is an integral part of the University ecosystem. Fig. 1.1.3 depicts the organizational structure of DU. Linked at all levels, the college is an important stakeholder. The various courses offered at MH are under the purview of 5 different Faculties, who have the Departments of Disciplines as shown under them. One teacher serves as college-teacher representative on the Faculty, according to rotation by seniority. All teachers are part of the general body of their respective departments and on the basis of rotation by seniority, serve on the Department Committee of Courses. There is also provision for nomination of a college teacher to the Department Research Council on the basis of research expertise and work being done. The prescribed curriculum for the course of study emanates from broad based discussions and active participation of college faculty at the General Body and Courses Committee meetings of the parent department. It becomes operational after statutory approvals by the concerned Faculty, the Academic Council and the Executive Council. The latter two bodies also create or modify the ordinances for effective implementation. The Principal has served on the Academic Council and Executive Council.

In this participative federal model of a collegiate university system, providing adequate procedural and practical support to the teachers for effectively translating the curriculum in the classroom is a natural component of all deliberations.

Infrastructural support:

- In consonance with the national goals of creating a Knowledge-based Society, as a top ranking university, DU has been on the forefronts of the digital revolution. It

has also been a beneficiary of government support that has led to the entire university becoming a part of the National Knowledge Network. The college is connected to the DU LAN and its whole campus has been WiFi enabled. Already having a strong hardware backbone in place, the connectivity elevated MH to being an example of best praxis in use of ICT. ***Refer 4.3.***

- With the NKN connectivity, DU gave 80 desktops in 2010-11 followed by 25 LCD projectors in 2011-12.
- A post of System Network Administrator was created in colleges in 2011 with the university providing funds for salary for 3 years.
- To facilitate implementation of the FYUP curriculum that was introduced in 2013, DU provided about 1000 laptops to the college for use by the first year students. Soon after, all visually challenged students were also issued laptops pre-loaded with accessible software.
- Following an earlier major curriculum reform in 2004-05, DU strengthened the laboratory infrastructure through a well thought out policy initiative. The process entailed identification of requirements, creation of detailed list of major equipment by all science departments and then centralized evaluation, procurement and distribution in 2007-08.
- Consequent to expansion of seats for OBC in 2008-09, the college received major non-recurring grants of Rs. 8.5 crore and recurring grants of Rs. 2 crore for infrastructure enhancement from UGC through DU. The college used this grant judiciously supplemented by funds form its own sources to create more teaching-learning spaces as detailed under Criterion IV.
- Committed to research and innovation in higher education, the college has worked relentlessly on improving facilities, providing state-of-art infrastructure and creating innovative digital resource centres and learning studios. It takes pride in having the best equipped science laboratories. The D S Kothari Centre for Research and Innovation in Science Education established at MH with grants form DST and further, grants from DBT, has helped the college leap frog to global recognition.

Curricular Support

- Instructional templates for facilitating implementation of new curricula are made available. For instance, in case of the recently introduced CBCS, UGC and DU have made available a comprehensive document that includes the background note on introduction of CBCS explaining the philosophy and advantages, structure of the scheme, details of courses along with credit distribution across theory and practical components, evaluation and grading system with algorithm for converting percentage marks to grade points.
- For all new courses, the detailed syllabus often includes recommendations on number of hours to be devoted to specific themes thereby setting the level at which the topics are to be covered. Recommended textbooks and reading lists are included.
- The college gave additional library grants to all departments for procurement of more books consequent to OBC expansion. As matter of policy, the college makes available funds for curricular resources whenever new courses are introduced.

Professional Development

- DU faculties and the executive recognize that teachers need to be provided adequate curricular resources and orientation for implementing the curriculum. In

case of FYUP, an Academic Congress preceded the introduction of the programme to change the mindset towards student centric teaching-learning. The DU Innovation Project scheme helped to mainstream project-based learning and collaborative work.

- CPDHE and ILLL continuously organize short duration capacity building programmes tied to curricular themes in addition to the mandatory orientation and refresher courses. These have variously been related to skill development. For instance, courses have been organized for use of ICT, or a particular software such as Mathematica and Matlab.
- The college is on the vanguard in organizing in-house workshops, and training programmes. Faculty members have also lead several programmes of CPDHE and ILLL. These initiatives are listed in Item 1.1.4.

1.1.4 Specify the initiatives taken up or contribution made by the college for effective curriculum delivery and transaction on the curriculum provided by the affiliating University or other Statutory agency.

MH faculty are at the vanguard of curriculum reform, development of courses, and training of teachers for effective implementation.

- Dr. Purnima Roy, Vice Principal, has been Fellow, Curriculum Development and Coordinator, B.A. Programme Committee, Arts Faculty, w.e.f. 4 November 2004, till date. The scope of work has been comprehensive and has entailed compilation of reading material; training of teachers; reform of examination and evaluation system. She is also a member of DU Textbook Committee for BA Programme and also served on Textbook Publication Committee for FYUP Foundation Courses. As B.A. Programme Coordinator, she organized in 2005-06
  - Refresher Course for Foundation Course *Contemporary India*, under the aegis of CPDHE.
  - Workshops for Foundation courses on *Language, Literature and Culture; Social Enquiry*; and *Contemporary India*.
  - Compilation of reading material in Hindi for application course on *Globalisation*. The compilation included seminal writings of Amartya Sen, Noam Chomsky, Stightz, and Kaushik Basu. The authors provided copyright waiver. The compilation was posted on the DU website.
- Dr. Shashi Aggarwal was deputed to DU Cluster Innovation Centre (CIC) for a period of two years from 2012-14. She functioned as a resource person in 5 workshops organized by CPDHE at CIC for college teachers on FYUP Foundation Course *Building Mathematical Ability* from May to July 2013. This course was introduced at UG for Erstwhile FYUP Batch. Each and every student of the college had to do this course. In each batch, there were 30 to 40 teachers.
- Dr. Sunita Dhingra[R] wrote the textbook on the FYUP Foundation Course *Science and Life* in 2013-14.
- Dr. Bani Roy and Dr. Smriti S. Bhatia wrote and video recorded e-Lessons for the MHRD Project e-PG-Pathshala.
- Dr. Mallika Pathak and Dr. Monika Tomar video recorded lecture on FYUP Foundation Course *Science and Life*. These were made available on DU website for use by students and faculty.

- All faculty members associated with teaching of FYUP Foundation Courses collaboratively created extensive Question Banks that were shared with the university and also made available on the website.
- Dr. Sushma Moitra organized the Workshop on Biology Laboratory Course LS 206 in 2008 sponsored by ILLL & DSKC.

Excursions and Field Trips: These are an important component of experiential learning that substantiates the curriculum.

- The Department of Chemistry organized its annual field trip to Khetri Copper Complex, Hindustan Copper Limited, Khetri, Rajasthan, in October 2013. A group of 32 students visiting the complex were accompanied by 3 teachers and 2 support staff. It was an educative and interesting field visit for all. What the students read in text books about metallurgy is not enough to prepare them for the sheer scale of the actual operation. It was exciting for them see the real machines in action. ***Refer 1.1.5***.

1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the University in effective operationalisation of the curriculum?

The college strongly believes that it takes a community to educate a student. It is important for the student to be exposed early to multiple viewpoints and multiple ways of approaching any problem or constructing knowledge. The prescribed curriculum is enriched by a spiral approach that allows revisiting any topic with increasing depth and complexity. Effective implementation of curriculum requires time to build a wider perspective with diverse examples and applications in real world contexts. To this end, the college organizes several lectures and interactive sessions on themes related to the curriculum by professionals and experts drawn from higher academia, research institutes, civil society, social sector, and industry, *et cetera*. These are frequently synchronized with curricular teaching of the topic to provide the maximum conceptual benefit to the student.

Leveraging Networks: The college has developed an extensive network and strong linkages with reputed institutions. Its location on the DU campus gives an added advantage. MH faculty are in regular contact with the parent departments and many have ongoing research collaborations. The DU faculty are also frequent visitors to MH, giving lectures and interacting with students. Senior DU professors and deans serve on advisory committees, and are invited to chair sessions in programmes with extremely distinguished outside visitors. The college is invited to DU Lecture Series, events at DU departments and other DU colleges. Students and faculty often attend these programmes together. DU also asks the college to host international visitors to the campus for an opportunity to experience interaction with a bright UG cohort.

The college has a range of Add-on Courses designed to enrich the curriculum. ***Refer 1.2.1.*** The very best specialist resource persons, drawn from other organizations, are invited to teach different topics. As part of UG research projects, science students also visit research organizations to get training or use facilities. This approach has led to a strong stakeholder network. Students are introduced to the frontiers of knowledge; get a ringside view of advanced research in the country and are also participants in various capacities as they are encouraged to undertake field trips, excursions, summer projects, internships, etc. All this aids progression in career and higher education. An

illustrative list of other organizations across sectors and the type of engagement the college has nurtured in recent past is given herein.

- ***Major Global and National Events****:* An illustrative list is given below:
  - Global Biotechnology Summit at Vigyan Bhawan, 2016
  - Indian Science Congress, annually
  - Sakura Plantation Ceremony, 2016
  - WIN Conference, 2016
  - National Science Day, Inter University Accelerator Centre (IUAC), since 2010
  - INSPIRE National Level Exhibition and Project Competition since 2010
  - US President Barak Obama's Address at Siri Fort Auditorium, 2015
  - JENESYS$^{2.0}$Programme, 2015
  - UNESCO MGIEP for TAG, 2015
  - TERI YUVA Meet on *Sustainable Solution: Safe Water for All*, Organized by TERI; Ministry of Youth Affairs and Sports; British Council; United Nations University, 2015.
  - International Conference on Science, Ethics and Education Transforming Pedagogies presided by Honorable Dalai Lama, 2015
  - Buddhist Conscience and Tradition of Story Telling Prof. G. Obeysekere
  - Academic Congress, *Enabling the Young: Redefining Education*, DU, 2012
- ***Field Visits and Excursions:*** Laboratory visits to renowned institutions like NBPGR, IARI, PMB, NPL, IGIB, AIIMS, FRI, TERI, IMTECH, IISER (Mohali), ICGEB, NII and JNU. Field Visits to various conservation sites such as Yamuna Biodiversity Park, Jim Corbett National Park, Keoloadeo National Park, Aravali Biodiversity Park and National Zoological Park. Physics students collected data using sensors in two Amusement Parks located in NCR and also visited Nehru Planetarium. Economics students visited the Mint in Noida.
- ***Industrial Visits:*** Students visits to industries such as the Khetri Copper Complex, Hindustan Copper Limited.
- ***Alternative School Visit:*** Department of Elementary Education organizes alternative school visits to organizations, Bodh Shiksha Samiti, Alwar (2010); Society for Integrated Development of Himalayas, Mussorie (2011); Digantar Khelkud Evem Shiksha Samiti, Jaipur (2012, 2013, 2015); and Bodh Shiksha Samiti, Jaipur (2014). The visit includes school visit, classroom observations, community interaction, resource room exploration, interactive session with organization members and city visit.
- ***Heritage Walk:*** In 2014-15, upon completing a workshop organized by INTACH, the students organized a Heritage Walk to the Pir Ghaib Baoli as part of *Adopt a Monument* initiative.
- ***Collaborations with NGOs:*** Students have been working in close association with NGOs such as *Pravah*,*Sewa Bharat*, *Bhumi*, *Maitri*, CRY, *Udaan*, Sulabh International and *ShikshaRath*,working in the field of primary education, healthcare and sanitation, rural enterprise development and deconstructing gender notions. ***Refer 3.7.1***
- ***Networking with Industry:*** College is associated with several industrial units such as Weekendr Innovation Labs Pvt. Ltd for Mobile App Development; Hero Motocorp for organizing Ride Safe Awareness Programme; Google Ltd. for using Google Apps for education; KPMG for mentoring *Enactus* students; Green Bandhu

Waste Management Solution and Services for installation and operation of compost plant, etc. ***Refer 3.7.1.***

- ***Networking with Universities/Research Institutes:*** College has established national and international collaborative programmes with research Institutes such as NII, CSIR, and Universities such as University of Sussex; George Washington University; University of Chicago; Lynchburg College; Utrecht Business School and King's College, London, to name a few. ***Refer 3.7.1.***

1.1.6 What are the contributions of the college and/or its staff members to the development of the curriculum by the University?

(number of staff member/departments represented on the Board of the Studies, students feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.).

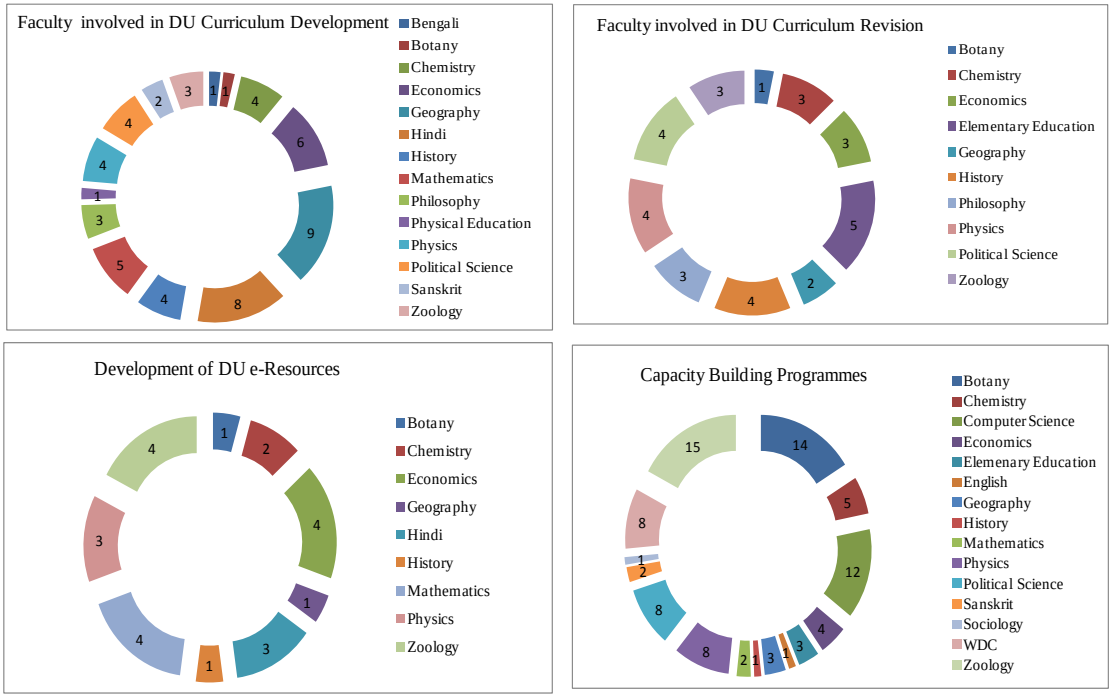
MH teachers have a strong voice in making of the curriculum and proposals for its effective delivery in the classroom.

- The Principal is a member of the University Court. By virtue of the post, she has served on the Executive Council; the Academic Council; and its various Sub Committees and Standing Committees. She has been a key player in curricular reform and continues to be a member of Committees for enhancing infrastructure in science laboratories for effective implementation of the curriculum.
  - Member, Infrastructure Committee, University of Delhi, March 2013 onwards.
  - Member, Committee for Procurement of Minor Equipment/ Consumables/ Chemicals for MH and departments of DU, April 2013 onwards.
  - Member, Academic Council, DU, 2012-2014.
  - Member, Executive Council, DU, 2003-2005, 2010-2012.
  - Member, Empowered Committee of Principal's for recommending reforms in the admission process 2012.
  - Member, Committee for strengthening infrastructure for B.Sc. Programme, DU, 2005-2008.
  - Member, Academic Council, DU, 2003-2005.
  - Member, Committee for Academic Reforms, DU, 2003-2005.
  - Member, Standing Committee on Academic Affairs, DU, 2003-2005.
  - Permanent Invitee, Empowered Committee on Restructuring of the Undergraduate Science Programmes, 2003-2005.
  - Member, Committee for Restructuring of B.Sc. Programmes, DU, 2003-2005.
  - Convener, Curriculum Development Committee for Interdisciplinary Courses, DU, 2003-2005.
  - Member, University Committee for B.Sc. Physical Sciences, B.Sc. Life Sciences and B. Sc. Applied Sciences 2004-2005
  - Member, Committee for Design and Implementation of Common Pre-admission form for admission to colleges of DU using Intelligent Character Reader /OMR Forms and Technology Solutions 2004; Key person on the project, credited with design of the DU Common Preadmission Form mapping all colleges all courses on a simple matrix.
- One faculty member was an elected member of AC from 2006-08 and 2008-10; and an elected member of EC from 2013-15 and 2015 till date.
- One faculty member has been Coordinator B.A. Programme, DU, since 2003.

MH faculty have always been key players in curriculum reform and change. Due to their expertise the University involves them extensively in Committee of Courses, Board of Studies, and Curriculum Revision Committees as Course-Co-coordinators.

They have also been an active part of creating reading materials, developing course objectives and learning outcomes. While contributing to such exercises, the faculty draws on the insight gleaned from student feedback and the experience of an inclusive classroom. When asked to represent the college at any forum, faculty members hold a department meeting, seek feedback from stakeholder groups and experts to make well deliberated and well informed contribution to the discussions. For instance, the Principal as member of DU Infrastructure enhancement group has carried out surveys to find out the status of science laboratories. Colleagues at MH have assisted in proposals for setting up model laboratories for both teaching-learning and research purpose; as also Centralized Instrumentation Centre. This exercise formed the basis for establishment of D S Kothari Centre for Research and Innovation in Science Education at MH with support from DST. Three teachers are members of the Department Research Council in History, Sanskrit and Zoology. The membership is based on the expertise and seniority across colleges, and the principle of rotation.

Fig.1.1.6: MH Faculty Members' Contribution to DU Curriculum Development



1.1.7. Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating University) by it? If yes, give details on the process (Needs assessment, design, development and planning) and the courses for which the curriculum has been developed.

Faculty at MH has played a key role in the development of courses for several leading institutions outside the University and also contributed to national policy frameworks. The Principal serves on the Scientific Advisory Committee to the Cabinet (SAC-C) constituted by the Office of the Principal Scientific Advisor to the Government of India. She has been part of high level group constituted by SAC-C on 'Careers'; this reviewed the existing state of higher education, and undertook need assessment to make recommendations. She is also part of Project Review Monitoring Committee (PRMC) for the Research Projects on Gifted Education being undertaken for the first time in the country at NIAS and CIC, DU. She has contributed to the segment on

Higher Education in the XII Plan Report by the erstwhile Planning Commission. The insight gleaned from these assignments informs curriculum development.

Some of the courses developed in MH include:

- ***Feminism and Indian Politics*** for the University of Wisconsin, Eau Claire, USA. This was an innovative, three weeks course and engaged with various issues and theoretical perspectives regarding Feminism in India. The course included Approaches to Understanding Patriarchy in India; History of Feminist Issues and Women's Participation in India; Constitutional Guarantees and Women's rights in India (emphasis on Right to Property); Public Policy and Women Political Participation; Economic Reforms, liberalization policies and its implications for women in India.Mutual consultation on student needs with the UWE, led to the formation of an Advisory Committee consisting of faculty members of the Department of Political Science and an expert group from the field. A series of consultative meetings were held to create a curriculum framework. Faculty and other participants were asked to present abstracts according to their interest and expertise after which the modules of the course and rubrics for evaluation were finalised.
- ***Rethinking the Obvious: Examining the Rhetoric of Development*** was developed collaboratively with George Washington University, USA. The curriculum was developed through e-mail and skype based consultations for deciding the framework, creating the module, coordinating, and collating enriching reading material. The format of the course included lectures and workshops, followed by analysis of issues and presentations by students. Evaluation was continuous and also through a course-end project.
- Both curricula were developed in consultation with the Principal who was an integral part of conceptualizing and leading these efforts.
- The curriculum for add-on courses have been developed at MH.
  Other than the courses mentioned above, a number of faculty members contribute to course development in other institutions and organizations outside DU, such as CBSE, NCERT, NIOS, IGNOU, SCERT, etc. ***Refer Table 1.1.7 in Support Documents***.

1.1.8 How does the college analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?

MH is known for its high standards of academic rigour, timely implementation of courses, and unwavering commitment to student wellbeing. The Academic Committee working through the various department committees ensures that faculty take lectures and tutorials regularly. Assignments are well crafted and administered regularly; consistently evaluated in time; and discussed with students to provide timely feedback. The classes are interspersed with interactive individual and small group project presentations keeping up a high level of interaction and student centric pedagogic approach. Laboratory work is punctuated with mock practical tests to check the skill of the student as an experimenter. The faculty also use viva voce to check if the students understand the objectives of the lab exercises, the methodology, and are able to interpret the results. Based on this oral interaction, remedial action is then taken immediately. Mid course evaluations are necessary and implemented. Observation of student engagement in lectures and tutorials; level of enthusiasm and engagement during discussions, debates, and questions posed to experts during enrichment programmes allow teachers to gauge conceptual understanding.

To cite an example, the students of Political Science engage with issues of contemporary concerns by undertaking projects on Capital Punishment, Freedom of Speech, Indo-US relations and many such issues. They engage on such themes with eminent speakers invited to MH through intense question-answer sessions and open interactions. Very frequently, the Principal and other faculty members are present at these beyond the classroom enrichment programmes. Such activities help in promoting better understanding of both the curriculum and the problems and issues of the real world. They also help pry open the classroom and allow independent observers to gauge the depth of student understanding. Direct student feedback also assists in analyzing how well course objectives are being met. Grades in accordance with well defined rubric and semester end DU examination results are taken as the ultimate indicator of student achievement of course objectives. These are carefully analyzed. Remedial classes are arranged for low performing students. ***Refer 1.1.4.***

1.2 Academic Flexibility

1.2.1 Specifying the goals and objectives give details of the certificate/diploma/ skill development courses etc., offered by the college.

MH offers a range of Certificate, Add-on and Skill Development Courses.

Operations Research: Optimization for Better Decisions: This 36-hour course has been offered since 2006 by the Department of Computer Science in collaboration with the Department of Mathematics. Experts from Faculty of Management Studies, Department of Operations Research, DU; Fostiima Business School; and Lloyd Business School, Delhi, teach the course. It is designed for students with a background in Mathematics, Economics and Computer Science and trains them to apply their analytical skills to real world situations for problem solving. They are exposed to a range of OR software such as LINGO, MUPAD, WBB and Solver.

Green Chemistry and Environment: The Department of Chemistry has been offering a 60-hour Add-on Course entitled *Green Chemistry and Environment* since 2008. It consists of lectures, practical sessions, and presentations by the participating students on topics related to green chemistry and environment. Sessions broadly cover the following aspects: Green Chemistry principles and applications; New energy efficient methods in synthesis including the use of the laboratory microwave; Solvent-free organic synthesis; Natural indicators in acid-base titrations; Green methods for organic and inorganic analysis; and Use of computational techniques in Chemistry.

Medical Biotechnology: Add-on Course *Medical Biotechnology* is a 72-hour course conducted by Department of Zoology since 2007 under the aegis of DSKC at MH. The curriculum has been designed to cover contemporary areas of biotechnology and its applications, with an emphasis on the field of medicine. The course consists of seventeen theory sessions on: Microbial pathogenesis; Tuberculosis diagnosis and MDR and XDR strains; Developments in the field of forensic science; Histone variants; Transcription factors in cancer research; Stem cells and regenerative medicine; Applications of nano-biotechnology; Factors affecting vitiligo; Patent rights; Capacity building and policy making; Carcinogenesis; and eight practical sessions of 5 hour each include latest molecular techniques like Genomic and plasmid isolation in *E. coli*; Transformation; Ligation; Cloning; Mammalian culture systems both primary as well as established cell line; PCR; Gel electrophoresis SDS-PAGE; Western blotting; bioinformatics tools, etc.

Bioinformatics and in silico medicine: This course is being offered jointly by the Departments of Botany and Zoology. It mainly targets the undergraduate students of the University of Delhi. The course includes lectures on diverse topics of contemporary interest delivered by resource persons drawn from reputed institutes. Themes covered are: Next generation sequencing; Biological databases; Sequence alignment (pairwise and MSA); Personal genomes to precision medicine; Fundamentals of computer programming (2 L); Data intensive scientific discovery; Protein structure prediction; and CADD. Hands-on training is imparted to the students in the related areas of Bioinformatics during the practical sessions. To involve students in the teaching learning experience from both ends, they are asked to choose a topic of their interest from the vast field of bioinformatics and give a short presentation.

Rethinking the Obvious – Examining the Rhetoric of Development: Floated in collaboration with George Washington University (GWU), this one semester course has strong synergies with a similar credit-based course offered by the Elizabeth J. Somers Women's Leadership Program at GWU. Three broad themes explored are: Rhetoric and rhetorical traditions in India; the Rhetoric of public health; and Rhetoric of poverty alleviation. The course includes background lectures by the anchoring MH faculty, and seminars by guest speakers. The course at MH runs in tandem with that at GWU, giving students an opportunity for online interaction with faculty and students at GWU. Together, an attempt is made to generate a common vocabulary for analyzing rhetorical concepts. Students are required to collaborate online for group assignments.The course format includes seminars and workshops, with leading experts as speakers at the seminars. At the end of the course, students are required to submit an essay on a subject of their choice pertaining to issues raised in the course. Offered for the first time in 2015-16, this highly successful course is included as an example of an innovative international collaboration. ***Refer 7.2.1G.***

DU Certificate Courses in Foreign Language: MH offers One Year DU Certificate Courses in French, German, and Spanish. The University Department of Germanic and Romance Studies has designed the syllabus and scheme of examination. Classes for the part time course are conducted late afternoon.

NSDC Certificate Courses on Skill Development: An MoU with NSDC in 2015-2016 has enabled introduction of these courses in select sectors.

- *Health Care:* Training is imparted by MIHER Skill Academy (Max Institute of Health Education & Research). This 480-hour course is spread over a minimum of two semesters. The curriculum has 26 modules including a three month internship at Max Hospital where students get sufficient hands-on exposure. Assessment and certification is conducted by HSSC (Health Sector Skill Council).
- *Media and Entertainment:* The Training partner is Ants Consulting & Services Pvt. Ltd. This 120 hour course includes three major modules, namely, Illustrative; Photoshop; and Flash. Assessment is on the basis of internal practical examination conducted by the skill council.
- In the year 2013-14, courses on Business Correspondence, Equity Dealer, were offered during summer vacations.
- *Business Correspondent:* This course was offered in June-July 2014 under the STAR, National Skill Certificate and Monetary Award Scheme with IL & FS Skills as training partners.

- *Equity Dealer:* This course was offered in June-July 2014 under the *STAR*, National Skill Certificate and Monetary Award Scheme with IL & FS Skills as training partners.
- *Gems and Jewellery:* This course was offered in June-July 2014 under the *STAR*, National Skill Certificate and Monetary Award Scheme with LabourNet as training partners.

English Language Proficiency Course: This 80-hour course is designed by teachers from DU Faculty of Education for Institute of Life Long Learning (ILLL) and is now offered under the aegis of the DU Department of Adult, Continuing Education and Extension. It aims at giving students practice in using English in a wide variety of contexts relevant to work, study and social activities. It helps them perform better in course related and post university activities. The course focuses on all the language skills: Listening, Speaking, Reading and Writing. One of the objectives of the course is to help students become more 'aware' so that they can be lifelong learners. Teachers are facilitators/guides, who help students understand and develop the language through various activities and task-based methodologies.

At MH, the course was conducted for two batches in 2012 and 2013. In 2012, the Intermediate Level of the course was run for B.El.Ed. students, though a few students from other courses were also enrolled. In 2013, ELPC was conducted as a part of Equal Opportunity Cell. For this batch, the Basic Level Course was conducted, especially for those students who had only a preliminary knowledge of the English language, and were not able to use it even in the everyday, familiar contexts. The number of students enrolled in the course in both the batches was 20-23. On the basis of students' performance in a test of English Language Proficiency administered at the end of the Course, a Certificate of Proficiency was awarded.

English Communication Course: This 48-hour course was specially designed in collaboration with *Lok Bharti Skilling Solutions* (LBSS) and offered by the company first in March-April 2012 and next in July-August 2012. The thrust of this personal development programme was to improve the behavioural skills and English Language through context based role plays with discussions on situational impact. It also included modules on improving inter-personal skills with focus on employability skills, starting with group discussions and interviews.

Certificate Course on Women and Law: This one-week course is conducted with support from the Centre for Advocacy and Research (CFAR) and Delhi Legal Services Authority (DLSA). It aims at imparting legal training for women, orienting them to women specific legislation and opportunities for work and education in the legal field. The course includes talks by leading legal luminaries.

Certificate Course on Consumer Awareness: This one-week course is aimed at raising consumer awareness and informing students about consumer rights, laws and responsibilities. This leverages network with the Ministry of Consumer Affairs and the Consumer Movements in India to bring some of the leading voices to talk to the students. Student work finds its way in the magazine *Santulan* published by *Tula*, the MH Consumer Club.

Certificate Course on Living Values: This 12-hour Seminar Course was launched in 2015. Led by the Department of Philosophy, it emerged from the eclectic belief that ethos of the student should be built on foundations of core values and peace. The course addresses issues on social, intellectual, emotional, spiritual and moral

development of the whole. These ideas permeate the entire curriculum of Philosophy and are communicated through lectures by eminent speakers. In addition to an overview, illustrative topics covered are *Suffering and Happiness in Buddhism*; *Moral Issues in Corporate Governance*; *Gandhi on Truth and Non-violence*; *Capital Punishment*; *Gender Biased Sex Selection and Reproductive Autonomy: Dilemma in Feminist Politics*; *Religious Tolerance in Ramakrishna Paramhansa and Vivekananda*; *Nationalism and Universal Brotherhood in Rabindranath Tagore*; *Love and Friendship in Plato and Aristotle*; *Meditation and Healing of Chakras*; *Value of Human Life and Euthanasia*; and *Values in Vedas and Upanishads*. Finally, students are required to submit an essay on *Relevance of Values in Contemporary World.*

1.2.2 Does the institution offer programs that facilitate twinning/dual degree? If 'yes' give details.

- As per DU rules there is no provision for colleges to offer twinning/dual degree courses.
- Three UGC approved 450-hour Certificate Courses conceptualized under the twinning/dual degree initiative were introduced at MH in 2004.
  - Theatre Direction
  - Tourism
  - Office Automation and Web Designing

These courses were discontinued as the students found it impossible to meet the requirement of 450-hour contact periods along with their regular studies.

1.2.3 Give details on the various provisions with reference to academic flexibility and how it has been helpful to students in terms of skill development, academic mobility, progression to higher study and improved potential for employability. Issues may cover the following and beyond: (Range of core/elective options offered by the University and those opted by the college; Choice Based Credit System and range of subject options; Courses offered in modular form; Credit transfer and accumulation facility; Lateral and Vertical mobility within and across programmes and courses; Enrichment courses)

Framework of UG Degree Programmes

The Undergraduate Honours and Programme courses have undergone considerable change in the past few years.

- In 2011-12, DU moved from the Three Year Undergraduate Programme (TYUP) in Annual mode to the Semester mode.
- In 2013-14, DU introduced the Four Year Degree Programme (FYUP).
- In 2014-15, DU reverted to the earlier TYUP scheme.
- In 2015-16, DU introduced the Choice-based Credit Scheme (CBCS).

The batch admitted under the erstwhile FYUP is graduating in July 2016. The TYUP programme stands phased out and the batch admitted under this scheme in 2014-15 will graduate in July 2017.

Courses on offer at MH

The college offers a wide range of Honours and Programme Courses. These are:

- B.A. Programme
- B.A. Honours in Bengali, Economics, English, Geography, Hindi, History, Philosophy, Political Science, Sanskrit, and Sociology.
- Bachelor in Elementary Education.
- B.Sc. Honours in Botany, Chemistry, Mathematics, Physics, and Zoology.

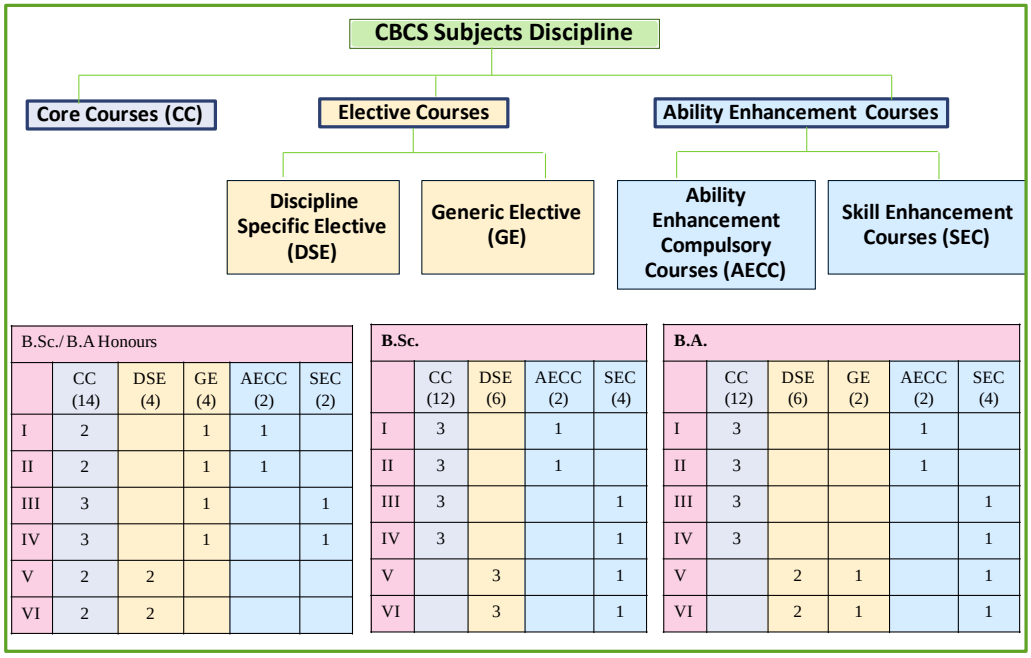
- B.Sc. Life Sciences: 3 domains of study, namely, Botany, Zoology and Chemistry
- B.Sc. Physical Sciences: 3 domains of study, namely, Physics, Mathematics and Computer Science.

Choice Based Credit System

CBCS has been adopted as part of National Policy across the country and is here to stay. The discussion herein is restricted to the courses offered under CBCS. At DU, already a large choice of courses have been on offer in the form of interdisciplinary, concurrent and open elective courses. These have now been mapped on the CBCS framework as indicated in Fig. 1.2.3 (a).

- All courses are modular and semester based. The classification of courses follows the uniform nomenclature proposed by CBCS. As depicted, the students are required to take a prescribed set of
  - Core Courses; these define the minimum common curriculum and cover the basics of a particular discipline.
  - Elective Courses; these are chosen from a pool of courses that are very specific or specialized. They are (i) Discipline Specific Electives (ii) Generic Electives chosen from an unrelated discipline/subject in order to seek exposure beyond the choices made in core and discipline specific elective courses.
  - Ability Enhancement Courses (AEC); these aim for ability or skill enhancement and are (i) Ability Enhancement Compulsory Courses (AECC) based on content that leads to knowledge enhancement. DU; and (ii) Skill Enhancement Courses (SEC) chosen from a pool of courses designed to provide value-based or skill-based knowledge with both theory and lab/hands-on training/field work.
- The 2 mandatory AECC courses are (a) Environmental Science and (b) Language and Communication with a choice of languages, i.e., English/Hindi/MIL.
- At DU, the SEC courses are linked to the main discipline of study.

Fig. 1.2.3 (a): Choice Based Credit System: Course Structure



B.Sc./B.A Honours					
	CC (14)	DSE (4)	GE (4)	AECC (2)	SEC (2)
I	2		1	1	
II	2		1	1	
III	3		1		1
IV	3		1		1
V	2	2			
VI	2	2			

B.Sc.				
	CC (12)	DSE (6)	AECC (2)	SEC (4)
I	3		1	
II	3		1	
III	3			1
IV	3			1
V		3		1
VI		3		1

B.A.					
	CC (12)	DSE (6)	GE (2)	AECC (2)	SEC (4)
I	3			1	
II	3			1	
III	3				1
IV	3				1
V		2	1		1
VI		2	1		1

Fig. 1.2.3 (b) depicts the immense flexibility the college offers within the CBCS giving to the students GE courses in accordance with their choice.

B.A. Programme is a two discipline course now offered in CBCS format. MH has always leveraged the inherent academic flexibility to offer a large number of discipline combinations, 27 to be precise. This makes it an attractive liberal arts course catering to diverse student interests. It is in particular helpful to students not keen to specialize in one discipline too early. However, the rigour with which the course is approached at MH allows students to actually develop two areas of interest and specialization, opening a wide spectrum of avenues for higher education and also, employability. The college also offers Modern Indian Languages (MIL) courses on Bengali, Punjabi and Tamil within this programme, both as a discipline and as a language. Students interested in studying other vernacular languages are allowed to pursue these at DU, with logistic support provided by the college. In order to promote MIL, college gives a 10% concession on entry level marks. Catering to diversity, the college offers a course on Functional Hindi to students with lower entry level marks. To support students inclined to enter the job market after graduating, an application courses on Office Management and Secretarial Practice (OMSP) is offered in combination with mainstream subjects like Economics and Mathematics.

Fig. 1.2.3 (c) depicts the student distribution across discipline combinations in 2015-16. Data shows how with care and sensitivity, the college offers immense flexibility to cater to diverse student interests through this B.A. Programme.

Fig. 1.2.3 (b): B. A. (H)/ B.Sc. (H) – Student Choice of Generic Elective Courses.

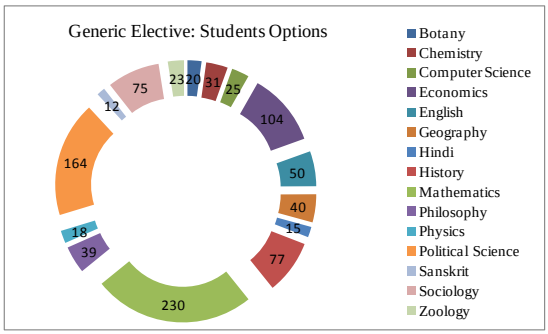
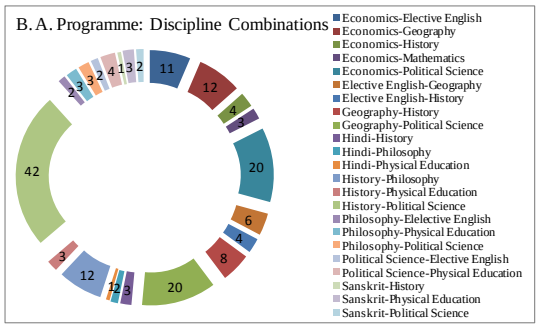


Fig. 1.2.3 (c): B.A. Programme – Student Choice of Discipline Combinations



Several Enrichment Courses in the form of Add-on and Certificate Courses are offered by the college. ***Refer 1.2.1.***

Credit transfer for vertical mobility is not possible for DU students. However, overseas students sent to MH through the Office of the Dean of International Relations accrue credit for one or two semesters. Lateral movement from one UG subject to another at PG level is quite common through entrance examinations.

1.2.4 Does the institution offer self-financed programs? If 'yes' list them and indicate how they differ from other programmes, with reference to admission, curriculum ,fee structure, teacher qualification, salary etc.

The college does not run any course in the self-financing mode.

1.2.5 Does the institution provide additional skill oriented programmes, relevant to regional and global employment? If yes, provide details of such programs and the beneficiaries.

The college offers a number of skill-oriented programs with the specific purpose of increasing employability in a globalised job market. ***Refer 1.2.1.***

A concerted effort is made to increase the generic skills and competency of students in use of ubiquitous ICT tools and software. Illustrative courses are:

- ***Certificate Course in Computer Applications*** offered by the Department of Physics and Computer Science. Modules include a range of application software, desktop publishing, development of multi-media presentations.
- ***Certificate Course on Computer Applications for Visually Challenged Students*** covers basic concepts of Computer operating systems, word processing, ICT and professional skills.

A range of short duration courses/ workshops are also conducted for advanced use of ICT. Students are given certificates on successful completion of the programme. An illustrative list is given below.

- Mobile App Development Training Program; 18 March-03 April 2016
- Workshop on Learning Multimedia through Photoshop and Flash; 06 and 10 October 2015
- Training on Bulk Email id Creation for students and Faculty on du.ac.in domain, Events Broadcast on Youtube; DUCC; 03 May 2014
- Training programme organized by Google for use of Google Apps for end users; Miranda House; 12 March 2014
- Science of Developing Android Applications ; 22-24 January 2014
- Introducing FOSS & Workshop on Linux; 08-09 October 2013
- Workshop on Ethical Hacking; 06 March 2013
- Workshop on Robotics: Touching Lives ; 30-31 March 2012
- Workshop on Robotics: Impacting Life Science; 26-27 March 2012
- Workshop on Scientific Visualization of Life Systems; 22 March 2012
- Training modules on Windows Server 2008 R2 Administration and Wireless Network Administration; 13-14 October 2011
- ICT workshop for Capacity Building of Faculty in DU in collaboration with ILLL; 11-16 January 2010; 05-10 April 2010; 19-24 April, 2010

1.2.6. Does the University provide for the flexibility of combining the face to face and distant mode of education for students to choose the courses/combination of their choice? If 'yes' how does the college take advantage of such provision for the benefit of students?

DU does not offer students the choice of credit transfer from another institution. All courses are full time. Students cannot formally combine face to face instruction with distance mode to assemble their own degree, exercising unlimited choice of course and institution. However, in view of the knowledge explosion and the range of excellent course modules available online, technologically advanced students and faculty access the materials without any impediment. Within this constraint, MH has encouraged academic flexibility in terms of accessing online and distance mode of learning. With the development of ICT infrastructure and accessibility to NKN college encourages faculty and students to leverage digital resources. They are motivated to train in MOOC's and access resources of NPTEL. In Add-on courses, students learn to access a number of e-resources offered by leading international universities. Online video–conferences with resource persons from foreign universities have been used to enrich students' experiences. Students make extensive use of YouTube lectures, INK and TED Talks for project presentations.

1.3 Curriculum Enrichment

1.3.1 Describe the efforts made by the college to supplement the University's curriculum to ensure that the academic programs and the College's goals and objectives are integrated?

To retain its leading edge, MH continually raises the bar in consonance with the meritorious profile of its students. The DU prescribed curriculum is the common denominator or the base line requirement. Faculty members add value and raise the level of the course in numerous ways. A concerted effort is made to identify lacunae in the syllabus and fill these. It is enriched an enhanced by including topics of contemporary interest. Tutorials provide an ideal platform for discourse that goes beyond the curriculum setting an individualized pace of learning for students. Assignments and Projects are other potent tools for supplemental learning. The college has introduced a range of Add-on Courses of contemporary importance to bridge the gap. These are described in Item 1.2.1. Several Collaborative Programmes have also been introduced to strengthen the University curriculum in myriad ways.

- ***King's College International Summer School in Delhi*** was launched in June 2013. Under its aegis, MH offered three 2-week course modules. These were (i) *International Relations: Theory & Practice;* (ii) *International Political Economy;* and (iii) e-*Business–the Online Entrepreneur.* The courses were taught by visiting faculty from Kings and open to students in general from across other educational institutions. MH faculty helped coordinate the courses, organized enrichment talks by eminent experts such as Dr. Diana Bozhilova and Mr. Michael Bedward of King's College. The course provided them an excellent professional development opportunity as they witnessed highly interactive methods of teaching and new ways of approaching the subjects. One faculty member Dr. Malabika Pal was given a fellowship to participate in the King's International School in London. The first two modules were again offered in 2014 and 2016. Dr. Purnima Roy was awarded the Kings Fellowship for the London School.
- ***Utrecht Business School Collaborative Workshop Management and Cultural Contexts:*** The college conceptualized and launched this Annual International Workshop in 2008 with UBS, Hogeschool Utrecht University of Applied Sciences, the Netherlands. About 10 Dutch students and 20 students each from MH and SRCC participate in this weeklong interactive programme. Faculty from UBS anchor the workshop. Experts from academia and industry also address the students on a variety of issues related to entrepreneurship and management. Students undertake a collaborative project that is presented at the end of the programme. In summer of each year, students of MH accompanied by two faculty members visit UBS for a similar programme conducted in Utrecht.
- The college organizes several enrichment events to elevate the academic programmes to match the aspirations of the college and its students. ***Refer 3.7.4.***

1.3.2 What are the efforts made by the college to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?

College recognises and fosters the employability potential of disciplines. A broad range of activities of each department is channelized towards launching students on successful career paths. The departments are thus cognizant of the jobs radiating from their disciplines and play a key role in sharing their understanding with the students. The faculty also empower themselves to serve this purpose better through networking

with potential employers. The Placement, Internships and Career Advancement Centre plays a critical role in this process. Add-on Courses and enrichment activities also introduce the students to the skills expected by potential employers. The college is cognizant that in the knowledge based society, the workplace of the future will be quite different from what is imagined by most students and their families. Enrichment activities give students experience of new ways of approaching the subject, and engage with contemporary challenges. All students are provided support in developing generic competencies and expertise in use of ICT tools. The college endeavours to provide an early exposure to distinctive professional tools and techniques through teaching-learning of specific disciplines. This is easily discernible in the science courses, especially the Laboratory courses. MH has excellent state-of-art equipment and instrumentation facilities. These initiate the students to the best scientific practices. The D S Kothari Centre 6-week Summer Camp *Flavor of Research* conducted in June-July promotes UG research and project-based learning.

Internships: MH students are encouraged to intern with industry, government, and social sector organizations to gain on-the-job experience while studying in college. There are numerous examples of students who have interned with agencies in the immediate past. For instance,

- Some students of Economics who have interned with leading organisations are: Priyanka Gupta, Aditya Birla Blood connect Foundation,2015; Arushi Gupta, Niti Aayog, 2015, Shubhra Singh, Tata Institute of Fundamental Research, Bangalore, 2015; Riddhi Kalsi, Harvard Business Publishing, 2014; Bhawna Sharma, SBI Life Insurance, 2013; Tamanna Adhikari and Karishma Mutreja, Department of Revenue, Ministry of Finance, Government of India, June 2013; Manisha Jain, RBI Bombay, 2012; Radhika Rawat, Planning Commission, 2012.
- Students of History and Geography intern in museums, rural locations in Primary Education, Healthcare and Sanitation, and Rural Enterprise Development across India. Students have also interned at National Centre for Antarctic and Ocean Research, Goa; Centre for Urban and Regional Excellence.

1.3.3 Enumerate the efforts made by the college to integrate the cross-cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?

Engagement through Curriculum: The prescribed DU curriculum delves deep into the above stated concerns, given their contemporary importance. The exposition is through multiple lenses as these are an integral part of several formal courses, collated in Table 1.3.3. ***Refer Supporting Documents.***

Classroom teaching-learning of these courses variously brings to the fore the underpinning intersectionality, an important paradigm in academic scholarship. Courses examine overlapping identities and how these are related to related prevalent social and political systems. Students develop variously a perspective on cultural categories such as gender, race, class and ability. Understanding the sectarian axis of identity is of critical importance in a pluralistic country like India and the key to successfully creating an inclusive society. The issues are closely linked to the reality on ground. Going beyond the theoretical framework, students connect with them at a personal level. It is observed that students are keen to learn more about the intricacies of gender, human rights; and the broader aspects of social justice. Interest in sustainable development and development economics is strongly intertwined. The coursework is supported by experiential learning, fieldwork, seminars, workshops and

exposure trips. Cinema and theatre is used as a powerful medium for enhancing understanding of these issues.

Enrichment Activities: A significant number of faculty members have gender and human rights as a research interest. They are part of social networks that address women's issues. These interests are reflected by the multifarious activities that the college undertakes for women empowerment. The *Women Development Cell* (WDC); *MH Vatavaran*, the Environment Society; *Celluloid*, the Film Club; Equal Opportunity Cell (EOC), *Lakshita*, the Enabling Society, and NSS are amongst the most active in the college. These groups have a large membership base and are self-driven. They approach issues in a mature fashion as expected from advanced students They also display rare sensitivity which is the hallmark of the college, committed as it is to diversity, inclusive education, and participatory, democratic functioning where each one has a voice that is heard and respected. Societies and departments organize several programmes that link the theoretical frameworks of courses taught to the ground reality. Inasmuch as all societies include members from all courses, the students bring distinctive perspective and unique prismatic view to the issues on hand.

- Taking an intersectional approach on the issue of Human Rights, the college has organized various public lectures by practitioners from the field on the concerns of the marginalised sections of society.
- WDC is actively involved in the global campaign *OBR: Countering Violence against Women* since 2013 and organizes regular seminars on issues of trans-national feminism to integrate course learning on Feminism in India with global learning on the issue.
- WDC also organizes an annual Seminar course *Women and Law* on legal awareness of women specific laws.
- WDC hosted in 2015 an innovative *Gender Mela* titled *Gender, Masculinity and Sustainable Development*, which brought together academicians, activists and practitioners working on the issue of gender, environment and human rights, issues of dalit women and sanitation in India as well as the need for sustainable development.
- The intersections of climate change, global warming, biodiversity and gender relations was the focus of the seminars organized under the *Gender Mela*. The purpose was to enrich curriculum learning for the students of the B.A. Programme Foundation Course *Human Rights, Gender and Environment.*
- MH is the only college to be a part of the UN University Regional Centre of Expertise (RCE) for Education on Sustainable Development. It works closely with TERI and other partners.
- Ms. Sunita Narain, Centre for Science and Environment (CSE) was one of the expert speakers at the Delhi Youth Summit on Climate (DYSoC), 2013.
- The ethos of the college with its motto of *Clean Campus, Green Campus*, and commitment to innovative green initiatives makes all students environmentally conscious. NSS and *MH Vatavaran* volunteers have been leading the *Swachh Bharat Abhiyan.*
- MH has an effective Solid Waste Management system, its own Compost Plant and a Paper Recycling Plant. The college takes immense pride in its own paper products that are used in-house and also gifted as mementos to visitors. All this leaves a deep impression on students and impacts their life style.

1.3.4 What are the various value-added courses/enrichment programs offered to ensure holistic development of students? (Moral and Ethical Values; Employability and life skills; Better Career Options; Community orientation)

The college inculcates in students a sense of idealism and spirit of selfless service. MH students are expected to be well informed and engaged citizens who understand that rights come with responsibility; that freedom of expression and liberty of action have to respect the rights, beliefs and opinions of others. It orients students towards understanding that they are expected to contribute to the task of nation building, addressing the grand challenges facing the country. The college ingrains moral and ethical values. It encourages students to be concerned about the local environment and issues affecting communities. The college societies inculcate a sense of responsibility in the students. They learn to work together in collaborative teams and are given freedom to choose thematic programmes. MH takes pride in the range of issues that students take up through various societies and the deep commitment to extension work. Co-curricular activities such as NCC, NOS and NSS reinforce human qualities of honesty, integrity, discipline, empathy and respect for the other. NSS volunteers are expected to spend 120 hours each year on community work. B.El.Ed. students are required to participate in an integrated NGO programme; they spend 20 hours in the summer holidays with a community based organization as volunteers. Programmes such as *Enactus*, or Students in Free Enterprise are founded on social responsibility for improving livelihoods and life of marginalized communities. They are yielding excellent results on the ground. The Gandhi Study Circle and Vivekanand Society are also service oriented.

1.3.5 Citing a few examples enumerate on the extent of the use of feedback from stakeholders in enriching the curriculum?

In a strongly bonded community such as MH, feedback flows continuously and freely. Students are encouraged to speak up and have the freedom to approach faculty and the Principal at any time. The open-ended feedback derived from classroom discussions and tutorials is the basis for organizing seminars, talks, workshops, screening of films, and innovative research projects. Very frequently, students want to know more about topics in news or path breaking discoveries. The college then organizes event around these requests. A few examples illustrate the essential approach followed by all departments in enriching and enhancing the curriculum.

- The Physics Department society organized special talk on Mars Orbiter Mission (MOM) on 29 October 2014 to celebrate the success of the Indian mission. Dr. Ajay Lele, Institute of Defence Studies and Analysis (IDSA), and author of the book *Mission Mars: India's Quest for the Red Planet* was invited to deliver a talk. In summer 2015, science communicators Mr. Pallava Bagla and Subhadra Menon, were invited to share their ringside view of the mission, beautifully recorded in their book *Reaching for the Stars: India's Journey to Mars and Beyond*. To celebrate 2015, the International Year of Light, the Department invited Dr. Rajarshi Roy to deliver a talk titled *Seeing the Light: J.C. Bose and Table Top Experiments.*
- The Geography Department organized an educational trip to Jaisalmer with a focal theme of Drought Perceptions and Livelihoods in 2014-15 to give students exposure to desert ecological existence.
- The Economics Department invited in 2014-15 Mr. Rajeev Malhotra, former Economic Adviser at the erstwhile Planning Commission, to an interactive session titled *Budget Decoded* to enlighten them on key policy challenges and bottlenecks

the country grapples with. They also invited economist Mr. Parth J. Shah, Founder President of Centre for Civil Society, to speak on *Rethinking Capitalism: Alternative Systems or Solutions Within?* Later in the year, based on student interest, the Department conducted interactive sessions on (i) *Corruption and the Outcomes of Public Policy*, and (ii) *New Development Bank BRICS*.

1.3.6 How does the institution monitor and evaluate the quality of its enrichment programme?

Most enrichment programmes are organized beyond the scheduled class hours. The level of participation of the students in these activities is a fair measure of their success. The enrichment activities are thrown open to the entire college as they often lie at intersection of disciplines and provide an interdisciplinary exposure. MH events are extremely popular and a large number of students from other colleges also join in. The Principal and faculty participate enthusiastically. The feedback is immediate; the depth of questions asked by the students and the ensuing discussion is rated high by the invited speakers. All departments and societies undertake periodic review of the extramural programmes organized by them. These are also summarized for inclusion in the Annual Report. Participation in these events is an important component of student portfolio and also the basis for letters of recommendation given to them as they apply for admission to prestigious institutions of higher learning. The Add-on Courses are self-financing and reviewed by a committee constituted for the purpose. Student feedback is taken to ensure that the objectives of the course are achieved. Also, the expert resource persons associated with the course provide independent evaluation Formalised structures of feedback are utilized in courses with international collaborations, like the King's Summer School Delhi at Miranda House; etc. In some courses, teachers are present as auditors. All of these lead to constant monitoring and evaluation of the enrichment programmes.

1.4 Feedback System

1.4.1 What are the contributions of the college in the design and development of the curriculum prepared by the University?

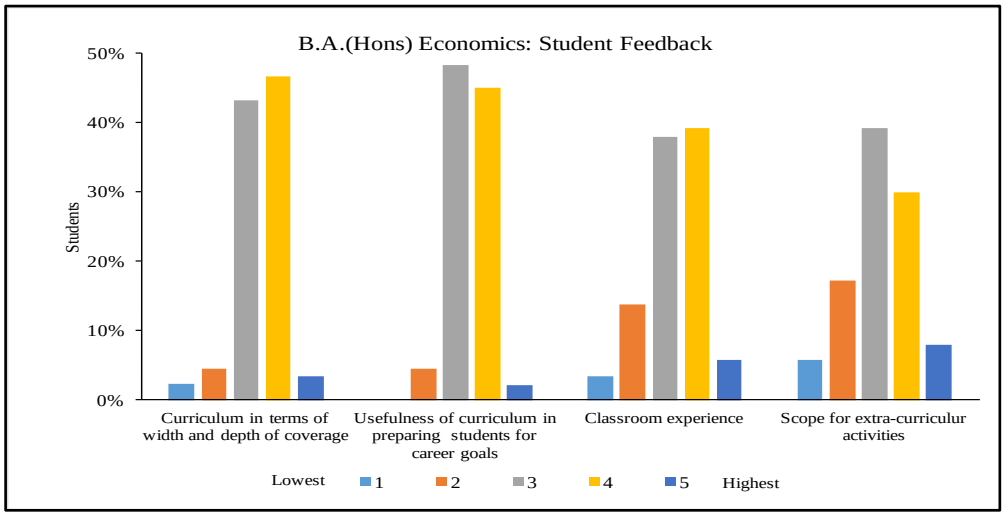
College faculty is actively involved in preparation and revision of syllabus in the University as members of Syllabus and Courses Committees. ***Refer 1.1.6.***

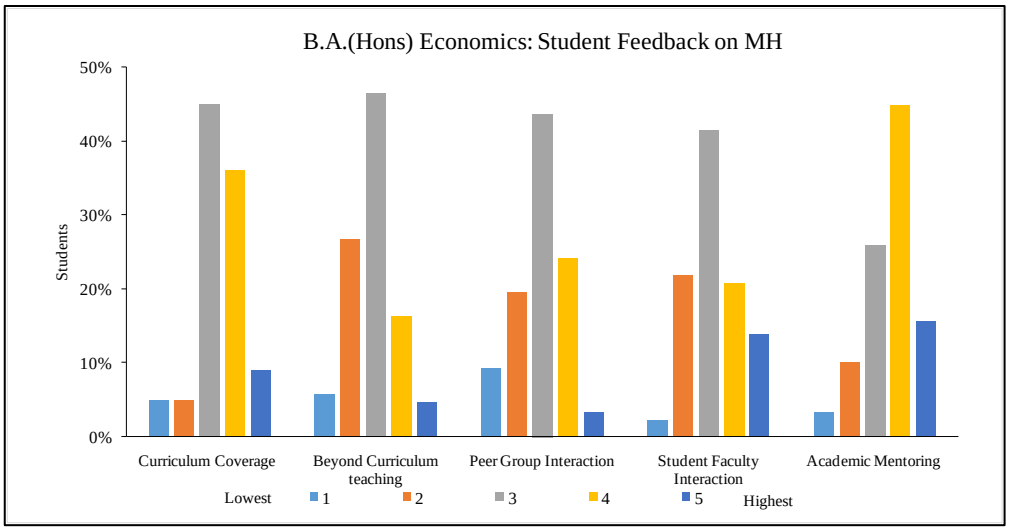
1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on curriculum? If 'yes' how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programmes?

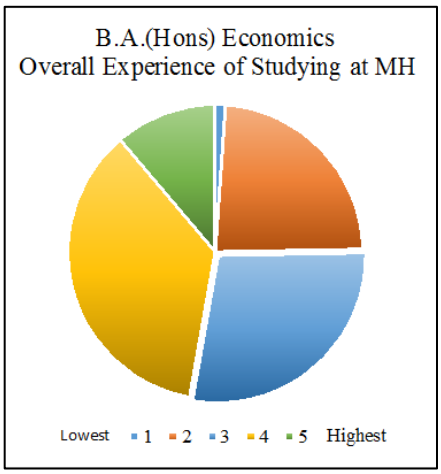
Most Departments and faculty members collect student feedback through informal channels or survey forms. The survey results are discussed at the Department and sometimes, the Academic Committee meetings. The Departments of History and Economics have developed a formal mechanism. The latter developed a Feedback Form after due diligence. This was administered in 2015-16 to elicit student response along several dimensions that included (i) quality of the curriculum; (ii) usefulness of curriculum in making career choices; (iii) classroom experiences; (iv) quality of mentoring; (v) scope for extracurricular activities; and (vi) need to go beyond prescribed curriculum for enrichment. The findings are summarized in Fig.1.4.2. The Department has used the survey judiciously to improve the quality of teaching and enrichment programmes. Last year, it created an Alumnae Fund for supporting research projects by its students; introduced an Alumnae Lecture Series under which

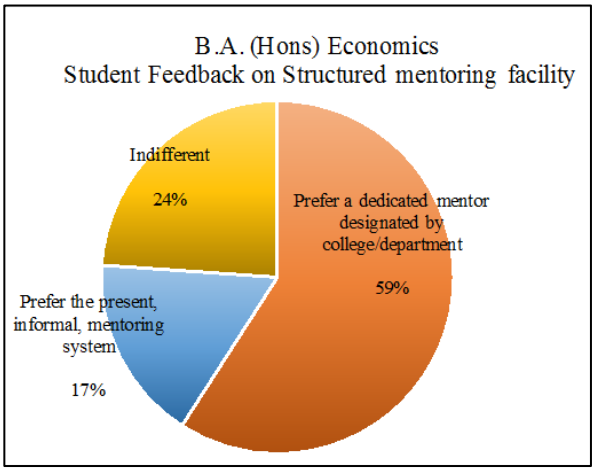
three lectures have been held. Top economists of the country have been invited to address the students. The college is reviewing its mentorship programme with the help of outside experts to match it better with needs of students. This pilot effort forms the basis for what the college expects to introduce across departments.

Fig.1.4.2: Department of Economics: Student Feedback









1.4.3 How many new programmes /courses were introduced by the college during the last four years? What was the rationale for introducing new courses/programmes?

Over the last four years, the framework of the degree programme has been in a state of flux (***Refer 1.2.3)***. The college has diligently implemented all these changes, staying on the leading edge of reform for student benefit. The CBCS is yet to complete one full cycle of three years. Hence several new papers have been introduced. MH has endeavoured to provide maximum possible flexibility to students with a large number of discipline combinations and electives.

Any other relevant information regarding curricular aspects which the college would like to include.

In addition to formal degree programmes, the college also rolled out a number of Add-on Courses, Skill Development Courses and Short Duration Certificate Courses (***Refer 1.2.1***). The courses aim to (i) fill conceptual lacunae in existing courses; (ii) provide remedial instruction or prerequisite knowledge as do the bridge courses; (iii) impart life skills such as in language and communication; (iv) enhance employability skills in identified sectors in accordance with national policies; (v) introduce students to knowledge on the frontiers, preparing them early for a research career; (vi) promote internationalization of syllabus and pedagogy; and (vii) promote bilateral exchange programmes with prestigious international institutes of higher learning, giving students an exposure to a globalizing world. ***Refer 1.2.1***

Criterion II

Teaching-Learning and Evaluation

2.1 Student Enrollment and Profile

Admission to MH is highly sought after. Since its inception, the college has established a strong reputation as an institution of higher learning that combines academic rigour with a liberal spirit and provides an enabling atmosphere to students for the relentless pursuit of excellence in every field. Its location on the University campus, the charm of its heritage building, excellent infrastructure; and the range of social science, humanities and basic science courses makes it the first choice for most women students seeking admissions to DU. Increasingly, the demographic profile of the college is that of the country. The increased mobility for education is clearly visible. Typically, about 60-70% students are from outside Delhi. Many are first generation learners and from economically weaker sections or remote areas. The educational background is increasingly diverse as the number of students qualifying Senior Secondary Examination from State Boards with high scores is on the rise.

2.1.1 How does the college ensure publicity and transparency in admissions?

A. Framework of Admissions at University of Delhi

Process of Admission: The overarching framework for admissions to the college is defined by the parent university and is the same for all its constituent colleges. Candidates who wish to be considered for admission to various UG Courses in different colleges are required to register either online or offline by completing the OMR based Centralized Pre-Admission Form at designated Admission Information Centres in Delhi. As such, DU does not permit direct registration through a pre-admission form at the college level. Admission to any course is on the basis of pre-announced eligibility criteria. The college declares a minimum 'cutoff' percentage for each course. The 'cutoff' announced is usually different for admission under UR/OBC/SC/ST/PwD categories. All students with marks above the announced 'cutoff' are admitted, irrespective of the sanctioned number of seats. In case seats remain unfilled, the college lowers the 'cutoff'. This process is continued in accordance with a given time schedule in permitted number of steps, till all seats are filled. In 2015-16, DU scheduled 10 cutoff lists giving applicants three days for completing the process of admission in each case. The process, although complex, is well explained through all available channels by both, the university and the college.

Supernumerary Seats: Candidates applying under certain categories of reservation such as children of War Widows/Kashmiri Migrants are required to register separately at DU and are admitted through a centralized process. Foreign students are also centrally admitted to the college after applying to the DU Foreign Students Registry. The college admits up to 5% students on the basis of excellence in sports and in extracurricular activities. For admission under these categories, candidates are required to fill a College Pre-Admission Form. The college gives them a 5% academic concession on eligibility cutoff.

B. Pre-Admission Public Interface

Prospectus: Published annually, it aims to attract prospective students and encourage them to apply. It dwells briefly on the history and legacy of the college; its mission and vision; its distinguished alumnae list; the uniqueness of its approach to education; the state-of-art infrastructure and facilities; the enriching academic, extramural, research and community outreach programmes; the promise of inclusive and enabling education for all and commitment to launch students on a successful career path. It provides in detail information on courses offered, sanctioned seats, basis for selection,

procedure for application and admission, fee structure and on campus accommodation in the hostel. It also delineates the add-on courses and other enrichment activities. This information is available on the college website and mirrored on the DU website.

DU and College Admission Information and Facilitation Centre: The Public Interface is twinned with that of DU as a Centralized Admission Process is followed. Measures are actuated with heightened interaction with all stakeholders about8 weeks before actual admissions take place. The college routinely sets up Information and Facilitation Desks with pleasing Graphic Display Boards giving comprehensive information about the college and showcasing the strength of all departments and societies. Faculty and student volunteers work relentlessly according to a roster to disseminate information and interactively satisfy queries of prospective students. Additionally, an Open House is organized on a well publicized date. The college has on several occasions served as the designated DU Admission Information Centre. This entails functioning as a distribution and collection centre for the DU Centralized Pre-Admission Form, providing assistance for on the spot filling of the form. The excellent logistical support provided to prospective candidates – over the duration of a fortnight when the Centre is operative – gives them a first-hand experience of the functioning of the college.

Media Interface: The Principal and faculty members routinely address large gatherings of parents and prospective students. They serve as panelists on DU Open House events, media Mission Admission Programmes, radio and television shows. They also contribute to the printed media's specific queries. The Public Relations Office is set up for the entire duration of admissions. Faculty members provide varied forms of counselling in addition to answering specific queries. Queries from general public are answered promptly even when they are general in nature and pertain to individual dilemmas.

School Interface: The linkages established with schools through various education outreach programmes such as the INSPIRE workshop are a powerful medium for publicity. The INSPIRE alumni have a first hand experience of the college's science programmes and are excellent ambassadors. Faculty members engaged in other synergetic activities with school systems also help publicise college's inherent merits. Invitations to address and counsel school students on choice of course and college are accepted with alacrity.

C. Accountability

The college understands that admission to a UG Course at a college of choice is an extremely stressful exercise for young students and their families. The high demand ratio and strong competition add to the tension. The cutoff for almost all courses at MH is extremely high. Viewing education it provides as a service to the nation and its citizens, MH manages admissions with sensitivity and goodwill. It maintains highest levels of public probity and is firmly committed to fair, transparent and well publicized policies and processes.

Transparency: Transparency is ensured by the seamless flow of information from several quarters into the public domain on the admission process and the criteria that constitute the basis of selection. Admission to MH is entirely on the basis of merit. Information at every stage is shared on the college website and the official notice boards. Stakeholder satisfaction is valued and in addition to the PRO, the Admissions Grievance Committee begins functioning early.

Stringent Verification: All student documents are scrupulously checked to ensure their validity and establish eligibility. For reserved categories, the process of verification often continues till after admissions as corroboration is sought from the organization or entity issuing the certificate.

Commitment to Diversity and Inclusion: The college upholds the national policy on reservations and the guidelines for filling these seats. For SC/ST category students, seats that remain unfilled are widely advertised and selection criteria is lowered to the minimum eligibility criteria.

2.1.2 Explain in detail the criteria adopted and the process of admission (Ex.(i) merit (ii)common admission test conducted by state agencies and national agencies(iii) combination of merit and entrance test or merit, entrance test and interview(iv) any other) to various programmes of the institution.

Admission Process at the College

The overarching framework of admission at DU is detailed in Item 2.1.1. The processes at the college dovetail those at the university in all respects. Careful and strategic planning involving large number of faculty and support staff members ensures smooth conduct.

A. College Admission Committee:

The Admission Committee is constituted by the Staff Council towards the end of May and begins to function almost immediately, managing all pre-admission operations of publicity and public interface that entails setting up the Information Desks and the Admission Facilitation Centre. The Principal chairs this committee while the Vice Principal is the Convener and Member Secretary. This committee spearheads the entire process of admission. Structured for maximum efficiency, it has within it Task Groups for admission to each course. For B.A. (H) and B.Sc. (H) courses, the Teacher-in Charge and one or two faculty members of the Department form the Task Group. For the B.A. Programme and B.Sc. Physical/Life Science Courses, at least one member from each department engaged in teaching the multidisciplinary course contributes to the participatory management of admissions. The entire non teaching staff is engaged and required to contribute to designated tasks.

B. Admission to UG Degree Courses:

Criteria Adopted: Selection is on the basis of marks secured in the Senior Secondary School Examination. In accordance with established DU norms, the criteria adopted for different courses is as outlined in Table 2.1.2.

Table 2.1.2: Selection Criteria: Basis for Admission to Courses Offered

Course	Basis of Selection
B.A. Programme	Aggregate % Marks of Best Four Subjects: One Language and 3 Academic Subjects
B. A. Honours in all Humanities and Social Science Courses	Aggregate % Marks of Best Four Subjects: One Language and 3 Academic Subjects
B. Sc. Honours in Mathematics	Aggregate % Marks of Best Four Subjects: Maths, one Language, and 2 Academic Subjects
B. Sc. Honours in Physics and Chemistry	Aggregate % Marks in Physics, Chemistry and Mathematics (PCM)
B. Sc. Honours in Botany and	Aggregate % Marks in Physics, Chemistry and

Zoology	Biology/Biotechnology (PCB/BT)
B.Sc. Physical Science	Aggregate % Marks in Physics, Mathematics, Chemistry/ Computer Science (PCM)
B.Sc. Life Science	Aggregate % Marks in Physics, Chemistry and Biology/Biotechnology (PCB/BT)
B.A. Honours in Music	Centralized Admission by DU Faculty of Music on basis of merit following a selection procedure
B.El.Ed.	Centralized Admission by DU Faculty of Education on basis of Entrance Test followed by Interview
The Language considered is Core/Elective. In some courses, marks of a vocational subject can be considered in lieu of an academic subject. In some courses, a change of stream entails a differentiated cutoff. If the theory component of a subject included is less than 70%, it entails a differentiated cutoff.	

Eligibility Cutoffs: DU provides data on the school-leaving examination results of all applicants garnered from the Common Pre-Admission Form filled in a digital format. This gender specific information contains the stream- and subject-wise result of individual applicants. The admission committee of each department meticulously works out the number of applicants in a specific range of marks. It keeps in mind the entry level marks of other colleges in the league, especially the co-educational colleges on the campus that are perceived to be attractive for reasons other than academic. This data in conjunction with the previous year's entry level marks and number of students actually admitted provides a model for setting the new benchmark. Beginning with the first cutoff, all the subsequent cutoffs are worked upon on similar lines. This process is followed for each category of applicants. The cutoff is sent to the university. The University displays it on its website and shares it with the media. The cutoff is simultaneously displayed prominently on the college notice boards and the website.

Admission on Basis of Excellence in Sports or Extracurricular Activities: Candidates who apply under these categories are shortlisted on the basis of certificates demonstrating achievement in competitions, etc. in a particular sport discipline or area of extracurricular interest. Shortlisted candidates are invited for sports trial or performance auditions. Admission is on based on merit, assessed by a duly constituted Selection Panel including Governing Body members/ DU Vice Chancellor's nominee, external experts, and college faculty with proven expertise in respective fields; with the Principal in Chair. The trials are frequently video recorded. The details regarding trials, including criteria and dates are given publicity on the College website. The list of candidates selected is prominently displayed on the website. Allocation of courses is on basis of the exercised preference, merit rank and number of supernumerary seats available in a course.

Admission to the Hostel: Students admitted to the college are eligible to apply for hostel accommodation. The distribution of students across the three years of the degree programme is uniform. The number of hostel seats available for any course is proportional to the sanctioned strength of students in the course. Reservation norms for SC/ST/PwD students are followed. This information is given clearly in the Hostel Bulletin of Information along with eligibility criteria, processes and rules. Admission is managed by the Hostel Committee and is based on merit mirroring the criteria of selection to the college. Marks are normalized to provide a level playing field between

students in the same course from different streams. There is no interview. However, parents and local guardians are invited for an interaction before the student is admitted with the objective of establishing a personal bond and assessing the student's background, special needs and support structure in the city, if any.

C. Admission to PG Degree Courses:

A centralized process is followed wherein about 50% seats are reserved on the basis of merit and the rest are through an Entrance Test. DU communicates the list of eligible students to the college.

2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating University within the city/district.

Table 2.1.3 (a): Entry level % Marks: First and Last Cutoff for Courses on Offer

Course	2015-2016									
	General		OBC		SC		ST		PwD	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. Prog.	95.50	90.25	90.50	68.00	87.50	65.00	87.50	80.25	87.50	87.50
Economics	97.50	96.25	96.00	92.50	95.00	85.75	95.00	78.75	95.00	86.00
English	97.50	95.25	96.00	87.00	94.00	85.50	94.00	88.00	94.00	92.00
History	95.00	95.00	90.00	90.00	87.00	87.00	90.00	90.00	88.00	88.00
Hindi	85.00	84.50	80.00	78.50	80.00	79.00	78.00	71.00	85.00	85.00
Philosophy	92.00	88.50	90.00	78.50	85.00	78.00	89.00	80.00	90.00	89.00
Political Sc.	96.50	95.50	94.00	85.25	93.00	90.00	93.00	93.00	93.00	93.00
Sanskrit	75.00	61.00	74.00	60.00	72.00	60.00	72.00	60.00	72.00	68.00
Sociology	95.50	94.75	93.00	85.00	91.00	83.00	92.00	91.50	94.00	90.00
Geography	95.50	95.50	93.00	93.00	90.00	90.00	92.00	92.00	92.00	92.00
Physics	96.67	95.00	95.33	92.00	92.00	90.00	85.00	76.00	90.00	89.00
Chemistry	96.67	95.00	95.67	92.00	93.33	87.00	85.00	79.00	90.33	90.00
Botany	96.00	93.00	94.00	87.33	90.00	86.00	85.00	80.00	85.00	82.00
Zoology	96.67	94.00	95.33	90.00	92.00	88.67	85.00	85.00	87.00	83.67
Mathematics	96.75	95.00	95.25	93.00	93.50	86.00	90.25	77.00	90.00	84.00
B.Sc. Phy. Sc.	94.00	87.00	92.00	77.00	88.00	75.00	85.00	60.00	89.00	87.00
B.Sc. Life Sc.	93.00	93.00	90.00	89.67	86.00	85.00	84.00	73.00	83.67	83.67

For 2011-2015 data refer Table 2.1.3 (c) in Supporting Documents

The comparison of entry level percentages with (i) select women colleges is given in Table 2.1.3 (d), (e) and (f); and (ii) select co-educational colleges is given in Table 2.1.3 (g), (h) and (i) included in the Support Documents. The data shows that the % marks required for admission to almost all course offered at MH are amongst the highest.

Table 2.1.3 (b): Changes in Entry level % Marks Over Ten Year Period

Course B.A./B.A. (H)/ B.Sc./B.Sc. (H)	**2006-07**	**2008-09**	**2009-10**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**
B.A. Programme	82.00	84.75	75.00	87.00	90.00	-	93.00	90.25
Economics	92.00	93.00	94.50	96.00	96.25	96.25	96.75	96.25
Geography	82.50	84.00	85.00	87.00	90.00	90.00	93.50	95.50
Hindi	68.00	69.00	70.00	75.00	77.00	84.00	84.00	84.50

History	80.00	82.00	78.00	93.00	95.00	96.00	96.25	95.00
Philosophy	71.00	76.50	68.50	81.50	84.00	85.00	91.00	88.50
Pol. Science	82.00	87.00	77.00	87.90	95.00	93.50	97.00	95.50
Sociology	81.50	84.00	75.75	89.50	90.50	93.00	94.50	94.75
Botany	73.00	72.00	74.00	80.00	85.00	87.00	90.33	93.00
Chemistry	78.33	73.66	78.00	90.00	92.00	93.00	95.00	95.00
Life Science	76.33	70.00	70.00	80.00	83.00	-	86.00	93.00
Mathematics	90.00	86.00	77.00	90.00	93.00	94.00	95.25	95.00
Physical Science	75.00	72.67	60.66	79.00	82.00	98.00	86.33	87.00
Physics	80.67	76.66	81.00	92.00	94.00	94.33	95.00	95.00
Zoology	75.00	79.33	80.33	87.00	90.00	93.00	95.00	94.00

2.1.4. Is there a mechanism in the institution to review the admission process and student profile annually? If yes, what is the outcome of such an effort and how has it contributed to the improvement of the process?

The admission process at MH is highly calibrated and based on the data made available by the DU Centralized Pre-Admission process which gives details of all applicants to a course across the constituent colleges. Each department scrutinizes this data in great detail. The cutoff is determined by number of seats on offer and statistical distribution of % marks of applicants. It is also influenced by the earlier years data on last cutoff and the number of students admitted. To avoid over admission, the college begins with a high cutoff and lowers it cautiously in subsequent steps. The profile of students admitted over the last few years informs admission policy on cutoffs. Some interesting trends are summarized herein.

- MH cutoffs are consistently amongst the highest in DU across disciplines.
- The difference between the first and the last cutoff is rather low in comparison to other colleges indicating a sagacious model for admission.
- In some courses, when over-admission occurs despite a very high cutoff, greater care is exercised in the next academic year.
- The difference between the academic profile of students in general and reserved categories has decreased significantly. This holds in particular for the case of OBC candidates; several are observed to be eligible under the general category cutoff. This mandates recalibration.
- With the biological sciences emerging as the new frontiers of science, and given the twinning with chemical sciences, there is a heightened interest in the UG courses in these streams. The cutoffs have increased accordingly. Although Physics remains the flagship course in sciences, in 2015-2016, the cutoffs for all the science courses were comparable.
- High demand for Economics and English needs extreme care in declaring cutoffs.
- Courses where seats on offer take longer to fill, such as certain language courses, efforts are made to reach potential candidates through counselling and concession.

2.1.5 Reflecting on the strategies adopted to increase/ improve access for following categories of students, enumerate on how the admission policy of the institution and the student profile demonstrate/ reflect the national commitment to diversity and inclusion (for SC/ST/OBC/ Differently Abled, Economically weaker section, Women, Minority community, Any other).

MH is strongly committed to affirmative action. The college strives to uphold the national commitment to diversity and inclusion. It considers providing quality higher

education to all segments of society a privilege. It fulfills its constitutional and legal obligations in letter and in spirit.

Increasing Equity: The Government of India Reservation Policy providing 27% seats to OBC; 12.5% to SC; 7.5% to ST; and 3% to PwD candidates is strictly adhered to.As a women's college, this sets the ground for first generation women from socially and economically disadvantaged groups to access higher education.

Table 2.1.5: Student Distribution: Reserved Categories

Category	2011-2012		2012-2013		2013-2014		2014-2015		2015-2016	
	No.	%	No.	%	No.	%	No.	%	No	%
OBC	202	19.1	263	24.9	266	25.2	383	36	314	30
SC	144	13.6	138	13.1	139	13.2	161	15.3	185	17.5
ST	65	6.2	70	6.6	70	6.6	76	7.2	86	8.2
PwD	14	1.3	16	1.5	19	1.8	27	2.6	27	2.6

The 4 year data on student admissions shows the institutional commitment to inclusion. In the current paradigm of admissions, filling the reserved category seats, in particular SC/ST/PwD, is a challenge for some courses. For instance, in all language courses except English, there are not enough applicants. The same holds for most science courses. MH has a proactive strategy for filling reserved seats. This entails tracking candidates. The departments maintain a record of interested reserved category candidates who do not meet the announced cutoff criteria at an intermediate stage of the admission process. Unfilled seats are duly advertised on the college website as well as notice board. Candidates are required to register to ensure transparency. A merit list of registered candidates is announced for admission. This process continues till the last date of the DU admissions.

Facilitating Admission*:* Recognizing the inevitable tension students and families experience during admission on account of strong competition and complexity of available choices, the college provides counselling and assistance at every step. This is vital for those at risk of making errors or falling aside due to unfamiliarity with the system or being constrained otherwise.

- A help desk is set up at the college entrance. An adequately staffed Public Relations Office provides academic and career counselling by faculty members.
- The step-by-step single page guide with logistic details is made available.
- Counters are set up for certificate verification of reserved category students.
- Student volunteers assist candidates to fill the Online College Admission Form.
- Each candidate with disability is guided through a fast-track admission process, assisted by a NSS volunteer at each step. Assistive devices like wheel chairs are kept available.
- Faculty members of Equal Opportunity Cell and the Enabling Society remain personally available during admissions and lead the facilitation.
- Students eligible for admission are required to have a substantive discussion with Course Admission in-charge before proceeding to complete the formalities.
- Admission Counters are kept open far beyond stipulated hours to ensure all those who entered the college in time complete the process.
- A Grievance Counter remains operative throughout the admission process.
- The Principal meets each student personally to establish a bond and assess needs before payment of fee and completion of the admission process.

Financial Assistance: It is the endeavour of the college that no eligible student should be deprived of admission because of economic reasons

- Students in financial need are encouraged to immediately apply for assistance.
- Full or partial fee waiver is provided to students in need with quick assessment of need.
- The handbook of Information carries details on College Bursaries and Scholarships available from other agencies.
- The college continuously tries to raise endowment grants to be able to provide more partial and full fee waivers.

2.1.6 Provide the following details (Number of Applications, number of students admitted, demand ratio) for various programmes offered by the institution during the last four years and comment on the trends i.e. reasons for increase/decrease and actions initiated for improvement.

The Centralized DU admission gives the candidates flexibility of expressing interest for admission to unlimited number of courses. More than 2 lakh candidates apply against 55000 seats on offer. Once registered, candidates are eligible to approach any college for admission to the course opted for provided the cutoff criteria are met. Hence it is not possible to provide quantitative data on demand ratio college wise.

Table 2.1.6 (a): Four Year Data on Admission to Various Courses

Course	2012-13		2013-14		2014-15		2015-16	
	Sanctioned	Admitted	Sanctioned	Admitted	Sanctioned	Admitted	Sanctioned	Admitted
B.A. Programme	185	211	Not Offered		185	193	185	218
B.Sc. P. Sc.	34	48	Not Offered		34	36	34	38
B. Tech Computer Sc.	Not Offered		30	41	Not Offered			
B.Sc. L. Sc.	35	39	Not Offered		35	42	35	46
Botany (H)	31	30	44	48	31	43	31	34
Chemistry (H)	62	90	69	60	62	72	62	79
Economics (H)	62	65	85	79	62	83	62	69
Elementary Education	54	61	54	52	54	50	54	51
English (H)	62	63	85	89	62	78	62	84
Geography (H)	46	55	60	93	46	57	46	55
Hindi (H)	62	58	85	86	62	63	62	70
History (H)	46	40	70	66	46	54	46	96
Mathematics (H)	70	64	90	87	70	81	70	76
Music (H)	15	10	15	10	15	20	15	13
Philosophy (H)	46	46	70	61	46	45	46	43
Physics (H)	69	67	75	88	69	87	69	109
Political Science (H)	54	63	89	94	54	84	54	64
Sanskrit (H)	31	19	31	26	31	33	31	22
Sociology (H)	52	56	60	55	52	53	52	52
Zoology (H)	31	30	44	40	31	45	31	38

2.2 Catering to Student Diversity

2.2.1 How does the institution cater to the needs of differently abled students and ensure adherence to the government policies in this regard?

Itself a proponent of inclusive education, the college has worked relentlessly towards providing a sensitive and facilitating environment to the differently abled students. It adheres to governmental policies, UGC and DU notifications in this regard. A meticulous need assessment has helped establish comprehensive and uniform guidelines to cater to special needs through formal and informal processes. The college frequently organizes community sensitization programmes for all stakeholders; these focus on the dignity of the differently abled person and a rights based approach to their concerns. A reflective attitude coupled with a systematic process of review and action enables it to improve access on a continuing basis.

Infrastructure: The college and hostel buildings have been made accessible with appropriate ramps to ensure mobility and independent functioning. All washrooms have disabled-friendly cubicles that provide access to the wheel chair bound. All classrooms carry Braille number strips and legends. Braille notice boards have been installed. Providing assistive devices like recorders and laptops with screen reader software in Hindi and English is high on priority and ensured for all students in need. The college recognizes that much more needs to be done as there are obvious constraints of financial resources. Proposals for installation of lifts have been submitted and await sanction of funds.

Peer Support: The NSS student volunteers have an exceptional spirit of service. They are especially trained to provide sensitive and need based support to the differently abled students, assisting their mobility and providing multifaceted academic scaffolding. Peer support and collaborative work in inclusive groups is encouraged in each class in order bring cohesion and promote mutually beneficial learning.

Inclusive Classroom: Faculty at MH are cognizant and sensitive to the diverse physical and scholastic needs of the differently abled. They directly address a wide range of concerns such as the location of the classroom, seat allocated to the student, deploying diverse teaching strategies, modulation of speech and voice decibel while lecturing, ensuring what is written on the board or displayed in digital presentations is simultaneously articulated, real-time recording of lectures, procuring readings and curricular resource materials in Braille or digital format. Personalized attention during tutorials and interactive hours helps resolve learning difficulties and personal queries. Care is taken to administer specially designed assignments for continuous assessment.

Examinations: During internal assessment tests and University examinations, specific care is taken to simplify all processes. Proper seating arrangements are made on ground floor. There is provision for allowing use of assistive devices and need based assistance of scribe/reader/Lab Assistant to all differently abled students on request. The college pays the fee for these services expeditiously. Transport service is also provided to students during exams. Special permission has been taken from DU to allow use of computers by students on their request during examinations. University is given timely information on special needs of students, such as setting of alternative Examination Papers in certain disciplines, conforming to accepted policy provisions. These could be in the form of alternative questions for visually impaired in lieu of questions requiring visual inputs. Implementation of this policy at DU has happened because of advocacy by the college emanating from the special needs of an

exceptionally brilliant visually challenged student Mahenoor Ali enrolled in B.Sc. (H) Mathematics at MH. The college worked closely with the stakeholder group to get implemented the policy of special Mathematics Papers for her. The group included the student, her parents, college faculty in the Department of Mathematics, PG Department of Mathematics, DU Equal Opportunity Cell, DU Examination Branch, and the Vice Chancellor's Office.

Library Resources: The Amba Dalmia Digital Resource Centre for the Visually Challenged (ADDRC) located in the library is a state-of-art facility that is equipped with all forms of assistive devices such as computers with screen reading software, low-vision aids, scanners, and Braille Embosser. The library also has a large collection of Braille books. Students are provided training on the use of computers and support services.

Nurturing Talent: Differently abled students invariably have exceptional talent. The college provides cohesive opportunities to nurture and showcase their individual proficiency and collective potential. They actively participate in all enrichment, extracurricular and extension activities. Impediments to inclusive participation in these activities are removed through a conscious, dynamic and continuous process adopted at each level including various student bodies. Enabling linkages with other organizations such as DU EOC, NAB and various NGOs are proactively promoted to create life long support structures. Four visually challenged students from MH were selected by DU EOC to participate in an International Students Excellence Programmmeat the University of Edinburgh from 29 June to 09 July 2013.

Evidence of Success: Occasionally PwD students meet the high admission eligibility criteria set for the general category students and continue to perform well. Students' excellent track record in academic, sports, cultural and other co-curricular activities is the hallmark of MH's reputation as a caring institution. A significantly large number of visually challenged students successfully complete the Taekwondo course offered by MH. It is a matter of great pride that differently abled students of MH routinely sweep all inter-college cultural and sports competitions to bring laurels. Pragya Mahajan of Sociology (H) secured the highest marks in first year in the University in 2015. In the same year her twin sister Prachi Mahajan, B.A. (H) Political Science, secured the second highest marks in her class in the first year. ***Refer 4.1.4.***

2.2.2 Does the institution assess the student's needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.

Higher education sets students on a challenging terrain. Teaching pedagogies are quite different from those deployed at the school level. The course content is vast and nuanced. There is a strong emphasis on interdisciplinary courses. The competencies required to engage with the curriculum and other activities need to be constantly developed.

- Students seeking admission are advised during Open House and at other forums about the scope of various courses, pre-requisite knowledge and preparation.
- The Academic Orientation Programme conducted by every department on the first day of the academic session is the steppingstone for assessing the individual needs and capacity of the students.
- During the orientation the faculty invests in exploring the needs of the students who come from diverse academic streams and language mediums at the senior

secondary school level. This is done in order to inform both students and the faculty of the efforts needed during the session to achieve learning outcomes.

- In 2008 the college organized *Beginning at Miranda: A Workshop on Life Skills.* This was a unique orientation week for the incoming batch before the commencement of the academic session. The objective of the workshop was to give students a perspective on what it means to be in a college. It included a smorgasbord of activities that gave a flavour of co-curricular and extracurricular activities on offer at the college. Each day a renowned motivational speaker interacted with the students to instill values of discipline, service, and responsibility with accountability. Students were engaged in small groups in hands-on workshops on theatre, fine arts, puppetry, photography, debating, creative writing, etc. This enabled peer bonding as well as a sense of pride in the institution. Carefully the students were guided to reflect on and value the life skills essential for making a smooth transition from school to college. About 350 students participated. The college intends to revive the programme.
- Early in the semester, some departments identify students requiring greater proficiency in English language and place them in special tutorial groups. For instance, the Hindi medium students are grouped together. However, precautions are taken to prevent isolation of these groups of students. They are rendered assistance by concerned faculty to develop bilingual skills in both Hindi and English. Successfully accomplished, this enables students to understand class lectures and undertake the work of translation of texts themselves. The improvement of language skills contributes to the overall confidence, other soft skills, and the academic performance of such students.
- At the commencement of the semester, the college provides a dedicated orientation to the MH library as a valuable resource centre. It familiarizes them with the enriching repository of books and other curricular materials placed on specific stacks; on-line catalogues for books and journals and digital resources. The students are also provided access to the book-bank.
- The college carries out an Online Digital Literacy Survey early in the semester to determine the familiarity level of students with technology, whether they possess laptops and smart mobile devices and to what use they put these.
- The college carries out a need survey of first year students before issuing laptops to them on request. A simultaneous survey of the level of familiarity with its use helps the college to organize orientation and training workshops.
- Online and Offline surveys are carried out to determine students' choice of Generic Elective and Interdisciplinary Courses. Students are assisted in making informed choices depending on their aptitude and life-goals.

2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of enrolled students (Bridge/Remedial/Add-on/Enrichment Courses etc.) enable them to cope with the programme of their choice?

Students come to MH from diverse regions of the country and cross-sections of society. On recommendation by faculty, several need based Bridge Courses and Remedial Classes are organized for strengthening domain specific competence.

A. Remedial Courses

English Language Proficiency Course (ELPC): Refer 1.2.1.

English Communication Course: Refer 1.2.1.

***Discipline Based Remedial Classes*:** In the last academic year, several humanities departments took the initiative of organizing such lectures on a voluntary basis. The idea behind this exercise was to encourage students to ask questions, engage in discussions and participate in a learning process outside of the regular classroom method. Classes were held beyond the regular teaching hours in college. Departments collectively crafted a course to address the difficulties that students face in regular classroom lectures and create a level playing field for them. Within the common methodology outlined above, the humanities departments developed a threefold initiative which was directed towards (i) deepening the learning exercise by enabling students to strengthen their conceptual and writing capacities; (ii) bridging the gap between types of classrooms: remedial and lecture and (iii) enabling interaction between students and teachers. The common response drawn from all the remedial classes held by different departments was that these classes should be held continuously through the year. This feedback is essential as it provides an understanding of the genuine needs of the students which can often not be accommodated within the classroom lecture or even within the tutorial space. Students are the most important stakeholders within institutions of higher learning and it is necessary to recognize and address their needs. These remedial classes were aimed at providing students with the opportunity to express their concerns and contributing to their learning beyond the classroom.

B. Bridge Courses

These are designed to bridge the gap between course requirements and existing competencies of the students. MH offers bridge courses for science students in:

- ***Laboratory Instrumentation in Zoology – Principles, Usage and Applications:*** The Department of Zoology offers this course for students of B.Sc. (H) Zoology, Part I to provide training on basic equipment and techniques used in the laboratory. The course is divided into four sessions of 2.5 hours each *viz.*, (i) Lab safety, Measurements and Microscopy; (ii) Glassware, Pipettes and Solutions; (iii) Centrifugation, Spectrophotometry and UV Lamp; and (iv) Laminar Flow, Incubator Shaker and BOD Incubator.
- ***Basic Laboratory Techniques in Botany:*** This course on *Basic Laboratory Techniques in Botany* is organized by the Department of Botany for students of B.Sc. (H) Botany and Life Sciences. The course comprises nine sessions of one hour duration each conducted by the faculty members.
- ***Laboratory Safety and Handling of Equipment:*** The Department of Chemistryorganizes a courseon Laboratory Safety and Handling of Equipment for the B.Sc. (H) Chemistry I under the aegis of DSKC. It is designed to enable the students to understand the importance of Laboratory Safety and to gain knowledge about handling of glassware, chemicals and equipment.

C. Enrichment Courses: *Refer 1.2.1.*

2.2.4 How does the institution sensitize its staff and students on issues such as Gender, inclusion, environment etc.?

MH has a legacy of being an empowering space for women. Admissions in recent years have brought to the institution students from across the country and from different social groups. Student diversity ranges along several dimensions, including those of region and language. The college has developed mechanisms to meet the needs of all students. Initiatives and interventions are multipronged. These involve

creating better infrastructure inside the college especially for the students with disability; enhancing safety within the college and more importantly, in the immediate environment in collaboration with civic agencies; creating strong peer and student-faculty interaction, providing mentoring and counseling services, creating oversight and redressal mechanisms. The process of sensitizing students to key concerns on gender, inclusion and environment is initiated at the beginning of each academic session at the Freshers' Orientation Programme itself. The ethos is such that the students and faculty continue to engage with these issues on a daily basis. On one hand, formal courses weave in these ideas and concerns, integrating them into the mainstream curriculum. This provides a scholastic framework and academic perspective. On the other hand, various societies keep the discussions alive outside the classroom and make the concerns on gender, inclusion and environment an important part of their belief system and identity. The specific task of wide ranging extramural engagement is taken up by the dedicated societies of the college which include the WDC, ICC, Equal Opportunity Cell, *Lakshita*, the Enabling Society, Forum for North-Eastern Students, and MH *Vatavaran*. Through workshops, seminars, enrichment activities, community engagement programmes and extension activities, these societies provide a platform for directly addressing the concerns. This provides the critical integration of the ideas into life style; and exposure to finely calibrated activism and advocacy.

Women's Development Cell*:** WDC spearheads the gender sensitization and empowerment programmes. In 2013-2014 the college took a lead role in organizing the *One Billion Rising (OBR*) global campaign to create awareness on the issue of violence against women. The programme has since been continued each year. Through regular informal discussions and debates, an enabling environment has been created in the college where students are able to break their silence on child sexual abuse, family violence and violence by close and intimate partners. WDC offers annually a weeklong Workshop on Women and Law to educate students on their fundamental legal rights. In 2015-16, WDC organized a *Gender Mela* with convergence of renowned academicians, grassroot level workers, children from the community and students. The basic emphasis of the *Mela* was to spread awareness amongst staff and students alike on the crosscutting issues of gender, masculinity and climate change. There are courses available in the existing DU curriculum, which have an inbuilt potentiality to sensitize students to concerns of human rights, gender and environment. ***Refer 1.3.3.

The Internal Complaints Committee (ICC): The College Complaints Committee constituted as mandated by the Vishakha Judgment and University of Delhi Ordinance XV-D has now been replaced by the Internal Complaints Committee (ICC) which has been formed under the aegis of the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act 2013 by an order of DU passed in 2013. The ICC has developed an excellent experiential base on working with police and various law enforcement agencies, Counselling Centres and women's groups to provide quick redressal as well as support mechanisms like counselling and free legal aid. The ICC specifically takes care of sensitization and orientation of staff and students to issues of sexual harassment.

Counseling Unit: The Counseling Unit with a trained Counsellor is available to provide psychological support and remediation to students in distress. Focus is on organizing sensitization programmes on a variety of issues for the entire college community. ***Refer 2.3.7.***

Equal Opportunity Cell*:* The College has a proactive committee to look after the affairs of the reserved category students. Special attention is paid to their education and development of soft skills. This empowers them, makes them confident and well aware young women, who are capable of handling difficult situations and know where to seek help when in need.

Lakshita, The Enabling Society: MH has an empathetic enabling committee to facilitate the differently-abled students in all aspects of student life. The society leads efforts to sensitize all students and faculty towards the rights and dignity of PwD. It organizes seminars, workshops and cultural programmes to nurture and show case their talent and skills. The main aim is to create an environment which is supportive and promotes the idea of interdependence amongst all. The confidence exuded by the visually challenged students and their multifaceted achievements generate tangible admiration and are an inspiration for others.

Society for North-East Students: The society aims to provide a harmonious environment to students hailing from NE and help them to integrate better. They are encouraged to share any kind of problem they come across in their daily life as well as in their academic environment. The society offers them support, counselling and motivation to fulfill their aspirations and contribute to the society in general. This helps the college in providing a friendly and congenial atmosphere to the students despite being far away from home.EOC has also introduced a Bridge Course in Hindi for the students of this region to help them hone their communication skills which will help in their development and integration with the mainstream. The Orientation Programme organized for students from NE is attended by the students from other states as well. In 2015-16, the society screened a short documentary *Soldiers in Sarong* directed by Dr. Arabam Lokendro, a Faculty member in History Department, Manipur University. This was followed by discussion with Mr. Babaloo Loitongbam, an eminent human rights activist. The documentary traced the history of the spirited struggle of the rural women in Manipur against the local liquor business, growing poverty, violent counter-insurgency operations and the armed forces special powers act. The society also organized its first Festival *North East Leirang: Exploring Culture, Diversity and Development*, encompassing the varied culture and history of India's North-East, the region's handicrafts, food and clothing. It began with talk on *The Importance of North East in India's Look East Policy* delivered by Dr. Nehginpao Kipgen, a political scientist and assistant professor of Southeast Asian Studies at the Jindal School of International Affairs. Well attended by students from various campus colleges, the festival and academic presentations set the format for future sensitization programmes. ***Refer 1.3.3***

MH Vatavaran: The Environment Society provides a platform for awareness generation and sensitization on issues of environment and sustainable development. The society has undertaken various activities centered on issues of climate change, water and sustainability. The clean and green environs of the college provide an impetus to the love for nature amongst students. The society strives to encourage ecofriendly lifestyle amongst students and faculty. It has gradually intensified *the clean and green* campaign within the college and the neighbourhood on waste disposal, recycling of waste and related cleanliness drives. The 3R's: *Reduce, Reuse and Recycle* have become the *mantra* of the college and symbols of environmental consciousness in the college community. These practices undertaken on a daily basis motivate life-style changes and encourage harmonious existence with nature.

2.2.5 How does the institution identify and respond to educational/learning needs of advanced learners?

Catching them Early: Advanced learners are easily identified, foremost through classroom interactions. The writing skills of the students, their originality, relevant research, ability for team-work, academic dominance and leadership are identified through a process of continuous observation and evaluation. The institution is cognizant that advanced learners are self-motivated, self-driven and can frequently have personality traits like introversion. They are recognized as scholastically gifted and efforts are made to engage them in extracurricular activities, in case they are not already a part of these.

Advanced Mentoring:

- Faculty provides gifted students with access to advanced references; involves them in undergraduate research.
- Meritorious students are encouraged to apply for INSPIRE and other prestigious scholarships.
- The college is well networked with leading universities and research institutions, both nationally and internationally; it invariably introduces students to visiting experts and scholars, providing them opportunities for extended interaction.
- Science students are encouraged to apply for Summer Internship Programmes offered by the Academies of Science at IISERs, IISc., TIFR, IUCAA, etc.
- Social Science students are encouraged to apply for LSE Summer Programmes.

Special Opportunities: Following examples are illustrative.

- ***Advanced Course on Financial Mathematics:*** It was offered by University of Chicago, Delhi Centre from 27 May to 06 June 2015. Of the 15 students chosen from few of the best institutions across the country after a rigorous process of selection, 8 were from MH. Their sterling performance in this course has led to offers for lucrative opportunities for MH students to undertake further studies at University of Chicago, US, on the basis of Principal's nomination.
- ***International/National Exposure and Exchange Programmes:*** Students are selected for participation in these programmes after a rigorous process of selection. This often entails submission of a Statement of Purpose followed by an interview. Advanced students and those with potential for leadership have been given opportunities to participate in the Indo-Dutch collaboration with the Utrecht Business School, the Netherlands; Wisconsin University Exchange Programme; Sussex University International Summer School; King's International School, Delhi; Jenesys$^{2.0}$ visit to Japan.
- ***Participation in National/International Conferences:*** Five students were nominated to participate as volunteers in the WIN (Women International Network) Conference with full fee waiver. This provided them leadership training and exposure that led to offer for coveted internships. Students are chosen on basis of merit to represent the college at Youth Summits, Public Lectures such as by President Barack Obama; Meeting with Speaker, Parliament; Meeting with visiting delegations, etc.

Participation in UG Research: This is the most effective avenue for scholastic growth of advanced students. The college has several ongoing research projects that provide an early exposure to professional tools and research methodologies. There is a systematic effort to identify future trends and knowledge frontiers and familiarize students with these areas through Seminars and Add-on Courses.

2.2.6 How does the institution collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop-out (students from disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?

MH is aware of the challenges higher education poses to all learners, and in particular to those from less privileged backgrounds. Committed to diversity and inclusive education, the college has well deliberated mechanisms for monitoring and providing academic and financial support to students in need. Faculty members are oriented towards remaining sensitive to differentiated pace of learning by students in the classroom and expected to address the needs of all learners within the classroom. This is not always possible in large sized classes and on account of time constraints imposed by content heavy curriculum. Tutorials and interactive hours provide opportunities for enhancing personalized interaction.

Identifying Students at Risk: It is easy for a teacher to determine if a student does not have prerequisite knowledge, is poorly prepared, disconcerted, struggling, unable to grasp, or completely out of depth. Personal problems are also easily identified in responsive systems such as at MH. Quality of interaction with the student during lectures, tutorials and interactive hours and performance on continuous assessment tasks are indicators of the efficacy of learning. Poor attendance records are also matters of concern. At MH, faculty members and department teachers-in-charge take these early signs seriously. Prompt and adept, they try to determine if the student is facing problems in one class or across the board. This helps in identifying the underpinning causes and setting remedial actions in motion. Financial problems are the easiest to address as the college provides aid from the Principal's Fund for Needy Students. Academic interventions are in the form of assistance with reading materials, make up assignments and remedial classes. Peer groups are sensitized to provide additional academic support, especially in case of students with disability or special needs. Departments are provide data on all outliers at the Academic Committee meeting where result analysis is presented. Reasons for essential repeats and failures are discussed. The college is trying to strengthen its parallel remedial teaching programme so that no student is left behind. ***Refer 2.1.5 and 2.3.7.***

2.3 Teaching-Learning Process

2.3.1 How does the college plan and organize teaching, learning and evaluation schedule? (Academic Calendar, teaching plan, evaluation blueprint, etc.?)

The college adheres to the academic calendar and examination schedule announced by the University. The planning for teaching-learning in the Odd Semester is done in the month of April-May and for the Even Semester in November.

- Departments draw up the workload of individual teachers and the department as a whole. After approval by the Workload Committee and checking the Roster, recruitment of teachers if needed is undertaken before the commencement of the academic session. The specialization and expertise of individual teachers plays an important role in the papers/topics allocated for teaching. The Academic Committee monitors this process as well as collaborative teaching and resource sharing across departments.
- The Timetable Committee prepares and allocates teaching periods to every department. The Teachers-in-Charge distribute the lecture and tutorial periods among the individual teachers of the department. The distribution is done through

a consultative process. The individual timetable are uploaded on the college website for easy access by the students. The Room Timetable is also encased and displayed outside each classroom.

- The academic progress of students is mapped dynamically on the basis of continuous evaluation. Faculty members exercise autonomy to use a variety of teaching-learning methods as per the specific requirements. All departments go into far more depth than is stipulated by the DU prescribed curriculum. They also undertake continuous assessment as a tool for enhancing and enriching teaching-learning. Then instead of cursory evaluation, they integrate assignments, projects and other innovative instruments to gauge students' course specific achievements. Following an open system, individual and collaborative group work are blended. Performance on each task is discussed. The department Moderation Committee scrutinizes the IA scores. These are publicly displayed for one week during which the individual student is required to validate correctness. Discrepancies and grievances, if any, are resolved in this duration. The College Moderation Committee then takes charge and after a final scrutiny uploads these formative assessment marks for inclusion in the summative assessment on the university website. If at any stage an error is identified, a formal mechanism of grievance redressal is set in motion. ***Refer 1.1.2 and 1.1.4.***

2.3.2 How does IQAC contribute to improve the teaching-learning process?

MH has always been well known for adherence to policies and schedules for achievement of targets. Discussions on Quality Assurance prompted by NAAC processes have led to establishment of an internal IQAC at the college. The community has internalized and adopted the new vocabulary that articulates the Quality Assurance precepts. Widespread discussions and recommendations have created coherent synergy between all stakeholders. These have sharpened the following values that were already part of the college ethos and upheld as exemplary.

Dimension of Quality	MH Systems
Equity: No student left behind	Strict adherence to National policies and DU guidelines. Commitment to inclusive classroom and respecting diversity. Generic provisions for students with diverse special needs. Specific provisions for visually challenged students; other PwD.
Timely Delivery of Curriculum	Planning organization of teaching in advance and meticulously. Prominently displaying teaching schedules and timetables. Adhering strictly to class and tutorial schedules.
Enhancing Quality of Teaching-Learning	Adopting student centric interactive strategies. Blending variety of methods including use of ICT. Promoting student projects, collaborative work and presentations.
Responsive Classroom Practices	Remaining sensitive to student needs. Providing timely intervention in the classroom. Continuous assessment and analysis of performance.

Supporting Advanced Learners	Providing challenging assignments and special opportunities. Early exposure to research. Forging linkages with experts; internship and mentoring.
Supporting Students at Risk	Modifying teaching methods in accordance with needs of students. Offering Remedial classes and Bridge Courses. Offering need based financial assistance.
Enrichment	Offering Short term Add-on courses. Organizing Seminars, Workshops, Lectures.

2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning amongst the students.

Foremost objective of education at MH is to train students to take charge of their own learning by *learning to learn*. Since its inception, the college has always promoted student centric teaching-learning. Classrooms at MH have always been vibrant spaces for discussion, discourse and debate. They have integrated with ease theatre, cinema and discourse in real world contexts with experts. There are excellent examples of how teachers frequently move learning beyond the walls of the formal classroom and seamlessly integrate enrichment activities with formal teaching to create not just memorable learning experiences but transformative paradigms of intellectual growth. Generations of alumnae recollect the lessons that helped them take quantum leaps in understanding and laid the foundations of an abiding love for knowledge. These stories are a part of the legacy of the college. The college believes that student centric teaching-learning has to be the norm and not the exception. Teachers make sure that the lectures are sufficiently interactive and the tutorial system is further strengthened. At every forum they are made aware that having mastery over *Discipline Knowledge* or being a good orator is not enough. It is important for them to enhance their own *Pedagogic Knowledge* to understand how students learn best; what the common learning difficulties are; how these are best addressed; and what the diverse set of teaching methods should be to generate interest and understanding. This entails some familiarity with constructivist and social theories of learning; and how active learning can be promoted and enhanced by leveraging peer learning and collaborative group work. Then concerted effort is made to orient the faculty to not just the newer ways of teaching but also the theoretical underpinnings of new pedagogic approach. This enables them to understand the importance of relating abstract knowledge to appropriate examples, providing relevant contexts for experiential learning; and enabling students to transfer knowledge gained to solve real world problems. Field trips, excursions, visits to other organizations, are encouraged and an important component of activities undertaken by all departments.

The college has organized several training programmes for faculty members to familiarize them with the use of computers, generic and specific software, and IT tools. The programme *Miranda Goes Google* has empowered faculty and students alike to use collaborative IT tools. It is easy to claim that with these initiatives, the college has mainstreamed the use of IT in education. Several faculty members have undergone training in use of IT tools at ILLL and CPDHE and are also actively engaged in writing course materials and creating e-Resources for DU. A large number blend PowerPoint presentations regularly in theory classes. Student projects and

presentations are the norm. The college funded a project *Digitization of High Resolution Slides of Indian Coins*, undertaken by a History faculty member in January-March 2015, to enhance classroom teaching of the subject. Under the impetus provided by FYUP, projects and presentations became a part of internal assessment for every department. This is being sustained and is expected to mature into flipped classrooms at MH.

The D S Kothari Centre for Research and Innovation in Science Education established at MH in 2008 has elevated these understandings to a new level, cutting across disciplines. DSKC has organized several workshops that have given science faculty members a first hand exposure on how to create student centric *Technology Enabled Active Learning Environments* and promote project based learning. Most faculty members act as resource persons and facilitators for student projects undertaken under the aegis of DSKC and are engaged in creating e-content and resource materials of high quality. The pedagogic expertise is visible and has a high impact.

In keeping with the contemporary focus on innovation and research in higher education, the college is implementing both, *student centric* and *student driven* teaching-learning. A significant number of MH faculty-student teams are actively engaged in a large number of DU Innovation and Star Innovation Projects. The classroom and research have been integrated into a vibrant learning grid.

2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?

MH is driven by its mission to provide a liberal space to students to enable them to think critically, reflect deeply and engage with communities positively. The classrooms are sustained as democratic spaces where students are encouraged to voice their views. Many Courses in the college are characterized by being interdisciplinary. There is intense give and take between all departments. The barriers between the Sciences and Humanities are non-existent. Disciplines come together in a variety of ways to open new frontiers of study and thought. Research projects by student peer groups are well integrated with the teaching of curriculum. Teaching pedagogies keep pace with expanding frontiers of science and technology. Departments encourage students to publish their findings and explorations.

Students are given exposure through seminar courses to a wide range of viewpoints and thereby an opportunity to hone critical thinking skills; capacity to deconstruct ideas; engage in evidence based argumentation; evaluate theoretical underpinnings and alternate frameworks. This questioning approach has been followed over the years. Two programmes illustrate the continuity of effort:

- MH hosted the first UGC sponsored National Social Science Seminar, *Probing Contemporary Indian Society*, on 05-06 February 2008.Seminal in nature, it brought together academics, activists and students on a single platform to deliberate on the challenges facing contemporary Indian society. The themes ranged from *Rethinking Development, Revisiting Displacement, Revisiting Education* to issues of *Identities and their Representations* and *Law, Rights and Gender* under the rubric *Rethinking Modernity*.
- More recently in 2015, the Add-on Course *Rethinking the Obvious: Examining the Rhetoric of Development* launched in collaboration with George Washington University examined rhetoric of Poverty, Public Health and Development.

Participating students undertook independent projects on a wide range of topics, examining critically the rhetoric underpinnings in public discourse to develop a balanced perspective. ***Refer 3.1.4.***

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg.: Virtual laboratories, e-learning resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education etc.

- ***Digital Infrastructure:*** The college has developed a very strong hardware and software backbone. The entire campus is WiFi enabled. All faculty members were issued Netbooks in 2011. All classrooms are multimedia enabled. Pupil-Computer ratio is 2:1. The library provides easy access to digital knowledge resources through DULS.
- ***Google Apps for Education***: MH became the first college at DU to sign up for Google Apps for education in February 2014, when it rolled out Google Apps for education (drive, docs, calendar, forms, videos, etc.) at its own domain (*mirandahouse.ac.in*) in collaboration with Google Ltd.
  - This is a big step as future-learning methodology would rely on students and faculty being able to communicate and collaborate effectively. The entire faculty and administration switched to their official email accounts created on the domain *mirandahouse.ac.in* using Google Apps for Education.
  - Gradually but steadily, the college community has started using apps like Google Calendar, Google drive and Google Docs to effectively organize teaching-learning process.
  - Several student groups/societies have used Google forms to collect survey data, student feedback or simply to collect RSVP information for events.
  - The college pioneered to live stream some of its important events like Founder's Day 2013, International Women's Day celebrations through Google hangout on its official YouTube channel *mirandahousedu*.
  - Departments like Economics and Physics used the Google Apps platform to develop in-house departmental websites on the domain *mirandahouse.ac.in.*
  - The college is establishing a rich digital resource library online using Google videos, video recordings of various lecture series, seminars, panel discussions, etc. held in the college from time to time.
- ***ICT Use Training Programmes***: The college has organized several training programmes for faculty members. The in-house workshops are supplemented by those held at ILLL, CPDHE and other institutions. An illustrative list is included. Workshops have covered a wide range –at different levels to suit different needs– from the basics of computers and use of IT tools to advanced courses on dedicated software.
  - Scilab for Physics Teachers; Dept. of Physics and Astrophysics DU; 2016
  - Workshop on Computer Programming and Numerical Analysis; Dept. of Physics and Astrophysics DU; 2015
  - Computational Chemistry and Bioinformatics for training in BIOVIA Discovery Studio software; DSKC, MH; 2015
  - Computational Methods in Drug Discovery for training in Schrodinger software; DSKC MH; 2015
  - Computational Profiling of Some Nanosystems, DSKC, MH; 2014
  - Introductory Workshop on LabVIEW; DSKC, Miranda House; 2014

- Docking studies & Molecular Modeling in Rational Drug design; DSKC, MH; 2014
- Training programme organized by Google for use of Google Apps for end users; MH; 2014
- Introducing FOSS & Workshop On Linux Ubuntu; Department of Computer Science, MH; 2013
- Active Learning Integrating Hands-on Experiments and Multimedia Resources; DSKC, MH; 2013
- Introduction to Robotics; Cluster Innovation Centre, DU; 2013
- Foundation Course on Information Systems; CPDHE, DU; 2013
- Computational Biology; Department of Botany, DSKC, MH; 2012
- Computational Chemistry for Chemistry Educators; Participants trained in software ArgusLab and Discovery Studio; DSKC, MH; 2011
- Training programme in C and C++ programming languages; for physics teachers; Department of Physics and Astrophysics; 2011
- e-classes as e-Learning Portal Coordinator; Dept. of Comp. Science DU; 2010
- A workshop on ERDAS, remote sensing software was organized. Mr. Ram Kumar, Technical Engineer, from Leica Geosystems Geospatial Imagine India Pvt. Ltd. demonstrated the salient features of the software to the students and the faculty, 2010
- ICT workshop for Capacity Building of Faculty in DU in collaboration with ILLL; 11-16 January 2010; 5-10 April 2010; 19-24 April,2010

- ***Developing IT Enabled Active Learning Resources***: Several faculty members are actively engaged in writing course materials and creating e-Resources for DU. The college has several pioneering programmes as given below.
  - The college funded a project *Digitization of High Resolution Slides of Indian Coins*, undertaken by a History faculty member in January-March 2015, to enhance classroom teaching of the subject.
  - The college also has an ongoing initiative on digitizing the slides and creating a digital photo library of specimens in Botany and Zoology Museums.
  - DSKC organized in October 2013 a collaborative workshop for 38 UG teachers from across 10 DU colleges titled *Active Learning: Integrating Hands-on Experiments and Multimedia Resources*. Participants were trained to author and design short multimedia modules incorporating text with animations and video to illustrate concepts, focusing on Physics phenomena that can also be demonstrated using simple equipment and hands-on experiments. The material was developed within the framework of *Physclips* Project at University of New South Wales, Australia, with George Hatsidimitris as resource person.
- ***Computer-based Measurements in Laboratories:*** MH Physics Department has played a pioneering role in the country by designing and developing *Science Online*, a comprehensive Sensor Based Real-time Data-Acquisition and Control System way back in 1988. This was a low-cost indigenously fabricated kit with user friendly software for generic and specific tasks. The work was extensively published. In-house development was in collaboration with open-ended investigative project undertaken by students form across DU colleges. Under the aegis of DSKC, the college has state-of-art equipment and software for online measurements from several commercial vendors and innovators from across the world. Leading Physics education research groups are collaborators. Physics

Department has taken the lead in introducing sensor based measurement to other disciplines. All science departments have collaboratively developed a comprehensive range of real-time experiments in multidisciplinary contexts. These are used for project-based learning during summer camps, and for short duration curricular projects. Several students undertake year long projects.

- ***Comprehensive Technology Enabled Active Learning Environment:*** The science departments, in particular, the Physics Department is following seminal Physics education research-based active learning methodology whenever possible within the constraints of the curriculum. These seamlessly integrate real-time measurements; video-clips along with video analysis tools; real-time graphing tools; simulations; data modelling and analysis tools.
- ***Open Educational Resources***: The best examples of praxis are deployed. These include
  - AAPT ComPADRE Digital Library, a network of free online resource collections supporting students, and teachers in Physics and Astronomy Education; Computational Physics and Computer Modelling Resources, etc.
  - TED and INK Talks; Webinars, Podcasts, YouTube Videos, etc., discerningly selected for curricular enrichment by faculty and often students themselves.
  - Open Educational Resources (OER) Commons for introductory courses.
  - Open Courseware (OCW) from prestigious universities such as MIT, and more expansively, from OCW Consortium. The open source and open content is suitably adapted and blended.
  - National Programme for Technology Enhanced Learning (NPTEL) and National Mission on Technology (NME-ICT) resource.
- ***Tactile Models, Computer Imaging and Visualizing Programmes:*** In Chemical and Life Sciences, these tools are deployedfor better understanding of molecular structures, stereoisomerism and crystal structures.
  - Students are tutored to visualize molecular structures and understand stereochemistry using OSS, e.g. ArgusLab, ACD ChemSketch, etc.
- ***Interactive Screen Experiments (ISEs):*** Resources include powerful rendering of hands-on science experiments developed for awareness and laboratory work.
  - *LearnChemistry* project of Royal Society of Chemistry.
  - Online Labs (OLabs), Virtual Simulation Labs from Amrita University; Freie University, Berlin; and Open University, UK.
- ***Mobile Apps in Education:*** MH understands Mobile Technologies are the future of ICT and is fast integrating these, in education.
  - *Mobile! MyLab, AnytimeAny where* is the title of one of the DU Innovation Projects undertaken by a multidisciplinary team of students and faculty from Chemistry, Computer Science, Botany and Physics Departments. The project is developing Apps for use of the Mobile as a versatile lab, leveraging on-board sensors for measurements in real-time.
  - *Chapter Apps and Chapter Vitamins,* is the name of the product on which MH has an MoU with Guiding Star Digital Publisher. The college is working on a Quizzing App, Survey App on Android, IOS and Web platforms; and publishing of lessons and multimedia content created by MH faculty.
  - *Attendance App,* was designed collaboratively under the above agreement and used extensively by about 80 faculty members who participated in beta testing.

2.3.6 How are the students and faculty exposed to advanced level knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?

MH is relentlessly working with joy and passion on transforming its teaching-learning spaces, physically and metaphorically. The change in paradigm on higher learning is being brought in a systematic and well deliberated manner on all fronts; with due attention to capacity building of faculty and students. As a self learning organization with strong collegial bonds, MH has focused on developing strong collaborative faculty-faculty, student-faculty and student-student groups to enhance both, the teaching-learning and research components. Strategies adopted for going beyond the curriculum to explore the frontiers of knowledge are multipronged; a vast manifold of programmes have been implemented.

Advanced Faculty Training: This report abounds with examples, including in-house workshops.

- Two science faculty members were nominated to participate in *Research Based Pedagogy Tools* (RBPT) Workshop for Undergraduate Science Teachers jointly organized from 10 to 12 March 2016 by IISER Pune, Department of Biotechnology (DBT) and the Newton Bhabha Fund, British Council. A team from University of Sheffield along with experts from India conducted the workshop. It aimed to train participants in designing and deploying research-based pedagogical tools and to develop strategies to assess the learning outcome amongst the Science and Mathematics students at the undergraduate level in India. The objective was to identify scale-able tools that can be deployed for teachers all over the country.

International Workshops:

- DSKC organized *Physware 2012: A Collaborative Workshop in Low-cost Equipment and Appropriate Technologies that Promote Undergraduate-level, Hands-on Physics Education throughout the Developing World,* from 26 November to 07 December 2012. This international workshop was sponsored by ICTP Treiste, IUPAP, ICPE, India Sri Lanka Foundation, CSI, VigyanPrasar, DST, UGC, DBT, DSKC-MH. The 4 International Workshop Directors included the Principal Dr. P. Jolly. It drew 47 participants from 14 countries. The first week introduced the value of promoting conceptual understanding with locally fabricated low-cost equipment. The second week introduced the use of advanced technologies including computer-based labs. The MH faculty and support staff helped coordinate, and were applauded for the innovation in experiments set up and meeting global benchmarks.

Advancing Trends in Knowledge, Expert Lecture Series: Few examples from those organized in 2015-2016 are:

- *Women in STEM and Future of Computing;* Ms. Debjani Ghosh, Vice President, Sales and Marketing Group, MD, South Asia, Intel., 13 October 2015.
- *Cloud and Mobile: The Fundamentals and the Future*; Mr. Vikas Sahni of University of Ireland, 28 October 2015.
- *Startup India;* Department of Computer Science Festival; 18March 2016.
- *The Digital Humanities and Architectures of Participation in Humanities Scholarship;* Prof. Paul Spence, from the King's College, London, February 2016.
- *Creativity–The Way Ahead*; Mr. Praveer Sinha, CEO and Managing Director of Tata Power Delhi Distribution Ltd., 14 October 2015. The talk acquainted students with the latest developments and innovations in smart technology.

- *Climate Crisis – A Braided Tale;* Dr. Vandana Singh, Associate Professor and Chair of Department of Physics and Earth Sciences, Framingham State University, USA, 11 January 2016.
- *Eyes on Earth – Exploring Earth from Space;* Dr. Diane L Evans, Director, Earth Science and Technology Directorate, Jet Propulsion Lab, NASA, USA, 17 February 2016.
- *Resolving Atom in our Backyard: Indigenous Technology in a Globalised World;* Prof. Deshdeep Sahdev, former faculty, IIT Kanpur, who set up his own firm *Quazar Tech* to develop high technology instruments such as scanning tunnel microscope, 03 March 2016.

Advancing Trends in Knowledge, Students Collaborative Projects: Students and faculty are engaged in several DU Innovation Projects. In addition, specific theme based short duration projects are undertaken.

- *Smart Cities:* The Geography and Physics Departments participated in a workshop on *Smart City* in February 2015, exploring contemporary concerns of metropolitan existence such as demographic diversity, communication, housing, transportation, waste disposal, safety, etc. A model was created and displayed at DU Annual Festival *Antardhwani*.
- *International Year of Light and Light-based Technologies:* In 2015, the students of Physics carried out projects to create innovative demonstration experiments; they set up exhibition stalls at *Antardhwani* and presented several papers.

2.3.7 Detail (process and the number of students/ benefitted) on the academic, personal and psycho social support and guidance services (professional counseling/mentoring/academic advise) provided to the students?

MH offers all students guidance, counselling and support through its various formal and non-formal processes and structures. Counselling service is of paramount importance to the institution as it helps students achieve their fullest potential, not only in the arena of academics but also in making them well-adjusted citizens of the country. The diverse socio-economic profile of students makes it imperative to have a range of counselling services to address academic, personal and psycho-social needs. Problems of relocation, life away from home, peer pressure, intense competition, worries related to future careers all contribute to the anxieties which require timely support and resolution.

Academic Counselling: Academic counselling begins at the time when prospective students approach the college seeking admission. The faculty members of various departments deputed at the Public Relations Office are available to answer the queries related to choice of subjects, course combinations, especially in the B.A. Programme, Generic Elective, Interdisciplinary, Concurrent courses, etc. Orientation programmes are also held for the second and third year students by the respective departments to enable informed choice of subjects/course combinations.

Personalised counselling on subject choice and other academic matters on a one-to-one basis is also offered. The faculty is available to students for support on matters related to sub-optimal academic performance, coping mechanisms with new pedagogies and curriculum etc. Student mentoring is encouraged across the board in MH. In 2010, teachers were allocated contact hour beyond their weekly class schedule to be available as mentor to a group of 10-15 students across disciplines. This resulted in orienting teachers as mentors enabling them to continue this practice in an informal

manner, even though the formal system was discontinued in 2012. However, the institutional mechanism in this regard continues with faculty members associated with the NSS, WDC, Equal Opportunity Cell, North-East Forum and *Lakshita*, the Enabling Society offering mentorship due to the very nature of these activities.

Career and Education Advancement Guidance: The college gives significant emphasis on career and education advancement guidance. The first point of contact for the students in this regard is the faculty who guide them on future education, research and career paths. The faculty due to their own expertise on the subjects concerned as well as their research experience provide substantial inputs in terms of reading materials, research proposals and suggestions regarding application processes to higher centres of learning both in India and abroad. MH has a dedicated Placement Cell with its own infrastructure which organizes sessions with leading companies and institutions for recruitment as well as awareness of employment opportunities. Every department encourages students to intern with business houses, development and social sector as well as government agencies.

Psycho-Social Counseling: MH has a well-established Counselling Unit run by a professionally trained Counsellor who is available for five and a half hours each day on three days a week. Apart from these working hours, the Counsellor is also available on call to take care of unscheduled requirements. The Counselling Unit handles issues related to behavioural problems, inter-personal relationships, stress and anxiety related to examination, etc. These services are provided on a one-to-one basis maintaining professional confidentiality. The underlying concept is humanistic counselling with emphasis on development of self-esteem and confidence. The Counsellor aids the students by listening, reflection and clarification with the help of empathy, warmth and genuineness.

Table 2.3.7: Psycho-Social Counselling by the Professional Counsellor

No	Period	Academic	Professional	Personal and Psycho-social
1	2013-14	75	75	160
2	2014-15	73	73	185
3	2015-16	60	60	200

As an essential part of counseling, information is disseminated through posters on topics of common concern such as *Exam and Study Skills*, *Anger Management*, *Anxiety and Fear*, *Peer Pressure*, *Productivity*, *Self-esteem* and *Developing Hobbies*. Art therapy sessions and workshops on mental health issues are also held. Workshops on *Understanding the Growing Need for Counselling and Managing Stress Processes* are regularly held for hostel residents and NSS student volunteers. ***Refer 5.1.8.***

2.3.8 Provide details of innovative teaching approaches /methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

MH is at the forefront of providing opportunities, training and academic flexibility to its faculty to adopt new and dynamic teaching methods. These are oriented towards strengthening Basic Science and Liberal Arts education in ways that are determined and sustained by all stakeholders. MH has created *Active Learning Environments* in which classrooms are transformed into learning studios that integrate lectures, tutorials and laboratory, field-work and diverse tools for teaching-learning. These innovative approaches in teaching lead to improved learning of the subject,

motivating students to engage in a reflective and sustained manner with the disciplines of their choice and the ability to connect it with the real world issues and concerns. Innovative pedagogic approaches and resources generated, collated herein, are to be read in conjunction with the submission in Items 2.3.3, 2.3.4, 2.3.5, and 2.3.6. It is reiterated that MH faculty have adopted and adapted several education research-based teaching-learning resource materials and commingle role as teacher with those as action researcher in the classroom/laboratory and members of curriculum development team.

- ***Advancing Science by Enhancing Learning in the Laboratory (ASELL):*** Nine members of Science Departments were awarded Australian Leadership Award Fellowship (ALAF) for participating in the ASELL International workshop organized in University of Sydney with fully funded 3-week stay. They developed and presented innovative science experiments from Chemistry, Botany, Physics and Zoology; the accompanying write up followed a research-base template with Pre- and Post-Lab questions. The team has since then added more experiments to the repertoire, under the aegis of a DSKC project titled *Laboratory Innovation Network for Knowledge Enhancement (LINKE),* creating a consortium for creating and documenting innovative experiments.
- ***Interactive Tutorials:*** MH Physics Department has developed and uses Interactive Laboratory Tutorials. Each tutorial includes (i) Pre-laboratory Questionnaire to elicit students understanding of procedural and conceptual knowledge (PACK); (ii) the Experiment Worksheet that provides a theoretical background and a guided exposure to the laboratory task; (iii) an Assessment Rubric integrating research-based concept- and data-probes; and (iv) Bridging exercises and thought experiments for enriching applications and pursuit of project work.
- ***Conceptual Inventories, Baseline Tests and Science Awards:***
  - Some faculty members of Physics Department use research-based concept inventories available through seminal international research and have also contributed to making of these. These are used as pre- and post-instruction probes and provide an insight in to conceptual understanding of the student.
  - At the beginning of the odd semester, MH students are invited to participate in the 2-step Science Award Competition. (i) Baseline Tests are administered in Physical Science, Chemical Science, Biological Science, Mathematical Science and Earth Science. One or more tests can be taken. (ii) Top three students of each stream compete in an exposition round on a topic of their choice. The winner is given the Science Award. The 4-member multidisciplinary college team for the University's prestigious *Science Quest* competition is chosen from amongst the winners. MH has consistently been in the top three positions of this competition, mostly receiving the first position.
- ***Nature Trips:*** These are an integral part of Life Science courses.
  - Students of Botany explore the college botanical garden, the campus and the northern ridge to learn and understand about biodiversity.
  - Visits to the Yamuna Biodiversity Park, local research institutions like the NBPGR, IARI, Department of PMB at the South Campus, IGIB, museums and various science exhibitions are undertaken on a regular basis.
  - The out-station visits to the Forest Research Institute at Dehradun, Institute of Microbial Technology at Chandigarh and Bharatpur National Park contribute to strengthening of learning.
- ***Teaching Aids:*** In Geography, multiple teaching aids such as Maps, Globes,

Stereoscopes, GPS, Pedometers, etc. make learning more interesting. Students are taught and encouraged to use specialized instruments and computer programmes. As Field Work is a compulsory component of the curriculum, at the end of the course, students are equipped to analyze data, create maps of places visited and write about the spatial connections, interactions and correlations.

- ***Experiential Learning in Social Sciences:***
  - ***Discourse:*** The focus is on actively engaging students in construction of their own knowledge through Debates, Discussions, Cinema, Theatre and Quizzes.
  - ***Case Studies:*** In all disciplines empirical analysis and use of case-studies and project-based learning are increasingly used as teaching methods. In the Department of Economics, industry student interface and study of rural economic realities through survey methods are an important part of this.
  - ***Political Speech Analysis*** as a method of reflection was undertaken by the students of Political Science through (i) the analysis of Atal Bihari Vajpayee's speech of 29 May 1996; (ii) telecast of the presentation of the Union Budget in the Parliament and the debates on it on 29 February 2016.
  - ***Field Visits:*** Visits to museums and archives motivate students to understand the dynamics of the past. History Department organizes a visit to the National Museum in every session for the first year students to enable them to understand the connect between the written word and the world of images. An outstation trip is organized in most academic sessions to a set of places of historical importance. ***Refer 7.2.1D.***
  - Visit to Gandhi Museum help recreate political journeys of national leaders.
  - Visit to Parliament and Courts enables understanding of how the legislature, judiciary and the executive function; and how national concerns are addressed.
- ***Reflective Journals:***
  - Many Departments have in-house journals where students are encouraged to write reflective articles about discipline centric themes.
  - B.El.Ed. students write reflective journals about their experiences and thoughts for some components of the programme.
- ***Self-development Workshops:*** Performing and Fine Arts workshops, Self-development workshops, Story-telling and Children's Literature workshops are used innovatively by students of B.El.Ed.to understand cognitive processes involved in learning subjects.
- ***Students Discussion Forum:*** This is an initiative of the students of the Department of History. Issues of contemporary significance are discussed fortnightly. Students of disciplines other than History are also welcomed at these discussions where ideas are exchanged and important questions of the day debated in a non-competitive atmosphere. Several teachers of the History Department also attend and moderate these discussions.

2.3.9. How are library resources used to augment the teaching learning process?

The library at MH is amongst the best equipped with a very large collection of text books, general books, reference tools, reserves, periodicals, e-resources and braille books. It has a fully automated circulation system through *Libsys.* The college has installed Web OPAC. Connected to DU LAN, it provides access to DULS and major databases such as N-LIST and INFLIBNET. Social Science and Humanities Departments find access to JSTOR (http://www.jstor.org/) particularly useful. This printed and digital knowledge system is an integral part of teaching-learning. The

syllabi of all courses include an extensive reading list. At the beginning of each semester, students are informed about the importance of primary and secondary sources, and independent reference work that goes far beyond the prescribed readings. Regular book readings, frontloading original texts into the class, serve to convey to the students that library time is an essential course requirement. As part of policy, the college makes an effort to procure pertinent readings, books and e-resources on introduction of any new course. The library at MH has acquired copyright to allow easy reproduction for books and articles to allow students to benefit from easy access to key readings. The library also facilitates inter-library loans so that students and faculty have seamless access to reference material. Most departments at MH have a Department Library to provide easy access to textbooks and rare readings. Faculty's own collection supplements this. A book bank is also maintained. ***Refer 4.2.***

2.3.10. Does the institution face any challenges in completing the curriculum within planned time frame and calendar? If yes, elaborate on the challenges encountered and the institutional approaches to overcome these.

Completing the prescribed syllabus in time is a top stated priority. The changes in curriculum due to the transition to CBCS system have been smoothly incorporated through meticulous planning and orientation of faculty to the intricacies of the new courses and evaluation procedures. Department teachers-in-charge are expected to ensure that classes are held as scheduled and the course is completed in time. Rescheduling of classes is discouraged; any departure from the scheduled class time has to be reported. Faculty who avail short duration leave are expected to make alternate arrangements providing specific information to the office. Faculty who wish to avail long leave have to apply well in advance so that alternate arrangements can be made. These measures contribute to course content being completed on schedule.

The college has a very vibrant cultural life while adhering to a rigorous academic calendar. As a result, time management is often a concern, which is overcome with careful planning and cooperation. The college endeavours to provide reprieve within the Timetable so that students do not miss classes. There is provision in the Timetable for a Coffee Break and a brief Lunch Break. Students are given common free time in the week for scheduling society meetings and extracurricular activities. A single day is allotted to all freshers' welcome or final year students' farewell parties across departments so that there is minimum disruption of classes. To enable observance of national days, classes are shortened by five minutes so that the event can be scheduled in the coffee break thus extended. Certificate courses are planned in the late afternoon.

2.3.11. How does the institute monitor and evaluate the quality of teaching learning?

There are different levels at which the quality of teaching-learning is monitored and evaluated by the college. Faculty are conscientious and take classes as scheduled. Individual faculty members gauge the efficacy of teaching-learning in their own classroom through informal and formal feedback. Student performance on continuous assessment is an obvious indicator of accomplishment of learning outcomes. Departments have periodic peer meetings to monitor the progress of courses, discussing problems or challenges being faced. Immediate remedial measures are taken in case the department receives any student grievance or representation. The department moderation committee also scrutinizes carefully the student IA profile. Analysis of students performance is diligently undertaken and reported at the

Academic Committee meeting with the Principal in chair. The minutes of all Academic Committee meetings are reported at the Staff Council meeting. The Principal also monitors and evaluates quality of teaching-learning independently. Students feel free to approach her to discuss problems they face. Representations on poor quality of teaching are expeditiously handled to student satisfaction. New faculty members and guest faculty are provided adequate mentoring, training and hand-holding where deemed necessary. Student feedback is an important indicator. While most faculty members process this informally, many departments are adopting it formally. The Department of Economics undertakes this exercise periodically. All these processes strengthen the teaching and learning evaluation. ***Refer 1.4.2.***

2.4 Teacher Quality

2.4.1 Provide the following details and elaborate the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent) teachers to meet the changing requirement of the curriculum.

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent Teachers						144	
D.Sc./D.Litt							
Ph.D.				44	01	59	104
M.Phil.				08	01	23	32
PG				02	01	05	08
Temporary Teachers						02	
Ph.D.						01	01
M.Phil.						01	01
PG							
Ad Hoc Full time Teachers 56							
D.Sc./D.Litt							
Ph.D.					07	06	13
M.Phil.					12	16	28
PG					02	13	15
Part Time Guest Teachers 24							
D.Sc./D.Litt							
Ph.D.					02	12	14
M.Phil.						07	07
PG						03	03

Recruitment and Retention of Faculty: The college understands that the single most important factor that determines the quality of teaching-learning in the classroom is the scholastic accomplishments of the faculty, their motivation level and commitment to the institution. Teaching at MH is more than a job. It is a mission in which all members of the community are expected to join. Faculty members are recruited to permanent posts through a well defined process of recommendation by duly constituted selection committees. While the college has tried its level best to ensure recruitment of new faculty occurs as soon as need arises, due to reasons beyond direct

control of the college, there have been inadvertent delays in permanent appointments. In the best interest of organization of teaching-learning, the college however ensures that *ad hoc* and guest faculty are recruited in a timely manner in accordance with the approved workload and roster, following due procedures. An appointment at MH is considered a privilege and a valuable experience by *ad hoc* and guest faculty. Irrespective of nature of appointment, the college provides orientation to all new faculty members. They are mentored, expected to follow the processes diligently, also contribute to beyond the classroom enrichment programmes. ***Refer 6.3.6.***

2.4.2. How does the institution cope with the growing demand/scarcity of qualified senior faculty to teach new programmes/modern areas (emerging areas) of study being introduced? Provide details on the effort made by the institution in this direction and outcome during last three years.

MH is increasingly a young college. Since 2000, 72 faculty members have superannuated across the departments. The college has recruited 98 faculty members; of these 17 new faculty members have been appointed in the last one year in 6 departments. Appointments in 6 other departments stand advertised and await constitution of Selection Panels.

As detailed in Items 6.3.2 and 6.3.6, the college policies ensure a smooth transition from the old to the new. All committees and task groups include new as well as immediate past members, young and senior faculty. In particular, young faculty are nurtured and provided adequate support where necessary without infringing on their autonomy and constraining the freshness of thought.

The college welcomes the opportunity to renew itself by recruiting younger, dynamic staff with experience of research on the frontiers and fluency with ICT tools. Rapid changes in the curriculum and pedagogy; the ubiquitous adoption of ICT in education; advent of digitally connected communities and workspaces; and most importantly emphasis on research and innovation, mandate a fresh look at the competencies faculty must have. The college is also highly cognizant of the skills the young students bring to the classroom and their expectations from an educational institute of repute. This awareness is reflected in the policies adopted for recruitment. In addition to the essential qualifications for Assistant Professor stated in the DU Ordinances, the college remains vigilant about the desirable qualifications of faculty being recruited.

This policy has borne rich dividends. The young faculty recruited in recent times are extremely talented. They have given an impetus to research. Detailed under Criteria III, the bio profile of several science faculty members is outstanding. They have helped the college establish research programmes on the frontiers in Material Science; Nanoscience; Bionformatics; Biotechnology; Drug Discovery; and Environment. The young faculty in Social Science and Humanities is also proactively guiding students under the DU Innovation Projects scheme and is driven by desire to produce and publish quality research.

To leverage the advantage, young faculty have been provided assistance by the college through DSKC for establishing research labs; a head start has been given by equipment procured by DSKC. They have also been encouraged to offer Add-on Courses in frontier areas of their research interest. In addition to training students, these deepen the research base by bringing renowned scientists as expert resource persons, establishing linkages and collaborations. For ease of reference, illustrative supplementary research initiatives are:

- Add-on Course *Medical Biotechnology*
- Add-on Course *Bioinformatics and in silico Medicine*
- Research Activities undertaken at OSDD Centre sponsored by CSIR
- Activities for enrichment of formal science education undertaken by 5 science departments under the DBT Star College Scheme Award
- UG Research Activities undertaken under the DU Innovation and Star Innovation Schemes
- Miscellaneous Education Outreach and UG Projects under the aegis of DSKC sponsored by DST

Continuing education of faculty and retraining is also given importance. In the last 4 years, the following faculty have been given duty leave for Master level programmes in frontier areas.

- Dr. Rekha Kumari: Selected by the University of Delhi under the Faculty Training Scheme to pursue a Masters Course in *Bioinformatics* at the University of Edinburgh, Scotland, UK, from September 2011 to August 2012.
- Ms. Hena Oak: Selected by the University of Delhi under the Faculty Training Scheme to pursue a Masters Course in *Economics and Econometrics* at the University of British Columbia, Vancouver, Canada, from September 2011 to August 2012.
- Ms. Sutapa Das: Selected by the University of Delhi under the Faculty Training Scheme to pursue a Masters Course in *Economics and Financial Economics* at the University of Nottingham, UK, from September 2011 to August 2012.
- Dr. Rashmi Shakya: Selected by the University of Delhi under the Faculty Training Scheme to pursue a Masters Course in *Systems and Synthetic Biology* at the University of Edinburgh, Scotland, UK, from September 2012 to August 2013.

2.4.3 Providing details of staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing teacher quality.

A. Nominations to Staff Development Programmes

Academic Staff Development Programmes	Number of Faculty Nominated
Refresher Courses	53
HRD Programmes	1
Orientation Programmes	42
Staff training conducted by the DU	7
Staff training conducted by other institutions	-
Summer/Winter Schools /Workshops etc	3

B. Faculty Training Programmes organized by the college to empower and enable the use of various tools and technology for improved teaching-learning.

An illustrative list of workshops organized in-house for enhancement of teaching skills is given below.

- *Bioinformatics and Biostatistics: An Introduction*; 23-25 February 2016; DBT-Star College Scheme
- *Training the Trainers: IPR Workshop*; 15 January 2016; DBT-Star College Scheme in collaboration with MHRD IPR Chair (Technical)
- *Computational Chemistry and Bioinformatics*; 26-28 August 2015, DBT-Star
- *Enhancing Conceptual Understanding of Physics with Real-time Computer-based*

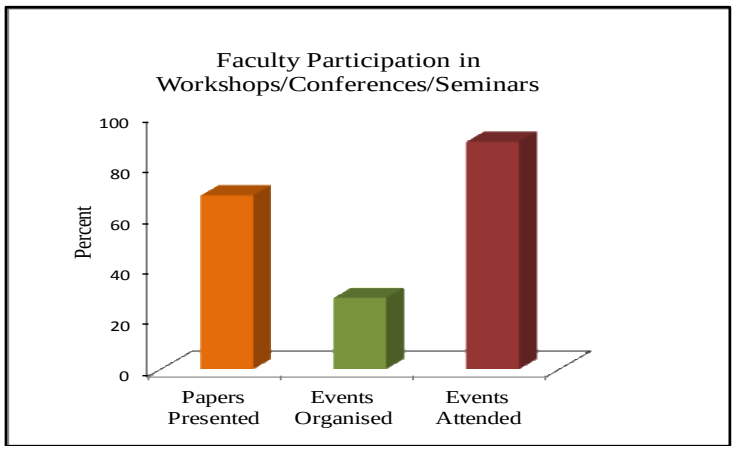
Experiments; 19 May 2015; DBT-Star College Scheme

- *Computational Methods in Drug Discovery*; 16-17 April 2015; DBT-Star College Scheme. *CME (Continued Medical Education) on Recent Advances in Immunology*; 17-18 July 2014, UGC, DBT, ICMR, CSIR, IIS, and BD India Pvt. Ltd.
- *Techniques in Biotechnology*; 09-12 January 2013; collaboration with ILLL, DU
- *Computational Biology*; 09-11 January 2012; DBT-Star College Scheme
- *Computational Chemistry for Chemistry Educators*; 23-24 November 2011; DBT-Star College Scheme
- *Microscopy: Techniques and Applications*; 27-28 September 2011; DBT-Star College Scheme
- *Bioinformatics: Unraveling Genes and Proteins*; 10-15 May 2010; UGC, CSIR
- *Biology Laboratory Course LS 206*; 24-26 September 2008; in collaboration with ILLL and DSKC

C. Percentage of faculty invited as resource persons in workshops/seminars/ conferences organized by external professional agencies; in external workshops/seminars/conferences recognized by national /international /professional bodies; presented papers in workshops/seminars/conferences organized by professional agencies.

MH faculty are very frequently invited as resource persons and also organize events in-house, inviting peers from other colleges.

Fig. 2.4.3: Percent Faculty Participation in Professional Development Activities



2.4.4 What policies/systems are in place to recharge teachers (e.g. providing research grants, study leave, support for research and academic publications, teaching experience in other national institutions and specialized programmes industrial engagement etc.)

Young and energetic, faculty at MH understands well the need for continuing education for professional development and advancement of their careers. As part of policy initiatives, the college has established a vibrant research culture, and always ready to upgrade the already excellent infrastructure to support new initiatives. They are encouraged to apply for research grants, mentored on available funding opportunities and how to write project proposals. Conferences are seen as important for networking and peer review of work being undertaken. As such the college uses its limited funds for providing full/partial financial assistance towards conference/workshop registration fee. Faculty members are encouraged to apply for

travel grants from national agencies such as UGC, DST, CSIR, etc. and also from international organizers or use research overhead grant.

Table 2.4.4 (a): Professional Development of Faculty: Financial Support (in Rs.)

Grant	2012-2013		2013-2014		2014-2015		2015-2016	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Travel Assistance	3	3,90,222	1	78,367	7	8,76,078	1	2,69,542
Seminar	2	5,59,600	1	1,35,000				0
Project Funds	1	2,30,000	1	5,00,000			1	2,00,000
Refresher Courses	13	9,000	8	4,900	10	7,800	19	14,000
Total		11,88,822		7,18,267		8,83,878		4,83,542

Study Leave to pursue doctoral or independent research/academic work provided following DU guidelines in last five years along with status of work is given below:

Table 2.4.4 (b): Professional Development of Faculty: Study Leave/EOL for Academic Purpose (2011-16)

Name	**Department**	**Duration**	**Status**
Dr. S. Purkayastha	English	16.07.09 -15.07.12	Ph.D. Awarded
Dr. P. Bhardwaj	English	16.07.10 - 22.02.12	Ph.D. Awarded
Dr. N. Bilasini Devi	Physics	16.07.10 - 15.07.13	Ph.D. Awarded
Dr. U. Chakravarti	Elementary Education	21.07.11 - 20.07.12	Ph.D. Awarded
Ms. I. P. Bahuguna	English	21.07.12 - 19.07.15	Pursuing Ph.D.
Ms. A. R. Sitalakshmi	Elementary Education	21.07.12-19.07.15	Pursuing Ph.D.
Ms. D. Ray	English	23.07.12 - 19.07.15	Pursuing Ph.D.
Ms. C. Suvasini	Elementary Education	17.09.14 - 16.09.16	Pursuing Ph.D.
Ms. H. Singh	Political Science	24.07.13 - 19.07.16	Pursuing Ph.D.
Ms. S. Thaimei	English	20.07.15 - 19.07.16	Pursuing Ph.D.
Ms. H. Oak	Economics	20.07.15 - 19.07.16	Pursuing Ph.D.
Dr. M. T. Kalia	Elementary Education	16.07.10 - 15.07.12	Post-Doctoral*
Dr. M.Vij	Geography	29.03.10 - 28.03.12	Post-Doctoral*
Dr. B. Jagannathan	History	21.07.11 - 01.05.13	Post-Doctoral**

* Post-Doctoral Work with ICCSR Grant **Fulbright Nehru Fellowship

Faculty members are permitted lien to join other institutions on deputation to gain exposure and experience a different work culture. To illustrate:

- Dr. Rama Yadav, Department of Hindi, went on deputation as Visiting Professor and ICCR's Chair of Hindi at ELTE University, Budapest, Hungary, on the basis of her expertise in Indian Culture;September2013-15.
- Dr. Amita Rana, Department of Sports and Physical Education, went on deputation as Deputy Director General, Sports and Functional Areas in the XIX

Commonwealth Games, 2010. She was instrumental in smooth conduct of games in the disciplines of Boxing, Hockey, Swimming and Shooting.

- Dr. Shashi Aggarwal, Department of Mathematics, served on deputation at DU CIC for two years from 2012 to 2014.
- Several members have availed leave with lien to explore other avenues such as at DU, JNU and TISS, as also prestigious International Fellowships and Awards such as the Charles Wallace Fellowship and Fulbright Fellowships.

2.4.5 Give the number of faculty who received awards/recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of faculty.

Institutional culture at MH fosters all round excellence. At the outset, the college attracts the very best students from across the country as is reflected by the consistently high entry level marks in all courses. To nurture their talent and accomplish its mission of providing exceptional education, the management looks for scholastic excellence while appointing faculty. The special emphasis on rigorous academics, high standards in teaching-learning, and high institutional expectations place continuous demands on the community. Student centric policies and constructivist frameworks do not allow faculty to become complacent. Instead, they spur them to remain scholastically engaged and cognizant to the need of staying ahead on the learning curve. This is of critical importance as they are expected to negotiate rapid changes in curriculum and pedagogy. They are also expected to be role models for students. The college fosters an ethos of innovation and experimentation. The expectations are high and the bar is continuously raised. With greater emphasis on UG research facilitated by faculty mentors, students and teachers now view themselves as a community of learners. This synergy is ushering in a new paradigm of scholastic growth. As a result faculty at Miranda House find pride of place in prestigious award lists of not just DU but other national and international organizations.

- Dr. Monika Tomar, Department of Physics, was the only college teacher to be given the *University of Delhi Award for Excellence in Teaching* on the occasion of University's Founder's Day on 01 May 2016. DU rarely gives such awards. On an earlier occasion in 2009, eight faculty members were conferred the *Distinguished Teacher Award* by DU. No other college had a similar distinction. The awardees are: Dr. R. Usha[R], Dr. Bani Roy, Dr. Saswati Sengupta, Ms. Ira Singh, Dr. Purnima Roy, Dr.. Srimanjari, Dr. .Ravinder Jha, Dr. Reema Bhatia.
- Dr. Jyoti Arora, Dr. Rekha Kumari and Dr. Mallika Pathak received Teaching Excellence Award for Innovation, University of Delhi, for Innovation Project MH 203 entitled *Efficacy of Natural Dyes in Dyeing and Imparting Antimicrobial Properties to Different Textile Materials,* 2015.
- Dr. Amita Rana; Rajiv Gandhi Khel Ratna Award and Dr. Radhakrishnan Memorial Award, 2006.
- Dr. Pratibha Jolly, Principal is recipient of Dr. S. Radhakrishnan International Award for Excellence in Educational Leadership; All India Classic People Society; Ist Youth World Parliament, 2007; Gr8! Award for Excellence in Education, Indian Television Institute; 2008; Amity Women Achievers Award in the field of Education, 2010; Dr. S. Radhakrishnan Smriti Rashtriya Shikshak Samman in Education by All India Freelance Journalist & Writer's Association, New Delhi, 2010; Lifetime Achievement Award by Women's International Network (WIN) in 2012.

- Dr. Pratibha Jolly received the Fulbright New Century Scholar Award Fellowship in 2009-2010 to work with an International team of 35 scholars from across the world on the theme *Higher Education as Innovation Driver and Knowledge Centre*.

2.4.6 Has the institution introduced evaluation of teachers by students and external peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?

Individual departments and faculty have undertaken exercises in student feedback. The evaluation is used for improving the quality of teaching-learning in terms of pedagogy, curriculum content, availability of resource materials, and reassessment of assignments. ***Refer 1.4.2.***

Faculty evaluation also occurs in other formats. The rules for promotion to higher grade and higher post entail evaluation of contribution to teaching-learning, research and extension activities. Rubrics have been developed for assessment of performance. Large number of faculty have publications in peer reviewed journals. Research Projects are strongly competed for and peer reviewed. These are also strictly monitored and undergo third party evaluation. MH faculty are invited as expert resource persons at workshops and conferences, etc. and also serve on national/international committees. All this adds to their credibility and reputation.

2.5 Evaluation Process and Reforms

2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?

Rubrics for evaluation are an integral part of the DU Curriculum followed by the college. The framework of the degree programme, details of degree specific courses, evaluation through continuous assessment and end of semester centrally administered examination are available on the DU Website and mirrored on the college website. The Prospectus includes essential details so that prospective students are made aware of the academic requirement of the course to which they are seeking admission. All students are given a Handbook of Information on the first day of the academic session. It lists in detail the University Ordinances on mandatory attendance requirements for being considered eligible to take the DU examinations; the Internal Assessment weightage of marks; promotion rules; and code of conduct during examinations. The college reiterates this information at the Department Orientation Programmes. New faculty members also undergo this orientation at the department level. Changes in ordinances, if any, are quickly disseminated. Students are required to fill DU Examination Enrollment form early in the semester. Office notifies schedules for filling of examination forms, payment of examination fee, obtaining mandatory clearances, collection of admit cards, etc.

The college protocol requires all faculty members to ensure that adequate preparation time is given to students to complete assignments and prepare for tests. They are expected to strictly follow the schedule for submission of attendance and continuous assessment marks so that the college can complete requisite processes before these are communicated to the University.

2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

In the last few years, DU has undertaken major changes in the structure of the degree programme. It moved from the annual to semester system in 2010-11 for sciences and 2011-12 for humanities. The Four Year Undergraduate Programme introduced in 2013-14 stood withdrawn next year. The Choice Based Credit System became operative from the academic year 2015-16. The latter has ushered in major reforms for end of the semester examination as the absolute marks have been replaced by a grading system, with the results being declared as a Semester Grade Point Average (SGPA). At the end of the three year degree programme, students will be awarded a Course Grade Point Average (CGPA). These reforms entail a change in perspective away from absolute marks and ensuing competition to a more collaborative learning approach with emphasis on competencies and achievements in percentile groups. The College Academic Committee discussed these changes in great detail in seminar mode. Another major reform has entailed doing away with end of semester Practical Examination in Laboratory Courses evaluated by external experts such as faculty from other colleges. The evaluation is now continuous. The parent DU Departments have created rubrics for continuous evaluation of laboratory work in consultation with faculties of all colleges. The college science departments have worked out college-specific evaluation schemes taking into account emphasis placed on hands-on work, expected benchmark and high standards achieved by students. The college leverages its relative autonomy in how the classroom teaching is organized and continuously assessed by deciding the frequency and format of quizzes, assignments and tests. Collaborative group work, field work, excursion reports and student presentations have been made an essential part of most courses. Project work is also increasingly a part of most courses. Being graded incentivizes it. As pedagogic approach adopts beyond the classroom activities very frequently, assignments touch upon aspects covered through enrichment talks by expert resource persons, thereby increasing student participation in such activities.

2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?

All faculty members are made active partners in implementation of policies. Appropriate orientation, especially of *adhoc* and guest faculty is of critical importance. Effective implementation of any academic process at the college takes place at multiple levels. Several checks and balances have been built in. Individual faculty members report to departmental committees. In case of shared or collaborative teaching, all stakeholders are brought on board. For such courses, depending on the extent of spread, coordinators are appointed. Moderation at this level is an integral part of the process. The college also has an apex moderation committee to scrutinize the internal assessment records of all courses. For Ability Enhancement Credit Courses (AECC) that are taught to a large student population in about 10 multidisciplinary sections, variation in teaching as well as continuous assessment are inevitable. Course Co-ordination Committees ensure standards. Further, strong moderation has been enacted. While the examination for AECC Environment Studies and Languages are centrally administered, the evaluation is handled internally with marking by the college faculty who teach the course. The college has set up mechanisms replicating those of DU for fair and transparent evaluation.

2.5.4 Provide details on the formative and summative assessment approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.

MH has evolved formative and summative assessment approaches in accordance with the stated DU norms on assessment.

- Formative assessment rests on continuous assessment and is a measure of how well the course is transacted. It gauges the effectiveness of teaching as well as learning. The DU norms mandate 25% marks for Internal Assessment in each paper. Of these, 10% weightage is for written assignments/ projects; another 10% weightage is quizzes/ class tests during the semester; and 5% weightage is for regularity in attending lectures and tutorials as reflected by formal attendance records. The college leverages faculty autonomy to deploy a wide range of formative assessment tools to gauge a variety of abilities as long as the prescribed norms are followed.
- Summative evaluation is the form of an end of semester examination centrally administered by the University. This carries a weightage of 75% marks while IA determines the remaining 25% of summative assessment.

The mandatory requirement of continuous assessment and incentives for attending classes regularly has injected greater seriousness and contributed to academic rigour. The nature of assessment tools has injected greater interactivity and helped the system become student centric. The changeover from end of semester Practical Examination to continuous assessment is also a positive development. Students are evaluated at the laboratory bench for their procedural and conceptual understanding of the experiments being performed. They learn that the laboratory data log book is the true indicator of their skills as an experimenter. Faculty uses a well thought rubric that includes discussion and *viva voce* to arrive at formative assessment. The summative assessment submitted to the university includes % of formative component with % weightage to regularity.

2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.

As stated in the earlier segments, there are several checks and balances for ensuring that the process of continuous assessment has been rigorous in every class. Students are free to approach the faculty, mentor or department teacher-in-charge for any clarification. The Department Committee for Moderation of Internal Assessment scrutinizes in detail the marks assigned to students in all courses in which department is directly engaged in teaching. IA scores are publicly displayed and individual student is expected to sign to certify validation. All academic grievances are addressed promptly and could entail recall of a written assignment that is usually returned to the student and revaluation, if deemed necessary. The oversight mechanism is clearly laid out for stakeholder satisfaction.

Inherent in the process of formative assessment is an evaluation of students nuanced comprehension of the course content, conceptual understanding and capacity to transfer knowledge in real world contexts or to unfamiliar situations. Thought experiments, back of envelope calculations, estimation exercises, building and testing hypothesis, analyzing and synthesizing information to create theories, communicating cogently and presenting in a variety of formats are all part of an enriched learning environment. At MH, project based learning and experiential learning has been strengthened and made the core of the teaching-learning process across all departments. These projects are innovative, interdisciplinary and designed to engage

students in critical thinking and problem solving. The ability to learn is continuously honed and tested. Student competencies and mastery of subject gets reflected in the formative assessment and hence the overall results declared by DU at the end of the semester. The result analysis presented in Criteria V on progression of learning depicts the sustained excellence of MH students. ***Refer 5.2.2.***

2.5.6 What are the graduates attributes specified by the college/ affiliating university? How does the college ensure the attainment of these by the students?

MH is guided by the essence of various National Policies on Education that have specified that a student undergoing university education emerge from the system with certain attributes. Prominent amongst these is that the student develops citizenship values and be trained for democracy and leadership. It is expected that graduate students would develop critical insight, employability skills and develop scientific temper. The institution is guided by these aims in all its academic, co-curricular and extracurricular activities. The MH motto focuses on *Swadhyayan*. This gives an insight into the graduate attributes that it specifies for its students. *Swadhyayan* is the practice of self-study and self-analysis. *Swa* is interpreted as 'self' and *adhyayan* means 'investigation or inquiry'. The institution aspires that its graduating students evolve as individuals who reflect deeply and understand the impact of their values and actions on others. MH is in the process of developing its own set of explicitly stated graduate attributes commensurate with national goals and its mission and vision.

2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?

The internal mechanisms for academic grievance redressal have been delineated in Item 2.5.5. Very frequently, students have difficulties at the end of semester examination. Illustrative examples of perceived grievance are an examination paper being too long, too difficult, 'out-of-course' questions, errors in questions, and so on. Student representations in this regards are duly forwarded to DU Dean of Examinations. If these are found valid, the DU takes care of the expressed grievances through moderation for the entire cohort. When an individual student finds discrepancy in IA marks in the final Mark Sheet issued by DU at the end of each semester, the college verifies the claim and traces the source of error, if any. The IA data is uploaded directly on DU server and processed digitally. The system is humungous and possibility of human error at various levels is not discounted. The representation is sent to the DU Examination Branch with support documents that include the student written assignment records, college IA lists and so on. The college pursues the case till it is expeditiously resolved to satisfaction.

2.6 Student performance and Learning Outcomes

2.6.1 Does the college have clearly stated learning outcomes? If 'yes' give details on how the students and staff are made aware of these?

- MH is dedicated to a set of generic learning outcomes which are aligned to its legacy, vision and mission. They cover all aspects of student life at the college. These are dynamic and responsive to emerging areas of knowledge, world of work and needs of students. The entire MH community works towards fulfillment of these all pervasive objectives.
- The framework of UG degree programmes have in-built flexibility with a choice of courses in the form of interdisciplinary and open electives. In the Choice Based Credit System implemented from 2015-2016, these are in the form of Generic

Electives (GE), Discipline Specific Electives (DSE), Ability Enhancement Courses (AECC) and Skill Enhancement Courses (SEC). The nomenclature reflects the expected outcomes. Inasmuch as classroom teaching-learning is extremely focused, within the framework of the degree programme, at the micro level, each course of study defines its own unique set of learning outcomes that are tied to the curriculum.

- The college proactively encourages faculty to participate in Refresher Courses so that they can gain familiarity with specific course objectives and tune the classroom teaching accordingly. The college also encourages faculty to organize in-house Educate the Educator Programmes. This provides an opportunity to create and disseminate course templates with details on both, objective and learning outcomes.
- The broad objective of a specific course is communicated to students by faculty at the beginning of the session. Following effective pedagogic practice, faculty articulates the learning objective and expected outcomes for each topic. These are reiterated through discussions and small group tutorials. Continuous assessment provides feedback on efficacy of the teaching-learning process.
- In all laboratory courses and practicums, students are made aware of the importance of arriving at an outcome in consonance with the task set. The learning outcomes are evident in the form of results of the exercise set or experiment undertaken. Immediate feedback is provided to the student. Immediate remedial action is also possible to ensure learning.

2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the student's results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.

The touchstone of teaching-learning at MH is the individualized attention given to each student. This approach gets translated into strong student-faculty bonds that enable mapping of academic progression in formal and informal settings. The overarching framework for monitoring student performance is uniform across courses. It mandates continuous and comprehensive assessment based on a well defined rubric. Faculty are expected to use a wide range of evaluation techniques to gauge student understanding and learning difficulties, if any, on a continuous basis. These are in the form of oral and written quizzes, pre- and post-class questionnaires, in-class and home assignments, presentations and projects. Tests are also administered at regular intervals. Performance on each of these evaluative tasks is explicitly conveyed to the student through individual feedback or group discussions. Written assignments are graded and are returned with appropriate annotations and comments. Students are given opportunities to improve performance through makeup assignments or tests. At the end of the semester, the consolidated internal assessment marks are communicated to the students for validation. Grievance if any, is addressed immediately.

As per DU guidelines, Internal Assessment marks carry 25% weightage of which 5% is for attendance. Before these are communicated to DU, these pass through two levels of moderation; the first is by a departmental committee; and the second is at the college level. The end of semester examination results are similarly analyzed at department and college level. All departments are expected to make a formal presentation on the examination results at the first Academic Committee meeting of

the semester; highlighting trends, and comparing performance with those of other colleges. Also identified are the university rankers, college rankers, other high performers and low performers. Detailed analysis of results and student progression are documented under Criterion V.

2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

MH feels duty bound to ensure academic success for each student. It also has a strong focus on stimulating and sustaining individual excellence through well deliberated strategies. First and foremost all this demands dedication, strict adherence to laid out academic calendar, and compliance with well articulated policies. Historical emphasis on these basic institutional qualities has created superior work culture and the academic rigour the college is well known for. Specifically, this is reflected through strict implementation of following precepts, easily visible on ground.

- All departments are required to complete planning for teaching-learning for odd semester that begins in July by April end. This entails discussing distribution of teaching, communicating the workload requirements to the Workload Committee, seeking its approval, requesting for additional faculty. Timetable Committee begins work in tandem to ensure that the Timetable is ready and communicated to departments by May-June. Each faculty member is expected to upload her own Timetable on the college website. The Timetable then is available in various other formats as the department or room Timetable. The college administration schedules interviews for empanelment of *ad hoc* faculty in all departments under all categories completing the process by first week of July. The recommended panel is used in order of merit.
- Faculty seeking various forms of long duration study leave, extraordinary leave and child care leave are required to synchronize the period of leave with the academic calendar and applying in January of each year. This minimizes impact on teaching-learning. During term time leave is discouraged and faculty is made aware that alternate teaching arrangements have to be in place. Faculty is expected to inform their respective department teacher-in-charge when availing leave. The list of faculty members on leave is prominently displayed on the Official Notice Board.
- Classes begin in earnest from first day of the academic calendar. Individual room Timetables are displayed outside all venues. Classes in MH are seen to be going on in earnest even on Student Union election day. To minimize disruption on account of various activities, common activity slot is provided in the Timetable. Strategies such as pre-announced shortening of classes by 5 minutes for mandatory observance of national days enable smooth conduct of both, the proceedings and the classes.
- Student driven events, such as Fresher's and Farewell Parties, are scheduled by the faculty advisors on a single day for the entire college with allocation of venues to each department, overcoming frequent disruption. This generic strategy requires coordination across units and cooperative sharing of venues for all enrichment activities.
- Students are made aware from the beginning of the session that while the college encourages and ensures vibrant enrichment through extracurricular and co-curricular activities, it is not liberal in giving attendance concession; institutional guidelines in this regard conform with the DU guidelines and are strictly followed.
- To aid students in their pursuit of all round development, the college makes

available all facilities round the year. Library is open till late hours. Students are facilitated as they practice and work till late hours on department and society events. All this is seen to contribute to stamina.

- Students are advised on time management. They learn early how to achieve the optimum balance. This reflects in the excellent performance on all fronts. Seeds of self-discipline and multi-tasking are sown early and responsible for later life achievements of alumnae.
- Faculty have considerable autonomy within the individual classroom. However, they are expected to follow the academic committee schedule on submission of attendance records, and uploading these on college website. A mobile app has been developed for dynamic processing. Departments monitor the continuous assessment protocols that are followed.
- The Academic Committee meetings are held frequently and require all departments to report to ensure broad uniformity across disciplines. Task groups and subcommittees prepare inter-departmental reports on attendance, continuous assessment, laboratory work assessment in the sciences, DU examination results and so on. These are discussed threadbare. Departments share best practices. To build an effective community expertise continuum, each task force has representation from new and immediate past members.

Underpinning the above initiatives is an excellent infrastructure, WiFi enabled campus, a strong technology backbone and college's commitment to highly interactive classroom teaching, appropriate blending of variety of teaching methodologies that also leverage ICT enabled new pedagogies to create contemporary active learning environments. These multipronged efforts ensure the claimed rigour and effectiveness of the teaching-learning processes conducive to achievement of learning objectives and goal accomplishment at macro and micro levels.

2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?

As stated at the outset, the college reflects the demographic diversity and pluralism of the country. A significant number of students are academically advanced and academically inclined. Many first and on generation learners and those from remote or economically less privileged areas recount the ambition to study at MH as being their childhood dream. They make it to the college because of their desire to contribute back to society and also, make a name for themselves. Analysis of career aspirations and alumnae tracks shows that careers in civil services, social sector, corporate sector, and higher academia rank high on ambition.

- Even as the college upholds and conforms to the DU curriculum, it encourages faculty to leverage the inherent autonomy inside the class to enhance and enrich the classroom experience with wide ranging examples from the real world. Understanding narratives of student experiences and perceptions helps understand identities. It makes classroom debates and discourse more socially relevant. Through carefully chosen socially relevant projects, students are trained to do in-depth research following reliable and valid methodologies. They are trained to understand the difference between meandering investigations of dubious value and systematically planned professionally driven scientific research. The year-long DU Innovation Projects have elevated these classroom initiatives to full fledged early research with socially useful innovation, product development and

entrepreneurship.

- Add-on Courses, short duration workshops and NSDC's Career Oriented Skill Development Programmes broaden perspective of the formal curriculum. Further, enrichment activities and exposure to the work of the best scholars and achievers in any field, students are given exposure that helps raise the bar and sets new benchmarks for personal aspiration. These and alumnae interactions make students aware that the world of work is rapidly changing and they will need generic competencies in addition to those that are domain specific. *Miranda Tech*, the college's own green technology demo and product development initiatives, the activities of *Enactus* and Entrepreneurship Units have also been transformational experiences for the young population.
- The Internship, Placement and Career Advancement initiatives are well established. These include capacity building programmes and individualized training and job opportunities. The college remains aware that many students simultaneously enroll in private coaching centres as they prepare for competitive examinations. Many also use personal networks and initiatives to drive their career progression. An increasing number take time off from education to enter the job market. Very often they return to academic stream to pursue higher degree programmes.

2.6.5 How does the institution collect and analyze data on student performance and learning outcomes and use it for planning and overcoming barriers of learning?

The formal mechanisms for collection and analysis of data on student performance and achievement of learning outcomes are described in detail in the earlier segments. As part of policy, performance at various levels is analyzed dynamically at various forums. Recommendations that emanate are ploughed back into the system by the departments and individual faculty members.

The college remains cognizant that individual students have different abilities, strengths and weaknesses. Barriers to learning are many and cannot be pushed under the rug. Challenges are posed by inclusive classrooms; diversity in educational and demographic background; social adjustment problems; gap between students understanding of educational systems and the reality of how the higher education system functions; transition from a protected school environment and teacher driven classroom to an open ended student centric teaching-learning environment that makes continuous demands. Challenges also arise from early learning difficulties on account of change of educational streams; inadequate exposure to pre-requisite knowledge, digital divide, domain specific tools and techniques; poor language and communication skills; content heavy curriculum; big class size; initial inability to understand higher education assessment and evaluation rubrics that assess qualitative and conceptual understanding; problem solving and higher order critical skills. Students are disconcerted and take time to adjust to the grading rubric that is quite different from that at school.

As part of policy and stated responsibility towards the individual student, each one of the above listed challenges are explicitly addressed head on in individual classrooms, through professional counseling and oversight mechanisms. Infrastructural constraints, largely those of room size and tutorial spaces, are continuously addressed to facilitate organization of teaching. Students are allocated course options as chosen. Within the permissible rules, students are allowed change of optional course when

deemed necessary. Remedial actions are taken within the classroom and in tutorials. Perspective change is brought about through discussions, debates and enrichment activities. Peer mentoring by seniors is considered essential and valuable. English Language Proficiency Course, English Speaking Course, Remedial and Bridge Courses are seen as essential to strengthening the process.

2.6.6 How does the institution monitor and ensure the achievement of learning outcomes?

The Staff Council instituted Academic Committee, Departments and individual faculty members are invested with the responsibility of monitoring and ensuring achievement of learning outcomes to ensure standards. The findings of all reviews are taken as serious indicators of strength and limitations. The recommendations are shared and ploughed back to overcome limitations.

2.6.7 Does the institution and individual teachers use assessment/evaluation outcome as an indicator for evaluating student performance, achievement of learning, objectives and planning? If 'yes', provide details on the process and cite a few examples.

The college uses assessment and evaluation outcomes to design remedial instruction within and outside the curricular framework. In individual classes this translates into relative emphasis on certain concepts and topics. Student difficulties are directly addressed. Through carefully designed assignments, problem solving sessions and project work, learning outcome goals are reached. In cases where lack of pre-requisite knowledge is a barrier, additional time is spent on addressing the lacunae through structured instruction either through extra classes, tutorial sessions or through a Bridge Course. An illustrative example is provided by the Laboratory Bridge Courses introduced by the science departments. These help students who have not had sufficient school level exposure to hands-on practical work in science overcome the handicap.

Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include.

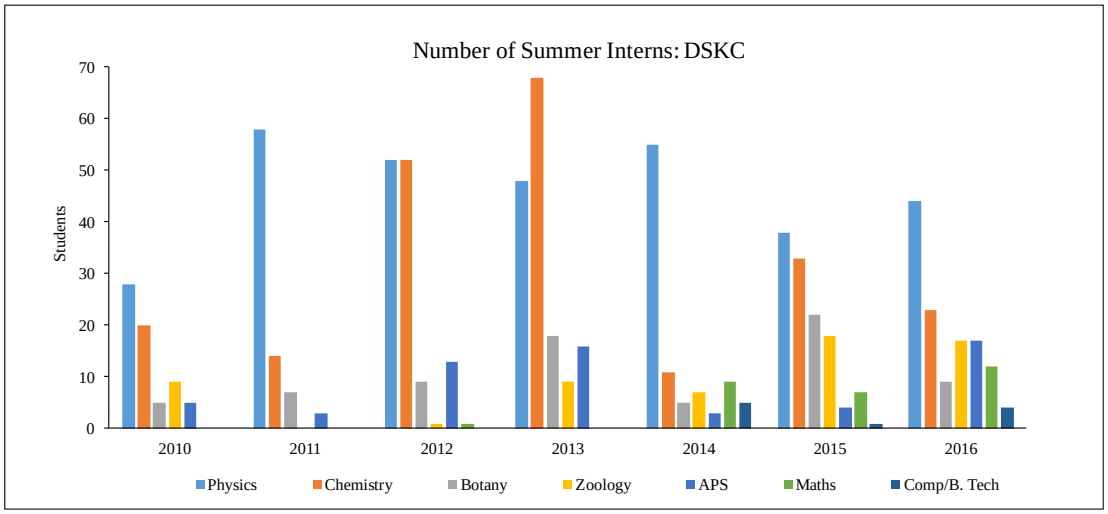
The D S Kothari Centre for Research and Innovation in Science Education (DSKC): DSKC is devoted to promoting creativity and excellence in science with special focus on attracting young students to careers in science. As a Nodal Centre, it provide easy access to resources for undertaking innovative and inspiring science activities designed to give an early exposure to the scientific process and the joys of discovery. The programmes are informed by rigorous science education research, results of cognitive studies on students learning and pedagogic tools established to be effective. Special emphasis is on adopting multi-representational, multidisciplinary approach to science learning in contemporary contexts and integrating the use of cutting-edge educational tools and technologies to provide the best possible environment for exploratory work. While providing a facility outside of the formal classroom, the Centre aims to develop educational resources, innovative curricular materials and pedagogic instruments which can be adopted by the formal system.

For large scale adoption of best practices, it will endeavour to develop research-based programmes for providing the highest quality *Continuing Professional Development* for those involved in science education. These programmes will aim to alter the perception of the process of teaching-learning per se, develop crucial skills for effective communication by imparting pedagogical knowledge; and train teachers

to contribute to the process of large-scale educational change. The broad mission of the DSKC is to enhance and enrich science education through:

- activity-based science teaching-learning programmes using the best available resources, technologies and pedagogical tools;
- research in science education and development of research-based curricular and co-curricular materials of contemporary value;
- capacity building and nurture programmes to provide mentoring to students and professional development opportunities to science teachers;
- education programmes for popularizing science and generating scientific understanding amongst diverse communities.

Fig. 2.7: Number of Summer Interns in DSKC since 2010



DSKC organizes an Annual 6-week long Summer Camp titled *Flavors of Research: Learning Through Investigative Projects in Multidisciplinary Contexts*. This draws students from across the colleges of DU and also many from outside Delhi. About 20 faculty members from the Science Departments of MH join as mentors and facilitators. The students often extend the association and carry the work beyond class hours over the duration of the year as the college extends to them all facilities. This programme provides an excellent opportunity to develop and implement innovations with an advanced and motivated cohort. Fig. 2.7 summarizes the number of students who have been associated with the programme.

Criterion III

Research, Consultancy and Extension

3.1 Promotion of Research

3.1.1Does the institution have recognized research Centre/s of the affiliating University or any other agency/organization?

MH encourages research activities by providing the necessary infrastructural set up to faculty and students at large. Seven research Centres have been established with help from external funding agencies. The recognized research Centres are:

The D S Kothari Centre for Research and Innovation in Science Education (DSKC)*:** DSKC was established at Miranda House with grants from DST in project mode for three years in 2008.This enabled establishment of unique laboratories to promote project-based learning and UG research across Science Departments. DSKC continues to function with sustained vigour judiciously using the assets generated; several new initiatives have burgeoned under its aegis. Science Departments are custodian of different laboratories established under the project. ***Refer 3.3.1.

***Recognized Research Labs*:** Faculty members from Physics and Zoology Departments have been given formal recognition by the DU Board of Research Studies for independent supervision of Ph.D. students. The first independently guided Ph.D. thesis was submitted in 2015. Advanced Research Laboratories established are:

- Material Science Research Lab
- Biosciences Research Lab
- Nano Science Research Facility
- Plant Tissue Culture Lab

***Open Source Drug Discovery Centre (OSDD)**:* Established in 2009, this Centre is a part of the CSIR Team India Consortium created with global partnership in a bid to make healthcare affordable. DSKC OSDD undertakes research on drug and vaccine discovery for Tuberculosis. Three research interns, 25 undergraduate and 10 graduate level students have been trained at this Centre in basic Cheminformatics and Bioinformatics tools for the stated objectives. Seven students have been awarded Tata CSIR-OSDD Fellowships of Rs.5000 each per month for a period of three months.

Amba Dalmia Digital Resource Centre for Visually Challenged (ADDRC)**:* Established in 2006 with generous grant from alumna Manju Kapur Dalmia and college resources, this is amongst the first centres at DU setup to facilitate visually challenged students. ***Refer 4.2.8.

Miranda Tech, The Green Technology Centre: A DST Research Project grant under its Women and Society scheme in 2003 led to establishment of a Paper Recycling Plant. A Compost Plant was soon added. The projects also received financial support from Ministry of Environment, Govt. of NCT of Delhi. The success of these initiatives and the research component of the work led to development of dedicated facilities and upgradation of equipment in association with NGO partners and endowment from a superannuated faculty member. Multidisciplinary group of faculty have been awarded grant of Rs. 40.88 lakh for a project titled *3R: Reduce, Reuse, Recycle*. These and other Green Technology Projects are located in a dedicated area and constitute the Centre. ***Refer 7.2.1A***.

UN University Regional Centre of Expertise (UNU-RCE): MH is the only college to be a member of the UNU RCE Network of Education for Sustainable Development. It works with TERI and other partner institutions to promote environment consciousness. National Workshop on Art and Science of Paper Recycling in 2010

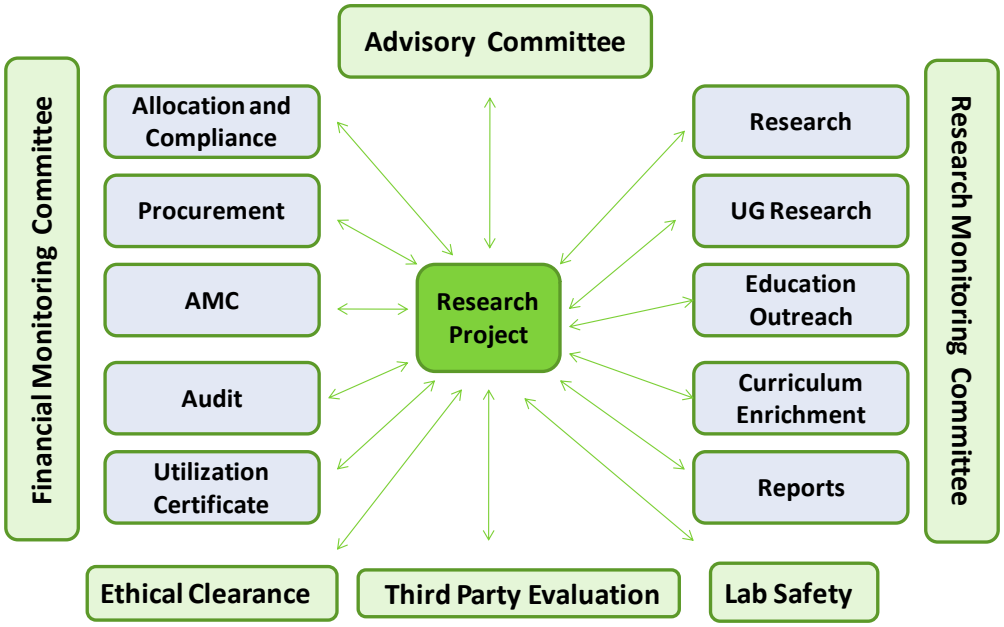
and Delhi Youth Summit on Climate in 2013 are amongst programmes hosted on the MH campus.

QuarkNet Nodal Centre: MH is the only educational institution in the country to have established this facility. QuarkNet is a High Energy Physics Education Outreach Project of Fermilab, University of Chicago, set up as a global network of physicists, teachers and students. The cosmic ray detector installed at DSKC is linked to the Cosmic Ray e-Lab Portal at Fermilab. It provides an online environment in which students engaged in projects across the world have scientific collaboration with each other on the portal.

3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

The college has well defined administrative processes and support structure to facilitate and monitor research initiatives. Components of this process are schematically shown in Fig. 3.1.2. This well deliberated structure has emerged after intensive discussions; experience gleaned from management of the earliest research projects at the college; and recommendations of an empowered task group.

Fig. 3.1.2: Institutional Support for Promotion and Monitoring of Research



Advisory Committee*:* Each research project has an advisory committee. The faculty Project Investigator(s), faculty with related expertise/interest, and external experts/mentors are members of the advisory committee, with Principal in Chair.

Research Monitoring Committee: This apex committee coordinates all ongoing research projects including DU Innovation Projects, Star Innovation Projects, DSKC Summer Projects, Education Outreach Programmes and Curriculum Enrichment Programmes. It ensures processes are followed and monitors timely submissions of reports to Funding Agencies.

Financial Monitoring Committee: It ensures proper management of funds and compliance with funding agency protocols, starting from allocation of funds under different budget heads till audit of accounts and submission of utilization certificate.

Project Purchase Committee (PPC): This consists of Bursar (in Chair), former Bursar, two senior faculty members (from any allied Department), SO Accounts and SO Administration in addition to the PI (Convener) and Co-PI.

Project Staff Selection Committee: After due advertisement, Project Staff is appointed on recommendation by a Selection Panel consisting of the Principal (in Chair), PI (Convener), Co-PI and two faculty members (from any allied Department).

Lab Safety Committee*:* Faculty from Chemistry, Botany and Zoology are members of this committee, which looks after the safe usage and waste disposal of material in the laboratories including research labs. It follows guidelines given in the *Manual on Laboratory Safety* prepared by DSKC in 2010-11.

Ethical Clearance Committee*:* College does not have an in-house Ethical Clearance Committee. Assistance is sought from PG Departments of DU or any other responsible official body for getting ethical clearance for the project.

Third Party Evaluation: This is usually carried out by the Funding Agency.

3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?

Autonomy to the Principal Investigator*:* Following its stated policy on promoting research activities, the college gives complete autonomy to the PI as per the terms and conditions of the funding agency. The college provides excellent infrastructural and logistical support. It continually invests in improving research facilities on request by the research team. The PI is the focal member of all committees constituted to facilitate the research project.

Timely availability or release of resources: Project grants are made available immediately; the PI is responsible for utilization following set procedures and rules.

Adequate infrastructure and human resources: The college has been investing in creating and refurbishing research laboratories in accordance with the project requirement. It also provides full administrative and technical support as and when required.

Time-off, reduced teaching load, special leave etc. to teachers: There is no provision for this as per DU rules. Academic leave, special casual leave, EOL may be availed for attending seminar/conference/workshop. Study leave can be availed for Doctoral and Post-Doctoral research.

Support in terms of technology and information needs: The entire college campus is WiFi enabled. PIs can access any of the Research Labs and Digital Resource Centres. Library provides web OPAC and access to NKN. As advanced users of ICT, all these laboratories are hotspots of learning and knowledge. ***Refer. 4.2 and 4.3.***

Facilitate timely auditing and submission of utilization certificate to the funding authorities: The Accounts Department of the college assists in auditing project accounts and timely submission of utilization certificate.

Any other: Interdisciplinary Research is facilitated for undergraduate students through the DU Information Projects and Summer Internship. Three Chemistry students, for instance, have been working on the OSDD project under the Department of Zoology in 2015-16.

3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

As a leading college for Liberal Arts and Basic Science, the college is committed to broad-based yet rigorous education for all. MH believes that fostering scientific reasoning and scientific way of functioning is vital for all disciplines. Students need to be trained to pose questions, hone observation skills, learn the art of hypothesizing, set up investigations with appropriate controls, appreciate the value of evidence-based inference, learn to validate findings, interpret and communicate these to diverse interest groups. It holds these understandings are vital for creative growth and innovative progress. The Add-on Course *Rethinking the Obvious: Examining the Rhetoric of Development* was introduced in 2015 to develop these skills. The participating students carried out about 20 valuable projects that explored the social process of thinking and acting in wide ranging contexts. Classroom discourse and debates are also used to inculcate the art of scientific reasoning and argumentation.

The college also believes that with ubiquitous use of technology, it is important for young students to understand the underpinning scientific principles. To this end, basic scientific literacy is essential for all. In the erstwhile FYUP, the Foundation Course *Science and Life* gave students a fine overview; several projects were carried out in multidisciplinary teams. DSKC Science Education Outreach Programmes, including those for school children and INSPIRE Mentorship Workshops include exciting talks that attract UG students of all courses. College networks with *Vigyan Prasar*, National Council for Science and Technology Communication (NCSTC) and has been funded by these organizations to set up science exhibitions. An extremely successful venture was *Vigyan Vichitra* Science Fair that set up hundreds of low cost hands-on experiments to demonstrate basic science principles, included a talk on Science of Magic. British Council sponsored the visit of Simon Singh, renowned popular science writer to this event. NGOs such as *Jodo Gyan* are invited to set up stalls at many events. INSPIRE Mentorship Workshops invariably include demonstration talk by National Science Centre Science Communicators and *Agastaya* Foundation Mobile Science Lab and innovative experiments. President of Federation of Indian Rationalists Associations, Professor Narendra Nayak delivered a talk and held an interesting workshop for students. Apart from this, talks on climate change, sustainable development, miracle machines of medicine, Indian mission to Mars, the nuclear and missile programmes, raging debates on stem cell research and genetically modified crops introduce students to the interface of science and society. The college has also been inviting leading medical experts and scientists to speak to diverse student populations on public health, generating awareness on cancer, etc.

The emphasis on UG research and innovation has increased manifold since the introduction of DU Innovation Projects. Working in collaborative groups on year-long interdisciplinary projects has provided students an excellent opportunity to develop as researchers. The work done has been of high calibre.

3.1.5 Give details of the faculty involvement in active research (guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.)

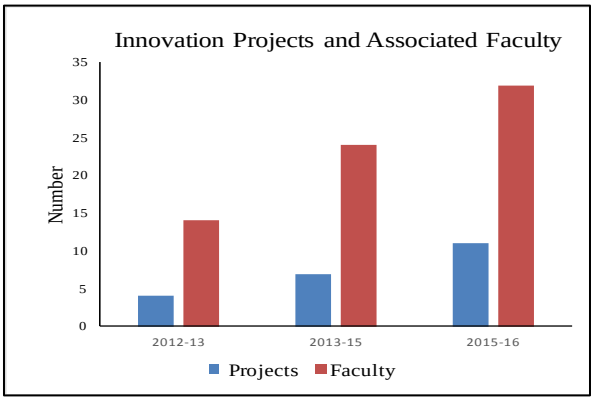
Research Projects: Over the last 5 years, 48 faculty members have been engaged in funded research projects as PI or Co-PI. Several projects are ongoing. ***Refer 3.2.7.***

Table 3.1.5 (a): List of Faculty Members guiding Ph.D. and M.Phil. students.

Faculty	Department	Research Supervisors			
		Ph.D.		M.Phil.	
		Ongoing	Completed	Ongoing	Completed
Dr. M. Tomar	Physics	1	2*	-	1
Dr. S. Moitra	Botany	-	1	-	1
Dr. Deepali	Botany	1	-	-	-
Dr. S. Sharma	Zoology	2	1*	-	-
Dr. S. Sharma	Mathematics	3	-	-	-
Dr. M. Srivastava	Mathematics	-	2	-	2
Dr. S. Aggarwal	Mathematics	2	-	-	-
Dr. M. Kumari	Sanskrit	3	1	1	-
Dr. S. Shukla	Sanskrit	-	1	-	1
Dr. R. Arora	Sanskrit	4	-	1	1
Dr. J. Rowena	English	1	-	-	-
Dr. R. Disodia	Hindi	1	-	-	1
Dr. P. Roy	Political Sc.	3	1	-	2
Dr. J. Pillai	Political Sc.	-	-	-	1
Dr. B. Nanda	Political Sc.	-	-	-	1

*Thesis submitted

DU Innovation and DU-Star Innovation Projects: College has successfully completed 11 DU Innovation Projects. There are 11 new DU Innovation Projects and 3 DU Star Innovation Projects. These have been possible with involvement of more than 50 faculty members and 250 UG students during the last five years. ***Refer 3.2.7.***



***Summer Internship Programmes*:** The annual 6-week long DSKC Workshop titled *Flavor of Research: Investigative Projects in Multidisciplinary Contexts for Science Students* in summer holidays draws ~150 students including those from other colleges and institutions outside Delhi. Nearly 60% faculty members guide students.

***INSPIRE Internship Programme*:** MH is a nodal centre for week-long DST INSPIRE Internship Workshop being organized since 2010. It draws about 250 of top1% school students and 30 school teachers from that many schools. It includes motivational overview talks by renowned scientists; demonstration talks by science educators and those engaged in outreach such as the National Science Centre; and small group hands-on workshops that have been specially designed innovatively by MH faculty. As many as 33 faculty members from science departments and about 100

UG students act as resource persons and mentors, ably supported by about 50 laboratory staff to make the programme a great success.

Table 3.1.5 (b) INSPIRE – List of Hands-on Workshops

Department	INSPIRE Hands-on Innovative Workshop
Physics	• Physics: The World in Motion • Physics: Sense, Measure and Control the World • Amusement Park Physics • Robotics: Impacting Life • Science on the Move: Amusement Park Physics
Chemistry	• The Green Pathway • Going Green: Science for a Sustainable Future • Colours of Gold and Silver • The World of Molecules: Playing with Structures • Forensics: To Catch a Thief
Botany	• The Cell: Life's Playground • DNA: Close Encounters • Designing Life: Small Experiments
Zoology	• DNA and Enzymes: Tiny but Mighty Players • Designing Life: Small Experiments
Mathematics	• Simulations and Video Analysis: The Modelling Game
Geography	• Remote Sensing: Map Your Environment
WWF Fellow	• Kites in the Capital: Urban Ecology of the Commonest Raptor

3.1.6 Give details of workshops/training programmes/sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

Refer Table 3.1.6 (a) and (b) as of Supporting Document

3.1.7 Provide details of prioritized research areas and the expertise available with the institution.

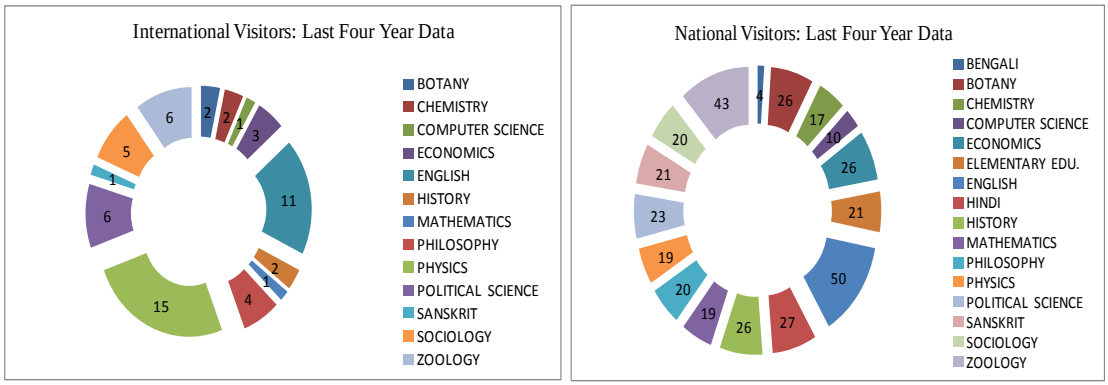
- Material Science Research: Surface Plasmon Resonance; Biosensors for detection of different biomolecules such as breast cancer specific biomarkers, cholesterol, uric acid, urea, glucose, meningitis, etc. Fabrication of piezoelectric thin films for SAW band pass filters and resonators; Design of novel gas sensors; MEMS structures for energy harvesting applications. Total Grant: Rs. 1630.09 lakh.
- Vaccines and drugs targeting infectious diseases. Total Grant: Rs. 94.12 lakh.
- Nano Science, Green Nanotechnology, Green Technology and Applications. Total Grant: Rs. 27.0 lakh.
- Natural Textile Dyes and Anti-microbial Finishing. Total Grant: Rs 11.0 lakh.
- Water Quality and Phytoremediation of heavy metal contamination, Project on *Yamuna* Water. Total Grant: Rs. 28.5 lakh.
- Low-cost instrumentation for science teaching. Total Grant: 43.0 lakh.
- Mobile App-based Science Laboratories. Total Grant: 6.5 lakh.
- UG Research and Science Education Research: All DSKC activities, Project-based learning, development of low cost hands-on science kits, mobile based apps for real-time science experiments, conduct of INSPIRE Camps, etc. Total Grant: Rs. 348.20 lakh.

- Gender Issues and livelihoods. Endangering Girl Child; Gendered socialization; Gender Discrimination. Total Grant: Rs.14.5 lakh.
- Socio-economic and Political History. *Kashmiriyat* and Beyond; Continuity and change in youth's perceptions on Foreign Policy, Changes in Business Ethics, Reward Networks. Total Grant: Rs. 13.5 lakh.
- Climate Change, Water Security and Livelihood Resilience, Disaster Preparedness. Total Grant: Rs. 12.5 lakh.
- Education and Pedagogy, Children's Picture Books in India. Total Grant: Rs. 3.5 lakh.

3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

The college through its faculty has established linkages and a vast academic network with other institutions of repute. Many are proactively engaged in consultative or collaborative work with other organizations. The college also enjoys tremendous goodwill and is recognized for the quality of its programmes. Hence, most experts consider it a privilege to be invited to MH. A directory of eminent resource persons in various disciplines is maintained. This is continuously updated to include those who faculty meet with at various conferences, seminars, public lectures, etc. A concerted effort is made to bring thought leaders, acclaimed scholars, fellows of prestigious academies, laureates of prestigious awards such as the Nobel, Bhatnagar Award, Infosys Award, Sahitya Kala Academy Award, etc. to the college. College also keeps track of national and international scholars visiting Delhi from other national and international universities. The college constitutes a National Advisory Committee for prestigious events and this enables identification of best speakers on a theme. Several international universities who approach the college for bilateral exchange programmes are requested to arrange first academic engagements such as round table discussions and lectures by their faculty on a topic of mutual interest. In the last few years, DST, DBT, INSA, NASI, FICCI, CII, Indo-US Science Technology Forum, Fulbright Foundation, British Council, Australian Embassy, American Centre, and the US Embassy have approached the college to host speakers and delegations. NASI Award Lectures by 2 recipients were hosted on request. The DST gave special grants to extend the INSPIRE Programme to enable visit by 2 Nobel Laureates. It also brought a delegation headed by John Holdren, Science and Technology Adviser to President of the USA Barak Obama, to witness how INSPIRE Internship Workshop is conducted and interact with an auditorium overflowing with students.

Fig. 3.1.8: National and International Visitors to the College: Four Year Data



For the list of distinguished guest speakers and resource persons, too numerous to include herein, refer Department Evaluative Reports. Fig. 3.1.8 depicts the number of unique visitors to MH.

3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

This facility has been recently introduced. One application is under process.

3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land).

The college understands the importance of linking research to real life problems and addressing the grand challenges. In addition to appreciating the value of blue sky research, it also undertakes research with direct application. Some illustrative examples are given herein:

***Patent filed for developing a sensor**:* Dr. Monika Tomar has developed a sensitive rapid sensor for detection of fuel gases in collaboration with DU parent Department.

***Development of low cost Surface Plasmon Resonance set up**:* Dr. Monika Tomar has developed an instrument, low cost table top surface plasmon resonance (SPR) measurement set up. Technology of the instrument is transferred to an industry, M/s Optiregion, Delhi. Currently, setup is undergoing validation. It will be used as a research and teaching tool in undergraduate colleges and universities.

Biosensors: Dr. Monika Tomar is associated with development of number of biosensors for fast detection of life threatening diseases such as breast cancer and meningitis, and biomolecules including uric acid, urea, glucose, cholesterol, etc. from the serum only. The integration of the developed biosensors with the appropriate electronics for the fabrication of a handheld device is under progress.

***Detection of UV radiations**:* Dr. Monika Tomar has also developed a UV photodetector for efficient detection of ultraviolet radiations (wavelength=365nm) in collaboration with DU parent Department.

***Improved drugs/vaccines for tuberculosis**:* Taking into account the fast spread of Multidrug Resistant Tuberculosis (MDR-TB) with no new drug or vaccine in the market, there is an urgent need in the country for improved drugs and vaccines for tuberculosis. DSKC Biosciences Lab and OSDD Centre are making sustained efforts to identify and develop for use better vaccine candidates and newer drug leads towards finding appropriate treatment.

***Silver nanoparticles for purification of water**:* Department of Chemistry is working on designing an affordable water purification device using green and eco-friendly silver nanoparticles. Research results are encouraging. Very soon the process will be standardized and made available for usage by general public.

***Development of antimicrobial textile**:* Faculty members of Zoology Department have developed Antimicrobial textile using eco-friendly bioactive compounds derived from natural products. Efforts are on to tie up with an industry to commercialize the product, which has wide applications in medical and health care sector.

Eco-friendly dyeing of textiles*:* Faculty members of Zoology Department have been successful in extractingNatural Dyes from plants using different sustainable and eco-friendly techniques. They have been able to create a rainbow palette of colours for dyeing of different textiles. The major findings are being communicated to students and community at large through workshops. The college uses this technique to create scarves and stoles as mementos for guests to the college.

3R: Reduce, Reuse, Recycle: The products developed at the Paper Recycling and Compost Plant are prime examples of Lab to Market paradigm. College has experimented with making filter paper for schools, neem enriched paper, increasing tensile strength of paper with natural additives, and printer quality paper. Products developed are being marketed and also used as mementos in the college. Compost produced is used in-house as well as marketed.

Eureka! MyLab: This project has led to development and dissemination of innovative active learning materials for school science laboratories in interdisciplinary contexts. Inexpensive and accessible laboratory kits have been developed so that students who do not have access to well-equipped laboratories are able to experience the joy of hands-on science. The project team is working with *Vigyan Prasar*, DST, to scale up its outreach.

Reflective Research at DSKC: DSKC summer school *Flavor of Research* encourages project-based learning, develops essential skills, encourages use of hands, gives early exposure to how professionals approach science, and triggers meta cognition. Students are trained in reflective research at a very young age. When these students go on to academic research at a later stage they will be 'thinking researchers'.

Disaster Research Programme (DRP): College is part of College Cluster Initiative involving the youth in participatory disaster mapping of neighborhoods. Comprehensive work has been done by the team to do a detailed mapping and profiling of disaster risk in the neighborhood of DU, along with sensitization of people to understand disaster risk.

Gender Socialization: The project team has analyzed how the different dynamics of matriarchal and patriarchal societies reflect upon the youth. The project had a strong inter-disciplinary approach, and emphasis was on the social, economic and psychological parameters which differentiate the matriarchal society from a patriarchal one in the north east.

3.2 Resource Mobilization for Research

3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

- There is no provision for research in the budget sanctioned by UGC to the colleges.
- Individual faculty are encouraged to apply to various funding agencies for research grants. ***Refer 3.2.7.***
- DU has provided research funding under the (i) Innovation Project and (ii) Star Innovation Project schemes.
- College is recipient of institutional project grants (i) for establishment of DSKC; (ii)under DBT Star College Scheme for enhancement of science education; and (ii) for organization of INSPIRE Internship Programme, etc.

Table 3.2.1: Research Projects and Funds Generated over Five Year Period (2010-15)

Research Projects	Ongoing		Completed	
	No.	Grant Rs. in lakh	No.	Grant Rs. in lakh
Individual Research Project	6	1312.43	16	771.96
DU Innovation Research Projects*	14	261.45	11	69.50
Research Fellows	2	24.61	1	2.25
Others	-	-	2	4.00
Total	23	1598.49	32	847.71

*This includes 3 DU Star Innovation Projects with total grant of Rs.130 lakh.

Each project has unique requirements. The major heads of expenditure with financial allocation are (i) Equipment (30-40%); (ii) Consumables (30-40%); (iii) Contingency (5%); (iv) Travel (5-10%); (v) Salary Component (as per rules of grant); and (v) Overhead (5-10% with a cap). Utilization is 100% in most cases.

3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of faculty that has availed the facility in the last four years.

There is no provision in the institution as such to provide seed money to the faculty for research. However, through DSKC, DST, DBT, DU and other projects, sophisticated research facilities have been established in all Science Departments.

- Dr. Anita Sehgal and Dr. Sadhna Sharma upgraded an already existing Tissue Culture Research Labto develop the DSKC Bioscience Research Facility.
- Dr. Kiran Kapoor, Dr. Sunita Dhingra, Dr. Bani Roy and Dr. Mallika Pathak established the DSKC Chemistry Undergraduate Research Lab.
- Dr. Pratibha Jolly, Dr. Mallika Verma and Dr. Monika Tomar established the Physics Project-based Learning Labs.
- DBT non-recurring grant of Rs. 5 lakh each to Departments of Physics, Chemistry, Botany, Zoology, and Computer Science was used to enhance equipment in teaching labs.

3.2.3 What are the financial provisions made available to support student research projects by students?

- Award of 22 DU Innovation Projects and 3 DU Star Innovation Projects has 250 students who are provided a stipend of Rs. 1000 per month for the duration of the project.
- DBT Star College Scheme provided 1000 students opportunity to carry out research projects.
- DST INSPIRE Award for Higher Education provides 333 scholars fellowship of Rs. 60,000 per annum and fully funded summer visit to prestigious institutions to engage in research.
- DSKC gives annually 1 Science Award and 15 Baseline Awards after rigorous selection based on performance on Baseline Tests and exposition on topic of multidisciplinary interest.

- DSKC assists students seeking funds for individual research or participation in events.
- DU *Gyanodaya* Express, a fully funded educational train journey, introduced in 2013 provided opportunity to a large number of NSS volunteers and other students to undertake innovative research projects.
- TATA-CSIR-OSDD fellowship of Rs. 5000 per month was provided to 7 students of Zoology, Chemistry and Life Sciences for three months.
- Junior and Senior Research Fellowships are being availed of by 4 Ph.D. Scholars and 2 Project Fellows.
- Eco Club Grant of Rs. 20,000, DoE, Govt. of NCT of Delhi, is for *MH-Vatavaran* students for Environment and Sustainable Development related activities and projects.
- Alumnus Fund, Department of Economics, provides annual research award of Rs. 5000 each to two students.
- Students are provided funding for attending conferences and presenting their work from grants of the research projects.

3.2.4 How do the various departments and staff interact in undertaking interdisciplinary research? Cite examples of successful endeavours and challenges faced in organising interdisciplinary research.

- Since 2008, with the establishment of DSKC, the faculty from the science departments are harmoniously using the facilities created by various departments as listed above, for enhancing both, teaching-learning and research activities.
- Since 2012, following the format of DU Innovation Projects, faculty members and students from two or three departments have been working collaboratively. The Project Miles on Yamuna awarded in 2012 is a prime example of interdisciplinary collaborations as two teams worked on this theme. Team A with 4 faculty and 10 students from Botany, Chemistry and Physics carried out research on water and soil quality. Team B with 3 faculty and 10 students from Economics, Geography and Sociology researched on riparian communities in the flood plains and the land holding records. ***Refer Item 3.2.7.***
- Since 2009, DSKC Summer Workshop, *Flavor of Research* allows close interaction between faculty and students of different departments.
- Since 2011, Department of Biotechnology Star College Scheme has promoted interdisciplinary approach for strengthening of life science and biotechnology education and training at UG level. Dr. Sushma Moitra is the overall coordinator. ***Refer Item 3.2.7.***
- In April 2013, a competitive bid grant of AUD 55,000 for a project titled *Building Leadership Capacity in Undergraduate Science Teaching* in India provided Australian Leadership Award Fellowship (ALAF) to9 faculty members from 4 science departments. This enabled the group to participate in the workshop, *Advancing Science by Enhancing Learning in the Laboratory (ASELL).* The team is collaboratively furthering this work.
- In January 2012, MH hosted a George Mason University team of students and faculty on an International Immersion Programme for about ten days. A unique visitors programme was designed involving faculty and students of all science departments.
- King's International Summer School at MH is organized with inter-departmental support.

Challenges faced

- As faculty and students collaborating on projects often have overlapping timetables and mismatched schedules, time becomes a constraint.
- Heterogeneity of student group in interdisciplinary research poses interesting challenges that also provide unique opportunities for design of training programmes; knowledge dissemination and generation.

3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

As part of policy, MH faculty and students have open and equal access to infrastructure and resources for both teaching and research purposes. Facilities are also used variously for add-on courses, summer schools, workshops and training programmes.

3.2.6 Has the Institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.

- MH Science Departments have variously received grants from various National agencies namely, UGC, DBT, DST, CSIR, DRDO, ICMR, INSA, NASI, Vigyan Prasar, and DU.
- International grants for science events have been received from prestigious organizations including IUPAP, UNESCO, ICTP, APS, AusAid, SPIE, OSA, and IUSSTF.
- MH Arts Departments have variously received grants from UGC, ICSSR, and DU.
- Programmes with Utrecht Business School, GMU, Wisconsin University require international partners to finance components of expenditure.
- All Departments and societies raise funds through sponsorship for various events.

3.2.7. Enumerate the support provided to faculty in securing research funds from various agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.

- Recognizing that young faculty need training on how to apply for research projects and the various opportunities available, the college nominated 4 faculty members to participate in (i) Indo-US Roundtable on ADVANCing Women Faculty in STEM, in November 2014; and (ii) International Training Programme on Leadership and Career Development for Women Scientists and Technologists, September 2014 at INSA. Both these programmes included sessions on importance of undertaking independent research and how to write projects seeking grants. On occasion of International Women's Day 2014, a programme was organized in collaboration with NASI Allahabad and DST to familiarize women scientists with government schemes for financing research.
- In furtherance of the cause of women in higher academia and nurturing their scholastic talent, faculty is given timely information on various schemes announcement by different funding agencies. Necessary administrative and infrastructure support is also provided.

Comprehensive list of 21 ongoing and 34 completed research projects is in Table 3.2.7.

Table 3.2.7: Comprehensive List of Sponsored Research Projects

Project Details	Agency	Amt lakh
Molecular Cloning and Immunological Validation of Three Hypothetical Proteins of *M. Tuberculosis* with Strong T-Cell Epitopes; S. Sharma, M. Sharma, 2013-16	DBT	66.48
Validation and Improvement of Indigenously Developed Table-top Surface Plasmon (SPR) System; M. Tomar, 2015-16	DST	86.00
Molecular Modelling of Halon alternatives; M. Tomar, 2015-17	DRDO	264.77
Development of Thin Film Surface Acoustic Wave Device as a Platform for the Sensing Applications; M. Tomar, 2014-19	DST	424.38
Demonstration of GaN LED by PLD; M. Tomar, 2014-16	DeitY	470.80
D. S. Kothari Centre for Research and Innovation in Science Education; P. Jolly, 2008-11	DST	313.20
Development of Platinum based Micro Heaters /Micro Evaporation Sources for Space Applications; M. Tomar, A. Sharma, 2014-15	ISRO	32.00
Models of Dark Energy: Theory and Observations; A.D. Habib, 2009-12	DST	17.75
Development of Metal Oxide Thin Film Based Low cost Sensors for CNG and PNG; M. Tomar, A. Sharma, 2013-15	GAIL	95.40
Design and Development of Functional Materials for SAW Devices in Communication and Sensors; M. Tomar, 2009-11	NRB (DRDO)	47.40
Development of Low cost Real Time Monitoring System for Detection of Harmful Gases (Phase-I) Packaged LPG Sensor; M. Tomar, 2010-13	DeitY	103.44
Development of Low cost Real Time Monitoring System for Detection of Harmful Gases (Phase-II) Packaged LPG Sensor; M. Tomar, 2012-13	DeitY	8.81
Development of MOx (M-Te, Se, Ge) Exhibiting Negative TCD for SAW Devices; M. Tomar, 2010-13	DST	18.24
Development of the Prototype of SAW Sensors for NOx gas; M. Tomar, 2009-12	DST	28.18
Indigenous Development of Table top Surface Plasmon Resonance (SPR) setup Low cost and Table top SPR Instrument: Technology Transferred; M. Tomar, 2011-13	DST	40.71
Multi-layer Metallization and PLG for Advanced MEMS Devices; M. Tomar, 2011-13	DRDO	9.96
Work Participation and Issues in Women Health in Tehri Garhwal District of Uttarakhand; P. Kumria, 2012-15	UGC	6.746
Some Aspects of Reproductive Biology in Podostemaceae; A. Sehgal, 2010-13	UGC	10.24
Cloning, Expression, Purification and Immunological Characterization of MymA Operon Protein; S. Sharma, M. Sharma, 2012-15	OSDD-CSIR	21.79
Cloning and Expression of Selected Intraphagosomal Expressed Genes of *Mycobacterium tuberculosis*; S. Sharma, M. Sharma, 2010-11	CSIR	5.85

Modulation of Toll Like Receptor (TLR) Signalling by *Mycobacterium tuberculosis*: An Evasive Survival Strategy; S. Sharma, 2006-09	DST	11.04
A Study of Certain Optimization Problems and Application of Computer-aided Software; S. Suneja, M.B. Grover, 2010-12	UGC	1.20
3R: Reduce, Reuse, Recycle; P. Jolly, B. Roy, A.T. Sheikh, M. Pathak, J. Arora, 2016-19	DU-Star	40.88
Eureka! MyLab: Developing Resources and Hands-on Science Activities and an Adaptation Accessible for Visually Impaired; P. Jolly, M. Verma, B. Roy, J. Subramanyan, 2016-19	DU-Star	37.50
Therapeutic Potential of Medicinal Plants: Culture, Extraction, Physico-chemical Characterization and Testing their Cytotoxic or Immunostimulatory Properties; S. Bahri, S. Sharma, S. Bhatia, 2016-19	DU-Star	26.67
Core Development of College Infrastructure and Set up of a Central Instrumentation Facility; P. Jolly, 2016-19	DU-Star	26.90
Star College Scheme; S. Moitra, 2012-ongoing	DBT	75.00
Mobile! MyLab: Anytime, anywhere; P. Jolly, M. Verma, B. Roy, J. Subramanyan, 2015-16	DU	6.50
Antimicrobial Finishing of Textiles Using Eco-Friendly Bioactive Agent; J. Arora, S. Jit, N. Rani, 2015-16	DU	6.50
Design of Affordable Water Purification Devices using Green and Eco-friendly Silver Nanoparticles; M. Pathak, M. Sharma, R. Kumari, 2015-16	DU	6.00
Synthesis of Henna (*Lawsonia inermis*) Based Scaffolds and Comparison of their Color and Antimicrobial Activity; M.J. Verma, S.M. Sonkar, A. Lumb, M. Sharma, 2015-16	DU	6.00
Sugarcane to Nanoparticles: Green Nanotechnology - the future; K. Saini, S.S. Bhatia, S. Bahri, 2015-16	DU	5.50
Phytoremediation of heavy metals contamination and extraction of nanoparticles; A. Kumari, S. Moitra, S.S. Roy, 2015-16	DU	5.50
Climate Change, Water Security and Livelihood Resilience: Role of Traditional Knowledge and Modern Technologies in Rajasthan, India; A. Sarkar, B. Gupta, S. Singh, 2015-16	DU	4.50
Continuity and Change in the Youth's perception of National Interest in India's Foreign Policy: A comparative study of Delhi University students with Jadavpur and Madras University students; P. Roy, K.K. Subha, S. Aggarwal, 2015-16	DU	3.50
Children's Picture Books in India: Rethinking History, storytelling and Pedagogy; S.S. Jha, M. Priyadarshini, A. Kushwaha, 2015-16	DU	3.50
Business Ethics: Business Leadership in Bhagavad Gita; P. Sharma, Shweta, M. Bala, 2015-16	DU	3.50
Reward Network as a New Form of Experiential Marketing; B. Kaur, R. Gupta, M.B. Grover, P.R. Jain	DU	3.50
Kashmiriyat- Beyond: A Study of Colonial and Post-colonial Kashmir; N. Dutta, P. Kumari, 2013-14	DU	3.00

Gendered Socialization-comparative Perspective; P. Roy, M.B. Grover, U. Chakravarti, 2013-14	DU	3.00
Efficacy of Natural Dyes in Dyeing and Imparting Antimicrobial Properties to Different Textile Materials; J. Arora, R. Kumari, M. Pathak, 2013-14	DU	4.50
More Miles on the Yamuna; M. Kumar, R. Bhatia, S.M. Sonkar, K. Saini, 2013-14	DU	3.0
Disaster Preparedness: Developing a Strategy for Vulnerability Reduction through Information, Education, & Communication; P. Behari, P. Kumria, R.Parijat, B. Biswas, A. Threja, 2013-14	DU	4.00
Nanoparticles and plant systems: *in vitro* and *in silico* studies; S. Moitra, S. Bahri, S.S. Bhatia, 2013-14	DU	6.50
Eureka! My Lab; P. Jolly, M. Verma, B. Roy, J. Subramanyan	DU	5.50
Inheriting Land, Endangering the Girl Child: Interrogating Land Productivity, Property Rights And Family Planning In Western Uttar Pradesh and Punjab; B. Gupta, A. Sarkar, M. Bandyopadhyay, 2012-13	DU	10.00
Computational Modelling of Phytoregulatory Profile of Some Nanoparticles; S. Moitra, S. Bahri, A. Sehgal, S.S. Bhatia, 2012-13.	DU	10.00
Miles on Yamuna; M. Kumar, R. Bhatia, R. Parijat, 2012-13	DU	10.00
Miles on Yamuna; P. Jolly, M. Verma, B. Roy, J. Subramanyan, 2012-13	DU	10.00
Predicting Potential Inhibitors for *Mycobacterium tuberculosis;* students: Asna, Pragya, Jyotsna, Gunjan, Neha, Geetika, Ayushi; S. Sharma (PI), 2014-15	CSIR - OSDD	2.25
Immunological Studies of Myma (Rv3083) and Adhd (Rv3086) of Cell Wall Associated Protein of *Mycobacterium tuberculosis* for Possible Subunit Vaccine; Iti Saraav, S. Sharma, 2013-16	ICMR	11.14
Cloning, Expression and Immunological Evaluation of Latency Associated Genes of *Mycobacterium tuberculosis*; S. Singh, S. Sharma, 2012-16	ICMR	13.47
Discrimination Against Girls and Access to Housing Rights to Women: Selected Study in Delhi and NCR Region; B. Nanda, 2015	NFI, UNFPA	1.5
Neighbourhood Mapping; R. Parijat, 2015	JNU UNF DRP	2.50
	Total Grant= Rs. 2,446.2 lakh	

3.3 Research Facilities

3.3.1 What are the research facilities available to the students and research scholars within the campus?

Laboratories: College has 9 well-equipped state-of-art laboratories for doing research. There are 18 teaching laboratories spread across different departments that are judiciously shared for teaching and research purposes. In addition, 7 dedicated Department Computer Labs are there, one in each of the Science Departments. ***Refer 4.1.2.***

Equipment: The research laboratories are uniquely equipped, rare for a college. Departments are custodian of DSKC equipment used for both research and teaching-learning.

Physics Project-based Learning Labs: In fulfillment of the DSKC initiative the department has developed Project-based Learning Labs. An illustrative list of equipment is:

- Innovative Experiments, Demonstration Setups, Science Online Kit which is a comprehensive Multidisciplinary Microcomputer-based Laboratory.
- Comprehensive collection of Sensors, Transducers and Data Acquisition Systems developed by internationally pioneering Science Education Innovators and acclaimed Distributors from across the world such as Vernier, Labview, Coach and PASCO. Physics Department has taken lead in introducing Sensor-based real time measurement to other science disciplines in the college and DU. A cryptic list of sensors and physical qualities measurable is given below.
  - *Physical Science:* Sensors for Motion, Force, 3-Dimensional Acceleration, Rotary Motion, Voltage Current, Pressure, Light, Magnetic Field, Sound
  - *Chemical Science*: Online measurement with Ion Selective Electrodes for pH; Colorimeter, and Sensors for Conductivity, Turbidity, Salinity, Oxygen, Carbon dioxide, and Water Quality Monitoring sensors
  - *Biological Science:* Soil Moisture, pH Electrodes, Dissolved Oxygen
  - *Human Physiology:* Handgrip Heart Monitor, Blood Pressure Sensor, Dynamometer, ECG sensor, Chest belt transmitter, etc.
- Test and Measurement Equipment: Four Channel Storage Oscilloscopes, Arbitrary Function Generator, Range of Variable Power Supplies, LCR Meter, Fluke Digital Multimeters, Pulse Counters, Tachometer, Infrared Thermometer, etc.
- Set of classical experiments in modern physics for determination of universal constants such as electronic charge, speed of light, e/m, etc. usually not found in colleges
- Comprehensive set ups for experiments using Laser Optics, Fibre Optics Communication, Ultrasonics, Microwaves
- Dedicated experiments for comprehensive investigations in mechanics, electricity and magnetism, thermal physics, sound, light, digital electronics, non-linear dynamics
- Wireless weather station for online monitoring and storage of weather parameters
- Robotics Laboratory is equipped with the multiple sets of state-of-art robots with compatible sensors and accessories
- Workshop facility for mechanical, electrical and electronic instruments, used for in-house repair, design and fabrication. Students working on projects are encouraged to make use of this facility to learn practical skills useful in everyday life and engage in product development

Material Science Research Lab has the facility for fabrication of ceramics and thin films by chemical method having equipment such as thermal evaporation, spin coater, furnace, pressing machine, ball milling, sonicator, hot plates, etc.

Chemistry Instrumentation Lab: The thrust of activities is fabrication and characterization of nano structured materials using chemical and green methods; and molecular modelling. The research facility has the following distinctive equipment:

- Microwave Synthesis Station
- Atomic Absorption Spectrometer

- PC-based Double Beam Spectrophotometer
- Melting Point Apparatus-digital
- Muffle Furnace
- Electrophoresis supply
- Rotary Vacuum Vaporator Quickvap
- Photocatalytic reactor

Botany Department Plant Tissue Culture Lab is mainly engaged in research on Reproductive Biology of Podostemaceae family and effects of nano particles on seedling biology of plants. Distinctive equipment are:

- Stereo-Zoom microscope with camera
- Fluorescence Microscope with camera
- Field Microscope with camera
- Photomicroscope with camera
- Laminar Flow
- Culture Trolley
- Rotary Shaker and Convector
- Micropipettes
- Cytomixer
- High end pH Meter
- Magnetic Stirrer
- Digital Balance

Biotechnology and Immunology Laboratory is well equipped to carry out animal cell culture, molecular biology as well as immunological work for vaccine candidate studies. Distinctive equipment are:

- Trinocular Inverted Phase Contrast Microscope with attached camera
- Trinocular Research Microscope E100 with CCD and Image Projection System
- Stericycle CO_2 Incubator
- Class II Biosafety Cabinet
- Millipore membrane filter assembly with vacuum pump
- Refrigerated Centrifuge with various rotors
- Non- Refrigerated Centrifuges
- Gel Electrophoresis assemblies with power supplies (Vertical& Horizontal)
- UV Transilluminator
- BOD Incubators

BioDiscovery Research Facility is equipped to carry out cloning and expression of important genes as well as purification of protein products derived from them for vaccine candidate and drug target studies. Distinctive equipment are:

- Biosafety cabinet
- Orbital Shaker Incubator
- Innova 42
- -80 ^{o}C Ultra Low Temperature Freezer with CO_2 Backup
- -20 ^{o}C Freezer and Refrigerators
- UV/VIS Spectrophotometer SmartSpec Plus 1702525
- Molecular Imager GelDoc XR+ with Image Lab Software & laptop
- Mini Trans Blot Module and Mini Protean Tetra Cell
- Sonifier 250 with multiple probes

- Veriti Gradient Thermocycler
- TC-3000G Gradient Thermocycler
- Nanodrop Lite
- Refrigerated Centrifuge
- Electronic Balances
- Millipore ELIX 3 Water Filtration system

Besides this, the lab carries out immunological studies such as immuno-fluorescent cell surface markers and cytokine ELISA as well as real time estimation of immunological parameters with sophisticated equipment like: BD Accuri C6 Flow Cytometer, Biotek ELISA Reader ELx800 with 9-Pin Narrow Carriage Impact Printer, ABI Step One Real Time PCR machine.

Textile Technology Lab has equipment such as Dye Bath, Padding Mangle, Hot Air Oven.

Automatic Weather Station has a weatherproof enclosure containing the data logger, rechargeable battery, telemetry with meteorological sensors mounted upon a mast. The different sensors detect temperature, relative humidity, wind speed, pressure and rainfall.

ICT, Software and Library Facilities: Refer Item 4.2 and 4.3.
Financial Assistance: College provides some financial assistance to students and faculty for participating in national/international conferences/seminars in the form of registration fee.

3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

MH is continually enhancing and upgrading existing research facilities, encouraging faculty to undertake funded research projects, develop linkages with research networks, establish collaborations and publish in peer reviewed journals. It seamlessly integrates teaching and research activities encouraging UG participation in research on the frontiers. The college has proactively established programmes with prestigious national and international research institutes.

Advanced Science and Interdisciplinary Research: A new Academic Block under construction will add 6 laboratories, 3 committee rooms, 6 lecture theatres and two discussion rooms. This will enable the college to add a separate wing for *Advanced Science and Interdisciplinary Research*, consolidating existing facilities. This will integrate and upgrade the existing

- Bio Discovery Lab Facility
- Multidisciplinary Nanoscale Research Laboratory (MNRL)

MI Lab, the Miranda Innovation Lab: Proposals have been sent to DU and other funding agencies for establishment of the *MI Lab*, the *Miranda Innovation Lab* that will have state-of-art instrumentation facilities. It is planned as a central facility for use by colleges and other educational institutions.

Science Education Outreach: Plans are to scale up ongoing education research and outreach activities. Further collaboration on these initiatives with DST, DBT, the three Academies of Science, Vigyan Prasar is slated. The mission is to train manpower to contribute to national goals through Summer Schools/Training

Programmes for all strata of students (UG, PG, M.Phil., Ph.D., Postdocs); Add-on-Courses; Educate the Educator programmes in emerging areas of research. The college is well poised to empower Women in STEM areas where they are underrepresented.

Maintenance and Upgradation*:* The college undertakes work for refurbishing of spaces, air conditioning and appropriate furnishing to create laboratory spaces befitting work being undertaken. It also provides assistance towards repair and maintenance of the basic facility, when feasible.

3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If 'yes', what are the instruments/facilities created during the last four years.

DBT Star College Scheme: The following equipment worth Rs. 35.67 lakh were procured:

- Digital Weighing Balance (9)
- Water Distillation Unit (4)
- Microscopes: Stereo Zoom (10); Monocular (10); Optical (10)
- pH Meters (19)
- Water Bath (6)
- Microwave Oven (2)
- Ultrasonic Kit (4)
- Interactive Projectors (6)
- Digital Photo Colorimeter (6)
- Spinwin MC-02 Micro centrifuge & Accessories (1)
- Vertical Laminar Flow (1)
- Fume Hood 30x18x18 (1)
- Orbital Shaker (1)
- Spinix Vortex Shaker (1)
- Digital Conductivity Meter (2)
- EyeRIS Device and Projector (2)
- NI ELVIS II Hardware (2)
- Vernier Bioinstrumentation Sensor Kit (2)
- Nikon Fluorescence Mercury Lamp E-200 HG-100W (1)
- Vertical Electrophoresis Apparatus (1)
- Mini Transblot module (1)
- Dynamixel AX-12A Digital DC Motor (RB-DAX12) (1)
- Ice Flaking Machine (1)
- Study of B-H Curve with Deep (1)
- Biot Savart's Law (SK022) (1)
- Electricity Kit (SN250)
- Magnetic Kit (SN 735)
- Nikon DSLR Camera KIT D5100 (18-55) VR (1);Cannon DSLR Camera 550D (18-55mm) KIT (1); Desktop (2); Laptop (1); Media Presenter (1);Electronic Screen (2); Printer (2); Coloured Laser Printer (1)

CSIR-OSDD: Equipment procured: Sonifier (Branson) and Nanodrop (Thermo-Scientific)

3.3.4 What are the research facilities made available to the students and research scholars outside the campus/other research laboratories?

MH leverages its location within the DU Campus and proximity to research institutions.

- Science students regularly use research facilities available in the parent Departments at DU and USIC.
- Department of Chemistry uses facilities at INMAS-DRDO and IIT-Delhi.
- Department of Zoology uses facilities at ACBR, VPCI, INMAS-DRDO, IGIB, ICGEB, NII and IIT-Delhi.
- Department of Physics uses research facilities available at JNU, IIT-Delhi, NPL, SSPL-Delhi, IISc.-Bangalore, CEERI-Pilani, SCL-Chandigarh, INMAS-DRDO, and DMRL-Hyderabad.
- The Department of Botany uses research facilities at Department of Environmental Studies, DU, IIT-Delhi and PMB–UDSC.
- In addition, students participate in various summer internship programmes offered at different institutes such as TIFR, JNU, IISc., NII, IISERs and HBCSE.

3.3.5 Provide details on the library/information resource Centre or any other facilities available specifically for the researchers?

Researchers have access to all E-journals and databases that are available through DULS and INFLIBNET N-LIST. E-resources available on other Library Resource Centres such as American Centre Library, British Council Library and DELNET can be accessed. Students and faculty members also take memberships of other libraries such as CSL, National Medical Library, IARI, CRL, Indian Council of Social Science Research Library, Indian Council of Historical Research, National Archives of India, Archeological Survey of India, Libraries of Delhi School of Economics and Institute of Economic Growth etc.

3.3.6 What are the collaborative research facilities developed/ created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.

CSIR-OSDD Centre: In collaboration with CSIR, college has set up a OSDD Centre wherein basic Cheminformatics and Bioinformatics tools are used for designing novel lead generation strategies which will enable researchers to carry out work on identification of the potential protein inhibitors as *M. tuberculosis* Drug Targets.

Science Setu Programme: This programme of NII aims to contribute to the national goal of encouraging bright young minds to pursue S&T as a career option. The MoU between the two institutions states that NII will work with MH to

- address the changing teaching, learning and research scenario in biology
- link NII in the spirit of "success through access" to UG teaching in biology
- engage a talent pool of biology students in the delivery of innovation, research and continuous development
- act, through all the above, as a catalyst of change.

DBT Star College Scheme: The college was granted DBT Star College Scheme in 2011. Since its inception, a total grant of Rs. 75 lakh has been utilized by the 5 participating Science Departments of Botany, Zoology, Chemistry, Physics, and Computer Science. Major portion of the funds have been utilized for buying latest equipment required for upgrading teaching/research labs. This has improved the

infrastructure available for undergraduate teaching. Some Departments have added several books to their libraries through this grant. The recurring grant of Rs. 2 lakh per Department enabled purchase of consumables and organization of workshops.

e-Yantra Robotics Laboratory*:* MH signed up for *e-Yantra* Lab Setup Initiative (eLSI) to establish a Robotics Lab in 2013-14. Facilitated by IIT Mumbai and sponsored by MHRD, it aims for effective Embedded systems and Robotics education across colleges in India by (i) providing training for teachers and students; (ii) engaging teachers and students in hands-on experiments with robots; and (iii) helping colleges to set up Robotics labs/clubs.

Spoken Tutorial-Digital India, IIT-Mumbai: National Mission on *Education through ICT* is a programme funded by MHRD. Under this programme, Computer Science Department has organized several events such as Online Test in C++. Students performed exceptionally well and were awarded certificates.

Adopt a Monument: Department of History regularly participates in workshops organized by INTACH to make citizens aware of their role in the conservation and preservation of building, natural material and living heritage. MH students have explored *Pir Ghaib*, a Tughlaq period monument on the Kamla Nehru Ridge and the *Baoli* close to it as part of *Adopt a Monumen*t initiative.

TERI: MH has several collaborative activities with TERI. 7 *MH-Vatavaran* student volunteers were selected to participate in the prestigious Annual YUVA Meet 2016. One student was selected as *LeadEarth* Fellow in 2013-14 to work on a technology development for sustainable water management. In this project, water from science laboratories was recycled using different techniques such as ion exchange.

Disaster Research Programme (DRP): Under this College Cluster Initiative, MH students have undertaken the project *Neighbourhood Mapping and Assessment of Disaster Risk and Vulnerability* for Selected Places in and around University of Delhi, North Campus with a grant of Rs. 2 lakh sanctioned by JNU. The Project is aimed at sensitizing the youth by involving them in participatory neighbourhood mapping programme for disaster risk reduction.

3.4 Research Publications and Awards

3.4.1 Highlight the major research achievements of the staff and students in terms of

Patents obtained and filed (process and product): Dr. Monika Tomar, Department of Physics, has applied for two Patents in collaboration with researchers in DU and NPL. Both are under process.

- A sensitive and rapid sensor for fuel gases
- Multi-state Nonvolatile Opto-Ferroelectric Memory

Original research contributing to product improvement*:* No

Research studies or surveys benefiting the community or improving the services:

Research inputs contributing to new initiatives and social development:

- As an open platform, OSDD is engaging students and using crowd sourcing to look for the affordable healthcare alternative for infectious diseases such as Malaria and Tuberoculosis.

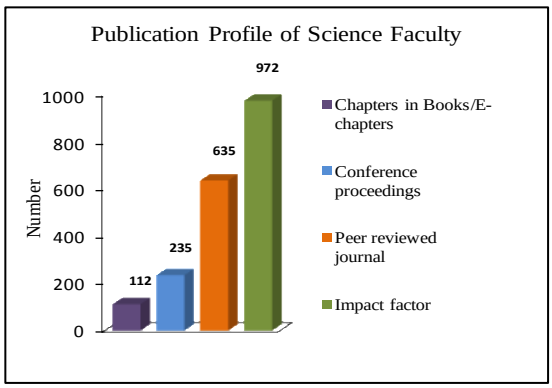
- The Vaccine/Drug discovery group is making sustained efforts towards development of new and improved vaccine candidates and drug targets for tuberculosis.
- MH is deeply committed to Solid Waste Management. It has not only established Paper Recycling, Compost and Grey Water Recycling Plants but also established a research programme on green technologies titled *3Rs: Reduce, Reuse and Recycle*. This is also a lived philosophy as the college takes pride in being a green and clean campus. Refer Item.
- The Automatic Weather Station (AWS) is enabling collection and display of real time weather data.
- Disaster Research Programme (DRP) has led to a greater understanding of nature of risks faced by local communities and disaster mapping of the neighborhood of DU.

3.4.2 Does the Institute publish or partner in publication of research journal(s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?

No

3.4.3 Give details of publications by the faculty and students:

Fig. 3.4.3: Publication profile of the faculty members



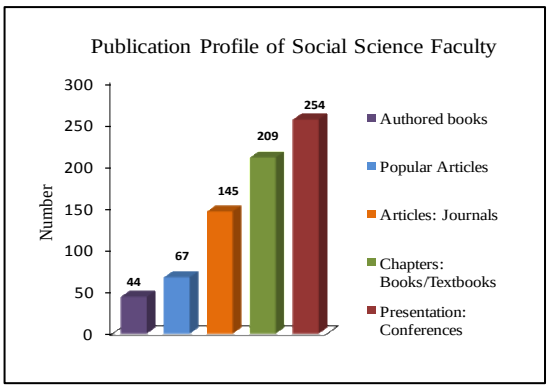


Table 3.4.3 (a): Publications by the Faculty from Science Department

Departments	No. of faculty	Peer reviewed Journal	Conference Proceedings	Chapters in Books/ e-Chapters	Edited Books/ Books with ISBN	Citation index	IF	h-index
1. Botany	9	49	56	12	14	433	60	27
2. Chemistry	14	105	27	02	10	442	120	37
3. Computer Sc.	2	1	4					
4. Mathematics	13	195	56	02	01	667	42	29
5. Physics	19	218	81	06		966	613	27
6. Zoology	9	68	11	17	02	1324	137	33
Total	66	635	235	112	27	2912	972	88
Publication in Peer Reviewed Journals per Faculty = 635/66 = 9.62								

Table 3.4.3 (b): Publications by the Faculty from Social Science Departments

Department	No of Faculty	Authored: Books	Edited: Books/ Proceedings	Chapters: Books/ Textbooks	Articles: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular Resources	Popular Articles
1. Bengali	03	3					11		21
2. Geography	14	9	7	26	17	4	109	9	01
3. Elementary Edu	17			11	25		02		07
4. Political Sc.	11	5	3	20	32	3	48	19	10
5. Hindi	14	7	5	111	14	93	24	11	13
6. English	11	6	7	24	21				04
7. Economics	07	3	1	3	12		24	2	2
8. Philosophy	07	9		8	14	01	16	1	06
9. Sociology	07	2		6	10	01	20	09	03
Total	95	44	23	209	145	102	254	51	67
Publications in Peer Reviewed Journals per Faculty =145/ 95 = 1.53 Publication of Books, Chapters in Books per Faculty = 2.9									

Student Publications in Peer Reviewed Journals

- Pandey, K., Sharma, M., Saarav, I., Singh, S., Dutta, P., Bhardwaj, A. & Sharma, S. 2016. Analysis of the DosR regulon genes to select cytotoxic T lymphocyte epitope specific vaccine candidates using a reverse vaccinology approach. International J. Mycobacteriol.5: 34-43.
- Saraav, I., Singh, S., Pandey, K., Vishnoi, E., Sharma, M. & Sharma, S. 2015. Cell wall-associated *Mycobacterium tuberculosis* Rrv3083 protein stimulates macrophages through toll-like receptor-2 (TLR2). International J. Mycobacteriol. 4: 176.
- Saraav, I., Singh, S., & Sharma, S. 2014. Outcome of *Mycobacterium tuberculosis* and toll-like receptor interaction: immune response or immune evasion? Immunol. Cell Biol. 92: 741-746.
- Sharma, M., Pathak, M., Roy, B., Chand, A., Dhanda, G., Abbasi, N. & Panchal, G. 2016. Green synthesis of gold nanoparticles and their characterization. Journal of Materials Nanoscience 3(1): 8-10.
- Sharma, M., Pathak, M., Roy, B., Jain, L., Yadav, N., Sarkar, B., Kaur, M. & Sharma, M. 2015. Quantitative estimation of aspirin in various drugs: UV-vis absorption spectroscopy and colorimetric studies. Journal of Undergraduate Research and Innovation, 1: 157-162.
- Singh, S., Saraav, I. & Sharma, S. 2014. Immunogenic potential of latency associated antigens against *Mycobacterium tuberculosis*. Vaccine 32: 712-716.

Student Publications in Conference Proceedings

- Bhatia, S.S., Saini, K., Bahri, S., Pandey, S., Choudhary, N., Malik, P., Agarwal, R., Baruah, S., Sekhari, S., Sharma, K., Ruhal, S., Suhail, S. & Suri, S. 2016. Synthesis of copper nanoparticles and characterizations by using different techniques. Indo-Portuguese Workshop on Emerging Trends of Nanotechnology in Chemistry and Biology (INCB-2016), organized by Department of Chemistry,

Hansraj College and Deshbandhu College, University of Delhi, India, in association with Centro de Quimica da Madeira University da Madeira, Portugal, 12-13 February 2016. J.Mat. NanoSci. 3(1), Abstract S19, ISSN 2394-0867.

- Chaudhary, N., Malik, P., Saini, K., Bhatia, S.S., Bahri, S.,Ingole, P.P., Pandey, S., Agarwal, R., Baruah, S., Sekhri, S., Sharma, K., & Ruhal, S. 2016. Synthesis of copper nanoparticles (Cu,Cu_2O,CuO) and characterization by UV-visible spectroscopy and powder X-ray diffraction. In: Proceedings of the National Conference in Chemistry-2016 (NCC-2016), organized by Department of Chemistry, Shyamlal College, University of Delhi, at India International Centre, 07-08 April 2016, pp. 168-173, ISBN 9789385824012.
- Saini,K., Gulati, A., Chawala, A., Sangeeta, Garima & Bhatiya, B. 2014. More miles on Yamuna. In: Proceeding of National Conference on Striving & Thriving Towards Diffusion of Student-Driven Research in Science and Technology for Inspired Learning, 16-17 October 2014, pp. 80-87, ISBN 978-81- 7273-958- 4.
- Saini,K., Sonkar,S.M., Balendra,G., Gulati, A., Sangeeta & Aayushi. 2015. Detection of heavy metals (Cr, Co, Ni, Cu) through atomic absorption spectroscopy from water samples of the river Yamuna at different locations in the NCT of Delhi, India. National Conference on Inspired Learning (NCIL-2015), organized by Embedded Systems and Robotics Centre (ESRC) and Department of Electronics, Maharaja Agrasen College, University of Delhi, 16-17 October 2015, Poster presentation. Full Paper in IJSRD: 120-123, ISSN 23210613.
- Subramanyan, J., Arlene, Gupta, D., Nagar, N., Yadav, N. & Bharti, S. 2015. Protease activity in pineapple fruits. In: Proceedings of the National Conference on Climate Change: Impacts, Adaptation, Mitigation Scenario and Future Challenges in Indian Perspective, S. N. Tripathi, R. S. Devi, S. Kumar, and V. Jolli (ed), Department of Botany, Deen Dayal Upadhyaya College, University of Delhi, New Delhi, 02-03 March 2015, pp. 56-60, ISBN: 978-93-5235-335-4.
- Subramanyan, J., Jolly, P., Manchanda, D. & Sella, N. 2016. Health sensors and smart medical devices. In: Proceedings of the International Conference on Public Health: Issues, Challenges, Opportunities, Prevention, Awareness (Public Health 2016), Vol. II, Daulat Ram College, University of Delhi, Delhi, and Krishi Sanskriti, New Delhi, 15-16 January 2016, pp.189-190, ISBN 978-93-85822-10-10.
- Subramanyan, J., Ila, Deb, K., Fauzdar, M. & Prakash, R. 2014. A study of catalase activity in potato tubers. In: Proceedings of the National Conference Striving & Thriving Towards Diffusion of Student-driven Research in Science and Technology for Inspired Learning, Maharaja Agrasen College, University of Delhi, Delhi, 16-17 October 2014, Authorpress, New Delhi, pp. 108-113, ISBN: 978-81-7273-958-4.

Books by Students

- Aparna Srivastava, English, 2014. *Jane Eyre as a Female Gothic Novel*. Student Pulse: The International Student Journal (online) Vol.6 (4).
- Arundhati Sridhar, History, writes for Wisden India.
- Gunjan Narang**,** Elementary Education**,** 2014. Co-authored *A Half Baked Love Story: "Not" A Sweet Love Recipe..!*, Srishti Publishers & Distributors, ISBN 9789382665267.
- Hardeep Kaur, Elementary Education, 2011. *Perhaps Ink Pots Stop Spots*, Serene Woods, ISBN 978-93-80112-42-8.

- Prachi Garg, Computer Science, 2016. *Superwomen*:*Inspiring Stories of 20 Women Entrepreneurs*, Srishti Publishers & Distributors, ISBN 13**:** 978-9382665632.
- Priyanka Gupta, Economics, 2015.*Woman Entrepreneurs–Unraveling the Myth* (e-book), IIM, Bangalore.
- Priyanka Gupta, Economics, 2015. Co-authored *The Women Who Ventured*, IIM, Bangalore.
- Ritu Gairola Khanduri, History, 2016. *Caricaturing Culture in India Cartoons and History in the Modern World*, Cambridge University Press, ISBN 9781107618572.
- Shubhangi Joshi, Economics, 2014. *To Stir Up An Ornate Nest*, Authorpress,New Delhi, ISBN8172739087.Her work has appeared in national and international journals such as *The Brown Critique, The Voices Project, Manushi* and the *Taj Mahal Review*.
- Somya Lakhani, History, writes for Indian Express.

Student Popular Articles and Online Publications

University Newsletters and University Online Newsletters act as platforms for students to communicate their views. To mention a few DU Beat, Campus Diaries and University Express. Some student contributions are:

- Eisha Roy, Sociology, has written articles, for Campus Diaries on Juvenile justice or injustice.
- Reva Kansal, Philosophy, writes for University Express.
- Sushrija Sakshi Upadhyaya, Political Science, writes for Youth ki Awaaz.
- Tooba Towfiq, Correspondent with DU Beat.
- Blogs, Newsletters and various other social media communications are the venturing houses of students to embark their ideas, notions and perspectives.
- Spiegel: It is a newsletter published by WDC. A test run issue was published online in December 2015 on Facebook, Whatsapp and Google Drive. Based on the success of this pilot issue, a decision was made to turn it into a monthly newsletter from 2016-17.
- The Economics Society of Miranda House has its own blog Ecotalker. Lighthouse is an online magazine of the Sociology Department.
- The College has two research based magazines *Santulan,* the magazine of Consumer Club *TULA,* and *Aapurti,* the magazine of Economics Department that features the research papers of the students. *Miranda* is the official college magazine, the thoughts and creativity of many students find expression through the pages of *Miranda.* The magazine has English, Hindi and Sanskrit sections. *Parnassus* is the annual magazine of Miranda House Hostel. *Geographica* of the Department of Geography, *Vox Populi* of the Department of Political Science, *Quisqualis* of the Department of Botany, *Rasayani* of the Department of Chemistry, *Evolvere* of the Department of Zoology, *Pehchaan* of the Department of Hindi, and *Megazine* of the Department of Mathematics are Departmental Magazines in which students writings are published.

3.4.4 Provide details (if any) of research awards received by faculty, recognition received of research

- Excellence Award for Teachers in Colleges, University of Delhi, 2016: M. Tomar
- UGC Research Award, 2016-2018: A. Sarkar

- Teaching Excellence Award for Innovation, University of Delhi, 2015: J. Arora, R. Kumari, M. Pathak
- Australian Leadership Awards Fellowship (ALAF), AUSAID, Australia, 2013: P. Jolly, U. Malik, B. Roy, M. Verma, J. Subramanyan, N. Vashistha, S. Bahri, M. Pathak, S. Sharma
- Charles Wallace India Trust Scholarship: S. Moitra, 2013-14; D. Ray, 2015-16
- Young Geographers Award, Institute of Indian Geographers, 2010: A. Sarkar
- ICSSR (Indian Council of Social Science Research) Fellowship for Post-Doctoral Research: M. Priyadarshini, 2011; M. Vij, 2012
- Shortlisted for DSC Prize for South Asian Literature, 2011-12: M. Kapur for novel *The Immigrant*
- Fulbright Nehru Postdoctoral Research Fellowship: B. Jagannathan, 2012-13; S. Purkayastha 2015-16
- International Summer School King's College London Scholarship Award: M. Pal, 2013; P. Roy 2014
- Special Appreciation Award from Faculty of University of Massachusetts: T. Bose^{R}, 2014
- University of Delhi Scholarship for Masters Course under the Faculty Training Scheme: University of Edinburgh, Scotland, UK, R. Kumari, 2011-12; R. Shakya, 2012-13; University of British Columbia, Vancouver, Canada 2011-12 H. Oak; University of Nottingham, United Kingdom, S. Das, 2011-12
- INSA-DAAD Bilateral Exchange Program Fellowship, Leipzig, Germany, 2013: R. Kumari
- Three Weeks Course Award, University of Wisconsin, 2015: J. Pillai, B. Nanda
- Best Display Award, *Antardhwani2015:* Innovation Project *Kashmiriyat: A Study of Colonial &Post-Colonial Kashmir*: N. Dutta, P. Kumari; Innovation Project *Efficacy of Natural Dyes*: J. Arora, R. Kumari, M. Pathak
- Best Poster Presentation Award: *National Symposium on Reproductive Health in India* 2016, J. Arora, S. Jit; *National Symposium on Man Made Diseases*, 2016, J. Arora, S. Jit; National Seminar on *Water Quality in Urban Ecosystem*, 2016, S. Bahri, S. Moitra; One-day Symposium on *Recent Trends in Biology*,2015: J. Arora, R. Kumari, M. Pathak; One-day Symposium on *Environment– Challenges and Awareness* 2014: J. Arora; *National Conference on Green Chemistry and Sustainable Technology for Society*, 2016, K. Saini; *International Conference of Electron Microscopy and XXXV Annual Meeting of Electron Microscope Society of India*, 2014, R. Shakya;
- Best Oral Presentation Award: *National Symposium on Man Made Diseases*, 2016, J. Arora, S. Jit; One-day Symposium on *Recent Trends in Biology*, 2015: J. Arora, R. Kumari, M. Pathak; One-day Symposium on *Environment - Challenges and Awareness* 2014: J. Arora
- Second Prize for Paper/Poster Presentation: National Conference *Advanced Functional Materials and their Applications*, 2015, K. Saini; Indo-Portuguese Workshop on *Emerging Trends of Nanotechnology in Chemistry and Biology*, 2016, S. Bahri, S.S. Bhatia, S. Moitra
- Third Prize for Paper/Poster Presentation: International Conference on *Public Health Issues, Challenges, Opportunities, Prevention, Awareness*, 2016: J. Subramanyan, P. Jolly
- Certificate of Appreciation for Poster Presentation: National Symposium on *Trends in Research and Innovation in Life Sciences at Undergraduate Level*,

2016, J. Arora; S. Jit; International Symposium on *Green Chemistry and Sustainable Development*, 2012, J. Subramanyan, S. Bahri

- IV Prize in e-Yantra Teachers Robotics competition, IIT Bombay, 2014: C. Goel
- Ambassador, Peace Award, Universal Peace Federation, January 2014: P. Jolly
- Lifetime Achievement Award by the Women's International Network (WIN) November 2012: P. Jolly
- Fulbright New Century Scholar Award, 2009-10: P. Jolly
- 10th GR8! Women Award, Education, Indian Television Academy 2011: P. Jolly
- Dr. S. Radhakrishnan Smriti Rashtriya Shikshak Samman in Education by All India Freelance Journalist & Writer's Association, 2010: P. Jolly
- Amity Women Achiever Award, Education, Amity University, 2010: P. Jolly

Faculty as members in National Committees and Professional Bodies

***Refer Table 3.4.4 (a)* in Supporting Document**

Faculty as members in International Committees and Professional Bodies

***Refer Table 3.4.4 (b)* in Supporting Document**

Editorial Boards

***Refer Table 3.4.4 (c)* in Supporting Document**

Incentives given to faculty for receiving state, national and international recognitions for research contributions.

MH takes great pride in the scholastic achievements of its faculty. It proactively motivates them to participate in conferences, seminars, workshops, etc. to give them exposure and opportunity to showcase their work. Faculty are encouraged to publish in peer reviewed journals, update CV on college website and create a presence on Research Gate, Scopus and other databases for greater visibility. Event notices and information on possible avenues for presenting research are promptly shared on the college email communication network. Nomination to an event is based on expertise as well as duly expressed personal interest. Full administrative support is provided with rapid processing of documents for participation in events including applications for visa. Travel grant applications are forwarded with a strong recommendation. Appropriate academic leave is provided. The Principal likes to share information on faculty achievement at every possible forum. These are also an important part of the MH Report published as part of the DU Annual Report.

3.5 Consultancy

3.5.1 Give details of the systems and strategies for establishing institute-industry interface?

The college is strengthening linkages with industry. It does so by facilitating visits of eminent experts from different walks of life, including leading figures from industry and corporate sector. Experts from leading industries are frequently invited for talks and interactive sessions. The Placement Cell is a powerful platform for institute-industry interface. Students and faculty interact with business and corporate world while soliciting sponsorship for important college events. College seeks expert advice from leading industrial organizations such as FICCI, CII and ASSOCHAM. The Principal and faculty accept offers for participation in industry organized events to maintain contact. The Principal has been a panelist several times at events

organized by CII and was lead organizer for CII-OECD Workshop held with support of Planning Commission. She participated with faculty conveners of Entrepreneurship Cell and *Enactus* at event to mark launch of FICCI Young Ladies Organization Website. This provided an opportunity to meet with leading entrepreneurs with successful startups. The college has also been part of FICCI Young Leaders Initiative. The college seeks assistance under CSR. Alumnae working in industry and corporate sector provide an important interface. In recent years, the number of startups and entrepreneurial ventures by MH alumnae has recorded sharp increase.

3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

The college encourages faculty to share their expertise with other institutions and organizations. The faculty is well recognized for their scholarship and commitment to society at large. The college has a vast network of stakeholders and strong linkages. As a result, faculty members usually have long standing collaborations with a spectrum of organizations. The faculty profiles displayed on the college website give details of their expertise in specific areas. Individual faculty members are also recognized as experts in their subjects through their research publications and presentations in conferences. All this facilitates them to offer consultancy services.

3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?

The college encourages synergetic contribution to other organizations in all sectors. When approached by an outside agency with request to provide personnel with expertise for a specified agenda, the college shares information with faculty. It facilitates consultancy by granting leave in accordance with university rules as and when required.

3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.

The broad areas of consultancy provided by the college faculty are:

- Design and revision of academic curricula; a significantly large number is associated with course framing or restructuring committees at DU.
- Membership of University Committees as well as Committees and Think Tanks set up by various government institutions and NGOs.
- Preparation of course material including e-lessons and video lectures; several faculty members undertake curriculum development exercises with NCERT, CBSE, NIOS, IGNU, ILL, NISCAIR, etc.
- Peer review of papers for learned journals.
- Mentoring and judging student participants for various prestigious competitions.
- Acting as observers for entrance examinations of government organizations and universities.
- Acting as resource persons for Faculty Training Programmes and Refresher Courses.
- Being part of Advisory Committees, Organizing Committees, chairing sessions, delivering lectures, being panelists rapporteurs and so on.
- Consultancy for school education; networking with schools and assisting in judging events, recruitment of school teachers, etc.

3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?

The consultancies mentioned above are largely honorary in nature. Wherever remuneration is involved college follows University of Delhi rules.

3.6 Extension Activities and Institutional Social Responsibility

3.6.1How does the institution promote institution-neighbourhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

Community engagement is seen as an important component of liberal education and experiential learning. It provides the critical connection with the real world. Students are urged to join one of the three co-curricular activities, namely, Sports, NCC and NSS. MH students uphold community work and have a strong sense of idealism and service. They are driven by a desire to change the world and in particular, like to work in the social sector. Gender issues, human rights, women empowerment and sustainable development are of strong interest. NSS Unit undertakes need assessment of the local community in the beginning of each academic year. It plans and prioritizes projects. An orientation programme is organized to introduce students to the services of community in the beginning of the academic session.

The college also engages with the society at large through its other forums such as the Women's Development Cell, *Enactus*, the international non-profit organization promoting entrepreneurial action to improve the standard of living of people in need, *Tula*, the Consumer Club, the Gandhi Study Circle, *Lakshita*, the Society for the differently-abled and *MH-Vatavaran*, the college Environment Society.

Many of the past and present DU Innovation projects awarded to the college are based on social and environmental themes such as *Miles on Yamuna* followed by *More Miles on Yamuna* that looked at water quality and riparian communities on the bank of the river. Other issues such as gendered socialization in matrilineal and patrilineal societies, water scarcity and some region specific causes are a major field of research. These give student researchers a deep insight into the grand challenges facing the country and motivation to find solutions. Within the prescribed curriculum, students of Geography and Sociology undertake field visits which give them opportunities to observe different communities closely. Students of B.El.Ed. get an insiders view on the primary education sector as it is mandatory for them to undertake practice teaching in associated government schools.

3.6.2 What is the Institutional mechanism to track students' involvement in various social movements/activities which promote citizenship roles?

The students at MH are deeply committed and function largely on their own momentum, following traditions set by their predecessors.

- NCC has its own mechanism for recognition and reward. Registered members appear for the B and C Certificate examinations conducted by the NCC Headquarters. Attendance for parades is compulsory. The NCC instructors ensure that students fulfill their duties at the camps they attend, which are mainly focused towards community service, self defence, emergency services and sports.
- NSS volunteers are required to maintain logbooks of community work undertaken. This is used to track their involvement in social activities. It is

essential to complete 120 hours of community service in an academic year in order to be eligible for a certificate.

- *MH-Vatavaran* volunteers also maintain logbooks. Contribution of 100 hours of pertinent work is the norm.
- WDC awards volunteer certificates on the basis of year-long participation, closely monitored by the student office bearers and Faculty Advisers.
- Geography and Sociology departments require students to submit reports of field trips, which are graded.
- B.El.Ed. students are graded on their practice teaching performance.
- It is mandatory for all student societies to submit an annual report of activities which is included in the Annual Report of the college.

3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

Faculty and students share a strong bond at MH. They are encouraged to voice their opinion and give suggestions. The elected Students Union and the Department Society representatives play a vital role by providing feedback and being partners in college's development. Suggestion boxes are kept at strategic locations on the campus. The Principal is accessible and interacts with students on a continuing basis, often personally mentoring. She invites them for round table discussions on key issues and organization of events. These become an important medium for seeking stakeholder perceptions, improving functioning as also steering activities to meet higher bench mark. The Vice Principal is in charge of day to day functioning of the Hostel and along with a Committee addresses emergent needs of resident students. Health and personal emergencies are handled quickly and effectively. Students and parents increasingly write emails directly to the Principal who answers queries herself or redirects them to pertinent staff. The faculty and other staff are also important stakeholders and play key roles in decision making.

3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

MH holds extension work as a priority area. Each year, the college tries to increase the range and scope of its contribution to society at large. It monitors the nature and quality of work undertaken; most importantly, it reflects on (i) the impact of the work on communities and (ii) learning and transformative change it brings in student volunteers. Extension work is viewed as action research; the process loop incorporates identification of a problem, planning, implementation, and iterative modifications for goal accomplishment. Inasmuch as academics is the forte, element of research and systematic evaluation is critical. It is well understood that work with communities is often arduous and benefits accrued are not always quickly visible. MH has several projects of longstanding such as in adopted areas or with marginalized communities. These rest on a deep commitment to stakeholder community and are viewed differently from short duration focused projects.

A variety of forums in Miranda House engage in extension and outreach. Few illustrative examples are given below:

Clean Environment: NSS volunteers and MH *Vatavaran* have undertaken cleanliness and environment consciousness campaigns in mission mode. The college is declared a

Zero Solid Waste Zone. Volunteers ensure that the college has exemplary cleanliness even at events such as the Annual Festival with footfall of more than 5000 and scores of food stalls. During DUSU elections while DU is littered with pamphlets, MH campus presents a sharp contrast. Volunteers pick paper from the pedestrian walkways and deliver it to the Paper Recycling Plant. College launched the *Swachh Parisar Abhiyan* (Clean Environs Mission) on 02 October 2014 and has kept momentum. Volunteers participate regularly in DU Campus Cleanliness Drive, Yamuna Cleanliness Drive; Clean India Green India; Dengue Awareness Campaign; Mega Tree Plantation Drive, etc. Several student groups script and perform Street Plays on these themes for community awareness.

Educating: College NSS unit focuses on teaching the underprivileged children as part of Institutional Social Responsibility. Presently, NSS has established two Off Campus Centres in low income *Jhuggi* Cluster to facilitate about 100 needy children. More than 60 NSS volunteers take turns to teach school going students, helping them with schoolwork. Most importantly, they impart basic life skills, inculcating hygienic habits and moral values. Special focus is on engaging them in extracurricular activities. Volunteers celebrate festivals with their mentees, and invite them to MH functions giving them a chance to perform. NSS has initiated a new project *Holding Hands* for women students of SOL who have their Personal Contact Classes on holidays at MH with the aim of assisting them academically and engaging them in extracurricular activities. They also organize Remedial Classes for children of MH staff living on the campus. An important initiative has been English Speaking Course in association with British Council and Teach India for the permanent and contractual staff of our college.

Assisting Persons with Disabilities: NSS and Enabling Society volunteers befriend and assist visually challenged students in more ways than can be listed. The Freshers' Orientation *Samdrishti,* provides a guided introduction to MH and DU facilities. Students provide academic help by scanning and editing essential readings, texts, and references to make a digital collection; read and record lessons; enhance ICT training; act as writers for DU examinations. Volunteers assist PwD participate in extracurricular activities and escort them to various off campus competitive events.

Empowering Women: WDC launched a national campaign *Growing up Girl* in collaboration with well known NGOs Plan, CFAR and CAPF. This unique campaign aims to spread awareness on (i) declining child sex ratio; and (ii) missing girls in India. WDC joined hands with the International Campaign *One Billion Rising* (OBR) to end violence against women and to lead the campaign in DU. In collaboration with Rahi Foundation, it started a 6-month long University level Campaign on Child Sexual Abuse called *I Will Not Shut Up* which engaged 20 volunteers. Diverse activities included an Online Placard campaign, self facilitated workshops, movie screenings, and the play *Dear Daddy.*

Improving Livelihoods: The mandate of the International movement *Enactus* led by KPMG is to unleash the entrepreneurial spirit of volunteers in order to empower communities in need through social enterprise. MH has two well established projects, *Tarang* and *Zaffran* especially aimed at uplifting the economic status of women in slums and two budding projects aimed at helping other 'communities in need' under its aegis. *Tarang* provides technical and vocational training to women weavers to make and market products such as designer clutches and baskets, carry bags, shoe bags and scarves. *Zaffran* engages another community of women to make spices,

package and label them for innovative marketing. A new Project *Jazba*, aims to break boundaries for those treated as *outcasts* in the society. The USP of *Zaffran* is that it is flourishing without collaboration with any NGO. Its success has helped the college team win many grants at national level. In 2013 and 2015 *Zaffran* won a financial grant worth Rs. 16,000 from Walmart. Mahindra Rise granted a sum of Rs. 40,000 in the years 2014 and 2015; it also won the KPMG Ethics Grant worth Rs. 50,000.

Medical Camps*:* College organizes several medical camps for generating awareness on diseases such as Alzheimer's and cancer. Interactive sessions on *Menstrual Abnormalities among Young Women* and *Voices for Cancer* drew renowned experts and NGOs. Blood donation camps are a regular feature. MH in association with Red Cross Society orgnanized a Certificate Course on First Aid in the year 2015 for students and staff. This will be a regular feature.

Consumer Awareness: In its ten years of existence, *TULA*, the Consumer Club has been instrumental in changing perceptions about consumerism. A week-long Certificate Workshop and year-long activities impart education on making judicious decisions regarding services and goods; and legal provisions on consumer rights. The group works closely with the Ministry of Consumer Affairs. It also generates public awareness through self-scripted street plays.

Youth Programmes*:* Volunteers from NSS, Gandhi Study Circle, Vivekanand Society and Environment Society are regular participants at youth events in the city. They participated in the *Yuwa Diwas*, an event to mark the birth centenary of Swami Vivekanand. Students also represented the college at the TERI EYSD (Educating Youth for Sustainable Development) Division in TERI YUVA (Youth Unite for Voluntary Action) Meet 2015. The focus of the summit was *Sustainable Development Goals and Dealing with Climate Change*. As a part of cultural exchange, the NSS unit was invited by the Ministry of Youth Affairs to host a delegation from Egypt and Azerbaijan in 2012. The college also hosted a delegation from Bangladesh in 2013. NSS volunteers were invited to participate in celebration of United Nations Volunteer's Day where they interacted with Ms. Solovieva, Deputy Country Director, UNDP.

Budget Allocation: NCC receives funds from the NCC Directorate, as per the requirements. Table 3.6.4 summarizes the funds allocated. Various Student Societies are allocated funds in the beginning of each academic year from the Student Fund.

Table 3.6.4: Budget Allocation to NSS and NCC: Four year data

Year	NSS (in Rs.)	NCC (in Rs.)
2012-13	136556	143718
2013-14	6959	650
2014-15	123866	125016
2015-16	129776	126784

Impact of Extension Activities is invariably positive. Students have gained through experiential learning and real time exposure to the field in the following areas:

- Through their involvement in remedial teaching in slum areas, students develop empathy, leadership, team spirit and learn to give importance to the needs of the underprivileged.
- NSS volunteers receive requisite skills/training through talks, field trips, certificate courses, etc.
- Students develop skills in undertaking research and survey in these areas.

- They understand the nuances of how best to use, allocate and account for public resources earmarked for extension and outreach.
- They are given exposure to real world challenge and field based learning.

3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/International agencies?

- The Orientation Programme at the beginning of the academic year introduces the students to the vast range of activities and opportunities. The focus of the Principal's speech is invariably on the importance of beyond the classroom activities, significance of community engagement; and the responsibility youth must shoulder in building a new world, a world of their dreams. They are made aware of the importance of having a strong portfolio for career and education advancement.
- NSS, NCC, WDC and MH *Vatavaran* organize Orientation Programmes to provide information on their activities; these invariably elicit a tremendous response.
- The criteria for college Awards of Excellence for II and III Year students include a substantial component of co-curricular activities, community engagement in particular.
- The coveted Principal's Medal is awarded to a student who has made extraordinary contributions to the corporate life of the college or to society at large in addition to meeting academic commitments.
- Founder's Day awards include Certificates of Appreciation for the Best NCC Cadet; the Best NCC and NSS Volunteers. There are two awards specially instituted to felicitate exemplary work undertaken with communities.
- College nominates NOS, NSS, NCC students as volunteers for DU events and parades where they are always acclaimed for their self-less service.
- Students pursuing co-curricular and extracurricular activities are given attendance concessions following set norms.
- NOS volunteers participate in various marathons to raise funds for a cause. They also volunteer in large numbers to assist in organization of mega college events, taking the lead in International Yoga Workshops culminating in the Yoga Day.

3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?

- ***Project Avani****:* This is WDC's Rural Outreach Programme established in collaboration with the Grass Roots Internship Programme (GRIP), in the village of Bhanin, Churu district, Rajasthan. Initiated in December 2015, the Project focuses on menstrual hygiene and maternal and child healthcare and works in accordance with the guidelines of the Sansad Adarsh Gram Yojana, under which the village has been adopted by MP Mr. Rahul Kaswan.
- ***Platform for Action****:* Through a collaborative learning initiative, youth from the slums, resettlement clusters and WDC volunteers are engaged in understanding the needs of the youth to cope and counter gender violence. A document called *the Platform for Action* was prepared in 2015 which provided the understanding on the rights and responsibilities of youth as well as a set of recommendations for protection, promotion of safety and security of women and girls. This was

presented to the Ministry of Health and Family Welfare and Women and Child Development, Central Government, and was highly appreciated by them.

- ***Climate Change, Water Security and Livelihood Resilience:*** A DU Innovation Project, this is looking at the role of traditional knowledge and modern technologies in Rajasthan. The survey included around 400 households in the interior villages in the arid and semi-arid parts of western Rajasthan. The survey in these areas helped students appreciate the traditional knowledge in creating resilient livelihoods in the face of severe water scarcity and persistent drought in this area. Many students, for the first time got an opportunity to see the *Other India,* in the remotest areas of the country.
- ***Gendered Socialization:*** Under this DU Innovation Project, students surveyed Gendered Socialization of youth in the matrilineal societies of North-East India in Shillong, 2014.
- ***Disaster Research Programme****:* The neighbourhood mapping of disaster risk in an area usually inhabited by DU students from outside Delhi is of great practical significance. It has been enabled by stakeholder participation and has thus created awareness amongst the youth population.
- ***Women Safety Audit****:* MH students in association with Delhi Police undertook safety audit of the Paying Guest accommodations availed by women students of DU, in the surrounding areas.
- ***Facilitating Distance Learners:*** NSS Volunteers carried out a survey and interviews of women students of SOL at MH PCP cluster to determine their academic needs with a view to launching enrichment activities for them.

3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.

- Extension activities help in accomplishment of the stated mission of the college as it endeavours to provide early leadership training through enriching beyond the classroom activities that address real world challenges. Through these activities, students experience real life situations. This helps them to make the connection between classroom learning and the real world, making it easier for them to handle the transition from the sheltered student life to the life of a responsible citizen. The opportunity for developing organizational skills in complex environments inculcates a capacity to take intellectual risks and confidence to handle unexpected challenges. Students learn the art of negotiation and importance of frugal innovation. Interacting with populace less privileged than themselves inculcates values of compassion and empathy that go a long way towards character building.
- Students, who work with the disadvantaged and economically marginalized communities, learn to appreciate the privileges they so often take for granted. They experience the joy of sharing by launching collection and distribution campaigns of essential items.
- Extension activities related to the environment and natural resources increase awareness about planet earth and the need for sustainable development. They sensitize the student on the individual's responsibility towards preservation of the environment and conservation of resources.
- Foundation Course on Human Right, Gender and Environment under restructured B.A. Programme and the Application Course on Consumer Affairs are enriched

by field experience. Extension activities provide a good opportunity to connect what is learnt in the classroom with the real world. Classroom discussions on Women and Child Development, Health and Education are in particular enriched with the work on the ground.

3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

Student volunteers working on extension activities assume leadership roles in carrying the entire college community with them. The college administration and faculty allow them full freedom to launch campaigns and join them with vigour as Team Miranda.

- Society festivals, special events including seminars, workshops and lectures are invariably well advertised and well attended. As part of policy and a general advisory, all societies create Graphic Event Display Boards highlighting their activities, the theme of the event and profile of invited speakers or collaborating agencies, NGOs, etc. if any. Stalls are frequently set up. The Enabling Society invites NGOs to display products made by PwD. The Environment Society often displays NGO products such as *Wealth from waste* or *Cash from trash*. They also set up regular stalls of the Paper Products and Compost made at the MH Plants. *Enactus* also displays the Project *Zaffran* Spices and Project *Tarang* fashion accessory products crafted by women communities trained by them. Gandhi Study Circle invites Khadi Gram Udyog to display their products. Bookstalls are common. The Annual Festival *Tempest* scales it up significantly. All this attracts and actively engages the college community.
- MH community joins campaigns in significantly large numbers. For instance, as part of *Swachh Bharat* Campaign, all sections and departments joined in cleaning designated areas. The *Clean Environs Campaign* was launched as it was felt that the adjoining green belt and pedestrian pathways bounding the college needed greater attention. Students, faculty and support staff completed the herculean task of cleaning this area with dedicated week long work culminating on 02 October 2014. Since then, regular maintenance work is undertaken outside the college as well. The administration continuously engages with civic agencies to ensure they contribute constructively to the upkeep.
- MH regularly interacts with civic and security agencies for participative citizenship. CISF band has been invited to perform at the inaugural of the Annual Festival. CISF has also carried out awareness campaigns on security, with demonstration by Bomb Disposal Squad and the Canine Squad. The college regularly organizes Civil Defence, Self Defence training programmes and Mock Drills for disaster preparation. Interactive sessions are conducted with Police Officials at the highest level. All these initiatives empower and generate confidence in the law of the land. They also reassure the community that the college is concerned about their safety and security.

3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

- Being located on the DU campus along with 8 other colleges, MH is uniquely privileged to give its students ample opportunities to participate in events happening at these colleges, the PG departments and the university. In turn, the

college gives wide publicity to all beyond the classroom activities at MH inviting those from neighboring colleges, both men and women. Peer groups are strongly networked through societies. Add on courses and all programmes of DSKC are open to all. MH students often work in groups with other college students on innovative projects.

- *MH-Vatavaran* regularly collaborates with Eco Clubs of other colleges to organize DU Campus Cleanliness Drives.
- NSS and NCC volunteers participate in the DU Annual Day Parade along with their peers from other colleges. They have been requested to volunteer at DU events such as *Antardhwani*.
- Students join their peers on the *Gyanodaya*, the college on wheels educational trip.
- MH green initiatives are examples of best practice and being emulated by other colleges. College has allowed use of this facility to students from neighboring CIE. Neighbouring NGO Society for Child Development uses the facilities at the Paper Recycling Plant to make paper. National Institute of Urban Affairs brings Municipal Officers being trained under *Swachh Bharat Abhiyan* to see the Compost and Paper Recycling Plants as example of best praxis.

3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.

Environment Related Research Project Awards

- DU Innovation Project MH-301 *Climate Variability, Water Security, Livelihood Resilience: Role of Traditional Knowledge and Modern Technologies in Rajasthan, India,* was awarded Certificate of Appreciation on the occasion of the 94th DU Foundation Day on 01 May 2016 from amongst more than 350 ongoing innovation projects.
- DU Innovation Project MH-203 *Efficacy of Natural Dyes in Dyeing and Imparting Antimicrobial Properties to Different Textile Materials* was awarded the Best Innovative Idea Certificate under Theme: Scientific Arena at Innovation Plaza, *Antardhwani,* 2015.
- MH has been awarded the DU Star Innovation Project *3R: Recycle, Reduce, Reuse* with total grant of ~Rs. 40 lakh to further research in recognition of its expertise in the area.

Student Achievements and Awards for Extension Activities

- Mahima Sharma and Riddhi Kalsi, B.Sc. (H) Sociology received Times Leadership Award for Community Engagement in 2014.
- Eisha Roy received an International Award to attend Youth Leadership Programme under World Youth Service Enterprise, London in Italy in 2014. She later became the Asian Ambassador for the Leadership Award.
- Mohini Thakur, B.Sc. (H) Chemistry III, was awarded the prestigious LeadEarthship Award by TERI and TetraPak in 2012-13.
- Teach India, Times of India (CSR), appreciated Miranda House Initiative in imparting English speaking course for its permanent and contractual staff and their children.
- Sandhya Bhatia, B.Sc (H) Chemistry, received Golden Key New Member Community Service Award in October 2012.

- Aditi Dave received the Global Citizenship Award and was selected to join a group of 10 students on a trip to Melbourne.
- Deepti Sharma and Shristi Thakur were selected due to their leadership qualities to attend a fully sponsored Certificate Course in Women's Studies in the Department of Women's Studies, University of Wisconsin Eau Claire, USA, from September to October 2015.
- Sgt. Sadhana Devi received 2 Gold and 1 Silver Medal in All India Trekking Camp.
- NCC Cadets were appreciated by DMRC unit in 2015.
- J.U.O Vani Shri Vats won 3 Gold Medals in All India Himachal Trek and DG Gold Medal in All India Thal Sainik Camp.
- MH NSS Unit received 10 out of 20 seats reserved for NSS volunteers on DU *Gyanodaya* Trip in 2013-14.
- Sports student Swati got a Police medal for catching a chain-snatcher in 2014.

3.7 Collaboration

3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives-collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

College has several collaborative programmes with Industry and NGOs. Collaborations with research institutions include DBT Star College scheme, CSIR-OSDD Project and NII-*Science Setu* Programme. College has established collaborative Programmes with 11 International Academic Institutions such as King's College, London, UK; Utrecht Business School, the Netherland; etc. These Programmes include Bilateral Exchange Programmes, organization of workshops and Add-on courses ***Refer 3.7.2.***

An illustrative list of collaborative endeavours between MH and Industry/NGO's is:

Academia Industry Partnership

- ***IRIS Publication Pvt. Ltd.*** has signed an MoU under which the AWS was installed in January 2016 and training programmes conducted.
- ***Bright Infotech*** has developed various software modules for the college. These include those for online submission of application forms for recruitment of faculty, for API linked promotion of serving faculty and for admission process in 2015-16. MH became the first college to move towards paperless admissions.
- ***Hero Motocorp*** has begun working with Disaster Preparedness Group from Department of Geography. In association with Delhi Police, it organized the *Ride Safe Awareness Programme* during the National Road Safety Week, 10 to16 January 2016. Delhi Traffic Police officials gave an informative presentation on *Two Wheeler Safety*.
- ***Weekendr Innovation Labs Pvt. Ltd.*** trained 20 science students from two DU Innovation Project groups on App Development for Android Systems, organized collaboratively in the college.
- ***Guiding Star Digital Publishers LLP Ltd.*** has collaboratively developed a teacher friendly, offline Mobile Attendance App which is being beta tested by faculty members. The company has also trained a group of Physics and Computer Science students for developing Mobile Apps for the college.
- ***KPMG*** is mentoring student members of *Enactus*.

- ***Google Ltd.*** launched *Miranda Goes Google!* Programme for MH as the college entered an MoU to use Google Apps for education.
- ***BHEL and ONGC*** organized joint events with MH during Vigilance Week.

Academia NGO Partnership

- ***Project Tarang*** was launched by MH in collaboration with NGO *Maitri* and has employed women from the slums of Sonia Vihar and R.K. Puram, and trained them in stitching and sewing. The products like *dupattas* and cloth pouches are also sold on the online shopping portal *ItsHandMade*.
- ***GreenBandhu*** has provided knowhow for establishment of the Compost Plant for Solid Waste Management.
- ***IPCA*** has an MoU for assistance with safe disposal of plastic waste. The college has purchased two wall-mounted PET bottle balers (compressors) and a dustbin created using sheets fabricated from recycled TetraPak for collection.
- ***Shriram Institute for Industrial Research*** is lending support to the Paper Recycling Plant by providing bamboo pulp for strengthening paper.
- ***Society for Child Development*** occasionally uses the Paper Recycling Plant for making pulp and calendering sheets, which are finally used for making paper products by physically challenged children.

3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of national importance/other universities/industries/ Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

The college has strong linkages with other educational institutes in the city of Delhi, and across the country. Given the reputation of the college, the best experts and renowned academicians and scientists are always keen to visit the college and address the students. The college also has strong international linkages. Major national and international collaborative programmes with Research Institutes and Universities are:

International Collaborations

- ***University of Chicago Delhi Centre*****:** A vibrant relationship was established in May-June 2015 when 8 of 15 students chosen after a rigorous national process of selection for the10-day Summer Course in Masters in Financial Mathematics in May-June 2015 were from MH. There was no course fee. Their excellent performance led to internship for one at University of Chicago Delhi Centre.
- ***University of Chicago, Graham School of Continuing Liberal and Professional Studies*, *USA*****:** The University of Chicago, Graham School of Continuing Liberal and Professional Studies extended an invitation to the Principal to nominate students for the Postgraduate Art and Science Bridge Programme, waiving GRE and extending scholarships. Five students were shortlisted, of which one has accepted the offer.
- ***George Washington University, Washington DC, USA*****:** Miranda House has signed an MoU for academic collaboration on a 10-week Add-on Course *Rethinking the Obvious: Examining the Rhetoric of Development.* This ran successfully from 25 August to 06 November 2015.
- ***Lynchburg College, Virginia, USA*****:** An MoU with Lynchburg College, Virginia, USA, for bilateral Academic Exchange Programme gives a preferred institution status to MH as a partner institution. Ms. Jyoti Agarwal has been given generous financial assistance to join Masters in Science Education Programme at Lynchburg College for Fall Semester 2016.

- ***University of Sussex, UK*:** The college has established an Academic Exchange Programme with the University of Sussex, UK. MH hosted scholastic talk by faculty from University of Sussex in February 2016. On Principal's nomination, Ms. Preeti Kumari of B.A. (H) Political Science III was given full financial assistance to participate in the International Summer School at SU.
- ***Wisconsin University, USA*:** Under aBilateral Exchange Programme12 students from WU and about 30 students from MH participated in a 3-week long Certificate Course on Women's Studies from 5 to 23 January 2015. Two WU faculty members, Prof. Asha Sen and Prof. Theresa Kemp were resource persons. Dr. Jayashree Pillai and Dr. Bijayalaxmi Nanda, Department of Political Science, along with 2 students visited WU from 14 September to 05 October 2015.
- ***King's College, London, UK*:** MH has been hosting King's College International Summer School in Delhi since 2012-13, offering 2Week Modules on International Political Economy, International Relations and E-commerce. The best student of each course is given a scholarship to attend the King's International Summer School in London. Further, one faculty member of MH is offered financial support to participate in the King's Summer School, London. Dr. Malabika Pal and Dr. Purnima Roy availed this award in 2013 and 2014, respectively.
- ***Utrecht Business School, the Netherlands*:** A MoU signed with MH, SRCC and DU for Bilateral Exchange Programme in 2008 enables an annual weeklong workshop *Management and Cultural Context*. Utrecht Business School (UBS) faculty are the resource persons. Students and faculty from MH participate in a similar programme at UBS in summer. So far seven faculty members and about 30 students from MH have visited UBS.
- ***S.P. Jain School of Global Management**:* This Australian Business School established a partnership with MH in 2013. Under its Student Ambassador Programme, 2 students are selected for fully funded visit to one of its 3 overseas campuses in Sydney, Singapore or Dubai. 6 students have benefited so far.
- ***University of Sydney, Australia:*** MH has established a strong network with Australian educational institutions. Under a collaborative project titled *Building Leadership Capacity in Undergraduate Science Teaching in India,* Australian Leadership Awards Fellowships (ALAF) were awarded to 9 faculty members to visit University of Sydney for three weeks in April 2013. They participated in a collaborative programme Centered around an Australian countrywide initiative on *Advancing Science by Enhanching Learning in the Laboratory (ASELL)*. MH has hosted visits and talks by several faculty from University of Sydney.
- ***American Embassy**:* In recognition of the strong basic science programmes at MH and activities undertaken by DSKC, the American Embassy requested the college to host talks by visiting scientists on two occasions. MH has also hosted visits by three high level delegations consisting of Presidents of Universities, Deans and Professors from US since 2014-15, listed elsewhere in this document.
- In addition to the above, the college is in the process of establishing Academic Exchange Programmes with the following universities: Deakin University, Melbourne, Australia; Houston University, Texas, USA; University of South Florida, USA; University of Ontario, Canada.

National Collaborations

- ***NII**:* The MoU with NII is under the aegis of a programme titled *Science Setu* floated by it. It brings together science faculty of 8 colleges to work together to strengthen science teaching at undergraduate level. The Programme aims to

contribute to the national goal of encouraging more and more bright young minds to take up the pursuit of science and technology as a career option.

- ***NSDC:*** Miranda House leveraged the opportunity to introduce the NSDC STAR Programme wherein students were imparted a 30 days Skill Training Course with National Certification. A total of 118 students participated in Courses such as Business Correspondent, Equity Dealer, and Gems and Jewellery. Miranda House joined the Pilot Programme of NSDC organizing Orientation wherein several NSDC Training Partners made presentations on courses offered in select sectors.
- ***MIHER Skill Academy:*** In collaboration withMax Institute of Health Education and Research, the college initiated a 480 hours Health Care Training course that spreads across two semesters.
- ***Ants Consulting & Services Pvt. Ltd.:*** College started a Media and Entertaining Training Course of 120 hours duration that is covered in one semester in association with Ants Consulting & Services Pvt. Ltd.
- ***Lok Bharati Skilling Solutions Pvt. Ltd.:*** Short term English Communication Courses were collaboratively designed and offered through the MH EOC.

3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment/creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories/library/new technology/placement services etc.

- DST has funded the establishment of DSKC at MH. This unique facility has changed the landscape of education, research and education outreach at MH, enhancing teaching of basic sciences and breaking boundaries between departments for interdisciplinary research and collaborations, creating state-of-art laboratories and providing a head start to faculty and students for advanced research projects. The programmes have drawn expert national and international resource persons. For instance, the *Physware 2012* was organized in collaboration with International Centre for Theoretical Physics, Trieste, Italy, with secretarial support and a grant of Euro 10,000. Further, sponsorships were received from internationally renowned education equipment manufacturers and book publishers such as Vernier Education Inc., Pasco and John Wiley. Participants from 40 countries were given data acquisition system by these companies.
- DBT Star College Scheme has also enabled enhancement of infrastructure and conduct of several capacity building workshops.
- With the support of CSIR, an OSDD Centre has been set up at MH.
- *Enactus*, is a student volunteer group mentored by KPMG to work with marginalized communities. KPMG has also invested in Solar Lights at MH.
- MH has organized workshops, seminars in collaboration with CII and FICCI.
- MH runs community based collaborative Programmes with many NGOs.

3.7.4 Highlighting the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.

3.7.4 (a): Conferences/ Seminars/ Workshops organized with eminent Scientists/ Academicians in 2015-16

- International workshop on *Role of MHC Complex in Biology and Medicine* under DBT-Star, Sudhir Gupta, Chief, School of Medicine, Basic and Clinical Immunology, University of California, USA

- International Conference on *Science and Geopolitics of Antarctica, Arctic and the Himalayas,* The Lights Foundation in collaboration with Geography and You at the India International Centre

National Seminars`

- *Doles, Freebies, and Handouts: Populism*? *The Right(s) Perspective,* Reetika Khera, Associate Professor, IIT, Delhi
- *Why the Euro is in Crisis,* Indradeep Ghosh, Professor, Meghnad Desai Academy of Economics
- *Union Budget: 2014-15,* Rajeev Malhotra, Former Economic Adviser at the Planning Commission
- *The Third Industrial Revolution: Intelligent Technologies and the Future of Work,* in collaboration with FICCI Young Leaders
- *India in the Age of Imperialism and the Idea of a Nation State,* Irfan Habib, Professor Emeritus, AMU, Aligarh
- *Business Laws and Policies,* Pasquale Sgro, Head, Department of Economics and Dean, Deakin University, Australia
- *Entrepreneurial Development Outlook,* Kamal Seth, Founder of Human Circle; Wioleta Burdzy, Organiser of Google
- *Living Values: Value Based Education,* Swami Paraayaananda, Ramakrishna Mission
- *Partition and its impact on Bengali Literature,* Jayanti Chattopadhyay, Former Head, Modern Indian Language and Literature Studies Department (MILLSD)
- *Democracy, Social Exclusion and Rights in Contemporary India*
  - Ujjwal Singh, Professor, Department of Political Science, DU
  - Ashok Acharya, Professor, Department of Political Science, DU
  - Madhulika Banerjee, Professor, Department of Political Science, DU
  - N. Sukumar, Professor, Department of Political Science, DU
  - Mary E. John, Professor CWDS
  - Sanjay Kumar, Professor CSDS, sponsored by ICSSR
  - Krishna Menon, Professor, Ambedkar University, Delhi
- *Policy Formulation in Higher Education,* J.B.G.Tilak, Professor, Vice Chancellor (In-Charge), NUEPA ; Pankaj Mittal, Additional Secretary, UGC
- *Indo-US Relations: Opportunities and Challenges,* Mirza Asmer Beg, Professor, Department of Political Science, Aligarh Muslim University
- *Role of India in the United Nations of the Future,* Thomas J. Ward, Professor, University of Bridgeport, USA
- *Deconstructing Disability,* George Abraham, CEO, Score Foundation; Komal Kamra, Associate Professor, SGTB Khalsa College, DU

For the events held in the academic year 2014-15; 2013-14; and 2012-13, refer table 3.7.4 (b) in Supporting Documents.

3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated-

The collaborations have been delineated in sections 3.7.1 and 3.7.2. *Educating the Educators* workshops for undergraduate teachers such as *PHYSWARE* and *REALM* have been organized in collaboration with the ongoing international collaborators. Australian Leadership Awards Fellowships (ALAF) was awarded to 9 faculty

members to visit University of Sydney for three weeks in April 2013. They participated in a collaborative programme Centered around an Australian countrywide initiative on *Advancing Science by Enhancing Learning in the Laboratory (ASELL)*. DBT Star College and *Science Setu* have developed a network of various science departments for curriculum enrichment.

A large number of MH students receive internships offers and work for summer projects at prestigious institutions such as TIFR, IIT-Delhi, etc. as has been listed in various departments' evaluative reports.

Faculty members are encouraged to participate in National and International conferences. Under Indo-Dutch Programme, 7 faculty members along with 40 students have visited Utrecht Business School. All bilateral agreements promote research and are funded on scholastic contribution by Miranda faculty. The Miranda House community has strong engagements and linkages with NGO's in various sectors. Green Technology Centre established at Miranda House is often showcased as an example of best practices. The placement and education enhancement Centre at Miranda House attract top companies and employers from all sectors, and also most prestigious educational institutions. The vast network of collaborations has led to successful execution of several Add-on courses at Miranda House.

3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/ collaborations.

In an increasingly globalized world, Miranda House values the power of networks in enriching educational opportunities for its students. The top universities and organizations from across the world approach the college seeking MoU for bilateral exchanges. The college too is extending this outreach. It has hosted students from George Mason University, USA, under Project SUNRISE in January 2012. As a part of the UKIERI-Study India Programme, a delegation of 20 students from UK managed by King's College London, visited MHin September 2012. Miranda House was privileged in March 2015 to host a high level delegation of Fulbright-Nehru International Education Administrators from United States on 09 March 2015, with an objective to understand the Indian Higher Education System. Nine students visited Japan under JENESYS$^{2.0}$, a large-scale youth exchange project advanced by the Japanese Government in 2015. Aditi K. Dave was nominated through rigorous selection to represent Miranda House at the University of Melbourne in 2011 on a Global Citizenship Programme for Young Leaders. The number of recipients of Erasmus Mundus Fellowships is on the rise. A student from Economics has qualified for South Asian Economics Students Meet (SAESM). A Russian delegation consisting of 20 students visited the college in November 2015. The college organizes cultural activities such as *Manzar*, a Biennial International Parliamentary Debate Tournament organized by *DebSoc*, the debating society of Miranda House.

Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.

MH places great emphasis on undergraduate research and goes all out to encourage and facilitate students to be part of research projects. Collaborative interdisciplinary research is popular with students and faculty. ***Refer 7.3.2.***

Many MH faculty members are consultants for curriculum framing and content writing in universities and institutions other than DU. ***Refer 1.1.7.***

Criterion IV

Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

MH understands that no institution can rest on its history or past achievements however scintillating these may be. There is need to continually reassess and reinvent. This has helped the college to consistently keep ahead of the times and retain its pioneering edge. Following due procedure, the college is committed to providing state-of-art infrastructure and the best possible facilities in pursuit of sustained excellence while preserving the architectural grandeur of its building.MH has recorded a phenomenal growth marked over nearly seven decades of its existence. It has grown from 132 students to more than 3500 students with 18 departments and in-house teaching of 20courses. The growth has first and foremost entailed creation of appropriate teaching-learning spaces.

The last decade can be termed as the decade of redevelopment and remaking of MH. The old infrastructure faced several challenges and had fallen into a state of disrepair. The college has worked comprehensively following due processes, to turn around its entire infrastructure. Starting from its boundary wall and entrance gates, pathways, corridors; all academic, cultural and recreational spaces; library and research laboratories; faculty rooms, offices and record rooms; the hostel and its kitchen; the college has repaired, renovated, refurbished to be amongst the best. New buildings include a new Hostel Block, the Student Activity Centre, 7 new classrooms, 2 arcades, several utility rooms. *Miranda Tech* housing green initiatives has also been developed. A new Academic Block is under construction. The meticulously planned steady pace of development is hailed as exemplary. Visitors give the feedback that MH has excellent infrastructure and is amongst the best maintained institutions.

4.1.2 Detail the facilities available for

4.1.2 (a) Curricular and co-curricular activities: classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, animal house, specialized facilities and equipment for teaching, learning and research etc.

Table 4.1.2: Academic and Cultural Spaces:

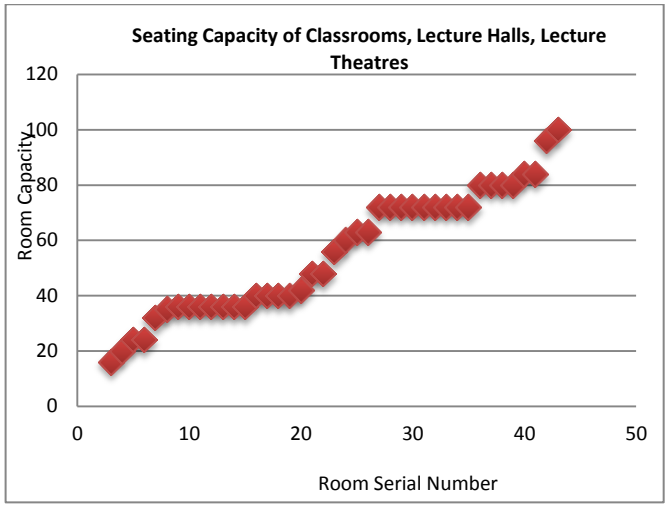
Summary:			
A	Classrooms: 33	Lecture Halls: 06	Lecture Theatres: 04
B	Digital Resource Centres: 03	Laboratory Complexes: 07	Learning Studio: 01
C	Seminar Hall: 01	Student Activity Centre: 01	Auditorium: 01
D	Faculty Offices (Shared): 32	Staff Lounge: 01	Committee Room: 01
E	Atriums: 02	Arcades: 03	Large Patio: 01
F	Large Foyers: 02	Sprawling Gardens	Sports Ground

MH with WiFi connectivity across the campus and a student-computer ratio of 2:1 follows *Learning Any Time, Anywhere.* The campus is always suffused with vibrant energy as in addition to taking serious interest in academics, students are engaged in creative activities. It is common to see a student with a book or a laptop curled up on a bay window sill, in the large number of niches in the building, under the arches, the sprawling lawns, under the shade of trees. The long corridor leading from the college to the hostel often gets converted into a fine arts studio. The teachers also organize classes outdoors. For an institution that takes immense pride in its ICT infrastructure,

the sight of a large class sitting under a tree deeply engaged in pursuit of knowledge is equally rewarding as it leverages all possible formats of delivery.

Classrooms, Lecture Halls, Lecture Theatres: The college at inception was designed for small classes of strength 30-40. One Lecture Theatre was added in the 1960s when the old science block came up. The new Science Block provided 3 more Lecture Theatres when inaugurated in1988. With expansion of seats under affirmative action for OBC students and sudden enhancement of class size, the college added 5 large lecture halls in Porta Cabins. Aesthetically designed and furnished, these are amongst the best teaching venues and often used for prestigious seminars. The total of 43 formal lecture spaces provide comfortable seating for 2200 students in regular classes with potential for easily accommodating another 10%.

Space	No.	Capacity
Classroom	02	5 to10
Classroom	02	10 to 20
Classroom	02	20 to 30
Classroom	13	30 to 40
Classroom	03	40 to 50
Classroom	02	50 to 60
Classroom	13	70 to 80
Lecture Hall[a]	02	60 to 70
Lecture Hall[a]	02	80 to 90
Lecture Theatre[a]	02	90 to 100
Total	43	~ 2200
Air-conditioned: [a]		



All lecture venues have

- Neatly arranged custom designed, comfortable desks and benches with shelves for bags; teacher table and chair.
- Green Ceramic Board for use with dust-free chalk or White Board for use with marker pens.
- Roof mounted Projector, with pull-down display screen for multimedia projection.
- Custom-designed Lecterns facility to link laptop to multimedia projector.
- Extra power outlets on front wall for flexible usage of the room.
- Roller Blinds where considered essential.
- On the outside, Time Table Display Board in which the Weekly Time Table (or a notice/ caption on alternate use the room is being put to) can be easily inserted.

Basic Science Laboratories: MH has played a pioneering role in science education for women as it was the first college to provide honours level undergraduate teaching at the University of Delhi. It takes immense pride in the emphasis laid on developing experimental skills and rigorous laboratory work. All science departments have an independent wing, each with large area laboratories; state-of-art equipment and facilities. All laboratories have a roof mounted LCD projector and a pull down screen for blended learning. Several computers are easily accessible for online work, accessing digital resources and individual work. State-of-art computer-based experimentation in real-time is an innovative facility in all labs, not found in other institutions. Additionally, each department has been issued laptops for enhancing this facility as desired.

Inasmuch as DSKC is not a brick-and-mortar centre but a collective initiative of all science faculties, departments have been responsible for requisitioning and developing its facilities. DSKC labs have been carved out of space spared by the science departments for this purpose. While all facilities are shared, departments are custodians of specific equipment and the research facilities developed under their supervision. This ownership by stakeholder faculty has been the hallmark of the DSKC and reason for its sustained vigour. The extensive infrastructure is put to use throughout the year, variously for curricular work and research undertaken at various levels by faculty, doctoral fellows registered with the college, fellows visiting DSKC for dissertation work, and most importantly, undergraduate research work. The touchstone of science at MH remains its deep commitment to capacity building of women in science; and the extensive science education outreach activities that pinnacle with summer internship programmes and camps, pitched at a very high level of competence and repute.

Department	**Space Description**
Botany	Laboratory 1: Plant Physiology, Metabolism & Ecology
	Laboratory 2: Plant Diversity
	Laboratory 3: Museum and Lab
	Plant Tissue Culture Research Lab
	DSKC Undergraduate Research Facility
	Laboratory Preparation Room
	Botany Main Store
	Department Library and Office
	Faculty Rooms (2 rooms with individual workstations for 10)
Chemistry	Laboratory 1: Inorganic/ Organic Chemistry
	Laboratory 2: Inorganic/ Organic Chemistry
	Laboratory 3: Inorganic/ Organic Chemistry
	Laboratory 4: Physical Chemistry & Instrumentation
	DSKC Undergraduate Research Facility
	Chemistry Main Store
	Apparatus Store
	Library and Computer Facility
	Faculty Committee Room
	Faculty Rooms (04 rooms with individual workstations for 20)
Physics	Laboratory 1: Introductory Physics
	Laboratory 2: Advanced Physics
	Laboratory 3: Computational Physics
	Laboratory 4: Digital Electronics
	Physics Stores and Support Staff Room
	DSKC Project-based Learning Lab 1
	DSKC Project-based Learning Lab 2
	DSKC Robotics Lab
	Material Science Research Lab
	Department Library
	Faculty Committee Room
	Faculty Rooms (04 rooms with individual workstations for 16)
Zoology	Laboratory 1: Morphology, Ecology and Animal Behaviour
	Laboratory 2: Physiology, Biochemistry, Cell and Molecular

	Biology
	Laboratory 3: Entomology
	Laboratory 4: Biotechnology and Immunology
	DSKC Bioscience Research Lab
	DSKC Undergraduate Research Facility
	Laboratory Preparation Room
	Zoology Main Store
	Zoology Museum
	Department Library and Computer Facility
	Faculty Rooms (03 rooms with individual workstations for 15)
Geography* .	Laboratory 1: Cartography Lab I
	Laboratory 2: Cartography Lab II
	Laboratory 3: Computer/GIS Remote Sensing Lab
	Geography Atrium 1: Tutorials and Project Workspace
	Geography Atrium 2: Tutorials and Project Workspace
	Geography Main Store and Office
	Faculty Room (with individual workstations for 10)
*Although counted amongst the Social Science and Humanities departments, being technologically driven, the Department occupies a separate wing with excellent laboratory spaces.	

Botanical Garden: The primary responsibility for the development and upkeep of the gardens at MH rests with the Department of Botany that has painstakingly developed an exquisite collection of plants, trees, shrubs and creepers since inception of the college. Year after year, MH has been winning the Vice Chancellor's Cup for scoring the highest marks at the DU Annual Flower Show. The college believes that the entire campus should the regarded as an extended laboratory for teaching of Botany. The rich biodiversity of the campus puts on display a large number of species and varieties of flora. The table below shows a diversity of 211 taxa and a very rich plantation.

Distinct Species/ Varieties	No.
Trees	54
Palms	11
Shrubs	29
Climbers	07
Leafy Perennials	39
Succulents	34
Cacti	19
Gymnosperms	10
Ferns	08
Total	211

Trees and Palms	
Location of Trees	No.
Inside College Campus including Hostel	241
Teacher's Residence Complex	134
Non-teaching Staff Residence Complex	07
Principal's Residence	29
Total	411
Palms (including Sago palm)	237
Green Belt along Boundary Wall	433

Most Common Trees in MH:	False Ashoka, Eucalyptus, Peepal and Neem.
Trees Uncommon in Delhi:	Taxodium, Soapnut Tree, Cherry Blossom, Rudraksha

The listed flora have been carefully labeled across the campus with both, the botanical and the common name. For purpose of formal teaching, the department has developed a botanical garden in dedicated space of 230sq.m. The rich plantation makes available seasonal and perennial plant material necessary for laboratory work, herbaria, study of plant taxonomy, ecology and other aspects of botany. The space also includes a

strictly protected wild patch for studies on natural vegetation. The college has also created a green shaded area (75sq.m.) which is used for cultivating a wide range of plants under optimally controlled conditions. This is also used for nurturing a wide range of saplings and transplants. The college takes full advantage of its location on the DU campus and proximity to the Yamuna Biodiversity Park and Delhi Ridge that provide rich ecosystems. Two faculty members of the department have successfully completed a project to list the rich collection of flora on the university campus. All this supplements teaching.

Botany Museum: Over the years, the department has developed a rich collection of preserved specimens displaying plant diversity. A well-stacked herbarium has an extensive collection of specimens covering the entire spectrum of plants.

Description	**Number**
Museum	
Specimens preserved in liquid	313
Dried specimens	120
Wood samples in the form of blocks	28
Essential oil samples	12
Items in wood, cane, coir, coconut shell, jute, other fibres; and clay	94
Charts	66
Framed specimens and photos	34
Total Specimens, Framed Specimens, Charts and Decorative items	667
Herbarium	
Pressed, Preserved and Labeled Specimens	1009
Other Specimens: Pressed, preserved and labled specimens collected from Delhi, other parts of India and abroad.	1199
Permanent Micro-slides	1310

Animal House: This has been dismantled following a ban on animal dissection.

Zoology Museum: This has a rich collection of 550 scientifically relevant zoological specimens and materials that are all well labeled, classified and properly exhibited in *Museum Display Cabinets*. The collection includes 300 Invertebrates belonging to different animal phyla: *Porifera, Cnidaria, Platyhelminthes, Nemathelminthes, Annelida, Echinodermata, Mollusca* and *Arthropoda*. There are 250 Vertebrate specimens that include fishes, reptiles, birds and mammals. A large number of specimens are preserved in formalin and some are mounted. There is a repository of 820 slides pertaining to histology, cytology, invertebrates' whole mounts, sections and larvae, frog and chick embryology. The entomological collection includes pinned insects and preserved specimens of insects and other arthropods. Osteological collection includes bones and skulls of fishes, reptiles, birds and mammals. The Image Projection System is used frequently for visualization. The Department is in the process of making an exhaustive digital library of slides. The Museum houses a small department Library with 400 books, and a collection of CDs on topics such as Global Warming, Climate Change, Ozone Depletion and Waste Management.

Seminar Hall: This is the preferred venue for most events, be they lectures, academic seminars, conferences, workshops, discussions, film screening, or other extra-curricular activities. Cheerfully furnished, and air-conditioned, despite heavy usage and footfall, the seminar hall is well maintained at all times. With windows opening into a long private corridor that has recently been renovated and integrated with it to

provide buffer space, the seminar hall can be suffused by natural light or submerged in appropriate level of darkness required by pulling down blinds. An extra exit door has been added to lead out audience into an adjacent arcade and sprawling student activity area lawns instead of the main college foyer for any post event discussion or hospitality.

- Seating capacity: 125
- Floor area: 122 sq.m.
- Slightly elevated stage with conference table and for a panel of four to six
- High quality sound system, wall mounted speakers, conference table mikes, roving mikes, lapel microphone, provision for recording
- Roof mounted high luminosity projection facility, drop down projection screen
- Dedicated video-recording camera with tripod for fixture
- Lectern with multimedia projector link; Electronic Lectern can be installed
- Buffer corridors, White boards, Pin-up boards, both inside and outside the hall
- Fire Extinguishers

Cultural and Extension Activities

Auditorium: The college auditorium is another unique facility. The list of events held and visitors hosted; most importantly the renowned alumnae it has launched into successful careers is unparalleled. In the last five years, it has hosted interactive sessions with three Nobel Laureates, Dr. Venkataraman Ramakrishnan, Sir Paul Nurse and Prof. Amartya Sen. Unfortunately, recently a chunk of roof fell and the stage collapsed. Investigations showed poor state of roof beams and floor beams supporting an adjacent wall due to honeycombing of concrete. Currently, after scientific testing and expert advice, preliminary retrofitting and reinforcement work has been initiated. Proposals seeking a major grant are for complete renovation are ready. Before it was declared unsafe, the auditorium had the following facilities:

- Seating Capacity: 450
- Floor area: 406 sq.m.
- Green Room with attached Washroom and Changing Room
- Stores for Stage Property, Lockers, Storage Cupboards
- Acoustic Paneling, Control Room, Theatre Quality Light and Sound System
- Lecterns (2)
- High Luminosity 5000 Lumen XGA Projector
- Display Screen (16’ x 12’); Remote Controlled Automated Drop Down
- Internet Connectivity: WiFi and access to DU Servers through node
- 1 Main Entrance and 8 Side Entrance/Exit Doors; Fire Fighting Equipment

Heritage Hall, the Learning Studio: The sprawling *Heritage Hall* with arched roof and large number of windows and doors overlooks the beautiful hostel building on one side and the Student Activity Centre on the other. It is used as a Learning Studio, furnished from time to time in accordance with needs of the activity being held. Since its inaugural with a flute concert by maestro Pandit Hari Prasad Chaurasia in *baithak* style, it continues to be a favourite concert location for SPIC MACAY chapter of MH and has witnessed week long *Virasat* Festival with all night classical music recitals by who is who on the cultural circuit. It is used extensively for organizing concerts in dance, theatre and workshops; exhibitions of photographs, paintings and art installations; prestigious public lectures, panel discussions, workshops, seminars, conferences, debating tournaments, etc. A favourite location for media, two NDTV town hall discussion programmes for youth have been held here.

- Floor area: 201 sq. m.
- Seminar Seating Capacity: 200
- Banquet Style Conference Seating Capacity: 150; with 10 round tables seating 12 to 15 persons (furniture fabricated in-house available).
- Multimedia Projection, High Quality Sound System, Video Recording as required using unmounted equipment available with college.

In the past two years, because of shortage of space, the *Heritage Hall* has also been used innovatively for holding tutorials, in banquet conference seating plan. Following the precept that best ideas often emanate from round table discussions, brain storming sessions, group work and formal tutorials are formally scheduled.

Student Activity Centre, the Learning Studio: This newly constructed semicircular hall on top of the exposed brick-work Cafeteria Building, follows the original heritage design. Akin to the Heritage Hall, the spacious hall is again a Learning Studio. It is used in a variety of ways for both academic, co-curricular and extracurricular enrichment programmes. It is furnished to suit the need of any specific event. It was inaugurated with organization of an interactive workshop on *Upanishads* followed by a collaborative event with TERI titled *Rhythms,* with discussions ranging from state of river Yamuna to Climate Change.

- Floor area: 299 sq. m.
- Seminar Seating Capacity: 125
- Multimedia Projection, High Quality Sound System, Video Recording: As required using un-mounted equipment available with college.
- Storage Section with Cupboards for property belonging to Cultural Societies in addition to furniture that is variously used.

4.1.2 (b) Extra–curricular activities: sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, public speaking, communication skills development, yoga, health and hygiene etc.

Sports and Physical Education: MH has a Sports Ground and facilities for a wide range of indoor as well as outdoor sports.

Competitive Sports: The college has 14 Sport Teams and competitively participates in the following disciplines:

Archery	Athletics	Ball Badminton	Chess	Cross-country
Basketball	Netball	Power Lifting	Table Tennis	Taekwondo
Tennis	Weight Lifting	Volleyball	Yoga	

MH is the only college that has an Outdoor Bounce Back Shock Proof Surface Basketball Court. This was made in 2009 with a grant from the Delhi Kalyan Samiti. The upkeep of the Tennis Court is ensured by resurfacing it every five years or so. The traditional clay surface has now been replaced by a synthetic surface.

Fitness Centre: This is equipped with weight and cardio training equipment to cater to the needs of both, students and staff. The hall is air-conditioned.

Community Sports and Fitness Initiatives: Sports Department inspires the college community to work on a fitness regime and a wonderful opportunity to bond.

- The Freshers' Cross Country race across the campus, organized each year by the Sports Union in the beginning of the session, is extremely popular.
- Intra-college sports events are regularly organized for all students.

- Morning sessions on Aerobics and Yoga, held throughout the year, popular with students in residence. On 21 June 2015, the college organized the International Yoga Day for the entire MH community and those in the neighbourhood.
- To promote fitness amongst staff, recreational games are organized on the sidelines of the Sports Festival, *Erobern*. These include faculty competitions and faculty-student match in throw ball. The non-teaching staff also plays volley ball and cricket, practicing in spare time. An entire community looks forward to the annual cricket match. MH Non-teaching Staff Cricket Team participates in DU Inter-college cricket matches.

Certificate Course in Yoga: Recognizing the importance of Yoga for physical and spiritual fitness, the college offers a One Month Certificate Course titled *Foundations of Yogasana*. The course motivates students to pursue Yoga on a daily basis for a sound mind in a sound body. The objectives are to make participants aware of the

- benefits of performing different *Yogasanas*
- scientific way of performing various *asanas*
- precautions to be taken while performing different *asanas*
- therapeutic aspects of *Yogasanas*for promotion of health and wellness
- importance of maintaining a healthy lifestyle through the practice of *Yogasanas*

The 36 hour course is scheduled in September/October every year. It is offered free to a batch of 50 students on a first come first served basis. The Resource Person Ms. Alka Singh, Yoga Therapist, D. Acu., D.N.Y.S., M.A. (Yoga), is an alumna. Participants are required to attend at least 90% of the sessions and are tested on Yoga Proficiency before being awarded Certificates.

National Cadet Corps (NCC)

MH has a full unit of NCC with 160 cadets. To facilitate its functioning, adedicated NCC Room has been specially constructed nestling in the hostel and opening into the sports ground, used also as parade ground. With a floor area of 35sq.m.it encloses changing rooms, a store for uniforms and trunks that hold miscellaneous items. It also has an office space with desks and comfortable chairs, notice boards, cupboards and filing cabinets for office records. A desktop with printer/scanner has been installed. The space is used to conduct meetings. It is here that the students and faculty members sit together and plan for the future. Its proximity to the Sports Department encourages synergy.

National Service Scheme (NSS)

NSS volunteers work from diffused spaces across the campus. Student Activity Centre is used for holding meetings. The lawns and arcades are the preferred venue for on-campus programmes such as reading to the visually challenged students and teaching children from the neighborhood. The NSS volunteers frequently organize exhibitions and fares wherein NGOs are invited to set up stalls to showcase their work. The linkage is strong with those working for PwD and children with special needs. The college facilitates group travel for events.

Public Speaking and Communication Skill Development

The college is well known for the space it provides to students to hone their communication skills. The well established Debating Society organizes high quality South Asian Parliamentary Debate *Manzar* alternating every year with *Dialectics*, a national debating event. The Economics Department takes led in organizing the annual Model UN. All department and cultural activities are led by articulate students.

For mega events, all rooms in the college are made available. The sprawling lawns are akin to the Hyde Park; students use the open spaces, arcades, pavilions and corridors judiciously for all their extramural activities.

Health and Hygiene

The college provides the very best facilities to its community, in particular the women. The college washrooms have been renovated, are disable friendly and well maintained by sanitation staff. Female hygiene equipment is installed.

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years. (Enclose the Master Plan of the institution/campus and indicate the existing physical infrastructure and future planned expansions if any)

All teaching spaces, be they classrooms or laboratories, have been comprehensively repaired and renovated in the last few years.

- The cement floor that had pits has been replaced by Kota stone flooring
- Electrical rewiring, replacement of old electrical fittings has been executed
- Good quality mirror optic light fittings have been used. Gradually, tube lights are being replaced by LED lighting within the same fitting, as far as possible. As part of environment consciousness, all lights in the library and the corridors are LED
- The original furniture in the college had also become dilapidated and classrooms appeared untidy with mismatched furniture, inappropriate for contemporary needs. Decision was taken to fabricate in-house new desks and benches, many of them reusing old Burma teak retrieved from old tables
- Faculty rooms have ergonomically designed individual workstations
- Minor civil repairs and the task of repairing door-frames, painting/polishing doors and windows, and distempering is being undertaken in phases

Table 4.1.3: Development and Infrastructure Enhancement: Works Undertaken and Amount Spent

S. No.	Name of work	Year	Amount (Rs.)
1.	Water proofing: Auditorium Roof	2015	7,57,000
2.	Synthetic Tennis Court	2015	15,00,000
3.	Red Stone Coping	2015	61,407
4.	Extension of Utility Room	2015	3,67,351
5.	Electrical works	2015	2,14,538
6.	Construction of Additional Guard Rooms	2015	4,80,695
7.	Renovation of Faculty Rooms: Botany, Chemistry, Zoology, Physics, Computer Science	2014	19,54,267
8.	Kota Flooring: Lecture Theatres, Class Rooms, Lecture Hall, Corridors	2014	14,03,467
9.	External Development and Sports Arcade	2014	22,16,821
10.	Repair and Renovation of Library	2013	40,90,497
11.	Kota flooring in Classrooms and Corridors	2013	13,05,932
12.	Extension of Seminar Hall (Garden Room)	2013	15,94,274
13.	Brick Pointing Work Hostel	2013	7,85,767
14.	Student Activity Centre above Canteen Block	2012	47,07,994
15.	Construction of New Hostel Block	2011	4,83,88,355

Most importantly, the college has added several multi-purpose halls to match the ever growing needs of beyond the classroom activities. These are the unique innovations that can be categorized as best practice in matching physical space to constructivist pedagogy. These include the Heritage Hall, and the Student Activity Centre which are aptly called *Learning Studios.* These are variously furnished to meet (i) the pedagogic requirement of academic activity or (ii) the freedom of creative expression of a cultural or co-curricular activity. The furniture design of the DSKC Project-base Learning Laboratories is another pedagogic innovation as it is designed to encourage group work and the generic space requirements of experiments. The college is also making optimal use of open spaces with aesthetic arcades and patios. The *Miranda Tech Park* has developed in last four years and has sheds for Compost Plant, the Paper Recycling Plant and a Studio Space for hands-on activities by students such as making paper products; *Playing with Clay* and *Pottery Workshops*. ***Refer Fig. 4.1.3(a)-(r) in Supporting Documents***.

4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

The college periodically undertakes an internal accessibility audit. Inasmuch as the policy is to create inclusive learning environments, focus is on making all facilities disable friendly. This has entailed making appropriate changes in the physical infrastructure.

- The college has built ramps conforming to the prescribed norm of slope
- All college washrooms have a cubicle meeting the norms for PwD, providing access to a wheel chair bound. The new hostel block also has this provision
- Corridors are normally kept free from obstructions such as those caused by planters, standing display boards, etc.
- All rooms in the college, whatever the use, carry a Braille strip displaying the room number for ease of identification by the visually challenged students

Special Measures: The equipment given to PwD students includes: Laptops (64) with pre-installed requisite software; Angel Players (23); MP3 Players(16). Several students have been provided with smart canes. It has so far not been possible to install lifts. Carefully developed plans have been submitted and await sanction of funds for the purpose. The new academic block under construction has all requisite facilities for PwD. The college plans in near future to install tactile tiles for ease of negotiation by the visually challenged students and is committed to incorporating new assistive technologies to improve accessibility. The infrastructural constraints, whenever encountered, are overcome sensitively with the community always willing to help. ADDRC is located on the ground level in the Library and is easily accessed. This makes available computers preloaded with assistive software and other equipment. One of the DU Star Innovation Projects aims to develop mobile based apps for accessible science laboratories.

4.1.5 Give details on the residential facility and various provisions available within them: (Hostel Facility-Accommodation available; Recreational facilities, gymnasium, yoga centre, etc.; Computer facility including access to internet in hostel; Facilities for medical emergencies; Library facility in the hostels; Internet and WiFi facility; Recreational facility-common room with audio-visual equipment.)

Hostel Facility:

The hostel designed by the renowned architect Walter George, with the foundation stone laid by Lady Edwina Mountbatten, lends to the college a historical charm and a

sense of legacy. It is laid out in an aesthetically designed quadrangle enclosing well kept gardens paced out by a majestic bottle palm lined pathway. The long corridors, the dining hall with a high arched ceiling, and stonework balconies add to its charm. Over the last few years, extensive restoration and refurbishment work has been undertaken to preserve its red brick façade and unique interiors. A new hostel block was added in 2012. The challenge was to match in grandeur the old Walter George building. Sitting smugly on the periphery of the old hostel, it integrates well and adds equal beauty and grace to the campus.

Accommodation

- Rooms: MH Hostel has 172 rooms on twin-sharing basis, 1 single room, 3 rooms with triple-sharing, 3 rooms with four-sharing. The latter two are with attached washrooms. All have ergonomically designed furniture that includes Single Bed with storage box and drawer and fitted mattress, Bedside Table, Dresser, Cupboard, Study Desk, Overhang Book Case and Chair for each student. Furnishing and linen are provided to each student.
- Toilet Blocks (17): Hygienic facilities, Geysers, Solar Heaters for hot water
- Pantry (7): Pantry in each block with Water Cooler, Refrigerator, Microwave Oven, Kettle, Induction Cooker, Essential cookware for student use
- Industrial RO water supply for drinking and cooking purposes
- Dining Hall: Seating capacity of 200; High Table for special guests
- Dining Hall Kitchen: Fully equipped with industrial burner stoves, cookers, ovens, tandoor, automated grinders, mixers, dough kneader, vegetable peelers, etc. Separate areas for storing, processing and cooking non-vegetarian food Ben Marie. Aesthetic steel serving utensils, crockery. Kitchen stores for groceries, non-perishable and perishable food items; IFB Industrial Dish washer
- Launderette with 6 IFB Washing Machines and 6 IFB Dryers
- Two Common Rooms with television and home theatre, Visitors Arcade
- Reading Room, Digital Resource Centre, WiFi, Public address system
- Two well furnished air conditioned Guest Suites each with large Drawing-dining, Pantry, two Bedrooms with attached baths, fully equipped with television, refrigerator, microwave cooker, kettle and essential cookware and crockery; Laptop provided on request
- Hostel Office, Warden Residence, Counsellor Room, Medical Unit with Doctor's Room and Sick Room.
- Dedicated round-the-clock security guards, sanitation and garden staff.

Drinking Water: The water supply to the kitchen for cooking and drinking purposes, all water coolers and drinking water taps in the hostel is from a dedicated Industrial Reverse Osmosis Water Purification Plant located within the hostel premises. The permeate water quantity is 1000 LH, identical to the one installed in the academic block. A Comprehensive Annual Maintenance Contract with the manufacturer/ supplier of the plant ensures regular servicing of equipment as well as treated Water Quality Testing on critical parameters such as turbidity, total hardness, chlorides, sulphates and TDS.

Water Supply: The college is committed to providing sufficient and uninterrupted water of good quality to the hostel. It has 2 underground water tanks of total capacity 2000 L and 3500 L, respectively. One bore well augments the town supply. Water is pumped to 36 overhead water tanks of capacity ranging from 500 L to 1500 L.

Shortage of water, if any, is overcome by requisitioning town supply *Jal Board* water tankers so that residents are not inconvenienced.

Electricity: Rooms are not air-conditioned. At all times room lights, fans and essential plug points; and corridor lights are well maintained. The hostel is connected to the College Generator Set in case of power outage. There is an electrician on 24-hour call, especially during exam time.

Hygiene and Sanitation: With special focus on cleanliness, health and hygiene, MH Hostel like the College meets high standards on these parameters. Services are outsourced to Sulabh International who deploy a Supervisor and women cleaning staff.

Launderette: The launderette is located in a specially designed spacious room in the new hostel block. The installation and operations are outsourced. It provides fully automatic 6 washing and 6 dryer machines of IFB make. The students are charged for the service in fee to encourage use. Clothes ironing service is also available herein.

Medical Facilities: The hostel shares this facility with the college. ***Refer 5.1.4.***

Counselling and Guidance Unit: The hostel shares this facility with the college. ***Refer 5.1.8.***

***Library Facility*:** The hostel does not have a dedicated library. The college library is kept open till 7.30 p.m. and is easily accessible to the resident students.

ICT Facilities and WiFi: The hostel being part of the college is WiFi enabled. A dedicated Digital Resource Centre has been established in the new Hostel Block. This has 10 networked computers and a printer/ scanner. Most students have personal laptops or those issued by the college. Many have smart phones that they put to good use. One of the College Digital Resource Centres is located in the hostel premises and kept open from 8.30 a.m. till 7.30 p.m. It has 80 computers connected to the DU system. The students can also access the Digital Resource Centre located in the library. This has 30 computer LAN connected to the DU system.

Common Room: Both the old and new hostel blocks have Student Common Rooms with a large screen television and home theatre system. The usage of these facilities seems to be continuously going down with the advent of multimedia access on personal laptop or smart phone. Students often book the College Auditorium and open premises for various hostel events. When necessary, college staff provides technical help in setting up audio-visual equipment.

Physical Fitness and Sports: The campus layout seamlessly integrates the college and the hostel facilitating sharing of resources. Resident students are free to use all college facilities from early morning till late in the evening. The college Sports and Physical Education Department organizes a Freshers' Cross Country Run across the campus early in the academic session. It also runs Yoga, Aerobic and Taekwondo classes.

Hostel Students Union: The Hostel has an elected Union with a President, Cultural Secretary, Mess Secretary and Sanitary Committee (San Com) Secretary. The Union also includes elected coordinators of various extracurricular activities that closely mirror those existing in the college. These are listed below:

Fine Arts	Film Club	Hostel Fellowship Society
Mridang, the Music Society	Photography Cub	*Lakshita*, the Enabling Society
Debating Society	Adventure Club	NSS Unit
Literary Society	Sports	Women Development Cell
Grimoire, the Hostel Magazine		

The Union makes sure that the students remain engaged in extramural activities throughout the year. Various Societies keep organizing events and competitions. The Hostel celebrates diversity and festivals of all communities as also the national days.

Extension Activities: The resident students are deeply committed to social causes. They volunteer under NSS in large numbers. Commonly undertaken activities include reading to the visually challenged students, teaching the children of nonteaching staff members, and underprivileged children. NSS resident students have also launched a unique initiative to support women students enrolled in undergraduate courses of School of Open Learning (SOL) who come to MH on Sundays and Gazetted holidays for the Personal Contact Classes for which the college is a centre. Under this initiative, they organize extracurricular activities for SOL students, share their own course specific teaching-learning resources and help solve their problems, both academic and personal. The hostel is home also to a large number of visually challenged students. It is the policy of the college that each VC student should share room with a sighted student on voluntary basis. This inclusive approach has led to synergetic understanding of disability. Volunteers have also been committing time to the *Swachh Bharat Abhiyan* and the college's Clean Environ Campaign and *Swachh Parisar Abhiyan* under which they help clean the peripheral roads.

Hostel Staff Residence: The hostel warden has a comfortable studio apartment within the hostel. The Administrative Assistant resides in the non teaching staff quarters.

Guest House: There are two Guest Suites located on the first floor of the new Hostel Block. Each has an entrance lobby, two bedrooms with attached toilets, large drawing-dining area and kitchen. These have been aesthetically furnished conforming with the hostel scheme. The catering is from the hostel kitchen.

Sharing Resources, Hosting Scholars and Fellows: Indian National Science Academy (INSA) along with Indian Academy of Sciences, Bangalore and National Academy of Sciences of India, Allahabad (NASI) jointly operate the Summer Research Fellowship Programme. This is one of the capacity building initiatives for the active young science students. Through a national selection process, young boys and girls are selected to work in various Laboratories across the country. Over 200 Summer Research Fellows work in different labs in Delhi during the months of May to July 2016. On the request of INSA, MH has been accommodating several of these scholars in MH Hostel for the duration of the programme.

Faculty and Staff Residences

There is a residence for the Principal. Declared structurally unsafe in 2000, it was reconstructed with funding from UGC and became ready for occupation in 2010. Carefully designed, it is another aesthetic addition to the college campus.

- The faculty residences are in a gated area within the college campus. These provide accommodation to 20 faculty members.
- The Non teaching residence is in a separate gated area within the college campus with 16 flats. DU has provided 10 additional flats to MH in Reids Line DU Staff

Residential campus. A block of 16 quarters on the college campus was declared structurally unsafe in 2011-12. The staff is currently availing accommodation on DU Dhaka complex made available on loan. The UGC has sanctioned Rs. 3 crore for reconstruction. The work has been awarded.

Security

MH stands committed to working towards safety of all these students. Initiatives and interventions are multipronged. These involve creating better infrastructure inside the college; enhancing safety in the immediate environment in collaboration with civic agencies; creating strong peer and student-faculty interaction, providing mentoring and counselling services, creating oversight and redressal mechanisms for all students. However, at all times, the individual's privacy and dignity is respected.

Security Guards: The college has round the clock security of high standards. To this end it employs a large number of well-trained guards on 24 hour roster. Security has been outsourced to a professional agency. Lady security guards are employed during the day at the college entry gates.

Disaster Preparation: Educational institutes of repute are expected to be well prepared and vigilant to handle all forms of emergencies. A comprehensive disaster management plan and protocol is in place. MH Geography Department has created an Evacuation Plan for the entire college. This is well displayed. Students are sensitized through Mock drills to respond to alarms including those in case of fire, terror or natural disaster; services of City Police, Fire Department, Red Cross and CISF have been solicited for this training.
This has entailed creation of the following facilities:

- *Fire Extinguishers:* The college has installed Fire fighting equipment at all strategic locations after a comprehensive Fire Fighting Audit by pertinent agency. The equipment is well maintained and college ensures that it is functional.
- *CCTV:* As part of security measure, the college has installed a vast network of CCTV cameras covering the boundary, gates, open spaces, corridors and other critical areas while protecting privacy of teaching-learning and social spaces. There are 48 CCTV Cameras in the College Area, 64 in the Library Area and 16 in the Hostel Area, all with two-week recording.
- *Public Address System:* This covers the entire college with 15 Sound Projector Speakers, Horn Loud Speakers, PA Amplifier system with 2 inputs and microphones for addressing from 2 locations. The Hostel has its own PA system.

Self Defence, Martial Arts and Civil Defence Training: Opportunities for training in Self-defence and First Aid are provided to students. Classes for Taekwondo, other Martial Arts, and personal fitness are organized as well. CISF Women Commandos, specially trained in martial art by KALI gave demonstration of Self Defence. A group of NCC Cadets of MH was also given similar training in this unique art. Staff and students regularly participate in Civil Defence training and First Aid training Courses.

Enhanced Security Network with Police, CISF and Civic Agencies: In a unique initiative, the college has sponsored and built an additional Police Booth outside the college gate to enhance security. The college works with all civic agencies to improve the security of the peripheral roads. Improving cleanliness and lighting is an integral part of this exercise. Police and CISF personnel are routinely invited for discussions and presentations at the highest level. The college invites the CISF Band to perform at the Orientation Programme and CISF Officials to speak on Security, especially of key

government installations. Special focus is on security provided by CISF in the Metro and how best a woman in distress can seek assistance, how lost items can be traced, etc. In the year 2013-14 and again in 2014-15, CISF gave a demonstration of bomb detonation exercise triggered by detection of unidentified objects bringing in both sniffer dogs and bomb-detection personnel in full gear. CISF Women Commandos, specially trained in martial art by KALI gave demonstration of Self Defence. A group of NCC Cadets of MH was also given similar training in this unique art.

Security Audit of off-campus Student Accommodation: Nearly 70% students are from outside Delhi. MH maintains record of private hostels, paying guest and rental accommodations. The list is given to the neighborhood police station soliciting their help in carrying out a security audit of these premises. An innovative research project has also carried out disaster mapping of localities neighboring DU ***Refer 7.2.1B.***

4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

Medical Unit: A Medical Support Unit was established at MH, located within the hostel in January 2014. It is a facility shared with the college. It augments the prevalent arrangement where all students in residence are compulsorily members of World University Service (WUS) Health Centre, University of Delhi, located at V. P. Patel Chest Institute, across the road from MH. WUS provides basic medical facilities to the students. The in-house medical unit is well equipped and professionally supported by neighborhood Hospital Nu Life. A Nurse is on duty 6 days of the week from Monday to Saturday, 9.00 a.m to 4.30 p.m. The doctor is available for consultation 3 days a week. This facility is ideal for regular health check up and treating common medical issues like cough and cold, indigestion, minor cuts, bruises, aches, pains, sports injuries and mild fever, etc. Since its institution, an average of 6-10 students and staff members visit the centre each day. The centre stocks emergency medicines for allergy, pain, fever, asthma, and other common ailments.

Sickbay: A Sick Room with 2 medical beds and a patient attendant bed is located across the doctor's consultation room and warden's quarters. Necessary medical equipment available in the medical room includes Blood Pressure Machine, Glucometer, Nebulizer, Oxygen Cylinder, Glucose drip, etc.

Medical Emergency Protocol: MH has a well defined protocol for efficient handling of medical emergencies, at all hours. A wheel chair, stretcher and transport are readily available. With first aid provided, the student is rushed to WUS for professional advice. If recommended, the student is shifted to a recognized neighborhood hospital like Hindu Rao or St. Stephens Hospital, accompanied by the Warden. The Principal and the Hostel Committee members are kept informed. Local guardians and parents are also informed early and consulted for course of action.

4.1.7 Give details of the Common Facilities available on the campus– spaces for special units like IQAC, Grievance Redressal unit, Women's Cell, Counselling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

Cafeteria: The Cafeteria has been aesthetically renovated and is furnished with custom-designed furniture. It includes a well-ventilated open kitchen for preparation of certain food items, with chimney hoods above burner stoves. Utmost hygiene is maintained at the food counters, dedicated storage spaces for grocery, cookware crockery and cutlery and dish washing area. Additional large room adjoining the main

hostel kitchen and opening into the cafeteria complex is used for preparation work and most of the heavy duty cooking. Water supply for cooking and drinking purpose is from the Hostel Reverse Osmosis Water Purification Plant.

Food Kiosks: The student activity area has two very popular food kiosks, the *Nescafe* Kiosk and the *Pizzas and More* (PAM). Additionally there is a *Quick Bite* Kiosk at the main college gate close to science departments. The canteen contractor also runs a Night *Dhaba* for benefit of hostel students from 9 to 11 pm. The hostel students have organized themselves to run a tuck shop for residents, with shared responsibility.

Drinking Water: The college is committed to providing sufficient and uninterrupted water of good quality to the entire college. An Industrial Reverse Osmosis Water Purification Plant has been installed in the main college block to provide water to all water coolers and drinking water outlets. The permeate water quantity is 1000 LH, identical to the one installed in the academic block. A Comprehensive Annual Maintenance Contract with the manufacturer/supplier of the plant ensures regular servicing of equipment as well as treated Water Quality Testing on critical parameters such as turbidity, total hardness, chlorides, sulphates and TDS. The college has an Annual Cleaning and Maintenance Contract for cleaning of all underground and overhead tanks in all areas of the college every six months. The college plumber regularly checks that all tank lids are properly locked; problems of leakage and overflow are addressed as soon as they occur.

4.2 Library as a Learning Resource

MH Library has adopted the well known motto *Right Document to the Right Reader at the Right Time*. It takes pride in fulfilling this inherent mission to the hilt. Over the last decade, especially in the last two years, the library has undergone major repair work. It has been renovated with great care to provide a bright and appealing ambience suffused with natural light. The long corridors and ample space to move between stacks of books gives a feeling of both, openness and seclusion. It entices the reader to explore the books that line the shelves and browse in the comfort of privacy. It is common to see students sprawled on the clean and cool stone flooring immersed in reading even in the stack area, oblivious to the world. Technologically modern, well stocked, well equipped user friendly and it serves effectively its purpose as a *Knowledge Resource Centre.* Undoubtedly, the library is one of the key teaching-learning assets of the college managed by well qualified professional staff.

4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

Yes. *The Library Committee* functions with the Principal as Chairperson and Bursar as ex-officio member. The Librarian is the Convener and Member Secretary. Each department is represented by its Teacher-in-charge as member of this committee. The members report back to their respective departments on all issues discussed and share the status of available funds. Equally importantly, they flag specific needs and concerns of the departments. All matters pertaining to development of the library facility as a knowledge network and teaching-learning resource are within the purview of this committee. The members of the Advisory Committee meet at least twice a year to interact and follow up on the various aspects of library management for smooth functioning of library affairs.
The specific mandate is to recommend

- The budget and library expenditure
- Allocation of library funds to various departments and disciplines
- List of discipline related, reference and general interest books
- Procurement of variety of other learning resources including e-resources
- Weeding of books and up-dation of resources
- Appropriate maintenance of resources including binding of books
- Enhancement of infrastructure and library services based on user feedback

Significant decisions taken by the Library Committee over a period of time include

- Making available library book circulation services round the year
- Increasing library access time for users by keeping it open for long hours
- Increasing the number of copies of commonly recommended texts from 3 to 5
- Levying fine on faculty members in addition to students for overdue books
- Recommending criteria for weeding out of books
- Issue of resources to faculty members through facility of individual password

4.2.2 Provide details of the following: Total area of the library (in Sq. Mts.);Total seating capacity; Working hours (on working days, on holidays, before examination days, during examination days, during vacation);Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)

MH library has always been ahead of its peers in modernization of facilities. Spread over three levels, It has 6 special sections, (i) Textbook; (ii) General Books; (iii) Reference Tools; (iv) Reserves; (v) Periodicals; and (vi) Braille Books. It introduced state-of-art automation of services with procurement of LIBSYS LSEase LMS package in 2001. Since then, it has followed technology enhancement as a continuous process. Recently Web-Centric OPAC has been installed. Within the college, it was the first to get internet connectivity and WiFi. Library database can be accessed through Online Public Access Catalogue. It has two Digital Resource Centres. The first has 30 computers for all users to access e-resources; it also has a LCD Projector and the area can be used for orientation and training programmes. The second is the Amba Dalmia Digital Resource Centre for Visually Challenged (ADDRC). It has 10 computers for the visually challenged students and other specialized equipment. The Library Administrative Section is well endowed with each staff member having a desktop. Library is a major college asset.

Total area of the Library	1641 sq. m.
Total Seating Capacity	250
Working hours	During Semester: Monday to Friday: 08.30 a.m. to 07.30 p.m. Saturdays: 09.00 a.m. to 04.30 p.m. During Vacations: Monday to Friday: 08.30 a.m. to 05.00 p.m. Saturdays: Closed
Layout of the Library	The Library is an independent building block spread over three levels. <u>Ground Floor:</u> Property Counter; Circulation Counter; 3 Touch Screen Information Kiosks: Online Public Access Catalogue (OPAC) 3 Desktops (OPAC) for users; Librarian's Chamber; Technical Section; Reserve Section; Reference Section;

	Reading Hall; Stack Hall 1; and Amba Dalmia Resource Centre for Visually Challenged Readers. First Floor: Stack Hall 2; Digital Resource Centre with 31 Desktops on LAN for online access for the readers, an LCD projector for group work; Server room with UPS, printer, scanner,. Second Floor: Periodicals Section, Textbook Stacks, Faculty Reading Zone, Students Consultation Area, Photocopying facility.
Safety and Security	32 CCTV, 25 Alba Dome Cameras, 700 TVL and 7 Yoko Cameras Dahua 16 Channel (2) DVR Network based, 2 TB HDD, TFT 17 inch with 32 Channel Switcher. 2 Display Monitors 9 Fire Extinguishers installed in the library

4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

Acquisition Policy: Procurement follows two channels. One, faculty members requisition books based on curricular and other academic needs. The request for procurement of a resource can emanate from any member of the college community. Two, the Library proactively recommends all category of books after consulting Publishers' Catalogues, Book Reviews, Publishers' Websites, Bibliographies and appropriate keyword search on World Wide Web. Further, library staff keeps track of all changes in curriculum to collate and update reading lists. A close interaction with the DU Library System is leveraged to enhance procurement list.

Information Dissemination: The list of new books/journals acquired is duly displayed in the library foyer. An E-mail alert is also sent to individual departments or user on request. A Braille Notice Board is installed in ADDRC, the section for the visually challenged students.

Textbooks and Reference Books: The college ensures that the requisite curricular material is available in the library. The endeavor is to procure the latest edition of books. In the last few years, major changes in curriculum have taken place. Special grants were made available to all departments to ensure that the recommended texts and reading were procured in time.

Journals, Periodicals, Newspapers: Most popularly read newspapers and magazine are made available in the reading room.

e-Resources: A total of 43270 e-journals and more than 100 databases are available through Delhi University Library Systems (DULS). An advanced user can search data bases available through DULS to get information on subject specific e-Journals. INFLIBNET N-List provides access to more than 97,000 e-books and 6,000 e-Journals to students and faculty members. ***Linkages with other Library Systems:*** MH has invested in linking with other well established Library Resource Centres such as the American Centre Library, British Council Library and DELNET. Consequently, members can avail e-resources available on other library systems.

Expenditure: In recent years, users have shown greater proclivity towards using E-resources and the Digital Library has expanded. This shift is noticeably significant in case of young users, whatever be the demographic profile. As outlined in the following section, technology enhanced, WiFi enabled learning environment at MH further strengthens the shift. The library resources are easily downloaded on desktops, laptops and hand held devices such as smart phones and tablets. The library space now extends across the college. The library expenditure on ICT has been continuously on the rise. The amount spent in the last four years under the different heads is given below:

Library Holdings	2011-2012		2012-2013		2013-14		2014-15	
	No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.
Texts, References	2298	668437	1098	700687	838	711468	1006	855591
Journals, Periodicals, Newspapers	53	73236	55	79698	59	80392	60	93849
E-resources	N-LIST	5000	N-LIST	5000	N-LIST	5000	N-LIST	5000

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

Library Automation	LIBSYS LSEase 6.3 LMS Available Modules: 1. Acquisition 2. Cataloguing 3. Circulation 4. Serials 5. Articles 6. OPAC
OPAC Access	Terminals: 06 Touch Information Kiosks: 03 Desktops: 03
Electronic Resources Management Package for e-Journals	Provided by DULS
Federated searching tools to search articles in multiple databases	As provided by UGC-INFONET (ICCC) and DULS (Knimbus)
Library Website	Integrated with college website
In-house/ remote access to e-publications	Provided by DULS
Total number of computer for public access	46
Total number of printers for public access	02
Internet Bandwidth/Speed	1 GB on LAN
Institutional Repository	Not structured
Participation in Resources sharing	Access to resources from: American Centre Library British Council Library DELNET, DULS, IFLIBNET, N-LIST

4.2.5 Provide details on the following items:

Average number of walk-ins	600
Average number of books issued/returned	400 to 450
Ratio of library books to students	25:1
Average number of books added during last four years	1310
Average number of login to OPAC	60
Average number to login to e-resources downloaded/printed	40
Number of information literacy training programmes organized	02
Details of "weeding out" of books and other materials	4110

4.2.6 Give details of the specialized services provided by the library

Manuscripts	Nil
Reference	Yes. The facility is available for both, students and faculty. The Reference Books are located in designated areas. There is a special Reference Section for curriculum related textbooks. A Reference Desk is located herein for prompt service
Reprography	Photocopy facility is outsourced and available within library premises. College has recently obtained Reprographic License for 2015-2016 with renewal in 2016-2017 from Indian Reprographic Rights Organization, New Delhi. This provides a legally tenable right to photocopy, scan or reproduce copyrighted work (from books and periodicals)
Inter Library Loan Service	DU, Other DU Colleges on request
Information Deployment and Notification	All new additions are accessible through OPAC
Download	High Speed Internet connection with powerful WiFi permits access to e-resources and efficient download
Printing	The library has 2 printers for member use. However, printing is on request and discouraged unless absolutely necessary
Reading List/Bibliography compilation	Yes. This is provided on request. See 4.2.7
In-house/remote access to e-resources	In-house access is available for e-resources
User Orientation and awareness	Yes. Library Orientation Programme is an important part of the College Orientation Programme organized on first day of the academic session for freshers. Information Literacy Programmes in collaboration with DULS for faculty and students give a comprehensive introduction to digital resources available through DULS, INFLIBNET, INFONET, N-LIST, etc.
Assistance in searching Databases	Yes. Library staff is professional and efficient. Service to user is their primary duty
INFLIBNET/IUC facilities	Yes. For the visually challenged students, Braille scripts and specially designed course packages are available.

J-Gate	The J-Gate interface offers searched articles published in all Journals subscribed by the UGC-INFONET Digital Library Consortium; print and e-Journals subscribed by 22 ILL Centres; and from Journals subscribed by other member libraries if listed in J-Gate.

4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.

Reference Services: The Library staff is congenial, helpful and committed to provide the best possible service. They diligently discharge their duties that include

- Maintenance of the library resources
- Efficient and accurate shelving
- Assistance in locating books, journals and various reading material
- Guidance for searching databases, downloading and printing on request
- Help in providing course material, syllabi and question papers of previous years
- Maintaining daily record of important newspaper items related to Delhi University and Higher Education; these are sent daily to the Principal's Office
- Providing information to individual users on status of books reserved by them
- Displaying information about the newly purchased books on all notice boards
- Displaying information regarding procedures for obtaining No Dues and Clearance Certificates at the end of the term

Extension Services: Several initiatives for user engagement and participative development have been introduced. These include

- The Librarian participated in teaching Information Technology course to entire FYUP students in 2013-14
- The students who are studying Library and Information Science are imparted training in library technical and reader services in our library
- Initiating student feedback and grievance redressal through Suggestion Box
- Special display of books by faculty, students and alumnae; and new arrivals
- Organization of regular Book Exhibitions inviting leading publishers and suppliers to the campus
- Organization of Annual Library Fest *Maison – The First Home* to promote reading habits and love for both, library and books along with creative competitions such as book hunt, novel review, illustrate a story, poem writing, poster making, sketch the building, check general knowledge and photograph the library
- Organization of Library Orientation Programmes at regular intervals
- Organization of Information Literacy Programmes in collaboration with DU Library System for faculty to give a comprehensive introduction to digital resources available through DULS, INFLIBNET, INFONET, N-LIST, etc.
- Organization of excursion for faculty and students to the Book Fair each year

Capacity Building of Library Staff: Library staff is encouraged to participate in further training programmes to upgrade skills related to Library Science and ICT.

4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.

Amba Dalmia Digital Resource Centre for Visually Challenged Students (ADDRC):

Mission: ADDRC is committed to providing an enabling environment and state-of-art assistive technologies to the visually challenged members of MH community. First of

its kind at DU, ADDRC was established within the library premises on the ground level with an endowment of Rs. 5 lakh from alumna and then faculty member Dr. Manju Kapur Dalmia in 2005-06. The college also expended funds and continues to invest generously in its infrastructure, academic needs and manpower requirements.

Management: The day to day functioning and upkeep of ADDRC is under the direct charge of the Librarian as the Centre is an integral part of the Library. A Library Attendant, who is himself visually challenged, has been assigned duties exclusively in this area and assists students with basic training for use of technology. Close linkages are maintained with the Equal Opportunity Cell at the University. The Convener of *Lakshita*, the Enabling Society, monitors facilities, and based on feedback, recommends how best to improve functioning of ADDRC.

Orientation and Capacity Building Programmes: The Library organizes a special Orientation Programme for the visually challenged students. This supplements the efforts of *Lakshita*, the Enabling Society.

Resource	Detail	Quantity
Desktop Computers		10
Assistive Software	Jaws, Safa, Lekha, Talking Typewriter	04
Braille Embosser	Model: Index Braille Basic DV4, Single and Double sided Braille embossing horizontal and vertical (sideways) printing use of flexible paper sizes- including user defined portable use – weighing only 7 kgs (16 lbs) unlimited multi copy function	01
Lex Scanner	Model Lex Air, Camera Resolution 5 mega pixels, Capturing speed upto 20 pages per minute, Connectivity 1x 2 USB, Focus Depth 10 cm, 4 inches, dimensions (W x D x H) 6.5 x 602 x25.5 cm and 2.5 x 2.4 10 inches, weight 500 grams, Time to read : 15 Seconds, Magnification : 0.2 to 4x on a 22 inch screen	01
Printer	HP Laser jet Printer 1051	01
Audio Equipment	Angel Player	26
	MP3 Players	21
Braille Language Documents		
	Books	850 Vol.
	Magazines, Periodicals	150 Vol.

4.2.9 Does the library get the feedback from its users? If yes, how is it analyzed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the library services?)

The librarian and the library committee attend to grievances, if any, of the students. A Suggestion Box is placed at the entrance of the library. The Enabling Society working closely with visually challenged students, provides feedback on how to improve facilities for them and resolve their grievances almost on a daily basis. A Google Form for taking regular feedback from the students has been designed. An informal feedback is also taken from all students at the time of issuing of *No Dues Certificate* that each student must procure at the time of being issued examination admit card and leaving college. The user satisfaction is high.

4.3 IT Infrastructure

MH is deeply committed to building a technology enhanced active learning environment and realizing innovatively the full potential of ICT in both, education and management of student life and educational processes. To this end, it has built a strong hardware and software backbone. To retain the leading edge, the college pays great attention to maintenance of computer facilities and investment in latest technologies. This entails continual up-gradation and procurement of computers with latest configuration.

4.3.1 Give details on the computing facility available (hardware and software) at the institution.

Number of computers with configuration (provide actual number with exact configuration of each available system)

Summary:

Total Desktops	368	***Computer-Student Ratio:*** With sanctioned student strength of 3165 in undergraduate courses, the Computer-Student Ratio is better than 1:2.
Laptops	1127	
Netbooks	111	
Tablet	003	
Grand Total	**1609**	

Table 4.3.1.1: Configuration of Desktops

Desktops	**LAN**	**WiFi**	**OS**	**Qty**
HP: i7 3.4 GHz, RAM 8 GB, HDD 500 GB	✓	✓	Win8	4
HP: i7 3.4 GHz, RAM 4 GB, HDD 500 GB	✓	✓	Win 8	30
HP: i7 3.4 GHz, RAM 4 GB, HDD 500 GB	✓	✓	Linux	35
Dell i7 3.4 GHz, RAM 4 GB, HDD 500 GB	✓	✓	Win 7	4
HP: i5 3.2 GHz, RAM 4 GB, HDD 500 GB	✓	✓	Win 8	29
HP: i5, RAM 8 GB, HDD 500 GB	✓	✓	Win 8	2
Dell: i5 3.2 GHz, RAM 2 GB, HDD 320 GB	✓	✓	Win 7	41
Acer: i5 3.2 GHz, RAM 2 GB, HDD 500 GB	✓	✓	Win 8	4
Dell: i3, 3.3 GHz, RAM 4 GB, HDD 500 GB	✓	✓	Win 7	1
Lenovo i3, 3.2 GHz, RAM 2 GB, HDD 500 GB	✓	✓	Win 7	2
HP: All-in One 23'' i5 4460T, RAM 4GB, HDD 1TB	✓	✓	Win 8.1	1
HP: All-in One 23'' i5 3360S, RAM 4GB, HDD 500 GB	✓	✓	Win 8	1
HP: Core 2 Duo 3.0 GHz, RAM 1.5 GB, HDD 160 GB	✓	✓	Win XP	11
HP: Core 2 Duo 2.4 GHz, RAM 1.5 GB, HDD 80 GB	✓	✓	Win XP	72
HP: Core 2 Duo 2.4 GHz, RAM 512 MB, HDD 60 GB	✓	✓	Win XP	10
Dell: Core 2 Duo 1.83 GHz, RAM 2 GB, HDD 80 GB	✓	✓	Win 7	1
IBM: Core 2 Duo 2.4 GHz, RAM 512 MB, HDD 80 GB	✓	✓	Win XP	9
IBM: Core 2 Duo 2.4 GHz, RAM 1 GB, HDD 80 GB	✓	✓	Win XP	2
Acer: AMD Phenom II 2.5 GHz, RAM 2 GB, HDD 320 GB	✓	✓	Win 7	80
IBM: P IV 3 GHz, RAM 1.25 GB, HDD 80 GB	✓	✓	Win XP	18
IBM: Pentium IV 3 GHz, RAM 2 GB, HDD 80 GB	✓	✓	Win XP	10
Lenovo: Pentium III, RAM 2 GB, HDD 160 GB	✓	✓	Win XP	1
TOTAL				**368**

Table 4.3.1.2: Configuration of Laptops and Netbooks

Laptops	Qty
A. Received from University of Delhi	
HP: Probook 445sG1, AMD Elite A65350 M 2.9 GHz, RAM 8 GB, HDD 320 GB	998
HP: Probook 445sG1, AMD Elite A65350 M 2.9 GHz, RAM 8 GB, HDD 500 GB	26
HP: Probook 4430s i5 2450 2.5 GHz, RAM 4 GB, HDD 500 GB	25
Lenovo: X131e, AMD E1-1200 APU, RAM 4 GB, HDD 320 GB	60
B. Procured by College	
Dell: i7 2.9 GHz, RAM 4 GB, HDD 250 GB	1
HP: i7 2.8 GHz, RAM 2GB, HDD 250 GB	1
Dell: i5 2.67 GHz, RAM 4GB, HDD 320 GB	2
HP: Pavilion i5 2.4 GHz, RAM 2 GB, HDD 160 GB	2
Sony Viao: i5 560M, RAM 4GB, HDD 500 GB	1
Sony Viao: Core 2 Duo, 2.8 GHz, RAM 6 GB, HDD 256 GB	1
Dell: Core 2 Duo 2.1 GHz, RAM 2 GB, HDD 160 GB	1
Dell: Core 2 Duo CPU T 5670 1.8 GHz, RAM 3 GB, HDD 80 GB	1
HP: Core 2 Duo 1.6 GHz, RAM 2 GB, HDD 250 GB	1
Dell: Pentium IV 2.4 GHz, RAM 2 GB, HDD 160 GB	1
Lenovo: CPU 2300 1.66 GHz, RAM 512 MB, HDD 80GB	1
D. Netbooks Procured by College	
HP Mini 10″: ATOM CPU N570 1.66 GHz, RAM 2 GB, HDD 250 GB	111
HP Mini 10″: ATOM CPU N2600 1.6 GHz, RAM 2 GB, HDD 300 GB	5
E. Tablets	
Asus Google Nexus: 7 Quad Core 1.2 GHz, RAM 1 GB Internal	3
TOTAL	**1241**

Table 4.3.1.3: Configuration of Servers

Servers	Qty
Acer: Xeon 2.4 GHz Dual, RAM 8 GB, HDD 300 GB*3	2
HP: i5 3 GHz, RAM 4 GB, HDD 320 GB	1
IBM: Xenon 3 GHz, RAM 1 GB, HDD 160 GB	1
HP: Xenon 2.13 GHz, RAM 8 GB, HDD 500 GB	1
TOTAL	**5**

Table 4.3.1.4: Configuration of Information Kiosks

Information Kiosks	Qty
Agmatel: Information Kiosks Processor Based free Standing Type (Display Size:48.3 Cm (19 inches) Type of Display : LCD 17 inch i5 3 Ghz, RAM 4 GB, HDD 500 GB, Screen 18.5 inch Touch Enabled	3

Table 4.3.1.5: Configuration of Electronic Lectern

Electronic Lectern	Qty
Agmatel: Active Matrix Color TFT Scratch Resistant Screen 19 inch with resolution 1920x1080 , i3, RAM 2 GB, HDD 500 GB with Display Switcher	1

Table 4.3.1.6: Configuration of Printers/ Scanners

Printer/ Scanners	Qty
HP MFP 175 nw Color Laser Jet	2
HP 1314 nw Color Laser Jet	1
HP 1415 nw Color Laser Jet	1
HP 125 nw Laser Jet	2
HP M1005 MFP	28
HP Laser 1606 nw Duplex	2
HP 1010/1020 Laser Jet	10
TOTAL	**46**

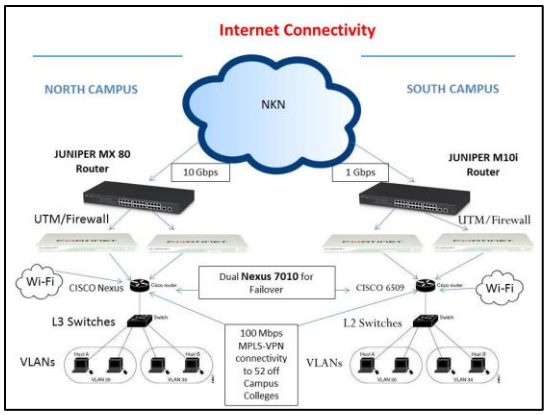
Table 4.3.1.7: Configuration of UPS

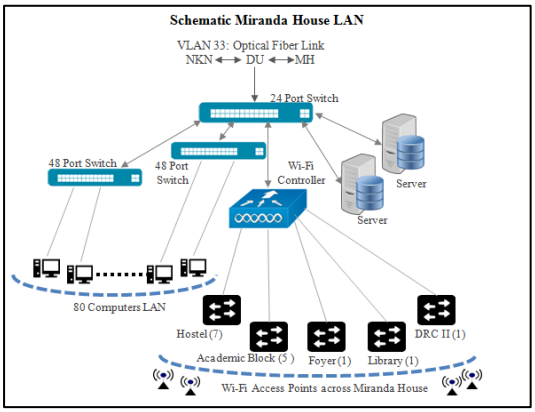
On Line UPS	Qty
APC: 10 KVA with 100 AH 32 Batteries	1
Numeric: 10 KVA with 42 AH 16 Batteries	3
Numeric: 2 KVA with 18 AH 16 Batteries	2
APC: 5KVA with 42 AH 16 batteries	6
APC: 5KVA with 42 AH 16 batteries	2
Uniline: 2 KVA with 42 AH 8 batteries	1
TOTAL	**15**

MH LAN

As a constituent college of DU, MH was linked to the National Knowledge Network with the DU Computer Centre planning and introducing state-of-art hardware, software and networking solutions. It laid a university wide fibre optic network that acts as the hub for ICT related activities at DU. All computers in the college are on LAN.

Figure 4.3.1.1: Schematic Diagram of DU and MH LAN





Location	LAN Switches	Computers
Main Server Room at DRC II	Manageable Switch layer 2 SNMP; 2 GB combo slots (RJ45/SFP) 48 port 10/100 Mbps	80
Administration Office	D Link 24 Port	14
Accounts	D Link 24 Port; 8 Port	8
Web Lab	Manageable Switch 12 Port; D Link 24 port	10
DSKC Project Lab I	D Link 24 Port	20

DSKC Project Lab II	D Link 16 Port	10
Computer Science	D Link 24 Port (two in number)	35
Physics Lab	D Link 24 Port	12
Mathematics Lab	D Link 24 Port; 8 port	24
Geography Lab	D Link 24 Port; 8 port	24
Library Office	D Link 24 Port	11
Library DRC1	Manageable Switch 24 Port; D Link 16 port	30
Amba Dalmia Centre	D Link 24 Port	10

Internet Connectivity and WiFi

The entire college campus has state-of-art high speed WiFi connectivity enabled through 73 indoor and 8 outdoor Access Points. These are managed by a WiFi controller located in the Main Sever Room in Digital Resource Centre 1 (DRC1). The WiFi network enables each and every device on the campus to be connected to the Internet, be it in the academic block, the hostel; or a laptop or a smart phone functioning from the open spaces. All Standalone computers have wireless card and are also connected with WiFi. The speeds on server are:

Download Speed	305.33 mbps
Upload Speed	87.87 mbps

Wireless Network Components		Qty
Dedicated Servers	Acer; Xeon 2.4 GHz Dual, RAM 8 GB, 3 HDD 300 GB	2
Optical Fibre Module	Transceiver 10 UTP + 2 Fibre Terminating Point	3
WiFi Controller	Ruckus; Model: Zone Director 3100	1
Access Points	Ruckus indoor AP; Model ZF-7962	76
	Ruckus outdoor AP; Model ZF 7731	8
Manageable Switches	Switch layer 2 SNMP with 2 GB combo slots (RJ45/SFP) 24 port 10/100/1000 Mbps	2
Unmanageable Switches	08 Port PoE switch: D Link	15

Licensed Software

Software: Windows	**Licenses**
Operating Systems	
Windows Server 2013	1
Windows Server 2008 (DU License)	2
Total Paper License of Windows 7/win 8	80
Microsoft Open License for windows (Admin and Accounts)	25
Other Windows License with Desktop	40
MS Office 13	6
Licensed Software through DU network	
MATLAB 2014 a	
Maxima 5.28	
SPSS 22.0	
Acrobat Reader 9.0 (Full Version)	
Ubuntu 10.04	

Application Software: Mathematics	
Mathematica 7.0.1Site License L3318-0610; Wolfram	30
Mat Lab ML DOC 13A: the MathWorks	26
MatLab Partial Differential Equations Tool Box	26
MatLab Symbolic Math Tool Box	26
Application Software: Physics	
NI LabView Academic Site licence 2012: National Instruments	1
Datastudio Site Licence CI-6871G: PASCO Scientific	Unlimited
Logger Pro 3.8 LP: Vernier International	Unlimited
Coach 6.1 and 6.2: CMA Foundation	Unlimited
Application Software: Geography	
Erdas Imagine 2010 (Leica Geosystems)	5
AutoCad 2009 (Autodesk)	5
JTMaps 1.2 (J Lets Technology Pvt. Ltd.	2
Application Software: Zoology	
FCS express 4 Flow Cytometry Professional (M/s Denovo Software USA)	
Application Software: Library	
Libsys (Libsys Corporation)	
ISM Language Software (CDAC Pune)	
AmbaDalmia Digital Resource Centre for Visually Challenged	
JAWS Freedom Scientific Mumbai	6
Office13	6
SAFA - NAB Delhi	6
LEKHA Freedom Scientific Mumbai	1
Talking Type Writer (Freedom Scientific Mumbai)	1
Application Software: Accounts	
Tally ERP 9	
Application Software: Custom Designed for Administration	
Office Automation with Administration, Payroll and Fee Accounting	
Establishment and Leave Management Software	
Student Admission	
Online Faculty Recruitment	
Online Faculty Appraisal	
Online Time Table	
Online Student Attendance	
Student Attendance Mobile App	

Open Source Software
Ubantu
Turbo C++
Code: Block open source software for C++
SciLab 5.5.2 for windows and Linux
ArgusLab
TreeView X
Discovery Studio
Red Hat Linux
Fedora

Multimedia Projection Facilities

Details of Projector	Location	Qty
Panasonic: PT VX505NEA; 5000 Lumens	Auditorium	01
Sony: 3700 Lumens	Seminar Hall	01
NEC Projector: S/N 1Z4016EC with interactive white board kit EyeRis Micro 5090	Computer Sc. Lab DSKC Lab I & II	03
Hitachi: CP-X4014WN 4000 Lumens	Classrooms	25
Infocus: DPL 2700 Lumens	Classrooms	17
Infocus: DPL 2700 Lumens	Not Mounted	04
Sony: 3LCD XGA VPL EX3 2000 Lumens	B.El.Ed., DRC I, II	03
Total		**54**

Samsung LFD	Location	Qty
Samsung, Diagonal Size 46/47 inches, Resolution: 1920 1080, Brightness: 450 Nits	Front Entrance, Auditorium Foyer	02

4.3.2 Detail on the computer and internet facility made available tothe faculty and students on the campus and off-campus?

Learning Any time, Anywhere is the mission that drives MH. It has been an early leader in use of ICT in education, integrating it in all aspects of campus life. The vast campus LAN system and WiFi permit the community to exploit the full potential of the technology for *Learning Any time, Anywhere*, for diverse purposes.

Digital Resource Centres are shared spaces with a cluster of computers on LAN that can freely and independently be used by students and faculty as these are 'off the time table'. Formal teaching is not scheduled here on a regular basis. Sometimes, these are requisitioned for formal computer-based training programmes or workshops.

Facility	Details	OS	Qty
Web Lab	IBM: P IV 3 GHz, RAM 1.25 GB, HDD 80 GB	Win XP	10
Digital Resource Centre I (Library)	HP: Core 2 Duo 2.4 GHz, RAM 1.5 GB, HDD 80 GB	Win XP	30
Digital Resource Centre II	Acer: AMD Phenom II 2.5 GHz, RAM 2 GB, HDD	Win XP	24
Digital Resource Centre III	Acer: AMD Phenom II 2.5 GHz, RAM 2 & HDD 320 GB	Win XP	56
Amba Dalmia Digital Resource Centre for Visually Challenged (Library)	HP: Core 2 Duo 3 GHz, RAM 1.5 GB, HDD 160 GB	Win XP	10
Digital Resource Centre IV (Hostel)	IBM: P IV 3 GHz, RAM 1.25 GB, HDD 80 GB	Win XP	16

Dedicated Department Computer Labs: These are important teaching-learning assets for all technology intensive courses that make extensive use of computers for course work. The computers here are preloaded with requisite software. Students have access to these beyond formal class/lab timings.

DSKC Project Labs: These are new generation state-of-art Learning Studios. They offer a comprehensive Technology Enhanced Learning Environment (TEAL) for self-driven learning and innovative project work in multidisciplinary contexts, seamlessly integrating computer-based real-time data acquisition systems using a vast range of sensors, video clips, simulations, graphical representation, data analysis and modeling

tools. The layout of the lab and design of the workstations is based on education research to encourage interaction and collaborative group work.

e-Governance and Administration: The college offices are amongst the best equipped and IT enabled units of the college. The Administrative and Accounts section are fully networked with latest configuration computers at each desk. The Principal, Vice Principal and office of the PS are similarly well equipped. All laboratory offices, hostel office, library office, security, server and CCTV control room have excellent ICT access to dedicated equipment. The college has also set up a Reprographics and Digital Resource Centre with high end dedicated equipment. That includes colour printers, scanners and reprographic machines.

S. No.	Reprographic Machine	Qty
1.	Kyocera Ecosys FS 6030 MFP Basic Digital Copier (Size A- 3)Minimum copying speed (cpm): 30, Paper SizeA3/A3,ram (MB):64,Bye Pass: 50 SHEET, Zoom: 50 TO 200%, Category: DUPLEX	1
2	Kyocera Ecosys FS-1135 MFP	1
	Total	2

An Archival Project Room has been established as the college is in the process of digitizing all its student and staff records from 1948, upwards.

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

MH views ICT in education as an opportunity to leap frog to the future of education. It is deeply invested in providing the best technological facilities and leveraging these innovatively for enhancing teaching-learning of all disciplines. Insight gleaned from DSKC activities, is enabling the college to develop Technology Enhanced Teaching Active Learning Environments (TEAL). The ICT Committee meets frequently to evaluate the status of computer and connectivity. The System Network Administrator reports on a daily basis on hardware and software problems encountered, maintenance and upgradation requests. These are quickly addressed. Recent innovative initiatives and future plans entail:

- Procurement of more electronic lecterns
- Installation of more electronic display boards
- Establishment of a state-of-art large capacity Video Conference Room to provide seamless access to online learning opportunities
- Exploring possibility of 4G connectivity on the campus
- Developing Mobile Apps for education as in DU Innovation Project Mobile! MyLab and DU Star Innovation Project Eureka! My Lab for developing lab resources and an adaptation accessible for visually challenged.
- Furthering industry collaboration for developing Mobile based curricular materials including quizzes, question banks, repository of presentations, videos, etc.
- Furthering industry collaboration in developing Mobile Apps for Student Life Management. A teacher friendly, offline Android based Mobile Attendance App has been developed in collaboration with *M/s Guiding Star Digital Publishers LLP Limited* and is being used since 4 January 2016 by faculty members of MH.
- Furthering online international collaborations such as with Enrico FermiLab under Quark Net Project; with George Washington University for the Add-on Course on Rhetoric: Rethinking the Obvious.

- Strengthening international collaborations for starting courses in interdisciplinary emerging areas e.g. Digital Humanities, having already hosted talk and discussion.
- Facilitating an ultra-high speed e-governance backbone for information sharing.
- Enhancing usage of NKN and other resources, including MOOC.

4.3.4 Provide details on the provision made in the annual budget for procurement, upgradation, deployment and maintenance of the computers and their accessories in the institution (Yearwise for last four years)

Budget Head	Expenditure on IT (Rs.)				
	2011-12	2012-13	2013-14	2014-15	2015-16
Procurement	45,68,742	6,66,432	27,78,042	23,58,697	7,85,233
Maintenance	3,68,259	3,07,777	8,27,494	6,03,267	4,88,054
Miscellaneous	5,94,197	4,72,094	6,48,657	8,27,611	9,63,952
Total	**55,31,198**	**14,46,303**	**42,54,193**	**37,89,575**	**22,37,239**

4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/learning materials by its staff and students?

- The college has issued netbooks and laptops to faculty members to enable them to use ICT in education. A large number of faculty leverages the facilities, undertakes development work, and apptly integrates these in teaching-learning.
- The university has given about 1000 laptops for students. Many students prefer to use their own. A survey shows a large number of students use smart phones. This allows faculty to set ICT enabled teaching-learning goal and tasks.
- The college remains cognizant to the need for organizing training and skill enhancement programmes.
- Inasmuch as the college has moved to e-governance and developed a reliable e-communication network with the community of students, faculty and staff, the uptake of technology in all functions of the college is strong.
- Discovering that most students are not interested in basic digital literacy programmes, the college has developed a series of interesting workshops for enhancing use of dedicated software that enhance presentation and communication skills.
- Students are exposed to various resources such as the NPTEL learning materials and videos from IIT-Madras; Spoken Tutorials from IIT-Mumbai; Courses promoting FOSS; Khan Academy Tutorials and other learning materials.
- MH signed up for Google Apps for education in 2004, rolling out applications at its own domain in collaboration with Google Ltd., enabling innovative uses.

4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching- learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

IT infrastructure and ICT resources form the backbone of any modern academic institution. Access to computers on- and off-campus, and availability of fast Internet facilitates the use of online learning resources like documentaries, open courses, online audio-video lectures and other educational materials. Students also creatively use the Internet and online resources for doing projects and assignments. Similarly,

the use of subject specific software helps students to understand conventionally difficult concepts of that subject in a much more informal and interactive manner. Likewise, the IT-enabled classrooms in the college has allowed us to use PowerPoint presentations, online simulations and demonstrations for a more interactive and effective teaching. This has facilitated the use of visual and audio to enrich lectures. Integrating visuals in lectures enhances student involvement and provides a connect to real life situations. Students are often asked to access a link online before commencing a discussion. This makes teaching interactive. A picture is indeed worth a thousand words. Online resources have also been used by college for carrying out large scale surveys and administering questionnaire and interviews. This would not have been possible without the strong IT infrastructure that the college has developed.

4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

National Knowledge Network (NKN) is available on DU Intranet and accessed via the college WiFi. The usage is still limited and is restricted to internet connectivity, video conferencing, and virtual classrooms. Faculty members also use some of the provisional features like video lectures, and learning management system courses. Students and faculty have actively participated in all NKN events at DU including:

- Launch of NKN at DU with an address by Dr. Sam Pitroda and the Vice Chancellor on 23 January 2013, followed by Academic Congress.
- Interactive sessions with Vice Chancellor on several occasions
- Broadcast of addresses by the Hon'ble President of India, Shri Pranab Mukherjee, to students and faculty members of Central Universities, namely,
  - *New Year Message*, 07 January 2014
  - *Parliament and Policy Making*,19 January 2015
  - *Youth and Nation Building*, 19 January 2016

4.4 Maintenance of Campus Facilities

4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

Table 4.4.1: Allocation of Funds (Amount in Rs.)

Heads	2012-13	2013-14	2014-15	2015-16
Building	30,00,000	20,00,000	20,00,000	22,00,000
Furniture	13,000	13,000	13,000	13,000
Computers	60,000	70,000	70,000	80,000
Vehicles	20,000	45,000	45,000	50,000
Any other	8,000	8,000	8,000	8,000

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

As a community, MH invests a great deal of time, effort and funds towards upkeep of infrastructure and sustained maintenance work. In a two-pronged strategy, the top management keeps a close watch on the state of the infrastructure and facilities to identify work to be undertaken and prioritize implementation. It believes that is the

duty of the management to provide the best possible facilities and corrective actions should be taken making redundant the need for complaints, freeing the staff and students to concentrate on their prime duties. However, it is commonly understood by each member of the college community that they are proactive stakeholders who have a role to play in upkeep. There exist a *Building Committee* and an *Infrastructure Maintenance and Sanitation Committee* that has wide spread representation of conveners of pertinent societies and teachers-in-charge. Institutional mechanisms facilitate reporting of faults, requisitioning repair, delegation of work, execution and closure of complaint on certification of work having been done satisfactorily. A specially designed form has been developed for the purpose. A *Complaint Register* is kept with the Caretaker and closely monitored. Major repair and renovation works undertaken follow a protocol that begins with a requisition and consultations with appropriate stakeholder group to create a detailed brief. Expert help of college consultants and college architect is sought where necessary.

In the formal set up, tasks are designated to several staff members including

- caretaker supervision of security and sanitation staff, maintenance of essential facilities and assets in the college and staff quarters;
- site engineer, who oversees construction, repair and renovation projects entailing civil, plumbing, electrical, and interior works following due procedures, in consultation with college architect or consultants;
- full time electrician for fixing electrical line and panel faults, maintenance of Generator Set, air conditioning, functioning electrical equipment, of audio-visual systems for events/performances; overall state of electrical equipment, communication lines; etc.
- part time plumber ensuring adequate supply of water, functioning of bore wells, pumping of water, regular cleaning of storm water and sewage drains; adequacy of facilities in toilets; underground/overhead tank and industrial RO maintenance;
- sanitation and security is outsourced;
- MH has Annual Maintenance Contracts for select equipment and facilities.

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?

Given the huge inventory of equipment, diversity of technical specifications, procurement and maintenance costs involved, no single policy can be adopted. The broad institutional guideline for procurement is to carry out rigorous market survey and buy the best so that it retains calibration and gives a glitch free performance over a long period. At the time of procurement, the warranty conditions are a key parameter. Where possible these are negotiated so as to extend the service period for critical equipment as much as possible within the budgetary constraints.

The college has evolved a practice wherein it is well understood that all equipment, small or big, must be in perfect working condition and meet the technical specifications of accuracy and precision so that it yields reliable and valid results. End users are required to take ownership and responsibility for all equipment. The stated policy is that equipment must be in good condition and working at all times. It should be recalibrated in-house where possible using scientific protocols. Else, the fault should be quickly diagnosed with requisite technical help. If the equipment is declared unserviceable, following due process it should be written off and then disposed off with the permission of the Governing Body. Due diligence is exercised in this process, especially for disposal of e-Waste where the report of the DU

Radiological Officer is sought before proceeding. An AMC is taken for machines and equipment that require periodic maintenance at high frequency. This list includes high end reprographic machines, the industrial reverse osmosis water plant, air conditioners, EPBAX system, CCTV network, WiFi network, etc. Laptops issued to students and staff are serviced at last once a year or on request.

4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

The college is a vast store with range of equipment that is dynamically being put to use. These range from basic, low cost devices to those that are extremely sophisticated and expensive. Safekeeping, appropriate use and maintenance of all resources is a prime concern. Designated staff who are the prime custodians are imparted training and deal with equipment on a daily basis.

Electrical and Electronic Equipment:

- Servo Stabilizers, Inverters, Surge Protection and Power Conditioning devices are used where necessary. All computer clusters on LAN use power through Online Uninterrruptible Power Supply (UPS) with 2 to 3 hour backup.
- The college has installed a Diesel Generator set; this has been procured from Sudhir Power Ltd, a top power generation equipment company and is a silent type with prime power rating of 320 kVA, 415 V with 1500 rpm, suitable for 50 Hz 3-phase system with AMF panel.
- Pipe Earthing is provided using (i) 3 to 6 m long galvanized iron (GI) pipes that are buried inside earth; or (ii) GI or Copper flat plates buried at depth of 3 to 6 m. The earthing is located near science laboratories and major clusters of computers such as near the Administrative Block, Physics, DSKC Research and Project Labs, Digital Resource Centres, Library, and the Hostel kitchen and offices.

Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.

New Academic Block: Construction Work is going on. The L-shaped building is separated into 2 sections. One section is dedicated to lecture rooms and the other section is meant for large continuous laboratories. The building once completed will be eligible for a five star GRIHA Rating. Given below are some of the green features used in the building.

- Insulated cavity wall construction for all external walls to reduce heat gain.
- A single sided deep corridor on the western facade opening on to an internal courtyard with high level ventilators to enable cross ventilation.
- High performance insulation on roof surfaces to reduce heat gain.
- Incorporation of existing site features including trees within the building.
- Use of sun control devices and shaded windows on all facades to reduce heat gain.
- High performance glazing for windows to reduce heat gain.
- Use of low flow fixtures to reduce water consumption.
- Recycling of rain water and anaerobic treatment plant for all water discharge.
- Appropriate lighting with monitored lux levels and daylight harvesting to reduce lighting loads and electrical consumption in the building.
- VRF air-conditioning systems to enable comfort level on demand and reduce running cost of the building.
- Incorporating Solar panels in building design at roof level to reduce grid connected loads in the building.

Criterion V

Student Support and Progression

5.1 Student Mentoring and Support

5.1.1 Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

College Prospectus is published annually coinciding with the admission schedule for the fresh batch of students. It provides pertinent information about the college and the admission process to prospective students. Typically, it carries a welcome message from the Principal, brief overview of the college, its mission, its history, and structured information on

- *Academic Programmes:* Courses offered along with number of sanctioned seats; Course details; Department wise faculty list; Add-on Courses
- *Admissions:* Important dates; Procedure for Admission; Fee Structure; Procedure for Admission to the Hostel
- *Campus life:* Extracurricular and Co-curricular activities; Infrastructure; Leisure facilities; Research and education outreach; International Collaborations; Placements, Career and Education Advancement; Discipline, Ordinances on Anti-ragging and Sexual Harassment

Hostel Bulletin of Information provides essential information on the hostel facilities, process of admission, hostel fee, and the hostel rules.

Handbook of Information is distributed to the new batch of students on the first day of the academic year after the Orientation Programme; and to students of II and III year at the time of payment of the college fee for the year. It provides information on

- Administrative Structure: Principal, Vice Principal,Bursar; Administrative, Accounts Section and Library staff; Departments Teachers-in-Charge
- Extracurricular and Co-curricular Activities and Faculty Conveners
- Statutory Committees on Discipline and Empowerment
- Student Entitlements:
  - Student Documents: Identity Card, E-mail; course/subject change; Bona fide and Migration Certificate; Withdrawal; Transcripts; DTC, Rail/Air Concession
  - Fee and Financial Assistance: Payment, Refund, Bank Accounts, Bursaries, University and Government Scholarship Schemes including reserved category
  - Awards and Fellowships: College Academic and Extracurricular Awards; Scholarships for Resident Scholars, PwD.
- Student Life
  - Facilities; Extracurricular and Co-curricular Societies
- Academic Requirements (Statutes and Ordinances): Absence and Leave, Attendance, Internal Assessment, Conduct Rules at Examinations, Classification of Results, Eligibility for award of Degree, Promotion Criteria
- Discipline: Code of Conduct; Prohibition and Punishment for Ragging; Sexual Harassment policy and Internal Committee; Statutory Undertakings
- Oversight: Grievance Committee Schedules
- Academic Calendar; Activity Calendar
- Campus Details: Layout Plans; Getting about
- Security: College, Police and Women Desk Helpline numbers

Handbook on Anti-ragging is an important booklet distributed to all students at the beginning of the academic year to reiterate zero tolerance on ragging.

With student centric policies, the college ensures that all processes are streamlined and the best service is provided to all stakeholders.

5.1.2 Specify the type, number and amount of institutional scholarships/freeships given to the students during the last four years and whether the financial aid was available and disbursed on time?

The demographic profile of the college is increasingly that of the country. About 60-70% students come from outside of Delhi. Many are first generation learners from low income groups who have through their own hard work made it to the college meeting the high eligibility standards. Further, honoring diversity and affirmative action, MH endeavours to fill the reserved seats as mandated. MH encourages students to apply for fee waiver, bursaries and scholarships offered by it and various outside agencies. Several measures have been implemented to provide timely help. At the time of the admission, provision is kept for financial assistance to deserving applicants who would lose out on admission if the fee is not paid within 3 days for each announced list. Students are asked to apply for College Bursary within a month of admission/start of the new academic year. Following due process, need based financial assistance is given early in the academic year. A staff member is designated to assist students applying for State Scholarships and those requiring online registration. Target dates and procedures are clearly notified and personalized help rendered in the application process. Donations to MH, an educational institute of national eminence, are exempt from tax under section 80G. A concerted effort is being made to raise endowments through the *Give to Miranda* initiative. The Principal's Fund for Needy Students is used for providing financial assistance and meeting emergent needs of a student in sudden financial distress, say due to loss of a parent. A large number of students are recipients of prestigious merit based scholarships. For instance, the college has a large number of DST INSPIRE fellows at both UG and PG level receiving annual fellowship of Rs. 6000 and Rs. 12000, respectively. The table below does not include the very large number of first year students in current year who have applied to DST and some other government agencies and will eventually receive funding, as past experience shows.

PwD Students: Following affirmative action policies, the college provides fee waiver to students with disability. Students in residence also receive waiver in establishment fee and mess fee in accordance with DU rules.

Table 5.1.2 (a): Summary of Financial Assistance from Various Agencies (Amount in Rs.)

Agency	2012-13		2013-14		2014-15		2015-16	
	No.	Amount	No.	Amount	No.	Amount	No.	Amount
College	256	879006	393	1173700	286	1619858	268	1503946
DU	82	136300	53	194560	62	104770	38	132000
DST INSPIRE	0	0	169	12420000	116	11760000	151	17160000
Govt.	51	502510	11	110141	8	77240	35	308472
Others	0	0	34	247000	37	281600	8	56932
Total	**389**	**1517816**	**660**	**14145401**	**509**	**13843468**	**500**	**19161350**

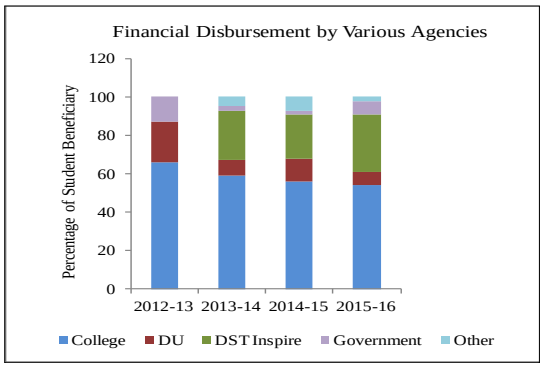
Table 5.1.2 (b): Financial Support to PwD Students in Hostel and College (Amount in Rs.)

Financial Year:	2012-2013		2013-2014		2014-2015		2015-2016	
Financial Waivers	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Hostel:								
Visually Challenged	14	470800	21	767050	23	819700	24	791700
Other Disability	06	202200	05	178000	04	142400	03	113100
College:								
Visually Challenged	33	281996	41	358740	49	411296	63	532820
Other Disability	11	113118	16	150208	20	189216	17	171104
Total		**1068114**		**1453998**		**1562612**		**1608724**

5.1.3 What percentage of students receive financial assistance from state government, central government and other national agencies?

About 10% students receive financial assistance from the Government agencies. Another 10% receive assistance from the college and the university.

Fig. 5.1.3 (a): Students receiving Financial Assistance and Amount Disbursed



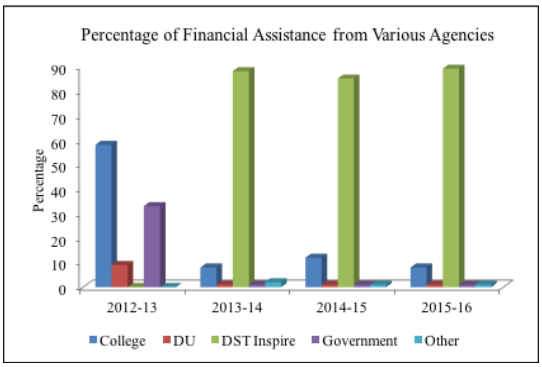
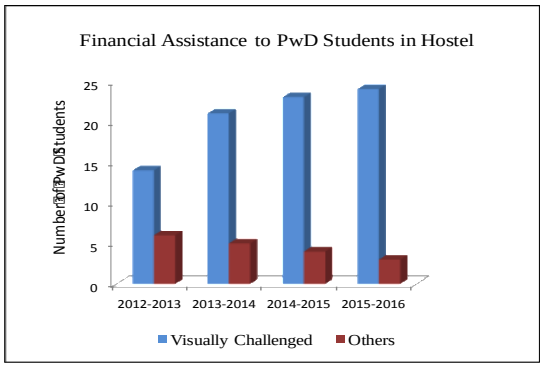
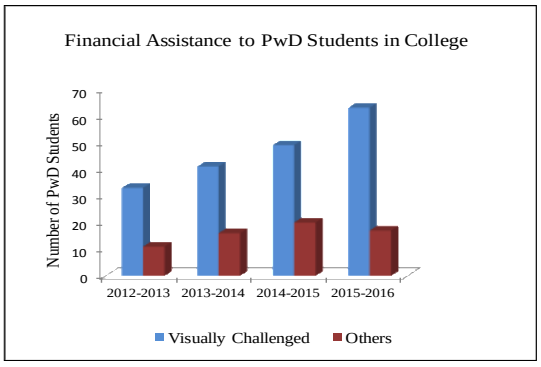
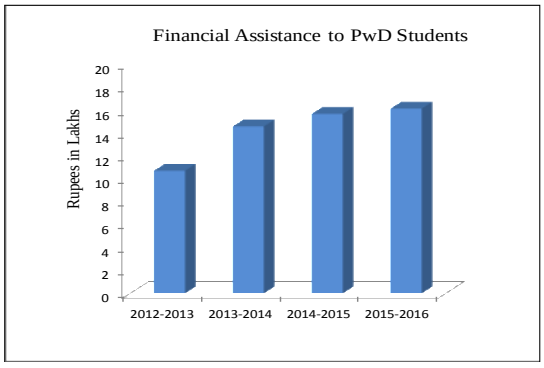
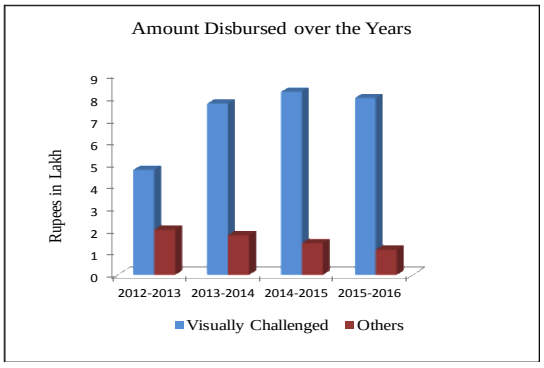


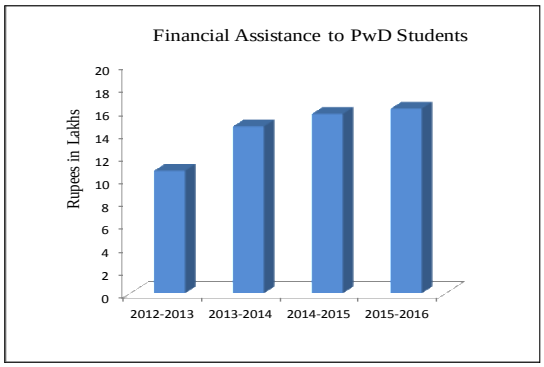
Fig. 5.1.3 (b): Financial Assistance to PwD and Amount Disbursed











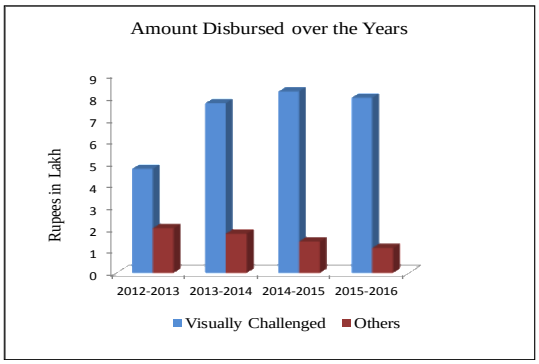


Table 5.1.3 (a): Financial Assistance to Arts Students from Various Agencies

Course	2012-2013					2013-2014				
	Total	College	DU	Govt.	Others	Total	College	DU	Govt.	Others
Bengali	4	4	0	0	0	3	3	0	0	0
Economics	7	7	0	0	0	12	10	2	0	0
English	14	10	0	4	0	10	9	0	0	1
Geography	12	11	0	1	0	7	6	1	0	0
Hindi	73	35	12	26	0	170	82	17	57	14
History	15	10	1	4	0	29	23	0	2	4
Music	4	4	0	0	0	8	8	0	0	0
Philosophy	10	2	1	7	0	12	10	1	1	0
Political Sc.	14	12	2	0	0	33	30	1	0	2
Sanskrit	11	11	0	0	0	26	20	4	1	1
Sociology	8	6	0	2	0	9	9	0	0	0
B.A. Prog.	121	51	23	47	0	114	53	5	52	4
B.El. Ed.	11	7	4	0	0	12	11	0	0	1
Total	304	170	43	91	0	445	274	31	113	27

Course	2014-2015					2015-2016				
	Total	College	DU	Govt.	Others	Total	College	DU	Govt.	Others
Bengali	3	3	0	0	0	2	2	0	0	0
Economics	16	8	1	7	0	4	4	0	0	0
English	18	13	1	4	0	9	9	0	0	0
Geography	13	7	0	6	0	17	11	2	0	4
Hindi	121	60	11	34	16	93	44	13	36	0
History	32	17	2	11	2	24	15	3	5	1
Music	5	5	0	0	0	13	12	0	0	1
Philosophy	15	11	0	4	0	7	7	0	0	0
Political Sc.	27	14	2	7	4	33	15	6	12	0
Sanskrit	27	14	0	12	1	20	15	0	5	0
Sociology	10	6	0	3	1	6	6	0	0	0
B.A. Prog.	109	39	5	56	9	93	27	3	63	0
B.El. Ed.	8	3	0	5	0	6	6	0	0	0
Total	404	200	22	149	33	327	173	27	121	6

Table 5.1.3 (b): Financial Assistance to Science Students from Various Agencies

Course:	2012-2013						2013-2014					
	Total	College	DU	DST Inspire	Govt.	Others	Total	College	DU	DST Inspire	Govt.	Others
Botany	21	13	6	0	2	0	38	24	0	14	0	0
Chemistry	37	21	12	0	4	0	62	31	5	25	1	0
Mathematics	18	16	0	0	2	0	66	17	0	44	0	5
Physics	37	13	20	0	4	0	88	20	4	64	0	0
Zoology	10	8	0	0	2	0	26	8	1	17	0	0
Life Science	6	5	1	0	0	0	11	5	4	2	0	0
Physical Sc.	10	10	0	0	0	0	27	14	8	3	0	2
Total	139	86	39	0	14	0	318	119	22	169	1	7
Course:	2014-2015						2015-2016					
	Total	College	DU	DST Inspire	Govt.	Other	Total	College	DU	DST Inspire	Govt.	Other
Botany	33	9	10	14	0	0	25	12	0	13	0	0
Chemistry	44	16	9	19	0	0	49	14	0	32	3	0
Mathematics	46	21	0	20	1	4	57	28	0	26	3	0
Physics	84	17	16	48	3	0	80	13	7	60	0	0
Zoology	29	8	5	9	7	0	30	8	4	18	0	0
Life Science	5	4	0	1	0	0	6	4	0	2	0	0
Physical Sc.	16	11	0	5	0	0	18	16	0	0	0	2
Total	257	86	40	116	11	4	265	95	11	151	6	2

5.1.4 What are the specific support services/facilities available for students from SC/ST, OBC and economically weaker sections, students with physical disabilities, overseas students, students to participate in various competitions National/International, medical assistance, coaching classes, skill development, support for slow learners, exposure to students from other institutions, corporate houses, publication of student magazines.

Since its inception, MH has been known to stand for empowerment of women from all strata of society, be they from the college or outside it.It recognizes the inherent challenges in creating an egalitarian ecosystem that is culturally sensitive and free from all forms of discrimination and constraints. This comprehension propels it to continually work towards providing an environment that is secure, accessible, liberal, respectful and welcoming, irrespective of caste, creed, religion, nationality, socio-economic status or physical ability. MH fulfills its statutory obligations by admitting the stipulated percentage of reserved category and differently abled students.

Students of SC, ST, OBC and Other Weaker Sections

Equal Opportunity Cell addresses all concerns of the SC, ST, OBC and other weaker sections. The prime objective is to ensure timely help is available to students in need.

Each year an Orientation Programme is organized to acquaint students with the year long activities planned by the Cell. Information on various scholarships available from the college and also the ones provided by the Ministry of Human Resource Development and Ministry of Social Justice and Empowerment is disseminated to the students. Through the year, Interactive Sessions are organized with individualized notices sent to all departments to ensure widespread participation of students. This gives an opportunity to address grievances, carry out a survey of the areas in which the students would like academic support, get data on the skill sets they perceive as important and any career oriented add-on course they would like to pursue. Data gathered shows fluency in English Language is the highest on the wish list. It is found, however, that the students prefer the inclusive classroom and not enough take advantage of the opportunities being offered. An illustrative list of programmes organized by the Equal Opportunity Cell is given below:

- The highlight of 2015-2016 was a 30 hour *English Speaking-Listening Course* designed to help students who are extremely weak in the language, many being first generation learners. It aimed to integrate English with its usage in the real life context. The course used an activity/task-based approach to teach spoken English. In all 24 students successfully completed the course.
- Since 2013-14, the Cell has been running an Add-on 80-hour *English Language Proficiency Course* (ELPC). A certificate is awarded on successful completion. For better interactivity, the batch size is 25.
- Five students participated in a five day *Capacity and Life Skills Building Course* conducted by the Department of Adult Continuing Education in October 2013.
- Short term certificate course on skill development titled *Breaking Barriers* in collaboration with National Skills Institute *Lok Bharati* in March-April 2012. This included modules on Language and Communication, Logical and Creative Thinking, and Interview Readiness. 124 students participated.

The activities of EOC are not limited to remedial instruction. One of the most successful programmes was a talk on *Epistemology of Social Exclusion* by Prof. Vivek Kumar, Department of Sociology, DU, organized in 2016 attracting faculty and students from all departments. Pertinent questions like exclusion in syllabus and public spaces with special reference to the *Shani-Shignapur* temple were raised. Discussions also veered to Women, Minority and the Third Gender.

Students with Physical Disabilities

***Lakshita*, the Enabling Society** was set up by the Staff Council in 2006 to address special needs of students with disability. Before this, NSS was solely responsible. The Faculty Convener of *Lakshita* working in consultation with other faculty members and student executive members on this society, is empowered to make recommendations on all aspects of student life of those with disability, and the visually challenged in particular as the number is significantly larger. The society organizes an orientation programme titled *Samdrishti* for visually challenged students. It also works closely with NSS volunteers who provide critical support to visually challenged students through reading, writing and accompanying them to events. There are annual seminar on Deconstructing Disability and Placements.

Amba Dalmia Digital Resource Centre for Visually Challenged Students (ADDRC) is committed to providing an enabling environment and state-of-art assistive technologies to the visually challenged members of MH community. First of its kind at DU, ADDRC was established within the library premises on the ground floor with

an endowment of Rs. 5 lakh from alumna and subsequently faculty member Dr. Manju Kapur Dalmia in 2005-06. The college also expended funds and continues to invest generously in its infrastructure, academic needs and manpower requirements. The day to day functioning and upkeep of ADDRC is under the direct charge of the Librarian as the Centre is an integral part of the Library. A Library Attendant, who is himself visually challenged and well versed with use of technology, has been assigned duties exclusively in this area and assists students with basic training for use of technology. Close linkages are maintained with the Equal Opportunity Cell at the University. The Convener of *Lakshita*, the Enabling Society, monitors facilities, and based on feedback, recommends how best to improve functioning of ADDRC.

Special Measures include issue of laptops (64), Angel Players (23), MP3 Players (16) and smart canes to those desirous. The college also displays notices in braille, tactile maps. Special permission is given to visually challenged students to retain laptops and recorders that have been issued to them till after examinations. With no specific award in 2005, today the college has 22 awards for PwD students. The financial support is in addition to fee waiver and the assistance obtained from government agencies.

Table 5.1.4 (a): Fellowships for PwD Students 2015-16

S. No.	Award	Number	Amount (Rs.)
1	Buti Foundation	3	30,000
2	R.R.P Sharma Memorial award	1	5,000
3	Amba Dalmia Fellowship	2	10,000
4	Savitri Jolly Award	1	5,000
5	Yashoda Trust Fellowships*	15	75,000
	Total	22	1,25,000

*Each award has a unique name after the person it commemorates

Overseas Students

Foreign students add to the diversity of the college. In addition to the regular students pursing the degree programmes, the college also attracts casual students from USA and Europe who come under the exchange programme through the office of Dean of International Relations, DU. There is a rather large population of Tibetan students. About 5% seats are reserved in the hostel for foreign students.

Table 5.1.4 (b): Distribution of Overseas Students

Academic Year	I		II	III	M.A. Previous	M.A. Final
	Regular	Casual	Regular	Regular	Regular	Regular
2011-12	14	02	17	09	07	01
2012-13	17	03	11	14	03	02
2013-14	15	01	17	09	02	02
2014-15	15	05	11	17	05	02
2015-16	16	04	13	11	03	04

Foreign Students Association **(FSA)** assists overseas students to overcome the feeling of isolation through carefully designed programmes. It includes Indian students who facilitate peers from other countries and going beyond the tourist circuit, help them explore life in the city. Cultural performances by foreign students regularly feature at the Founder's Day and other prestigious events. FSA organizes extremely successful multi-cuisine food festivals, dance and music performances with breathtaking ethnic splendor of dresses. The faculties pay special attention to

academic performance of foreign students in their classes and provide the requisite scaffolding. Language is often a concern. Many students join special classes for improving fluency with English in addition to the local language.

Performance and Progression of overseas students at Miranda House has been consistently very good. They are subjected to the same rigour as others. Most maintain high attendance in classes, integrate well and participate with great enthusiasm in all college events. Many bring laurels to the college long after they leave. The most famous exchange student was Gloria Steinem who at the age of twenty stayed at the college for 6 months as a Fulbright Scholar and went on later to start the feminist movement. Sri Lankan alumna Jayanth Kur-Utumpal, B.A. (H) English(2000-2003) after scaling Mt. Kilimanjaro, Mt. Kinabalu, and the Andes, has successfully scaled Mt. Everest, becoming the first Sri Lankan, and the first MH student to do so.

Support to DU Foreign Students Associations helps expand the circle of friends for college students. MH routinely loans its auditorium and premises to the Korean Students Association for organizing their annual festival. Overseas students organized the Thai International Day in 2010 wherein the ambassador of Thailand in India and diplomatic staff participated actively in a mesmerizingly beautiful programme with chanting of Buddhist hymns, traditional dances, music, display of martial arts and film highlighting the culture and historical sights of Thailand. In 2011, DU Korean Students Union organized Korean Irresistible Film Festival. In 2012 Tibetan students in the college took initiative in organizing an event to sensitize their classmates and teachers about the contemporary ground realities in Tibet. Close associates of Dalai Lama addressed students. In 2013 a session was held with Free Tibet volunteers. The college hosted Dr. B. Tsering, Principal, the Dalai Lama Institute for Higher Learning, Mysore, and Mr. Tsewang Yeshi, Principal, TCV Schools in India, to understand better the needs of the Tibetan students. A foreign students competition was organized as part of *Tempest*, in which students of various nationalities participated. The performances included stories, dances, songs and poetry from Mauritius, Tibet, Sri Lanka and Belize.

International Student Visitors are welcomed under several collaborative programmes with foreign universities that include short duration academic exchange; and events entailing participation by international students and faculty, such as *Manzar*, the South Asian Debating Tournament, the workshop in collaboration with Wisconsin University and the annual Indo-Dutch workshop, Management in Cultural Contexts. The college also hosts scholars on short duration research visits to work independently, with college or DU faculty. The students on these programmes are routinely offered campus accommodation. The bonding with Indian cohort is seen to be extremely strong and friends are made for life.

Helping Students Participate in Various Competitions/National and International

MH proactively creates opportunities for students to represent the college at other institutions and compete with peers from across the country and globally. All enrichment activities at MH are thrown open to students from other colleges, both men and women. MH students are well networked with other institutions and regularly participate competitively in DU inter-college and inter-university events. Students are encouraged to present papers and posters in academic seminars and have won several top awards. The international participation is increasing rapidly.

- Nayantara Sarma, Economics (H) III, represented DU at the workshop *Wonders of Friendship: Thailand and the South East Asian Countries*; Bangkok; 2009
- Aditi Dave, Chemistry (H) III, represented DU; Melbourne, Australia; 2012
- College selected 9 students to participate in *Jenesys*.
- DU selects visually challenged students for participation in various events.
- 8 to10 students are selected each year to participate in the Indo-Dutch Workshop Management in Cultural Contexts at Utrecht Business School, Utrecht, The Netherlands, in June-July.
- S. P. Jain Global School of Business has been selecting students to visit their campuses in Dubai and Singapore. So far 6 students have participated.
- Many MH students participate in the King's International Summer School.
- 5 students were selected as volunteers for the WIN International Conference.

Medical Assistance to Students: Health Centre, Health Insurance : *Refer 4.1.6*

Group Personal Accident Insurance: Students are covered under a Group Personal Accident Insurance Policy that covers accidental death, permanent total disablement, permanent partial disablement and terrorism benefits and medical extension on inpatient as well as outpatient basis. Maximum any one life limit is Rs. 1 lakh. The premium of Rs. 100 per student is charged under the fee. No student is allowed to go on a college field trip or excursion without this policy cover.

Health Insurance: Awareness programmes have been conducted to encourage students to consider health insurance as an important part of life management. Understanding the insurance sector and developing an understanding of various insurance instruments is considered a useful life skill. The college, however, does not promote any single instrument or policy. Many students have family health insurance benefits. The diversity of backgrounds and aspirations suggests this can at best be a voluntary option.

Organizing Coaching Classes for Competitive Exams; No such classes are offered.

Skill Development (spoken English, computer literacy, etc.): ***Refer 2.2.3*** and ***2.3.5***

Support for Slow Learners: Remedial Teaching. ***Refer 2.2.3***

Exposures of Students to Other Institutions of Higher Learning/Corporate/ Business House, etc.: *Refer 3.7.2 and 5.1.9.*

Publication of Student Magazines: *Refer 5.3.4.*

5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.

College views entrepreneurial skill as an essential life skill. It believes each student should be capable of standing up on her own feet and being self employed, irrespective of the career choice she makes. It is also seen as a powerful instrument for helping in improving lives of marginalized communities with whom students interact under outreach programmes.

Entrepreneurship Cell: Founded 7 years ago in 2009, the Entrepreneurship Cell aims to foster in students acumen for building a successful enterprise. Workshops are held to develop organizational and project management skills. Students learn to make business plans, hone decision making and communication skills. Students gain knowledge about businesses and ventures through interactive sessions with invited entrepreneurs. Annual Business Fest *Croesus,* Youth Entrepreneurship Summit

(YES), B-Inquizitive – the quiz contest, workshop by iSEED focusing on Women Empowerment and Entrepreneurship, National Youth Idea and E-Film are illustrative of events organized.

Enactus: Earlier called *Students in Free Enterprise (SIFE)*, this international movement is led by KPMG. It networks students with industry leaders, academicians and NGOs. Students are mentored and exposed to positive power of business. The students learn organizational concepts by modeling their group as a corporate entity with clear business plans. Given seed money, they are expected to raise resources. The efforts are directed towards providing real, sustainable benefits to local communities. It is a perfect forum for developing leadership skills, sense of service and responsibility. The annual series of regional, national and international competitions culminating in the Enactus World Cup evaluate the projects. MH chapter has several well established projects such as *Zaffran* and *Tarang* that engage community of women to package, organize spices and fashion accessories, respectively. In 2013 and 2015 *Zaffran* won a financial grant worth Rs. 16,000 from Walmart. Mahindra Rise granted a sum of Rs. 40,000 in the years 2014 and 2015. Finally, it won the KPMG Ethics Grant worth Rs. 50,000 last year. The spices have been sold at various college events across Delhi to create its brand value.

Made in Miranda: Years of work have led to establishment of the MH Paper Recycling Plant and Compost Plant. The college takes great pride in the hand made paper products crafted out of paper made in-house. These are used as souvenirs and mementos and carry the label *Made in Miranda*. Efforts are on to scale up with more manpower for making it a viable business.

Academic Workshops: The Indo-Dutch Collaborative Workshop *Management in Cultural Contexts* was conceptualized at MH to promote global understanding of entrepreneurship and business management. Although the college does not offer Commerce as a discipline, its association with the Utrecht Business School and SRCC has thrived since 2008. Students develop an innovative business plan as part of project-based learning. The workshop is extremely successful in imparting interpersonal skills in a globalizing world.

5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities, etc. additional academic support, flexibility in examinations; special dietary requirements, sports uniform and materials; any other.

It is mandatory for all students to opt for co-curricular activities choosing between NSO, NCC and NSS.

Physical Education and Sports Department ensures the highest standard of training for the selected sportswomen and various teams. To this end, it employs the services of qualified coaches from professional associations. For the 14 games/sports played competitively at Miranda House, there are 14 coaches. Track is kept of all competitive events and special opportunities to showcase sporting talent. The Department takes care of timely registration and payment of entry fee. For high level of participation, the fitness and competence of each individual player is monitored. The following entitlements are effectively implemented.

1. Special dietary arrangements are made; each player is given Rs. 30 during practice session and Rs. 50 or Rs. 100 during tournaments.
2. One set of suitably designed Sports Kit and gear is provided to each player.

3. Transport is arranged for the playes and teams on priority basis as and when required.
4. First aid is always available for students who may injure themselves on the sports field. A protocol for handling sports injuries and mishaps has been developed.

Celebrating achievement is important. The college has instituted several awards for winning teams and players. There are 6 special awards in the form of a Trophy and Cash Prize for outstanding sportswomen.

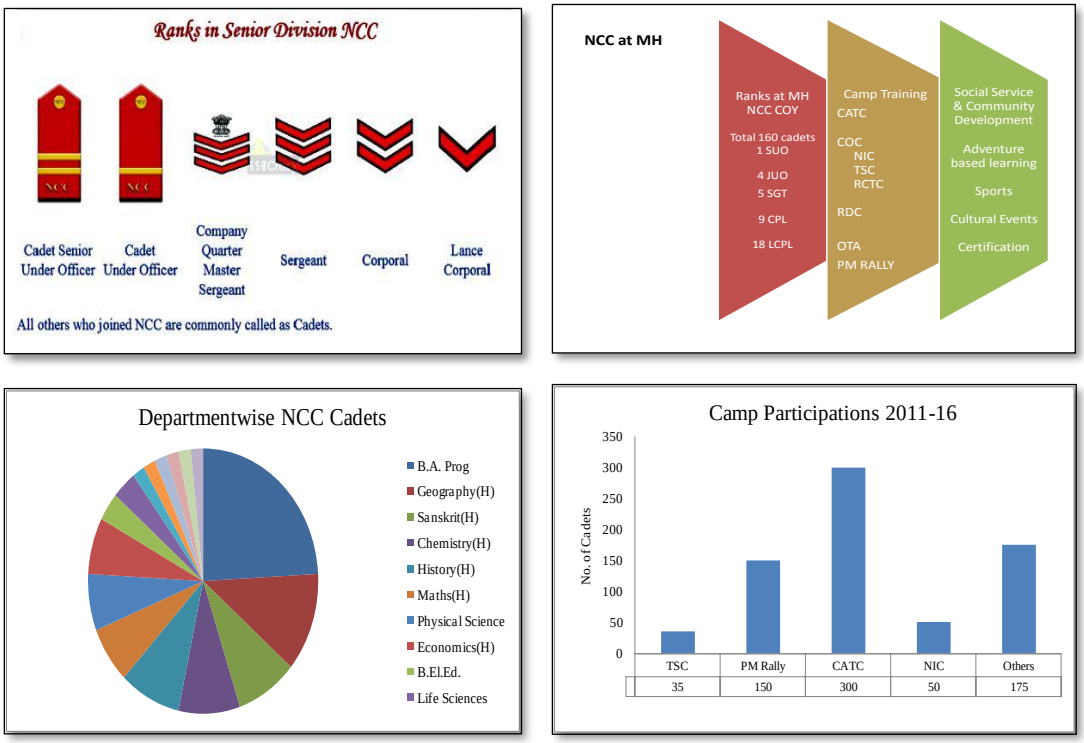
National Cadet Corps (NCC) appeals to the idealistic minds of young students and is quite popular. The mission of the college resonates with the stated aims of NCC that is to:

(i) develop character, comradeship, discipline, a secular outlook, the spirit of adventure and ideals of selfless service amongst young citizens; and

(ii) create a pool of organized, trained and motivated youth with leadership qualities in all walks of life, who will serve the Nation regardless of which career they choose.

Thus the college sets great value in supporting NCC in best possible ways. Miranda House Platoon, MH Company (COY3), is under 1 Delhi Girls Battalion located at Kashmiri Gate, Delhi. It has a sanctioned strength of 160 cadets and many of those desirous of joining are left out. The process of selection is rigorous and meets visual and physical fitness standards as prescribed by NCC directorate. The unit also enrolls girl students of other neighbouring colleges that do not have an NCC women unit, namely, SGTB Khalsa College, which is across the road from Miranda House. MH COY 3 functions under the leadership of faculty adviser termed as the Associate NCC Officer (ANO). Miranda House is fortunate to have as ANO, Dr. Ritu Ahlawat, who is herself a well trained and designated Captain rank officer. The unit attracts students from all departments as is seen from the pie chart distribution.

Fig. 5.1.6: NCC: Profile of Students and Activities



Training for cadets takes place twice a week in the afternoon. Special classes are also held at 1 Delhi Girls Battalion Headquarters. As part of the drill, in addition to fitness training and parades, cadets learn map reading, weapon training, first-aid, tent pitching, civil defense, leadership training, adventure training, social service, besides march past.The cadets at Miranda House are a motivated cohort. They are always ready to volunteer at all events, including those of the university. The college likes to showcase their achievements at every possible opportunity. It is normal practice for smartly dressed cadets in uniform to escort distinguished guests at the Founder's Day, etc. They have the following entitlements:

- The Directorate provides every NCC cadet one pair of Khaki uniform, a white suit, shoes made of leather, beret, socks and Dupatta. A uniform washing allowance is given.
- Every cadet enrolled in NCC gets refreshments and Rs. 45 per day for training.
- NCC cadets are eligible to and receive special scholarships each year like the Sahara scholarships for Rs. 12,000, and Cadets Welfare Society Scholarship of Rs. 6000 given by the Delhi Directorate
- The college has instituted two 'Best Cadet' awards to promote competition and encouragement among students
- The college organizes NCC fest *Nishchay* every year at inter-college level to test the skills of cadets through a variety of competitions.
- Rank Award Ceremony is a major event for NCC where officers from Delhi Directorate decorate the MH cadets with their ranks.

The college ensures in case of a student who is selected to participate in the annual NCC camps or any allied NCC activity with the approval of the Principal is allowed the following provisions:

1. Additional time for submission of written assignments.
2. Alternative mode of evaluation in lieu of the House examination.
3. Benefit of attendance for internal assessment for the classes missed as per the existing provision of Ordinance VII.2.(9)(a)(i).

5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR-NET, UGC-NET, SLET, ATE/CAT/ GRE/TOEFL /GMAT/Central /State services, Defense, Civil Services, etc.

As such, no structured assistance is provided to students taking the above competitive examinations. UG students preparing for CAT and Civil Services prefer to take private coaching. The data on those taking GRE/TOEFL/GMAT is not available. Inasmuch as teaching of PG courses is at the University level, very few PG students seek help of the college as they prepare for NET. The college undertook a survey to determine how best it could help students taking these examinations. There was very little expression of interest, largely because of proximity of a large number of coaching centres in the university area that entice with claims of high success rate. The faculty contributes to the education and career advancement of students in a variety of ways. Students are always encouraged to discuss their plans related to higher study including research and their choice of career. They are encouraged and guided to appear for the entrance exams for post-graduate studies in prestigious institutions and universities in and outside the country. The help rendered includes rigorous discussion on course material, books, approaches to problems and

perspectives and on research proposals. The continuous interest taken in the academic and career choices of students which includes teaching, the administrative services, publishing, the mass media and pure research, contributes to an abiding and enriching relationship of the students with the faculty and the institution.

5.1.8 What type of counselling services are made available to the students (academic, personal, career, psycho-social, etc.)

The college accords high priority to the counselling process, given the fact that nearly 70% students come from outside Delhi, several are first generation learners and the full range of diversity exists within the college community, be it in terms of differing socio-economic and educational backgrounds, differing ethnicities, cultures, religious affiliations, or student's abilities. Problems of relocation, sudden independence, social activity, technology mediated social networks, peer pressure, and intense competition pose several challenges to the individual. Counselling is used to provide timely help to students having emotional, behavioral, academic, social or other adjustment concerns. Although the teacher-student bonds at Miranda House are very strong, mentoring is often not enough and professional quality mental health interventions are often necessary to help students establish realistic goals and develop active short-term treatment solutions.

Psycho-Social Counselling and Guidance Unit: The college has established a Counselling Unit on the campus. Its mission is to enhance student well being and offer them a meaningful and successful college experience. This entails helping them evolve as confident and well-adjusted young women capable of handling any situation. ***Refer 2.3.7.***

Academic Counselling: This begins from the time of admission when the faculty members deputed at the Public Relations Office answer queries of prospective students unable to makeup their mind on what course to choose. The faculty members also assist students seeking advise, particularly in B.A. Programme wherein a large number of course combinations are on offer. The dilemma of choice is again visible when students select from options available for Generic Elective, Interdisciplinary, Concurrent Courses, etc. For second and third year students, departments often organize orientation programmes and road shows to enable well informed choice. Students are encouraged to seek personal advice when doubts persist. Subsequently, students fill well-designed survey forms on basis of which they are allocated optional courses. This data becomes the basis for organization of teaching. Students are given a chance to change the option up to an announced date. Individualized counselling becomes necessary in rarest of rare case where a course cannot be offered because of lack of viable number of students or when a student remains unsure despite extensive discussions.

Career and Education Advancement Guidance: The faculty contributes to the education and career advancement of students in a variety of ways. Students are always encouraged to discuss their plans related to higher study including research and their choice of career. They are encouraged and guided to appear for the entrance exams for post-graduate studies in prestigious institutions and universities in and outside the country. The help rendered includes rigorous discussion on course material, books, approaches to problems and perspectives and on research proposals. ***Refer 5.1.9.***

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).

Internships, Placements and Education Advancement: This provides a platform for disseminating information on career opportunities and avenues that students can explore further in pursuit of a career. It provides a forum for companies and students to interact and work together. Offers come in the form of internships, skill training programmes and placements. A large number of reputed companies and organizations visit the college throughout the academic year. The cell organizes various collaborative activities. In addition to recruitment sessions, seminars are organized to increase awareness about future academic opportunities, post-graduate courses, and career opportunities. Workshops on skill development, resume writing, grooming of personal interview, group discussions, etc. are extremely popular. Activities are coordinated by a dedicated team of faculty members, student coordinators drawn by a selection process across all streams of study and a large contingent of student volunteers. Two members of the administrative staff have been deputed by the college to help in organizing the placement events. A dedicated space equipped with its own laptop, printer, LCD projector, portable screen and a portable audio system has been created with a grant from UGC. In the academic year 2015-16, the number of interactive sessions with representatives from various prominent industries increased significantly. Prominent among them was an interactive talk by the Managing Director of Tata Power Limited. He gave an overview of innovations happening in energy sector and disruptive technologies. He also shared with students information on various avenues available at Tata Power for research and internships.

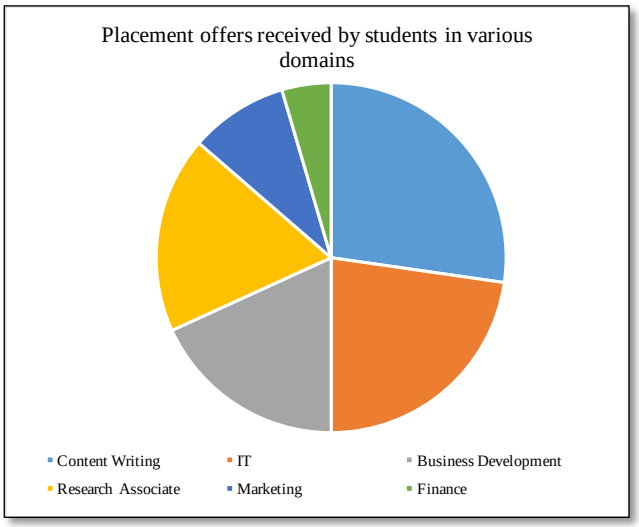
Education Advancement: Many private universities from India and abroad have organized interactive sessions with students to share information about their academic programmes. Private institutes offering MBA programmes also visited the college to share information and motivate students to apply. BITS Pilani has been conducting informative sessions about programmes offered at BITS Hyderabad campus for the last three years. MH students who joined BITS for M.Tech. programme in Cyber Security will graduate this year. Their performance has been very good and one of the factors why the institute is keen to recruit more students.

Internship: The following companies have been offering internships to the students year after year. In 2015-16, the highest stipend offered was Rs. 15,000 per month and the average was Rs. 10,000 per month.

Function	Companies
Digital Marketing	Fresh Monk, Ipsaa Day Care, Tutor Universe, GharPeTutor
Information Technology	Alliance Infotech, Posist Tech
Campus Ambassador	Google, Dell, Mentored, Porter, Tutor Universe, Cash Karo
Human Resource Development	Chisel and Adze, Test Book, Seek Sherpa
Teaching	SuSumer Foundation

Placements: Opportunities in 2015-16 with Sectorwise break are summarized as a pie chart. Companies are listed in the table below. The highest compensation package offered per annum is Rs. 7.5 lakh, the average being Rs 4.5 lakh per annum.

Job Function	Offers	Companies
Content Writing	30	Routofy, Actozen, Josh Talks, Butterflies, ScoopWhoop, TrulyMadly, Levitate, ASN Global Communication Pvt.Ltd., Indigo
Information Technology	25	Wipro, Accenture, NIIT, Asahi India Glass Ltd. Tata AIA Life Alliance InfoTech CFBI, Syntep, Info Iwonder
Business Development	20	Asahi India Glass Ltd. (AIG), Shape Crunch, Axience, Josh Talks, Nearbuy, Manya Education Pvt.Ltd.
Research Associate	20	AIG Ltd., Teach for India, Routofy, Grofers
Marketing	10	Asahi India Glass Ltd., Oberoi Group, ITC Hotel divison, Decathalon, Josh Talks, Luxure, Nearbuy, Teachersity, Skill Tree Knowledge Center GSS Group
Human Resource Development	10	Decathalon, Talerang, Zee Media, AwareMonk, Kickstart Ventures, Manya education Pvt.Ltd.
Finance	5	KPMG, S & P Capital IQ, Ernst & Young, Josh Talks



5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.

Utmost importance is attached to redressal of students' grievances. In accordance with the MHRD and UGC notifications, new committees have been constituted and faculty appointed as nodal officers to perform stipulated functions. These supplement the grievance redressal mechanisms that have existed for several years at the college.

Grievance Redressal Committee was constituted in the academic year 2015-16 under the UGC (Grievance Redressal) Regulations, 2012. As stipulated, it is chaired by the nominee of the College Governing Body; it includes three senior faculty members and one student representative. So far this committee has not handled any complaint. The Vice Principal is the Public Grievance Officer.

Academic Grievance Committee: This has the Vice-Principal as chairperson and two senior teachers. The Principal functions as appellate. This committee addresses

student grievances as and when received. The cases addressed by this committee are delineated below.

Internal assessment: A group of students complained that the Internal Assessment marks recorded in the mark sheet were lower than what the teacher had awarded to the students. These complaints were forwarded to the University and cooperatively redressed on submission of college records. Another student complained about receiving low marks in internal assessment. The committee found that the marks were fair based on the student's performance and attendance. She was given a fair hearing and counselled on how to improve her performance.

Change of course: (i) A student of B.A Programme asked for change of combination from History-Political Science to Economics-Political Science after admission. She remained adamant on this change despite counselling. The matter was referred to the University who categorically informed the student that the change was not permissible. The student finally accepted the decision of the University. However, she was advised to meet with the college counsellor. All possible help was provided by concerned faculty to help make up for loss of studies on account of prolonged distraction. (ii) A student of B.A. (H) Sociology made repeated claims that she had been denied admission to B.A. (H) Political Science despite having the required percentage. On verification, students' marks were found to be indeed below the required percentage. The admission policy of deductions on account of change of stream was explained again to the student. (iii) Students sometimes find the marks reflected on the mark sheet issued by the University do not match those given by the teacher and displayed on the college notice board. In all such cases, a detailed verification process is undertaken to see at which stage an inadvertent error has been made. Teacher record of marks along with student assignments is forwarded to the University to assure rectification.

Miscellaneous Complaints: The college has a well established practice for reporting of problems faced and acts fast making redundant centralized redressal through the grievance committee. Complaints are forwarded to pertinent departments or societies. Illustrative examples are given below:

Discipline: A group of students complained about unfair practice of a candidate during Students Union elections. The faculty advisers of Students Union along with members of Proctorial Committee investigated the matter, spoke to both the candidates and ensured withdrawal of the candidature of the erring student.

Entitlements: Grievance of any student regarding delay in processing a request is immediately addressed. In one instance the visually impaired students of the college complained about delay in receipt of writers' fee. The matter was pursued by the office for expeditious release of funds by DU so that the payments could be made.

Infrastructure: A major grievance pertained to glitches with WiFi connectivity in the college resulting from non-functioning of equipment provided by the university. Following due processes, the college used its own resources to replace the faulty equipment and took an AMC for upkeep.

5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

As part of its initiative to create an enabling environment for development of leadership qualities in women and to provide them with a safe and secure creative

space, Miranda House is committed to counter and prevent sexual harassment in all its forms. The college established an Internal Complaints Committee (ICC) with effect from 14 March 2014, having its jurisdiction over entire college including its departments, administrative office, hostel administration, library, etc. This replaced the College Complaints Committee (CCC). The ICC has duly appointed five members as mandated under the Act and carries out its responsibilities as contained in the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressed) Act, 2013. Apart from the ICC, the Women's Development Cell (WDC) provides gender sensitization and awareness generation on issues related to countering sexual harassment as a part of its activities. ***Refer 2.2.4.***

There have been few substantive cases in which the Section 10 (1) of the Act has been used for conciliation between the parties. There were 7 informal complaints regarding hostile environment while travelling to college, stalking, cybercrime, etc. which did not take place in the college premises. For addressing these, an interface developed with Delhi Police through the WDC was used to resolve the issues. Through collaborative workshops with Delhi Police, and regular interactive sessions with Delhi Police personnel at the neighbourhood Maurice Nagar Police Station, collaboration and cooperation has been ensured. To forge sustainable relationship with the law and order machinery, the college invited the Joint Commissioner of Police, North Range, DCP, North Delhi, along with 80 police personnel to interact with students of the college, especially on the issue of sexual harassment. MH has striven to make this a regular part of its holistic learning environment to counter sexual harassment and develop self-confidence and self-esteem amongst its students. An annual Seminar Course on Women and Laws emphasizes on creating awareness on the Act through legal training and social awareness. The Delhi Legal Services Authority have been part of the organization of such programmes. Posters, pamphlets, booklets and handbook on the issue and containing the provisions of the law have been created and distributed in the college. The students and faculty have participated not just in safety audits regarding the college campus but also the whole city of Delhi along with a network of civil society initiatives led by *Jagori*. The students have had regular sessions on various technological initiatives for women's safety such as Women Helplines, *Safetipin* and *Himmat* App of Delhi Police. A training session by Centre for Social Research on Social Surfing provided the students with knowledge about internet safety norms for women in relation to cybercrime regarding sexual harassment and exploitation. It also emphasized on the positive values of networking and creating solidarity for the safety and security of women.

5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

The college is deeply committed to providing an atmosphere conducive for building the confidence and self-esteem of all students. It takes pride in being a friendly campus where students freely interact and learn from each other in pursuit of excellence. The anti-ragging committee of the college functions on the precept of zero tolerance to ragging. The committee consists of the Principal, Vice Principal, members of the Proctorial Committee, one faculty member of the Women's Development Cell, one faculty member of the Hostel Committee, the hostel warden, a member of the non-teaching staff, and two students. The committee diligently follows a three-pronged strategy to ensure that the college environment remains free of ragging, with the following three dimensions of action.

Dissemination of information: A major publicity campaign is launched on anti-ragging at the beginning of the academic year. About 25 innovative posters with engaging cartoons have been designed and are displayed. A specially printed anti-ragging booklet is distributed to all students. This reiterates the college policy and includes the University Ordinance XV-B on maintenance of discipline among students; Ordinance XV-C on prohibition of and punishment for ragging; the sexual harassment of women at workplace (prevention, prohibition and redressal) act 2013; pertinent excerpts from the laws of the land including the Raghavan Committee report and guidelines of the Supreme Court. All students of the college are required each year to fill the Anti-ragging Undertaking.

Vigilance and prevention: At the beginning of the year, an extended anti-ragging committee is also constituted for better vigilance on ground. It includes faculty and student representatives of each department as well as support staff. It functions throughout the Academic Session and is particularly vigilant in the months following the arrival of fresh batch of students.

Swift disciplinary action: The college community understands that in case of any violation, law will prevail and action will be swift.

With positive measures implemented in letter and in spirit, there has been no case requiring action.

5.1.13 Enumerate the welfare schemes made available to students by the institution.

In keeping with the college's commitment to inclusive education and precepts of equity, there are a number of welfare schemes. ***Refer 5.1.4.***

5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?

The Miranda House Alumnae Association (MHAA) is a registered body with its office located in the college. In addition to fostering friendship and maintaining contact amongst old students; and between them and the college; it aims to contribute towards the overall development of MH as a premier women's college in a variety of ways. Its affairs are managed by an Executive Committee which is an elected body of 11 members, constituted annually in accordance with the rules of the association. The Principal, Vice Principal as well as President and Secretary of Students Union are ex-officio members. There is provision to nominate one or more patrons and also co-opt members. It is ensured that the executives represent all generations of alumnae. The membership is open to all former students of the college. Former and current teachers who have not been students of the college can become Associate Members without voting rights. In the last two years, the college has started a drive to enroll the graduating class into the association.

Academic and Cultural support: MHAA is committed to fostering amongst the young women students at their alma mater the progressive, secular and liberal values enshrined in the constitution and work towards the goal of gender equality and empowerment of women.

MHAA Excellence and Achievement Awards: These awards honour the distinguished alumnae and are given at a special function organized at the college.

Each award carries a citation and a silver plaque. Laureates give an acceptance speech to a packed hall of current students. The programme is extremely inspirational as the awardees in sharing their life experiences model for the students what it takes to craft a successful life and career. It also gives the students a chance to interact with celebrities and understand the legacy of excellence each generation of MH inherits. Awards have been given to:

- Malti Gilani, Romila Thapar, Sheila Dikshit, Anjolie Ela Menon, Brinda Karat (2005-06)
- Anita Desai, Jalabala Vaidya, Lotika Vardarajan, Mina Swaminathan, Nandita Das (2006-07)
- Shovana Narayan, Mira Nair (2007-08)
- Bimla Bissel, Madhur Jaffery, Bhavnesh Kumari (2008-09)
- Ritu Sarin, Shailaja Chandra, Indira Rajaraman, Anita Pratap (2009-10)
- Renu Sud Karnad, Uma Vasudev, Shobha Deepak Singh (2010-11)
- Tara Gandhi Bhattacharjee (2012-13)
- Rekha Surya (2014-15)

Departing from the past practice, in 2015-2016, MHAA gave its award to the extremely talented sister duo of Neeti Mohan and Shakti Mohan at the college's annual cultural festival *Tempest*. The sisters performed at the star night without charging the usually exorbitant fee.

MHAA Scholarships: Two merit-cum-need scholarships of Rs. 5000, each have been instituted by MHAA. Funds for these were generated by auction of sketches donated by alumna Anjolie Ela Menon and bought by another alumna, Radhika Roy of NDTV. These scholarships are awarded to II year students of Humanities and Science, respectively. Students with family income not exceeding Rs. 1.5 lakh per annum are eligible to apply. Merit is based on cumulative marks in the first two semesters. Additionally, two Angeli Qwatra Awards of Excellence of Rs. 6000 each are given on basis of merit to final year students drawn from the Humanities and Science streams, respectively.

5.2 Student Progression

5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.

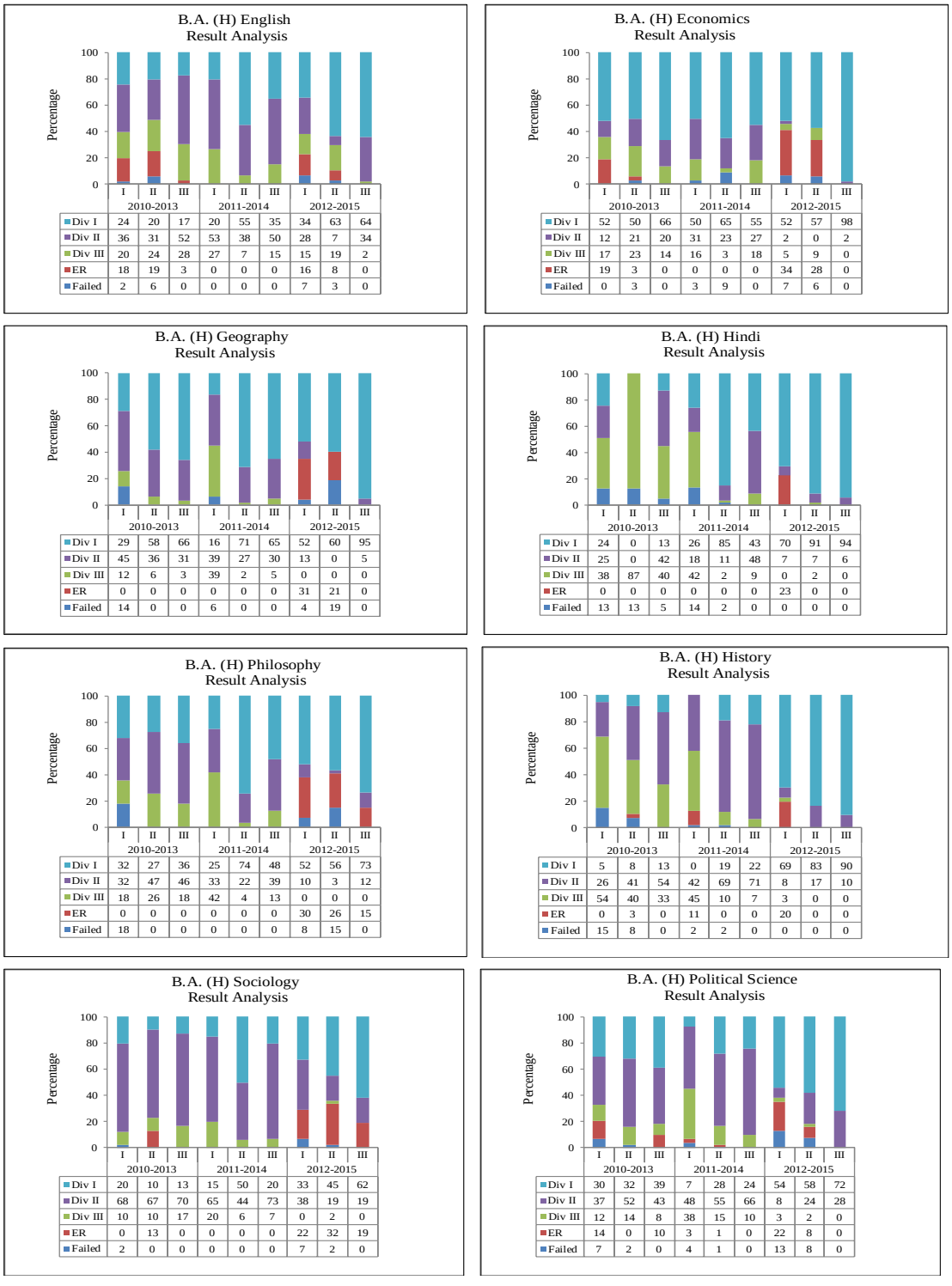
The college does not have well organized, reliable and validated quantitative data. Qualitative observations are that a significantly large number of MH students prefer to pursue higher education and research in the best institutions in preference to entering the job market early. Many students do not actually take up the Campus Placement offers. Civil Services, and Social Sector is seen to be very attractive. Refer Department Evaluative Reports.

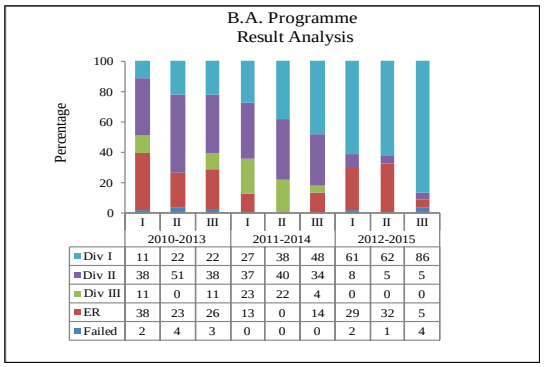
5.2.2 Provide details of the programme-wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.

Programme-Wise College Result Analysis: Careful analysis of the DU Examination Results shows excellent performance. Almost all students who are enrolled complete the course. The number of students getting first division and distinction has been

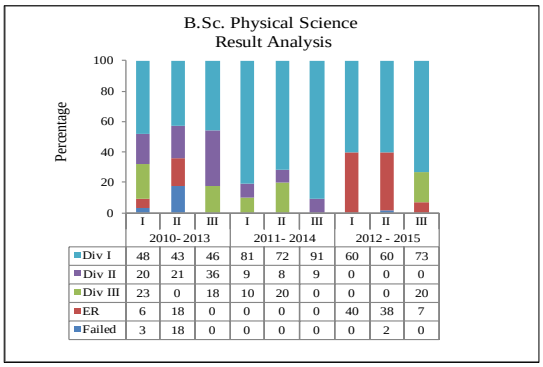
consistently increasing. Many are University Rankers. The Result Analysis depicted through stacked Bar Charts for all departments is given in Fig. 5.2.2. Consistently, students of all departments are high scoring. At times students get ER for various academic reasons that range from personal, academic to instability in course curriculum at the macro level in DU. The eventual pass rate is 100%. This reflects academic support and investment made by the college in improving performance of students through tutorials, remedial classes and mentoring in addition to classroom teaching. ***Refer to Table 5.2.2.***

Figure 5.2.2: Student Progression Analysis

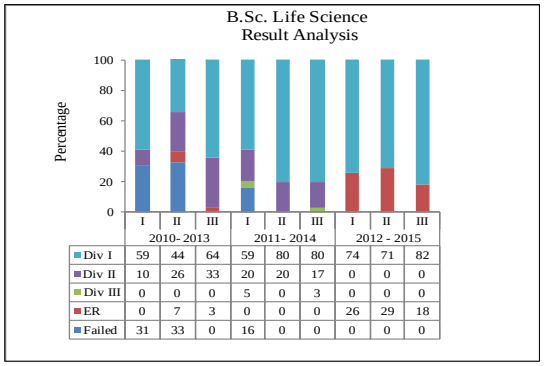




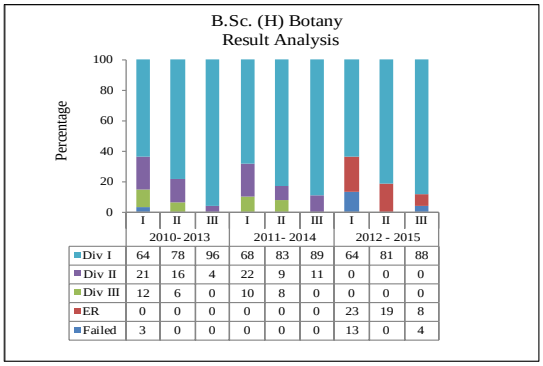
	I	II	III	I	II	III	I	II	III
	2010-2013			2011-2014			2012-2015		
Div I	11	22	22	27	38	48	61	62	86
Div II	38	51	38	37	40	34	8	5	5
Div III	11	0	11	23	22	4	0	0	0
ER	38	23	26	13	0	14	29	32	5
Failed	2	4	3	0	0	0	2	1	4



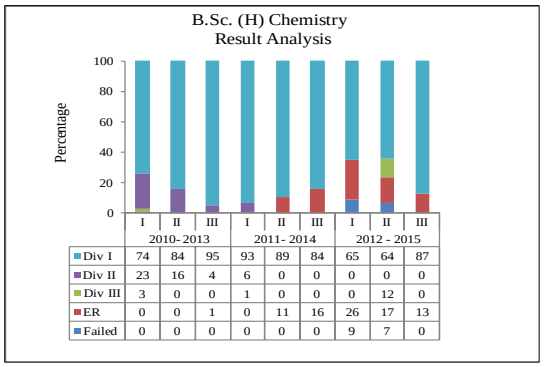
	I	II	III	I	II	III	I	II	III
	2010- 2013			2011- 2014			2012 - 2015		
Div I	48	43	46	81	72	91	60	60	73
Div II	20	21	36	9	8	9	0	0	0
Div III	23	0	18	10	20	0	0	0	20
ER	6	18	0	0	0	0	40	38	7
Failed	3	18	0	0	0	0	0	2	0



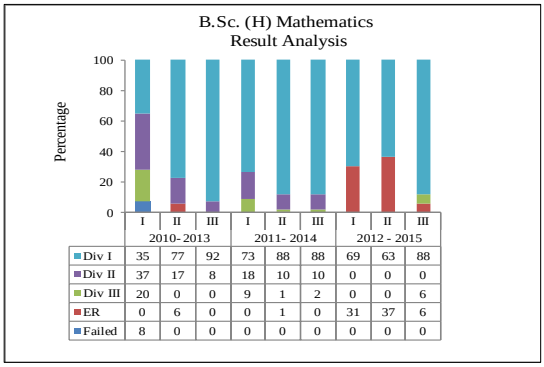
	I	II	III	I	II	III	I	II	III
	2010- 2013			2011- 2014			2012 - 2015		
Div I	59	44	64	59	80	80	74	71	82
Div II	10	26	33	20	20	17	0	0	0
Div III	0	0	0	5	0	3	0	0	0
ER	0	7	3	0	0	0	26	29	18
Failed	31	33	0	16	0	0	0	0	0



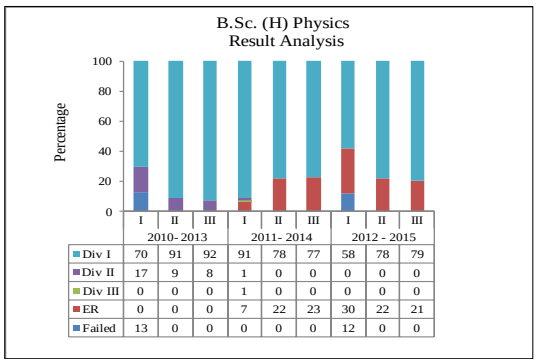
	I	II	III	I	II	III	I	II	III
	2010- 2013			2011- 2014			2012 - 2015		
Div I	64	78	96	68	83	89	64	81	88
Div II	21	16	4	22	9	11	0	0	0
Div III	12	6	0	10	8	0	0	0	0
ER	0	0	0	0	0	0	23	19	8
Failed	3	0	0	0	0	0	13	0	4



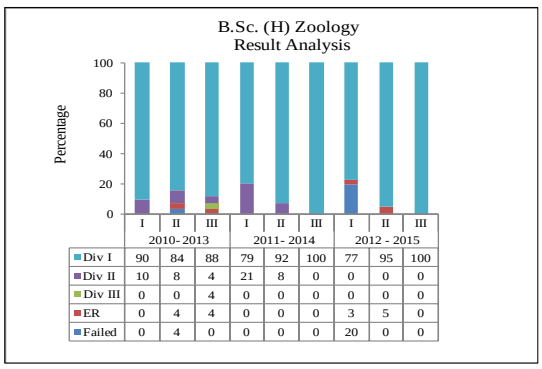
	I	II	III	I	II	III	I	II	III
	2010- 2013			2011- 2014			2012 - 2015		
Div I	74	84	95	93	89	84	65	64	87
Div II	23	16	4	6	0	0	0	0	0
Div III	3	0	0	1	0	0	0	12	0
ER	0	0	1	0	11	16	26	17	13
Failed	0	0	0	0	0	0	9	7	0



	I	II	III	I	II	III	I	II	III
	2010- 2013			2011- 2014			2012 - 2015		
Div I	35	77	92	73	88	88	69	63	88
Div II	37	17	8	18	10	10	0	0	0
Div III	20	0	0	9	1	2	0	0	6
ER	0	6	0	0	1	0	31	37	6
Failed	8	0	0	0	0	0	0	0	0



	I	II	III	I	II	III	I	II	III
	2010- 2013			2011- 2014			2012 - 2015		
Div I	70	91	92	91	78	77	58	78	79
Div II	17	9	8	1	0	0	0	0	0
Div III	0	0	0	1	0	0	0	0	0
ER	0	0	0	7	22	23	30	22	21
Failed	13	0	0	0	0	0	12	0	0



	I	II	III	I	II	III	I	II	III
	2010- 2013			2011- 2014			2012 - 2015		
Div I	90	84	88	79	92	100	77	95	100
Div II	10	8	4	21	8	0	0	0	0
Div III	0	0	4	0	0	0	0	0	0
ER	0	4	4	0	0	0	3	5	0
Failed	0	4	0	0	0	0	20	0	0

Result Analysis: Comparison with Other Colleges

Comparison of the pass percentage of students in courses offered at MH with select DU colleges is given in Table 5.2.2. The colleges selected are amongst the best. For authentic comparison, data of other colleges is sourced from their respective SSRs. The performance of MH students in the sciences is consistently better and reflected in 100% pass percentage across all disciplines. The same trend is noticed in Humanities and Social Sciences that also record 100% pass percentage. There are two exceptions (i) result for Hindi Honours in 2012-13 was 94.7; (ii) result for B.A. Programme in 2013-14 was 99.3 which was still higher than any other college.

Table 5.2.2 (a): Comparison of Pass % in Science Courses with Select Colleges

Courses	2012-2013					2013-2014				
	MH	SSC	HC	GC	SVC	MH	SSC	HC	GC	SVC
Botany	100		100	100	74	100		100	100	54
Chemistry	100	97		100	98	100	100		100	79
Life Sciences	100			100	70	100			100	56
Physics	100	64	100	100	86	100	100	100	100	100
Physical Science	100	78		100		100	95		100	
Zoology	100		100	100	76	100		100	100	100

Source: SSR of St. Stephen's College (SSC), Hindu College (HC), Gargi College (GC) and Sri Venkateswara College (SVC)

Table 5.2.2 (b): Comparison of Pass % in Arts Courses with Select Colleges

Course	2012 -2013				2013 – 2014			
	MH	LSR	IP	JMC	MH	LSR	IP	JMC
B.A. Programme	100	97.7	90.6	75.8	99.28	95	85.1	66.3
B.EL.Ed.	100	100		92	100	96		100
Economics	100	100	100	100	100	87	90.2	74
English	100	98.6	86.5	100	100	96	83.7	88.6
Hindi	94.7	94	94.2	100	100	90	85.7	52.2
History	100	97.2	90.6	94.3	100	93	80.8	74.4
Mathematics	100	94.4	100	100	100	96	81.9	91.4
Philosophy	100	96.6	100		100	84	100	
Political Science	100	95	99	100	100	91	90	100
Sanskrit	100	87.5	80		100	60	35.7	
Sociology	100	100		95.7	100	95		80.7

Source: SSR of Lady Shri Ram College (LSR), Indraprastha College for Women (IP), and Jesus and Mary College (JMC)

5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

The college has a Career and Education Advancement Centre which provides student guidance as well as placement opportunities through campus placements. Various enrichment activities introduce students to issues of contemporary interest and ever increasing opportunities in academic, corporate and social sectors. The MoUs with institutions also facilitate progression. ***Refer 3.7.2.***

5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

Remedial and Bridge classes provide structured support. Additionally, the college focuses on building soft skills to improve comprehension and communication. Personalized support and mentoring is provided during tutorials and interactive hours to those at risk of failure. ***Refer 2.2.3*** and ***2.2.5.***

5.3 Student Participation and Activities

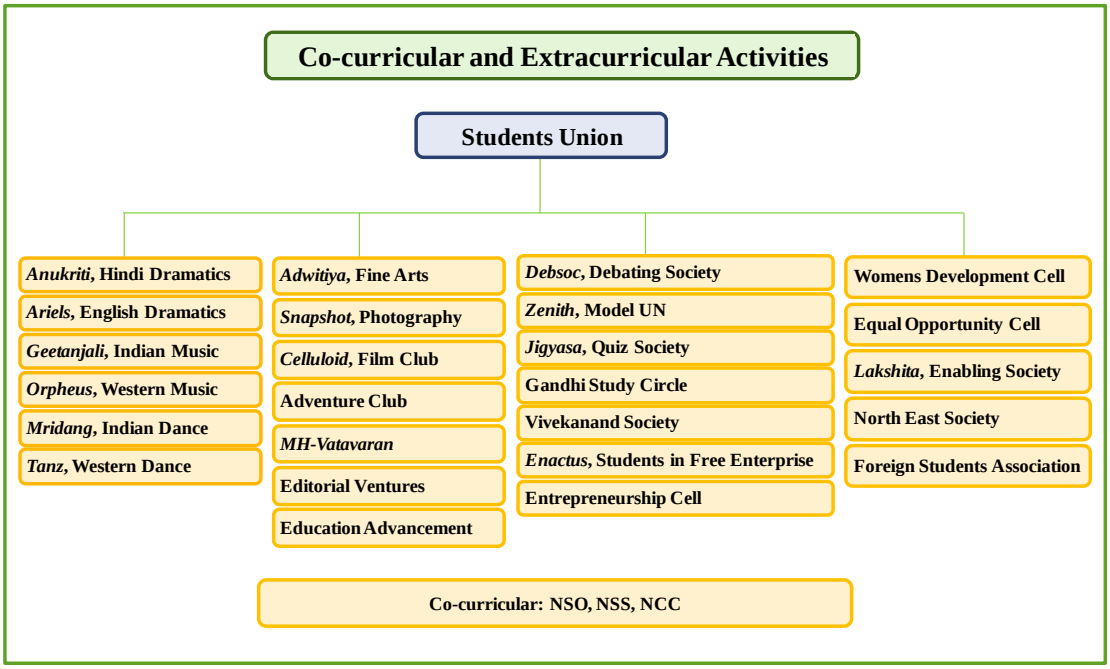
5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and programme calendar.

Sports and Games: Miranda House perceives sports as a means of empowering young women and has continuously endeavoured to enhance and upgrade its sports

facilities. For instance, the Outdoor Bounce Back Shock Proof Surface Basketball Court is one of a kind in the University. As a constituent campus college, access to University facilities is easy. These include the Polo Ground and the multipurpose hall located in the new state-of-art DU Stadium constructed during Commonwealth Games. The college organizes *Erobern* the Annual Sports Festival and a Cross Country Race each year. The Annual Sports Award Ceremony is a major event for which well known sports personalities are invited as role models. Some past invitees are Kapil Dev, Murali Kartik, Nikhil Chopra, Bhuvaneshwari Devi (Squash), Indu Puri (Table Tennis), Kiran Bedi, Shamsher Jung and Anuja Jung (Shooting), Abhishek Verma (Archer).

Co-curricular and Extracurricular Activities: The college believes that beyond-the-classroom and extracurricular activities help it in mission accomplishment. Extracurricular Activities are well structured and executed by various societies listed in Table 5.3.1.

Table 5.3.1: Extracurricular Societies at MH



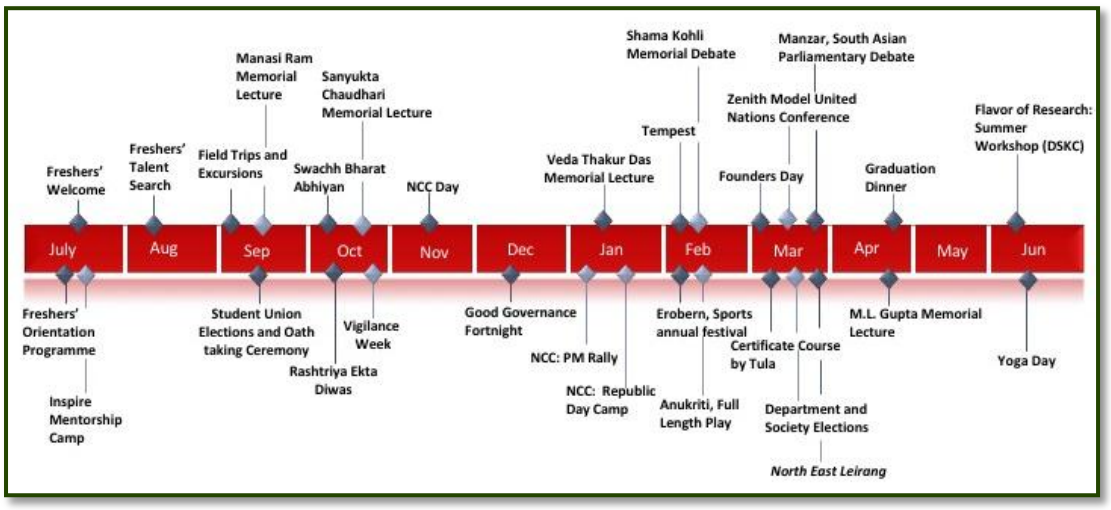
Department Societies and their Festivals: All departments have their own society which organizes enrichment activities and an annual festival on an academic theme that is explored through seminars and talks. These creatively integrate scholastic and cultural events.

1.	*Agrani*, the Bengali Society	*Utthsav*
2.	*Arthashastra*, the Economics Society	*Zenith*
3.	*Literary Society*, the English Society	Literary Festival
4.	Elementary Education Society	*Buniyaad*
5.	Geography Society	*Globe*
6.	*Bharti Parishad*, the Hindi Society	*Sahityotsav*
7.	History Society	*Tarikh*
8.	Philosophy Society	*Gnosis*
9.	Political Science Society	*Ecclesia*

10.	*Sanskrit Sangam*, the Sanskrit Society	*Sanskrit Divas*
11.	Sociology Society	*Utopia*
12.	Mathematics Society	*Origin*
13.	*Vidyut*, the Physics Society	*Iridescence*
14.	*Rasayanika*, the Chemistry Society	*Pratikriya*
15.	*Tricord*, the Life Sciences Society	*VigZest*
16.	*Antheia*, the Botanical Society	*Koshika*
17.	*Synapse*, the Zoological Society	*Impulse*
18.	*CompuAda*, the Computer Science Society	*Orrey*

Activity Calendar: The Students Union Executive Council along with faculty advisors coordinate with the departments to create the annual cultural calendar, taking into account the academic calendar. A typical calendar is depicted in Fig. 5.3.1 (b). The schematic is illustrative.

Fig. 5.3.1 (b): Co-curricular and Extra-curricular Activity Calendar.

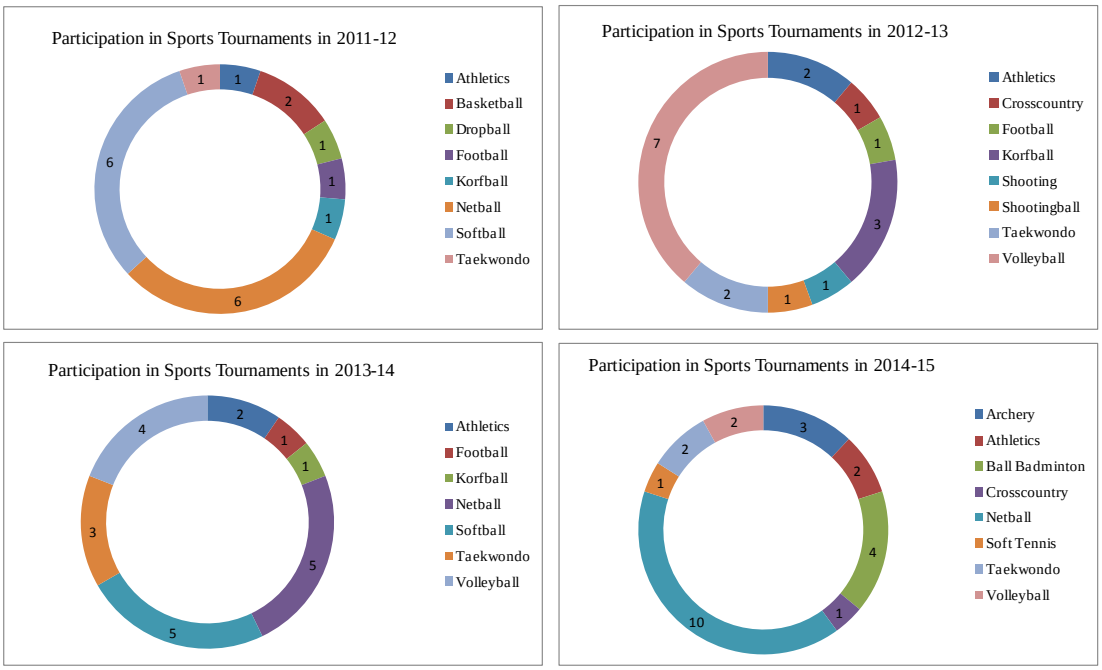


5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University/State/Zonal/ National/International, etc. for the previous four years.

Miranda House sportswomen excel in almost all disciplines of sports. Their performance was outstanding in academic year 2015-16 at International, National, All India/ North Zone Inter University, Inter College and other State level tournaments in Athletics, Archery, Ball Badminton, Basketball, Chess, Netball, Power Lifting/ Weight Lifting, Tennis, Soft Tennis, Taekwondo, Volleyball and Yoga. Students remained on the winning spree also in the open tournaments and events at the college fests organized by various colleges of Delhi University. The Basketball team had secured I Position in *Erobern 2016*, The Annual Sports Fest of Miranda House, II Position in the Kirori Mal College Invitational Basketball Championship, III Position in the Delhi State Women Festival and III Position in the Delhi Olympic Games. The Chess team secured I Position in the Kirori Mal College Invitational Chess Tournament, I Position in *Erobern 2016* and II Position in the Lady Shri Ram College Sports Fest. The Netball team also secured I Position in the *Erobern* 2016. The Archery Team won I place in the LSR Sports Fest. The Yoga team won 1 Silver and 2 Bronze Medals in the Delhi State Yoga Championship. The athletics team won 2 Gold, 2 Silver and 2 Bronze Medals in the Delhi State Athletics Meet; 1 Gold and 3

Bronze Medals in the Delhi State Women Festival; and 3 Gold, 3 Silver and 1 Bronze Medal in the Festival of Youths and Sports, SRCC Sports Fest. The Taekwondo Team won 4 Gold Medals in the Delhi State Taekwondo Championship; 3 Gold, 2 Silver and 2 Bronze Medals in the 4th Ch. Ran Singh Memorial Taekwondo Grand Prix Championship and Winners Trophy in the Bharti Cup Taekwondo Championship with 5 Gold, 1 Silver and 2 Bronze Medals. Kanchan Pandey, B. Sc. (H) Physics, won II place in the Uttarakhand State Rifle Shooting Competition.

Fig. 5.3.2: Participation of Students in Sports in the Last Four Years



Sports: Major achievements of students in sports are listed below:

Name	Game	Tournament	Result
2011-12			
Namrata Malik	Netball	National Games	I
		The Champions League	I
		The Youth Champions League	I
Tara	Softball	Senior National	II
Neelam Dixit	Softball	Senior National	II
VishakhaVerma	Softball	Senior National	II
Disha	Softball	Senior National	II
Vishakha	Softball	Senior National	II
Adiba	Softball	Senior National	II
Sweety	Taekwondo	North Zone National	II
Vijeta Soni	Drop ball	National Games	III
2012-13			
Neetu	Volleyball	Senior National	I
Shalini Tyagi	Athletics	North Zone Athletics Meet	II
2013-14			
Anjali Raina	Netball	Asian Youth Championship	VII
		All India Inter University	III
Shailja Aswal	Korfball	All India Inter University	II

Ruchi Kumari	Netball	All India Inter University	III
Tanya Garg	Netball	All India Inter University	III
Pragati Singh	Netball	All India Inter University	III
Tanu Sharma	Netball	All India Inter University	III
Bhawana Bisht	Taekwondo	All India Inter University	III
Deepika Rawat	Football	North Zone Inter University	III
2014-15			
Tanu Sharma	Netball	Senior National	III
Akanksha Kapur	Netball	Senior National	III
Monika Sharma	Netball	Senior National	III
Tapasya Changkakati	Taekwondo	All India Inter University	III
Harshita Chugh	Soft Tennis	Senior National	I

Achievements in Sports of Differently Abled Students:The college has a large number of differently abled students. The Department endeavours to provide them varied opportunities to participate in sports and physical fitness activities. They are encouraged to participate in competitions where they routinely excel and sweep the prizes and awards. This year again, several differently abled students won medals at the national as well as the state level championships. Their achievements at International/National/All India/North Zone University Tournaments are as follows:

Name	**Game**	**Tournament**	**Result**
Nisha Devi	Athletics	Senior National (400 m)	I
		Senior National (Relay)	II
		Senior National (100 m)	III
		Senior National (200 m)	III
		Inter College (100 m)	I
		Inter College (400 m)	I
		Inter College	Best Athlete
Gulshan	Athletics	Senior National (100 m)	I
		Senior National (Long Jump)	II
		Senior National (Relay)	II
		Inter College (Long Jump)	II
		Inter College (Discus Throw)	II
		Inter College (100 m)	III
		State Championship (Long Jump)	II
		State Championship (Discus Throw)	III
Pooja Singh	Athletics	Senior National (Long Jump)	I
		Senior National (400 m)	III
		Inter College	Best Athlete
		Inter College (Long Jump)	I
		Inter College (Discus Throw)	I
		Inter College (Javelin Throw)	I
		State Championship (Long Jump)	I
		State Championship (Javelin Throw)	III

Sanju Kumari	Athletics	Senior National (200 m)	II
		Inter College (200 m)	II
		State Championship (Discus Throw)	II
Homeshwari	Athletics	Senior National	Participation
		Inter College (Shot Put)	I
		Inter College (Long Jump)	II
		Inter College (Discus Throw)	II
		State Championship (Shot Put)	I
		State Championship (Discus Throw)	I
Kalpana	Athletics	Senior National	Participation
		Inter College (200 m)	I
		Inter College (100 m)	II
		State Championship (100m Relay)	I
Honey Sharma	Athletics	Inter College (100 m)	I
		Inter College (200 m)	III
Shehar Nigar	Athletics	Inter College (Discus Throw)	III
		State Championship (100 m Relay)	I
		State Championship (Long Jump)	II
Sapna Bhandari	Athletics	Inter College (Shot Put)	I
Indu	Athletics	Inter College (Shot Put)	II
		Inter College (Discus Throw)	III
		State Championship (Shot Put)	II
		State Championship (Discus Throw)	III
Jyoti	Athletics	State Championship (200 m Relay)	II
		State Championship (100 m Relay)	III
Nisha	Athletics	State Championship (100 m Relay)	I
		State Championship (200 m Relay)	I
		State Championship (400 m Relay)	I
Rashmi	Athletics	State Championship (100 m Relay)	III

NCC: Major achievements of NCC Cadets are listed below.

2014-15

- NCC cadets participated in International Yoga Day organized in June 2015
- NCC cadets participated in the *Swachh Bharat Abhiyaan* by cleaning the college surroundings and spreading awareness about cleanliness, sanitation and hygiene
- One cadet attended Republic Day Camp
- Three cadets were selected and attended Thal Sainik Camp
- 2 cadets attended Officers Training Academy (OTA camp) at Gwalior
- 2 cadets attended All India Rock Climbing and Training Camp;Pauri Garhwal,UK
- 2 cadets Sadhna Devi and Vani Vats won Gold and Silver medals at All India Trekking and Expedition camp at Solan, Himachal Pradesh
- Three cadets attended All India Para Slithering Camp at Delhi Cantonment
- One cadet attended All India Para Sailing Camp at Delhi Cantonment
- NCC cadets organized Self Defence workshop in collaboration with CISF

- Won awards at Inter college NCC fests in cultural, sports and drill competitions
- Ankita Rana, Senior Under Officer won Gold Medal for the Best Senior and Best Hard working Cadet at CATC Delhi Cantonment
- Shagufta won the Best Cadet Award at ATC camp Delhi.

2013-14

- JUO Prashasti was selected for Officers Training Academy Camp at Chennai
- Five cadets attended Thal Sainik Camp at Delhi Cantonment
- Six cadets attended National Integration Camp at Dehradun

2012-13

- JUO Annapurna won Gold Medal for Delhi Directorate team in Map Reading
- SUO Vishakha Verma was chosen for Amar Jawan Jyoti celebrations at India Gate on NCC Day
- Five cadets were selected for various All India Camps
- 50 cadets participated in *Gyanodaya Express* organized by DU
- Cadets gave a Fire Fighting Demonstration for Chief of Naval Staff

2011-12

- Cadets participated in Tree Plantation Drive organized by the then Chief Minister of Delhi as part of raising awareness about Environmental Issues
- Cadets participated in Disaster Management workshop at National Disaster Management Association, Delhi
- MH cadets won 1st prize in drill, debate and song competitions at CATC Gurgaon
- Cadet Preeti Negi won second prize in firing competition
- MH cadets won first prize in national integration presentation at Maharashtra and Gujarat national level camps.
- CSM Anupriya; Best Performance Cadet award; NIC Maharashtra and Gujarat
- Cadet Antushree; Best Disciplined Cadet; Godhra Camp
- Cadet Pragati; Best Cadet; Rohtak Camp

5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

The Career and Advancement Cell provides the forum for meeting with employers. Individual departments have strong alumnae networks, especially for the recent batches who organize social meetings, inviting faculty as well. These provide a good opportunity for garnering multi-dimensional appraisal of institution. The college also organizes a Graduation Dinner for the final year students just before the final examination. Attendance is nearly 100%. This gathering is an occasion for gauging the satisfaction of students with their college. Social media sites provide a powerful medium for honest feedback and keeping track of student progression in highly personalized ways. The planning perspective is deeply impacted by these inputs which are used to open new opportunities for students.

5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications/materials brought out by the students during the previous four academic sessions.

Several Departments produce annual magazines in addition to maintaining Bulletin Boards with frequently updated content. Exceedingly, all societies have a vibrant

social media presence and maintain regularly updated Face Book pages and specially created Blogs. List of magazines/ journals is given below:

1.	College Magazine	*Miranda*
2.	Hostel Magazine	*Grimoire*
Department Magazines		
3.	Hindi	*Pehchaan*
4.	Economics	*Aapoorti*
5.	Geography	*Geographica*
6.	Political Science	*VoxPopuli*
7.	Sociology	*Light House*
8.	Physics	*Dimensions*
9.	Chemistry	*Rasayani*
10.	Botany	*Quisqualis*
11.	Zoology	*Evolvere – the unfolding*
12.	Computer Science	*Adazine*
Societies		
13.	*Tula*, the Consumer Club	*Santulan*
14.	*Anukriti*, the Hindi Theatre	Fifty Years of *Anukriti*

5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

Miranda House has a Student Council known as Student Union Executive Council (SUEC). It is one of the oldest unions on the campus. The preamble to the constitution states that:

In an effort to realize our responsibilities to ourselves, to our college, and to our community: to stand up for student's rights within and outside our college, to promote college spirit and discipline, to encourage ideals, to uphold a high standard of scholarship and citizenship and to further our social relationships, we the students of Miranda House do establish this constitution.

The Constitution amended in the academic session 2007-08 and adopted in April 2008 is now operative. All students belong to the union. The Principal is Patron. The Union is managed by an Executive Council consisting of 38 members. They are the President, Vice President, Secretary who also functions as Treasurer, two Central Councilors who represent the college in DUSU, Presidents of Cultural Societies, President Sports, President NSS, President NCC, President Hostel, and one Course Representative from III year of each course. The President is from the III year, the Vice President from the II year, the Secretary from the III year and the two Councilors are from the III year. They are elected, however, by votes cast by all the students of the college. To be eligible to stand for election, following the recommendations of the Lyngdoh Commission, as in the case of DUSU, the President, Vice President, Secretary and the two Councillors are required to attain minimum 75% attendance and have no academic arrears in the year of contesting. The elections take place along with the elections for DUSU.

The Presidents of Societies are from II or III year and elected by the registered members of the society. The Course Representatives are elected from amongst those in II year by the students of the course. Presidents of cultural societies and departments are elected on basis of active participation with a minimum of 67% attendance. Sports, NCC and NSS have their own criteria such as participation at the

national level, etc. The members of the Executive Council are elected for a period of one year. The elections for the President of Society and Course Representatives take place in the month of February. For smooth functioning of societies through the year, including the summer holidays when the college begins the admission process, the outgoing President is required to handover all records, reports and accounts of the Society by 15 March to the new President under the supervision of the Staff Adviser. Built into the constitution is the missive that the Union shall not take any decision without consulting the staff advisors or without conducting a meeting of the Executive Council attended by not less than 2/3 present and voting. There are provisions for disqualification, vote of no confidence and impeachment in case of violation of discipline or code of conduct.

The Union is responsible for organizing the Founder's Day, National festivals, College festivals, Departmental festivals, Social functions, internal functions like farewells etc., college representation on DU, National or International Student bodies and maintaining decorum within college. Union Executive Council is required to perform all necessary functions in connection with Library, Cafeteria, Sanitation and general behaviour. The responsibility for the latter is given to the Proctorial Committee on which the Union has significant representation. The Union is also responsible for establishing Court of Honour to address violation of rules and grievances, the findings being communicated to the Principal for final decision and action. Student's Union funds are handled by the President, Vice President and Secretary of the Union through a separate account operated by the Principal of the college. In addition to the internal funds, they are permitted to raise funds through sponsors. There are stringent rules for how these funds can be sought. Commission is prohibited and all payments are in the name of Principal Miranda House through a crossed cheque or electronic transfer for use by the Union.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

MH follows a student centric approach. Students are an integral part of decision making at the college. Such engagement is beleived to impart organizational and administrative skills. All cultural and departmental societies are led by elected student representatives and are empowered to manage their own affairs with faculty playing the role of mentors. Student Union President, Vice President, Secretary or a nominated/elected student is a member of

- Financial Assistance Committee for disbursement of bursaries to needy students
- Planning Committee for allocation of funds to co-curricular and ECA societies
- Committees for planning and organization of Orientation Day, Founder's Day, National Festivals, and all other functions and events that cut across departments
- Court of Honour
- Grievance Committee
- Internal Complaints Committee
- Anti-ragging Committee
- Proctorial Committee
- Extended Proctorial Committee for better monitoring and vigilance on ground
- Extended Admission Committee for facilitating open days, and public relations
- Cafeteria Committee which is responsible for award of contracts and monitoring
- Sanitation Committee
- MH Alumnae Association as ex officio members

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.

Leveraging Alumnae Network: MH frequently invites alumnae for enrichment activities such as lectures, workshops and training programmes. The Guest of Honour at each Founder's Day is a distinguished alumna. The Economics Department initiated in 2014-15 an Alumnae Lecture Series. Shovana Narayan, an extremely accomplished Kathak danseuse choreographed and presented *Anugati the dance of the particles* as part of the cultural program in the International Conference on Physics Education (ICPE) organized by the Physics Department in 200. She has given several performances at the college free of cost. A *Meet the Author* event was organized wherein Sahitya Academy Award laureate Mridula Garg presented excerpts from her book and interacted with students. Dr. Vandana Singh gave a talk on Climate Change. and is helping the college draft a curriculum on the subject, Sustainability and Planet Earth. Prachi Garg who has a start up *GhoomoPhiro.com,* and whose book *Superwomen: Inspiring Stories of 20 Women Entrepreneurs* has been published this year, addressed Entrepreneurship Cell. BIBA Int established by Meena Bindra was one of the sponsors for E-Cell Festival. Anjolie Ela Menon, who has visited the college several times, permitted the use of her painting as cover of *Reliving Miranda*, a collation of articles published on the occasion of the golden jubilee of MH.

Leveraging Former Faculty Network: Former faculty is sent invitations for all major college events. They enjoy coming to the Founder's Day celebrations and the annual college play. Ms. Omi Manchanda, former faculty, Department of History, was the Guest of Honour at the Founder's Day 2016. At the age of 87, she continues to be a role model. Ms. Uma Kapila's college textbook on Economics are widely used. Her edited volume Indian Economy Since Independence is now in its silver jubilee edition. Dr. Uma Chakravarti, renowned feminist historian and rights activist taught a course on Ancient History till recently. Dr. Kiran Kapoor and Dr. Sunita Dhingra, former faculty, Department of Chemistry, volunteer as resource persons for Green Chemistry labs. Jalabala Vaidya announced a creative writing competition with a single prize of Rs. 35,000. Many scenes of *Reluctant Fundamentalist*, a Hollywood Film by alumna Mira Nair, and much acclaimed *Margarita with a Straw* by alumna Sonali Bose were shot at MH. A Retrospective of Films by Ritu Sarin, Crane Productions, was organized at MH in the run up to the MHAA Excellence and Achievement Award Ceremony where she was honoured. Her films on Tibet have been used for sensitization. Ritu facilitates participation of few students at the International Film Festival held at Dharamshala each year.

Any other relevant information regarding Student Support and Progression which the college would like to include.

A substantial number of Science students go in for PG degree in their original UG subject. PG seats are limited in DU, so many students appear for multiple entrance examinations. Quite a few of those who complete Masters go on to do a Ph.D. in their subject either in India or in a foreign university.

Criterion VI

Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

The legacy, traditions and institutional values

MH has a rich legacy. Set up in the newly independent India, it has over the years, produced self-reliant young women who have excelled in their own chosen fields. ***Refer1.1.1 and page nos. 1 to 4.***

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

From its inception, MH has been privileged to have an illustrious Governing Body with members drawn from across the spectrum of the academia, arts, media, public service and civil society. The Chairpersons have been of great repute. An alumna has always been included. All of them have shared the sense of pride that association with MH generates. Sagaciously, they have contributed to the making of a great institution and also added to its aura by their very presence. The role of the Governing Body has been inspirational and supportive. MH is a community of stakeholders. The Principal and the faculty form a strongly bonded collegium that works for vision implementation and the benefit of students. Policies are framed and implemented within the overarching framework of the acts, statutes and ordinances of DU. The Staff Council with Principal-in-Council is empowered to take decisions on most aspects of teaching-learning, extracurricular and co-curricular activities; admission of students; recommendations on introduction of new courses, new teaching posts in the departments; expansion of existing departments; formulation of policies for capacity building of faculty and opportunities for participation in seminars, conferences *etc.*

Faculty, other staff members, and students contribute in many ways to the planning and decision making processes. Every voice matters, every opinion is respected. This strengthens the sense of ownership and belonging. It motivates the community to work synergistically towards fulfillment of goals. As part of vision implementation, in the last decade, the college has worked relentlessly to restore the heritage building and undertaken major repair and renovation work. All spaces have been refurbished. State-of-art infrastructure has been created. Interdisciplinary teaching and research has got a major thrust. The Principal has led these team initiatives, given to them a momentum and created an enabling environment where each faculty member has felt motivated to give her best. The participative model has entailed creating task groups that come together for a specific purpose to plan, design and implement, co-opting others as and how needed. Illustrative examples abound in this report.

6.1.3 What is the involvement of the leadership in ensuring: the policy statements and action plans for fulfillment of the stated mission; formulation of action plans for all operations and incorporation of the same into the institutional strategic plan; **Interaction with stakeholders; Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders; Reinforcing the culture of excellence; Champion organizational change.**

Policy statements, action plans and strategic implementation: Mission accomplishment is possible only with unambiguous formulation of policy and its

implementation. The college is committed to providing a liberal, participative work environment for its faculty and inclusive quality education leveraging every possible opportunity for personal growth of its students.

Formulation of action plans: Students are attracted to the college because of its reputation built assiduously over the years by the quality of education the college imparts. The academic departments and the faculty are central to all that the college has to offer to its students. To maintain standards, each semester the departments engage in well-structured deliberations to analyze their functioning and plan for the future. All sections of the college undertake periodically similar detailed planning and review, be it the administrative sections/committees, the hostel or the library. The Principal has regular meetings with each department, society and task group to review functioning, proactively mentor, provide scaffolding where needed, and facilitate in all possible ways. A high professional quality benchmark is set on performance and future aspirations; the bar being continually raised. An overall college calendar and action plan is evolved and shared across the college via printed media, emails, Google Docs and Google Calendar to facilitate collaboration and resource sharing. The plans and implementation strategies, too numerous to describe herein, are at the heart of excellence at Miranda House, its effective governance and leadership. ***Refer 1.1.2.***

Interaction with stakeholders: MH has a wide network of stakeholders. In addition to all sections of the parent university and funding agencies, the college has strong societal linkages with diverse interest groups that are associated with the college as a part of the continuum. Foremost on the list are the parents and families of students; the former students and staff. The college endeavors to maintain strong personal bond with them. The faculty and students are closely knit with those in other colleges and universities in the region. Students routinely participate in annual festivals of the IITs at Delhi, Kanpur and Mumbai, BITS Pilani and AIIMS. The vibrant beyond the classroom activities associate a wide spectrum of distinguished scholars and resource persons many of whom have been listed in this report. The college views itself as a bridge between the school and the professional workspace. The Placements, Career and Education Advancement Centre brings students in contact with potential employers and those at the helm of providing higher education opportunities. In recent years, the college has hosted a large number of visitors from national and international universities. Several MoUs detail bilateral exchange programmes. The college has contributed immensely to the social sector. It has established a strong network with NGOs working on environment and green technologies; human rights; consumer movements; women empowerment; women and law; prevention of oppression and trafficking of women and children and non-formal education, to name a few. Connections with cultural organizations and performing arts run deep. The Miranda House SPIC MACAY chapter has been privileged to host performances by great maestros adorned with the highest awards of the land; it has also provided opportunities to upcoming stars. The National School of Drama is closely associated with production and direction of full length plays at the college.

Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders: Detailed need analysis and scientific project planning is the norm. This is best illustrated through how in the last decade the college has undertaken major infrastructure enhancement and construction projects. All these have entailed a comprehensive review of existing facilities, stakeholder meetings and wide ranging discussions with consultative groups. For instance, how to best utilize the recurring and non-recurring OBC grants was decided through detailed

need analysis of existing classrooms and laboratory spaces followed by stakeholder meetings to draw a priority list. Architectural plans were submitted for approval of the university through the Governing Body. To understand the degeneration of some of its buildings it has undertaken scientific soil testing. Findings show a very high subsoil water table making the site unfit for normal construction. The college has a competent team of architect and consultants for construction work. All new buildings are on pile foundation. The college has undertaken restoration of its heritage building, and retrofitting work on a scale not undertaken by any other college. In all renovation work, in-house fabrication has been done. Ergonomic design principles have been followed to make best use of space and provide maximum comfort to the end user. The college also undertakes in depth market research before procuring its equipment and other critical resources.

On the academic front, the college has started a range of add-on courses after comprehensive background work and need analysis. These courses aim to (i) fill the lacunae in the traditional curriculum; or (ii) introduce a topic of contemporary interest; or (iii) give students exposure to professional research methodologies and knowledge on the frontiers. In each case, an advisory committee of experts drawn from the best institutes of higher learning and research was constituted to device the curriculum and identify the resource persons. The green initiatives are another illustration of how the college has undertaken research, experimented with technologies and networked with expert groups across the country to adopt best praxis. This inherent approach is evidenced in all its functions.

Reinforcing the culture of excellence: Through action and through words, Miranda House continually reminds its community that no institute can afford to be complacent. Inheritance of excellence includes the tradition of producing pioneers. The deep sense of pride students and faculty have in their college translates effortlessly into creative expression and concrete accomplishment. With changing demographic profile, the college has a large population of students who are from outside Delhi including first generation learners. The number of students from economically disadvantaged backgrounds is also increasing. Often they are diffident when they first enter the college. Inclusive learning environment, peer interactions and strong mentoring help students evolve to be confident young women poised for success in all that they undertake. Opportunities for experiential learning and active engagement expedite this transformation. An important role is played here by the illustrious list of invitees who model what it takes to excel. Every cohort outshines. An interesting example is of the large number of visually challenged students who excel in Paralympics and other sports competitions for students with disability bringing laurels to the college. The college records appreciation for each achievement through a news flash on the website, special meetings with the Principal and mention in the college reports, certificates and special prizes. Staff is also encouraged to excel in a variety of ways. An effort is made to throw open professional development opportunities and positions of responsibility for sustained growth.

Champion organizational change: The college views itself as an organization committed to facilitating the learning of all community members – faculty, supporting staff, and students – so that they can adapt to the rapid changes taking place in higher education as well as the work place. Through discussions and planning, the college ensures that all stake holders develop a nuanced understanding of tasks and challenges in goal accomplishment. An established institution needs to continuously assess beliefs, practices and processes to remain on the cutting edge. An open culture and

spirit of discourse and discussion has been instrumental in transformative changes at MH. An illustrative example on organizational change is provided by use of ICT in the classroom and for all administrative purposes. In an institutional leadership project, the college invested in procuring net books, overcoming some challenges, foremost among them being the fact that not all were technically fluent. These were issued to more than 100 faculty members as a digital resource with no prescriptive stipulations. With a sense of pride in the new acquisition, learning from each other, very quickly the faculty mastered the technology. The college also organized in-house peer driven functional computer literacy programmes, specifically focusing on providing competence in standard skills. Tentative usage cascaded to a tipping point. Miranda faculty carrying her net book everywhere became a defining image. Although many possess high end computing systems, the net books are still a coveted possession as they are rich repositories of educational resources, while being easy to carry around. Institutional trust has played an important role in the transformation as no questions were asked on the use the device was being put to.

The college has been ahead of its times and has several firsts to its credit. Administratively, it was an early mover in use of computer-based management systems and ICT enablement. Examples of technology mediated processes at MH include widespread use of online survey forms for management of student options under CBCS and earlier FYUP framework; feedback; collection of data; online registration for events; use of social media for professional purposes; and so on. These enhance the fully automated office administration and advanced e-governance processes for management of various facets of student life from admission to organization of teaching to declaration of results. The administrative staff is well trained and their skills are continually upgraded. In another institutional leadership project, the college tied up with an outside agency to develop and beta test mobile apps for (i) teaching-learning resource materials including teacher notes, PowerPoint presentations, online MCQ tests, quizzes; and (ii) attendance with features for daily, weekly or monthly publication of data on the college website. A large group of faculty was involved in development of appropriate human-machine interface.

Strategic facilitations by the college have aided establishment of a vibrant culture of continuing skill enhancement, collaborative work, interdisciplinary research and globalization. Faculty is equipped to handle rapid changes in higher education. These involve (i) curricular frameworks, (ii) pedagogic transformation of the classroom (iii) use of disruptive technologies (iv)greater emphasis on professional growth, research and publications. The college is promoting action research as a method for reflective transformation. The establishment of DSKC and its activities is a prime example of champion of organizational behavior. In addition to carrying out research and capacity building programmes, associated faculty work round the year on education outreach: the 6 week summer workshop *Flavors of Research* culminating in the INSPIRE Mentorship Programme with undergraduates as mentors for school students. The DU Innovation projects and Star Innovation projects have also been transformational.

MH is considered a champion of Zero Solid Waste Movement. It has introduced several innovations and green practices. The Compost Plant and the Paper Recycling Plant draw several visitors. Recently, National Institute of Urban Affairs brought groups of Municipal Commissioners and other officers, receiving training under the Swachh Bharat Mission Programmes, to visit Miranda House facilities, upholding them amongst the best examples of green praxis.

6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

The college undertakes periodic review of all its activities. The Staff Council and departments have specified mandates. The beliefs and expectations underpinning policy decisions and projects undertaken are clearly defined and communicated to stakeholder groups. The college likes to implement its plans through task groups (or committees) specially constituted for the stated purpose. The task could be as simple as organization of a public lecture or more complex like the organization of a major international conference or construction of a new academic block. Clear cut action plans are drawn and adhered to. Groups are empowered and supported by the Principal, who in the given system is ultimately responsible and accountable for all that happens in the college. Given the rich human resource, the process of project implementation provides an exciting forum for vibrant academic discussions, research into new and effective ways of doing things and finding creative solutions for problems small and big. This attitude helps the college to look critically at its existing functions, policies and plans, raise the bar and remain innovative.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

As an institute of higher learning, the college is fully cognizant that when it recruits talented and high achieving faculty members, it must provide to them an academically conducive environment in which they can grow further. A faculty member is expected to contribute to teaching-learning, extracurricular activities, extension activities in the form of education outreach and community engagement programmes, and administrative work. She is also expected to participate in professional development programmes for her own continuing education/capacity enhancement and undertake independent research work for professional growth. The Principal is working towards making the college an ecosystem wherein diverse members of the community thrive symbiotically and all are given an equal opportunity. The infrastructure and facilities are continually being improved. Information on opportunities within and beyond the college is shared rapidly. The departments are urged to share their best practices. A department fund has been set up for giving an impetus to academic activities. These could be in the form of curriculum resource generation, fortnightly seminars or colloquia, department publications, or whatever is deemed a befitting thrust direction.

6.1.6 How does the college groom leadership at various levels?

The college is increasingly young with as many as two thirds (96 of the 145) of the permanent faculty having joined the college in the new millennium. It has successfully met the challenge of ensuring that the values and traditions that are the hallmark of the college are not just inherited by the new faculty but also assimilated in letter and in spirit. Creating a flawless continuum has entailed making available opportunities for the new faculty to work with the more experienced. The principle of rotation in being teacher-in-charge of a department, or heading a society or task group gives opportunities to *learn while you lead*. Mentoring and institutional support furthers personal growth. Administrative functions are often assigned to faculty working in synergistic teams. For instance, the college team that coordinates the end of semester examinations consists of one faculty member drawn rotationally from the Sciences and another from the Arts. The Coordinating Team for the Central Evaluation Centre at the college for DU Examinations has one senior faculty member

and two drawn from those who joined in 2000 and after. All Staff Council committees have an invigorating mix of experienced and new members. Most administrative committees such as the Leave Committee include the current and immediate past teacher representatives on the Governing Body. The current and the immediate past Vice Principal and Bursar serve together on important advisory, brainstorming and decision making agendas in addition to committees. With strategic composition of working groups, the college leverages institutional memory, conjoining richness of experience with freshness of ideas. Rapidly growing administrative acumen and organizational competence strengthens the entire college and its functioning.

6.1.7 How does the college delegate authority and provide operational autonomy to the departments/units of the institution and work towards decentralized governance system?

The departments are the core strength of the college. Faculties are empowered by the Staff Council to take the lead role in organizing teaching-learning and extracurricular and co-curricular activities. Within the framework of prescribed curriculum and rubrics of assessment and evaluation set by the University, faculty has autonomy to innovate in their teaching practices, adopt newer pedagogies and build enriching learning environments. Departments leverage this autonomy to break the barriers to learning and push the boundaries of knowledge. The department festival is invariably used to create a thematic learning opportunity for the entire student population. The college is highly supportive of independent applications for sponsored research or organization of programmes. The faculty conveners of various societies and committees are expected to function autonomously and deliver on the charge delegated. Their decisions are respected and administrative support provided in implementation. The Vice Principal and the Bursar play critical roles. The Hostel Committee ably assisted by the hostel staff takes care of the hostel admissions, discipline and needs of resident students. The Librarian in consultation with the committee of teachers expected to provide students requisite resources. The high degree of decentralization helps the college to move fast forward.

6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.

The culture of participative management has been adopted at MH since its inception and found to be highly effective. That the faculty are at the centre of academic and administrative processes has been delineated throughout this report. The Students Union Council has high degree of autonomy. Elected student representatives of departments and presidents of societies are self-driven. These bodies roll on their own momentum under the guidance of faculty conveners. Senior students launch major drives to hunt for talent amongst freshers, enroll them and introduce them to MH culture. They budget activities, leverage networks to bring sponsors on board and invite the very best resource persons and speakers. The Principal is always available for discussion and mentoring. It is the norm for faculty-student teams to make formal presentations at these sessions as they seek final approvals, where mandated. These presentations and intense brainstorming roundtable discussions are part of students' leadership training.

The support staff is also given immense responsibility. Science laboratories have a well-defined administrative structure. In addition to technical duties, senior staff is trained to administer laboratory stores entailing procurement, inventory control, asset and finance management. They also provide requisite secretarial assistance to science

faculty in all administrative matters under their charge, including student record keeping and facilitation. Because of the large support staff strength and capacity to attract research funding, the college recognizes the potential of science departments to function with significant autonomy as centres of excellence. The day to day functioning of the hostel is under the direct charge of the Vice Principal who is assisted by a committee of teachers and hostel staff. The Library also enjoys significant autonomy. The same is the case with faculty driven administrative committees. In all these endeavours, the college office – including the administrative staff, the Accounts Section under charge of the Bursar, and the Principal's office– facilitates rapid baseline clearances, processing of files and penultimate managerial support.

6.2 Strategy Development and Deployment

6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Quality has been the hallmark of the college, a way of functioning. The college is in the process of formulating a formal quality policy in the sense in which NAAC and contemporary management systems view it. The associated review process reveals that in myriad intangible and tangible ways, MH has always followed a systems approach in all is functions, be they academic, extramural or administrative. As a highly democratic and participative workspace, it has a high degree of transparency and accountability to stakeholders. The college has initiated the process of documenting its ways of functioning and action plans on how these can be further improved. This is seen as crucial for establishing a continuum of excellence and seamless transfer of responsibility in leadership of units and the whole.

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

The college has charted a short term and long term perspective for future that dovetails with the well thought out development plan followed over the last decade. The manifold of development in the last few years has included

- infrastructure enhancement and modernization
- expansion of seats on account of affirmative action
- changes in framework of degree programmes leading to introduction of CBCS
- changes in pedagogy leading to large scale integration of ICT tools
- establishment of Digital Learning Resource Centres
- introduction of several add-on courses of contemporary value
- inter-disciplinary and collaborative research thrust
- establishment of DSKC, enhancement of action research, education outreach and undergraduate research
- establishment of research labs, several centres and doctoral programme
- organization of capacity building programmes for students and staff0
- development of Educate the Educator programmes
- increased links with national and international education and research institutes
- creation of disabled friendly environment and assimilation of inclusive culture
- establishment of ADDRC, promotion of assistive/adaptive technologies for PwD
- high quality community engagement programmes with enhanced participation
- zero waste campus: recycling of paper; horticulture/kitchen waste; grey water

- establishment of *Miranda Tech*: the Centre for green technologies
- initiation of work on GRIHA rated new academic block

Building on the above, over the next five years the college plans to

- Strengthen liberal education leveraging CBCS with strong component of (i) humanities for science students and (ii) science for humanities students
- Establish formally a Centre for Early Leadership
- Broaden understanding of diversity and inclusive education to prepare students for life in an interconnected, rapidly globalizing and culturally evolving world
- Identify and develop competencies for the rapidly changing work place in association with employers in private, government and social sector
- Develop an immersion programme for students and faculty to enhance global exposure to other cultures and organizations
- Host cohorts for more countries under their globalization and international immersion programmes through formal MoUs
- Introduce a range of add-on courses leading to Interdisciplinary Research
- Establish a Community Engagement Centre making it mandatory for all students to participate and contribute
- Expand the activities of the Career and Academic Advancement Centre with greater industry linkage for internship and placement opportunities
- Support more students with bursaries by encouraging donations
- Develop innovative TEAL based on research in higher learning
- Strengthen the *Miranda Tech* Park for green technologies to showcase best praxis
- Create appropriate infrastructure to facilitate new initiatives

In the next 18 months, the college is committed on the academic front to

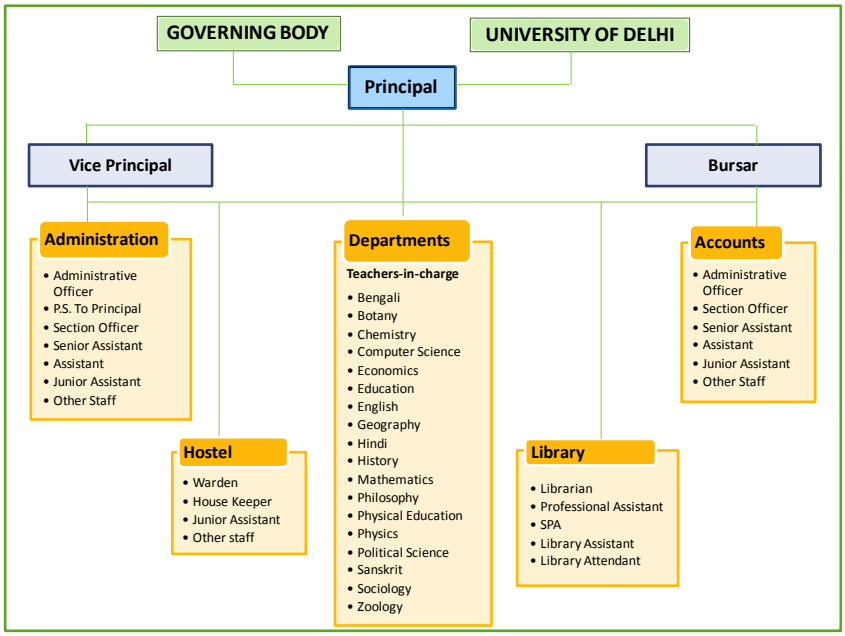
- Restoring the Auditorium, ensuring grants for comprehensive repair and renovation with installation of state-of-art facilities
- Completing the construction of the New Academic Block as the first GRIHA rated building at DU, achieving 5 star rating on fulfillment of stringent criteria
- Raising funds through various agencies to furnish and equip laboratories and lecture halls to create a model learning environment.

6.2.3 Describe the internal organizational structure and decision making processes.

The organizational structure follows the norms prescribed by the parent university and the funding agency. The Administrative Structure is standard and well defined as flowcharted in Figure 6.2.3 (a). The administrative wing led by the Principal functions in a concerted manner to provide the highest quality support to the college community engaged in accomplishing the mission of liberal education. This administrative support and scaffolding is the rock solid foundation on which the college rests and constructs its multifaceted profile.

The Academic, Cultural and Extramural activities are driven through the Staff Council with Principal in Council. There is considerable twinning and synergy in all aspects of college functioning as the academia provides wide ranging administrative support by managing affairs of teaching departments, student bodies; further contributing to infrastructure maintenance, development and enhancement.

Fig. 6.2.3 (a): The Administrative Structure



6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following Teaching & Learning; Research & Development; Community engagement; Human resource management; Industry interaction

Teaching & Learning: The college is known for its emphasis on academic rigour and stringent assessment norms, often stricter than those of peer institutions. The inclusive classroom in the university system brings its own challenges as it includes students with a wide spectrum of academic background, scholastic preparation, competence, career aspirations and motivation. Quality in teaching-learning inherently implies equal quality access for all. The college departments are well equipped to understand that they need to address the needs of the gifted, self-driven, and advanced learner, as also the special needs of those who join with inadequate preparation and are disadvantaged for multifarious reasons. Despite large class size, faculty are motivated to adopt active learning strategies with adequate individualized attention to all students, using tutorials and interactive hours. The college is committed to ensuring that all students understand explicitly the course objectives and expected learning outcomes. All departments have distinctive methods for quality assurance on these objectives through enrichment activities as gleaned herein from sections on Criteria I, II and III.

Research & Development: The college has moved beyond mere teaching. Academic rigour organically twins with research and development. Exceedingly, teaching-learning is project based. Students have early opportunities for undergraduate research and its communication on professional platforms. All departments introduce the students to research methodologies and engage students in research on varying scale. The college has a large number of DU Innovation Projects. Faculty is also engaged in research individually and/or collaboratively. Institutional accountability is through a Research Monitoring Committee. It requires proper planning and resource allocation. Quality measures have been implemented in each of these endeavours. These include foremost ethical practices. Plagiarism detecting software has been procured. Research monitoring includes discussions on appropriate documentation, proper training, validation of methods and protocols, adoption of controls, reliability and validity of

data, surveys and interpretations. College is encouraging third party evaluation. Faculty and students are encouraged to present their findings and publish these in quality peer reviewed journals with high impact factor.

Community Engagement: The co-curricular activities provide the appropriate forum for sensitizing students to what it means to be a good citizen and motivating them to work in the service of the nation. MH has from its inception contributed to social causes and worked relentlessly towards building an egalitarian society. Students are encouraged to work relentlessly for disadvantaged communities. *Enactus* and NSS have well-structured community engagement programmes. As these activities represent and add to the core values of the college, they have to meet a set of ethical and operational standards. This entails outlining objectives, methods, challenges, opportunities and accomplishments. Students receive pre-interaction training and are sensitized to inherent complexity and level of unpredictability in community interactions. They are expected to undertake initial surveys to map the ground realities, community needs analysis, meticulous planning, feasibility and sustainability study before commencing on field interactions and field interventions. NSS volunteers desirous of adopting a slum followed this process for quality observance. A similar exercise was undertaken on a project wherein the NSS volunteers launched a programme to befriend and strengthen the educational opportunities for women students enrolled in the DU School of Open Learning MH Contact Programme that runs on Sundays and on all gazetted holidays. Student volunteers are assessed on practices adopted, cultural sensitivity and responsiveness; and most importantly sustained devotion to the community cause. They are expected to have a high degree of accountability so that their work can be showcased to motivate other students and they can be upheld as role models.

Human Resource Development: Education is about human resource development commensurate with national goals and aspirations for its youth. Beyond isms and rhetoric, the college considers it a privilege to nurture the young women under its tutelage during their foundational years. It continually looks at the changes in the work place to identify the skill set potential employers seek. The Placement, Education and Career Advancement Centre organizes interactions with professionals, industry experts and HRD experts to impart knowledge about workspace expectations. The college also evaluates students on their competence through formal and informal interactions. It recognizes the merit in giving students multiple opportunities for skill enhancement so that these are not mere spikes but provide a continuum for personal growth. Quality Skill Development programmes certified by professional guilds have been started in association with NSDC for those desirous of entering specific job sectors.

Industry Interaction: The college frequently invites well known corporate and industry stalwarts to its campus to participate in various enrichment activities. Industrial visits are part of experiential learning. Students have a well established network that is leveraged to raise sponsorship for various events. A part of CRS activities, leading corporates such as KPMG have installed solar lights at the college. Going beyond such engagements, the college is establishing quality interactions through well structured internship programmes. Recently, on request of TCS, college shortlisted students to work on content writing and as content editors for the company. It has recently signed an MoU with Tata Solar Power, a neighborhood company to enable students to undertake industry based project work.

6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

Staff and students of MH are digitally connected through the official email accounts conveniently allocated as FirstName.LastName@mirandahouse.ac.in. All sections of the college have easy to remember distinctive email ids defined by their functions. The community is kept notified about official duties and responsibilities of both teaching and non teaching staff. Student groups and individual students are similarly on the college communication network. This enables a fast and effective channel of communication with the Principal who herself answers most queries and forwards information received by her personally to relevant interest groups. As part of e-Governance initiatives, the e-mail is being used extensively for communication with the University as well as funding agencies. Fully automated management system permits sharing of statistics with ease. The college is able to elicit required information, data and reports effectively through this medium. Miranda is subscribed to Google Docs and uses this effectively for collaborative work at all levels. Electronic surveys are the norm and facilitate feedback. College has embarked on a project to integrate these initiatives comprehensively.

MH has established digital communication protocols with expert groups associated with it, especially in the context of ongoing development and construction work. For example, the principal, college architect, consultants, site engineer, designated office staff, and the contractor are on a specific e-mail group through which a rapid communication and decision making channel has been established. All pertinent documents related to the project are digitally archived and electronically filed; the hard copies and minutes of meetings are also meticulously maintained. MH files all official data and records meticulously. This includes a variety of reports and minutes of meetings. The Principal's Annual Report of the College is very detailed and a major archival source of the year's activities. A brief Annual Report is also sent for publication in the DU Annual Report. MH provides information on its functioning and progress to various public surveys on college rankings. The Governing Body agenda is also very detailed as it provides an opportunity to make public the working of the college. MH has undertaken a leadership project digitizing its records of students, former staff and from inception in 1948 till the time it developed electronic management system.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

The structure of college governance has at the apex its Governing Body appointed by the University of Delhi. The duly appointed Principal is responsible for vision implementation and day to day functioning of the college. She is assisted by the Vice Principal and the Bursar appointed for a period of two years on the principle of rotation by seniority and a well structured administrative set up. Decision making is participatory and most aspects of management are decentralized. Staff at all levels is empowered and suitably trained to deliver quality service.

6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

Deliberations and decisions taken at the Governing Body meetings held in the recent year are summarized below:

Governing Body Meeting held on 20.11.2015

1. College and Hostel Budget estimate of Rs. 4504.40 lakh and Rs. 93.20 lakh respectively approved for 2015-16.
2. OBC Non-Recurring Grant status update: balance Rs. 764,93,106.
3. Donation towards re-development of garden and landscaping was approved.
4. Statement of Admission for the year 2015-16 was noted.
5. Award of 11 DU Innovation Projects worth Rs. 39 lakh was reported.
6. Award of 3 DU Star Innovation Projects worth Rs. 1.30 crore was reported.
7. Status of application for accreditation by NAAC was discussed.
8. Status of Tender for Construction of Teaching Extension Block was discussed.
9. Sanction of Rs. 3 crore by UGC for Non-Teaching Staff Quarters was reported.
10. Recommendations of the Selection Committees for appointment of Assistant Professors in Departments of Chemistry, Botany, English, History, Political Science and Zoology were approved.

Governing Body Meeting held on 26.06.2015

1. Annual Accounts of the College and Hostel for 2014-2015 was presented
2. Students Fund Account, Receipts and Expenditure as on 31.03.2015 was approved
3. Enhancement of 4 Existing Endowments was reported and approved
4. Merging of 2 Awards by a single donor and Change in Title of 3 Awards as requested by donors was approved.
5. Endowments were accepted to institute 2 new awards.
6. Endowment was accepted to institute 12 full fee waivers for the year 2015-16.
7. Enhancement of Hostel Fees was approved.
8. Appointment of Mr. S. K. Aggarwal as SO, Administration, was approved.
9. Confirmation of staff completing probation period was approved.

6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If 'yes', what are the efforts made by the institution in obtaining autonomy?

Miranda House is a University Maintained Constituent College of the University of Delhi under Ordinance XX as detailed in the University of Delhi Calendar giving the Acts, the Statutes and Ordinances (page 427 to 433). It was the first college to be so established in 1948. There is no provision for autonomy.

6.2.9 How does the Institution ensure that grievances/complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?

The college administration takes grievances seriously. ***Refer 5.1.10***.

The Vice Principal is the PIO and handles all RTI enquiries. The Principal is the Appellate Authority. The PIO seeks reply to RTI queries received from the concerned department or section of the college. All members of the college recognize they are duty bound to assist the PIO. She formulates the reply after verifying and evaluating comprehensive inputs and documents as received.

6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?

The summary of court cases in the last four years is given below.

1. Dr. S. Ganguli vs DU & Ors on Appointment of Assistant Professor in Department of Bengali; Action taken as per the final directives of Court.
2. Ramanand Sharma vs Principal Miranda House on Payment of Gratuity under Gratuity Act, Action taken as per the final directives of Court.
3. M.M. Malhotra vs Principal, Miranda House on Revision of Gratuity, Action taken as per the final directives of Court.
4. Dr. S.K. Suneja & Ors. vs Union of India & Ors. (Miranda House College R-5) on Conversion of CPF to GPF; Pending.
5. University of Delhi vs Minakshi Sethi & Ors. (Miranda House College R-7) on Conversion of CPF to GPF; Pending.
6. Delhi University SC/ST/OBC vs University of Delhi & Ors (Miranda House) on Appointment of SC/ST/OBC Teachers; Pending.
7. Vinita (minor) through her Father Vijay Kumar Sihag vs. University of Delhi & Ors. on Admission; Pending.

6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If 'yes', what was the outcome and response of the institution to such an effort?

Student Feedback on institutional performance is considered to be very important and taken seriously. Suggestion boxes are placed in the office area, library, cafeteria and hostel. Students can record complaints on malfunction of any device or equipment located at any facility in a register kept for the purpose in the office or fill a form kept in the office for the purpose. They often e-mail or write directly to the Principal for quick action. For instance, the large capacity Porta Cabin classrooms constructed on the top floor were getting uncomfortable in summer months. The college took a decision to air condition these and install blinds. Over a period of time, student societies short on storage have been provided lockers and storage cupboards. A survey on how students use the ICT facilities was carried out for need based improvement of facilities. The student and faculty feedback on shortage of space and venues for organization of events is noted and immediate solutions found. Likewise, the college monitors and seeks regular feedback on progress of plans for all major events to provide timely assistance for quality assurance.

6.3 Faculty Empowerment Strategies

6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?

Sustained Professional Development of staff is considered as critical for maintaining high standards of teaching and research. Teachers tend to teach as they were taught. Hence it is important to give to them exposure to new ways of doing things and a wide range of opportunities for experiential learning and all round personal growth. In particular, as an institute primarily devoted to undergraduate teaching, faculty is motivated to enhance their Pedagogic Knowledge Content and move towards constructivist framework of student centred teaching-learning. Educate the Educator is seen as the way forward for creating active learning environment. Use of appropriate technology is another area that needs concerted reinforcement. The policy of the top administration is to provide an encouraging and facilitating environment for (i) organization of capacity building and training programmes within the college campus; and (ii) participation of staff in such programmes organized by outside agencies. All this is actualized through a well established administrative and academic process loop.

Facilitating participation:

- College keeps track of opportunities offered by outside agencies.
- Notices received are immediately shared through e-mail with all faculty members or interest groups thereof.
- For important programmes faculty members are encouraged to apply or nominated to participate, as the case may require.
- Faculty are advised to apply in time.
- Applications and documents for participation in seminars/workshop/conferences/ refresher and orientation courses, etc. are processed fast.These include applications for visa, no objection certificates, relieving letters, and so on.
- Applications seeking financial assistance or travel grants for participation in International Conferences are forwarded with strong recommendation.
- Financial support for participation is provided in form of full or partial Registration Fee reimbursement. Faculty with research project grants avail travel if sanctioned by the funding agency. The overhead grant share of PI can also be used in accordance with DU rules.
- Faculty are expected to submit a report on the programme attended highlighting how they have benefitted from it and also share the learning with other colleagues.

The participation of faculty in Orientation/Refresher Courses conducted by CPDHE, ILLL or UGC Academic Staff Colleges in other universities is depicted below. Participation in International/National Conferences, Seminars, capacity building workshops is also given in ***2.4.3***.

Facilitating organization:

The college accords high priority to organization of high quality capacity building programmes in-house. These range from those designed exclusively for own faculty to those that have national/ international participation as well as resource persons. A convenient framework encourages more and more faculty to take organizational roles. The process is simple.

- Departments or interdisciplinary faculty groups decide on the theme and scope of the programme, often in consultation with the Principal.
- An Advisory Committee is constituted and a programme designed in consultation. Speakers and resource persons with appropriate stature and ability are invited.
- The local Organizing Committee with one or more Coordinators is supported by an administrative support team including secretarial and required technical staff. For mega events, help of departments other than those academically engaged is often sought especially for administrative and logistical support.
- First time Programme Coordinators are personally mentored by the Principal to ensure that due processes are followed. Detailed reports of earlier programmes and set of templates for standard documents are shared for organizational training.
- Faculty Coordinators are encouraged to apply to funding agencies such as UGC, ICCSR, DST, DBT, CSIR, INSA, NASI, ICMR, etc. In the sciences, these are often facilitated through DSKC, DBT Star College Scheme grants, and *Science Setu* Programme. The college extends financial help with loans and advances pending receipt of sanctioned funds. Seed money and internal allocation is often extended for in-house programmes in absence of outside funding, depending on merits of the case and recommendation of a consultative group.
- For international programmes, administrative support is provided for seeking statutory permissions from MHRD, MHA and MEA.

- Support is extended for visa and travel arrangements where requested.
- On-campus accommodation is provided to the Resource Persons and outside participants in the College Guest House; the Hostel Warden is in charge and ensures excellent support.
- Adequate venues and ICT arrangements are made available for the programme. No effort is spared to ensure that the organization of the event meets the high benchmark characteristic of all MH programmes.

Faculty Recognition, Achievements and Awards: Refer 3.4.4.

The Principal makes it a point to acknowledge the contribution of individuals and groups at every forum, be it the Founder's Day Speech or other public occasions. These are also recorded in the Annual Report. Faculty members are often nominated for representing the college at various events and meetings of other organizations. The college also sends nominations for awards by the University. In 2009, 8 faculty members received recognition for excellence in teaching; this was the largest number from any college. On occasion of DU Foundation Day on 01 May 2016, Dr. Monika Tomar, Department of Physics, was the only college teacher to be given an award for excellence in teaching.

Capacity Building of Support Staff

The motivation of Miranda House support staff to match the pace set by the college is exemplary. Their role in establishing the reputation the college enjoys cannot be overstated. They are provided training on the job on a continuous basis necessitated by continually changing demands of the office works space. In addition, staff is sent to Training Programmes organized by the University and other organizations.

- In the last 4 years, 20 Laboratory Staff members from Departments of Botany, Chemistry, Geography, Physics and Zoology attended the Three Week Training Programmes organized by University Science Instrumentation Centre (USIC). The break up is: 2016 (9); 2015 (2);and 2012 (9). No programme was conducted in 2014, 2013. Of the staff members in these departments, nearly all have attended this course at least once in their career.
- The System Network Administrator was sent to a Training Programme offered by DU Computer Centre.
- Six Laboratory Staff members were sent for a Training Programme on Use of UNIX conducted by DUCC.
- An Orientation Programme was organized 02.01.2015 for newly recruited staff. Senior staff members form Administration and Accounts section shared their knowledge and experience and answered queries.
- Good Governance Week was organized in December 2015 vacations. Open discussions were held by various wings of the college administration. Ideas generated have been implemented.
- The Administrative Officer attended a Training Programme organized by DU on Roster of Teaching and Non-teaching Staff.
- In accordance with VI Pay Commission adopted by DU, Group D Staff members of the college and the hostel who do not possess requisite educational qualification (matriculation) were provided Multi Skill Training Programme for being placed in Pay Band 1 of Rs. 5200-20200.
- Contractual Staff employed through agencies are periodically provided training as part of the MoU.

- Workshops on Computer Operation are routinely organized during vacations.
- Significantly large number of staff members have been imparted Civil Defence and Fire Fighting Training by officials of Civil Defence Office and Police.

Support Staff Recognition, Achievements and Awards:
The college encourages its staff members to enhance their educational qualifications.

- Cartographic Assistant Dr. Parveen Mishra presented a paper in a Conference on Remote Sensing of Land Use and Land Cover organized by European Association of Remote Sensing Laboratories; University of Bonn; Germany; 2009, and at the Asian Conference on Remote Sensing held at Colombo; Sri Lanka; 2008.
- Some members have successfully cleared Class X and Class XII School Examinations from National School of Open Learning.
- Two staff members have enhanced their qualifications through distance mode.

Former non-teaching staff members have instituted awards to give an incentive to staff engaged in various sections.

- Best Worker Library Award instituted by Ms. P. Tandon, former MH Librarian
- Best Worker Accounts Award instituted in memory of late Ms. S. Bhutani, former member of the administrative staff
- Best Worker Garden Award instituted in memory of late Ms. S. Bhutani, former member of the administrative staff
- Best Worker among Group C (erstwhile Group D)Employees Award instituted by Shri Singh Raj, former member of the administrative staff
- Best Worker among Non-Teaching Staff in Zoology Department Award instituted by Shri Milap Chand, former member of the Zoology Department

Welfare: The non-teaching staff is also provided opportunities for holistic growth.

- Sports Department organizes friendly matches and leisure sports for them each year. A Cricket Match between two staff teams is played in February. The college Non-Teaching Staff Cricket team participates in DU Inter-college matches.
- A Free Health Checkup Camp was organized for staff and their dependents with cooperation from RG Urology and Laproscopy Hospital, Pitampura.
- The wide range of activities undertaken by the college often entails working well beyond college hours. Arrangements are made to provide escort service or transport to women staff working till late. ***Refer 3.6.4.***

6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

Continuing education and professional development of the faculty is given high priority. Faculty are given duty leave to participate in Refresher and Orientation Courses organized by CPDHE, ILLL, etc. MH organizes advanced programmes in-house with its own staff as resource persons. The Principal frequently asks faculty associated with a particular activity or function to accompany her for meetings, or represent her and the college. This gives them a broader perspective in which to view a particular aspect of administration and provides an opportunity to network. During visits by delegations and speakers, a select group of faculty members join discussions. Dr. M. Pathak represented at the INSPIRE review meeting 2014 held at KIIT Bhubaneswar; Dr. M. Verma represented at INSPIRE review meeting held in Goa, 2016; and attended the management Development Programme for Senior Scientific Staff at Hyderabad Staff College of India; Ms. P. Behari represented the Principal at

TCS meeting of the Principals in Bengaluru; and so on. Dr. B. Nanda and Dr. J. Pillai undertook a collaborative visit to Wisconsin University. Seven faculty members have so far visited the Utrecht Business School under the exchange programme. Nine ALAF faculty who visited University of Sydney for 3-weeks in 2013 have been regularly participating in the diplomatic events at Australian Embassy. Several science faculty have been nominated by the college to serve on committees/task groups constituted by DBT and DST, especially in furtherance of INSPIRE Programme which is of great national importance.

6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

Faculty members are encouraged to actively participate in all aspects of college life, irrespective of whether they are permanent, temporary, *ad hoc* or contractual. They are expected to contribute towards strengthening the four pillars on which the college rests, namely, teaching-learning; research; extension activities; and administrative work with responsibility and accountability. DU norms for formal appraisal are followed. MH has evolved a system wherein faculty are required to submit individually formal reports on work undertaken. These reports document personal achievement, both scholastic and extramural. Teachers-in-Charge of various departments and Conveners of various societies and task groups are also expected to submit an annual report on work or activities carried out under their guidance. Some of these reports are also presented at the Staff Council meetings and form the basis of the comprehensive Annual Report. Further, faculty are required to update their personal profile on the website on a regular basis. Thus, the contribution of the individual to the multidimensional corporate life of the college is well documented. *Curriculum vitae* of individual faculty members are available on the college website in the public domain. The college has developed an Online Self Appraisal Proforma (SAP) that all faculty members on threshold of a promotion to the next pay band or higher post must fill. Following the University guidelines, SAP is self evaluated on the existing rubric to assign API scores along different dimensions. A Committee of senior faculty members is constituted to scrutinize the proforma submitted and validate the API scores. The process motivates faculty to work towards strengthening their bio profile. It also provides the Principal and Administrative Committees a basis to nominate faculty members for various awards, further enrichment programmes, etc.

6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

For the purpose of attaining the higher grade or promotion, the University guidelines are being followed. The college informs faculty members 6 months before they are due for appraisal, asking them to submit their applications in time. A committee is constituted for verification of API scores. The outcome of selection procedure is reported to the GB for its approval before being communicated to the faculty member.

6.3.5 What are the welfare schemes available for teaching and nonteaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

Staff members have several statutory entitlements. The college believes in timely and efficient action on providing benefits as per rules, following due processes. The level

of satisfaction of staff is high as is reflected by the fact that several members with spouses in employment in the university or its constituent colleges opt to claim benefits from Miranda House. The data given below summarizes the welfare benefits claimed by teaching and non-teaching staff (including pensioners), in the past 4 years.

Table 6.3.5 (a) Teaching Staff: Allowances (Amount in Rs.)

Financial Year	2012-2013		2013-2014		2014-2015		2015-2016	
Allowances in Rs.	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Childrens' Education	18	360000	21	435000	24	555750	26	702000
LTC/HTC	28	1268935	33	1923362	40	2170601	22	998607
Leave Encashment LTC/HTC	10	326406	14	436699	19	713384	08	354667
Medical Reimbursement	38	3547769	37	2333133	37	2342480	33	2073411
Medical Reimbursement[P]	15	778954	20	1305613	21	2023663	15	20373314

Table 6.3.5 (b) Non-Teaching Staff: Allowances (Amount in Rs.)

Financial Year	2012-2013		2013-2014		2014-2015		2015-2016	
Allowances in Rs.	No.	Amount	No.	Amount	No.	Amount	No.	Amount
Childrens' Education	28	590554	28	638141	26	611872	30	731528
LTC/HTC	15	515577	31	1443636	39	2116923	09	57508
Leave Encashment LTC/HTC	26	237791	05	40801	31	315301	02	34399
Medical Reimbursement	60	1247309	67	1434865	47	1571180	61	1877848
Medical Reimbursement[P]	14	33908	26	431656	38	1227246	45	2255083

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

Miranda House is more than a college. It has by now established itself as a community of practice. It is known for the meritorious profile of its faculty and students and the high standards it sets for itself. The college is recognized by the achievements of numerous alumnae who have distinguished themselves in diverse fields of occupation. Both, faculty and students consider it a privilege to be a part of the MH community. The charm of the heritage building, the green campus, state-of-art infrastructure, the liberal atmosphere, and sustained excellence over close to seven decades give an immense sense of pride and satisfaction. More importantly, the freedom to express, discuss, debate, and function in relative autonomy, makes it an attractive workspace where the individual can evolve scholastically and creatively. Serving faculty perceives MH as a place where they can fulfill their individual academic aspirations and also contribute to the larger cause of women's education and empowerment. A large number of alumnae dream of one day returning to their own college as faculty. Appointment at MH is coveted and an aspiration fulfilled. Of the 7 Principals appointed at MH since 1948, three are alumnae, namely, Dr. T.S. Rukmini (1982-1993), Dr. Kiran Datar (1993-2000), and Dr. Pratibha Jolly (2005- continuing).

To retain its leading edge, the college ensures that vacancies are well advertised and appointments are made strictly on the basis of merit. The reputation of the college motivates selection panels set up by the parent university for recommending names of candidates for appointment on basis of interview to find the most meritorious. There are two concrete examples at the college of the candidates with significant experience being offered a higher starting salary as an incentive to join. Several eminent faculty served full time at MH till superannuation.

Recognizing the need for retaining merit in a world full of opportunities, within the constraints of its rules, the college is liberal in granting sabbatical leave, study leave for independent post doctoral work, and extra ordinary leave for academic purpose such as working on a book. It also allows faculty to take lien to join other institutes when they wish to leverage opportunities offered by other organizations. Permission is granted for faculty to participate in postgraduate teaching at DU.

Research facilities are assiduously being enhanced at the college and faculty are encouraged to apply for project grants and also guide independent research. College facilitates with basic infrastructure. Dr. Sadhna Sharma is guiding Ph.D. students independently. Ms. Iti is the first student to submit a Ph.D. thesis directly from MH.

It needs to be added that premiere institutes of higher learning across the country covet faculty serving at MH. Inasmuch as the teaching for postgraduate courses is not carried out at the college and the post of Professor has not been sanctioned so far, in recent years, the college has relieved several faculty members to join institutes like DU postgraduate departments, JNU, and TISS. This progression is viewed as a measure of the success of the college in nurturing its faculty. Former faculty continue to contribute to the growth of the college in a variety of ways.

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

The college works within the framework of rules and regulations formulated by the Government, various Funding Agencies and the University. Fiscal discipline, compliance with terms and conditions of the grant, judicious use of resources, integrity and accountability are of utmost importance and followed diligently. The college is 100% maintained by the UGC. Other regular source of income is the Student Fee. The Annual Budget presented to the UGC reflects the establishment expenditure including, salary, retirement benefits and non-salary components. Grants for special projects and research are for specific use.

College Accounts are supervised by the Finance Committee which consists of the Principal (in chair), Vice Principal, Administrative Officer and the Section Officers of Administrative and Accounts Sections. These are subject to final approval of the Governing Body. The college has well defined procedures for allocation of funds to various segments of the college. The financial protocols are diligently followed at every level. Financial transactions of student societies and department activities are routed through the convener or department teacher-in-charge, as the case may be. Day to day financial transactions are monitored by the college Bursar. The final approval is of the Principal. Electronic financial transactions are the norms.

6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

As part of protocol of audit for university maintained institutions, a comprehensive independent internal audit of all relevant establishment and financial records of the college is carried out annually by the Audit Branch of the university under guidance of the Internal Audit Officer. The Office of the Director General of Audit (Central Expenditure) also carries out an yearly audit of the previous financial year. The objective is to check that financial statements are prepared in accordance with acceptable accounting standards/rules; and various elements are properly evaluated, measured and presented. The evaluation of the internal control assists in safeguarding assets, resources and assures accuracy and completeness of accounting records in complying with financial laws and regulations. Miranda House is part of the University Audit Report carried out by the Office of the Director General of Audit. It receives the relevant observations of the Separate Audit Report (S.A.R.). Internal Audit last carried out a 17 day audit from 22.01.2013 to 14.02.2013. Office of the Director General of Audit (Central Expenditure) last carried out audit on 06.07.2015 to 10.07.2015 (5 days) and 03.12.2015 to 04.12.2015 (2 days). Actuarial valuation of retirement benefits in accordance with the Uniform Format of Accounts and AS-15 was advised. All observations were complied with in the financial year 2015-16. The accounts have always been found to be satisfactory subject to observations made in the report.

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

Maintenance Grants: As stated at the outset, the college is 100% funded by the UGC which provides the Annual Maintenance Grant with Salary, Retirement Benefits and Non Salary components. Funds are also available under Student Fee. The college has no other source of income and deficit is met by the funding agencies. Audited Income and Expenditure Account Statements for the last four financial years are appended.

Five Year XII Plan Grants (2012-2017): The college has been sanctioned Grant-in-aid towards(i)General Development Assistance of Rs. 58.95 lakh; (ii)Reconstruction of Non-teaching Staff Quarters of Rs. 3 crore.

OBC Grants: The college received an additional recurring grant of Rs. 1 crore against projects submitted for repair and renovation; these works were successfully completed. It has received from UGC and DU administrative a sanction of Rs. 3.7 crore towards ongoing construction of the New Academic Block.

Five Year XI Plan Grants (2007-2012): The college was sanctioned Grant-in-aid of Rs. 2 crore towards Construction of Women's Hostel.

Expansion of seats for OBC: The college received grants for development and enhancement of infrastructure subsequent to expansion of seats for OBC category students. These were received under the Recurring and Non Recurring heads.

Government of NCT of Delhi: Directorate, Higher Education sanctioned a contribution of Rs. 50 lakh amounting to 25% of the grants sanctioned by UGC for Construction of Women's Hostel.

Delhi Kalyan Samiti: This functions under the Directorate, Higher Education Govt. of NCT of Delhi. Based on applications made, it sanctioned (i) Rs. 25 lakh for Construction of a Bounce Back Surface Basket Ball Court at the college; and

(ii) Rs. 26 lakh for Procurement of Kitchen Equipment for the Hostel Kitchen.

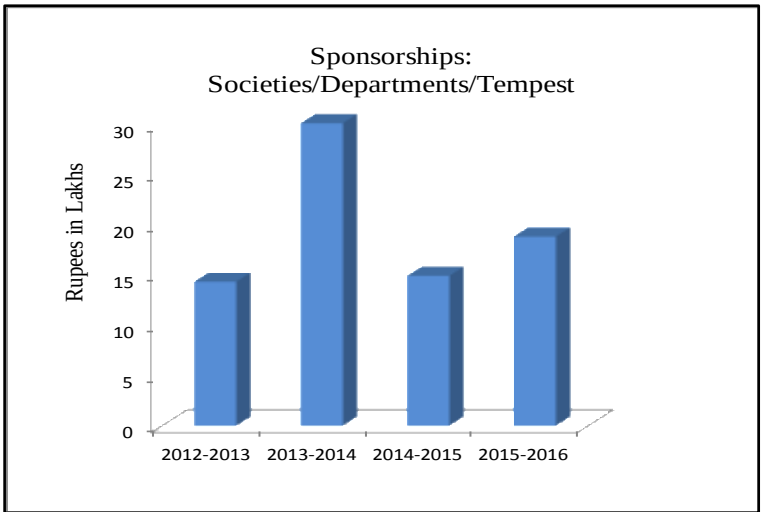
6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

The college encourages individual teachers, departments and collaborative groups to apply for Major and Minor Research Projects under various schemes offered by UGC, DBT, DST, CSIR, ICMR, INSA, ICHR, ICSSR, DU; Financial assistance towards organizing International and National Conferences, Seminars, Workshops; Travel Grants for participating in International Conferences, etc. ***Refer 2.4.4 and 3.2.7.***

Apart from individual project grants, major institutional grants have been for:
1. DSKC, funded by the DST.
2. DBT Star College Scheme Award, funded by the DBT.
3. DU Star Innovation Projects Award, funded by DU; this includes a core grant for creation of instrumentation facilities at the college.

The college innovatively leverages every opportunity for raising funds. International funding agencies have been a major source of funding for International Conferences and Workshops since 2005. UNESCO, India Sri Lanka Foundation, Indo-US Science and Technology Forum. International Workshop in 2012 Physware was sponsored by the Abdus Salam International Centre for Theoretical Physics, Trieste, Italy. Fig. 6.4.4 summarizes the sponsorship amount raised by various departments from private organizations for society and department events in the last four years.

Fig. 6.4.4: Funds Raised from Private Sponsors by Societies and Departments.



6.5 Internal Quality Assurance System (IQAS)

6.5.1 Internal Quality Assurance Cell (IQAC)

(a) Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?

The process of preparing the Self Study Report for NAAC led to an objective 360° view of the college, unleashed reflection and brainstorming at a variety of levels.

Quality Assurance was the common denominator in all these discussions. The Steering Committee constituted for the purpose engaged in wide ranging discussions. The committee took the following decisions that were then implemented:

- All departments were asked to study in depth and discuss the Manual for Self-Study Report for Constituent Colleges.
- All faculty members were asked to fill a comprehensive Self Appraisal Proforma, following the format of the Online Self Appraisal Proforma designed for younger faculty due for promotions.
- All faculties were asked to create detailed Department Reports with comprehensive data tracing their own history, critically evaluating current practices, and mapping the future.
- It was decided that as Miranda House approaches 70 years in 2018, work should begin on compiling another Commemorative Volume.
- An Internal Quality Assurance Cell should be constituted and begin work immediately. Subsequently, a ten member IQAC was constituted. While the Steering Committee deliberated on who to invite as external members on the IQAC, the finalization was left as prerogative of Governing Body.

The IQAC decided that there was need to

- strengthen the process of remedial teaching.
- document problems encountered by students on account of classroom diversity and educational background in a bid to start formally Bridge Courses; and float more short duration add-on courses.
- improve the institutional process of result analysis.
- document and share feedback surveys already being carried out.
- develop online dynamic feedback mechanisms for facilities and services such as library, cafeteria, sanitation, toilets, infrastructure, ICT services, helpfulness of staff, administrative processes, etc.
- initiate the process of Third Party Energy Audit, Green Audit, Accessibility Audit, and Disaster Preparedness.
- initiate the process of installation of roof-top Grid Connected Solar Energy Plant.
- organize a Seminar on Best Practices with all departments making a presentation.

Based on suggestions of Steering Committee and the IQAC, initiatives were strengthened for organization of Remedial Courses; Bridge Courses; Google Survey on ICT by students and Google Survey on ICT usage by faculty.

(b) How many decisions of the IQAC have been approved by the management/authorities for implementation and how many of them were actually implemented?

The Governing Body of the college fully supports development in pursuit of excellence. The Principal has been the motivational force in the decisions taken collectively at various forums within the college after due deliberations, including the Steering Committee and the IQAC. The college administration is facilitating implementation in all possible ways.

(c) Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

At present two external members on the college IQAC as stipulated by NAAC have not been appointed. However, following its established practice, the college is

discussing matters of quality assurance with a large number of experts who are associated with various projects of the college. This is through, both, formal and informal meetings. An academic exercise of how the best institutions in the world undertake quality assurance is being carried out.

The college organized two Skype Video Conferences with King's College London, UK, in June 2014 on the subject of (i) Institutional Quality Assurance, and (ii) Research. Each session was of two hour duration. These entailed a dialogue between faculty at MH and King's faculty in order to exchange ideas on the processes each institution has evolved for full time and collaborative courses run with other institutions. There was a presentation by the Head of Quality Assurance at King's, Trevor Pearce, who covered issues relating to the UK Quality Framework in Higher Education and the Quality Code, Quality Assurance and "Managing Higher Education with Others" with reference to joint award programmes and Short Courses. The session on Research covered topics such as how many academics engage in research at King's, what is the difference between academics that conduct research and those that teach, how research influences teaching, how research is funded. Faculty members of MH discussed the research initiatives they have been undertaking and how students have been participating in them, with attempts at bringing out department journals. Both the sessions were highly informative and interactive. They provided the necessary orientation, motivating faculty members to look at quality assurance as a critical part of higher education. The proceedings were recorded at King's and a summary document prepared. This initiative assumes great significance in light of the King's International Summer School hosted at MH and increasing globalization with MoUs for exchange programmes with several International Universities.

The college has made quality assurance a part of informal discussions and dialogue carried out with numerous visitors from other institutions, in particular international visitors and collaborators. Best practices are being adopted and adapted. The college is on the threshold of a major quality assurance overhaul.

(d) How do students and alumni contribute to the effective functioning of the IQAC?

Students are central to all projects undertaken and measures adopted at MH. Their feedback assists in improving quality. MH alumnae have established themselves in lead roles in many sectors and bring insight to the college about the changes in the work place and valuable advice on required professional skills that can be imparted early. The newly established IQAC is drawing action plans on formal orientation of Students Union and Cultural Council towards quality assurance processes with mentoring by alumnae.

(e) How does the IQAC communicate and engage staff from different constituents of the institution?

The IQAC has made a preliminary beginning. It will soon scale up its activities. For pilot need assessment projects, it is leveraging the great strides college has made in the area of e-governance to procure useful data and community feedback. The communication between different constituents of the community and stakeholder groups is increasingly through digital media. e-mail is the preferred mode. All staff members, including nonteaching staff, use only the official e-mail id on the college domain for all official communications. Data sought by IQAC is provided by the

concerned staff who also provide administrative support in analysis and documentation, if required.

6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalization.

Effective twining of academic and administrative processes at MH is the bedrock of quality education the college delivers. The coherent synergy between faculty, support staff and the apex administrative team ensures timely delivery of services to numerous stakeholders. The college provides excellent work environment to all sections of its staff. Offices of administration, accounts, library, laboratories, ICT services, hostel, and all miscellaneous services are ergonomically designed work spaces with high quality contemporary facilities. An early user of technology, the college has invested resources in development of custom designed software packages for Enterprise Resource Planning (ERP). These are periodically upgraded to meet new requirements. For example, administrative staff provides faculty timely information on student admissions, demographic profile, course options exercised by students, distribution of students across courses and sections, examinations to take, and so on. It manages attendance and internal assessment records. There is seamless integration and linking of all processes; this entails management of student data from the start point defined by online admission application to the end point defined by examination results and issue of certificates and transcripts. The college uses web linked software modules for key academic services such as Department, individual faculty and room timetables; and student attendance. The faculty can log in to upload the data themselves with assistance for staff, if required. The library has Web OPAC. Under IQAC, a major review will be undertaken on how to further enhance integrated solutions.

6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.

MH inherently follows quality assurance procedures in all its processes. The college endeavors to deploy the latest technologies for effective management. Maintenance and upgradation of computers is accorded high priority. New software packages are introduced at a rapid pace. Staff is continually challenged to produce professional quality work. They see this as an opportunity to learn new skills. The apex administration mentors and provides training on the job for quality service. Short duration highly targeted skill development courses are organized for delivery of requisite services. The principle of rotation has ensured that a significant number of staff members are well trained and able to keep pace with the multifaceted activities the college undertakes as a community of students, educators and researchers.

It needs to be added that the laboratory staff has also been trained in-house to high caliber. This has been an essential pre-requisite for the large number of ongoing research projects and education outreach programmes organized throughout the year. The appreciation they receive from distinguished resource persons and visitors has enhanced their motivation to excel further.

6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

Quality Assurance for all academic programmes is foremost priority.

Academic Audit: The overarching framework has several in-built provisions for academic audit which so far have been in form of periodic internal review strengthened by Oversight Mechanism. The Academic Committee with all Teachers-in-Charge addresses comprehensive agenda that is synchronized to the academic calendar for timely planning and implementation of each aspect. Comprehensive discussions are on organization of teaching-learning; class and tutorial size; workload, timetable; optional papers offered by the departments, academic counselling on choices that students can exercise, survey based enrollment of students to various electives, etc.; cooperative teaching; sharing of resources; infrastructure and library requirements; attendance, internal assessment and timely communication of these data to students, administration and the University; appointment of *ad hoc* and guest teachers; faculty recruitment; faculty capacity building programmes; promotions; student grievances; assessment of student performance; conduct of examinations; and so on. The first meeting at the start of a new semester is devoted to presentation of result analysis by each department, listing university ranks, distinctions and divisions. The data on essential repeats and failures, if any, is scrutinized carefully in a bid to understand reasons. On one hand, the college celebrates the achievements of its top ranking students by organizing a Scholars Lunch hosted by the Academic Committee to felicitate the top three college rankers – many of them are university rankers. On the other hand, individual teachers and departments set up personalized counselling and remedial processes for under performing students. Those short on attendance or lagging in assignments are also monitored and personally counseled.

Research Audit: Funded research projects periodically undergo third party evaluation. The evaluation reports have been excellent.

University of Delhi Innovation Projects: Students are required to submit individually monthly progress report of work undertaken; internship stipend of Rs. 1000 per month is transferred after due evaluation and recommendation by one faculty mentor. The project team consisting of 3 to 4 faculty mentors and 10 students is required to submit quarterly/half-yearly reports of work undertaken. The final report is certified by the external mentor. The Project Team also participates in presentations for purpose of mid-term evaluation as and when these are organized by the Office of Dean, Research, DU. The Project Teams participated in the Annual University Festival *Antardhwani*, when organized in February 2013 and 2014. Interactive Stalls and exhibitions were put up on display. Four projects have received recognition and certificates of appreciation. Additionally, work is published in peer reviewed journals.

The college immediately devotes itself to implementing the suggestions given by the expert team reviewing these projects.

6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

As a constituent college of DU, the college is subject to provisions of the Act, Statutes and the Ordinances of the University. Further, as a University maintained college, fully funded by the UGC, all its quality assurance mechanisms are aligned with the parent university and the funding agency. The Governing Board is nominated by DU. The University Treasurer is an *ex-officio* member. The college accounts are subject to financial audit by the DU Internal Audit section and by Office of the Director General of Audit (Central Expenditure). ***Refer pages 520-534 in Supporting Documents.***

The college follows the principle of equal opportunity and national policies on reservation in admission and recruitment of staff. As described across several sections of this report, it works towards equity and excellence in fulfilment of its mission as a leading institution for women's education and empowerment. The measure of its success is reflected in the large talent pool it has nurtured in the service of the nation; the large number of well trained human resources it contributes to the work space; the ethical values and leadership quality of its alumnae in all arenas of human endeavour.

6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

Refer 6.5.4.

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

The College holds itself accountable to the stakeholders: the students, their parents, serving and former staff, alumnae, the funding agencies and the parent University. It understands that it is answerable also to the society at large. The college endeavours to be fair, transparent and culturally sensitive in all that it undertakes. Through the college website, it makes public relevant policies, decisions and data.

Oversight Mechanism: To accomplish its mission of quality teaching-learning, the college designed an Oversight Mechanism as an independent and objective assurance activity. Specifically, the stated objectives of the oversight mechanism are to ensure:

- well-informed and systematic implementation of all processes;
- effective organization of teaching-learning so that the needs of each and every student are served and grievances, if any addressed appropriately;
- the evaluation process is systematic, objective, impartial and transparent with inbuilt mechanism for timely feedback to the student;
- the evaluation process is evidence-based and reliable measure of students'learning
- teaching, continuous evaluation and feedback is uniformly executed across different sections of teaching;
- appropriate mechanisms for moderation of evaluation across sections are setup;
- students are given adequate support and remedial opportunities as they work towards achieving the learning objectives;
- the college remains accountable to students, their parents and the University;
- shortcomings in the organization, implementation and monitoring of all processes are recognized and remedial measures adopted for iterative improvement.

The Oversight Mechanisms assume great significance in the context of Choice Based Credit System where flexibility, freedom to choose from a range of courses, and requirement of compulsory courses for large cohorts necessitate large number of multi-ability, multi-disciplinary sections be taught the same course by different teachers. This raises questions on standardization of teaching, student satisfaction and assessment. For instance, the freshman class of 1000 are required to study Ability Enhancing Compulsory Courses (AECC) on Language Communication and on Environmental Science. In the odd semester, Group A consisting of about 500 students study Language Communication in 10 distinct sections and Group B with another 500 students studies Environmental Science, again in 10 sections. In the even semester, the groups interchange. On varying scales, similar challenges are

successfully addressed with utmost quality assurance in teaching of many other courses to the satisfaction of all stakeholders.

The objectives of oversight are implemented through three Committees, with differentiated responsibilities. These are (i) Administrative Committee; (ii) Coordination Committee; and (iii) Moderation Committee. The Committees meet periodically and work synergistically for smooth functioning. The Administrative Committee works closely with the College Workload and Time- table Committees to organize teaching for the large cohort drawn from 20 bachelor degree programmes. This entails overcoming several challenges of time and space. The Course Coordinators organize teaching, overseeing recruitment of *ad hoc* or guest faculty and issues of their retention. They also ensure standardization of teaching and address questions of student satisfaction. The Moderation Committee works independently to ensure normalization in assessment across multiple sections. Despite multi-pronged efforts on quality assurance, grievances, if any, are addressed by the Grievance Committee. Item further elaborates on redressal mechanisms. With careful quality checks at each stage, feedback shows that the satisfaction level with the teaching-learning is excellent. Inasmuch as many functions of the college reside with the parent university, appropriate documentation and timely communication between the partnering sections ensures seamless integration of services to stakeholders.

Any other relevant information regarding Governance Leadership and Management which the college would like to include.

MH prides itself in providing a platform for bringing out the leadership and management potential of students. The exposure they receive at MH stands them in good stead, no matter what career they choose for themselves afterwards. A Mirandian stands out at her workplace for her poise, confidence and efficiency.

Criterion VII

Innovation and Best Practices

7.1 Environment Consciousness

Miranda House was one of the first colleges to set up an Environment Society, *MH-Vatavaran*. From its inception two projects were identified - Paper Recycling and Composting. These two highly visible innovations became the touchstone of environment consciousness at MH. The immensely useful compost and the beautiful paper products made at MH imparted a tangible sense of pride and helped the college community to converge towards a common goal of creating a *Zero Solid Waste Zone* and a *Clean Campus, Green Campus*. The college today has several innovations in the field and is upheld as a leader in environment consciousness. More importantly, it presents to its student community a participative model of sustainable green practice that becomes a part of their own life style, where ever they go. The college looks at all dimensions of environment and is engaged in serious research on projects emanating from its heightened environment concerns. All this has resulted in establishment of *MirandaTech: The Green Technology Park* which demonstrates successful technological solutions in context.

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

The New Academic Block under construction at MH has been designed to achieve Green Rating for Integrated Habitat Assessment (GRIHA). The Project has been registered with GRIHA Council for third party evaluation. The GRIHA rating system consists of 34 criteria categorized under various sections such as Site Planning, Conservation, Efficient Utilization of Resources, Building Operation and Maintenance and Innovation Points. The building design has several green features with the aim of achieving the highest five star rating. This will be the first GRIHA rated building on the University of Delhi campus.

7.1.2 What are the initiatives taken by the college to make the campus eco-friendly? **Energy conservation; Use of renewable energy; Water harvesting; Check dam construction; Efforts for Carbon neutrality; Plantation; Hazardous waste management; e-waste management.**

Energy conservation: The college is designed to optimally utilize natural light. The original set of buildings have 13 inch brick walls that instead of cement used lime and sand; rooms are buffered by long wide corridors; each room has ample windows and glass panelled doors for optimal utilization of natural light; halls with high arched ceiling are naturally cooler. As the college renovates and refurbishes spaces, it has resolutely ensured maximum possible use of natural light. The maxim is small measures go a long way to save energy.

- The Principal's Office, the Administrative Block, the Library, the Laboratories are always suffused by natural light.
- Classrooms have transparent glass doors and windows for maximum use of natural light so that electric lights do not need to be switched on all the time.
- 'Save Electricity' campaigns are conducted throughout the academic year.
- Student volunteers of *MH Vatavaran* have put up posters near the switchboards of classrooms urging users to switch off lights and fans on their way out.
- Gas burners in the laboratories are ignited only when necessary.
- In classrooms and labs, lights and fans are switched on only in the occupied area.
- While purchasing air conditioners or refrigerators, the Bureau of Energy Efficiency star rating is checked.
- Students are urged to conserve every drop of water, especially in the hostel.

- College community observes the Earth Day when lights in the academic block, the hostel and the residences are switched off.

Use of LED Lighting: The college is rapidly substituting tube lights and CFL bulbs with appropriate LED luminaires. Because of financial constraints, this is done as and when a non-functional device requires replacement. In a concerted move, traditional lights which consume a greater amount of power have been substituted by LED's in the library and all corridors.

Use of renewable energy: The hostel has installed 7 Solar Water Heaters on the roof to cater to the needs of the residents and the hostel kitchen.

- The college has installed 40 Solar Street Lights. (i) Installation of 20 Solar Photovoltaic (SPV) Street Lights of capacity 20 Wp SPV in January 2013 has been facilitated by KPMG Foundation which has funded the cost of the project under CSR. (ii) Installation of another 20 Solar Street Lights was facilitated by an MoU in January 2008 with M/s Sonen who have installed and maintain the luminaires. The MoU is valid for 10 years.
- Under the DU Star Innovation Project *3R: Reduce*, *Reuse*, *Recycle*, funds have been earmarked for installation of 7 kWp Grid Connected Roof Top SPV Power Plant expected to be operational by end of July 2016. This will provide electricity to the *MirandaTech* Park area where the green technologies are installed.
- College has applied for grants to enable installation of a fully owned 100 kWp Grid Connected Roof Top SPV Power Plant to meet significant proportion of its energy needs. The initial cost of installation of the assets will be recoverable in a period of 5 years. The alternate option of using the RESCO model leasing the roof and adopting Design Build Finance Operate (DBFO) model in Public-Private Partnership (PPP) mode is being explored.

Water Harvesting: The water table in Miranda House is very high. Hence water recharging is not recommended. The college is in the process of constructing a comprehensive water management system. Work is underway for construction of water tanks for collection of rainwater and recycling.

Grey Water Recycling: The college has two pilot projects on grey water recycling described under Innovation. A comprehensive plan for recycling and reusing grey water from all sources in the hostel and college is planned. This will be a part of an integrated solution to be undertaken along with the ongoing construction of the New Academic Block. This has provision for innovative anaerobic treatment of grey water.

Check dam construction: NA

Efforts for Carbon neutrality: Efforts towards reducing the carbon footprint include reducing energy consumption, using alternative energy source where possible and planting trees to absorb carbon dioxide.

Plantation: MH has extensive plantations. As stated in 4.1.2 (a) the campus has a rich biodiversity. Plantations carried out in different parts of the college campus are in a well-planned way so as to keep the campus green and contribute to reducing the carbon footprint without interfering with the natural lighting in classrooms. Aesthetic landscaping further enhances the natural beauty of the heritage building.

Green Laboratory Practices: The Department of Chemistry has been leading the movement for green practices in the laboratory and management of chemical waste.

- Green practices are followed by minimizing the quantity of chemicals required for different experiments by employing dilute solutions, using smaller burettes and pipettes and performing experiments in groups where feasible.
- Greener chemical methods are employed where possible. e.g. aspirin synthesis is done using a special laboratory synthesis microwave station rather than by the conventional method.
- Solutions for disposal are neutralized, e.g. during titrations, and flushed down the sink using copious amounts of water.
- A *Green Chemistry and Environment* Add-on Course is conducted for students to spread awareness about green chemical methods to be adopted in laboratory work and eco-friendly practices they could adopt in their daily routine. ***Refer 1.2.1.***

Safe Laboratory Practices: New faculty members and support staff are imparted appropriate training for Laboratory Protocols and safe waste management. A Manual on Laboratory Safety has been prepared and provides orientation towards essential protocols. Students are sensitized to common laboratory hazards and provided with Personal Protective Equipment (PPE) such as gloves and eye glasses wherever required. They are advised to wash hands before and after doing the experiments; discard laboratory waste in designated containers; seal materials in a leak-proof, shatter-resistant secondary container to transfer them from one laboratory to the other. For any emergency, the First Aid Box is kept handy and in hygienic conditions.

Hazardous Waste Management: MH makes efforts to reduce the generation of hazardous waste and manage chemical and bio-waste as per prescribed protocols.

Chemical Hazards: An inventory of all the hazardous chemicals with their Material Safety Data Sheets (MSDS) giving information about the properties of the chemical, its hazard identification, first aid measures, fire-fighting measures, handling, storage and disposal are kept available. Students are given instructions on the care to be exercised while handling chemicals and advised against mouth-pipetting. Auto-pipettes and dispensers are made available for the purpose. They are also advised not to inhale vapours of solvents such as chloroform and ether which are anaesthetic. Fume hoods have been installed for experiments with volatile chemicals.

Biological Hazards: All microbes, animals, blood, sera, and cells of animal origin are potentially infectious. As part of laboratory protocol, the general advisory is to:

- use gloves while handling such materials, especially if there is a wound or scratch.
- all plastic ware used for storing live samples should be autoclaved prior to disposal as general laboratory waste.
- use extreme caution when handling sharp cutting devices such as microtome blades, scalpel, razor, blade or needles; these are disposed in a *Sharps Disposal Container* or needle disposal unit, respectively.
- use bacterial culture under a bio-safety cabinet and autoclave it before discarding.

Radiation Hazards: Ultraviolet (UV) radiation is routinely used in the college to visualize DNA and RNA stained with ethidium bromide. UV radiation is dangerous and can damage the retina of the eye, and prolonged exposure of skin can cause burns and rashes. To minimize exposure, hand held lamps and trans-illuminator are adequately shielded and viewed through a filter or safety glasses. UV radiation is also mutagenic and carcinogenic, therefore appropriate safety gear is essential. Radioisotopes are not being used in any undergraduate laboratory at the college. However, students are made aware of the hazards of radiation.

Fire and Electrical Hazards: Power supplies and electrical equipment pose fire hazard and electric shock hazards, if not used properly. Students are advised not to operate any electrical equipment with wet hands; ensure that storage and handling of flammable solvents (e.g. ether, methanol etc.) is far from the burners. Specific instructions for using autoclaves and centrifuges are explicitly displayed. Fire extinguishers are kept full and readily accessible for any emergency.

E-waste management

The college periodically disposes off the unserviceable electronic and electrical equipment bought from non-recurring grants diligently following the process of writing off and safe disposal. The departments are required to make a list of unserviceable items, giving the details of when procured, cost price, and reasons for recommending write-off. They are required to inform if the item falls in any hazardous category and needs special handling. A sub-committee of the Governing Body makes a site visit for physical verification. Then the college seeks permission of the DU Radiological Officer who verifies the nature of waste personally or through his nominee. Once a clearance certificate is received, the college places the list of unserviceable items for the consideration of the Governing Body. On receipt of approval, the process of auction is initiated through a public notice inviting Government Certified e-Waste Management Firms only. The college has created a special store for neat and safe storage of written off equipment and sundry items. Within this area, potentially hazardous items and e-waste is handled carefully following the protocols delineated above. Staff is trained to be cognizant of leaching batteries, etc. *MH Vatavaran* volunteers have an ongoing campaign for collection of used batteries, cells, cameras, CDs, cassettes and mobile phones. A drop box is placed strategically in the Auditorium Foyer as a collection point. Safe disposal of sundry e-waste is part of the MoU with partnering NGO IPCA. Other NGOs who are working on creating resources from e-Waste are often invited to exhibit their products.

UNU Regional Centre of Expertise (RCE): MH is a partner institution in the RCE network in the Education for Sustainable Development Programme of the United Nations University (UNU). RCEs aspire to achieve the goals of the programme by translating its global objectives into the context of the local communities in which they operate. Brainstorming meetings are held between the college, TERI and other RCE partner institutions to analyze sustainable development.

Invited Talks and Field Visits: *MH Vatavaran* and the *Green Chemistry and Environment* add-on course have been organizing lectures and interactive sessions with Dr. Sunita Narain (CSE), Dr. Iqbal Malik, Mr. Ravi Agarwal (Toxics Link), academics from TERI and representatives from CSE, IPCA, ICPE, Green Bandhu to increase the awareness of students on issues related to global warming, climate change and sustainable development. Field visits are also organized for students.

7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

A. Scientific Research, Product Development and Entrepreneurship on the 3R Principles – Reduce, Reuse & Recycle

Towards a Zero-waste College Campus: Every member of the MH community diligently works towards making it a *Green Campus, Clean Campus*. This effort has

entailed establishment of a comprehensive Solid Waste Management System through several pioneering initiatives and innovation projects. The attitudinal commitment is best witnessed at *Tempest*, the Annual College Festival, which draws a footfall of more than 5000. Student volunteers ensure that the campus remains litter free. Again, at the time of DUSU elections, when the entire DU Campus is littered with pamphlets and leaflets, Miranda House remains noticeably cleaner than the roads outside. In an effort to maintain the areas surrounding the college clean, two aesthetically designed structures for garbage disposal have been constructed outside the front and back gate of the college.

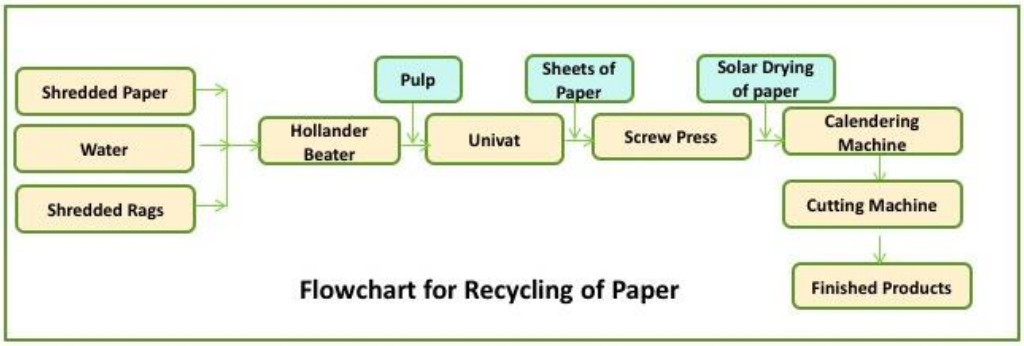
Paper Recycling Plant (2003 – onwards): MH was sanctioned a grant for setting up a Paper Recycling Plant in 2003 under the Women and Science Division of National Council for Science and Technology Communication. It envisaged training women from economically weaker sections in the making of recycled paper and paper products. MH tied up with the SEWA chapter of Delhi. SEWA Delhi sent groups of women from some slums of Delhi to receive training at the paper plant. Training was given by technical experts sent by M/s Green Technologies, the firm which had installed the paper plant. Students also joined the training session whenever possible.

After successful completion of the four-year project, the college made special efforts to keep the plant running. A mini paper plant was also obtained through a grant from the Department of Environment, Government of NCT of Delhi and set up. In 2014-15, a generous grant from Dr Urvashi Dhamija, a superannuating faculty member who was one of the founder members of *MH-Vatavaran*, allowed the refurbishment of the old equipment and purchase of a new paper plant of a higher capacity. The list of equipment is as follows:

Paper and Rag shredder; Hollander Beater; Univat; Moulds for univat; Wooden mould with 30 stainless steel wire mesh along with lower and upper deckles; Screw press; Calendering machine; Cutting machine; Screw Press (MS)–Platform Size-32”x36” (non motorized); Accessories –belts, pulley, keys, motor railing, etc.

The plant is currently functional and produces good quality recycled paper including printer quality paper. Excellent quality thick marbled recycled paper is crafted into folders, big and small envelopes, gift bags and gift envelopes. The paper and products made in Miranda House are appreciated and are being used within and outside the college.

Fig. 7.2(a): Process Flow Chart: Paper Recycling Plant

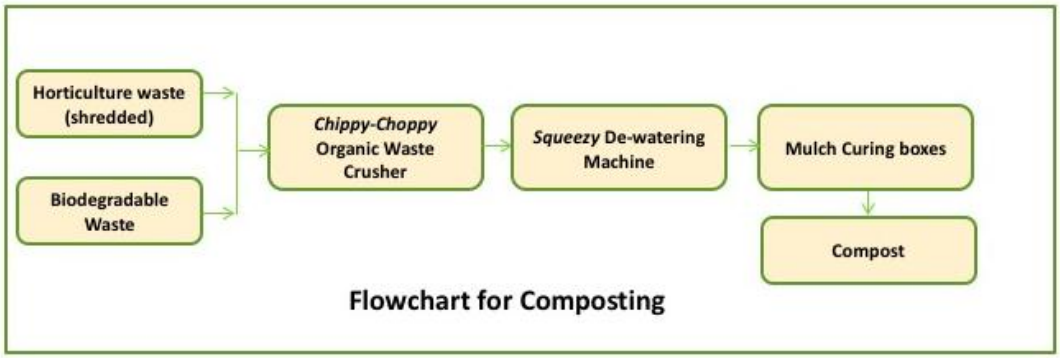


Compost Plant (2003 – onwards): In the initial years, the college used vermicompost pits to convert the bio-degradable waste into compost. Subsequently, a need was felt

for speeding up the composting process to cope with the huge amounts of biodegradable waste, including horticultural waste piling up in the college compound. MH in collaboration with GreenBandhu Environmental Solutions & Services has set up a model de-centralized organic waste-to-compost system as part of *Miranda Tech: The Green Technology Park* initiative to study the various aspects of solid waste management. The initiative has been a huge success in minimizing the burden on the city's dumping grounds and landfills. The in-house composting system has been able to process over 2,00,000 kg or 200 tonnes of organic waste since its inception in a sustainable manner. The waste processed includes food-waste (cooked/uncooked), horticulture waste such as dry leaves, etc. The compost produced in this facility is being used for gardening and landscaping purposes within the college. Housed in the same shed that houses the paper recycling plant beyond a partition, the composting plant is operated by a technically trained person. The machinery includes:

Horticulture waste sorting stand; Horticulture waste shredder machine; *Chippy-choppy* organic waste crusher; *Squeezy* de-watering machine; Leachate trays; Mulch curing boxes; Compost sieving stand.

Fig. 7.2(b): Process Flow Chart: Compost Plant



The project team has succeeded in generating revenue through sale of compost. The project has successfully demonstrated the best practices of solid waste management to the students of the college and visitors from all over India. This model initiative has inspired several institutions, housing societies, hotels, municipalities, etc. to setup their own in-house organic waste to compost system in order to manage and process their waste in a scientific, environment-friendly and responsible manner. As stated earlier, NIUA has included visit to MH Compost Plant in the training programme schedule for officials of Municipal Corporations from across the country under the *Swachh Bharat Abhiyan*. Recycling activities have been made a part of co-curricular as well as extra-curricular activities. Students of B.El.Ed. are given projects based on recycling which necessitate visiting and studying the recycling unit. Student volunteers also work in the recycling unit in order to accumulate the necessary hours to obtain a certificate.

Future Thrust Areas: With the success of the composting initiative, the 3 R Project Team of MH, in collaboration with GreenBandhu, is interested in exploring various other processes and technologies in solid waste management. The processes and technologies that would be introduced in phases as part of this initiative are:

Waste Pelletization; Waste Briquetting; Soil-less Organic Gardening; Alternative Packaging; Reusing and/or Recycling of Plastic bottles.

Reuse and recycling of waste water: A comprehensive design for grey water management has been conceptualized. In collaboration with M/s Sanicon Energy Solution Pvt Ltd., New Delhi, the college has installed two Hydroponic Systems.

- The first system uses grey water from the launderette. The water output from 6 washing machines is collected in a septic tank and treated. Water enriched with micronutrients is pumped through tubes where a rich collection of plants is grown.
- The second system uses grey water from the kitchen including the industrial scale dishwashing machine. This micronutrient-rich water after suitable processing is used to grow plants in another Hydroponic System installed outside the kitchen.

B. Disaster Research Programme: Neighbourhood Mapping

Background: Disasters are extreme events that have been disturbing the functioning of the society. Limited resources and widespread impacts have added to the misery of the people. It is increasingly important to assess the risk and take actions before a situation turns into a disaster. The National Capital Territory of Delhi has been traditionally vulnerable to natural disasters on account of its unique geo-climatic conditions. It lies among the high-risk areas facing threat from both floods and earthquakes. Falling in the Earthquake Zone IV, Delhi has had a long seismic history, experiencing earthquakes of local as well as Himalayan origin. Land use change and paved urban landscape have led to heavy surface run off and very low infiltration rates. The continuous problem of water logging too affects many parts of the city. Delhi is also highly vulnerable to man-made disasters like fire and chemicals hazards. Highly congested areas, poor electrical wiring, proliferation of small scale hazardous industries near residential areas, and improper storage and disposal of chemicals have increased the incidents of fire and chemical hazards.

JNU Disaster Research Programme (DRP) has launched a College Cluster Initiative. MH is a part of this cluster. Under its aegis, students of Geography have undertaken a project titled *Neighbourhood Mapping and Assessment of Disaster Risk and Vulnerability for Selected Places in and around University of Delhi, North Campus* with a sanctioned grant of Rs. 2 lakh. The project is aimed at sensitizing the youth by involving them in participatory neighbourhood mapping programme for disaster risk reduction. The objectives of the study are to

- identify the nature of disaster risk in the four wards of Civil Lines Municipal Zone and one ward of Sadar Paharganj Municipal Zone.
- study the land use in the area and create a spatial database of risk.
- analyze the risk and assess the dimensions of vulnerability.
- determine the method for reducing risk through disaster preparedness.

Research Methodology: Comprehensive work has been done by the team for a detailed mapping and profiling of disaster risk, along with sensitization of people to understand disaster risk. The research team of Miranda House has designed its own research methodology to assess vulnerability and disaster risk in the neighbourhood of the college. This has entailed the following:

Demarcation of Area: A detailed study has been done to choose the localities in the neighbourhood to be considered for the study based on secondary sources and reconnaissance survey. In the first instance, Kamla Nagar, Jawahar Nagar, Malkaganj, G.T.B. Nagar, B.D. Estate, Mukherjee Nagar, University Area, Outram Lane, Vijaynagar, Indra Vihar and Christian Colony have been selected.

Tools and Techniques: Different variables have been chosen to arrive at a suitable methodology to conduct the research work. A carefully designed survey technique has been devised for administering to a well represented sample group.
Survey: Observation, Structured Questionnaire Survey, Focused Group Discussion and Expert Interviews have been included to undertake the study.

- *Preparation of Questionnaires for Institutional, Residential and Commercial Land Uses*: The student research team after a thorough review have prepared detailed questionnaires for surveying the neighbourhood areas to gain knowledge regarding various aspects of disaster awareness, compliances and threats.
- *Expert Interviews*: In order to accomplish the assigned objectives, the team of students carried out interviews of various experts in the related fields. It included personnel and experts from Delhi Disaster Management Authority (DDMA), National Institute of Disaster Management (NIDM), Seismological Observatory, academic experts in the University, Police Station, hospitals, and Fire Station.

Assessment Tools: An inventory of present land use and land use changes has been done. Risk has also been assessed for this region based on the above survey.

- Notional mapping, Interpretation of images and maps
- Vulnerability and Capacity assessment
- Risk mapping
- Resource mapping.

Outcome: The project research yielded very interesting findings.

1. Nature of disaster risk: Survey results show that residents find their locality more prone to earthquake, fire accidents and waterlogging.
2. Land use changes in the area: The land use changes have been interpreted for a period of 15 years (2000-15). It reveals many facts that show an increase in the vulnerability over this period of time.
3. Vulnerability assessment: The assessment has been based upon the survey results and researcher's observation. Based on the factors of vulnerability, a Vulnerability Index (V.I.) has been prepared for each Municipal Ward.
4. Analysis of risk: As per the V.I., risk analysis of the entire neighbourhood has been done. The level of risk has been identified and mapped in the area.
5. Mapping: A detailed mapping was done with the help of GIS. Statistical and cartographic techniques have been used to demonstrate the outcomes. The team also created a spatial database of resource mapping to be used for any emergency.
6. Application: The study highlights the level of awareness and vulnerability in the area which needs to addressed. Thus, building capacities in the neighbourhood is quite essential and preparedness measures can be taken to efficiently manage different types of emergencies and reduce risk in the society. This initiative can help to foster interdisciplinary study among young researchers. Thus the knowledge gained by the team can translate into actions that will define their goals in the future. This will also instill a sense of responsibility among the enthusiastic researchers, and give directions to their ongoing efforts.

C. Safety Comes First: Disaster Preparedness at MH

Educational institutes can greatly contribute by building capacity among the youth in disaster awareness and education. Through sustained initiatives, students can be taught to guide others, and thus usher in a tradition of preparedness. At MH, the culture of prevention and preparedness has already taken shape, through volunteerism, project work and as a routine activity. With the Principal lending a firm support to this

initiative, the college community is making continuous effort in this direction. The Department of Geography is leading this campaign to sensitize the need for disaster awareness and preparedness. A project *Disaster Preparedness: Developing a Strategy for Vulnerability Reduction through Information Education and Communication* was also undertaken by Geography Department along with Elementary Education Department in 2014-15 under the DU Innovation Project Scheme.

- The aim was community participation for disaster preparedness in educational institutions starting from MH, emphasizing the need for capacity building.
- The project team was vigorously trained in various preparedness activities.
- Training in First Aid and Home Nursing in collaboration with St. John's Ambulance, for students, teachers and non teaching staff.
- A floor wise and colour coded Emergency Evacuation Plan was prepared by the students with each and every detail of exit options clearly marked on them.
- Mock Drill was also conducted in collaboration with Delhi Disaster Management Authority and Delhi Fire Service as part of the preparedness drive.
- Awareness campaigns were organized in and outside the college by displaying posters, placards, staging street plays and holding interactive sessions.
- Social media was used to disseminate information (Facebook page, SMS, etc.).
- The concept of an Emergency Bag Pack carrying vital supplies (to be used to sustain oneself in case of an emergency) was popularized.
- Recommendations and guidelines were created for institutional preparedness.
- Students and teachers have presented their recommendations at various forums, including those organized by National Institute of Disaster Management (NIDM), SAARC Disaster Management Centre, National Disaster Response Force (NDRF), Sphere India Workshop and at Jawaharlal Nehru University.
- After completion of the project, the students of Geography Department created a Disaster Preparedness Brigade/team to motivate and sustain student interest.
- A seven day workshop on Disaster Risk Reduction was organized in the college last summer, in collaboration with NIDM and NDRF. A battalion of 50 personnel from NDRF gave demonstration on search and rescue operation in the college campus. The students did a comprehensive survey of malls in Saket.

As per recommendations, the college administration has wholeheartedly supported this endeavour by:

- Installation of Public Address System in the college premises.
- First Aid post set up during festivals and other college events.
- Evacuation maps at appropriate places.
- Student Union will also take safety measures while organizing mega events.
- Many more activities have been planned in the future to create a Disaster Safe Zone within and outside the college.

This initiative continues to be valued for its humanitarian concern, and is now being taken up as a social responsibility. More students have volunteered to be part of the sensitization programme and create an overall culture of disaster resilience.

D. Heritage Education

MH students constitute a strong advocacy group for heritage preservation. The college believes that there is no substitute for experiential learning and field exposure. Heritage Walks to the neighbouring Northern Ridge and its monuments contribute to abiding interest in the past which is essential for an all-round growth of students.

- Excursions to the sites in Madhya Pradesh, Maharashtra, and to the Rann of Kutch and archaeological and historical sites in Gujarat, the 180 million years old Akal Wood Fossil Park near Jaisalmer, and the archaeological site of Chandrawati in Rajasthan, are a regular feature of field-based learning undertaken by students of History. The most 'historic' trip was to Pakistan in January 2001. The week long tour included visits to Lahore and most importantly to Takht-i-Bahi (1Century BCE), Harappa, and Taxila. The visit allowed students to experience the excavation work undertaken by ASI prior to the partition of 1947.
- MH has invested in a collection of framed photographs of Monasteries of India and Tibet by eminent photographer Benoy Behl. This is occasionally put on display in the Heritage Hall and was also loaned to the Archaelogical Society of India for display at Qutub Minar. History students set up related poster exhibitions, such as on the secular tradition in Indian art and architecture.
- MH has a collection of more than 200 replicas of artifacts of archaeological interest. The college is in the process of creating a museum and archives. Students regularly visit exhibitions like the International Rock Art exhibition organized by the IGNCA. They gain additional experience by volunteering as guides.
- The Department of History participates in workshops on Heritage Education conducted by the INTACH to sensitize students about Delhi's heritage. Students learn about conservation and community involvement in heritage protection. MH students volunteered for *Adopt a Monument* concept of INTACH through a survey of the 14th century *baoli* in Hindu Rao Hospital complex, an example of community involvement in heritage protection. The INTACH e-Newsletter, *Paramparā* released on World Heritage Day 2013, acknowledged these efforts.
- The Department of Geography in thematic explorations of Heritage organized a seminar in December 2009, titled *Dilli Meri Jaan* focusing History and Architecture; Cultural Landscape of Delhi; Images and Impressions; Spatial Mapping and Contemporary issues.
- The exposure to heritage motivates students to choose related career paths. In 2013, Percy Arfeen, B.A.(H) History, joined an international internship programme with AIESEC in Egypt to work on gender relations in Pharaonic Egypt under the guidance of the Faculty of Egyptology of Cairo University. She has been selected for the Erasmus Mundus Archaeological Material Sciences Masters Programme and recently joined the Pattanam Archaeological Research at Kerala for the duration of one year to gain first hand experience in Archaeology. Alumna Aditi Dave, student of Chemistry, received Felix Scholarship to pursue MS Archaeology, Oxford University and has progressed to a Ph.D. programme.

E. Theatre and Cinema in Education

Ariels, the English Dramatic Society, focuses on using theatre as an instrument to develop students' creative skills, integrate these with social awareness and enhance professional opportunities. *Anukriti*, the Hindi Dramatic Society has equally helped in showcasing talent along with providing group oriented learning skills. Theatre helps break disciplinary boundaries as students from humanities learn technological expertise while students from the sciences engage in literary activities, such as writing, adaption and translation. Celluloid, the Film Club creates an interface between cinema texts and social lives through panel discussions with film makers and critics, screening of documentaries and in ensuring participation in international film festivals such as the Dharamsala International Film Festivals. This has, in many ways, broken the boundaries between the classroom and the auditorium.

F. School of Life – Jeevan Ke Rang, Paathshala Ke Sang

Background: This unique endeavor is a joint initiative of MH, WDC and CFAR. It has been innovatively designed as a learner driven educational programme to provide participatory and collaborative two-way, mutually experiential learning between young people from the community and students of MH. Conceptual training and facilitation is by mentors, many of whom are experts from the social sector, field of communication and faculty members of leading colleges and universities of the city. The ethical foundation is nurtured by the young people involved in the process. The role of the mentors is to reflect, conceptualize and institutionalize the learning experience and thereby enable a common pursuit to address, reduce and mitigate gender based violence at all levels. A special purpose vehicle in the shape of a mobile tent to signify a learning space and a Centre has been created to establish the idea that learning is not static and the more one moves from place to place, engages directly with communities in their own context and with different institutions, the greater the possibility of appreciating different dimensions of the issue. The idea was conceptualized through a brainstorming meeting with multiple stakeholders which included Prof. Thomas Pogge of Yale University, USA, Prof. Ashok Acharya of DU, Akhila Sivadas of CFAR and others from DU in August 2015.

The curriculum: This is based on the principle that understanding and engaging with gender conceptually enables the learning to be used as a transformative tool. The School of Life comprises of three capsules of learning each spread over a period of eight days. The themes of the capsules include (i) Conceptual framework regarding Gender and Socialization; (ii) Understanding Violence against Women: Addressing rights and removing stereotypes and misconceptions; and (iii) Linkages with life-affirming Initiatives. The capsules followed a two way process to allow the learner and the mentor to establish their own techniques for engagement. Each phase is expected to generate creative outputs to demonstrate learning outcomes. These range from conceiving and scripting a play, initiating an action research project, or putting together an art installation or community newspaper depending on the interest of the mentors and the learners. The First Capsule of the School of Life was launched in Mandoli Village, Harsh Vihar, Delhi with mentors from MH. The learners included 80 young people, 20 students from MH and 20 each from the three community areas, Nangal Raya, Saboli Khadda and Kalyanpuri. The youth enrolled from the community included survivors and those affected by and vulnerable to violence. Interesting community newspapers were designed by the community youth and MH students creatively reporting on gender issues after the first capsule training of 8 days. The programme successfully provides integrated learning experience fostering inclusion through participation.

Future Plans: These include facilitating the development and dissemination of an ethical code for community engagement and strengthening the ownership of all stakeholders, especially the youth, in order to make it self-driven. The Pilot Project is a replicable and scalable way of encouraging openness and dialogue between the youth of universities and the youth of the community, between women and men, between the young and the old thereby fostering respect for socio-cultural diversity and gender equality. This will help build an empowered cadre of young people to work collectively across class, gender and community barriers to prevent, reduce and counter gender inequalities and violence with sensitivity and responsibility.

G. International Online Collaborative Add-on Course: Rethinking the Obvious – Examining the Rhetoric of Development

- International universities keen to establish a bilateral exchange programme often approach the college. Unlike the foreign partner, the college is usually unable to take full advantage of the association for several reasons: (i) although CBCS has been implemented, the Credit Transfer system is yet to take shape. Hence as part of bilateral exchange, it is not possible for MH students to spend a semester abroad without academic loss; (ii) it is difficult for most students to afford the steep cost of *Semester Abroad* or *International Immersion* Programmes. An innovative course-based collaboration was conceptualized to overcome these disadvantages. Its success has paved the way for similar initiatives.
  - The semester long Add-on Course offered to MH students in Delhi had strong synergies with a similar credit-based course offered by the Elizabeth J. Somers Women's Leadership Program at GWUconducted by Dr. Steven Salchak.
  - Within the framework of DU degree programme, it was a non-credit course for MH students. They were given certificates on successful completion.
  - The two courses ran almost simultaneously, providing an innovative platform for faculty and students of the two institutions to collaborate. There were no financial implications on either institution.
  - There were three broad themes: (i) Rhetoric and Rhetorical Traditions in India, (ii) the Rhetoric of Public Health, and (iii) the Rhetoric of Poverty Alleviation.
  - The content of the course was *per se* of great interest and provided an excellent opportunity to hone critical thinking and evokes higher order skills.
  - The course was uniquely designed in the format of a Seminar and Workshop Course. It included background lectures by the anchoring faculty and leading experts in the area were invited as speakers. The seminars were followed by analysis of issues and presentations on these analyses by students.
  - The course was intense and intensely interactive. Students were given a list of readings and encouraged to review and study a wide variety of materials, and discuss them in class through presentations.
  - Students at the two institutions were required to generate a common vocabulary for analyzing rhetorical concepts.
  - Students were assigned to groups comprising 4 students from GWU, and 2 students from MH. Each group was required to interact online to choose either speeches or movies: one each from India and the US. Students then collaborated to do a rhetorical analysis of the chosen speeches/movies.
  - At the end of the course students were required to submit an essay containing a rhetorical analysis of a subject of their choice.
  - Evaluation was on the basis of Class Participation (5%); Group Presentations (20%); Collaborative Project with GWU (25%); and Final Essay (50%).
- The specific topics covered by various speakers included An Introduction to Rhetoric; Rhetorical Traditions in India – Sufi Music, Challenging the Conventional; Propaganda, Public Opinion and Consensus; Theatre and Feminism; Truth, Objectivity, Rationality; The Rhetoric of Public Health; The Rhetoric of Poverty Alleviation; Writing Workshops; Students' Seminar/ Presentations On Exploring Metaphor, Retelling Tales, Films, Reading and Re-reading of texts.
- An illustrative list of Student Essays is: The notion of development amongst Vanvashis in Jharkhand; Modi – Recent visits; The Rhetoric behind MP's

Maryada; The *Bloody* in the *Sunday*; The Rhetoric of Image Creation by Political Leaders Specially through Cinema; The Power in Rhetoric: Hitler's *Mein Kampf;* Caste in Contemporary India; A 'WALK' to remember; The Rhetoric of Sanitation in India; The Rhetoric of Body Perfection; The other side of advertisements; Religious Pluralism: Understanding and Approach; Disability – Perception of our Society; Right to Information; Rhetorics of beautification; The Rhetoric of Public Health; Scavenging: Challenging Modernization; and The Rhetoric of Comedy.

- Based on the positive feedback, the college plans to offer the course again in the Academic Year 2016-17 in the odd semester over a period of 12 weeks rather than 10 weeks. Discussions with GWU are underway to strengthen the collaborative content of the program. The Course Coordinators are working towards compiling some of the better essays by students into a published volume.

7.3. Best Practices

7.3.1

1. Title of the Practice:

Women as Leaders and Achievers: Laying Foundations for a Successful Life

2. Goal

MH envisions a world where women will assume leadership roles in all spheres of life. It aims to sustain its distinguished legacy of having produced alumnae who ventured forth as pioneers to explore uncharted territories and became extraordinary leaders. MH students consider themselves as torchbearers. Meritorious, passionate and motivated, they want an equal opportunity to be able to lead from the front. Courageous, compassionate and discerning, they want to contribute to the task of nation building and social change. Cognizant that women often do not get an equal opportunity to fulfill their dreams, the college aims to help them transcend as also overcome the existing social challenges. It aims to help students set action oriented goals, understand gender specific barriers and explore early their potential for leadership. Viewing each individual student as special, it aims to launch her on a unique career path, helping her build a professionally and personally fulfilling life.

3. The Context

The demographic profile of the college has in recent years undergone radical changes. A large number of students are from remote areas. Several are from economically underprivileged families and first generation learners. They enter the college with some diffidence and a sense of awe. They seek to redefine their own identity by adopting that of the college. Allured by the profile of the college and having met the rigorous standards of eligibility criteria, they have high expectations from the college. Highly motivated and aspiring, they are the face of new India, raring to give wings to their dreams. Fired by idealism and their journey thus far, they remain focused, perseverant and committed to doing something for society and for the country. Very quickly students understand the importance of building a strong portfolio of achievements through participation in extramural activities. Strongly committed to inclusive education and sensitive to challenges that diversity poses, in a culturally sensitive way the college provides a level playing field and opportunities for all round growth to all students.

4. The Practice

MH is on the path of redefining leadership. There are several milestones on the journey to success.

- The curriculum provides the starting point for initiating students into the mainstream of university education. Effective teaching-learning in the classroom equips them with domain-specific knowledge. It is important to help all students to successfully negotiate the rough terrain of rigorous academics as this imparts confidence, enhances self image and strengthens resolve to set higher goals. This is accomplished through discussions, debates, individualized mentoring, innovative and participatory teaching-learning practices. Challenging assignments encourage critical thinking and transformative learning. Projects help in establishing the connection between the world of knowledge and the realm of praxis. Classroom presentations promote communication skills. Encouraged to improvise, adapt, innovate and create, the students are trained to realize their full potential.
- Collaborative learning with added focus on integrating all sections of student community and encouraging them to excel in a variety of domains is the driving force of this practice. Facilitated by faculty, students take charge of designing and organizing curricular enrichment activities such as seminars, workshops and conferences on incisive themes. This entails identifying and inviting distinguished guest speakers. The ensuing interactions are intellectually stimulating and elevating. In addition to expanding the knowledge horizon, these also provide students a preview into the world of higher academia; diverse sectors and work places. The thematic department festivals also go beyond the curriculum to explore new ideas and emerging trends. Exposure to local, national and global perspectives contributes to both scholarship and leadership qualities.
- Another important milestone is achieved through active engagement with societies for co-curricular and extracurricular activities. These thrive on institutional legacy and roll along on their own momentum with student executives in the lead. It is here that the leadership skills come to the fore. Student teams learn to work together, set goals, develop action plans, network with peer groups, not just within the college but at other institutions across the country and across the world. These student leagues constitute a micro cosmos that is surcharged with idealism, passionate convictions, and vibrant energy. The whirlpool of activity draws the entire student populace and inspires each one to contribute to the creative process. The magnitude of events planned and their intellectual and cultural scope is often too big for an individual but within easy reach of the community. Organizing or participating in mega events drives all society members to develop the stamina as they practice and work round the clock, macro plan and micro detail, launch major publicity drives, network, raise funds, look at all aspects of management. Having created a rock solid foundation and requisite scaffolding, the college allows students sufficient autonomy and latitude to take risks. Leadership is a transformative process linked with problem solving and learning to negotiate new terrains. Students get ample opportunities to stride over unfamiliar and unforeseen situations. Regular brainstorming meetings, roundtable discussions and mentoring sessions with the Principal and faculty ensure that all events meet

the high standards expected of the college. Freedom with responsibility and accountability; and public probity become the underpinning hallmark.

- An important milestone is feeling empowered as a woman and believing that there are no barriers. Students yearn for a future where women shape their own destinies, and play an equal role in the decision-making process. When the cognitive skills and creative expression is sharp, when interpersonal and organizational skills have been honed, students are ready to take off. When the environment is inclusive and sensitive, however diverse their backgrounds, all students begin to experience transformative change. The college directly addresses the issues of gender and social change. Women Development Cell plays a critical role as it creates a framework for growth and through reflective discussions, helps students adopt the vocabulary of the community of practice. Workshops on Women and Law, Consumer Rights, Civil Defence, Self Defence, Living Values and Entrepreneurship are seen as essential for enhancing life skills. These focus on awareness, capacity building and advocacy. The students' enhanced access to law, their ability to report on any form of violence or crime against them and their decrease of inhibitions in approaching agencies like the Internal Complaints Committee, Police, Judiciary and the Consumer Courts, etc. are evidence of success. Aware of their rights and constitutional guarantees, students become responsible citizens. They also become peer educators. The students and faculty of MH have been frontrunners in the global campaigns on gender specific issues.
- MH recognizes the importance of community outreach programmes and development of entrepreneurial skills among students as a part of its goal of creating leaders of tomorrow. The college chapter of *Enactus* provides the students a platform to combine entrepreneurship with social responsibility. The college aspires to establish a link between students and women artisans and produce job creators as also empower the marginalized communities.

5. Evidence of Success

MH is counted amongst the top academic institutions of national eminence that are also globally recognized. It is a niche college that is beyond competition because of its unique approach to education. The alumnae list is extremely distinguished and includes well recognized names such as Sheila Dikshit, Brinda Karat, Jaya Jaitley, Meira Kumar, Romila Thapar, Anita Desai, Sayeeda Hameed, Anjolie Ela Menon, Mira Nair, Nandita Das, Shovana Narayan, Charu Sija Mathur, and Bina Agarwal. Many have received the *Padma Awards*, the top awards of the country. This unusual spark of leadership and its commitment to creating an egalitarian society, democratic values, and public good is a distinctive characteristic of MH.

It is a measure of sustained excellence over seven decades that the college continues to produce women of substance who are pioneers, experiment with cutting edge of contemporary thought and creative expression, and are counted amongst the top achievers in their chosen field of enterprise. The alumnae today exemplify the contemporary trend of disruptive leadership. They reflect the college's commitment to paradigmatic change; fostering a culture of game-changing innovations; generating new ideas and executing new solutions. Small Startups to Global Corporations which challenge conventional wisdom and established models have been created by alumnae like Prachi Garg of

ghoomophiro.com; Anshulika Dubey, an entrepreneur who has ventured into crowd funding of creative projects through her Startup *Wishberry*. Jugnu Jain a molecular geneticist and cell biologist with Ph.D. from Cambridge University and extensive post doctoral work at Harvard University has steered multiple drug discovery projects; with more than 20 patents to her credit, she returned to India to set up *Sapien Biosciences,* a company that works towards genetically personalized medicine. Jayanthi Kuru-Utumpala, a student from Sri Lanka holds a very important portfolio in CARE, Sri Lanka and has done extensive work in the field of women's rights. She has scaled Mt. Imja Tse, Mt. Kilimanjaro, Mt. Kinabalu and recently created history as the first Sri Lankan to conquer the summit of Mt. Everest. Sugandha Munshi is a gender specialist who works with the International Rice Research Institute (IRRI) in Bihar. She has coined the term *KisanSakhi* to give recognition to invisible women farmers. She is recipient of the *Aadhi Abadi – 8th Women Achievers Award 2016* for her work on gender equity.

6. Problems Encountered and Resources Required

The college is adept at turning challenges into opportunities. As a constituent college of DU, MH functions within the constraints of a prescribed curriculum that is content laden and time demanding. The onus for striking a balance between sustaining the academic rigour of the courses and making the courses accessible and participatory is on the faculty. With many activities going on in parallel, space is also constrained. A need for human and financial resources can at times hinder the uninterrupted attention that the best practice demands. The challenge lies in overcoming these obvious impediments by motivating both the students and faculty to go far beyond the common denominator and joyously look for opportunities to take quantum leaps. With innovative teaching-learning and enriching beyond the classroom activities, the college converts each moment into a transformative learning experience for the student. However, several excellent opportunities cannot be leveraged to their full potential because of inherent systemic constraints. Cutting edge courses of contemporary value can be implemented only as self-financing Add-on Courses. The International Bilateral Exchange and International Immersion Programmes cannot be fully implemented as the credit transfer system is not in place. Further the college does not have resources to provide travel and sustenance allowance and there are hardly any avenues for government sponsorship for students. This implies that only those students who can afford are able to participate. Again, for international leadership building events organized at MH, such as the Parliamentary Debates, Model UN, and Youth Summits, the process of obtaining clearances from government agencies is difficult and slow. The college is in the process of setting up an Early Leadership Centre. It is hoped that support from the alumni, the local and global collaborative partners will help in overcoming some of these challenges.

7. **Notes**

The institution nurtures talent in motion and encourages the young students to explore uncharted territories. It provides a platform and an environment that helps them move forward and focus on their own authentic contribution.

- Two student leaders were invited in recognition of their leadership skills for the collaborative programme with Women's Studies Department, Wisconsin Eau Claire and were supported by a generous travel grant for a three week study programme on Transnational Feminism at Wisconsin Eau Claire, USA.

- As part of the *JENESYS*$^{2.0}$(12 January to 20 January 2015) students travelled to Japan as cultural ambassadors.
- Pragya Chawla and Unnati Akhouri have taken enormous strides and won global recognition as young scientists. Pragya Chawla won the *Mitacs Award* in astrophysics in 2014 for discovering a rare asteroid. Unnati Akhouri, a student of Physics, has been selected for the *S.N. Bose Scholars Program Award: 2016.*
- Priyanka Gupta and Hardeep Kaur have established themselves in the world of fiction, writing novels and poetry respectively.
- Five students were selected to participate in a prestigious conference organized by WIN (Women's International Networking), an independent global women's leadership organization in 2016.
- The college has instituted several awards in recognition of the meritorious contributions of the students to community life and excellence in academics. The annual Principal's award for student conveners for the NSS, WDC, and NCC is in recognition of holistic leadership qualities. This emphasis on all round leadership is derived from the rich and variegated legacy of the college.
- The Amba Dalmia Resource Centre for the Visually Challenged is an outstanding example of the use of modern technologies to further academic excellence and enhance self-reliance. Differently-abled students of Miranda House excel in all areas. Their performance in the arena of sports is spectacular. The college team won the overall trophy at Udaan the 6th Annual Sports Meet for students with disabilities organized by the Equal Opportunity Cell, University of Delhi on 26-27 March 2015. Their performance was outstanding. The students won 26 medals and the best athlete awards in three categories. This was the third time in a row that students have won the overall trophy. The students also won several awards at the Delhi State Para Olympics organized on 14-15 February 2015.

7.3.2 Best Practice 2

1. Title of the Practice:

Flavor of Research: Learning in Multidisciplinary Contexts

2. Goal

MH is committed to providing a stimulating active learning environment through distinctive academic programmes that instill rigour and develop competencies for new domains of knowledge. Going beyond teaching-learning in the classroom, it aims to provide its exceptionally talented undergraduate students opportunities for guided as well as independent research in multidisciplinary contexts. This is in consonance with national goals that students should get creative opportunities and build capacity to contribute innovatively to the globally integrated knowledge based society in the making. To this end, the college seeks to foster a culture of inquiry, discovery, innovation, entrepreneurship and student excellence by providing early exposure to high quality research experiences. Through UG research, the college aims to focus student attention towards the grand challenges facing humanity. It aims to ignite their creative spark, seeking game changing ideas and innovative inputs on problems of societal interest.

3. The Context

There are grave national concerns about diminished attraction among meritorious students for careers in (i) research and development, and (ii) university teaching.

This is especially true in the basic sciences where there is a felt need to arrest student flight of talent to other disciplines; and subsequently, other professions. The massive investments that the government has made in developing institutions of higher education, its scientific infrastructure and world class research programmes on the frontiers of knowledge necessitate a steady input of talented and well trained individuals. Then there is a felt need for spotting, nurturing and training students with outstanding scholastic talent through well thought out interventions. UG research takes project-based learning to a higher level. An exciting UG research experience can provide the platform for connecting the world of textbook knowledge to real world problems and synthesis of knowledge from diverse courses. Most importantly, it can give students an opportunity to discover their innate talent, elevate interest in academic disciplines to a lifelong passion and motivate them towards seeking opportunities for advanced studies. Most institutions of higher learning, research organization and employers look for evidence of such creative engagement in the student's portfolio of achievements. Students gain through early association with professional bodies, and participation in research seminars, conferences and opportunities to publish.

4. The Practice

- ***Genesis:*** MH is an early proponent of UG research and led a pioneering initiative titled *Learning Through Investigative Projects: A Programme for Promotion of Scientific Interest in Youth* with financial assistance from DST, way back in 1984. Simultaneous efforts on curriculum reform made Projects an integral part of final year Laboratory Curriculum in Physics with 25% weightage in summative evaluation. The entire final year class of MH and SSC worked collaboratively on projects, some of which led to UG publications in a refereed journal of Physics Education. The work laid the foundation for establishment of Centre for Science Education and Communication at DU. This seminal work has continued since and led to establishment of D S Kothari Centre for Research and Innovation in Science Education at MH in project mode with funding by DST. An important stated objective of DSKC is to engage UG students in research. To this end, the grants were utilized for enhancing the basic infrastructure and procuring equipment for establishing (i) Research Laboratories; (ii) Laboratories for Advanced Experiments; and (iii) Project-based Learning Studios and Laboratories. DSKC and its vibrant research and outreach activities changed the ethos of the college, impacting not just the sciences but also the social sciences and humanity departments.
- ***Summer Workshop:*** Under the aegis of DSKC, the college organizes a 6-week summer programme *Flavor of Research: Learning in Multidisciplinary Contexts.* It attracts a large number of students who want to conduct scientific research, from across the colleges of DU and also from other educational institutes across India. An Orientation Programme sets the stage for independent curiosity driven work. Students team up in accordance with research interests and work collaboratively guided by faculty mentor(s). Academic and skill enhancement exercises; hands-on workshop training; product development; and lectures by experts supplement the research experience. Students present their work through a Research Symposium later in the year. A Poster Conference is also being introduced.

- ***DU Innovation Projects:*** In 2012, DU started the DU Innovation Project Scheme and then in 2015, the DU Star Innovation Scheme to promote collaborative UG Research wherein groups of 10 students and 3-4 faculty mentors work on a year long project. MH is recipient of 25 such projects with a total funding of Rs. 261.45 lakh. This scheme has given an impetus to UG research by students of Social Science and Humanities Departments. The work is closely monitored. Students are required to submit quarterly reports, make presentations at various forums, and setup outreach posters and stalls at the DU Annual Festival or Annual Day. The work has also been presented at conferences and published in peer reviewed journals. These projects have made a tangible difference to the research environment in the college.
- ***Advanced Research:*** As outlined in Criteria III, MH has excellent on going advanced research programmes enabled by state-of-art in-house facilities. These engage UG research assistants who receive additional mentoring by doctoral students. The proximity to DU research departments seamlessly expands available facilities, enhances engagement and exposure. The carefully designed Add-on Courses are linked to the research priority areas and prepare students for the advanced level research.
- ***Research Fellowship and Internship Programmes:*** A large number of students are recipients of DST INSPIRE Fellowship. Science students at various times have qualified for Science Academies Summer research Fellowship Programme for Students that offers two month summer fellowships to work with scientists associated with the three Indian Academies of Science; the Project Oriented Chemical Education (POCE) and Project Oriented Biological Education (POBE) Programmes; the TIFR-HBCSE National Institute of Undergraduate Science (NIUS) Proto Research Programme, TIFR, Saha Institute of Nuclear Physics, Raman Research Institute, ISRO, *et cetera.* Many students like to work on research projects under mentors at national and international institutions they identify themselves. The college encourages all these initiatives. The Social Science and Humanities students use the Internship model for engaging in research for reputed organizations; the list is diverse and long.

5. Evidence of Success

- MH has established excellent research facilities as detailed in Criterion IV. Priority areas are well defined. The BioDiscovery Lab Facility and the Multidisciplinary Nanoscale Research Laboratory offer platforms for open collaborative research and education to faculty, students and researchers.
- The research work in Material Science coordinated by Dr. M. Tomar engages UG students as well. Dr. M. Tomar was the only college teacher to be given the Award of Excellence on DU Annual Day, boosting student motivation
- MH was chosen by CSIR to partner in OSDD for tuberculosis research. The OSDD Centre has a mandate to find new drugs and vaccine candidates for tuberculosis as an open platform using crowd resourcing of college students. A Grad School Research Environment has been created as students at all levels – B.Sc./B.Tech., M.Sc./M.Tech., Ph.D. scholars – work together to carry out modern research in various aspects of tuberculosis. One Ph.D. scholar has submitted her Ph.D. thesis and has published findings in high impact journals like *Vaccine and Immunology* and *Cell Biology* with others in the group. The

students were also able to showcase their work in important national and international conferences

- The impact of UG Research and Project-based Learning is seen from the way the DU Innovation Projects have grown at MH; from 4 awarded in first round in 2012, to 7 in the next round, and 11 in the next. The college has also been awarded 3 Star Innovation Projects. The review of these projects has been excellent with the teams winning awards.

  A. Innovation Project MH 306*: Design of affordable water purification device using green and eco friendly silver nanoparticles,* 2015-16:
  - One publication in peer-reviewed journal. Sharma Malti; Pathak Mallika; Ojha Himanshu; Kumari Rekha; Sharma Navneet; Roy Bani; Jain Gaurav *Green synthesis, characterization and antibacterial activity of silver nanoparticles.* (2016) Green Chemistry & Technology Letters, 2(2), 103-109;
  - Shortlisted for display on the Foundation Day of the University on 01 May 2016;
  - Certificate of Appreciation for Poster Presentation on the Foundation Day of the University on 01 May 2016;
  - Second prize for Poster presentation in a National Conference.

  B. Innovation Project MH 203: *Efficacy of Natural Dyes in Dyeing and Imparting Antimicrobial Properties to Different Textile Materials,* 2013-15:
  - Teaching Excellence Award for Innovation (2014-15) on 93rd Foundation Day of University of Delhi, 1 May 2015;
  - Best Display Award under Theme-Scientific Arena at Innovation Plaza, *Antardhwani* 2015;
  - Shortlisted for presentation at *Industry-Academia Interface* at Innovation Plaza, *Antardhwani* 2015;
  - One Best Oral Presentation, two Best Poster awards at various forums. ***Refer 3.4.4.***

  C. Innovation Project MH 307: *Antimicrobial Finishing of Textiles using Eco-Friendly Bioactive Agents,* 2015-16:
  - One Certificate of Appreciation for poster;
  - One Best Poster, and one Best Oral Presentation awards.

  D. Innovation Project MH-201: *Kashmiriyat - Beyond: A Study of Colonial and Post-colonial Kashmir* 2013-15:
  - Best Display Award at *Antardhwani*2015.***Refer 3.4.4.***

- The aim of the practice to increase retention in the discipline is amply corroborated by the track record of participating students who have found placements in prestigious higher education and research institutions.

6. Problems Encountered and Resources Required

The traditional emphasis on content laden, time bound curriculum imposes obvious constraints on the extent to which innovations in education can be implemented. Yet, a large number of students put in long hours of dedicated work often working far beyond college hours. All this is without proportionate rewards. Within the framework of CBCS, defining aspects such as greater range and flexibility in introducing courses; summer credits; transfer of credits, student mobility, etc., are yet to be introduced. With statutory permissions, making pre-requisite Add-on Courses credit based and introducing the facility of *Research*

Credits would give a major boost to UG Research. Although MH has excellent research infrastructure, there is always need for more space and more funds to strengthen facilities. MH encourages individual faculty to apply for research grants and enhance the range of activities. MH and DSKC continue to generate institutional grants through projects from various national and international funding agencies to sustain activities of education outreach and UG Research. It is imperative to implement national level schemes on UG Research so that students can be given stipends, travel and subsistence grants to present research papers at conferences, and facilitation on mentoring by the top scholars of the country. While government encourages innovation by students, far more can be done.

7. Notes

- Under the OSDD, MH trains students in use of basic cheminformatics and bioinformatics tools for identifying novel lead generation strategies and then validating them experimentally. The experiments range from cloning, expression and purification of relevant proteins and testing their enzymatic and immunological potential. Students gain experience in contemporary molecular biology techniques like Enzyme Linked Immunosorbent Assay (ELISA) and Western blotting, etc.
- Students have been involved as research assistants in a number of Interactive interdisciplinary research projects leading to understanding of social issues and training for future research pursuits. Geography showcases skill based education especially with the advent of newly developed spatial technologies and software of Advanced Spatial Statistical tools, Automated Weather Station, Remote Sensing, GIS, Computer Cartography, etc. This has enabled the mapping of social realties superposed on physical spaces and equipped students to understand contemporary relevant global issues such as Climate Change, Regional planning, Disaster Management, Environment Planning, Natural Resource Management, Gender Mapping etc. In the ongoing project *Climate Change, Water Security and Livelihood Resilience: Role of Traditional Knowledge and Modern Technologies in Rajasthan, India*, we see the dynamics of climate change, water security and livelihood resilience interacting as factors that govern everyday lives of people. Our student researchers working in this project benefit from looking at nuances of the impact of sudden shifts in the climate variables along with the adaptation strategies developed at local level in arid and semi-arid areas. They are able to document how communities in water insecure regions evolved to cope with a slow disaster like drought with their traditional knowledge systems. The output of such a study bridges the policy gaps on disaster risk reduction and the International Framework for Disaster Risk Reduction.

8. Contact Details

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Evaluative Report

Department of Bengali

1. **Name of the Department:** Bengali
2. **Year of Establishment:** 1961
3. **Names of Programmes/Courses offered:**

   UG: B.A. (H) Bengali; B.A. Programme Bengali (under Semester System Mode 2014-2017)

4. **Names of Interdisciplinary courses and the departments/units involved**:

   In addition to Bengali, students of Bengali take courses offered by the Departments of Geography, Philosophy and English. The students also study Environmental Science.

5. **Annual/semester/choice based credit system (Programme-wise):**

   Choice Based Credit System (CBCS) in Semester Mode from 2015.

6. **Participation of the Department in the courses offered by other departments:**

   Bengali is taught as a Generic Elective (GE) as well as an Ability Enhancement Compulsory Course (AECC) to B.A. (H) students.

7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** None.
8. **Details of courses/Programmes discontinued (if any) with reasons:** None
9. **Number of Teaching Posts**

Post	Sanctioned	Filled
Associate Professor		1
Assistant Professor		

10. **Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt. /Ph.D. / M. Phil., etc.):**

Name	Qual	Des	Specialization	Exp Y	Research Guidance
Dr. S. Chakravarti	Ph. D.	Associate Professor	Historical Novels, Tagore Studies	29	Ph.D.: 2
Dr. S. Ganguli[T]	Ph.D.	Assistant Professor	Modern Poetry, Linguistic	15	
Dr. P. Chakraborty[A]	Ph.D.	Assistant Professor	Histriography of Bengali Literature	1	

Qual: Qualification; Des; Designation; Exp Y: Experience in years; [T]: Temporary; [A]: *Ad hoc*

11. **List of senior visiting faculty:** None
12. **Percentage of lectures delivered and practical classes handled (Programme-wise) by temporary faculty:**

Year	2011-12		2012-13		2013-14		2014-15		2015-16	
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Lectures + Tutorials	54	53	51	51	66	66	68	68	67	68

13. Student-Teacher Ratio (Programme-wise):
Student- teacher ratio in 2015-2016 for B.A. (H) Bengali: 7:1

14. Number of academic support staff (technical) and administrative staff: None

15. Qualifications of teaching faculty with D.Sc./D.Litt./ Ph.D./ M.Phil./PG:

Qualification	2011-12				2012-13				2013-14				2014-15				2015-16			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	1	1	2	2	1	1	2	2	1	1	2	2	1	1	2	2	1	1	2	2

P: Permanent; A: Temporary/*Ad hoc:* O: Odd semester: E; Even semester

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: None

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: None

18. Research Centre/facility recognized by the University: None

19. Publications:

Name	Authored/Co-authored: Books/ Monographs	Edited: Books/ Monographs	Chapters: Books/ Textbooks	Papers: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular resources including e-resources	Popular Articles
1. Dr. S. Chakravarti	1					5		5
2. Dr. S. Ganguli	1					1		8
3. Dr. P. Chakraborty	1					5		8

20. Areas of consultancy and income generated: None

21. Faculty as members in a) National committees, b) International Committees, c) Editorial Boards:

Name	a) National Committees	b) International Committee	c) Editorial Board
Dr. S. Chakravarti	1. Bengal Association, Karol Bagh Bangiyo Sanshad 2. Sahitya Academy, Delhi 3. Bangiosahityo Parishad, Kolkata	International Congress for Bengal Studies	Ajanta, Literary Magazine, Delhi
Dr. S. Ganguli	1. Bengal Association, Delhi 2. Digangan, Delhi		

22. Student projects:

a) Percentage of students who have done in-house projects including inter-departmental/programme

As a part of course work students undertake projects on topics such as Socio-cultural History of Bengalis, 19th Century Renaissance and Social Reforms, Partition and its Impact on Bengali Literature, and so on.

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: None

23. Awards/Recognitions received by faculty and students:

Students' Awards

2011-12	University Rankers Award I Position	Deepti Malakar	B.A. (H) Bengali III year
	College Academic Award	Deepti Malakar	B.A. (H) Bengali III year
2012-13	University Rankers Award I Position	Shikha Dey	B.A. (H) Bengali III year
	College Academic Award	Shikha Dey	B.A. (H) Bengali III year
2013-14	University Rankers Award I Position	Nahida Khondkar	B.A. (H) Bengali III year
	College Academic Award	Nahida Khondkar	B.A. (H) Bengali III year
2014-15	University Rankers Award I Position	Debdatta Ghosh	B.A. (H) Bengali III year
	College Academic Award	Debdatta Ghosh	B.A. (H) Bengali III year
2015-16	University Rankers Award I Position	Anamita Manna	B.A. (H) Bengali III year
	College Academic Award	Anamita Manna	B.A. (H) Bengali III year

In 2016, Rs.1500 was given to the III year student who had highest cumulative score of I and II year.

24. List of eminent academicians/visitors to the Department:

i. Prof. Nandita Basu, Former Head, Modern Indian Language and Literary Studies Department, University of Delhi, in 2015.
ii. Special lecture on Images in Poetry by Dr. M.M. Yunus, Zakir Husain Evening College, University of Delhi, in 2015.
iii. Prof. Jayanti Chattopadhyay, Former Head, Modern Indian Language and Literary Studies Department, University of Delhi, in 2013.
iv. Prof. Mamani Raisam Indira Goswami (Famous Assamese Author), Former Head, Modern Indian Language and Literary Studies Department, University of Delhi, in 2010.

25. Seminars/Conferences/Workshops organized & the source of funding:

The annual seminars organized by the Bengali Department have been on the following themes.

i. 19-20th Century Literature, in 2011

ii. 20th Century Short Stories, in 2012
iii. Tagore and Buddhism, in 2013
iv. Theory of Criticism in Literature, in 2014
v. Literature and Films, in 2015
vi. Partition and its Impact on Bengali Literature, in 2016

These provide deeper insight into Bengali literature and widen the prospective. The college provides requisite funds to encourage the academic activities.

A Workshop on New Syllabus was organized in 2013. Prof. Nandita Basu, Head, Modern Indian Language and Literary Studies Department, University of Delhi, was invited for the Workshop.

26. Student profile programme/course-wise:
Entry level % marks in 2015-16: Bengali being a regional language no minimum criteria are fixed for admission. However, we admit students scoring 45% (best four subjects). The college gets students with much higher marks.

27. Diversity of Students:
Most of the students who get admitted are from CBSE. However, students from West Bengal Board and other Boards also seek admission

28. How many students have cleared national and state competitive examinations such as NET: Two students cleared the NET (Bengali) during 2011-16.

29. Student progression:

Students complete their graduation successfully mostly with a first division, and proceed for post-graduation or B.Ed. A large number of alumnae are working in reputed schools in Delhi. One of our students with commerce background is working in a bank. Many of our students are working with NGOs as well.

30. Details of Infrastructural facilities:

a) Library: The college library has 3000 books in Bengali literature. In addition, the departmental library has 100 books for ready reference.
b) Internet facilities for staff and students: The college is WiFi enabled and accessible to faculty and students. Faculty members have been issued netbooks and every student has been issued a laptop. The Digital Resource Centre is available for students and faculty members for using computers and the internet.
c) Classrooms with ICT facility: The Bengali Department has classrooms with LCD projectors.
d) Faculty room: Individual workstations and storage space has been provided to each faculty member in the faculty room.

31. Number of students receiving financial assistance from college, university, government or other agencies: None

32. Details of students enrichment programmes (special lectures/workshops/ seminars) with external experts:

Refer to Item 24 for lectures delivered by experts, and to Item 25 for seminars and workshops organized for students.

33. Teaching methods to improve student's learning:

- Project based assignments are allocated to the students to improve their interpersonal skills.
- Group discussions and presentation on topics within the syllabus are a regular activity.
- The Department holds a yearly inter-college event under *Agrani*, the Literary and Cultural Society, which has a large participation from students within and outside the college. The Society also organizes lectures, workshops and seminars time to time.
- Classrooms are interactive where students ask questions and new ideas are generated.
- Every year workshops are held on how to improve the syllabus and the teaching methodology.

34. Participation of students in Institutional Social Responsibility (ISR) and Extension activities:

Students actively participate in NSS and NCC. In 2015-16, Rakhi Hathua, B.A. (H) Bengali III year, joined NCC. The remaining students were enrolled in NSS.

35. SWOC analysis of the department and Future plans:

Strengths

- In our college we offer the Honours course in Bengali. Only a few colleges have the course in the University of Delhi. The college library is our biggest strength, with a vast number of reference books and textbooks which help the students and faculty members to explore the research work. Every year the Bengali Department organizes an Annual Seminar on a literary topic which helps the students to understand various aspects of literature. We get funds from the college to organize seminars. Being a small department with few students we are in close association with our students. We have several interactive sessions as well.
- *Agrani*, the Literary and Cultural Society of our Department, is very active throughout the year, and organizes debates, quizzes and other inter-college competitions. Our Department is very much involved with social issues and awareness programmes. Every year the Department conducts a study tour, or organizes a project on gender discrimination, dowry system, women illiteracy and child marriage. In 2013, two teachers and nine students went to Jaipur on a study tour.

Weaknesses: The Bengali Department is the smallest department in Miranda House. The number of students is limited in the Honours course, as well as in B.A. Programme. Due to time constraint it is difficult to strike a balance between teaching and research work.

Opportunities: The students can pursue their career with translation work, creative writing, mass communication, teaching and performing art. They can also work with NGOs.

Challenges: Almost every year the University of Delhi is introducing new courses to students. However, we have to enrich our library with contemporary and syllabus-related books. It is a continuous process of thinking and organizing.

Future Plans: We wish to start an Add-on Certificate Course in Bengali wherein we can take our language, literature and culture among the non-Bengalis as well. The Department plans to initiate a Tagore study circle. Translation of literary works from Bengali to English and vice-versa will also break boundaries and help in the appreciation of various cultures. The Department will continue to contribute to the development of the cultural heritage of the college.

Evaluative Report

Department of Economics

1. **Name of the Department:** Economics
2. **Year of Establishment:**1948
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
   UG: B.A. (H) Economics; B.A. Programme: Two domain combination; Economics is offered with Political Science/History/Geography/Mathematics
4. **Names of Interdisciplinary courses and the departments/units involved:**
   Economics students study courses offered by other departments within their academic curricula, as follows:
   - Generic Elective: All social science and humanities departments, and Mathematics Department offer a course of which students may choose one.
   - Ability Enhancement Compulsory Course (AECC), Credit and Qualifying Language: Bengali, English, Hindi and Sanskrit departments.
   - Interdisciplinary Concurrent Courses (IDC, under the three-year undergraduate programme system): English, Hindi, History, Geography, Mathematics, Political Science, Philosophy and Sanskrit departments.
   - Discipline Centered Concurrent Courses (DCCC, under the three-year undergraduate programme and semester system): English, Hindi, History, Geography, Mathematics, Political Science, Philosophy and Sanskrit departments.
   - Allied and Foundation Courses (under erstwhile FYUP): English, Hindi, History, Mathematics, Political Science, Philosophy and Sanskritdepartments.
   - Environmental Science.
5. **Annual/ semester/choice based credit system (programme-wise):**
   Choice Based Credit System (CBCS) in Semester Mode from 2015-2016.
6. **Participation of the department in the courses offered by other departments:**
   The Department offers papers and actively engages in collaborative teaching with the following programmes:
   - Generic Elective, Skill Enhancement Courses: B.A. (H) and B.Sc. (H)
   - Generic Elective and Skill Enhancement Courses to B.A. Programme
   - Allied Courses, Foundation Course to B.A. (H) erstwhile FYUP
   - Discipline Based Concurrent Courses to B.A. (H) erstwhile FYUP
   - Foundation and Application Courses to B.A. Programme
   - Liberal option in Economics, B. El. Ed: II and III years
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**
   None
8. **Details of courses/programmes discontinued (if any) with reasons:**
   None
9. **Number of Teaching Posts:**

Post	Sanctioned	Filled
Associate Professor		6
Assistant Professor	5	5

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil.,etc.):

Name	Qual	Des	Specialization	Exp Y	Research Guidance
Ms. M. Vats	M.Phil.	Associate Professor	Monetary Economics	37	
Ms. A. Budhiraja	M.A.	Associate Professor	Macroeconomics and Econometrics	34	
Dr. R. Jha	Ph.D.	Associate Professor	Microeconomics, Game Theory and Mathematical Methods	26	
Ms M. Kumar	M.Phil.	Associate Professor	Development Economics, Economic History	24	
Ms. N. Dutta	M.Phil.	Associate Professor	Indian Economy International Economics, Political Economy	22	
Dr. M. Pal	Ph.D.	Associate Professor	Law and Economics, International Economics and Development	16	
Dr. B. Kaur	Ph.D.	Assistant Professor	Indian Economy, Agricultural Economics	13	
Ms. N. Chopra	M.Phil.	Assistant Professor	Environmental and Resource Economics, Statistical Methods of Economics	10	
Ms. H. Oak	M.Phil.	Assistant Professor	International Trade, Econometrics and Environmental Economics	10	
Ms. S. Meena	M.A.	Assistant Professor	International Trade and Development	7	
Ms. S. Das	M.Phil.	Assistant Professor	Econometrics, Mathematical Methods for Economics, Macroeconomics and Indian Economy	6	

Qual: Qualification; Des: Designation; Exp Y: Experience in years

11. List of senior visiting faculty: None

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary/*ad hoc*/guest faculty:

Year	2011-12		2012-13		2013-14		2014-15		2015-16	
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Lectures	18	27	9	18	9	18	20	24	36	32
Tutorials	22	33	11	22	11	22	19	19	26	25

14. Student-teacher ratio (programme-wise):18:1

15. Number of academic support staff (technical) and administrative staff; sanctionedand filled: None

16. Qualifications of teaching faculty with D.Sc./D.Litt./Ph.D./M.Phil./PG.:

Qual	2011-12				2012-13				2013-14				2014-15				2015-16			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	2	2			3	3			3	3			3	3			3	3		
M.Phil.	7	7			6	6			6	6			6	6			6	6		
M.A./M.Sc.	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

P: Permanent; A: Temporary/*Ad hoc*; O: Odd semester; E: Even semester

17. Number of faculty with ongoing projects from a) National and b) International funding agencies and grants received:

a) **National:** Currently, one DU Innovation Project is ongoing and three DU Innovation Projects have been completed.

b) **International:** None

18. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

1.	Title	Miles on the Yamuna
	Department Co-PI	Ms. M. Kumar
	Students	Vatsala Shreeti, Bhavya Sharma
	Funding Agency	Innovation Project Scheme, University of Delhi
	Grant	Rs.10 lakh
	Duration	2012-13
2.	Title	More Miles on the Yamuna
	Department Co-PI	Ms. M. Kumar
	Students	Prerna Dewan, Debasmita Padhi
	Funding Agency	Innovation Project Scheme, University of Delhi
	Grant	Rs.3 lakh
	Duration	2013-15
3.	Title	Kashmiriyat: A Study of Colonial and Postcolonial Kashmir
	Department Co-PI	Ms. N. Dutta
	Students	Ayushi Gaur, Anusha Choudhary, Ruby Mittal, Sanya, Gunjita Gupta
	Funding Agency	Innovation Project Scheme, University of Delhi
	Grant	Rs.3 lakh

	Duration	2015-16
4.	Title	Reward Network as a Form of Experiential Marketing
	Department Co-PI	Dr. B. Kaur
	Student	Lavanya Tayal
	Funding Agency	Innovation Project Scheme, University of Delhi
	Grant	Rs.3.5 lakh
	Duration	2015-16

18. Research Centre /facility recognized by the University: None

19. Publications:

Name	Authored/Co-authored Books/ Monographs	Edited: Books/ Monographs/ Proceedings	Chapters: Books/ Textbooks	Papers:Journals	Book Reviews: Journals	Presentations: Conferences	Curricular resources including e-resources	Popular Articles
Ms. M. Vats							1	
Ms. A. Budhiraja	1							
Dr. R. Jha			1	2		1		
Ms. M. Kumar		1				3		
Ms. N. Dutta				2		8		
Dr. M. Pal	1		1	2		5		
Dr. B. Kaur						2	1	
Ms. H. Oak				1				
Ms. N. Chopra				3		2		2
Ms. S. Meena			1			1		
Ms. S. Das	1			2		2		

20. Areas of consultancy and income generated:

- Dr. R. Jha: Consultant for an UNCTAD funded project undertaken by the Institute of Economic Growth 2007-09. Income generated Rs.1.2 lakh.
- Ms. M. Kumar: Development of Exemplar Resource Material in Economics for the Visually Impaired, NCERT, 2015.
- Ms. N. Dutta: Consultant to V. V. Giri National Labour Institute on Labour Market Issues and Youth Employment.Income generated Rs.1.2 lakhs in consultancy fees. She is also Professional Consultant for ZEE News (Hindi) and News 24 on economic issues.

21. Faculty as members in a) National Committees b) International Committees c) Editorial Boards: None

22. Student projects:

a) Percentage of students who have done in-house projects including inter-departmental/programme

Under the annual system till 2012-13, 100% of students undertook projects as part of their internal assessment requirements that were assessed and evaluated for their final University results. In 2010-11 and2012-13, all the final year students undertook a collaborative project for two papers- Development Theory and Experiences, and Economy, State and Society. These were extremely stimulating academic exercises and the college created space and opportunities for this kind of intra-curriculum collaborations among students.

In 2013-14, under the FYUP system, all students did projects in each of the seven foundation courses as part of their compulsory internal assessment.

Eight students have undertaken the following projects, involving primary data collection, as part of the Economics Society Activities during the odd semester of 2015-2016:

1. Study on the Pull of Instant Gratification as a Cause for the Use of Social Media
2. Effect of Income on Education Grade Points of Children
3. Expenditure on Education by the Urban Poor: An Empirical Study

In addition, about 7% of all students engaged in the Honours course have also participated in the following Innovation Projects:

1. Miles on the Yamuna: 2012-13
2. More Miles on the Yamuna: 2013-2015
3. Kashmiriyat: A study of Colonial and Postcolonial Kashmir: 2013-15
4. Reward Network as a Form of Experiential Marketing: Ongoing

b) Percentage of students placed for projects in organizations outside the institution, i.e.in Research laboratories/Industry/other agencies

The list below is indicative of the nature of internships our students undertake.

Student	Internship/Organization
Priyanka Gupta	RTI Nation Aditya Birla Blood Connect Foundation, 2015-16
Vidushi Jalota	Aditya Birla Money Mart, June-July 2014
Aishwarya Joshi	Centre for Equity Studies, June-July 2015 BRICS, August-December 2015
Ananya Goyal	Centre for Civil Society, June-July 2014 Seva Mandir, December 2014 Indian Statistical Institute, Delhi, March 2015
Arushi Gupta	NITI Aayog, May-July 2015 Pratham, June-July 2014
Gunjita Gupta	Price Waterhouse Coopers, June-July 2015 Pratham, June-July 2014
Ankita Sawhney	Centre for Civil Society, June 2015 Consumers India (NGO), November 2014-January 2015
Snehal Singh	Zuari Investment Limited, June-July 2014 India Bulls Housing Finance Limited, June-July 2015
Riddhi Kalsi	Harvard Business Publishing, 2014
Kanika Tomar	Pratham, June-July 2014

Radhika Rawat	Policy and Development Research Team with Naveen Jindal (MP, Lok Sabha), May-July 2013 Planning Commission, December 2012-January 2013
Sonali Chowdhry	Centre for Civil Society, June-August 2013 Centre for Equity Studies, December 2012-March 2013
Stuti Oberoi	Centre for Civil Society, 2013
Tamanna Adhikary	Department of Revenue, Ministry of Finance, Government of India , June-July 2013
Karishma Mutreja	Department of Revenue, Ministry of Finance, Government of India , June-July 2013
Khushboo Lather	Centre for Civil Society, June-July 2012
Bhawna Sharma	SBI Life Insurance, June-July 2013
Ishita Shukla	Elite Wealth Advisors Limited, 2012 Emerging India Value Advisors Pvt. Ltd., 2013
Shubhra Singh	SPML Infra Limited, Gurgaon, November 2015 Tata Institute of Fundamental Research, Bangalore, July 2015 Commission for Agricultural Costs & Prices, New Delhi, January 2014 ING Vyasya Bank, Patna, June-July 2013
Mithila Velamala	Eros Labs, 2014
Praachi Kumar	South Asia/Asia office, Penn Schoen Berland, 2012-13

23. Awards/Recognitions received by Faculty and Student:

Faculty Awards

- Dr. R. Jhawas recognized as a Distinguished Teacher of the University of Delhi in September 2009. She was one of seven teachers of Economics across 36 colleges of Delhi University to get the award.
- Ms. N. Dutta, Co-PI, received the Best Display Award at Antardhwani 2015 for her Innovation Project Kashmiriyat: A study of Colonial and Postcolonial Kashmir.
- Dr. M.Pal received a scholarship to attend a Summer School at King's College London in August 2013 in the course Introduction to the English Legal System.
- Ms. H. Oak was awarded the University of Delhi scholarship under the Faculty Training Scheme to pursue a Masters Course in Economics and Econometrics at the University of British Columbia, Vancouver, Canada, from September 2011 to August 2012. The scholarship covered full tuition fees ($7,490.88CAN), full living expenses ($16,800 CAN), return airfare and other related costs.
- Ms. S.Das was awarded the University of Delhi scholarship under the Faculty Training Scheme to pursue a Masters Course in Economics and Financial Economics at the University of Nottingham, United Kingdom, September 2011 to August 2012. The scholarship covered full tuition fees (GBP 11,620), full living expenses (GBP10,200), return airfare and other related costs.

Students' Awards

	Awards	2010-11	2011-12	2012-13	2013-14	2014-15
International Awards	Rhodes Scholarship to study at Oxford University					1
	Full Intra-departmental Scholarship to study M.Sc. Economics for Development at Department of International Development, Oxford University					1
	College Award to pursue Post-graduation in Economics at the National University of Singapore					1
University Prizes and Medals	University Rankers	2			1	
	The Erachshah Maneckji Nanavutty Memorial Prize	1				
	Shri Mudixil Padmanabha Pillai Memorial Gold Medal	1				
	Vidyavati & Sohan Lal Nayyar Gold Medal	1				
	Vice-Chancellor's Gold Medal					1
Academic Awards	Malaan Devi Bhalla Prize	3	3	3	3	1
	Sumana Dutta Memorial Award	1	1	1	1	1
	Golden Jubilee Award for Humanities			1		1
	Professor Savitri G. Burman Award of Excellence (Humanities)			1		1
	Dr. Angeli Qwatra Award of Excellence (Humanities)			1		
	Lady Irwin School Alumni Association				1	
Awards for Contribution to Extra - Curricular Activities	Outstanding contribution to the Photography Club		1		1	
	Outstanding contribution to Debating Society	1		1		
	Outstanding contribution to SPIC MACAY		1	1		
	Outstanding contribution to TULA, MH Consumer Club	1				
	Outstanding contribution to E-Cell			1		
	The best volunteer for Indian Dance	1		1		
	Certificates to Students Union 2012-2013			1	1	
	N. N. Kesar Memorial Award for Music	1	1			
	The best volunteer for Western Music		1	1		1
	The best volunteer for the Women's Development Cell		1			
	Sports awards	3	4	3	3	1

24. List of Eminent Academicians and Scientists/visitors to the Department:

1. Prof. Amartya Sen, Nobel Laureate, Thomas W. Lamont University Professor and Professor of Economics and Philosophy, Harvard University
2. Dr. Pranoy Roy, Co-founder and Executive Co-chairperson, NDTV
3. Prof. Subramanian Swamy, Politician and Economist
4. Mr. Sanjay Baru, Political Commentator and Policy Analyst
5. Prof. Irfan Habib, Economic Historian, Aligarh Muslim University

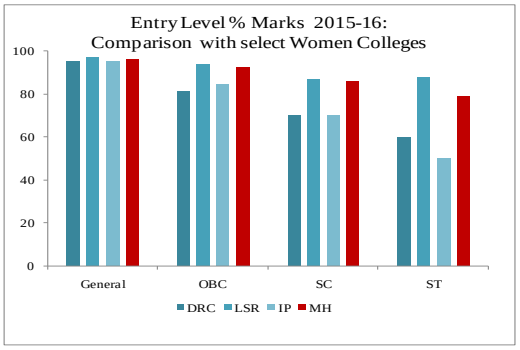
6. Mr. Manishankar Aiyer, Member, Indian National Congress Party
7. Mr. Jairam Ramesh, Economist and Politician
8. Dr. Arvind Virmani, Former Chief Economic Advisor to the Government of India
9. Dr. Montek Singh Ahluwalia, former Deputy Chairman of the Planning Commission
10. Dr. Isher Ahluwalia, Chairperson, ICRIER
11. Prof. Deepak Nayyar, Chairman, Centre for the Study of Developing Societies
12. Dr. Ashok Desai, Economist
13. Dr. Pulin Nayak, Professor, Delhi School of Economics, DU
14. Dr. Sunil Kanwar, Professor, Delhi School of Economics, DU
15. Mr. Parth J. Shah, Founder President of Centre for Civil Society
16. Mr. Ranjan Varma, Founder, Rupee Manager and Facilitator of Maximum Living Programme
17. Mr. Rajiv Malhotra, Former Economic Adviser at the Planning Commission
18. Dr. Nandita Mongia, Economist, formerly with UNDP and Miranda House
19. Dr. Parikshit Ghosh, Professor, Delhi School of Economics, DU
20. Dr. Ashok S. Guha Professor, JNU
21. Dr. Arunava Sen, Professor, Indian Statistical Institute, Delhi
22. Dr. Rohit Azad, Assistant Professor, JNU
23. Dr. Surajit Das, Assistant Professor, JNU
24. Prof. H. Ramachandran, Department of Geography, Delhi School of Economics, DU
25. Mr. Vimlendu Jha, Founder, Swechha, and Executive Director, Green the Gap
26. Mr. Anshul Tiwari, Founder, Youth Ki Awaaz
27. Mr. Ajay Chaturvedi, Founder, Har Va
28. Prof. Indradeep Ghosh, Meghnad Desai Academy

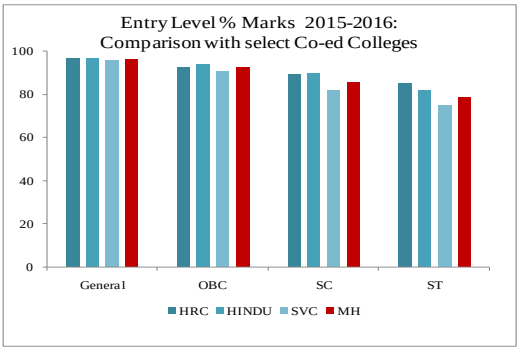
25. Seminars/Conferences/Workshops organized and the source of funding:

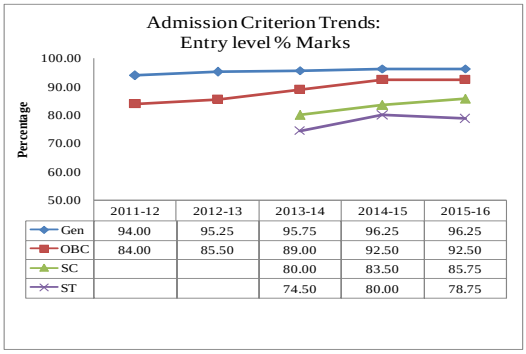
1. Prof. Amartya Sen and Mr. Montek Singh Ahluwalia: Interactive Session on India's Growth Story with Dr. Prannoy Roy as the anchor (NDTV News Channel) at Miranda House, 23 February 2013.
2. Irfan Habib, Professor, Aligarh Muslim University: India in the Age of Imperialism and the Idea of a Nation State, 04 March 2016.
3. Workshop: Dynamic General Equilibrium Models Using Octave, 12 February 2016; Experts: Dr. Amit Goyal and Dr. Pawan Gopalakrishnan (ISI, Delhi).
4. Reetika Khera, Development Economist, Prof. at IIT-Delhi: Doles, Freebies: A Right(s) Perspective, 26 August 2015.
5. Prof. Indradeep Ghosh, Meghnad Desai Academy: Euro Zone Crisis, 16 October 2015.
6. Mr. Rajeev Malhotra, former Economic Adviser at the Planning Commission: Union Budget 2014-15.
7. Dr. Surajit Das, Assistant Professor, JNU: The Current Fiscal Trends in the Economy, 28 August 2014.
8. Panel discussion: Rethinking Capitalism: Alternative Systems or Solutions Within? Panelists: Parth J. Shah, Founder President of Centre for Civil Society, and Ms. Nandini Dutta, Associate Professor, Economics Department, Miranda House, 03 November 2014.

9. Mr. Ranjan Varma, founder, Rupee Manager and Facilitator of Maximum Living Program: Lights, Camera and Action: Steps on Money Management, in collaboration with the Finance, Investment and Crisis Understanding Cell, Lady Sri Ram College, 23-24 September 2014.
10. Mega Trends Road Show: Miranda House, Economics Department in collaboration with FICCI Young Leaders.The topic was The Third Industrial Revolution: Intelligent Technologies and the Future of Work, and the industry panelists were: Ms. Sulajja F. Motwani (Chairperson, FICCI Young Leaders; Vice-Chairperson, Kinetic Engineering Ltd.); Ms. Shaifalika Panda (Co-chairperson, FICCI Young Leaders; Chief Executive Officer, Bansidhar & Ila Panda Foundation); Mr. Shivinder M. Singh (Mentor, FICCI Young Leaders - FYL, and Executive Vice-Chairman, Fortis Healthcare Ltd.); and Mr. Prasanto K. Roy (President and Chief Editor, Cyber Media Publications), 05 February 2015.
11. *Elevate My Bid* in collaboration with R.A.G.E.: a four days certificate event on business administration, 29 August-02 September 2012.
12. Workshop on Game Theory - What is in a Game? They included Dr. Parikshit Ghosh from the Delhi School of Economics, Dr. Ashok S. Guha from JNU, Dr. Arunava Sen from the Indian Statistical Institute, Delhi, Dr. Dipjyoti Majumdar from the Concordia University, Canada, & Indian Statistical Institute, Delhi, and Dr. Krishnendu Ghosh Dastidar from JNU, 12-13 February 2013.
13. A seminar on Investment and Financial Marketswasorganized in collaboration with the Bombay Stock Exchange.
14. A seminar was organized by the Infinity Business School on Financial Wealth and Stocks.
15. A seminar on The Role of Stateby Ms. M. Kumar, faculty member, was organized on 28 September 2010.
16. South Asian Students Economic Summit: The Economics Department at Miranda House collaborated in the organization of the 5th South Asian Students' Economic Meet, with Ramjas College on 10-12 March 2008. The theme for the Meet was Economic Challenges in making South Asia Free from Poverty and Deprivation. It saw participation by teams of thirteen students and two faculty members each from India, Bangladesh, Nepal, Pakistan and Sri Lanka. In addition, two students and one faculty member from leading institutions in India were invited to attend as delegates, to widen the reach of the Meet.

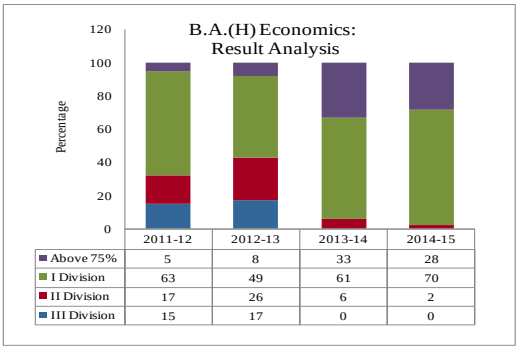
26. Student profile programme/course-wise:







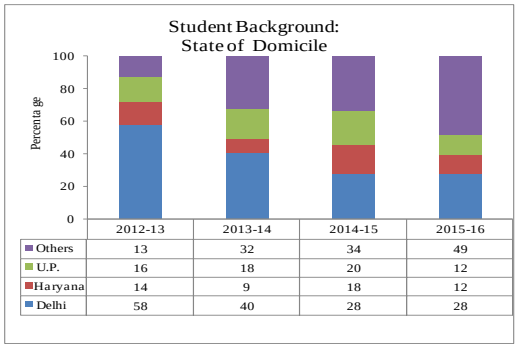
	2011-12	2012-13	2013-14	2014-15	2015-16
Gen	94.00	95.25	95.75	96.25	96.25
OBC	84.00	85.50	89.00	92.50	92.50
SC			80.00	83.50	85.75
ST			74.50	80.00	78.75



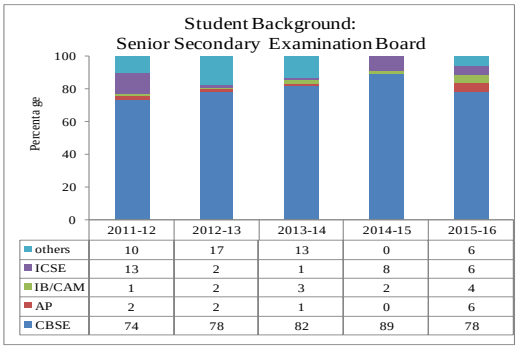
	2011-12	2012-13	2013-14	2014-15
Above 75%	5	8	33	28
I Division	63	49	61	70
II Division	17	26	6	2
III Division	15	17	0	0

The Department accepts students at cut-offs comparable to the best colleges of the University. Our results are also excellent, with very high proportions of our students passing with a first division. The chart above shows that of all the students who passed the course, none received a third division over the last two years, and the proportion of those receiving more than 75% has been rising.

27. Diversity of Students:



	2012-13	2013-14	2014-15	2015-16
Others	13	32	34	49
U.P.	16	18	20	12
Haryana	14	9	18	12
Delhi	58	40	28	28



	2011-12	2012-13	2013-14	2014-15	2015-16
others	10	17	13	0	6
ICSE	13	2	1	8	6
IB/CAM	1	2	3	2	4
AP	2	2	1	0	6
CBSE	74	78	82	89	78

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services:

Many of our students have opted for teaching as a career and cleared the NET. Besides teaching, many of our students have chosen the Civil Services as a favoured career option. This list is indicative.

	Name	Year of Graduation	Details
1	Anjana Tanwar	2013	Indian Economic Service, NET
2	Debasweta Banik	2012	Indian Administrative Service (Rank 14)
3	Nikita Pant	2010	Indian Economic Service
4	Aparajita Singh	2009	Indian Economic Service
5	Avni Gupta	2008	Indian Economic Service, NET
6	Vibha Agarwal	2007	Teaching in an undergraduate college, DU
7	Avni Gupta	2007	Indian Economic Service, NET
8	Tulsipriya Rajkumari	2007	Indian Economic Service
9	Devika Lal	2007	Indian Foreign Service
10	Deepika Srivastava	2007	Indian Economic Service
11	Nitya Aasawari	2007	Reserve Bank of India
12	Stuti Gupta	2003	Teaching in an undergraduate college,DU
13	Pooja Tyagi	1996	Teaching in an undergraduate college,DU

29. Student Progression:

The students of Economics Department have always opted diverse careers and have established themselves in their respective fields.

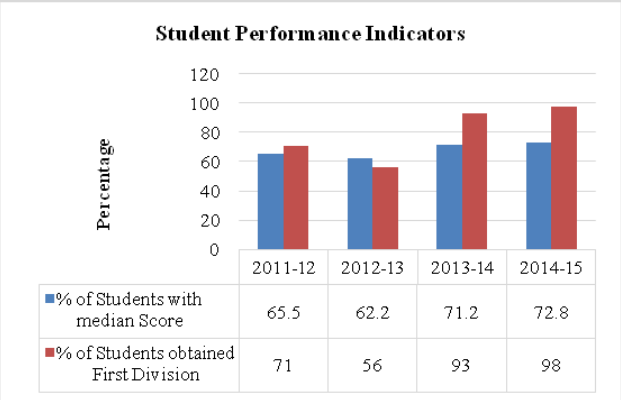
An illustrative example is the career graph of Ambika Ghuge, 2012 Economics (H) graduate from Miranda House. As an undergraduate in Miranda House, Ambika was the Founder President of the Entrepreneurship Cell. She also completed a programme in *Mathematical Finance* from the Mathematical Sciences Foundation, New Delhi. Ambika was selected British Council's International Climate Champion 2010 and Hindustan Times Bright Young Climate Leader 2010. She was also Member, India International Centre Youth Forum, and Delegate, Indo-Dutch Collaborative Programme 2010. Ambika also got recognition as CRISIL Young Thought Leader 2010. She was selected for the Young India Fellowship founded by IFRE and University of Pennsylvania. While she was a Fellow, she worked with a leading poultry and food company in North India as part of the 8-month Experiential Learning Module. Armed with this experience, Ambika became a co-founder of Mayur Poultry, a broiler chicken farm with a capacity of 30,000 birds per month in Kalahandi, Odisha. Ambika noticed a specific gap in the market in 2015 – although 98% of the chicken sold in India is fresh, the sector is completely unorganized. Responding to this lacuna, Ambika started a chain of fresh chicken outlets called Fresh Chick in Odisha in 2015. They are currently engaged in expanding the number of outlets across the state. Ambika's start-up venture is an inspiration to young people today. She is also recognized as a young international climate change champion.

Snigdha Das of the outgoing batch (2013-2016) has been offered a seat in the Ph.D. programme in Economics at the University of Virginia, USA, with full scholarship.

The students of Economics Department have excelled in diverse fields and the following figures exemplify the student progression patterns over the last few years.

Student Progression	Year of Graduation			
	2011-12	2012-13	2013-14	2014-15
Post-Graduate within India	12	4	3	11
Post-Graduate/ Ph. D. Abroad	4	3	6	4
Recruitment, Campus and other than Campus	*	13	*	*

Note: This is an illustrative table. * Information not available.



30. Details of Infrastructural facilities:

a) Library: Most of the required texts are available online either as e-books or as journals or as course pack collections, and sites like JSTOR, remain a rich resource base. The library currently stocks around 5523 books in Economics exclusively besides an equally large number of interdisciplinary books related to social science research and text that our students often use.

b) Internet facilities for staff and students: All faculty members have been issued netbooks. The faculty room has a desktop and a printer-scanner. Students and faculty have access to the Digital Resource Centre for research and project work.

c) Classrooms with ICT facility: The Department uses 6-8 rooms, all of which have projectors. Students access computers in the Digital Resource Centre. All teachers use personal notebooks and around 80% teachers have opted for individual netbooks provided by the college.

d) Faculty room: Each faculty member has a workstation and sufficient storage space.

31. Number of students receiving financial assistance from college, university, government or other agencies:

The following students received Vice-Chancellor's Undergraduate Scholarship of Rs.3000 in 2013-14:

Bhawna Sharma, B.A. (H) Economics III year

Deeksha Supyaal, B.A. (H) Economics II year

Kirti Majusha, B.A. (H) Economics IIyear

32. Details on Student Enrichment Programmes (special lectures/workshops/ seminar) with external experts:

The Economics Department organizes various events through *Arthashastra* - the Economics Society.The goal of the society is to encourage interaction between members and create a liberal and open environment for wide-ranging academic discussion. The society is student driven, and supported by faculty. Listed below are the Economics Society initiatives that enrich student life; they also reflect students' enterprise:

Zenith, the Annual Economics Festival, *Zenith* Model United Nations Conference, held annually since 2012.

Vishleshan, is an Economics Discussion Group, where eminent personalities are invited for interactive sessions to stimulate intellectual discourse on critical economic issues. It provides an opportunity for discerning minds to engage beyond the usual constructs of classroom teaching- a forum to inspire and provide greater opportunities to aspiring economists. The students greatly benefited from the unique viewpoint that each of the speakers brought in and approbated the colloquy.

Aapoorti, the Annual Economics Journal of Miranda House, is an initiative of economics undergraduates at Miranda to bring together ideas and opinions regarding various facets of economic life. *Aapoorti*, is the Hindi word for 'meeting wants' and hence aptly captures the etymology of economics (matching supply with demand) and the root of political policies. In the same spirit, *Aapoorti* provides a common platform for different opinions to interact in a distinct enclave.

Ecotalker, the Society Blog (https://ecotalker.wordpress.com) -The Economics Society of Miranda House has its own blog *Ecotalker* where ideas are exchanged

about anything and everything from the eyes of an aspiring economist, and creates a new outlook towards economics, economic theories and much more.

33. Teaching methods adopted to improve student learning:

The Department is Socratic in its approach.Standard pedagogic tools - lectures, tutorials, audio-visual presentations and group discussions are supplemented with one to one mentoring andteaching aids like question banks, supplementary reading lists, web links to various relevant sites and reports. Movies are screened to contextualize texts where possible: for instance Shyam Benegal's Manthan was screened to illustrate rural credit issues, 'An Inconvenient Truth'on environmental issues, and so on. Sometimes classrooms are converted into discussion fora.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

All our students are actively involved in various co-curricular activities. Through NSS, NCC, Women's Development Cell, Enabling Committee and other societies of diverse nature, college provides the students an institutionalized mechanism to extend their academic life beyond classrooms. Besides these, our students are associated with various voluntary organizations like Action Aid, Teach for India, PRAYAS, GOONJ, etc. They also participate in socially relevant programmes assigned to them by the college as well as according to their individual interests.

35. SWOC analysis of the department and Future plans:

***Strengths*:** A department is known for its teachers and students. We have a group of faculty members who possess a wide variety of expertise and interests both in academics and in extra-curricular activities. In addition, this Department caters to some of the intellectually brightest minds. Highly committed, competent faculty and motivated students are the strength pillars of our Department. The Department has successfully sent students for higher learning to academic institutions of repute both within the country and outside. Our students have gone to LSE, Cambridge, Oxford, UCL, National University of Singapore, etc., and many of them with full scholarships and handsome bursaries.

The Department envisions providing excellent teaching to a heterogeneous group of students. Heterogeneity is our strength. The variety in understanding and the analysis that this heterogeneity generates provides an experiential richness that the Department is proud of. We want to expose our students to an active, quality research atmosphere so that they seamlessly fit into any institution of higher learning and research and look back at their undergraduate collegial experience with pride. Our students are equipped with the skills and techniques to respond to the economic challenges of our times, contribute towards effective policy decisions directed towards the specific needs of their countrymen and for a global constituency, but with a spirit of inclusion. The Department has achieved excellent academic results and has placed its students in a large number of reputed institutions, academic and workwise. "Success is not final, failure is not fatal; it is the courage to continue that counts."

***Weaknesses*:** As a Department, we strongly feel that in order to maintain the academic quality of teaching, study materials need to be provided in languages other than English. Our student community is getting more heterogeneous, and the Department can grow only by becoming more inclusive. Unavailability of

good quality study materials in Hindi is affecting average student performance. Also, insufficient exposure of the students to the use of econometric and data-handling software is an area that needs to be addressed.

***Opportunities*:** Through the use of information technologies, both teachers and students are able to access more resource materials. The IT enabled classrooms have allowed us to enrich our lectures. We are exploring the setting up of laptop-based labs for skill enhancement courses on statistical and econometric analysis.

***Challenges*:** With the growing demand for Economics as a subject at the undergraduate level, we should be able to expand the Department both in terms of the number of students and in terms of permanent recruited faculty. More of civil society as well as industry interface within the course structure are needed to enable well rounded student profiles. Currently, this is done outside the formal structure. Due importance has to be given to this aspect of learning.

***Future Plans*:** To build a strong and credible network with the Department's alumni so that they could contribute in terms of academic and professional expertise. Inviting professors/fellows during summer will help to fill the gaps and exchange ideas in undergraduate teaching within India and abroad. We have an illustrious list of alumni including Prof. Bina Agarwal and Indira Rajaraman, to name a few. Many branches like Applied Econometrics, Environment Economics, Behavioural Economics and Public Policy require expertise beyond the scope of the undergraduate programme of the university. We plan to set up a think tank comprising experts, within and outside the faculty, whom we can invite to deliver lectures. Procuring software packages like Stata, R, Matlab, and Eviews will help us to undertake research projects. An interface with research organizations like NIPFP, ICRIER, NCAER and even Niti Aayog would strengthen the research capabilities of the Department.

Evaluative Report

Department of Elementary Education

1. **Name of the Department:** Department of Elementary Education
2. **Year of Establishment:** 2006
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
   UG: B.El.Ed.
4. **Names of interdisciplinary courses and the departments/units involved:**
   The course permits 10 Liberal Option Courses. These are offered by the DepartmentsofEnglish, Hindi, Mathematics, Political Science, Geography, History, Economics, Physics, Chemistry, Biology, and Physical Education. A minimum of 7 students is required for an option to be given.
5. **Annual/semester/choice based credit system (programme-wise):** Annual
6. **Participation of the Department in the courses offered by other departments:**None
7. **Courses in collaboration with other universities, industries, foreign institutions, education institutions, etc.**
   The Department has established a vast network of linkages with other organizations engaged with innovative education such as Jodo Gyan, NGO, Delhi; Pravah, NGO, Delhi; Sri Aurobindo Society, Delhi; Vidya Bhawan, Udaipur; Shikshaarth, Gurgaon, Eklavya, Bhopal; Digantar, Jaipur Bodh, Rajasthan and National School of Drama, Delhi.There are also strong linkages with MCD and Sarvodaya schools for practicum and internship teaching.
8. **Details of courses/programmes discontinued (if any) with reasons:**None
9. **Number of Teaching posts:**

Post	Sanctioned	Filled
Associate Professor		
Assistant Professor	8	8

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil., etc.):**

Name	Qual	Des	Specialization	Exp Y	Res. Guidance
Dr. M. Priyadarshini	Ph.D.	Assistant Professor	Language Education	18	Ph.D.:1[o]
Ms. C. Suvasini	M.Phil	Assistant Professor	Psychology	18	
Ms. A.R. Sitalakshmi	M.Sc., M.Ed.	Assistant Professor	Science Education	8	
Dr. U. Chakravarti	Ph.D.	Assistant Professor	Psychology, Special Education	7	
Ms. N. Rana	M.A., M.Ed.	Assistant Professor	Social Science Education	7	
Ms. A. Threja	M. Phil.	Assistant Professor	Mathematics Education	6	
Dr. B. Biswas	Ph.D.	Assistant Professor	Social Science Education	6	

Ms. R. Badsiwal	M.A.	Assistant Professor	Education	6	
Ms. A. Kushwaha[T]	M.Phil.	Assistant Professor	English Language Teaching	6	
Ms. S. Shukla[A]	M.Sc., M.Ed.	Assistant Professor	Child Development, Education	5	
Ms. V. Chowdhary[A]	M.Phil.	Assistant Professor	Science Education	3	
Ms. S. Das[A]	M.Phil.	Assistant Professor	Education	2	
Ms. S. Jaiswal[A]	M.Phil.	Assistant Professor	Mathematics Education	1	
Ms. G. Aggarwal[A]	M.A., M.Ed.	Assistant Professor	Psychology	1	
Mr. Sandeep[A]	M.A., M.Ed.	Assistant Professor	Education	1	
Ms. S. Sah[A]	M.Phil.	Assistant Professor	Language Education	7	
Mr. S. Bharaty[A]	M.A., M.Ed.	Assistant Professor	Social Science Education	1	

Qual: Qualification; Des: Designation; [A]: *Ad hoc*; [T]: Temporary; [O]: Ongoing; Exp Y: Experience in years

11. List of senior visiting faculty: The Department invites senior resource persons from the concerned fields for practicum courses such as:

Performing and Fine Arts	Ms. Moloyshree	Jan Natya Manch Theatre Group, Delhi
	Mr. A. Ghosh	ANANT, Delhi
	Mr. L. Jain	Mandala-The Magic Circle Theatre
	Mr. Sukesh	Yellow Cat Theatre Group, Delhi
	Dr. A. Singh	Lady Irwin College, DU
Art and Craft	Mr. S. Guha	Delhi
	Mr. Mohit	Art College, DU
	Mr. V. Bhargava	Satya Global Society, Delhi
	Mr. R. Kumar	Art College, DU
Self Development Workshop	Ms. I. Sen	Pravah, NGO, Delhi
Story Telling and Children's Literature	Mr. P. Jha	Ankur, Society for Alternatives in Education,Delhi

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary faculty:

Temporary/*Ad hoc*faculty have full workload, similar to the permanent faculty.The workload of the entire faculty is as follows:

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Lectures	46	47	39	38	39	36
Practicals	55	53	61	62	61	64

13. Student-Teacher Ratio (programme-wise):

Student-teacher ratio in 2015-16: 13:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Year	2011-12		2012-13		2013-14		2014-15		2015-16	
	S	F	S	S	S	F	S	F	S	F
Resource Centre Attendant*	1	1	1	1	1	1	1	1	1	1

S: Sanctioned; F: Filled; *****on contract basis

15. Qualifications of teaching faculty with D.Sc./D.Litt./Ph.D./M.Phil./PG.:

	2011-12		2012-13		2013-14		2014-15		2015-16	
	P	A	P	A	P	A	P	A	P	A
Ph.D.	2		3		3		3		3	
M.Phil.	3	1	2	2	2	3	2	4	2	5
M.Ed.	3	3	3	1	3	1	3	1	3	4

P: Permanent; A; *Ad hoc*

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received(including Innovation Projects):

DU Innovation Project	Children's Picture Books in India: Rethinking History, Storytelling and Pedagogy
Co-PI	Dr. M. Priyadarshini, Ms. A. Kushwaha
Students' names	Aditi, Anshu, Ekta, Neha, Rachna
Total Grant	Rs.3.5 lakh
Duration	2015-16
Funding Agency	University of Delhi

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: None

18. Research Centre/facility recognized by the University:

The Department does not have a Research Centre. However, it has established a Resource Centre with an excellent collection of books, textbooks, story books, books, low cost innovative teaching-learning materials and aids on specific subject areas such as Language, Mathematics, Environmental Science, Social Science, Sciences, Psychology and Child Development.

19. Publications:

Name	Authored/Co-authored: Books/ Monographs/	Edited: Books/ Monographs/ Proceedings	Chapters: Books/ Textbooks	Papers: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular Resources including e-resources	Popular Articles
Dr. M. Priyadarshini			2	5				1
Ms. C. Suvasini			1	4				
Ms. N. Rana				1				
Ms. A. R. Sitalakshmi								
Dr. U. Chakravarti			2	2				

Ms. A. Threja				1		2		
Dr. B. Biswas			2					
Ms. R. Badsiwal								1
Ms. A. Kushwaha[T]				2				
Ms. S. Shukla[A]			1	3				1
Ms. V. Chowdhary[A]			2	2				1
Ms. S. Das[A]			1					
Ms. G. Aggarwal[A]				5				1
Ms. S. Jaiswal[A]								
Mr. Sandeep[A]								2
Mr. S. Bharaty[A]								
Ms. S. Sah[A]								

[T]: Temporary; [A]: *Ad hoc*

20. Areas of consultancy and income generated: None

21. Faculty as members in a) National committees, b) International committeesand c) editorial boards:

a) National Committees

Dr. M. Priyadarshini

- Chief Advisor and Member of the Hindi Textbook Committee, NCERT for Primary Classes and Middle Classes, respectively, 2007
- Member of the Sub-Committee, NCTE Delhi, reviewed and revised the existing NCTE Regulations, Norms and Standards of Teacher Education Courses,2013
- Nominated as Member of the Joint Review Mission of Teacher Education Government of India, constituted by the MHRD, 2013

Ms. V. Chowdhary

- Member Secretary of NCTE High Power National Committee working on recommendations of Justice Verma Commission, under the chairpersonship of Prof. V. Kaul, 2014
- Member Secretary of NCTE National Committee working on Pre-School Education, under the chairpersonship of Prof. V. Kaul, 2014

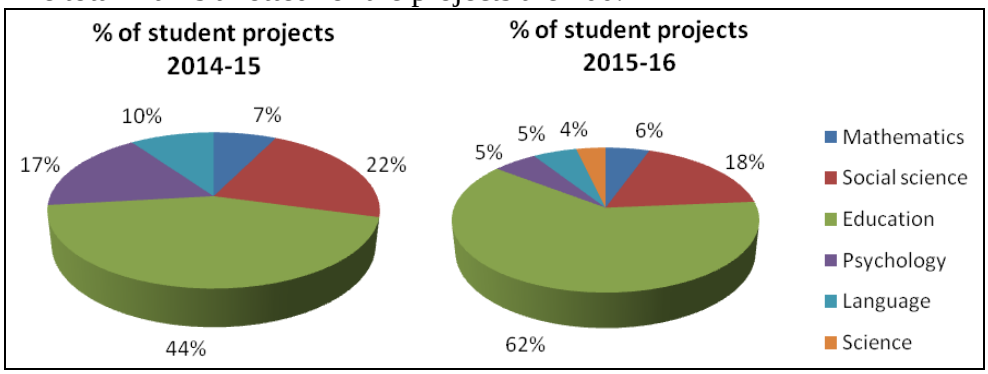
b) Editorial Board

Ms. V. Chowdhary, Associate Editor, Anweshika, National Journal, NCTE

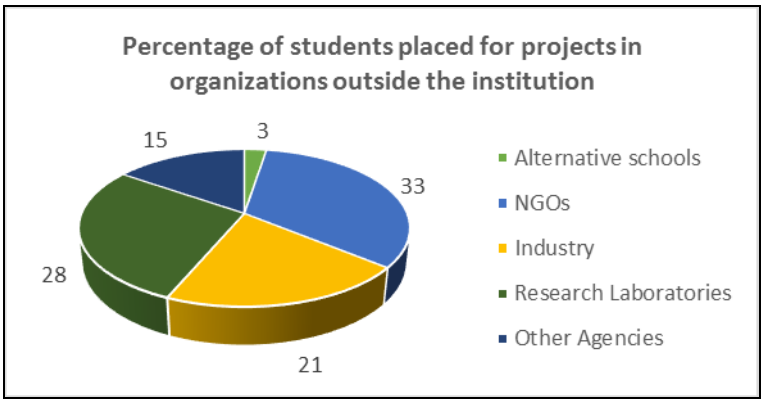
22. Student projects:

a) Percentage of students who have done in-house projects including inter departmental/programme

As part of the B.El.Ed. curriculum, each student in the fourth year is required to conduct research based projects under the guidance of the Department faculty. The total marks allotted for the projects are 100.



b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies:



23. Awards/Recognitions received by faculty and students:

Faculty Awards

- Dr. M. Priyadarshini received ICSSR (Indian Council of Social Science Research) Fellowship to do Post Doctoral Research for work on Status of Hindi as a Language of Formal Discourse, 2011.
- Ms. Suvasini received Erasmus Mundus Fellowship for Visiting Scholars, Freie Universitat, Berlin, Germany, 2009.

Students' Awards

Award	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
1. University Rankers Awards	1					
2. Academic Award (College Topper)		1	1	3	1	
3. Bachelor of Elementary Education Award				2		
4. Toto Chan (Best Creative Teaching) Award				2		
5. Award for All-round performance				1	1	
6. Yashoda Fellowship					1	
7. Lady Irwin School Alumni Association (LISAA)				1		

Co-curricular

NCC: One student won3 All India Gold Medals in Himachal Trekking Camp 2015; Gold Medal (All India Thal Sainik Camp), 2015; Nominated for NCC Special Entry by Officers Training Academy Gwalior, 2015.

24. List of eminent academicians and scientists/visitors to the Department:

Vidya Rao, Acclaimed Classical Music Exponent; Maya Rao, Vismayah, Shiv Nadar University; Shantha Sinha, Chairperson, National Council for Protection of Child Rights; Harsh Mandar, Director, Centre for Equity Studies; Kamala Bhasin, Advisor &Founding Member, SANGAT & Jagori; Vinod Raina, Educationist; Sunanda Sen, Visiting Professor, Jamia Millia Islamia; T.V. Venkateswaran, Scientist, Vigyan Prasar; Gauhar Raza, Chief Scientist, CSIF-NISCAIR; Molayshree Hashmi, Founding Member, JAN NATYA MANCH;

Jamal Kidwai, Director, Aman Ekta Manch, Delhi; Yogendra Yadav, Senior Fellow, Centre for the Study of Developing Society, Delhi; Poonam Batra, Central Institute of Education, DU; Apoorvan and, Department of Hindi, DU; Dilip Simeon, Chairperson, Aman Trust, Delhi; Anita Rampal, Central Institute of Education, DU; Jaya Iyer, Freelance, Theatre & Self-Development; Shefali Ray, English Language Professional Teaching; Ashish Ghosh, Theatre personality, ANANT Children's Theatre, Delhi; Indira Mukherjee, Freelance, Story Telling and Children's Literature, Delhi; and Alex, Professional, Graphic Designing & Animation, Delhi.

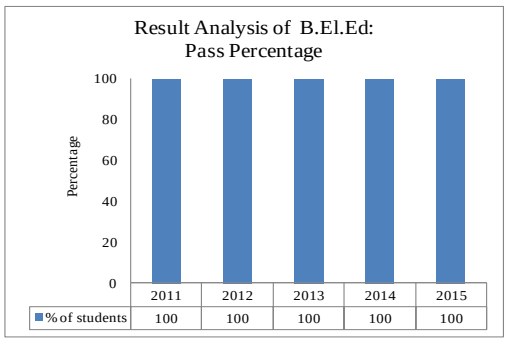
25. Seminars/Conferences/Workshops organized & the source of funding:

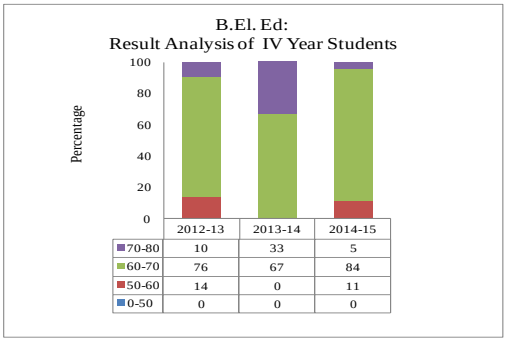
a) National

Faculty Member	Seminar/Conference/Workshop	Sponsors
1. Dr. M. Priyadarshini	Fifth CESI International Conference on the theme *Education, Politics and Social Change*, 16-18 November 2014	ICSSR, UNICEF, NUEPA, CARE India & APU
2. Dr. U. Chakravarti	Seminar *Understanding Disability*, January2014	ICSSR
3. Dr. M. Priyadarshini	National Seminar on Social Science *Probing Contemporary Indian Society* 05-06 February, 2008	UGC & ICSSR

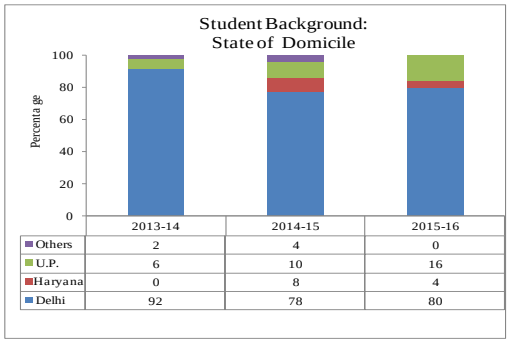
b) International: None

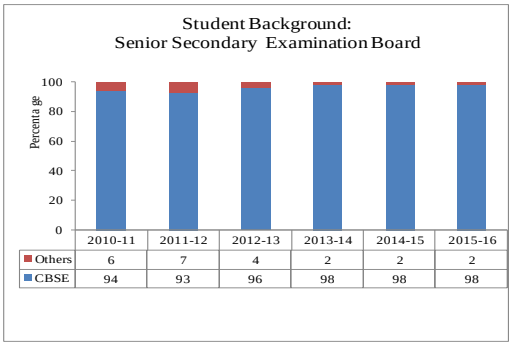
26. Student profile programme/course-wise:





27. Diversity of Students:





28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? :

Almost 90% of the students who appeared for the CTET have cleared the exam. The students who pursue higher education also clear the NET.

29. Student progression:

Student Progression	Against % Enrolled
UG to PG	85
PG to M.Phil.	3
PG to Ph.D.	5
Ph.D. to Post-Doctoral	NA
Employed • Campus selection	Sancta Maria (Hyderabad), Heritage School, Bharat National Public School, Presidium School, Learning Links Foundation (LLF)
Entrepreneurship/Self-employment	Data not available

30. Details of Infrastructural facilities:

a) Library: The Department has a very well-developed Resource Centre with several resources in the form of books, textbooks, story books, children's literature on general as well as subject specific areas. Teaching learning materials such as maps, globes, abacus, science kits, charts are also there in the Resource Centre. There are 3380 books in the Resource Centre and 1413 books in the main library.

b) Internet facilities for staff and students: The college has a well-equipped Digital Resource Centre with internet facility and the college campus is WiFi enabled accessible to both staff and students. The Department has one PC with internet broadband facility. The faculty members also have personal netbooks issued by the college. Some students have been issued laptops by the college.

c) Classrooms with ICT facility: All the classrooms in the college have LCD projectors and screens. The Department also has digital cameras, speakers which are used for various teaching-learning and co-curricular activities. Students with special needs, also avail special software enabled ICT resources of the college.

d) Laboratories: The Department Resource Centre has Mathematics and Science kits.There are also innovative science teaching material purchased from organizations like Eklavya, Jodo Gyan and Vigyan Prasar. For everyday classroom science experiments, the Department takes help of college's science departmentswhohave very well-equipped laboratories which are readily accessible to the B.El.Ed. staff and students.

e) Faculty room: The Department has a faculty room with individual workstations and storage space.

31. Number of students receiving financial assistance from college, university, government or other agencies:

Year	No. of Students
2010	4
2011	2
2012	2

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts:

The B.El.Ed. programme in its curriculum and structure includes various workshops/special lectures/seminars for student enrichment components such as Theatre, Art and Craft, Self development, Story-telling and Children's literature.There have also been enrichment programmes on pedagogy and co-curricular aspects for both students and faculty in the form of special workshops and special lectures organized by the Department. Some of them are as follows:

Workshops

- Innovative Practices in Teaching of Primary Grade Mathematics, Mr. Dinesh Rastogi and Mrs. Ruth Rastogi.
- Flaming the Sparks: Workshop on Science Communication among Elementary School Science Teachers.
- Science, Technology, Engineering and Mathematics, Mr. Prakash and Mirambika.
- All About Photography, Mr. Pratyush Pushkar, Delhi Art Foundation.
- Workshop to Understand the Issues of Homeless People, Mr. Lokesh Jain and Shri Indu Prakash Singh.
- Madhubani Painting and African Painting, Mr. Vijit Bhargava.

Lectures

- Teaching of Numbers in Primary Grades, Jodo Gyan team.
- Pedagogy of Mathematics, Ms. Shikha Thakkar, Research Scholar, Homi Bhabha Centre for Science Education.
- Children's Play and Observation Techniques, Dr. Nandita Chaudhary.
- Right to Education Bill and No Detention Policy, Lok Shikshak Manch.
- Understanding Classroom Discourse for Language Teaching, Ms. Sonika Kaushik, Senior Consultant, NCERT.

Presentations

- A theatrical presentation on the theme Violence against Women, the theatre group Jana Natya Manch.
- A Dastangoi Session of Traditional Story-telling form, artists Ms. Fauzia and Ms. Valentina Trivedi.

33. Teaching methods adopted to improve student learning:

- Research based relevant readings are provided to the learners prior to the scheduled lectures. The readings are discussed on the basis of students' participation in the form of presentations (group/individual) and reflective discussions on questions raised in classroom.
- Most of the teaching at the Department is interactive which involves use of a variety of teaching methods. Use of project methods, group discussions, presentations, assignments, brain storming, hands-on activities and audio-visual aids to enhance the effectiveness of teaching-learning process.
- Field visits are undertaken to have a more first hand, practical experience related to different types of educational as well as socio-economic settings.
- Students are encouraged to write reflective journals about their experiences and thoughts for some components of the programme.
- PowerPoint presentations are used while interacting with students in the classroom and the students are also encouraged to make their presentations using ICT.
- Films, documentaries, videos, photographs, journals and magazines related to themes of the course are also used frequently.

- As student teachers, B.El.Ed. students are also encouraged to devise innovative teaching learning materials on general and subject specific topics related to education using local as well as multimedia resources.
- A two-dayDigital Literacy Course was conducted on Graphic Designing & Animation.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- The Department participates and collaborates in most of the college related activities.It collaborates with about 20 Government schools-primary and middle, for school internship (IV year), block teaching (III year) and school contact programme (I year).
- During school internship, and block teaching,it initiates in-service Government school teachers to innovative methods of teaching through classroom teaching and co-curricular activities such as theatre, art and craft, physical education.
- During school internship a resource room equipped with teaching learning resources for primary school level is developed. The purpose of the resource room is to encourage reading habits, activity based learning through models and experiments. The resource room also has various resources for teachers which can be used by them to make their teaching more effective.
- The faculty members are involved in ISR and Extension activities by being members of different societies and committees of the college. Faculty members have been part of Enabling Committee, Equal Opportunity Cell, SPIC MACAY, Canteen Committee, Garden Committee, Adventure Club and NCC.
- The faculty members participated with dedication and enthusiasm in the Swachh Bharat Abhiyaan in 2014.

35. SWOC analysis of the department and Future plans:

Strengths: The Department has well-qualified and dedicated faculty. Learning is facilitated by use of innovative and flexible approaches to teaching thereby contributing to an all-round and holistic development of students. The Department ensures that students' interests are met by creating provisions for mentoring as also by maintaining constant communication between students and teachers. As a Department, which believes in following as well as fostering leaner-centric approach, attention to needs and requirements of individual students is a way of functioning. The Department has its own Resource Centre equipped with academic readings, books and children's literature for students' ready use and reference. The programme draws disciplinary resources from other Departments and an effective collaboration with cooperative faculty is one of its greatest strengths. All the faculty members are bilingual in their subject knowledge transaction and this ensures dissemination of equitable knowledge to students from both Hindi and English medium.

To make learning more enriching, the Department regularly organizes workshops, special lectures and discussion sessions with experts and practitioners in the field of education to talk about various aspects of education. Students are encouraged to participate in various summer internship programmes conducted by organizations in the field of education. The Department makes a sustained effort to expose the students to the work of

groups and organizations engaged at the grass-roots leveland facilitate integration of theoretical studies with field realities. At the end of the programme, placement of students in different schools and NGO's is also facilitated by the Department. Learning in B.El.Ed.is not understood as happening only during the four years of the programme. The faculty members engage intensely with each learner to ensure they are initiated into the process of life-long learning, development and empowerment.

Weaknesses: The college is still in the process of expanding its infrastructure and the development of a state-of-the-art curriculum laboratory is already under way. However, in the absence of the above, the Department has to make do with the available space. Given that the programme demands individual engagement with students, there is requirement for additional sanctionedsupport staff for managing the Resource Centre and handling curriculum laboratory.

Opportunities: The interdisciplinary nature of the B.El.Ed. curriculum provides opportunities for more collaboration with other Departments of the college, student interaction between disciplines and taking up of innovative interdisciplinary projects. There are opportunities for greater creativity and effectiveness in design and use of teaching-learning material. There is also a scope for more collaboration with the other B.El.Ed. colleges, government and private agencies for innovative aids and methodology.

Challenges: Being a bilingual programme, we need to develop more resource materials in Hindi language for students who prefer Hindi medium. Resources are required to conduct and undertake research in the field of Elementary Education.Another challenge is to maintain the vision of B.El.Ed. and continue with innovative teaching learning methods is the large class size of over 50 students, and high student- teacher ratio.

Future Plans: The Department plans to expand the Resource Centre with more books, teaching-learning materials and resources. There are plans to develop a Curriculum Laboratory. Efforts are going on for strengthening the support system provided to in-service school teachers. There are plans to initiate a research based journal in the field of education.Provision for more reading material for Hindi medium students is being made.Efforts are being made to use better technology to make teaching-learning more effective and meaningful, to create more e-learning resources for students and to involve the alumni to contribute in the activities of the Department.

Evaluative Report

Department of English

1. **Name of the Department:** English
2. **Year of Establishment:** 1948
3. **Names of Programmes/Courses offered:**
   UG: B.A. (H) English; B.A. Programme: English is offered in combination with other humanities subjects
   PG: M.A. English
4. **Names of Interdisciplinary courses and the departments/units involved:**
   Students of B.A. (H) English take credit courses offered by social science and humanities departments.
5. **Annual/semester/choice based credit system (programme-wise):**
   Choice Based Credit System (CBCS) in Semester Mode from 2015-2016.
6. **Participation of the department in the courses offered by other departments:**
   - Ability Enhancement Compulsory Course (AECC)
   - Generic Elective (GE) Course
   - Discipline Centered Courses (in the Sixth Semester)
   - Students from all other courses study English
7. **Courses in collaboration with other universities, industries, foreign institutions:** None
8. **Details of courses/ programmes discontinued (if any) with reasons:** None
9. **Number of Teaching posts:**

Post	Sanctioned	Filled
Associate Professor		6
Assistant Professor	8	8

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil., etc.):**

Name	Qual	Des	Specialization	Exp Y
Dr. S. Sengupta	Ph.D.	Associate Professor	Gender and Cultural Studies	29
Dr. S. Purkayastha	Ph.D.	Associate Professor	Literature and Naxalite Politics in Bengal	29
Ms. I. Prasad	M.Phil.	Associate Professor	Modern Indian Drama	25
Dr. S. Roy	Ph.D.	Associate Professor	Colonial British Women's Writings	23
Ms. D. Tandon	M.Phil.	Associate Professor	Comparative Studies in Drama	22
Ms. I. Singh	M.Phil.	Associate Professor	20th Century Novel	23
Ms. D. Ray	M.Phil.	Assistant Professor	Children's Periodicals in Bengali	9
Ms. S. Thaimei	M.Phil.	Assistant Professor	Oral Tradition of the Rongmei	9
Ms. M. Sagar	M.Phil.	Assistant Professor	Modernist Poetry	12

Dr. P. Bhardwaj	Ph.D.	Assistant Professor	Partition Narratives	13
Dr. S.S. Jha	Ph.D.	Assistant Professor	Gender History, Cultural Studies	9
Dr. J. Rowena	Ph.D.	Assistant Professor	Popular Malayalam Cinema	7
Ms. G. Rao	M.Phil.	Assistant Professor	Modern British Drama	4
Dr. A. Kujur	Ph.D.	Assistant Professor	Indo-Jewish Writing	9
Ms. S. Moitra[A]	M.Phil.	Assistant Professor	Women and Reading in Colonial Bengal	4
Ms. K. Tepa[A]	M.Phil.	Assistant Professor	Northeast Women's Autobiography	1

Qual: Qualification; [A]: *Ad hoc*: Des: Designation; Exp Y; Experience in years; Ph.D is under process for Ms. Prasad, Ms. Ray, Ms. Thaimei, Ms. S. Moitra and Ms. Tepa.

11. List of senior visiting faculty: None

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary/ad-hoc/guest faculty:

Year	2011-12		2012-13		2013-14		2014-15		2015-16	
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Lectures + Tutorials	23.7	23.7	30.8	27.7	28.8	21.4	26.8	34.6	18.4	23.8

13. Student-Teacher Ratio (Programme-wise) :

- B.A. (H) English: 17:1
- B.A. Programme: 25:1
- M.A. English tutorials: 6:1

14. Number of academic support staff (technical) and administrative staff: None

15. Qualifications of teaching faculty with D.Sc./ D.Litt./ Ph.D./ M.Phil. / PG:

Qualification	2010-11		2011-12		2012-13		2013-14		2014-15		2015-16	
	P	A	P	A	P	A	P	A	P	A	P	A
Ph.D.	6		6	2	6		7		7	1	7	
M.Phil.	4		4	1	4	1	3	3	5		7	2
M.A.	1	8	1	7	12			8		8		

P: Permanent; A: Temporary/*Ad hoc*

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

a) National

- Dr. S. Roy is currently working on a monograph titled *Offending Bodies: Gender and Crime Writings in Late 19th and Early 20th Century Bengal*, due to be published by Palgrave Macmillan, UK, in 2017.
- Dr. S. S. Jha is one of the guides for an ongoing University of Delhi Innovation Project titled *Children's Picture Books in India: Rethinking History, Storytelling and Pedagogy*, funded by the Research Council, DU. The total grant sanctioned is Rs.3.5 lakh**.**

b) International: None

17. Department projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Two-day International Seminar sponsored by UGC, ICSSR and ICCR was organized in 2010. Total grant received: Rs.2.5 lakh (Rs.1 lakh from UGC, Rs.50,000 from ICSSR, Rs. 1 lakh from ICCR towards air tickets).

18. Research Centre /facility recognized by the University: None

19. Publications:

Name	Authored/Co-authored: Books/ Monographs	Edited: Books/ Monographs/ Proceedings	Chapters: Books/ Textbooks	Papers: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular resources including e-resources	Popular Articles	No. of Publications listed in International Database	Impact Factor
Dr. S. Sengupta	1	2	5	4						
Dr. S. Purkayastha		1	3	1						0.92
Dr. S. Roy	1	1	3	4						
Ms. I. Prasad	2			1						
Ms. D. Tandon		1	3	1						
Ms. I. Singh	1									
Ms. D. Ray			2							
Ms. M. Sagar		2	1							
Dr. P. Bhardwaj			1	1						
Dr. S.S. Jha			2	1					2	
Dr. J. Rowena	1		2	1						
Ms. G. Rao				4						
Dr. A. Kujur				2					2	
Ms. S. Moitra			2	1						

Books authored/co-authored, edited/co-edited by current faculty members

- Sengupta, S. 2011.The Song Seekers, Zubaan India, ISBN 978938101703. Also published by The Chicago University Press, 2013, ISBN 9789381017036. Translated into Italian, La Dea Combattente, Elliot Press, Rome, 2013, ISBN 9788861923690.
- Sengupta. S & Tandon. D. (ed.). 2011. Revisiting Abhijnanasakuntalam: Love, Lineage and Language in Kalidasa's Nataka. Orient Blackswan, India, ISBN 9788125044192.
- Sengupta, S., Purkayastha, S. & Roy, S. (ed.). 2007. Towards Freedom: Critical Studies on Rabindranath Tagore's Ghare Bhaire, Orient Longman, Delhi, India, ISBN 81-250-3187-1.
- I. Prasad (co-ed.) 2006. The Individual and Society: Essays, Stories & Poems, Pearson, New Delhi, ISBN 978-81-317-0417-2.
- Roy. S. 2011. In Zenanas and Beyond: Representations of Indian Women in British Colonial Texts, 1800-1935, Lambert Academic Publishing, Saarbrücken, Germany, ISBN 978-3846519172.

- Singh. I. 2014. The Surveyor, Picador, Pan Macmillan India, ISBN 978-93-82616-27-6.
- Rowena, J. 2012. Themmadikalum Thamburakanmaarum: Malayala Cinemayum Aanathangalm, Subject and Language Press, Kottayam, Kerala.

The following books came out of seminars organized by the Department of English

- Sengupta. S. & Tandon. D. (ed.). 2011. Revisiting Abhijnanasakuntalam: Love, Lineage and Language in Kalidasa's Nataka, Orient Blackswan, India, ISBN 9788125044192.
- Rajeswari. S. R. (ed.). 1992. The Lie of the Land: English Literary Studies in India, Oxford University Press, Delhi.
- Joshi. S. (ed.). 1991. Rethinking English: Essays in Literature, Language, History, Trianka, New Delhi.
- Chatterji. L. (ed.). 1986. Woman Image Text: Feminist Readings of Literary Texts, Trianka Publications, New Delhi.

20. Areas of consultancy and income generated:

Dr. S. S. Jha was the Academic Consultant for Educational Exhibit for the Mah Laqa Tomb and Garden Restoration Project, Hyderabad, in August 2010.

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards:

a) National Committees: Ms. I. Prasad is a member of the Standing Committee constituted in June 2014 by the UGC to advise the University of Delhi on migration from FYUP.
b) International Committees: None
c) Editorial Boards: Ms. G. Rao for literary journals IAWS and of FORTELL

22. Student Projects:

a) Percentage of students who have done in-house projects including inter-departmental/programme

- Projects form an important part of students' academic work.
- Department students participate in a variety of projects within the college as members and office holders of Societies like Ariels, Indian and Western Music Societies, college magazine, NSS and Enactus.
- Many students also undertake internships, summer jobs and volunteer work.
- At the departmental level, students work to organize the English Literary Society festival held annually in February.
- Five students are members of the DU Innovation Project *Children's Picture Books in India: Rethinking History, Storytelling and Pedagogy*.

b) Percentage of students placed for projects in organizations outside the institution, i.e. in Research laboratories/Industry/ other agencies

Year	No. of students projects outside institution	% of students projects outside institution
2011	1	33
2012	2	50
2013	11	85
2014	11	92
2015	7	78
2016	37	28

23. Awards/ Recognitions received by faculty and students:

Faculty Awards

Year	Faculty	Award/Recognition
2015-16	Ms. D. Ray	Charles Wallace Grant
	Dr. S. Purkayastha	Fulbright Nehru Postdoctoral Research Fellowship
	Dr. S. Roy	Academic Visitor at SOAS
2013-14	Ms. S. Moitra	Charles Wallace India Trust Fellowship
2011-12	Ms. Manju Kapur	Novel, *The Immigrant* –Shortlisted for DSC Prize for South Asian Literature
	Dr. S. Sengupta	Novel, *The Song Seekers* –Long listed for DSC Prize for South Asian Literature

Students' Awards

Course	Name of Award	Name of Student
2011-12		
B.A. (H) English III year	College Academic Prize	Isha Singh
B.A. (H) English III year	College Academic Prize G. Persahad Memorial Award Gayatri Das Gupta Memorial Award Urvashi Memorial Award	Anamika
M.A. (Final) English	Urvashi Memorial Award College Academic Prize	Sejal Mehendru
2012-13		
B.A. (H) English III year	College Academic Prize	Shreya Sinha
B.A. (H) English III year	College Academic Prize G. Persahad Memorial Award Gayatri Das Gupta Memorial Award Urvashi Memorial Award	Maryam Sikander
M.A. (Final) English	Urvashi Memorial Award College Academic Prize	Ima Kazmi
2013-2014		
B.A. (H) English III year	College Academic Prize	Aditi Agarwal
B.A. (H) English III year	College Academic Prize G. Persahad Memorial Award Gayatri Das Gupta Memorial Award Urvashi Memorial Award	Shikha Kothiyal
M.A. (Final) English	Urvashi Memorial Award College Academic Prize	Maryam Sikander
2014-15		
B.A. (H) English III year	University Ranker Award II Position	Aditi Agrawal
M.A. (Final) English	College Academic Prize	Sameera Mehta
M.A. (Final) English	University Ranker Award II Position	Maryam Sikander

24. List of eminent academicians/ visitors to the Department:

1. Prof. Sukanta Chaudhuri, Retd. Professor, Jadavpur University, 2012
2. Prof. Tapan Basu, Department of English, DU, 2012
3. Dr. Ranjani Mazumdar, School of Arts and Aesthetics, JNU, 2012
4. Dr. Baidik Bhattacharya, Department of English, DU, 2012
5. Dr. Srimanjari, Department of History, Miranda House, DU, 2012
6. Keval Arora, Department of English, Kirori Mal College, DU, 2012
7. Daniel J.R. Grey, Scholar, Wolfson College, Oxford, 2012
8. Orijit Sen, Artist-illustrator, 2012
9. Aman Sethi, Journalist-author, 2012
10. Chandan Gomes, Photographer, 2012
11. Shreema Ningombam, Poet, 2012
12. Chaoba Phuritshadam, Poet, 2012
13. Soibam Haripriya, Poet, 2012
14. Taru Dalmia, Performance Artiste, 2012
15. Prof. Kumkum Sangari, University of Wisconsin, Milwaukee, 2013
16. Prof. Ruth Vanita, University of Montana, 2013
17. Prof. Renu Addlaka, Deputy Director, CWDS, 2013
18. Keval Arora, Academician-theatre person, Kirori Mal College, DU, 2013
19. Shubhra Gupta, Journalist, 2013
20. Safina Uberoi, Documentary filmmaker, 2013
21. Prof. Gary Lyons, School of Performance and Cultural Studies, University of Leeds, 2014
22. Prof. Nigel Leask, University of Glasgow, 2014
23. Prof. Ruth Vanita, University of Montana, 2014
24. Prof. Achin Vinayak, Retd. Professor, Dept. of Political Science, DU, 2014
25. Prof. Rosie Llewellyn-Jones, South Bank University, London, 2014
26. Dr. Veio Pao, Shaheed Bhagat Singh College, DU, 2014
27. Saswat Bhattacharya, Deshbandhu College, DU, 2014
28. Umair Gul, Research Scholar, Jamia Millia Islamia, 2014
29. Waiel Avad, Journalist, Syrian Arab News Agency and President, Foreign Correspondents Club of South Asia, 2014
30. Sanjoy Hazarika, Journalist-author and Director, Centre for North-East Studies and Policy Research, Jamia Millia Islamia, 2014
31. Kishalay Bhattacharjee, Jouranlist-author, 2014
32. Anjum Zamrud Habib, Author-activist, 2014
33. Tenzin Tsundue, Poet-activist, 2014
34. Sahba Husain, Researcher, Translator, 2014
35. Dr. Uma Devi, Department of Modern Indian Languages, DU, 2015
36. Dr. U. Chakravarti, Feminist Historian and Documentary Filmmaker, 2015
37. Dr. Dilip Simeon, Historian, Chairperson, Aman Trust, 2015
38. Paranjoy Guha Thakurta, Journalist and Author, 2015
39. Gautam Navlakha, Journalist and Human Rights Activist, 2015
40. Pamela Philipose, Journalist, 2015
41. Ravinder Bawa, Journalist, 2015
42. Sukhbir Saharia, Mediaperson, 2015
43. Rachel Sauer, Mediaperson, 2015
44. K.G. Suresh, Editor, Doordarshan, 2015
45. Rachitaa Gupta, Digital Communication Strategist, 2015
46. Warisha Farasat, Lawyer, Supreme Court, 2015

47. Nitin Meshram, Lawyer, Supreme Court, 2015
48. Chittaroopa Palit, Human Rights Activist, 2015
49. Prof. Vasudha Dalmia, Professor Emerita, University of Yale, 2016
50. Prof. Paul Spence, King's College, 2016
51. Dr. Farida Khan, Department of Education, Jamia Millia Islamia,2016
52. Dr. Nonica Datta, Centre for Historical Studies, JNU, 2016
53. Dr. Charu Gupta, Department of History, DU, 2016
54. Dr. Ramaa Vasudevan, Fort Collins, Colorado State University, 2016
55. Dr. Ashok Prasad, Fort Collins, Colorado State University, 2016
56. Akshaya Mukul, Journalist and Author, 2016
57. Subhash Ghatade, Journalist and Human Rights Activist, 2016
58. Marion Molteno, Author, 2016
59. Mrigashree Pant, Creative Director, Media Network Private Ltd., 2016
60. Indira Mukherjee, Author, 2016
61. Navin Menon, Children's Book Trust, 2016
62. Bharati Jagannnathan, Department of History, MH, DU, 2016
63. Saumya Chaudhury, Performance Artiste, 2016

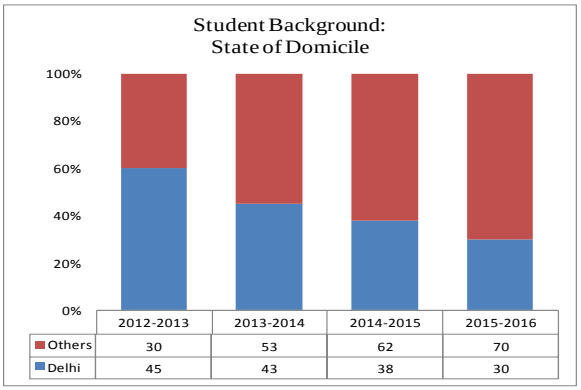
25. Seminars/ Conferences/Workshops organized & the source of funding:

- Two-day International Seminar on *Revisiting Kâlidâsa's Abhijñânasâkuntalam: Land, Love, Languages: Forms of Exchange in Ancient India*. UGC, ICSSR and ICCR funded, 2010
- Two-day Seminar on Violence in Literature in Popular Culture, 2012
- One-month Theatre Workshop with Keval Arora, theatre person-academician, with students of English and other departments on Classical Greek Theatre: Performance and Poetics. Workshop led to production of Sophocles' *Antigone* Production of play funded by V. Krishna Memorial Fund, Miranda House, 2013
- 2 day Festival of Arts celebrating Harry Potter: Recreating the Magic, 2013
- 2 day Seminar: Disputed Territories, Denied Homelands, 2014
- Seminar: Imagine You are Gaza, co-organized with Department of History, Miranda House, 2014
- Workshop on CBCS GE Course: Media and Communication Skills, 2015
- 2 day Seminar: Censored, 2015
- 2 day Seminar: Distorting History, Manufacturing Culture, 2016
- 2 day Seminar co-organized with Dept. of Elementary Education, 2016

26. Student profile programme/course-wise:

B.A. (H) English	Selected	Enrolled
2011-2012	56	56
2012-2013	63	63
2013-2014	89	89
2014-2015	79	79
2015-2016	85	85

27. Diversity of Students:



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, :

Year	No. of responses	Exam passed-NET/SLET/Civil Services/GATE
2011	3	1
2012	4	1
2013	13	5
2014	12	

29. Student progression:

Total percentage against the number enrolled could not be obtained; the figures provided in the following table shows the number out of the total number of former students who responded to the survey.

Year	No. of responses	M.A./M.B.A./PG	M.Phil.
2011	3	2	1
2012	4	2	2
2013	13	11	1
2014	12	11	
2015	9	7	

Students of the Department have gone on to work in a variety of fields. Many have trained as journalists and are employed in the field of news, media and communications, with national and international news agencies including India Today, Reuters, Deccan Chronicle, The Asian Age, Hindustan Times and Quartz (an Atlantic Media company). Several have qualified as teachers and some are working in the management/corporate sector and have occupied directorial posts in organizations such as Kellogs Mumbai, GlaxoSmithKline Pharma, J.M. Morgan Stanley, Nomura, Reliance Energy, Bharti Televentures, to the South African High Commission

30. Details of facilities/ infrastructural facilities:

a) Library: The Department maintains a library for the use of faculty members and students, with 3000 books. Books are ordered regularly to keep pace with the demands of a changing curriculum. The English section in the college library has 12,700 books.

b) Internet facilities for staff and students: The college campus is equipped with a Digital Resource Centre (DRC) and WiFi connectivity. Netbooks have also been issued to faculty members and laptops to students.

c) Classrooms with ICT facility: The 12 classrooms used by the Department have ICT facility.

d) Faculty room: The Department faculty room has independent workstations for each teacher. It is also equipped with a desktop and a printer. The room has a DVD player and television screen.

31. Number of students receiving financial assistance from college, university, government or other agencies: None

32. Details on student enrichment programmes (special lectures/workshops/ seminars) with external experts:

- The Department, through the English Literary Society, regularly organizes lectures on literature as well as several related fields.
- The Department makes an effort to meet the specific needs of students each year in accordance with changes in the curriculum. For instance, in 2015, several events were organized especially for the students who have opted to study the new Generic Elective (GE) course on Media and Communications Skills offered by the English Department this semester.
- In addition to talks held through the year, the English Literary Society organizes an annual two-day inter-college event in February. These events are usually centred around a topic/theme and consist of panel discussions, lectures, student presentations, music and informal events. The Department, eschewing sponsorship, generates funds through innovative methods like a food court, a second hand book bazaar and the sale of posters, diaries and bookmarks designed by faculty and students.
- The Department also holds the V. Krishna Memorial Event in March in memory of the faculty's first teacher who joined in 1948. Several eminent scholars have delivered the V. Krishna lecture, such as Gayatri Spivak, Mahasweta Devi, Aijaz Ahmed, Sumit Sarkar, Romila Thapar, Ngugi wa Thiong'o, Sukanta Chaudhuri, Robert and Sally Goldman. In 2013, the V. Krishna Memorial Event was a production of Sophocles' *Antigone* directed by Keval Arora, Department of English, Kirori Mal College, with students of B.A. (H) English, Miranda House.
- English Dramatics Society Ariels: Faculty members of the English Department have, traditionally, been involved with the staging of plays and the evolution of a dramatics society in college. As convenors of the English Dramatics Society, Ariels, they have helped to organize theatre workshops and interactive sessions with theatre persons such as Keval Arora and Faisal Alkazi. Angela Koreth, Svati Joshi, Ruth Vanita and Deepika Tandon have scripted plays, as well.
- Women's Development Cell: Faculty from the Department has been actively involved in the activities of the Women's Development Cell. They have helped in organizing seminars, workshops, film screenings and appointment of a counsellor, obtaining funding from the Ministry of Human Resources & Development.
- Celluloid, the Film Club: In 2005, Dr. S. Sengupta and Dr. S. Roy from the English Department started a Film Club named (after the iconic erstwhile film club of Delhi University).
- Creative writing workshops with novelist Manju Kapur, an ex-faculty member and the writer of novels such as *Difficult Daughters, The Immigrant* and *A Married Woman* have been organized by the Department.
- College Magazine: Several faculty members of the English Department have traditionally been on the Magazine Committee as editors for the English

section of the college magazine. The college magazine has always had a very large number of students from the English Department. Our students have written and edited a vast variety of articles including book and film reviews, interviews with famous alumni and analytical pieces on contemporary issues and events and have worked on illustrations and photographs.

33. Teaching methods adopted to improve student learning:

- In addition to lectures and tutorials, PowerPoint presentations, handouts and film screenings are regularly used as teaching aids.
- Orientation programmes are held at the beginning of the academic year, lectures and demonstrations by experts are organized for better understanding of literature.
- Group projects are encouraged and students are taught to use performative arts along with academic works for such submissions. Mentoring is specifically undertaken for helping students create collective knowledge through project work.
- Individually, students are trained to use JSTOR resources and access digital information in order to learn the latest developments in a given field.
- Informal workshops are organized by faculty members for enabling students to improve their writing skills. Similar workshops for creative writing are also held.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Students of the Department take part in ISR Activities through various forums in the college, such as NSS, NCC, WDC, Enactus Miranda House (social entrepreneurship) and others.
- Department faculty members have been active in the WDC (please see point 32) and the NSS.
- As coordinator of the Equal Opportunity Cell in 2011-12, Ms. I. Prasad held remedial classes in English for students from the reserved category.
- Several students from the Department are also currently participating in an ongoing University of Delhi Innovation Project, which, through field work, provides to students the experience of working with different sections of society.

35. SWOC analysis of the department and Future plans:

Strengths

- Interdisciplinary approach to the study of literature and pedagogy that relates classroom practice with the world outside with particular emphasis on gender studies.
- Introduction of and sustained interest in critical theory, literary studies and media studies.
- Innovative teaching methods based on exploration of dialogic relation between text and context, poetics and performance; production of individual and collective student projects including diverse genres such as essays, film translations, essays, creative writing, etc; and, use of digital resources.
- Academic publications: individual and collective academic books and research articles by faculty members, many of which have been based on the departmental weekly seminars. Some faculty members have collaborated in

preparing textbooks and study material for courses in Delhi University as well as IGNOU.

- Creative output: individual creative works such as fiction and poetry by faculty members.

Weaknesses

- As a constituent college of the University of Delhi we are constrained by the difficulty of curriculum innovation.
- As a result of highly inflated marks at the senior secondary level, during admission it is difficult to identify students with genuine talent and adequate language skills.

Opportunities

- Building translation studies as future of literary studies as several faculty members are fluent in different languages (Urdu, Hindi, Bhojpuri, Bengali, Malayalam, Tenyidie, Rongmei, Gujarati and Marathi).
- Providing information for creating interdisciplinary modules for teaching humanities with colleagues and visiting faculty.
- Mentoring and collaborating with students for writing articles for publication.
- Strengthening classroom interactions with diverse students as English is taught to all.
- Creating innovative exercises and projects through festivals and competitions which enable exhibition of diverse skills in activities such as academic papers, creative writing, graphic designs, culinary arts, audio-visual presentations, etc.
- Contributing to extracurricular activities based on the pioneering efforts of students and faculty in creating college societies such as Ariels, Magazine, Film Club, etc.
- Developing voluntary outreach programmes and self-help initiatives for consciousness raising and social assistance.

Challenges

- Teaching classes consisting of a diverse range of students with varying levels of proficiency in English.
- Strengthening original scholarship against plagiarism arising out of easy availability of information on the internet.
- Retaining focus on the study of literature and building a balance with new emphases on language oriented studies.

Future Plans

- To continue to build and expand our pedagogic skills by keeping pace with developments in technology.
- To learn innovative methods of teaching in order to cater to the needs of students.
- To use our familiarity with narratives for more work involving audio-visual media.
- To continue our efforts in integrating the study of literature with active social and political inquiry and engagement.
- To build collective ventures with other departments in different parts of the world.
- To encourage collaborative research work between faculty and students.

Evaluative Report

Department of Geography

1. **Name of the department:** Geography
2. **Year of Establishment:** 1965
3. **Names of programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
   UG:B.A.(H) Geography; B.A. Programme in combination with History, Political Science, Economics and English
4. **Names of Interdisciplinary courses and the departments/units involved:**
   Students of B.A. (H) Geography study the following courses offered by other departments
   1. AECC: Departments of English, Hindi, Sanskrit, Chemistry and Botany
   2. GE Courses: Departments of English, Hindi, Music, History, Philosophy, Economics, Political Science, Sociology, Bengali and Sanskrit
5. **Annual/ semester/choice based credit system (programme-wise):** Choice Based Credit System (CBCS) in Semester Mode was introduced in 2015-16.
6. **Participation of the department in the courses offered by other departments:**
   Students of other departments study the following courses offered by the Geography Department: B.El.Ed. (Liberal Option Paper): Department of Elementary Education; B.A. Programme: Core Course and Application Course
7. **Courses in collaboration with other universities, industries, foreign institutions:**
   Collaboration with IRIS Publication Pvt. Ltd., New Delhi, METKIDS Programme has led to installation of Automated Weather Station (AWS) in the college. Students are being trained to acquire, analyze and interpret real time sensor-based weather data.
8. **Details of course/s discontinued (if any) with reasons:** None
9. **Number of teaching posts**

Post	Sanctioned	Filled
Associate Professor		6
Assistant Professor	4	4

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil., etc.):**

Name	Qual	Des	Specialization	Exp Y
Ms. P. Behari	M.A.	Associate Professor	Population and Urban Geography	39
Dr. S. Bhattacharya	M.Phil. Ph.D.	Associate Professor	Physical Geography	21
Dr. R. Ahlawat	M.Phil. Ph.D.	Associate Professor	Water Resources	17
Dr. R. Parijat	M.Phil. Ph.D.	Associate Professor	Environment Geography and Disaster Management	17
Dr. P. Kumria	M.Phil. Ph.D.	Associate Professor	Environmental Planning	15
Dr. M. Vij	M.Phil. Ph.D.	Associate Professor	Urban and Regional Planning	17
Dr. A. Sarkar	M.Phil. Ph.D.	Assistant Professor	Agriculture and Economic Geography	11

Dr. B. Gupta	M.Phil. Ph.D.	Assistant Professor	Social and Development Studies	09
Dr. P. Puri	B.Ed. M.Phil. Ph.D.	Assistant Professor	Urban Geography and Audio-Visual Education	09
Dr. P. Yadav	M.Phil. Ph.D.	Assistant Professor	Globalization and Urban Studies	06
Dr. M. Singh[A]	Ph.D.	Assistant Professor	Regional and Urban Geography	04
Mr. D. Borisa[A]	M.Phil.	Assistant Professor	Social Geography	01
Mr. B. Krishnan[A]	M.Phil.	Assistant Professor	Regional Development	01
Mr. B. Behera[A]	M.Phil.	Assistant Professor	Regional Development	01

Qual: Qualification; Des: Designation; Exp Y: Experience in years; [A]: *Ad hoc*

11. List of senior visiting faculty: None

12. Percentage of lectures delivered and practical classes handled (Programme-wise) by temporary/ *ad hoc*/ guest faculty:

Year	2011-2012		2012-2013		2013-2014		2014-2015	
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Lectures	41	33	18	18	15	15	14	14
Practical	11	8	0	0	17	11	32	35

13. Student-Teacher Ratio: 12.1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Post	Sanctioned	Filled
Cartographic Assistant	1	1
Laboratory Attendant	1	1

15. Qualifications of teaching faculty with D.Sc./D.Litt./Ph.D./M.Phil./PG:

Qualification	2015-16		2014-15		2013-14		2012-13		2011-12		2010-11	
	P	A	P	A	P	A	P	A	P	A	P	A
Post-Doc	2		2		2		2		1		1	
Ph.D.	7	1	7		7		7		8		6	
M.Phil.		3		2		2		2		2	2	2
M.A./M.Sc.	1	1	1	2	1	3	1	3	1	1	1	3
B.Ed.	1		1		1		1		1		1	

P: Permanent; A: *Ad hoc*

16. Number of faculty with ongoing projects from a)National b)International funding agencies and grants received:

a) National Funding Agency

No. of faculty	No. of projects	Grant (lakh)
3	2	7

DU Innovation Projects Awarded (DU-IP)

Project	Student Researchers	Grant (lakh)
MH 301: Climate Change, Water Security and Livelihood Resilience: Role of Traditional Knowledge and Modern Technologies in Rajasthan, India PI: Dr. A. Sarkar, Co-PI: Dr. B. Gupta Duration: September 2015; Ongoing*	S. Kumari A. Vashisht M. Kajla S. Parveen S. Meena A. T. Chetna	4.50
MH 205: Disaster Preparedness: Developing a Strategy for Vulnerability Reduction through Information, Education and Communication PI: Ms. P. Behari; Co-PI: Dr. R. Parijat, Dr. P. Kumria Duration: 2013-15 ; Completed	A. Singh G. Tanwar S. Qureshi S. Singh Rana S. Pal S. Singh	4.00
MH 101: Inheriting Land, Endangering the Girl Child: Interrogating Land Productivity, Property Rights and Family Planning in Western Uttar Pradesh And Punjab PI: Dr. B. Gupta, Co-PI: Dr. A. Sarkar Duration: 2012-2013; Completed	S. Borthakur S. Neog D. Rathore D. Singh R. Dalal	10.00
MH102: Miles on Yamuna PI: Dr. R. Parijat Duration: 2012-2013; Completed	R. Sinam S. Banerjee K. Sharma	10.00

*This project was selected out of the 350 ongoing projects for a Special Certificate of Appreciation by the DU on its 94th Foundation Day.

Project in collaboration with other universities

Project	Funding Agency	Student Researchers	Grant (lakh)
Neighbourhood Mapping Co-PI: Dr. Rakhi Parijat Duration: 2015; Ongoing	JNU Disaster Research Programme	A. Sikka, A. Mathur, D. Jain, M. Shukla, P. Singh, P. Chauhan, S. Rohella, S. Chaudhary, Y. Ravi	2.50

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Project	Funding Agency	Grant (lakh)
Major Research Project: No 41-1050/2012(SR): Work Participation & Issues in Women Health in Tehri Garhwal District of Uttarakhand PI: Dr. P. Kumria	UGC	6.746

18. Research Centre /facility recognized by the University:

Applied for KAUSHAL Kendra to UGC for setting up a Centre for Capacity Building in Critical Areas for Disaster Management under the XII Plan Guidelines for Deen Dayal Upadhyay (DDU) Centres for Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood in Universities and Colleges.

Total grant sought Rs.93.5 lakh.

19. Publications:

Name	Authored: Books	Edited: Books/ Proceedings	Chapters: Books/ Textbooks	Articles: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular Resources	Popular Articles
Ms. P. Behari						2	4	
Dr. S. Bhattacharya						5	2	
Dr. R. Ahlawat				6				
Dr. R. Parijat			4			8		
Dr. P. Kumria	3		4			14		
Dr. M. Vij	1	3	4			17	1	
Dr. A. Sarkar		1	3	5	1	17		
Dr. B. Gupta		1	3	1	3	20	2	
Dr. P. Puri	3		2	1		3		
Dr. P. Yadav	1		1	1		2		
Dr. M. Singh[A]	1	1	1	3		9		1
Mr. D. Borisa[A]		1	4			5		
Mr. B. Krishnan[A]						2		
Mr. B. Behara[A]						5		

[A]: *Ad hoc*

Books

Kumria, P. 2015. Housing in Delhi: Choices and Constraints, Research India Press, New Delhi, ISBN978-93-5171-027-1.

Kumria, P. 2015. Women & Health: Issues and Barriers, Research India Press, New Delhi, ISBN978-93-5171-026-4.

Kumria, P. 2016. Forest Gaps: Conflict and Management, Mittal Publications, New Delhi, ISBN81-8324-575-7.

Vij, M. 2006. Fringe and Fusion: A Study in Urban Dynamics, AP Books, Delhi, ISBN 818885.

Puri, P. 2013. Initiation of Spatial and Economic Urban Planning-I, LAP Lambert Academic Publishing, Germany, ISSN 978-3-659-50396-2.

Puri, P.2013. Initiation of Spatial and Economic Urban Planning: City Development and Best Practices, LAP Lambert Academic Publishing, Germany, ISSN978-3-659-50716-8.

Puri, P. 2013. Transport and Land Pricing: Mass Rapid Transit, LAP Lambert Academic Publishing, Germany, ISSN978-3-659-51035-9.

Yadav, P. 2013. Impact of Globalization on India: An Analysis of International Trade and Capital Flows, LAP Lambert Academic Publishing, Germany, ISSN 978-3659172274.

20. Areas of consultancy and income generated:

Title of the consultancy	Name of faculty	Commissioning agency	Income generated
International Water Management Institute (IWMI): Energy Sector Management Assessment Programme (ESMAP) March 2011-January 2012	Dr. A. Sarkar	World Bank	USD 5000
Trend Report of Research Survey in Geography: Theme Editor of Watershed and Water Conservation Techniques and Water Marketing under the Theme Land and Water Resources 2010-2011	Dr. A. Sarkar	Indian Council of Social Science Research (ICSSR)	Rs.10,000 honorarium
Curriculum Development and Course Material for Appreciation Course on Population and Sustainable Development 2013-2014	Dr. A. Sarkar	Population Foundation of India (PFI) & Indira Gandhi National Open University (IGNOU)	Rs. 6,000 honorarium
End of Project Evaluation of the Project Enabling Livelihood Security of Poor and Marginal Communities in Jharkhand during the period 2009-2012 February-November 2013	Dr. B. Gupta	Naya SaveraVikas Kendra (NSVK), Hazaribagh, and Oxfam, New Delhi	Rs. 2.20 lakh
Curriculum Development and Course Material for B.A. (H) Foundation Course on Geography (In Press) 2012-2013	Dr. B. Gupta	School of Interdisciplinary Studies, Indira Gandhi National Open University (IGNOU)	Rs. 5,000 honorarium

21. Faculty as members in a) National Committees b) International Committees c) Editorial Boards:

Name of Faculty	a) National Committees
Dr. P. Kumria	• Advisory Committee for the Preparation of Definitional Dictionary of Climatology for Creation of Hindi Words and Definitions, Government of India Commission for Scientific & Technical Terminology, 2015 • Advisory Committee for the Preparation of Definitional Dictionary of Geography for Creation of Hindi Words and Definitions, Government of India Commission for Scientific & Technical Terminology, 2015
Dr. M. Vij	Training Committee at Academy of Administration, Bhopal,

	for Training of Newly Elected Panchayati Raj Representatives of Madhya Pradesh
Dr. A. Sarkar	• Subject expert in Indian Council of Social Science Research • Committee to prepare the Trend Report of the Sixth Round of Research Surveys in Geography, 2011

b) International Committees: None

Name of Faculty	c) Editorial Boards
Dr. A. Sarkar	Indian Council of Social Science Research: Theme Editor of *Watershed and Water Conservation Techniques and Water Marketing* under Land and Water Resources Theme in the Trend Report of Research Survey in Geography; 2011

22. Student projects:

a) Percentage of students who have done in-house projects including inter-departmental projects

Fieldwork in B.A. (H) Geography is mandatory for all students as it is an integral part of the academic curriculum. The Department has been organizing excursions and field visits across the country. Project work is undertaken and is supervised on an identified theme. The following is an illustrative list.

Year	Field Area	Project Theme
2014-2015	Jaisalmer, Rajasthan	Landforms and Livelihoods in the Thar Desert: A Case Study of Jaisalmer
2013-2014	Chanderi and Orchha, Madhya Pradesh	Sustainable Livelihoods of the Marginalized Communities: A Case Study of the Chanderi Weavers of Madhya Pradesh
2011-2012	Indore, Omkareshwar, Maheshwar and Mandu, Madhya Pradesh	Landforms and Lives in the Deccan Plateau
2010-2011	Chamba and Dalhousie, Himachal Pradesh	Use of Remote Sensing /GIS Technology for Development Planning in the Chamba Valley of Himachal Pradesh
2009-2010	Kota, Rajasthan	Inter-linkages between Private Educational Institutes, Changing Demography and Economy of Kota

b) Percentage of students placed for projects in organizations outside the institution, i.e.in Research laboratories/Industry/other agencies

Students intern on a wide spectrum of projects in both Government Research Organizations and national and international NGOs. As interns of NGOs their projects were in rural locations in Primary Education, Healthcare and Sanitation and Rural Enterprise Development across India. Students have also interned at National Centre for Antarctic and Ocean Research, Goa; Centre for Urban and Regional Excellence; the Centre for Culture and Education, Egypt Society for Culture and Development, Cairo, and State Human Rights Commission. Eight Students have participated in the UNFCC Climate Change Global Certification Programme.

Name of the Student	Internships
S. Kumari (2013 - 2016)	1. TERI National YUVA Meet 2. Sustainable Solutions; Safe Water for All 3. British Council and The Times of India Teach India Programme 4. Dose Internet Media at www.tiptoplifestyle.com as a creative writer 5. Climate Counsellor for UNFCCC supported cause on Green Revolution 6. Centre for Urban and Regional Excellence as an Intern in Slum Development 7. Centre for Culture and Education as a City Coordinator for Delhi Region 8. Campus Mag (www.campusmag.in) as Editor 9. The Energy and Resources Institute, Goa
S. Jha (2013-2016)	1. ENNOVENT - Innovations for Sustainability
Ms. S. Rao (2013-2016)	1.RAHI Campaign against Child Sexual Abuse 2. Research and content writing at Gap Year Travel Private Limited 1. Karnataka State Human Rights Commission 2. King's College London, Delhi Summer School 2014 in course on International Relations: Theory and Practice
V. Singh (2013-2016)	1. Summer Volunteer Programme with ASMAT, NGO at Soda Village, Rajasthan 2. Winter Volunteer Programme with ASMAT, NGO at Soda Village, Rajasthan as a core team member
Vijaylaxmi (2013-2016)	1. MISEREOR Smile Internship 2. Volunteer Service Earth Hour 2015 (India Unplugged) 3. Green Revolution Global Certification Programme
D. Tanwar (2013-2016)	1. Leaders for Tomorrow- 2014 2. Climate Counsellor for UNFCCC
S. Ranka (2013-2016)	Green Revolution Global Certification Programme
T. Bhatia (2013-2016)	Green Revolution Global Certification Programme
R. Sharma (2013-2016)	College Climate Counsellor for UNFCCC, Green Revolution
D. Jain (2014-2017)	1. AIESEC GUC, Cairo in the field of women's rights 2. Egypt Society for Culture and Development 3. Worked in Public Library of the Centre with children of different ages, talking about cross-cultural interaction along with gender and human rights 4. Worked as a volunteer in New Delhi World Book Fair
S. Parveen (2014-2017)	1. Worked as a volunteer in New Delhi World Book Fair

S. Rohella (2014-2017)	1. An Internship with Kitaab for You, teaching children of Bal Sahyog Shelter Home, Connaught Place
S. S. Rana (2012-2015)	1. Summer internship programme with ASMAT, NGO in Soda village, Tonk district of Rajasthan, 2013 2. Participant in Indo-Dutch Collaboration Programme on Management and Culture, New Delhi, 2013 3.Programme coordinator for Indo-European Dutch Collaboration Programme on Management, New Delhi, 2015
P. Ramesh (2008-2011)	National Center for Antarctic and Ocean Research, Goa
U. Dey Sarkar (2009-2012)	National Institute of Oceanography

23. Awards / Recognitions received by faculty and students:

Faculty Awards

Name	Awards / Recognition
Dr. R. Ahlawat	First Young Geographer Award by National Association of Geographers, India at the 21st Indian Geography Congress, 2000, Nagpur
Dr. P. Kumria	Young Geographers Award by National Association of Geographers, India at 25th Indian Geography Congress, 2003, Ghaziabad
Dr. M. Vij	ICSSR Fellowship for Post-Doctoral Research on Mapping the City: A Geographical Perspective on Urban Crime in NCT of Delhi, 2012-2014
Dr. A. Sarkar	• Young Geographers Award by Institute of Indian Geographers, at the 31st Indian Geography Congress, 2010, Bengaluru • UGC Research Award, July 2016 -2018 on Urban Water Insecurities
Dr. B. Gupta	• Navajbai Ratan Tata Trust Scholarship for Post-Doctoral Research at CSSS, Kolkata, 2008-09 • Felix Scholarship for the degree of M.A. Environment and Development at School of Oriental and African Studies, University of London, 1997

Students' Awards

University Rankers Award

Award	2010-2011			2011-2012			2012-2013			2013-2014			2014-2015		
University Rankers	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
Number of awardees								1			2		1	2	1

College Awards

Award	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
College Rankers' Award	2	2	3	2	4	2
Golden Jubilee Award					1	1
Principal's Award				1		

Miranda House Alumnae Association Award		1				
D.S. Kothari Centre Baseline Test	1	3	3		3	
Merit-cum-Means Awards						
Sanyukta and D. N. Chaudhari Endowments			1			
Saroj Bedi Award		1				1
Anu Bedi Award						1
Yashoda Fellowship for Resident Scholars			1			
Co-Curricular Activities						
Sports		1		1	1	
NCC	1			1		
Extracurricular Activities						
Outstanding Contribution	3	2	1			2
Inter college Awards		1			3	2

List of some exemplary awards received by students:

1. Shahnaz Parveen won the Priyadarshini Excellence Award in the field of Co-Curricular Activities by the National Students' Union of India to Young Woman Achievers in India for classical dance in 2015 -2016.
2. Sanjana Kumari won the Golden Jubilee Award and Saroj Bedi Award in 2015 -2016.
3. Akanksha Singh was awarded the Golden Jubilee Award Certificate of Appreciation in 2014-2015.
4. Arshdeep Kaur secured Second Position in the University of Delhi Inter-College Taekwondo Championship in 2014 -2015.
5. Deepika Rawat secured Second Position in the Football Camp held at NZIU, Hissar, 2013- 2014. She was also selected for the National Indian Women's Football Training in New Zealand.
6. Namrata Barooa was awarded Yashoda Fellowship for Commitment to Social Change, 2012.
7. Namrata Barooawas awarded Sanyukta and D. N. Chaudhari Fellowship for Resident Scholars 2012.
8. Meenu Dabas was adjudged the Best Sports Woman of the Year, 2011.
9. Rebati Sinam was awarded the Miranda House Alumnae Association Award for students in Humanities and Saroj Bedi Award in 2011- 2012.

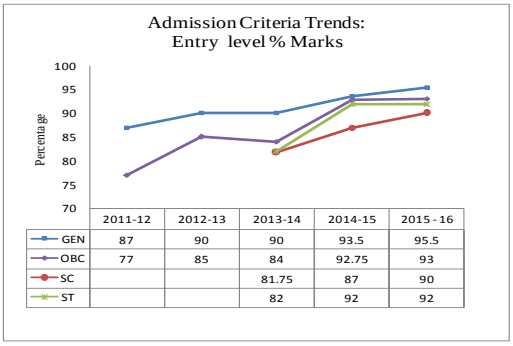
24. List of eminent academicians and scientists/visitors to the department:
Refer Item 32.

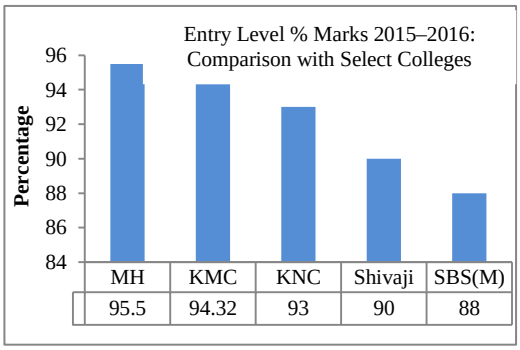
25. Seminars/ Conferences/Workshops organized & the source of funding:

Workshop	Name of Faculty	Collaborating Agency
Summer Workshop on Disaster Risk Reduction 10-15 June 2015	Ms. P. Behari Dr. R. Parijat	National Institute of Disaster Management and National Disaster Relief Fund

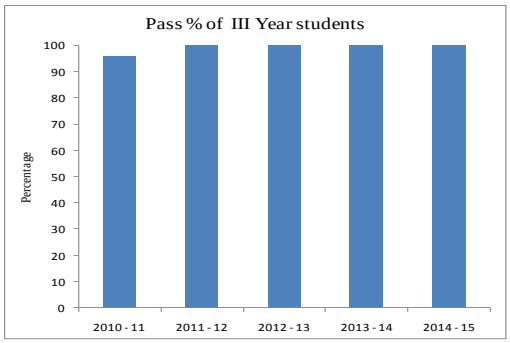
National Workshop on Climate Change- Cloudbursts and Natural Hazards in Himachal Pradesh 28 December 2011	Dr. P. Kumria Co-Convener	Department of Science and Technology, Government of India, SHROT and Kirori Mal College
National Seminar on Delhi: The Saga of a Mega City (Space, Society & Culture) 01 March 2012	Dr. P. Kumria, Dr. R. Parijat	ICSSR
National Seminar on Dilli Meri Jaan 16-17 December 2009	Dr. M. Vij	UGC
Geography Workshops for Annual INSPIRE Training Programme at Miranda House since 2011	Dr. R. Parijat Dr. P. Kumria Dr. P. Puri	DST

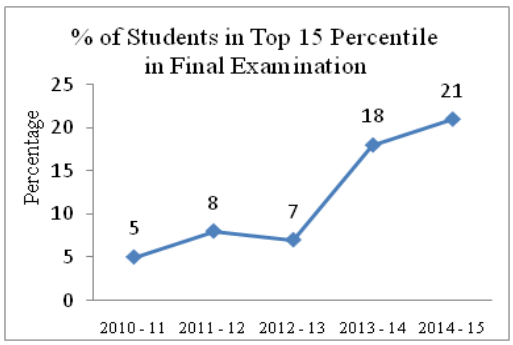
26. Student profile /course-wise:

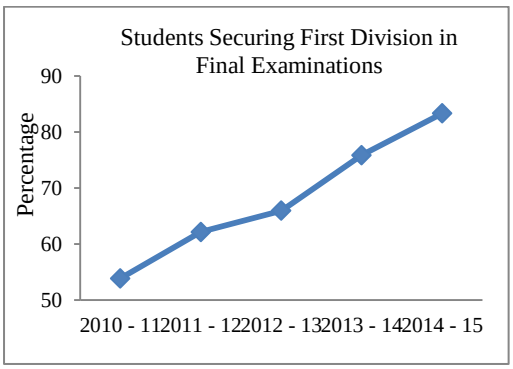


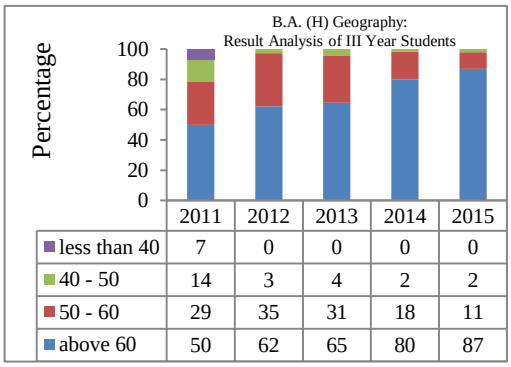


Over the years the minimum entry level percentages for B.A. (H) Geography has consistently increased. Moreover, there is little variation in the cut-off percentages for the various categories of students taking admission in the course.



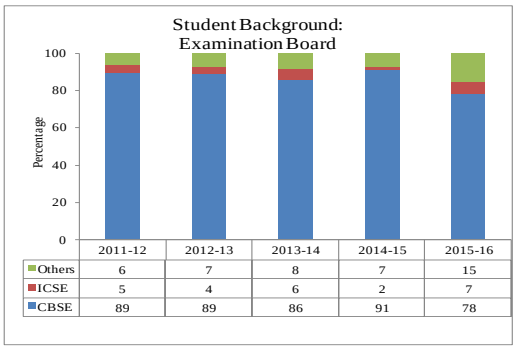


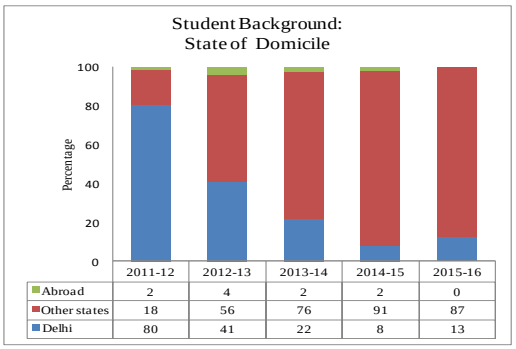




Year	Appeared	Passed	Pass %
2010 - 11	26	25	96
2011 - 12	37	37	100
2012 - 13	47	47	100
2013 - 14	58	58	100
2014 - 15	48	48	100

27. Diversity of Students:





28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services,:
Around 25% of students who progress from PG to M.Phil. clear the NET.

29. Student progression:

Student Progression	Against % Enrolled
UG to PG	70
PG to M.Phil.	30
PG to Ph.D.	10
Ph.D. to Post-Doctoral	Information not available
Employed	30
Entrepreneurship/Self-employment	10

* On the basis of the data collected through telephonic survey of alumni of the last five years. Sample size: 50.

30. Details of Infrastructural facilities:

a) Library: The departmental library has 878 catalogued books out of which 220 books have been added in the last five years. The number of catalogued Geography books in the main college library is1928.

b) Laboratories: There are three dedicated laboratories. Cartographic Laboratory: Two laboratories, each having a seating capacity of 25 students. There are 14 tracing tables in each room enabling cartographic exercises. Computer/GIS RS Laboratory: This laboratory has 25 computers preloaded with relevant software. The computer software used in the Department are as follows:

Software	Number of Licenses
JT Maps	2
AUTOCAD Map	5
ERDAS Imagine	5
Quik Heal Anti-Virus	26

There is a dedicated room to house the laboratory equipment and office space for the two technical staff.

c) Automated Weather Station (AWS):The installed AWS consists of a weatherproof enclosure containing the data logger, rechargeable battery, telemetry (optional) and meteorological sensors mounted upon a mast. The different sensors detect temperature, relative humidity, wind speed, pressure and rainfall.
d) Classrooms with ICT facility: There are two dedicated classrooms fully equipped with multimedia facilities with a seating capacity of 50 and 65, respectively.
e) Internet facilities for staff and students: The college has issued netbooks to all faculty members who use it for teaching and research. One laptop has also been issued from the college for dedicated use in the practical classes. College is WiFi enabled.
f) Atrium space: The space adjoining the cartographic laboratories is used for tutorials and self-study by the students.
g) Faculty room: Each faculty member has an individual workstation. A desktop, printer and scanner is available for administrative work.

31. Number of students receiving financial assistance from College, University, Government or other agencies:

Year	Agency Providing Scholarships	Total Students
2010	State Merit Scholarship	1
2011	Miranda House	3
	Government of Arunachal Pradesh	1
2012	Miranda House	5
	Government of Arunachal Pradesh	1
	Vice-Chancellor's Student Fund	1
	Government of Manipur	1
2013	Miranda House	
	Government of Arunachal Pradesh	1
2014	Miranda House	1
	Government of Arunachal Pradesh	1
2015	Miranda House	1
	Government of Arunachal Pradesh	1

32. Details on student enrichment programmes (special lectures/workshops/ seminars) with external experts:

International

1. Dr. Animesh Kumar, Deputy Head of Office, UNISDR Regional Office for Africa, UN Office for Disaster Risk Reduction (UNISDR), *Disaster Risk Reduction: Implications for a Resilient Post-2015 World*, 2015.
2. Dr. Shilpi Srivastava, Research Fellow, Institute of Development Studies, University of Sussex, *The (Un)governability of Water: The Challenges of Water Reforms in Maharashtra*, 06 April 2012.

National

1. Dr. Ashok Vishandass, Chairman, Commission for Agricultural Costs and Prices, Ministry of Agriculture and Farmer Welfare, Government of India, *Deficiency in Production of Pulses in India: Its Diagnosis and Policy Prescription towards Self-Sufficiency*, 16 February 2016.
2. Dr. Arindam Banerjee, School of Liberal Studies, Ambedkar University, Delhi, *Perspectives on Food and Nutritional Security in India*, 16 Feb. 2016.

3. Dr. A. Amarender Reddy, Principal Scientist and Faculty Member, Division of Agricultural Economics, Indian Agricultural Research Institute, New Delhi, *Production Technology, Accessibility and Affordability of Pulses: Implication on Poverty and Nutrition*, 16 February 2016.
4. Prof. C. Mahapatra, School of International Studies, JNU, New Delhi, *The American Perspective on India and its Neighbours*, 06 February 2016.
5. Prof. M. H. Qureshi, Center for Study of Regional Development, JNU, New Delhi, *Understanding the Role of Traditional Knowledge in Addressing Water Insecurities in Rajasthan*, 21November 2015.
6. Prof. H. Ramachandran, Delhi School of Economics, DU, *Cultural Diversity of India*, March 2014.
7. Prof. Abdul Shaban, Department of Development Studies, Tata Institute of Social Sciences, Mumbai, *Spatial Aspects of Development*(in collaboration with LIGHTS Research Foundation, Geography and You), 22 October 2013.
8. Prof. Saraswati Raju, Center for Study of Regional Development, JNU, New Delhi, *Space and Gender*, 2012.
9. Ms. Lydia Powell, Senior Fellow, Observer Research Foundation, New Delhi, *Sustainable Energy*, 2011.
10. Prof. Sachidan and Sinha, Centre for Study of Regional Development and Associate Dean of Students Welfare, JNU, New Delhi, *Challenges in Educational Development*, 2011.
11. Prof. S.C. Garkoti, School of Environmental Science, JNU, New Delhi, *Biodiversity and its Conservation*, 2011.
12. Ms. Sheema Fatima, Tata Institute of Social Sciences, Mumbai, *Development Theories*, 2010.

Workshops and Short-term Certificate Courses

1. Workshop *International Day for Disaster Risk Reduction,* 13October 2015.
2. Workshops for school teachers *Spatial Information Technology* (CBSE and SCERT schools), April 2015.
3. Certificate Course *First Aid and Home Nursing* with St John Ambulance for students, teachers and non-teaching staff of Miranda House, 27 October -08 November 2014.
4. Workshop and screening of a documentary film, New Delhi Power Limited in collaboration with Hazard Centre. This was followed by an interactive session on the issues related with equal distribution of resources among all stakeholders in the city of Delhi, 2012.
5. Mega Disaster Preparedness Mock Drill in collaboration with Delhi Disaster Management Authority and National Disaster Management Authority, 2011.
6. Workshop on ERDAS, Mr. Ram Kumar, Technical Engineer, from Leica Geosystems Geospatial Imagine India Pvt. Ltd., 2010.
7. Annual DST sponsored Workshop-cum-Internship-Programme INSPIRE for school students, 2011onwards.

Seminars

1. National Seminar *Delhi: The Saga of a Mega City*, 01 March 2012.
2. National Seminar *Does India Need a Pulses Revolution,*16 February 2016. The Seminar was followed by a National Paper Presentation Competition for undergraduate students. The winner of the competition was awarded a cash prize of Rs.15,000. The winning paper is under publication in the journal *Geography and You*.

33. Teaching methods adopted to improve student learning:

Teaching learning processes in Geography are based on interactive environments. This is enhanced by usage of audio-visual modes. Hands-on training is practiced in the laboratories. Multiple teaching aids such as maps, globes, stereoscopes, GPS, and pedometers make learning more interesting. Students are taught and encouraged to use specialized instruments and computer programmes. As field work is a compulsory component of the curriculum, teaching and learning takes place in the real world scenarios as well. After the field visit, students write field reports and dissertations under supervision. At the end of the course, students are equipped to analyze data, create maps and write about the spatial connections, interactions and correlations.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Social responsibility is one of the mainstays that support academic research work in Geography. Efforts to create disaster awareness have led to training the college community for Mock Drills and First Aid for Disaster Preparedness. Preparation of College Evacuation Plan has been undertaken by the Department. Public Address System has also been set up in the college towards this direction. Under *Neighbourhood Mapping* projection collaboration with JNU, initiatives have been taken to build community resilience to disasters. A small team of dedicated students have made a Disaster Preparedness Society. They have introduced a series of social awareness programmes for awareness generation among College and University communities for disaster preparedness.

Interactive interdisciplinary researches developed on property inheritance rights of women and sex ratio in India, and geophysical and socio-economic profile of a village situated on the banks of the Yamuna have led to understanding of social issues like legal literacy, women property inheritance rights, genealogy mapping and environmental degradation. In understanding the use of scarce resources communities in water insecure regions were observed to have evolved to cope with a slow disaster like drought with their traditional knowledge systems. This was studied to bridge the policy gaps under the newly adopted Sendai Framework for Disaster Risk Reduction 2015-2030. The project was recommended for a Special Certificate of Appreciation by the University of Delhi on its 94th Foundation Day.

All such activities involve extensive fieldwork in the project areas. These field visits expose the students to experience the *other India*. They also enable them to understand the diversity and experience different aspects of life and its challenges from multiple standpoints. Such engagements help build a strong foundation in their personalities to pursue their careers with a sense of social responsibility.

35. SWOC analysis of the department and Future Plans:

***Strengths*:** Geography showcases skill-based education especially with the advent of newly developed spatial technologies and software of Advanced Spatial Statistical Tools, Automated Weather Station, Remote Sensing, GIS, Computer Cartography, etc. This has enabled the subject to map social realties superposed on physical spaces and equip students to understand contemporary relevant global issues such as Climate Change, Regional Planning, Disaster Management, Environment Planning, Natural Resource Management, Gender Mapping, etc. In combination with classroom and laboratory teaching, extensive

fieldwork and dissertation preparation leads to rigorous academic training for the students. Social extension researches of the Department as mentioned earlier further add to its strength.

***Weaknesses*:** Geography as a discipline is poised between the social and pure sciences. Over the years it has been observed that students have poor language and computational skills. There has to be bilingual interaction in the classrooms. There is a need for good quality textbooks and self-study materials in the vernacular languages.

***Opportunities*:** The level of academic excellence which the Department has acquired makes it possible for our students to get entry into institutes of global repute in large numbers. New Diploma and Certificate Courses which are more market oriented and carrier upgrading could be developed. Skill enhancement in understanding and analyzing spatial correlations, trend analysis, neighbourhood mapping, traffic flow, demarcation of catchment area, resource mapping, etc., which are integral to Geographic research will provide better platforms for industry intake.

***Challenges*:** More efforts are required to strengthen academia-industry linkages. Streamlining collaborations with other universities and institutions are sought for. We need to explore possibilities of collaborative research with research institutions and other academic bodies.

***Future Plans*:** Establishment of UGC sponsored Deen Dayal Upadhyay (DDU)KAUSHAL Kendra: The Department has submitted a proposal to set up a Centre for Capacity Building in Critical Areas for Disaster Management under the UGC XII Plan Guidelines for Deen Dayal Upadhyay Centres for Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood (KAUSHAL) in Universities and Colleges.

The activities of the centre will focus on skill up-gradation through:

1. PG Diploma Course in Risk Resilience and Disaster Management (RRDM)
2. Short-Term Training Programmes for Training the Trainer (TOT) in Disaster Risk Reduction Management (DRRM)
3. Empowering and training women leaders especially in local bodies
4. Training of women personnel in law and governance

The Department is also keen to take up more research projects involving more student researchers. It aims to collaborate with other research organizations and foreign exchange programmes. Along with their teaching, the faculty members plan to publish their ongoing and completed research work in their own field of expertise. The Department is keen on setting up career counselling sessions for students so that they can get exposed to many more ideas and career options in the field of Geography.

Evaluative Report

Department of Hindi

1. **Name of the Department :** हिन्दी
2. **Year of Establishment :** 1948
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
   UG: Application courses in B.A. Programme, Functional Hindi in B.A. Programme
   PG: M.A. (Hindi)
4. **Names of interdisciplinary courses and the departments/units involved:**
   - Annual: Subsidiary Course
   - Semester: Concurrent Course, Discipline Centered Course, Foundation Course, Application Course and Language Literature Culture
   - FYUP: Foundation Course, Application Course, Applied Hindi
   - CBCS : AECC, Skill Development
5. **Annual/semester/choice based credit system (programme-wise):**
   Choice Based Credit System (CBCS) in semester mode has been implemented from 2015.
6. **Participation of the Department in the courses offered by other departments:**
   The students of the Hindi Department study the following courses from other Departments:
   - Department of English: English (Credit Language Course); English (Qualifying Language Course); Individual and Society (Interdisciplinary Concurrent Course)
   - Department of Sanskrit: Sanskrit Language (Qualifying); Nationalism and Indian Literature (Disciplined Centered Course)
   - Department of History: Environmental Issues in India (Interdisciplinary Concurrent Course); Ancient/Medieval/Modern Delhi (Disciplined Centered Course)
   - Department of Political Science: Reading Gandhi (Interdisciplinary Concurrent Course); Citizenship in Globalizing World (Disciplined Centered Course under the CBCS (Introduced in the Academic Year 2015-16)
   - AECC Course: Environmental Science offered by Science Departments; English Communication Skills offered by English Department; Generic Elective (GE) offered by all the Departments
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**
   - Theatre Direction in association with National School of Drama, 2006-2008.
   - Translation Course in association with Language Department, University of Delhi, 2007-2008.
   - Radio and Mass Communication with Moving Media, 2008-2010.
   - Radio Jockey, with R.K Films and Media Academy, 2008-2009.
   - Certificate Course in Television Production in association with School of Convergence, 2007.
   - Certificate Course in Photography in association with School of Convergence, 2007.
8. **Details of courses/programmes discontinued (if any) with reasons:** None

9. Number of Teaching posts

Post	Sanctioned	Filled
Associate Professor		02
Assistant Professor	09	09

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D./M. Phil. etc.,):

Name	Qual	Des	Specialization	Exp Y	Research Guidance
डॉ. उ. सिंह	पीएच.डी.	असोसिएट प्रो.	मध्यकालीन साहित्य : महाराष्ट्रीय संत साहित्य	38	
डॉ. नि. नाग	पीएच.डी.	असिस्टैंट प्रो.	जनसंचार एवं आधुनिक कविता	17	
डॉ. र. दिसोदिया	पीएच.डी.	असोसिएट प्रो.	स्त्री विमर्श, दलित विमर्श एवं कथा साहित्य	17	
डॉ. क.भाटिया	पीएच.डी.	असिस्टैंट प्रो.	आधुनिक कविता और स्त्री विमर्श	13	
डॉ. र. यादव	पीएच.डी.	असिस्टैंट प्रो.	रंगमंच और आधुनिक कविता	14	
डॉ. ब. कौर	पीएच.डी.	असिस्टैंट प्रो.	हिन्दी और उर्दू कथा साहित्य का तुलनात्मक अध्ययन एवं प्रिंट मीडिया	13	
डॉ. उ. मीणा	पीएच.डी.	असिस्टैंट प्रो.	आत्मकथा साहित्य और दलित विमर्श	10	
डॉ. चं. सागर	पीएच.डी.	असिस्टैंट प्रो.	कथा साहित्य और दलित विमर्श	12	
डॉ. रे. अरोड़ा	पीएच.डी.	असिस्टैंट प्रो.	आधुनिक रंगमंच	14	
सुश्री अ. शर्मा	एम्.फिल	असिस्टैंट प्रो.	साहित्य का इतिहास	08	
डॉ. सं. राय	पीएच.डी	असिस्टैंट प्रो.	जनसंचार और रंगमंच	09	

Qual: Qualification; Des: Designation; Exp Y: Experience in years

11. List of senior visiting faculty :

- विमलेश कान्ति वर्मा, भाषाविद
- हेमचन्द्र पाण्डेय, भाषाविद, दिल्ली विश्वविद्यालय
- डॉ विभा, कमला नेहरु कॉलेज,
- दिनेश खन्ना, राष्ट्रीय नाट्य विद्यालय
- सुजाता मट्टू, आकाशवाणी
- रंजन श्रीवास्तव, आकाशवाणी
- रंजना श्रीवास्तव, अनुवाद विशेषज्ञ
- डॉ संतोष गोयल, मिरांडा हाउस (निवर्तमान)

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary faculty:

Year	2014-2015		2013-2014		2012-2013		2011-2012		2010-2011	
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Percentage of classes taken by temporary, *Ad hoc*, Guest faculty clubbed together (B*100/A)										
Lecture	20.63	13.04	24.02	45.12	23.61	28.57	30.37	29.87	-	-
Tutorials	18.19	12.34	23.03	44.03	22.69	25.68	29.92	28.88	-	-

13. Student-Teacher Ratio (programme-wise): 18:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: None

15. Qualifications of teaching faculty with D.Sc./ D.Litt./ Ph.D./M.Phil./PG.:

Qualification	2011-12				2012-13				2013-14				2014-15				2015-16			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	9	9	4	4	9	9	3	3	8	8	5	6	9	9	2	2	10	10	0	0
M.Phil.	2	2	0	0	2	2	0	0	1	1	0	0	1	1	0	0	1	1	0	0
M.A./M.Sc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P: Permanent; A: Temporary/*Ad hoc*; O: Odd Semester; E: Even Semester

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: None

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: None

18. Research Centre/facility recognized by the University: None

19. Publications:

Name	Authored/Co-authored: Books/ Monographs	Edited /Co-Edited /Translated: Books	Research Papers/ Articles	Chapters in Books	Popular Articles/Book reviews/Poems/	Presentations: Conferences	Recourse Persons/Chair/ Discussant/Panelist	Lessons/E-lessons
1. डॉ. उ. सिंह		6	3					
2. डॉ. नि. नाग	1		43	1	7	5	4	
3. डॉ. आर. दिसोदिया	2		27	4	10		7	
4. डॉ. क. भाटिया	3		15		36	3		2
5. डॉ. र. यादव			9	2	22	7		4
6. डॉ. ब. कौर		4	3	7	17	2		5
7. डॉ. उ. मीणा	1		4		1			
8. डॉ. चं. सागर		1						
9. डॉ. रे. अरोड़ा			7					2
10. सुश्री अ.शर्मा			1					
11. डॉ. सं. राय			2			7		

20. Areas of consultancy and income generated: None

21. Faculty as members in a) National committees, b) International Committees and c) Editorial Boards:

- Dr. B. Kaur, Editor of Hindi Journal, Hans, Delhi
- Dr. R. Yadav, Member of Editorial Board Amrit, Journal published by Indian Embassy of Budapest, Hungary, 2013-2015 August

22. Student projects:

a) Percentage of students who have done in-house projects including inter departmental/programme:

- हिन्दी विभाग छात्राओं के कलात्मक विकास को ध्यान में रखते हुए ऐसे कार्यक्रम आयोजित करता है जिससे साहित्य की समझ के साथ-साथ अपने को व्यापक स्तर पर प्रस्तुत करने का विश्वास भी छात्राओं में पैदा हो l इस दृष्टि से प्रति वर्ष आयोजित साहित्योत्सव छात्राओं को एक प्रमुख मंच प्रदान करता है जहाँ वह अपनी कला की समन्वित अभिव्यक्ति अन्य महाविद्यालयों से आए छात्रों के मध्य रहकर करें l छात्राओं के लिए यह अपने आपमें एक बड़ा प्रोजेक्ट होता है जिसमें **नाट्य प्रस्तुतियां, एकल अभिनय, वाद-विवाद प्रतियोगिता, लोक-नृत्य, लोक गायन** आदि विभिन्न प्रतियोगिताओं में छात्राएँ बढ़-चढ़ कर भागीदारी लेती हैं l अनुकृति हिन्दी विभाग का एक मुख्य प्रोजेक्ट है l प्रतिवर्ष अनुकृति न केवल छात्राओं को बल्कि विभाग को भी एक साझा मंच प्रदान करता है l अनुकृति की कार्यशालाएँ छात्राओं के समन्वित विकास में योगदान देती हैं l छात्राओं द्वारा किये गए कुछ प्रमुख प्रोजेक्ट इस प्रकार हैं -
  - कविता का सस्वर पाठ
  - कहानी अथवा नाटक के किसी अंश का आंगिक, वाचिक, सात्विक अभिनय के साथ प्रस्तुतिकरण
  - रेड़ियो के लिए सामूहिक परिचर्चा
  - रेडियो के लिए सामूहिक वार्ता
  - समाचार पत्र के लिए सम्पादकीय और रिपोर्ट लेखन
  - सामयिक विषय पर रिपोर्ट लेखन
  - लोक और मेला
  - दिल्ली की बावड़ियाँ
  - शहरी और ग्रामीण क्षेत्र
  - शहर और स्लम
  - तीन कोस पर बदले बोली

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies: 4%

23. Awards/Recognitions received by faculty and students:

विभागीय उपलब्धियाँ

- डॉ अर्चना वर्मा को हिन्दी अकादमी पुरस्कार
- सुश्री अपराजिता शर्मा द्वारा हिन्दी के पहले चैट स्टिकर्स हिमोजी का निर्माण

छात्र उपलब्धियाँ

- स्वेतलाना, तीनों सालो में, विश्वविद्यालय में उच्चतम अंक प्राप्त, वर्ष, २०११
- सुप्रिया प्रणय, महाविद्यालय का रजत जयंती पुरस्कार, वर्ष, २०११

खेल पदक

- उर्वशी, स्वर्ण पदक, वोलीबाल, दिल्ली स्टेट, २०१२-२०१३
- निधि यादव, कांस्य पदक, मिरांडा हाउस, स्पोर्ट्स फेस्ट, २०१३
- निधि यादव, कांस्य पदक, श्री राम कॉलेज ऑफ कॉमर्स एंड आर्ट्स, स्पोर्ट्स फेस्ट, २०१३
- नेहा त्यागी, रजत पदक, अंतरमहाविद्यालयी ट्राईकैंडो चैंपियनशिप, २०१३
- नेहा त्यागी, रजत पदक, श्री राम कॉलेज ऑफ कॉमर्स एंड आर्ट्स, स्पोर्ट्स फेस्ट, २०१३
- नेहा त्यागी, रजत पदक, मिरांडा हाउस, स्पोर्ट्स फेस्ट, २०१३
- निधि यादव, कांस्य पदक, मिरांडा हाउस, स्पोर्ट्स फेस्ट, २०१४
- निधि यादव, रजत पदक, डिस्ट्रिक लेवल, ट्राईकैंडो चैंपियनशिप, २०१४
- निधि यादव, रजत पदक, मिरांडा हाउस, स्पोर्ट्स फेस्ट, २०१५
- निधि यादव, स्वर्ण पदक, दूसरी ट्राईकैंडो चैंपियनशिप, २०१५
- निधि यादव, कांस्य पदक, चौथी ट्राईकैंडो चैंपियनशिप, २०१५
- निधि यादव, कांस्य पदक, अंतरमहाविद्यालयी ट्राईकैंडो चैंपियनशिप, २०१५
- चंचल को अंतरमहाविद्यालयी तीरंदाज़ी प्रतियोगिता में कांस्य और रजत पदक प्राप्त, २०१५
- चंचल को दिल्ली स्टेट, तीरंदाज़ प्रतितोगिता में रजत पदक प्राप्त, २०१५
- चंचल को, डॉ भरत राम ओपन स्पोर्ट्स मीट में स्वर्ण पदक, २०१५

<u>दिव्यांग छात्र उपलब्धियाँ</u>

गुलशन, बी.ए, द्वितीय वर्ष

16 वीं राष्ट्रीय सिनियर परा अथलीट चैंपियनशिप, २०१६, हरियाणा

- १०० मीटर, प्रथम; लॉन्ग जम्प, द्वीतीय; रिले रेस, द्वीतीय

इक्वल ऑपरच्यूनिटी सेल,स्पोर्ट्स मीट फॉर पी.डब्लु.डी दिल्ली विश्वविद्यालय

- लॉन्ग जम्प, द्वीतीय; डिसकस थ्रो, द्वीतीय; १०० मीटर, तीसरा स्थान

८ वीं दिल्ली स्टेट परा अथलीट मीट २०१६, दिल्ली

- लांग जम्प, रजत पदक; डिसकस थ्रो, कांस्य पदक

१५ वीं सीनियर परा राष्ट्रीय अथलीट चैंपियनशिप २०१६, उत्तर प्रदेश

- १०० मीटर, प्रथम; लांग जम्प, प्रथम; डिसकस थ्रो, द्वीतीय

इन्द्रप्रस्थ कॉलेज स्पोर्ट्स मीट

- १०० मीटर रेस, प्रथम

मिरांडा हाउस स्पोर्ट्स मीट

- शोटपुट, द्वीतीय

होमेश्वरी, हिन्दी ///

इक्वल ऑपरच्यूनिटी सेल,स्पोर्ट्स मीट फॉर पी.डब्लु.डी दिल्ली विश्वविद्यालय

- शॉटपुट, प्रथम; लांग जम्प, द्वीतीय; डिसकस थ्रो, द्वीतीय

24. List of eminent academicians and scientists/visitors to the Department:

आलोचक

- प्रोफेसर नित्यानंद तिवारी; डॉ विश्वनाथ त्रिपाठी; डॉ हरदयाल; डॉ रामेश्वर राय; डॉ द्वारिका प्रसाद चारुमित्र ; डॉ सुमन केसरी; प्रोफेसर मेनेजर पाण्डेय

सिने आलोचक

- गौहर रज़ा रज़ा, साइंटिस्ट और कवि; जवरीमल पारिख, इंदिरा गांधी मुक्त विश्वविद्यालय

कथाकार

- उदय प्रकाश; मृदुला गर्ग ; मैत्रयी पुष्पा; असग़र वज़ाहत

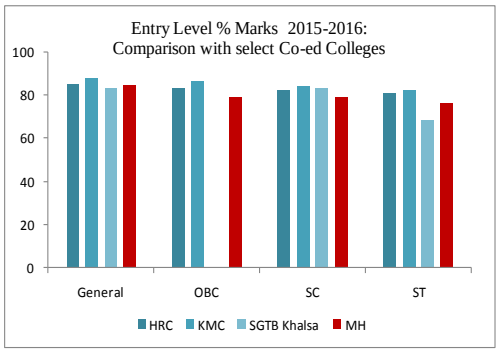
कवि

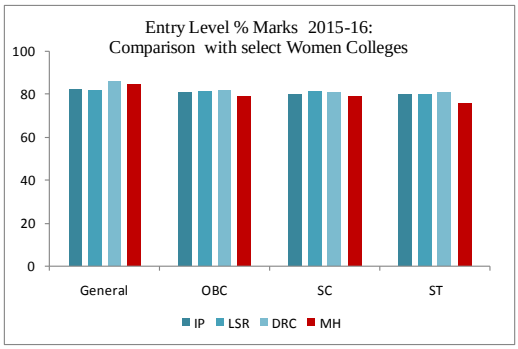
- मंगलेश डबराल; अर्चना वर्मा; सूरजपाल चौहान; इब्बार रब्बी; मिथलेश श्रीवास्तव; अनामिका; निर्मला गर्ग; राजेश जोशी; ज्योति चावला; वनिता; नोमान; जितेन्द्र श्रीवास्तव; अनिता भारती; सपना चमडिया

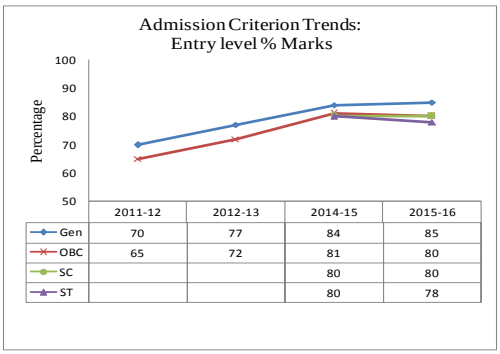
25. Seminars/Conferences/Workshops organized & the source of funding National/International:

1. लेखक से मुलाक़ात श्रृंखला के अंतर्गत, असगर वज़ाहत की बाकरगंज के सैयद का लोकार्पण और लेखक से मुलाक़ात
2. सोशल नेट्वर्किंग साईट और मीडिया, वक्तव्य, मिहिर पंड्या और विनीत
3. रघुवीर सहाय की कविताओं का वाचन, कार्यशाला श्री अजय कुमार, द्वारा राष्ट्रीय नाट्य विद्यालय
4. कहानी कैसे पढ़ाएँ, डॉ अल्पना मिश्र
5. लेखक से मुलाक़ात श्रृंखला के अंतर्गत साहित्य अकादमी से पुरस्कृत कथाकार लेखक मृदुला गर्ग से मुलाक़ात
6. लेखक से मुलाक़ात श्रृंखला के अंतर्गत साहित्य अकादमी से पुरस्कृत, फिल्म मेकर, उदय प्रकाश से बातचीत और मुलाक़ात
7. लेखक से मुलाक़ात श्रृंखला के अंतर्गत, सम्पादक हरी भटनागर से मुलाक़ात
8. कहानी का रंगमंच, वक्तव्य, देवेन्द्र राज अंकुर, निदेशक, राष्ट्रीय नाट्य विद्यालय
9. जनसंचार की भाषा और उसकी भूमिका : ओम थानवी, आनंद प्रधान, लक्ष्मी शंकर वाजपेयी, पीयूष दत्ता
10. समकालीन दौर में साहित्य : प्रोफेसर नित्यानंद तिवारी, सुहेक हाशमी, चंद्रदेव सिंह, मैनेजर पाण्डेय, जवरीमल पारेख, गौहर रज़ा
11. आधुनिकता बोद्ध और साहित्य, प्रोफेसर गोपेश्वर सिंह
12. हिन्दी उर्दू अन्तः संबंध, अली जावेद
13. जनसंचार और रचनात्मकता, जवरीमल पारेख, इरफ़ान.

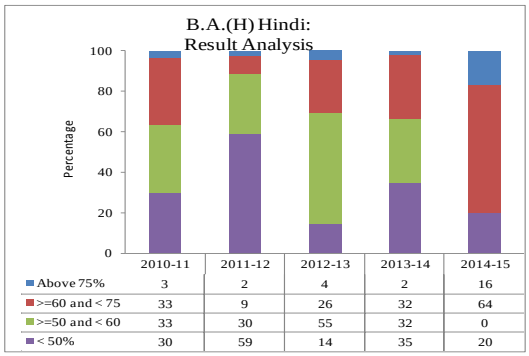
26. Student profile programme/course-wise:





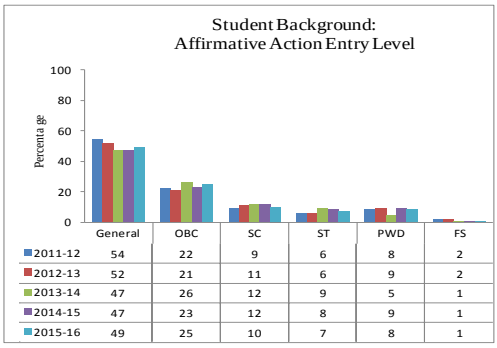


	2011-12	2012-13	2014-15	2015-16
Gen	70	77	84	85
OBC	65	72	81	80
SC			80	80
ST			80	78

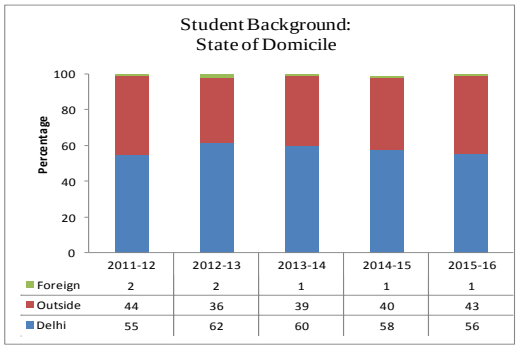


	2010-11	2011-12	2012-13	2013-14	2014-15
Above 75%	3	2	4	2	16
>=60 and < 75	33	9	26	32	64
>=50 and < 60	33	30	55	32	0
< 50%	30	59	14	35	20

27. Diversity of Students:



	General	OBC	SC	ST	PWD	FS
2011-12	54	22	9	6	8	2
2012-13	52	21	11	6	9	2
2013-14	47	26	12	9	5	1
2014-15	47	23	12	8	9	1
2015-16	49	25	10	7	8	1



	2011-12	2012-13	2013-14	2014-15	2015-16
Foreign	2	2	1	1	1
Outside	44	36	39	40	43
Delhi	55	62	60	58	56

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services?

- Kamna Pathak, Theatre artist in Epta, 2009
- Supriya Singh, working in Times of India, 2009, Editor with NBT, 2009
- Chadra Prabha, AIR FM Gold, 2009
- Rajkumaari, Senior Hindi teacher in DPS, 2012
- Farha Khan, Reporter in ABP, TV, 2012
- Farah, Reporter in NDTV, 2012
- Tara, Seeta, Sivangi, Shweta, working in Diler Samachaar, 2012

29. Student progression:

Student progression	Against % enrolled
UG to PG	60%
PG to M.Phil.	20%
PG to Ph.D.	20%
Ph.D. to Post-Doctoral	-
Employed/Campus selection Other than campus recruitment	70% other then campus
Entrepreneurship/Self-employment	20%

30. Details of Infrastructural facilities:

a) Library: महाविद्यालय द्वारा विभाग को पुस्तकालय की सुविधा प्रदान की गयी है l जिसमें प्रति वर्ष विभाग को अनुदान राशि प्रदान की जाती है l विभाग अपनी आवश्यकताओं के अनुसार पुस्तकों का चयन करता है l मिरांडा हाउस के पुस्तकालय में हिन्दी साहित्य से सम्बंधित तमाम तरह की पुस्तकें उपलब्ध हैं जिसमें पुराने प्रकाशन से लेकर नए विमर्शों तक पर अनेकानेक सुविधाएं उपलब्ध हैं l कुल हिन्दी किताबों की संख्या 13,748 है l पुस्तकालय में दुर्लभतम पुतकों को एक साथ देखा जा सकता है l इसके अतिरिक्त विभाग का अपना व्यक्तिगत पुस्तकालय भी है जिसमें उन सभी पुस्तकों को रखा गया है जो अपने क्षेत्र में दुर्लभतम हैं l

b) Internet facilities for staff and students: विभाग में छात्रों तथा प्रवक्ताओं को इन्टरनेट की सुविधा उपलब्ध है।

31. Number of students receiving financial assistance from college, university, government or other agencies:

40% students receiving financial assistance from the college.

Year	College	DU	State Government	Others	Total
2012-13	35	12	26	0	73
2013-14	82	17	57	0	170
2014-15	60	11	34	0	121
2015-16	44	13	36	0	93

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts:

- तुलसी जयंती, वक्ता : विश्वनाथ तिवारी, डॉ इंदुजा अवस्थी, २४.०.२००३
- तुलसी जयंती, सानिध्य, प्रभाकर क्षोत्रिय, २००४-२००५
- नाटक एक नयी दृष्टि, वक्ता, डॉ कुसुम लता, ३१.०८.२००७
- भाषा दक्षता और टंकन, व्याख्यान, डॉ हरदयाल, २६.०९.२००७
- राजभाषा हिन्दी, कार्यशाला, वक्ता: श्री विनोद बिहारी, २८.०२.२००७
- हिन्दी अकादमी, कार्यशाला, फंक्शनल हिन्दी, २०.०२.२००८
- काव्य पाठ, राजेश जोशी, २०.०८.२००८
- साहित्य अनुवाद : सृजन और पुनः सृजन, कार्यशाला, २९.०१.२००९
- मीडिया और मनोरंजन, व्याख्यान, पंकज शुक्ल, २०.११.२००९
- साहित्योंत्सव, सानिध्य, विश्वनाथ त्रिपाठी और प्रोफेसर नित्यानंद तिवारी, २०१०
- विद्रोह की अवधारणा मनुष्य की भूमिका और कविता, सेमिनार, वक्तव्य, डॉ हरदयाल, डॉ द्वारिका प्रसाद चारुमित्र, असद जैदी, रामेश्वर राय और सुमन केशरी, ९.९.२०११
- साहित्योत्सव, २३.०२. २०११
- कहानी पाठ, अर्चना वर्मा, २२.३.२०११
- विभागीय बैठक के अंतर्गत कविता पाठ सानिध्य: सुप्रसिद्ध कवयित्री अनामिका और कवि नोमान, २२.०३.२०११
- आधुनिक बोध और साहित्य: व्याख्यान, प्रोफेसर गोपेश्वर सिंह, २४.०१.२०१२
- वार्षिक साहित्योत्सव, ०३.०४.२०१२
- अमीर खुसरो, जावेद अली, ०३.१०.२०१२
- कहानी कैसे पढ़े, कार्यशाला, अल्पना मिश्र, ०१.११.२०१३
- साहित्योत्सव, २०१३:
  1. अभिव्यक्ति की स्वतंत्रता
  2. भारतीय सिनेमा और बाजारवाद
  3. मृत्यु दंड: अंतिम दंड ?
  4. मीडिया का बढ़ता प्रभाव और साहित्य की भूमिका
  5. युवा शक्ति और संस्कृति
- लेखक से मुलाक़ात के अंतर्गत मृदुला गर्ग से छात्रों का संवाद, २९.०१.२०१४
- लेखक से मुलाक़ात के अंतर्गत, मैत्रयी पुष्पा से संवाद, १९.९.२०१४

- हरी भटनागर का व्याख्यान, २४.०१.२०१४
- १४.१०.१०१५ को लेखक से मुलाक़ात के अंतर्गत असगर वज़ाहत से वार्ता तथा उनकी कृति बाकरगंज के सैयद का लोकार्पण, १०.१०.२०१५ सैयद का लोकार्पण
- हिन्दी अकादमी द्वारा महाविद्यालय में प्रतिभा दर्पण नाम से एक नयी योजना का शुभारम्भ किया, जिसमें जिसमें विश्वविद्यालय के छात्रों के लिए स्वरचित कविता पाठ का आयोजन किया गया l इसमें छात्रों के लिए प्रथम पुरस्कार – ११,०००, द्वितीय पुरस्कार ९०००, तृतीय पुरस्कार ७,००० प्रदान किया गया और साथ ही २५०० रूपए के सात सांत्वना पुरस्कार भी रखे गए, भाग लेने वाले समस्त प्रतियोगियों के लिए प्रमाण पत्र की व्यवस्था थी, ०६.११.२०१५ तथा ०७.११.२०१५

33. Teaching methods adopted to improve student learning:

- छात्रों के साथ कक्षा में अधिक से अधिक समूह वार्तालाप किया जाता है जिससे विषय को लेकर उनकी समझ अधिक विकसित हो
- समय-समय पर विषय से सम्बंधित प्रश्न कर छात्राओं के आत्मविश्वास को तथा विषय पर उनकी पकड़ को बढाने का प्रयास भी इसमें शामिल है
- कमज़ोर छात्रों पर अलग से भी काम किया जाता है
- छात्राओं क समय- समय पर आकाशवाणी तथा समाचार पत्रों के दफ्तर और विज्ञापन एजेंसी ले जाने का प्रयास किया जाता है ताकि वे हिन्दी के वर्तमान उपयोग को समझें
- छात्राओं को विषय से सम्बंधित फिल्म दिखायी जाती हैं ताकि विषय को लेकर समझ अधिक विकसित हो
- वार्षिक साहियोत्सव में छात्रों को अपनी रचनात्मक प्रतिभा दिखाने का अवसर प्रदान किया जाता है
- साहित्य जगत के सुप्रसिद्ध विद्वानों से छात्राओं का समय-समय पर परिचय कराया जाता है

34. Participation in Institutional Social Responsibility (ISR) and Extension activities Department regularly:

- मिरांडा हाउस का हिन्दी विभाग कॉलेज के एन. एस. एस से लगातार जुड़ा रहा है l छात्राओं के साथ-साथ प्राध्यापिकाओं का ध्यान भी इस विषय पर होता है कि उन छात्रों की हर तरह से मदद की जाए जो किसी न किसी कारण से अपना काम स्वयं करने में असमर्थ हैं l दृष्टि बाधित छात्राओं को मंच पर लाना, उनके लिए पठन सामग्री जुटाना, रीडिंग और रिकार्डिंग की व्यवस्था करना, कमोबेश पिछड़े इलाकों में जाकर बच्चों के विकास के लिए छोटी-छोटी कार्यशालाएँ आयोजित करना l
- आर्थिक दृष्टि से जो छात्राएँ सक्षम नहीं हैं उनके लिए भी हिन्दी विभाग द्वारा समय-समय पर आर्थिक सहायता प्रदान की जाती है l
- छात्राओं की व्यक्तिगत समस्याओं विभाग में खुलकर बात होती है और छात्रों से जुड़ी समस्याओं का एक समुचित निष्कर्ष निकाला जाता है l

35. SWOC analysis of the department and Future plans:

उपलब्धियाँ

- अपनी स्थापना के समय से ही मिरांडा हाउस का हिन्दी विभाग विश्वविद्यालय में अपनी अलग पहचान रखता है l कॉलेज की प्रारंभिक प्राध्यापिकाओं में डॉ कमला सांघी और शान्ति माथुर ने विभाग को आकार देने में महत्वपूर्ण कार्य किया l बाद के वर्षों में नाट्य समीक्षक इंदुजा अवस्थी,

कथाकार मन्नू भंडारी और डॉ शैल कुमारी के सहयोग से हिन्दी नाट्य संस्था अनुकृति का प्रादुर्भाव महाविद्यालय में एक क्रांतिकारी घटना सिद्ध हुई l हिन्दी नाट्य संस्था अनुकृति ने न केवल हिन्दी विभाग की छात्राओं को आकार देने में महत्वपूर्ण भूमिका निभाही बल्कि विभिन्न विभागों के मध्य एक पुल का काम भी किया l कीर्ति जैन, अनुराधा कपूर, हेमा सिंह हिन्दी विभाग द्वारा संचालित अनुकृति की ही उपज हैं जो आज नाटक और रंगमंच के क्षेत्र में विश्व स्तर पर भारत को एक अलग पहचान दिलाने में सक्षम हैं l बाद के वर्षों में अनुकृति से ही आज के दौर की एक प्रमुख आलोचक डॉ अर्चना वर्मा का भी जुड़ाव हुआ जिन्होंने हिंददी आलोचना के क्षेत्र में एक नया इतिहास रचा l

- यह उल्लेख करना आवश्यक है कि मिरांडा हाउस का हिन्दी विभाग ही वह विभाग है जिस पर सबसे पहले हिन्दी सिनेमा की नज़र गयी l मन्नू भंडारी जिनकी रचनाओं ने हिन्दी जगत में तहलका मचा दिया और अपने समय की सोच पर एक क्रांतिकारी असर छोड़ा उनकी रचना **यही सच है** पर हिन्दी सिने जगत की दृष्टि गयी और आज तक की बहुचर्चित फिल्म बनायी निर्देशक बासु चैटर्जी ने 1974 में **रजनीगन्धा** नाम से जिसे हिन्दी फिल्म जगत में एक मील का पत्थर माना जाता है l मन्नू भंडारी की ही कहानी पर एक अन्य कलात्मक फिल्म बनी **स्वामी** l डॉ शैल कुमारी और डॉ अर्चना वर्मा के दिग्दर्शन में हिन्दी नाट्य संस्था अनुकृति लगातार आगे बढ़ती रही l
- डॉ अर्चना वर्मा हिन्दी आलोचना और सम्पादन की दुनिया का एक जाना माना नाम है l विभाग की वर्तमान पीढ़ी भी कई दृष्टियों से महत्वपूर्ण है l विभाग में डॉ निशा नाग, डॉ रमा यादव, डॉ रेणु अरोड़ा, डॉ संगीता राय रेडियो से सतत रूप से जुड़े रहे हैं l डॉ अपराजिता शर्मा ने हिन्दी के पहले चैट स्टिकर हिमोजी का निर्माण किया जो इन्टरनेट के इस युग में नए मानदंड स्थापित करने में सक्षम हैl डॉ रमा यादव आई.सी.सी.आर की सांस्कृतिक आदान-प्रदान की योजना के तहत हिन्दी चेयर पर हंगरी की राजधानी बुदापैश्त में अगस्त २०१३ से अगस्त २०१५ तक कार्यरत रहीं l इसके साथ ही दिल्ली सरकार के थियेटर प्रोजेक्ट के अंतर्गत वर्ष २०११ में फिरोजशाह कोटला में हुए नाटक तुगलक की सह निर्देशक रहीं l
- डॉ कविता समकालीन कवयित्रियों में एक महत्वपूर्ण हस्ताक्षर हैं l उनके दिग्दर्शन में निकल रही पत्रिका पहचान विश्वविद्यालय में अपनी नयी पहचान बना चुकी है l डॉ बलवंत कौर हिन्दी की प्रमुख पत्रिका हंस के सम्पादन मंडल से जुड़ी हुई हैं l डॉ अर्चना वर्मा के साथ सहसम्पादन में हाल ही में हिन्दी के प्रमुख साहित्यकार राजेन्द्र यादव ग्रंथावली छह भागों में उनके सुधि निर्देशन में प्रकाशित हुई है l डॉ रजनी आलोचना के क्षेत्र में नए प्रतिमान रच रही हैं l
- डॉ चंदा सागर विभाग की दृष्टि बाधित प्राध्यापिका हैं l उनके दिशा निर्देशन में हिन्दी विभाग में अनेक दृष्टि-बाधित छात्राएँ आगे बढ़ती हैं जिसमें समग्र हिन्दी-विभाग का सहयोग रहता है l डॉ चंदा हिन्दी जगत की उभरती कवयित्री भी हैं l डॉ उमा मीणा दलित आलोचना के क्षेत्र में महत्वपूर्ण भूमिका निभा रही हैं l

सीमाएँ

- विभाग की कुछ सीमाएं भी हैं, हिन्दी विभाग में दाखिला पाने वाली बहुत कम छात्राओं का प्रतिशत साहित्य की पृष्ठभूमि से आता हैं l छात्राओं के चतुर्दिक कला-विन्यास को आकार देने का प्रयास प्राध्यापिकाओं का लगातार रहता है l कोशिश की जा सकती है कि इस क्षेत्र में प्रतिवर्ष कुछ विशेष कार्यशालाओं का आयोजन किया जाए जिससे छात्राओं में साहित्य और संस्कृति की समझ अधिकाधिक विस्तृत हो l

उपलब्ध अवसर

- विभाग के पास मीडिया और जनसंचार से जुड़े विज्ञ लोग हैं अतः छात्राओं के साथ रेडियो और जनसंचार जैसे विषयों पर विशेष प्रोजेक्ट किए जा सकते हैं l
- भाषा और भाषा विज्ञान की जानकार प्राध्यापिकाओं के होने से हिन्दी भाषा और उसके व्याकरण से सम्बंधित कार्यशालाओं का आयोजन किया जा सकता है l

चुनौतियां

- हिन्दी विभाग में एक बड़ी संख्या दृष्टि बाधित छात्राओं की आती है सामान्य और दृष्टि बाधित छात्राओं के मध्य सामंजस्य बैठाना एक चुनौती पूर्ण कार्य है l इसके साथ ही उनके लिए पढ़ने योग्य सामग्री जुटाना और उपलब्ध पाठ की रिकार्डिंग रखना भी एक महत्वपूर्ण कार्य है l
- साहित्य के साथ-साथ जो नयी भाषा नीतियाँ उभर रही हैं उनका ताल मेल बैठाना एक महत्वपूर्ण चुनौती है l

भविष्यगत योजनाएँ

- छात्राओं की रचनात्मक और कलात्मक अभिव्यक्ति को ऊपर उठाने के लिए कार्यशालाओं की नियमित आवृति l
- छात्राओं को रंगमंच से जुड़ी गतिविधियों से जोड़ना और उसकी एक सालाना कार्यशाला के रूप में प्रस्तुति देनाl
- दृष्टि बाधित छात्राओं के लिए पाठ की अधिकाधिक रिकार्डिंग तैयार करना l
- पठन-पाठन की अत्याधुनिक तकनीकों के साथ अधिकाधिक जुड़ाव l इसके साथ ही रेडियो, टेलीविज़न, अखबार जैसे माध्यमों से छात्रों को अधिकाधिक जोड़ने का प्रयास l छात्राओं को इन माध्यमों में काम करने के लिए तैयार करना l
- छात्राओं के मध्य विविध सामयिक विषयों पर शोध को बढ़ावा देना l

Evaluative Report

Department of History

1. **Name of the Department:** History
2. **Year of Establishment:** 1948
3. **Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., etc):**
   UG: B.A. (H) History; B.A. Programme with History in combination with Economics/ Geography/ Mathematics/ Philosophy/ Political Science
   PG: M.A. History
4. **Names of Interdisciplinary courses and the departments/units involved:**
   Students of B.A. (H) History opt for the following papers offered by other departments:
   - Ability Enhancement Compulsory Course (AECC): English, Hindi and Sanskrit
   - Generic Elective (GE) Course: All other departments
   - Discipline Centred Concurrent Course (DCCC): Economics, English, Hindi, Geography, Mathematics, Philosophy, Political Science and Sanskrit
5. **Annual/ Semester/ Choice Based Credit System (programme-wise):**
   Choice Based Credit System (CBCS) in Semester Mode since July 2015.
6. **Participation of the department in the courses offered by other departments:**
   History faculty members teach the following courses to students of other departments:
   - Generic Elective (GE) Courses to students of humanities and social sciences
   - Interdisciplinary Course (IDC) to students of humanities, social sciences, and Mathematics
   - Discipline Centred Concurrent Courses (DCCC) to students of humanities and social sciences
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**
   None
8. **Details of courses/ programmes discontinued (if any) with reasons:** None
9. **No. of Teaching Posts:**

Post	Sanctioned	Filled
Associate Professor		5
Assistant Professor	4	4

10. **Faculty profile with name, qualification, designation, specialization:**

Name	Qual	Des	Specialization	Exp Y	Research Guidance
Dr. Srimanjari	Ph.D.	Associate Professor	Modern Indian History	27	
Dr. N. Datta	Ph.D.	Associate Professor	Modern Indian History	18	Ph.D.: $3^{[o]}$; M.Phil.: $2^{[o]}$
Dr. B. Jagannathan	Ph.D.	Associate Professor	Ancient Indian History	18	
Ms.. Madhu	M.Phil.	Associate Professor	Modern Indian History	18	
Dr. S. Singh	Ph.D.	Associate Professor	Ancient Indian History	24	

Ms. S. Jha	M.Phil.	Assistant Professor	Medieval Indian History	15	
Dr. R. Chadha	Ph.D.	Associate Professor	Medieval Indian History	19	
Dr. K.K. Das	Ph.D.	Assistant Professor	Modern Indian History	1	
Mr. S.K. Chandan	M.Phil.	Assistant Professor	Medieval Indian History	5	

Qual: Qualification; Des: Designation; Exp: Experience in years:[O]:Ongoing
Qual: Qualification; Des: Designation; Exp Y: Experience in Years; [O]: Ongoing

11. List of senior visiting faculty:

Dr. Uma Chakravarti, a renowned historian and an esteemed former colleague who taught from 1966 to 1998 at Miranda House, was visiting faculty on an informal basis from 1999 till 2012. She used to teach the unit on Buddhism in Paper I, History of India from Earliest Times till c. Eighth Century.

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary/ad hoc/guest faculty:

Year	2011-2012		2012-2013		2013-2014		2014-2015		2015-16	
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Lectures	26	26	39	26	40	36	22	34	40	40
Tutorials	32	32	32	28	38	42	37	35	43	43

13. Student-Teacher Ratio: 15: 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: None

15. Qualifications of teaching faculty with D.Sc./ D.Litt./ Ph.D./ M.Phil./ PG:

Qualification	2011-12				2012-13				2013-14				2014-15				2015-16			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	6	6	0	0	6	6	1	1	6	6	1	1	6	6	0	0	6	6	1	1
M.Phil.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2
M.A.																				1

P: Permanent; A: Temporary/*Ad hoc*; O: Odd semester; E: Even semester

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

1.	Project Title	Climate Change, Water Security and Livelihood Resilience: Role of Traditional Knowledge and Modern Technologies in Rajasthan
	Department Co-PI	Dr. S. Singh
	Students	Krishna Shekhawat, Bhavya Chauhan, Saumya Sahai
	Funding Agency	DU Innovation Project
	Grant	Rs. 4.5 lakh
	Duration	2015-16
2.	Project Title	Digitization of High Resolution Slides of Indian Coins

	Department Co-PI	Dr. B. Jagannathan
	Students	None
	Funding Agency	Miranda House
	Grant	Rs.20,000
	Duration	January-March 2015

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Project Title	Probing Contemporary Indian Society
Department Coordinator	Dr. Srimanjari
Funding Agency	UGC sponsored National Social Science Seminar
Grant	Rs.90,000
Duration	February 2008

18. Research Centre /facility recognized by the University: None

19. Publications:

Name	Authored/ Co-Authored Books/ Monographs	Edited: Books/Monographs	Chapters: Books/ Textbooks	Papers: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular resources including e-resources	Popular Articles/ Books
Dr. Srimanjari	2			6	6		4	
Dr. N. Datta	2	1	6	10	18			20
Dr. B. Jagannathan	1			1	13			22
Ms. Madhu						1		
Dr. S. Singh							3	
Ms. S. Jha				1				
Dr. R. Chadha			3		4			
Dr. K.K. Das	1							
Mr. S.K. Chandan				2				

Monographs and Textbooks

- Das, K.K. 2012. *India Indonesia Strategic Partnership 1991-2008*, Lambert Academic Publishing House, Germany, ISBN 978-3-659-12369-6.
- Datta, N. 2009. *Violence, Martyrdom and Partition: A Daughter's Testimony*, Oxford University Press, New Delhi; reprint 2010; 2011. Shortlisted for the Crossword Award, 2009. Paperback 2012, ISBN 9780198083993.
- Datta, N. 1999. *Forming an Identity: A Social History of the Jats*, Oxford University Press, New Delhi, ISBN 13: 978-0195647198.
- Datta, N. (ed.). 2003. *Encyclopaedia Britannica: Indian History: Modern*, Encyclopaedia Britannica: India, ISBN 13: 9788181310613.
- Jagannathan, B. 2015. *Approaching the Divine: The Integration of Āḻvār Bhakti in Śrīvaiṣṇavism*, Primus Books, New Delhi, ISBN 978-93-84082-13-0.

- Srimanjari. 2009. *Through War and Famine: Bengal 1939-45*, Hyderabad: Orient Blackswan, Hyderabad, ISBN 8125035486, 9788125035480.
- Srimanjari, Gupta, N. & Menon, V. 2004.*Bharat KaItihas*, Part 3, Textbook for Class VIII for SCERT, New Delhi.

20. Areas of consultancy and income generated:

Name	Project Title	Institution
Dr. Srimanjari	Walk through the Ages: The Seven Monuments on the Northern Ridge	University of Delhi, 150th Anniversary of 1857 Uprising, 2007
Ms. Madhu	Syllabus & Course Material Development, Online Certificate Course for Elementary Teachers on Pedagogy of Educational Games and Activities	CIET, NCERT, March 2012
Ms. Madhu	Reviewer, Educational Games for Video Series of Quiz Programmes	CIET, NCERT, July 2010
Ms. Madhu	Expert, Development Team, Audio-visual Programmes for School Children and Teachers	CIET, NCERT, January 2008
Dr. Srimanjari	External Examiner, 2Ph.D. theses and 3 M.Phil. dissertations	Different Universities
Dr. Srimanjari	External Examiner, Dissertations of students of One-year Diploma in Archival Management	School of Archival Studies, National Archives of India, New Delhi, 2013
Dr. N. Datta	External Examiner, 15 M.Phil. and Ph.D. theses	Different Universities
Dr. R. Chadha	External Examiner of 2 M.Phil. dissertations	Jawaharlal Nehru University

21. Faculty as members in a) National Committees b) International Committees c) Editorial Boards: None

22. Student Projects:

a) Percentage of students who have done in-house projects including inter-departmental/programmes

In 2014-15, upon completing a workshop organized by INTACH, the students organized a Heritage Walk to the Pir Ghaib Baoli as part of Adopt a Monument initiative. In 2014, the students of the History Department put up a historical play, Ajatashatru, entirely on their own, not only acting in and directing the play, but even researching and obtaining the appropriate costumes and properties, and composing the musical scores themselves.

First year students of the erstwhile FYUP undertook interdisciplinary group projects for a course titled Indian History and Culture. These covered a variety of themes including, The Walled City of Shahja hanabad, Humayun's Tomb, Elements of Change in Chandni Chowk, Fairs and Festivals, The Bombay Railway, Water Management in the Past, Baolis of Delhi, and Social Inequality and Gender. Many of these were of such excellent quality that they were exhibited at Antardhwani, or published in the college magazine. Till 2010, project work was a required component of the internal assessment where the students were encouraged to explore

historical issues beyond the syllabus. For their projects for the paper on Modern European History, a few final year students even wrote historical fiction after detailed study of fiction from nineteenth century Europe.

Students of the History Department regularly present carefully researched projects both in the annual departmental festival, *Tarikh* (with inter-college competitive events), and in the academic festivals held in other colleges. In the last three years, they have won 15 prizes in inter-college History festivals organized in our own as well as in other colleges.

b) Percentage of students placed for projects in organizations outside the institutions in Research laboratories/Industry/ other agencies

A large number of students undertake summer internships with outside organizations including NGOs. Most of these are self-driven initiatives.

23. Awards/ Recognitions received by faculty members:

Faculty Awards

Name	Award	Year
Dr. Srimanjari	British Academy Visiting Fellowship	2000
Dr. Srimanjari	Distinguished Teacher Award, University of Delhi	2007
Dr. N. Datta	Visiting Professor, University of St. Gallen, Switzerland	2012
Dr. N. Datta	Visiting Professor, South Asian Studies, University of Toronto	2011
Dr. N. Datta	Visiting Professor (Rotating Chair ICCR), Humboldt University, Berlin	2007-2008
Dr. N. Datta	Fellow, Nehru Memorial Museum and Library, New Delhi	2006-2009
Dr. B. Jagannathan	Fulbright-Nehru Post-Doctoral Fellowship, Department of South Asia Studies, University of Pennsylvania, Philadelphia	2012-2013
Dr. B. Jagannathan	ICHR Junior Research Fellow Pay Protection Grant	January-March 2009

Students' Awards

Student Participation in International Programmes

- Vidushi Jain represented the college in Korean Government Invitation Programme for Undergraduate Students from Major Partner Countries, 2011.
- Ananya Sharma represented the college in JENESYS 2.0 programme (Japan-East Asia Network of Exchange for Students and Youths). The theme was Science and Technology and took place from 12-20 January 2015.

The following university ranks have been won by students of the History Department

	B.A./M.A.	I Rank	II Rank	III Rank
2015	B.A.		Manisha Rajput	
	M.A.		Vidushi Jain	
2014	M.A.	Divya Raj Juyal	Vineet Chitra	
2013	M.A.		Shehnaz Parveen	
2011	B.A.			Satakshi Sinha

The following college awards have been won by students of the History Department.

Award	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
University Rankers Award	1		1	2	2
College Academic Prize	3	3	3	3	1
Best NSS Volunteer Award	1	1			
Miranda House Golden Jubilee Award (Humanities)	2	1	1		
Golden Jubilee Certificate of Appreciation					1
Contribution to Music/ Dramatics/ Dance/ Students' Union	3		3		1
Shail Kumari Award for Anukriti			1		
Yashoda Fellowship			1	1	2
Savitri Devi Jolly Award for Visually Challenged	1			1	
Buti Foundation Awards for Visually Challenged		2		1	

24. List of eminent academicians and scientists/visitors to the department:

Richard Follet, University of Sussex, UK. 2015-16
Radhika Singha, Centre for Historical Studies, JNU, 2015-16
Charu Gupta, Department of History, DU, 2015-16
Sunil Kumar, Department of History, DU, 2014-15
Naman Ahuja, Centre for Art and Aesthetics, JNU, 2014-15
Uma Chakravarti, Retd., Department of History, Miranda House, 2014-15
Saman Habib, Senior Research Scientist, Central Drug Research Institute, Lucknow, 2014-15
Sanjay Mattoo, Independent Filmmaker, All India Radio Newscaster, 2014-15
Rajeev Bhargava, Centre for the Study of Developing Societies, Delhi, 2013-14
Raziuddin Aquil, Department of History, DU, 2013-14
Parul Pandya Dhar, Department of History, DU, 2013-14
G. Arunima, Centre for Women's Studies, JNU, 2013-14
Dipankar Gupta, Centre for Sociology, JNU, 2012-13
Ranabir Chakravarti, Centre for Historical Studies, JNU, 2012-13
Urvashi Butalia, Editor-Publisher of Feminist Press, Kali, 2012-13
Farhat Hasan, Department of History, DU, 2012-13
Sohail Hashmi, Independent Researcher, Columnist and Activist, 2012-13
G. Arunima, Centre for Women's Studies, JNU, 2012-13
Narayani Gupta, Retd., Department of History and Culture, Jamia Millia Islamia, 2012-13
Prashant Bhushan, Lawyer, 2011-12
Shahid Amin, Department of History, DU, 2011-12
Najaf Haider, Centre for Historical Studies, JNU, 2011-12
Mahmood Farooqui, Filmmaker, Writer, Dastangoi researcher and performer, 2011-12
V.R. Rao, Department of Anthropology, DU, 2011-12
Shireen Ratnagar, Retd., Centre for Historical Studies, JNU, 2011-12
Upinder Singh, Department of History, DU, 2011-12

John Stratton Hawley, Barnard College, University of Columbia, 2010-11
M.J. Akbar, Senior Journalist, 2010-11
Susan Visvanathan, Centre for Sociology, JNU, 2010-11

25. Seminars/ Conferences/ Workshops organized, and the source of funding:

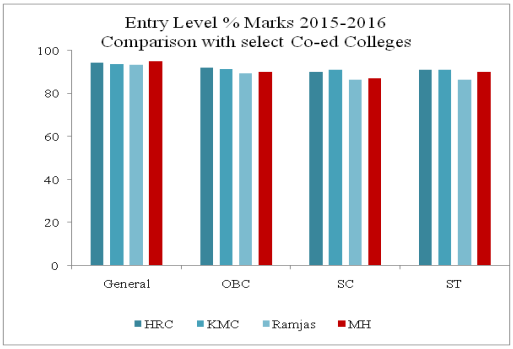
National Seminar, Different Archives, Different Histories, 22-23 March 2012, funded by a Rs.58,000 grant from ICHR.

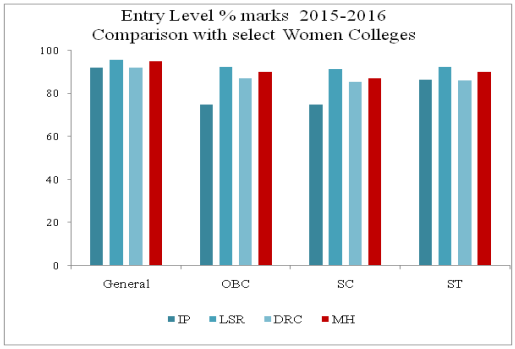
A Book Launch of *Insights and Interventions: Essays in Honour of Uma Chakravarti*, edited by Prof. Kumkum Roy, 19 August 2011, in collaboration with Primus Books, New Delhi.

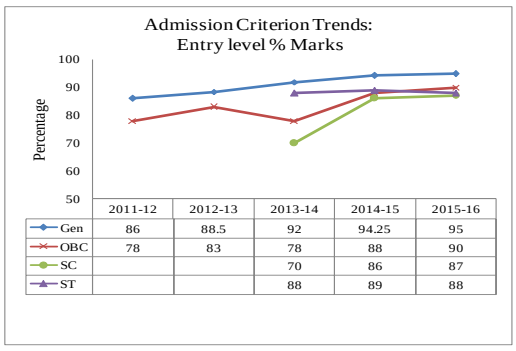
26. Student profile course/ programme-wise:

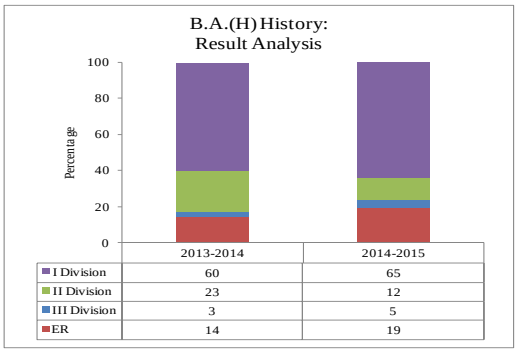
As per University rules students have to apply through a centralized admission form and the admission to a particular course is granted on the basis of the cut-off percentage declared by the college (details are given in the graph below).

2015-16									
Course	Category	MH		IP		LSR		DRC	
		Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) History	Gen	95	95	95.5	92	97	95.5	92	92
	OBC	90	90	94	75	96	92.5	88	87
	SC	87	87	93	75	95.25	91.5	86	85.5
	ST	90	90	93	86.5	95.50	92.25	86	86
	PwD	88	88	95	70	94.75	83	86	86





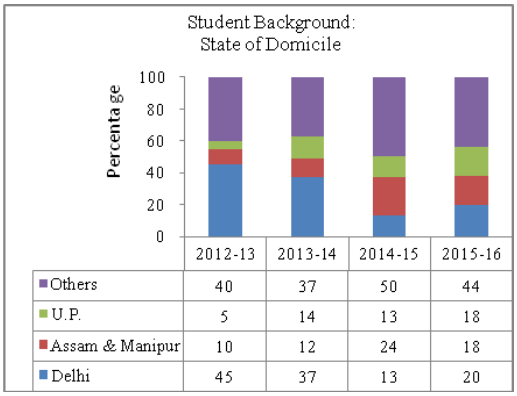




Miranda House has consistently maintained a high cut-off percentage with respect to other colleges in the University of Delhi.

Pass Percentage: Over the past few years the pass percentage has been well above 95%.

27. Diversity of Students:



	2012-13	2013-14	2014-15	2015-16
Others	40	37	50	44
U.P.	5	14	13	18
Assam & Manipur	10	12	24	18
Delhi	45	37	13	20

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defence Services?

Graduates of the Miranda House History Department have proved their mettle in academics as well as in a number of other professions. While some are carrying out research at some of the best Indian universities, others are doing so overseas. Many have presented papers at national and international research conferences and published papers in reputed journals. Some are now teaching history in different colleges of Delhi University while others are reputed teachers in fields other than History and in institutes in different parts of the country and abroad. Our students are also placed in the top ranks of the Indian Civil Services and State Civil Services. Many have found success in professions like Law, Interior Designing, Media, Advertising, Journalism, Print Photography, Museum Management, and Corporate Management. In 2015, out of a batch of 40 students, 14 students cleared the JNU entrance examination and joined the post-graduate programme at the Centre for Historical Studies.

The following is an illustrative list of what our students are doing

Higher Education

Ph.D., 2014, Oxford University, UK, Dr. Aishwarya Pandit (2005-2008).
Ph.D. Candidate at University of Georgia, USA: Kajal Sinha (2000-2003), (Masters in Education, University of Pennsylvania).
Ph.D. Candidate, Development Studies, Tata Institute of Social Sciences, Ranjini Basu (2007-2010).
Ph.D. Candidates at DU: Avantika Sharma (2004-2007; submitted 2015), Heeral Chhabra (2005-2008), Radha Sinha (2005-2008), Sonal Singh (2001-2004).
Ph.D Candidates at JNU: Divya Khattar,Priyanka Pandit(2005-2008), Ankita Kumari, Aditi Singh, Urvashi Gautam, Priyanka Khanna (2004-2007), Sana Kochak (2008-2011).
M.Phil. students at DU: Vidushi Jain, Ratnapriya, Richa Sharma.
M.A., London School of Economics, Astha Khanna Mallik (2002-2005).
M.A., School of Oriental and African Studies, UK, Sana Khan (2002-2005).

Teaching

Dr. Santoshi (1999-2002), Lakshmi Bai College, DU.
Sonal Singh (2001-2004), Ramjas College, DU.
Supriya Sinha, *ad hoc* lecturer, DU colleges.
Mridul Megha (2006-2009), *ad hoc* lecturer, DU colleges.
Sushmita Bannerjee (1999-2002), *ad hoc* lecturer, DU colleges.

Nikita Teresa Sarkar, Whistling Woods International School of Media and Communication, Mumbai.
Nuvan Prabha (2002-2005), Gateway College, Rajagiriya, Sri Lanka.
Divya Khattar (2005-2008), Srijan School, New Delhi.
Ira Bogra (1987-90), Co-ordinator at Smart Wonders School, Mohali.
Neha Sharma (2004-2007), Delhi Public School, Gurgaon.
Civil Services and Government Services
Pragya Richa, Indian Police Service (IPS).
Pami Baruah, Assistant Commissioner, CM Secretariat.
Noopur Sharma (2003-2006), District Minority Welfare Officer, Jehanabad (Cleared Bihar Public Service Commission in 2013).
Vageesha Diwedi (2003-2006), Information Officer for the Intelligence, Ministry of Home Affairs (Selected in 2013).
Payal Joshi (2002-2005), Assistant Project Manager, PMU, under Ministry of Tourism.
Namita Aggrawal, Indian Revenue Service, 2015 batch.
Rige Chiba (2004-2007), National Museum, New Delhi.
Archana Kamboj (2003-2006), Assistant Manager at Canara Bank.
Entrepreneurship
Shikha Durlabhji (2005-2008), Director, Code Silver.
Ranjna Ranji, Interior Designer.
Law
Nimrat Gill (2000-2003), Senior Advocate, High Court, Chandigarh.
Tanya Singh, Associate, K.K. Law Firm.
Media, Journalism and Publishing
Ayushi Thapiyal (2006-2009), Journalist, *Women's Health India*.
Somya Lakhani (2006-2009), Senior Correspondent, *Indian Express*.
Aranya Shankar (2006-2009), Senior Correspondent, *Indian Express*.
Mita Ahlawat (2003-2006), Photojournalist, *The Hindu*.
Veena Mani (2010-2013), Bloomberg TV, India.
Gayatri Goswami (2003-2006) Associate Editor, Oxford University Press, Delhi.
Professionals at Corporate and Autonomous Institutions
Shubangini Pandey, Corporate Management, IBS Hyderabad.
Astha Khanna Mallik (2002-2005), Reward Consultant at British Petroleum.
Aditi Malhotra (2004-2007), Consultant at CRY (Child Relief and You).
Sneh Verma (2003-2006), Financial Advisor with Merrill Lynch, New York.
Neha Sharma (2003-2006), HR Partner with Convergy's, Mumbai.
Saumya Baijal, (2003-2006), Advertising Professional, Ogilvy and Mather.
Bashobi Banerjee (2003-2006), Research and Programme Coordinator, Heritage Education and Service at INTACH.
Ritika Khanna (2003-2006), Research Assistant at INTACH Heritage Academy.
Sana Khan (2002-2005), Communications Officer at UNESCO, MGIEP.

29. Student progression:

Student Progression	Against % Enrolled
UG to PG	50
PG to M.Phil.	10
PG to Ph.D.	6

Ph.D. to Post-Doctoral	2
Employed	70
Entrepreneurship/Self-employment	4

30. Details of Infrastructural Facilities:

a) Library: The college library has a rich and regularly updated section for History with 4624 books. Our Department also maintains a separate library devoted exclusively to History. The departmental library has 458 books and photocopies.

b) Internet facilities for staff and students: Free WiFi is available through the college campus for all students and teachers including those of the History Department. The college has issued netbooks to all faculty members desirous of availing the facility. The college provides free access to teachers and students alike to some of the most reputed portals for journal articles as well as e-books, like JSTOR.

c) Classrooms with ICT facility: About a dozen lecture rooms are used by the History Department, all of which are ICT enabled with installed overhead projectors and screens. The facility is used for screenings of films, PowerPoint presentations by teachers and student-project presentations. The Digital Resource Centre is available to all students for self-paced study and project work.

d) Faculty room: The History Department room, which has individual workstations for the faculty members, is also equipped with a desktop computer, a photocopy machine and a printer-photocopier for the use of the faculty.

31. Number of students receiving financial assistance from college, university, government or other agencies:

Year	Govt.	UGC	DU	College	Others	Total
2010-2011			1			1
2011-2012	4		1	3		8
2012-2013			1	2		3
2013-2014				2	1	2
2014-2015		3		5		8
2015-2016				2		2

32. Details on student enrichment programmes (special lectures/ workshops/ seminars) with external experts:

In 2015, the students visited the exhibition celebrating the Golden Jubilee of Victory of the 1965 Indo-Pak War at India Gate lawns. The visit focussed on understanding the armament industry, questions of nationalism, development of weapons since World War II and aspects of international relations.

Since 2010, the Department has participated in a two-day Workshop on Heritage Conservation organized by INTACH, every year.

Dr. Srimanjari leads an annual Walk on the Ridge to bring its historical riches to light. The Department also organizes regular walks to monuments of historical importance in Delhi, such as the Hauz Khas ruins, Humayun's Tomb, Mehrauli Archaeological Park, etc., in association with INTACH/Agha Khan Trust. Ms.

Swapna Liddle, an expert associated with INTACH, conducted a walk around Old Delhi in 2014 while in 2015, volunteers associated with the Agha Khan Trust led a walk around Nizamuddin.

At the annual festival, *Tarikh*, eminent scholars are invited to speak on a given theme. Competitive student paper presentations on the same theme, and a debate on a related topic draw participation from a large number of students not only from our own Department but from other departments in the college, as well as from outside Miranda House.

33. Teaching methods adopted to improve student learning:

The bedrock of the teaching-learning process is the classroom experience of lectures and tutorials. At the start of each theme/ topic of every course, the students are given a detailed bibliography. While lectures may be interactive to a degree, as students are encouraged to ask questions, it is in the tutorial classes that dialogue becomes a key tool of learning. There is emphasis on an analytical, interactive and discussion-driven approach. Each teacher, in his or her own way, seeks also to connect the specifics of the course content to the concerns of the social sciences and humanities in general. In History, this also translates into relating knowledge of the past to insights about the present.

However, this is by no means the entire story. Maps, PowerPoint presentations and screenings of films on themes related to the subject go a long way in making the subject both comprehensible and enjoyable. Some teachers even carry material objects like stone tools (genuine), old coins (genuine) or art pieces (usually copies or prints) from their personal collections to class so that students can get a tangible feel of the objects of study. A trip to the National Museum is organized in every session for the first year class. An outstation trip is organized in most academic sessions to a set of places of historical importance and interest. In the last few years, the students and faculty members have travelled to Rajasthan (Udaipur, Mount Abu, Ranakpur, Chittorgarh, Kumbhalgarh: 2015), Gujarat (Lothal, Ahmedabad, Patan, Dholavira, Modhera: 2014), Karnataka (Hampi, Badami, Aihole, Pattadakal: 2012) and Madhya Pradesh (Bhopal, Bhimbetka, Sanchi, Vidisha, Bhojpur: 2010).

Movie screenings followed by discussions on the relevance, rhetoric, perspectives and nuances of the historical events and processes depicted are another way to enhance learning. Some of the movies screened in 2015-16 were *Dr. Strangelove* (satire on Cold War), *An Inconvenient Truth* (documentary on climate change), *Life is Beautiful* (dark humour on Nazi Concentration Camps), *Fiddler on the Roof* (Jewish life in Tsarist Russia) and *A Way to Justice* (women's rights).

An initiative of the students of the Department of History is The Discussion Forum where issues of contemporary significance are discussed fortnightly. Students of disciplines other than History are also welcome at these discussions where ideas are exchanged and important questions of the day debated in a non-competitive atmosphere. Several teachers of the History Department also attend and moderate these discussions.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Tanisha Rathore (2013-16), an NCC cadet, has attended several NCC camps and was part of the Republic Day2015-16 contingent.

Vidushi Jain (2010-13), was an outstanding NSS volunteer.

Ms. Madhu is the Convener of Equal Opportunity Cell (EOC) of Miranda House. The EOC offered a 30-hour English Speaking Certificate Course from 14 October to 07 November 2015. Numerous students including several from the History Department benefitted from the course.

35. SWOC analysis of the department and Future plans:

Strengths: The abiding strength of the Department of History in Miranda House is its committed faculty. All our teachers, individually and collectively, are committed to keeping themselves updated with the latest developments in their respective areas of specialization, go out of their way to look for resources useful for students, organize extra-curricular activities for the enrichment of students and faculty alike and adopt the best pedagogic practices possible. The fact that ours is a women's college makes us particularly sensitive to gender issues which are also central to our discipline. Our location in the heart of the North Campus, among a cluster of the best colleges of the university, allows our students and teachers to participate in academic and extra-curricular activities in other, nearby colleges. The diversity of our faculty facilitates mutual appreciation and respect for plurality. Yet another factor that gives us a cutting edge is our illustrious history and 'brand' value. Our Department was among those established at the moment of the inception of the college. Over the decades since 1948, it has produced some of the greatest academic luminaries that the discipline of History has witnessed in independent India: Uma Chakravarti, Prem Choudhary, Indrani Chatterjee and Radhika Singha among others. This reputation helps us attract the best of students. Even at a time when the Humanities seem an unattractive option in the public perception, our History Department attracts excellent students year after year.

Weaknesses: The weakness stems from the structural weaknesses of the larger socio-economic system. Job opportunities for fresh graduates in any social science discipline, unlike in the case of professional courses, are limited. A career born of a proper education in the discipline of History usually has a long gestation period. While a number of excellent students do opt to study History at the college level, possibly greater numbers choose 'safer' subjects after school to ensure employment soon after graduation. The members of the faculty usually try and address this issue by counselling - aspirants and 'doubters' - during the admission process by elaborating the eventual choices open to graduates in History.

Opportunities: Training in the discipline of History enables students to enter a wide range of professions. While academics, teaching and research are obvious progressions, archaeology, museum management and conservation, and archiving are also directly related to the discipline of History. Graduates in History also find opportunities in fields as diverse as media, journalism, film making, human resource management, law, hospitality, administrative services, outreach activities and in NGOs. The basic grounding in a social science discipline proves to be critical for analyzing, understanding a variety of socio-economic situations and provides the foundation for a productive and fulfilling career.

Challenges: The main challenges are to bridge the gap between students' understanding of History as studied by most of them in school and inculcation into a discipline that has grown out of a series of debates and continues to change and grow, and to demonstrate that historical knowledge is not a series of

facts contained in a textbook that requires commitment to memory but is grounded in primary sources, rationally analyzed, imaginatively interpreted and convincingly argued. A student of History learns to think historically by following a historical debate, peeling back the layers of arguments that constitute historical knowledge on the subject. This requires extensive reading and includes a degree of grappling with primary sources. Another important challenge is to ensure access to equal quality of education to students coming from disadvantaged backgrounds. Such students are frequently Hindi-medium educated, and consequently need special attention. Reading material, though not entirely unavailable, is strictly limited for many non-Indian History papers. We believe that this challenge is also an opportunity that can be overcome through the efforts of our highly qualified and devoted faculty. Our library's recent initiative to acquire permission for non-profit replication of key books could be crucially expanded to serve Hindi-medium students.

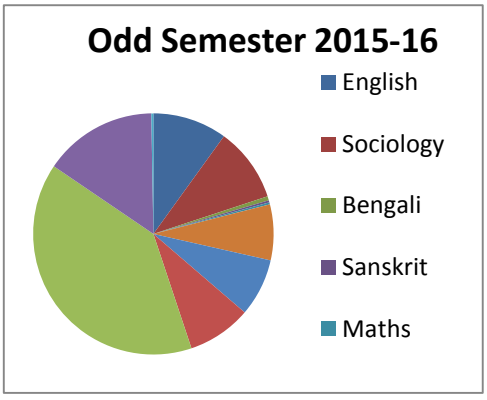
Future Plans: The Department of History is planning a short-term course on exploring the history of the neighbourhood to encourage students to 'Think through the City'. Since the life of an individual is enmeshed with the historical experience of society and of the nation, the focus of the course would be on exploring the city of Shahjahanabad and other urban spaces with emphasis on the history of the streets and monuments, cuisine and music of the city. Pictorial narratives and exhibitions, cinema and heritage walks will be used to explore the myriad aspects of life in the city.

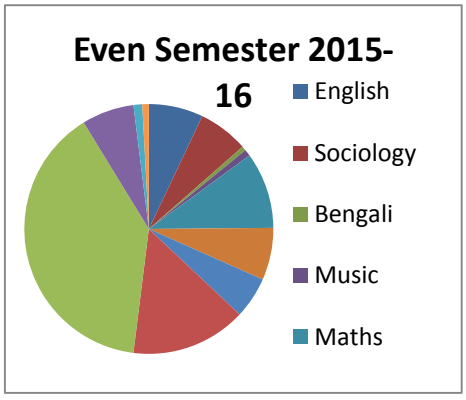
Evaluative Report

Department of Philosophy

1. **Name of the Department:** Philosophy
2. **Year of Establishment:** 1948
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
   UG: B.A. (H) Philosophy; B.A. Programme with Philosophy in combination with Hindi/Elective English History/Political Science/Physical Education
   PG: M.A. Philosophy
4. **Names of interdisciplinary courses and the departments/units involved:**
   Students of Philosophy Honours pursue the following courses offered by other Departments:
   - Generic Elective Courses
   - Allied Courses under the erstwhile FYUP
   - Environmental Science Course
   - Ability Enhancement Compulsory Course (AECC)
   - Discipline Centred and Interdisciplinary Courses
5. **Annual/semester/choice based credit system (programme-wise):**
   Choice Based Credit System (CBCS) has been implemented from July 2015.
6. **Participation of the Department in the courses offered by other departments:**
   The Department of Philosophy offers to the students of other Departments the following courses:
   - Generic Elective Course: Humanities and Mathematics Department
   - Interdisciplinary Concurrent Course: Humanities and Mathematics Department
   - Discipline Centred Course: Humanities and Mathematics Department
   - Allied Courses (for erstwhile FYUP): Humanities and Mathematics Department

   Philosophy is a popular option as an interdisciplinary course. The following pie charts indicate the total number of students studying B.A. (H) Philosophy in 2015-16 and the number of students across various disciplines who offer Philosophy as GE and IDC (Odd semester 2015-16) and GE and DCC (Even Semester 2015-16), respectively.





7. **Courses in collaboration with other universities, industries, foreign institutions:** None
8. **Details of courses/programmes discontinued (if any) with reasons:**
   None

9. Number of Teaching posts:

Post	Sanctioned	Filled
Associate Professor		1
Assistant Professor	6	6

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. /M. Phil. etc.,):

Name	Qual	Des	Specialization	Exp Y
Dr. N. B. Tyagi	Ph.D.	Associate Professor	Philosophy of Religion, Philosophy of Science, Ethics, Social and Political Philosophy, Logic, and Gandhian Philosophy	27
Dr. R. Kannojiya	Ph.D.	Assistant Professor	Indian and Western Philosophy, Consciousness and Ethics	14
Dr. P. Sharma	Ph.D.	Assistant Professor	Epistemology, Analytical Philosophy, Logic, Social and Political Philosophy, and Philosophy of Science	12
Dr. R. V. Sinha	Ph.D.	Assistant Professor	Indian and Western Philosophy, Epistemology, Analytical Philosophy and Philosophy of Language	14
Dr. Shweta	Ph.D.	Assistant Professor	Social and Political Philosophy, Ethics and Gandhian Thought	13
Dr. S. Valecha	Ph.D.	Assistant Professor	Indian Philosophy, Ethics, Feminism and Gandhian Thought	11
Dr. A. Saharan	Ph.D.	Assistant Professor	Indian Philosophy, Western Philosophy, Ethics, Social and Political Philosophy	11

Qual: Qualification; Des: Designation; Exp Y: Experience in years

11. List of senior visiting faculty:

None

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary/*Ad hoc*/Guest faculty:

Year	2011-2012		2012-2013		2013-2014		2014-2015		2015-2016	
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Lecture	13	13	13	13	29	29	14	14	14	13
Tutorial	13	13	13	13	29	29	14	14	14	13

13. Student-Teacher Ratio: 16:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

None

15. Qualifications of teaching faculty with D.Sc./D.Litt./Ph.D./MPhil./PG:

Qualification	2011-12				2012-13				2013-14				2014-15				2015-16			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	6	6			6	7			7	7			7	7			7	7		
M.Phil.	1	1	1	1	1		1	1							1	1			1	1
M.A.											2	2								

P: Permanent; A: Temporary/*Ad hoc*; O: Odd Semester; E: Even Semester

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Title	Business Ethics: Business Leadership in Bhagvad Gita
Department Co-PI	Dr. P. Sharma
Students	S. Bajpai, N. Singh, P. Shukla, A. Singh,Gauri, T. Yadav
Funding Agency	University of Delhi, Innovation Project Scheme
Grant	Rs. 3.5 lakh
Duration	2015-16

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: None

18. Research Centre/facility recognized by the University: None

19. Publications:

Name	Authored/Co-authored/Translated: Books/ Monographs	Edited: Books/ Monographs/ Proceedings	Chapters: Books/ Textbooks	Papers: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular resources including e-resources	Popular Articles/Films
Dr. N.B. Tyagi	1		1	5	1			1
Dr. R. Kannojiya	1		2	3				3
Dr. P. Sharma	1		1	2		6		
Dr. R.V. Sinha	2		2	1		3		1
Dr. Shweta	2			1		2	1	
Dr. S. Valecha	1			1		2		
Dr. A. Saharan	1		2	1		5		1

Books authored/co-authored/translated:

1. Tyagi, N. B.1998.Goodness: The Gandhian Way of Life, Gandhi Peace Foundation, New Delhi, ISBN 10: 8185411166/ISBN 13: 9788185411163.
2. Kannojiya, R. 2010. Hegel's Philosophy: Doctrine of Spirit (GEIST), Lap Lambert Academic Publishing, Saarbrucken, Germany, ISBN 978-3-8433-6366-2.
3. Sharma, P. 2012. Propositional Knowledge: With Special Reference to Gettier Problem, Lambert Academic Publishing, Germany, ISBN 9783659200472.

4. Sinha, R. V. 2002. The Theories of Perception: GE Moore and AJ Ayer, Rajat Publications, New Delhi, ISBN 978-8178800264.
5. Sinha, R. V. 2004. 5th revised edition in 2013. Tarkashatra: Ek Rooprekha (translation of Krishna Jain's A Textbook of Logic), DK Print world, New Delhi, ISBN 8124606498.
6. Shweta. 2006. Human Rights: A Gandhian Perspective, Sarup and Sons, New Delhi, ISBN 81-7625- 624-2.
7. Shweta. 2009. The Humanities: Methodology and Perspectives, Pearson Longman, India, ISBN 978-81-317-2921.
8. Valecha, S. 2001. Gandhi's Law of Conscience, Rajat Publications, New Delhi, ISBN 81-7880-053-5.
9. Saharan, A. 2012.Re-thinking Self-identity with Special Reference to Shankaracharya and Immanuel Kant in the Wake of Globalization, Academic Excellence, New Delhi, ISBN 9380525-54-9.

20. Areas of consultancy and income generated: None

21. Faculty as members in National Committees b) International Committees c) Editorial Boards:

Dr. N. B. Tyagi

- Member, Editorial and Reviewer's Board of Athens Journal of Humanities and Arts: A Journal of the Arts & Humanities Research Division of the Athens Institute for Education and Research; ISSN: 2241-7702.

Dr. R. Kannojiya

- Editor/Reviewer for International Journal of History and Cultural Studies (IJHCS)
- Lifetime Member, All India Philosophical Association, India
- Member, Global Justice and Human Rights, UK.
- Associate Member, Council for Research in Values and Philosophy, USA.

Dr. P. Sharma

- Advisor, Editorial Team, Philosophica
- Member, Indian Association for the Study of Religions
- Member, All India Philosophy Association

22. Student projects:

a. Percentage of students who have done in-house projects including inter departmental/programme

All students are consistently encouraged to undertake projects as this strongly helps in enhancing their analytic skills. Field visits and exposure trips are also a part of this endeavour. Some of the noteworthy projects undertaken by the students are on Justice, Feminism, Ethical issues like Euthanasia, Virtue Ethics, Capital Punishment, Cruelty towards Animals and Female Infanticide. The projects are chosen by students collaboratively with the faculty and then assessed on full class interactive presentations. The students in the erstwhile FYUP Programme did 100% in-house projects as mandatory requirement of their curriculum. In addition to this, 11% our III year students are working on DU Innovation Project.

b. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies

Many students are involved in different kinds of projects as part of their internship programmes outside Miranda House in Research organizations and in several other National organizations. Some students volunteered with

NGOs at rural level working in the field of primary education, healthcare and sanitation, rural enterprise development, deconstructing gender notions, etc.

An illustrative list of some of the internships is given below:

- Ms. S. Bajpai: Pravah(October 2014-March 2015); Make a Difference (June 2015-Feburary 2016) and Centre for Public Initiative (November 2013-March 2016)
- Ms. S. Mandir: Sewa Mandir (June 2015-July 2015); Bhumi (September 2015-October 2015) and Sewa Bharat (October till date)
- Ms. Rimpi: Genesis Media Pvt. Ltd. (May2015-July2015); Art Crunch (June 2015-June 2015); GoUNESCO (June 2015-December 2015) and CampusMag Miranda House Chapter (July-April 2015)
- Ms. Mohini: Robin Hood Academy (February 2015 till date)
- Ms. S. Bindra: Make a Difference (July 2014-March 2015)
- Ms. Y. Sethi: Cry(2015) and Golden Shine (2015)
- Ms. R. Singh: National Commission for Women (June 2014-July2014); Smile foundation (December 2014-January 2015) and CRY (December 2016-January 2016)
- Ms. H. Sood: CRY (September 2015-May 2016); Udaan (June 2015-June 2015); Teach For India Volunteer (December 2015-February 2016) and Josh Talks, Start up(February 2016-May 2016)
- Ms. S. Pandey: MAD (2015-16) and Shiksha Rath (Aug. 2014-Aug. 2015)

23. Awards/Recognitions received by faculty and students:

Faculty Awards

Dr. N. B. Tyagi

- Appointed on deputation as Deputy Dean Academic, DU and In- charge Academic Activities, Gandhi Bhawan, University of Delhi (2013-15).
- Deputy Proctor, Delhi University w.e.f. 17 February 2016.
- Visiting Fellow, International Institute of Peace Studies and Conflict Resolutions, Gandhi Foundation, London, UK, May 1996.
- Signed a Manifesto against Conscription and the Military System at Berlin, Germany, 30 November1996.

Students'Awards

	Award	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
1.	University Rankers Award		5		1	3
2.	S.S. Ahluwalia Award	1	1		1	1
3.	Sanyukta and D.N. Chaudhari Fellowship for Resident Scholars	1	1		1	1
4.	Saroj Bedi Award	1				1
5.	Miranda House Alumnae Association Award (Humanities)	1				
6.	Lady Irwin School Alumnae Association (LISAA) Scholarship				2	
7.	Principal's Award					
8.	College Academic Prize	3	3		3	1

9.	Best Gandhi Study Circle Volunteer Award	1		2		
10.	Outstanding Contribution to TULA, MH Consumer Club				1	
11.	State Scholarship Award Government of Assam		1			
12.	State Scholarship Award Government of Manipur	7	8	1		

In addition to the above-mentioned awards, Shailja Das from III year was selected for JENESYS 2.0 (Cultural Exchange Programme of Government of India with Japan) programme 2015.

Our Philosophy graduates have carved a niche for themselves and have been recognized in diverse fields like media, cinema, administration, governance and others. The list below however, is not an exhaustive list:

- Neeti Mohan is a renowned singer. She has been the winner of the Channel V show *Popstars* and many other shows on Star Plus and other TV channels as well. She is presently working with most famous music composers like A.R. Rahman, Shankar, Ehsaan and Loy and Vishal-Shekhar.
- Reema Lamba (Mallika Sherawat) is an actress and a former model. She is known for her work in many Indian and International movies. A recipient of many awards and having a good critic's reception for her roles, she has also represented India in many foreign countries.
- Roohi Dixit is a famous Director, Producer and a Script Writer. Her critically acclaimed film *Scattered Windows, Connected Doors* won many awards at National as well as International platforms.
- Dr. Pooja Rai is a Director of Institutional Development and trains and sensitizes engineering graduates in communication and soft skills at KC College of Engineering, Management Studies and Research.
- Devyani Shiv is a television actress. She has done many shows on National television since 2009. Currently, she is working under Anil Kapoor's production house; she is doing series of *24 Season 2*.
- Jai Madan is a renowned astrologer and a Vaastu expert. She has earned her reputation as one of the best astrologers in India providing the most comprehensive astrology predictions. She has currently been broadcasting on India News and runs a show named Family Guru.
- Tejasvi Chandok is a journalist at IBN 7. She works with news TV18 and manages Delhi media production for the same.

24. List of eminent academicians and scientists/visitors to the Department:

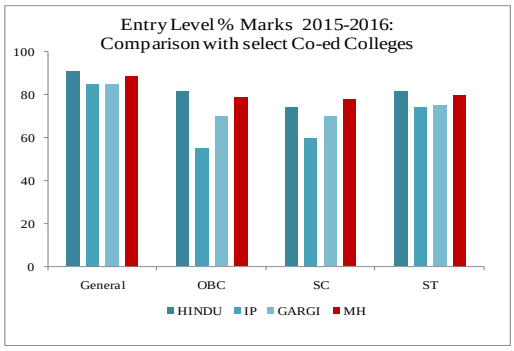
- S.R. Bhatt, Chairperson, Indian Council of Philosophical Research
- Jaya R., Jt. Secretary, Ministry of Information and Broadcasting
- Mrinal Miri, recipient of Padma Bhushan Award and an eminent philosopher and an educationist
- Louis Cabrera, renowned Political Scientist, University of Birmingham, UK
- Tom Sorrell, an eminent philosopher, University of Birmingham, UK
- Daniel Rayeh, University of Tel Aviv, Israel
- Shuva Chakarborty Dasgupta, University of Tokyo
- J. P. Sharma, Delhi School of Economics, DU
- Vibha Chaturvedi, Retired Professor, Department of Philosophy, DU
- G.L. Pandit, Retired Professor, Department of Philosophy, DU
- Kanchana Natarajan, Department of Philosophy, DU
- N. Mukherjee, Department of Philosophy, DU

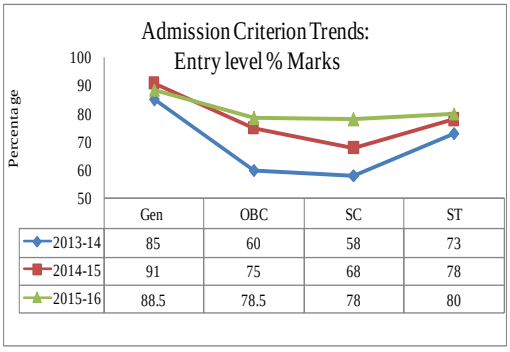
- Shashi Motilal, Department of Philosophy, DU
- Bindu Puri, Department of Philosophy, DU
- Pragati Sahni, Department of Philosophy, DU
- Indu Agnihotri, Centre for Women's Development Studies, DU
- S.P.Gautam, Department of Philosophy, JNU
- Bhagat Oinem, Department of Philosophy, JNU
- Sudhir Kumar Arya, Special Centre for Sanskrit Studies, JNU
- N. Raghuram, School of Biotechnology, GGSIP University, Delhi
- Abdul Bismillah, Retired Professor, Department of Hindi, Jamia Millia Islamia University, Delhi
- Chhanda Chatterji, Retired, Department of Philosophy, Miranda House, DU
- Devasia M. Anthony, Hindu College, DU
- Ruplekha Khullar, JDMC, DU
- Bijayalaxmi Nanda, Department of Political Science, Miranda House, DU
- Srimanjari, Department of History, Miranda House, DU
- Swami Shantatmananda, spiritual teacher and an educationist, Ramkrishna Mission, Delhi
- Swami Paraayananda, spiritual teacher and an educationist, Ramkrishna Mission, Delhi

25. Seminars/Conferences/Workshops organized & the source of funding:

- National Seminar on *Rights and Obligations* sponsored by Indian Council of Philosophical Research, 2001
- Certificate Course in value based education, *Living Values*, 24 February-05 April 2016

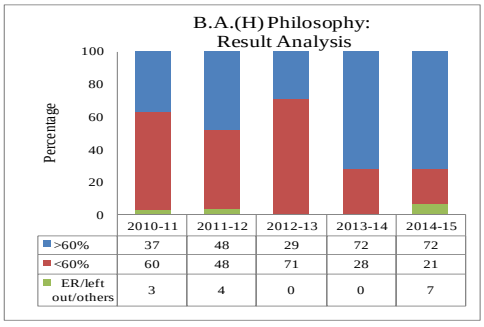
26. Student profile programme/course-wise:





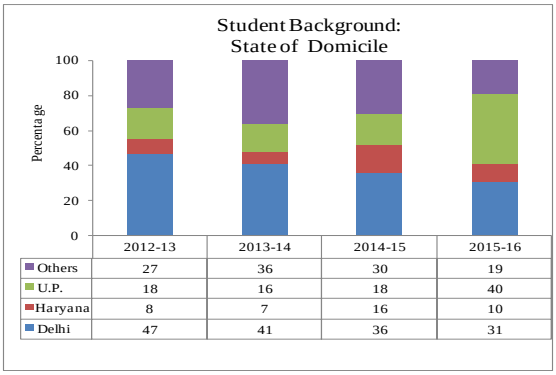
	Gen	OBC	SC	ST
2013-14	85	60	58	73
2014-15	91	75	68	78
2015-16	88.5	78.5	78	80

It is evident from the analysis of the cut-off percentages that the Department of Philosophy has been showing consistent increase in its cut-off percentages over the years in all categories indicating towards an increasing competition to get admission to the course. Also, there is little variation in the cut-off percentages for the various categories of students taking admission in the course.



	2010-11	2011-12	2012-13	2013-14	2014-15
>60%	37	48	29	72	72
<60%	60	48	71	28	21
ER/left out/others	3	4	0	0	7

27. Diversity of Students:



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

More than 50% of our M.A. seats are filled up by our own college graduates. Many of our students are teaching in various colleges of the University of Delhi like Lady Shriram College for Women, Hindu College, I.P. College, Shyama Prasad Mukherjee College for Women and Laxmibai College. Two present faculty members of the Department, Dr. N. B. Tyagi and Dr. Shweta are alumnae of the College. Besides academics, our students have proved their mettle in other fields as well. Vibha Yadav joined the Uttarakhand Judicial and Legal Service as Civil Judge (Jr. Div.) Udham Singh Nagar in her first posting. She is at present serving the Uttarakhand Judicial and Legal Academy as Assistant Director. Nancy Moirongthem is working as a State Civil Administrator in Manipur.

29. Student progression:

Student progression	Against % Enrolled
UG to PG	70
PG to M.Phil.	18-20
PG to Ph.D.	10
Entrepreneurship/Self-employment	5

30. Details of Infrastructural facilities:

a) Library: The Department library has 214 books which is updated on a regular basis to keep pace with demands of the changing curriculum. The Philosophy section in the main College Library has 4034 books. It also subscribes two Journals of Philosophy on regular basis. These are *International Philosophical Quarterly* and *Indian Philosophical Quarterly*.

b) Internet facility for staff and students: The college campus is equipped with Digital Resource Centre (DRC) and WiFi connectivity. Netbooks have been issued to faculty members and laptop to students. The class rooms used by the Department have ICT facility.

c) Classroom with ICT facility: The Department has been provided with multimedia enabled rooms for teaching purposes.

d) Faculty room: The Department has independent workstations for each teacher. It is also equipped with a desktop and a printer.

31. Number of students receiving financial assistance from college, university, government or other agencies:

Year	College	Government	Total
2010-2011	5	7	12
2011-2012	4	9	13
2012-2013	3	1	4
2013-2014	1		1
2014-2015	2		2
2015-2016	1		1

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts:

The Department regularly organizes lectures by eminent academicians specializing in various areas of Philosophy as well as from several related fields. There is special emphasis on generating social and political awareness among students through discussing and debating current events and thereby analysing their impact in the present scenario. The Department organizes its Annual Fest *Gnosis* which involves panel discussion on some contemporary topic followed by various competitive events like Debate and Quiz where students get opportunities to use their skills and create awareness. We have always believed that lessons need not necessarily be confined to the classroom. Learning in fields provides a better opportunity for bonding between teachers and students. Some of the trips undertaken by our students, accompanied by the teachers, are as follows:

Year	Places Visited
2005	Jim Corbett National Park and Nainital; Chandigarh
2006	Dharmshala and McLeodganj
2011	Udaipur and Chittorgarh
2013	Haridwar, Rishikesh and Shivpuri
2014	Jim Corbett National Park and Nainital
2016	Kurukshetra

33. Teaching methods adopted to improve student learning:

The Philosophy discipline has a wide range of papers which makes it possible for the students to be able to engage with the ideas of information and research along with acquiring inter personal skills, decision making skills, business communication, thereby grooming them into refined, confident, articulated young professionals, ready to face the cut-throat competition in the corporate world. While papers like Philosophy of Science; Philosophy of Mind; Contemporary Philosophy, Continental Philosophy and many others help in enhancing the analytical skills of our students; papers like Ethics and Indian Philosophy emphasize on the movement of thought from logical reasoning to inner awakening of the Self.

Our objectives that form a part of our collective vision as a Department are:

- Knowledge with human values
- Competitive spirit with mutual respect and trust
- Social dynamism with cultural sensitivity and tolerance
- Leadership with the sense of equality and social justice
- Sportive spirit to face the challenges of life with positivity

- To promote an interdisciplinary approach in research activities
- Sustained and continuous mentorship and guidance to students

Hence, our prime mission is to merge traditional wisdom with progressive streams of knowledge including technical awareness. Our Department has dedicated faculty to supplement traditional-learning modules with the latest development in pedagogical practices. The Department has parallel formal and informal feedback systems which complement each other. At the formal level, the students are asked to give their feedback on course curriculum and teaching practices. In an informal manner, through engagement with students in the course of the activities by agencies such as the departmental societies, their opinion is regularly taken into account and their concerns addressed to. Importance of team work and more tolerant to each other, skill for leadership, better communication skills, voluntariness for self-service and less dependence on others help in enhancing the team spirit and organizational capabilities of our student community. Interactive lectures where students are encouraged to ask questions and ample practising of exercises in reasoning papers like Logic are some of the key tools that are employed to enhance the very process of learning. PowerPoint presentations, screenings of films on themes related to the subject and educational trips go a long way in making the subject both comprehensible and enjoyable. The invaluable moral and political legacy of Gandhiji has been kept alive through Gandhi Study Circle. This society holds lectures and talks every year to encourage students to uphold values like non-violence and truth and thereby participate in the process of holistic education and character building.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Students of the Department participate in ISR and Extension activities through units such as NSS, NCC, Gandhi Study Circle and Vivekananda Society and several other forums. Many of our students volunteer with NGOs at rural level working in the field of primary education, healthcare and sanitation, rural enterprise development and deconstructing gender notions thereby contributing to various social causes related to the environment, marginalized sections of society and many others.

Gandhi Study Circle provides an active platform to the students to express diverse opinions on different topics and it goes beyond promoting Gandhian values. Every year the society organizes a wide range of programmes and competitions. To name a few: *Gandhi Vichar* was organized in the month of September 2015 to discuss the life of Gandhi and what we can learn from his life's events. Same year on the occasion of Gandhi Jayanti, Cleanliness Drive was organized inside and outside the campus and students performed a play titled *Humkisgali jaarahe hain?* in the college auditorium and in Gandhi Bhawan as well. This play is a modern adaptation of Bhartendu Harishchandra's play *Bharat Durdasha*, which questions todays' ways of conduct and tries to explain why Gandhian ideology is relevant in day to day life. Our students visited various orphanages and NGOs like Nirmal Hriday, Palna, Kilkari, etc. to promote Gandhian ideology and conducted a survey to know how contemporary youth perceives Gandhi. In *Antardhvani* 2015, our students performed a play titled *Aakhir hum hi haijimmedar* whose major theme was awareness regarding cleanliness drive *Swach Bharat Abhiyaan* and why sanitation is a major issue in India. Gandhi Study Circle celebrated Khadi Utsav from 30 September to 01

October 2015 where Khadi apparels, village industries' products, books and souvenirs were sold so as to promote small scale cottage industries. Charkha Exhibition witnessed with lots of enthusiasm by students and faculty as well.

Vivekananda Society provides an active forum to our students to experience the invaluable lessons of universal brotherhood and global harmony not only in the external world but as an integral constituent of their own lives. The society celebrated *Universal Brotherhood Day* on 11 September 2015 by putting up an informative board on *Chicago Address* and felicitated a book stall by Ramakrishna Mission, New Delhi. The volunteers of Vivekananda Society were given copies of Chicago Address so that they could get insight of Vivekananda's message of Religious Pluralism. The volunteers also participated in the screening of the documentary *Half the Sky* on20 October 2015**;** where some women achievers were awarded. This proved to be an inspirational event for the participants. The volunteers participated in *India Today Mind Rocks* event where they had a chance to listen to various actors, musicians, eminent politicians and entrepreneurs. The *National Youth Day* was celebrated on 12January 2016 and an exhibition of display boards containing Swami Vivekananda's photographs, teachings and messages was organized. The same day Swami Shantatmananda, the Secretary, Rama Krishna Mission, New Delhi, delivered a lecture on *Relevance of Vivekananda Today* followed by an Interactive session of Swami ji with the students. An essay competition on the topic *Role of Youth in Nation Building* was conducted and a movie *The Light: Swami Vivekananda* was screened. On 30 January 2016, our students participated in *Youth Convention* organized by Ramakrishna Mission, New Delhi, where the eminent speakers from diverse fields addressed various social issues.

In addition to this, several students of the Department are currently participating in an ongoing University of Delhi Innovation Project, which through field work provides to students the experience of working with different sections of society.

35. SWOC analysis of the department and Future plans:

Strengths

- Dedicated faculty with consistent record of research publications.
- Highly motivated faculty and eager students work as an ideal combination for learning.
- Using novel ideas to make the teaching learning process more learner centric.
- Encouragement of students' participation in decision-making of departmental activities.
- Philosophy Department through its curriculum also highlights basic human values and prepares ground for social peace and harmony by creating a sense of self-discipline, social service and tolerance.
- We have representation by a large number of faculty members in Board of Studies contributing to curriculum design and implementation.
- We owe the distinction of being a cosmopolitan college that comprises of students and faculty from different regions of the country. Therefore, one of our primary ideals has been the recognition of significance of diversity in all its endeavours, academic and non-academic as well.
- Our students are the biggest asset of the Department as they bring laurels to the college in the form of University toppers regularly. The Department provides a strong foundation to each one of our students for excelling in

various fields such as academics, research, civil services, social work, law, human resource development and public relations.

- Gandhi Study Circle and Vivekananda Society help in providing an enlightening and illuminating environment conducive to fostering young minds and souls by equipping them with the best academic excellence along with nurturing them to realize one's inherent potential.

Weaknesses

- As a constituent college of Delhi University we are constrained by the difficulty of curriculum innovation.

Opportunities

- Faculty members are encouraged to participate in Refresher Courses, Orientation programmes; academic discussions and to present papers in National and International seminars/conferences.
- B.A. (H) Philosophy offers a number of opportunities to students. The Department provides a strong foundation to its students for excelling in various fields such as academics, research, civil services, social work, law, human resource development, public relations, media and advertising and so on.

Challenges

- To motivate students for pursuing a research career.
- Establishing quality research and academic level publications.
- Adjusting to new forms of pedagogy and new technologies.
- Providing better resources for marginalized students.

Future Plans

- The Department has plans to come out with a research journal to showcase the research projects undertaken by the students.
- Organizing National and International level seminars/conferences/workshops sponsored by UGC.
- To inculcate and focus more on research in the form of innovative projects for all the students.
- The teachers are looking forward to undertake short-term Exchange Programmes with other International and National Universities.
- Developing Add-on Courses.

Evaluative Report

Department of Political Science

1. **Name of the Department:** Political Science
2. **Year of Establishment:** 1948
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**
   UG: B.A. (H) Political Science; B.A. Programme with Economics, Geography, History, Mathematics, Philosophy and Physical Education
4. **Names of Interdisciplinary courses and the departments/units involved:**
   The students of B.A. (H) Political Science study following courses offered by humanities, other social sciences and Mathematics departments:
   - Credit and Qualifying Language
   - Ability Enhancement Compulsory Course (AECC)
   - Generic Elective Courses (GE)
   - Interdisciplinary Concurrent Course (IDC)
   - Discipline Centred Concurrent Course (DCCC)
   - Allied Course (for erstwhile FYUP)
   - They also study Environmental Studies.
5. **Annual/ semester/choice based credit system (programme-wise):**
   Choice Based Credit System in Semester Mode was introduced in 2015-16.
6. **Participation of the department in the courses offered by other departments:**
   The Department of Political Science offers the following courses for the students of other departments: Generic Elective Courses (GE), Ability Enhancement Elective Courses (AEEC), Interdisciplinary Concurrent Course (IDC), Discipline Centred Concurrent Course (DCCC), and Allied Course (for erstwhile FYUP) to students of humanities, social science and Mathematics.
7. **Courses in collaboration with other universities, industries, foreign institutions:**
   A vibrant collaboration has been established with the Department of Women Studies, University of Wisconsin, Eau Claire (UWEC), USA, in the area of Transnational Feminism. The courses already held are from 05 to 23 January 2015 at MH and 14 September to 05 October 2015 at UWEC, USA. The next course will be held from 02 January to 23 January 2017 at Miranda House.
8. **Details of courses/programmes discontinued (if any) with reasons:** None
9. **Number of teaching posts:**

Post	Sanctioned	Filled
Associate Professor		3
Assistant Professor	8	8

10. **Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./Ph.D. / M. Phil. etc.):**

Name	Qual	Des	Specialization	Exp Y	Research Guidance
Dr. J. Pillai	M.Phil. Ph.D.	Associate Professor	Public Administration, Governance and Management; IGP	33	

Dr. P. Roy	M.Phil. Ph.D.	Associate Professor	International Relations and Political Economy of Africa	32	Ph.D.: 1; 3[O]
Dr. B. Nanda	M.Phil. Ph.D.	Associate Professor	Political Theory; Gender Studies; Human Rights	22	
Ms. K. K. Subha	M.Phil.	Assistant Professor	Political Theory, Western Political Philosophy, IGP	15	
Dr. N. Singh	Ph.D.	Assistant Professor	Public Administration, Governance and Management; CNI	9	
Ms. H. Singh	M.Phil.	Assistant Professor	Western Political Thought; Political Theory	11	
Ms. P. Kumari	M.Phil.	Assistant Professor	Political Theory; CP; Gender Studies and H R	11	
Dr. R. Kumari	M.Phil. Ph.D.	Assistant Professor	IPT; Political Theory; Education Policy	4	
Ms. S. Chitalkar	M.Phil.	Assistant Professor	International Relations; Education Policy; IPT	3	
Dr. S. Sahu	M.Phil. Ph.D.	Assistant Professor	Political Theory; WPT; Gender Studies	3	
Dr. R. Gopi	M.Phil. Ph.D.	Assistant Professor	International Relations; Gender Studies	3	
Ms. S. Sharma[A]	M.Phil.	Assistant Professor	Indian Government and Politics, Political Theory	8	

Qual: Qualification; Des: Designation; Exp: Experience in years;[A]:*Ad hoc*; [O]: Ongoing

11. List of senior visiting faculty:

- Prof. Asha Sen, Department of English & Women Studies, University of Wisconsin, USA, 05 to 23 January 2015.
- Prof. Theresa Kemp, Department of English & Women Studies, University of Wisconsin, USA, 05 to 23 January 2015.

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary/ *ad hoc/* guest faculty:

Year	2014-2015		2013-2014		2012-2013		2011-2012		2010-2011
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even	
Lectures	38	40	40	39	44	42	45	40	17
Tutorials	23	17	19	16	21	17	18	16	8

13. Student -Teacher Ratio (programme-wise): 15:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: None

15. Qualifications of teaching faculty with D.Sc./D.Litt./ Ph.D./ M.Phil. / PG:

Qualification	2011-2012				2012-2013				2013-2014				2014-2015				2015-2016			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	4	4			4	4	1	1	4	4	1	1	3	3	1	1	7	7		
M.Phil.	8	8	2	2	8	8	5	5	8	8	6	6	7	7	5	5	11	11	2	1

P: Permanent, A: Temporary/*Ad hoc*, O: Odd semester; E: Even semester

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Number of faculty	Number of ongoing projects	Total grant (lakh)
5	5	11

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Title	Details
Project	Discrimination Against Girls and Access to Housing Rights to Women: Selected Study in Delhi & NCR Regions
Principal Investigator	Dr. B. Nanda
Funding Agency	National Foundation of India United Nations Population Fund
Grant and Duration	Rs.2 lakh; July to December 2015
Project	Youth Perception of National Interest in Foreign Policy: A Comparative Study of Universities of Delhi, Jadavpur and Madras
Department Co-PI	Dr. P. Roy and Ms. K.K. Subha
Student Participants	Preeti, Shehal, Ifra and Ananya
Funding Agency	DU
Grant and Duration	Rs.3.5 lakh; 2015-2016; ongoing
Project	Gender Socialization: A Comparative Perspective of Matrilineal & Patrilineal Societies
Department Co-PI	Dr. P. Roy
Student Participants	Aayushi, Divyanshi, Shubhangini, Shabnam
Funding Agency	DU
Grant and Duration	Rs.3 lakh; 2013-2015; completed
Project	Kashimiriyat and Beyond: Study of Colonial Kashmir
Department Co-PI	Ms. P. Kumari
Student Participants	Tammana, Deepti, Ishani, Sonal and Pausali
Funding Agency	University of Delhi
Grant and Duration	Rs.2.5 lakh, 2013-2015; completed

18. Research Centre /facility recognized by the University: None

19. Publications:

Name	Authored/Co-authored: Books/ Monographs/	Edited Books/ Monographs/ Proceedings	Chapters: Books/ Textbooks	Papers: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular resources including e-resources	Popular Articles
Dr. J. Pillai				2				2
Dr. P. Roy	1		1	1				
Dr. B. Nanda	1	1	4	6	1	21	4	5
Ms. K.K. Subha						2		
Dr. N. Singh				1		5	6	
Ms. P. Kumari			4	2		5	8	
Dr. R. Kumari			1	6	2	3		
Ms. S. Chitalkar			4	1		3		1
Dr. S. Sahu	1	1	3	10		4	1	
Dr. R. Gopi		1	1	3		5		
Ms. S. Sharma [A]	2		2					2

[A]: *Ad hoc*

Books

- Motilal, S. & Nanda, B. 2006. Human Rights, Gender and Environment, Allied Publishers, New Delhi.
- Roy, P. 2012. Political Parties and Trade Unions in India, Lambert Academic Publishing, Saarbrucken, Germany.
- Sahu, S. 2015. Gender, Sexuality, and HIV/AIDS: Exploring Politics of Women's Health in India, Sage, New Delhi.

20. Areas of consultancy and income generated:

Dr. B. Nanda	
State, Women and Girl Child Policy for Government of Odisha; 2013	United Nations Population Fund, Rs.1 lakh
State, Women and Girl Child policy for Government of Rajasthan; 2012	United Nations Population Fund, Rs.1 lakh
Expert Review of Advocacy for Change: Repositioning Family Planning-Promoting Birth Spacing; 2012	Population Foundation of India, Rs.60,000
Certificate Course on Population and Sustainable Development and Gender & Development; 2011	IGNOU & PFI, Rs.1.12 lakh

21. Faculty as members in a) National Committees b) International Committees c) Editorial Boards:

a) National Committees

- Dr. B. Nanda, Advisory Board, Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act, Government of Delhi, in 2015-16,& State Supervisory Board, Pre-Natal Diagnostic Techniques (PCPNDT) Act, Government of Delhi, in 2013-15.
- Dr. J. Pillai, Faculty Consultant, National Consumer Help Line Phase II, Ministry of Consumer Affairs, Government of India, in 2010-2011,&Life Member of Indian Institute of Public Administration (IIPA),Government of India.

b) International Committees: None

c) Editorial Boards: None

22. Student projects:

a) Percentage of students who have done in-house projects including inter-departmental/programme

The Department recognizes the need for making project work a mandatory requirement for all courses. Consequently, students undertake projects on all papers under the supervision of the concerned teacher. This practice of the Department has been lauded over the past three decades. These projects are undertaken in various formats including group work as well as individual presentations. They entail field work, case studies, literature surveys, and data collection with emphasis on interpretations. As an incentive, projects are assigned marks to be included in Internal Assessment. In the prestigious DU Innovation Projects 8% students and three faculty members have been engaged (Item 16). The following is an illustrative list of the projects linked to curriculum, carried out beyond classrooms by students in each paper in the even semester 2016.

Political Theory-Concepts and Debates

- Portrayal of Women in Indian Cinema: Ambi, Nitmen, Nilza, Rinchen
- A Debate on Capital Punishment: Ambi, Lisa
- Capital Punishment and Witchcraft: Anjali Mathur
- Freedom of Speech and Expression: Joyee, Kanupriya, Aanchal, Tarini, Madhulika

Political Process in India

- Secularism in India: Bhavneet, Tarini, Joyee
- Caste in India with Special Focus on Bihar: Ambi
- Hindutava Ideology: Bavneet
- Political Parties and Party System in India: Tarini

Public Policy and Administration in India

- An Analysis of Union Budget-2016: Shreya, Kiran, Sridevi
- MNREGA: Juhi
- NRHM: Smriti Tejaswee, Raveena
- SSA: Arti
- PDS: Prachi

Political Processes and Institutions in Comparative Perspective

- Democratization: Annu, Angana, Arti, Prachee, Ravina
- Decolonization in China and India: Sehel, Mrinalini, Sridevi, Juhi
- State Socialism in a Comparative Perspective: Harshita, Sneha, Salini, Sreya
- Globalization and New Imperialism: Ananya, Titiksh, Charu
- Globalization and Imperialism: Shallu, Juhi, Preeti, Ishani, Paushali

Global Politics

- Technological Dimensions of Globalization: Akansha,Titiksha
- Apple versus FBI Debate: Deepti, Kiran, Sonam, Annu
- Globalization and Poverty: Emily, Keziah
- International Terrorism: Sushrija,Sakshi
- U.S. and Terrorism: Smriti,Tejaswee, Arti

Western Political Thought

- Mary Wollstonecraft's Critique of Rousseau's Idea of Education: Navishti, Aastha
- Karl Marx on Historical Materialsim: Sonal, Namdrol, Shambhavi
- Modernity and its Discourses: Prerna, Oindrilla, Vaishnavi
- Enlightenment and Modernity: Nandini
- J.S. Mill, On Liberty: Eshani Chawla

Indian Political Thought

- Nehru and Tagore: Navashti, Aastha, Sonal
- Savarkar's Hindutva: Eshani, Khyati, Neha
- Ambedkar's Annihilation of Caste: Shambhavi, Somya, Richa
- Gandhi's Hind Swaraj: Namdrol, Choedon, Yangkyi
- Lohia's Socialism: Chozom, Zojila, Lalrinberi

Theories of Administration

- Evolution of the Theories of the Administration: Nandini, Aishwarya, Eshani
- SSA: Shabnum, Neha, Jasvinder
- MNREGA: Choedon, Yangkyi, Chozom
- PDS: Sangeeta, Somya, Richa
- NHRM: Priyanka, Zojila, Shambhavi

India's Foreign Policy

- Indo-U.S.A. Relations Political Cartoons: Aastha, Antaripa, Adrika
- Indo-Russia Relations Political Cartoons: Boijayanti, Himani, Himangini
- India-Pakistan Relations Political Cartoons: Nandini, Navroz, Navishti
- India-China Relations Political Cartoons: Eshani, Arushi, Aba
- India-Sri Lanka Relations Political Cartoons: Bhawana, Bharti, Kaavy

b) Percentage of students placed for projects in organizations outside the institution, i.e.in Research laboratories/Industry/ other agencies

It has been a practice to recommend students for internships in other educational institutions, Government organizations, Social-sector entities, Non-governmental organizations and the corporate sector, through the rich network of linkages developed by the Department. An illustrative list of internships with full logistics completed is given below. This includes international opportunities leveraged by the students.

- Preeti, Health from Global Perspective, University of Sussex, UK,July 2016.
- Titiksha, Rights of Women in Urban Delhi Slums, Hope in U, June 2016.
- Ambi, Digital Transformation and Politics, Fredrich-Ebert-Stiflung, India, 2016.

- Deepti, Transnational Feminism, University of Wisconsin, USA, December 2015.
- Shristi, Transnational Feminism, University of Wisconsin, USA, December 2015.
- Ishani, Understanding Masculinities, Centre for Health and Social Justice, 2015.
- Paushali, Understanding Masculinities, Centre for Health and Social Justice, 2015.
- Chhavi, Understanding Masculinities, Centre for Health and Social Justice, 2015.
- Sakshi, Girl Child Rights, Girls Count, Summer2015.
- Eshani, Understanding Rural Intervention, Project Avani, Summer2015.
- Ambi, Editing Articles on Women and Politics, Women's Features Services, 2015.
- Devyanshi, Women's Reproductive Health, UNFPA, 2014.
- Varalika, Study of the Bhopal Gas Tragedy, INGAF Summer 2016.
- Suman, Educating Children of Sex-workers, Kathputli, Summer 2013.
- Sumana, Teach India, 2013.

23. Awards / Recognitions received by faculty and students:

Faculty Awards

J. Pillai	Three Weeks Course Award by University of Wisconsin, 2015
B. Nanda	Three Weeks Course Award by University of Wisconsin, 2015
P. Kumari	Best Display Award at Antardhwani, Innovation Project Kashmiriyat: A Study of Colonial & Post-Colonial Kashmir, 2015
P. Roy	Three Weeks Course Award by King's College London, 2014
	Excellence in Teaching; University of Delhi, 2007

Students' Awards

University Rank Holders														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
1		1		1	1		1	1				1		1
College Academic Award														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
2			2			2			2			1		
Golden Jubilee														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
									1					
Principal's Medal														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
									1					
Department of Political Science Award														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
2			2			2			2					

Dr. Angeli Qwatra Award of Excellence (Humanities)														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
									1					
Lady Irwin School Alumnae Association (LISAA) Scholarship														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
									1					
Yashoda Fellowship														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
			1			1			4			1		
Sports Award														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
I	II	III	I	II	III	I	II	III	I	II	III	I	II	II
					1			1	1					
NSS Award														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
									1			1		
For outstanding contribution to Enactus														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
												1		
For contribution to the Students Union														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
2			1									2		
N.N. Kesar Memorial Award for competence in the field of Vocal Music														
2010-11			2011-2012			2012-2013			2013-2014			2014-2015		
									1					

24. List of eminent academicians and scientists/ visitors to the department:

Members of Parliament and State Legislatures

- Sheila Dixit, Chief Minister, Delhi, 2001.
- Arvind Kejriwal, presently Chief Minister of Delhi, former RTI activist, 2008.
- Chandan Mitra, Member of Rajya Sabha, former Editor, Pioneer, 2008.
- Swapan Dasgupta, presently Member of RajyaSabha, former senior journalist, 2008.
- Kiran Walia, MLA, Legislative Assembly, Delhi, 2010.

Activists

- Gloria Steinem, American feminist, social and political activist, 2013.
- Shabana Azmi, actor, activist and former Member of Rajya Sabha, 2012.
- Kamla Bhasin, feminist and social activist, 2016.
- Bejon Mishra, consumer activist, 2015.
- Mallika Sarabhai, feminist and social activist, 2012.

Academicians

- J. B. G. Tilak, Vice-Chancellor, NUEPA, 2016.
- AchinVanaik, Eminent Political Scientist, 2016.

- Radhakrishnan Pillai, University of Mumbai, 2015.
- Michael Robert Reinhard, Prof. of Pol. Sc, Millsaps College, USA, 2015.
- Pratap Bhanu Mehta, President, Centre for Policy Research, 2011.
- Jill Steans, Department of Political Science and International Studies, University of Birmingham, 2014.
- Tom Sorell, University of Birmingham, UK, 2012.
- Louis Cabrera, University of Birmingham, UK, 2012.
- Krishna Kumar, Eminent Educationist, 2010.
- Andre Betille, Eminent Sociologist, 2009.
- Rajni Kothari, Eminent Indian Political Scientist, 2008.
- V. R. Mehta, Vice-Chancellor, DU, 2000.
- Sudha Pai, JNU, 2008.

Journalists

- Paranjoy Guha Thakurta, Journalist and Political Commentator, 2011.
- Vinod Sharma, Journalist and Political Commentator, 2010.
- Gautam Roy, Journalist and Political Commentator, 2008.

Bureaucrats

- Sanjay Beniwal, IPS, 2012.
- Satish Agnihotri, IAS, 2015.
- Pankaj Mittal, Additional Secretary, UGC, 2015.

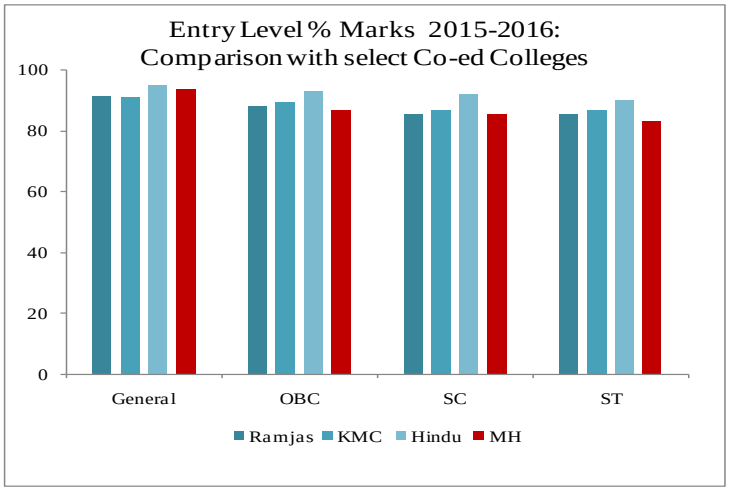
25. Seminars/Conferences/Workshops organized & the source of funding:

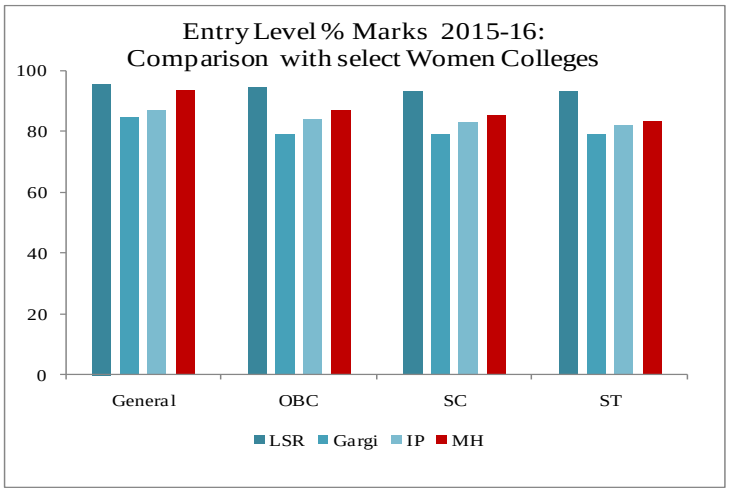
S.No.	Seminar/Conference/Workshop	Organizing/Funding Agency	Year
International			
1	Collaborative Programme	UWEC, USA	2015
2	Conference on Global Justice	University of Delhi/Yale/Birmingham	2014
National			
1	Democracy, Social Exclusion & Rights in Contemporary India	ICSSR, New Delhi	2016
2	PC-PNDT Act: Structure and Status	National Foundation of India (NFI)	2015
3	Workshop on Wajood	CFAR&ASAP-India	2015
College Level			
1	Indo-U.S. Relations	Ecclesia	2015
2	Gender and International Relations	Ecclesia	2014
3	Religious Diversities: History & Politics in Modern India	Ecclesia	2013
4	Interrogating the Indian State	Ecclesia	2012

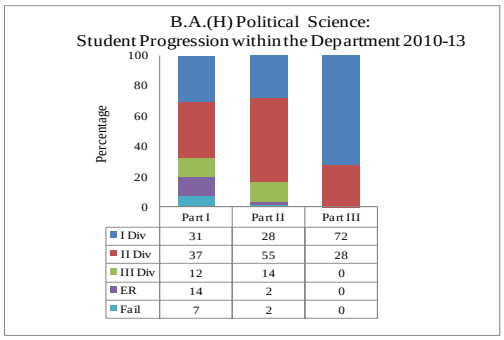
Public Lectures				
S.No.	Resource Person/s	University/Institution	Topic/Theme	Year
1	J.B.G. Tilak	V-C, NUEPA	HEP: Past and Future Trends	2016
2	Satish Agnihotri	Cabinet Secretary, GOI	Nature of Corruption in India	2015

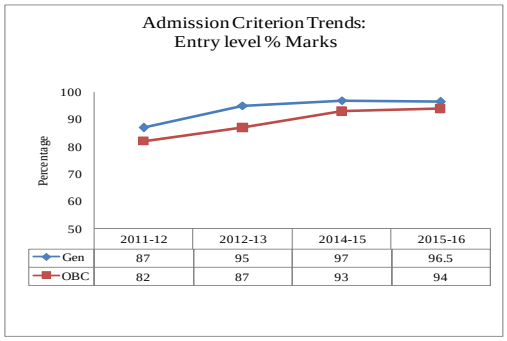
3	R. Krishnan Pillai	University of Bombay	Kautilya and Statecraft	2015
4	Sanjay Maini	British Embassy	Women and Digital World	2015
5	Gurpreet Mahajan	JNU	Cultural Diversity in India	2015
6	Ujjwal Singh	University of Delhi	State and Democracy in India	2015
7	Elizabeth Hill	University of Sydney	Women in Globalizing India	2014
8	Stephen Shute	Chair, Department of LPS, University of Sussex	Individualized Criminalization: CPO & Reduction of Serious Crime	2014
9	Anupama Roy	JNU	Making Citizenship Familiar	2014
10	M.N. Thakur	JNU	Role &Relevance of Marxism	2013
11	Harish Dhawan	Activist, PUDR	State and Anti-Terror Laws	2011

26. Student profile programme/course-wise:

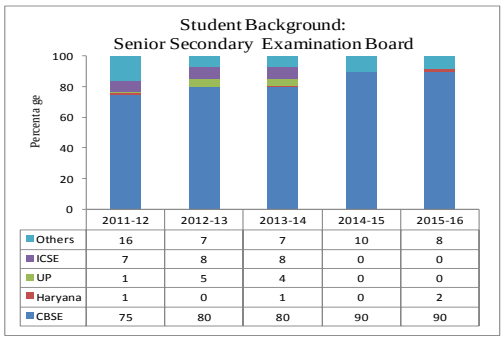


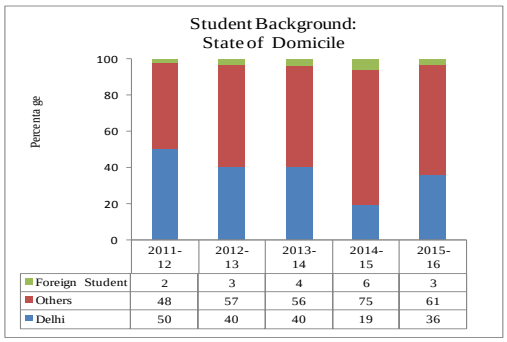


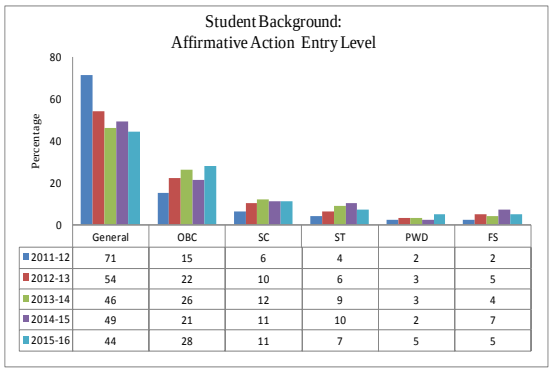




27. Diversity of Students:







28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense service?

The most preferred career choices of Political Science students are Civil and Defence Services. Outstanding achievements are Shahla Nigar, IAS (Second Position, 2000), Dibya Gupta, Indian Defence Examination (2014), Nivedita Jha, Bihar Public Service Commission (2013). Around 15% of the students clear the UGC-NET.

29. Student progression:

Student Progression	Against % Enrolled
UG to PG	75
PG to M.Phil.	60
PG to Ph.D.	20
Entrepreneurship/Self-employment	10

30. Details of Infrastructural facilities:

a) Library: The college library has 3,874 books in the stacks. This includes 32 books added in the current year. The Department maintains its own library.

b) Internet facilities for staff and students: Internet/WiFi facilities are available across the college campus. Faculty members are issued netbooks by the college.
c) Classrooms with ICT facility: The Department has been provided with ten multimedia enabled rooms for teaching purposes. Students make use of digital resources.
d) Faculty room: The Department has a comfortable faculty room with individual work- stations, lockers, a desktop and a scanner-cum-printer.

31. Number of students receiving financial assistance from college, university, government or other agencies:

Category	2012-13	2013-14	2014-15	2015-16
College	04	11	01	02
DU	02	01	02	06
Government		01	01	02
Others	03	08	07	04
Total	09	21	11	14

Persons with Disability (PwD) are given fee waiver in the college and hostel as per the rules. In the academic year 2015-16, seven students from the Department have benefited under this scheme.

32. Details on student enrichment programmes (special lectures/workshops/ seminars) with external experts:

As a part of student enrichment, regular public lectures, workshops and seminars are conducted, giving students an exposure to the practioners in the field. A detailed reference has been given in item number 25.

33. Teaching methods adopted to improve student learning:

Teaching Methods: The faculty members in the Department use contemporary teaching methods to make learning experiential. This involves the use of debates, discussions, movie-screenings, quiz, and drama. Value addition to the courses is also done through workshops. For instance a consumer awareness workshop is conducted every year in a self-financing mode. Drama is used regularly in street play format to highlight certain important political issues. The Department also takes students on field visits and study trips. An illustrative list of the teaching methods is given below:

Films Screened: The Hunting Ground, 2015; Khuda Ke Liye, 2015; Mona Lisa Smile, 2015; Godan, 2015; Hazaron Khwashien Aise, 2014; Lament of Niyamraja, 2014; Shot Dead for Development, 2014; Ghaire-Bhaire, 2013; Gandhi, 2013;Water: the Source for Sale, 2012; No Man's Land, 2012.

Street Plays and Dramas: On Corruption entitled Bhrashtachar was performed on 30 October 2015; on Food Safety and Adulteration at Delhi Secretariat as a part of National Consumer Day Celebrations on 23 December 2015; Skit on Feminist Critique of Justice in 2011; Mock Consumer Court in January 2013.

Political Speech Analysis: Students were shown the live telecast of the Union Budget, which was followed by discussion on 29 February 2016; Atal Bihari Vajpayee's speech of 29 May 1996 in the Parliament on Confidence Motion, March 2016.

Study and Field Visits: Municipal Corporation, Delhi, 2016; annual visit to Maurice Nagar Police Station, 2016; Indian Institute of Advanced Studies,

Shimla, to study the use of research methods, 2012; Rajasthan, District Alwar, to observe the working of Panchayati Raj Institutions, 2011; Visit to Centre for Women's Development Studies, 2011; Wagah Border, 2011; National Rural Health Mission, Chandigarh, to interact with ASHA workers and Health Officials, 2010; Visit to Kasauli, Chahal, 2010.

The Department also regularly conducts seminars and public lectures in every session. The details have been mentioned in item number 25.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

The Department promotes the institution/ neighbourhood community network and student engagement through its various formal and informal structured society and units. Faculty members have been conveners of *TULA*, MHCC (Dr. J. Pillai), NSS (Dr. P. Roy and Dr. N. Singh), Enactus (Dr. J. Pillai and Ms. K.K. Subha), Women's Development Cell (WDC) (Dr. B. Nanda) and NCC (Dr. P. Roy). The Department through its community outreach programmes and its collaboration with NGOs is working towards generating awareness towards health, sanitation, consumer affairs and girl-child issues. It provides a space for students to participate in Institutional Social Responsibility and Extension Activities. Some of the main programmes run through *TULA*, NSS, Enactus and WDC are as follows:

TULA, Miranda House Consumer Club: The consumer awareness movement in Miranda House has come a long way. In its ten years of existence, *TULA* has been instrumental in changing perceptions and creating an empowered and aware group of students. It has pioneered a consumer awareness movement across the North Campus of the University of Delhi. Members of *TULA* participated in the National Consumer Day Celebrations conducted by the Delhi Government at the Secretariat on 23 December 2015 and presented a Nukkad Natak in the presence of Minister of Food, Supplies and Consumer Affairs Hon'ble Shri Imran Hussain and were awarded certificates of appreciation and participation. Every year *TULA* organizes annual workshop on Consumer Awareness with various interactive sessions which draws participation from a large number of students and faculty. Some of these activities are in collaboration with the government and non-governmental agencies. For example, in April 2016 Mr. Anshuman Shukla, Manager, Learning Links, Google India, enlightened the students about internet safety, cyber bullying, phishing, and digital footprint. Prizes and certificates of participation are given to the winners of competitive events and participants.

WDC: A number of activities are organized to raise awareness about violence against women in society.The inaugural event of One Billion Rising (OBR) in the University of Delhi was launched at Miranda House on 14 December 2013. Seminar courses have been held highlighting women's issues in collaboration with the Centre for Advocacy and Research. As part of the rehabilitation programme for the Kashmir flood victims, WDC did its bit by organizing a Sanitary Napkin Collection Drive from 11to 13 September 2014 for women. In 2015 a Gender-Mela was organized which saw interaction between activists, academicians and students in large numbers.

Enactus: Since its inception in 2011 Enactus has been on its journey towards empowering under-privileged women through entrepreneurial action. Currently it has two projects under its aegis. Project Tarang started in 2012 to help women weavers at R. K.Puram and Dhaula Kuan to become financially independent.

Project Zaffran, launched in 2013, works with women spice-makers in Johripur. The aim of this movement is to help achieve a better future, a future of independence and equality, for the women. It symbolises engagement in entrepreneurship with social responsibility.

In the academic session 2015-16, the following students of the Department provided leadership (President/Vice-President) to various societies in the college:

Aishwarya Sinha, *TULA,* MHCC; Chhavi Nagpal, WDC; Vaishnavi, Enactus; Kaavya Nair, Debsoc, the Debating Society; Adrika, Jigyasa, the Quiz Society; Arushi Aggarwal, Snapshots, the Photography Society; Himangini, Celluloid, the Film Club.

35. SWOC analysis of the department and Future plans:

Strengths

- Faculty with extensive knowledge networks which are leveraged for student internships.
- Sustained and continuous mentorship and guidance.
- Wide community outreach programmes.
- Collaborative programmes with international universities.
- Regular conferences, workshops, seminars.
- Fully funded international student exchange programmes.
- Student-centric Department Journals: *VoxPopuli* and *Santulan.*
- Anchoring the Consumer Awareness drive in the University campus through *TULA*, the Miranda House Consumer Club.
- Engagement of the faculty in the corporate life of the college. Our students pursue post-graduate courses in prestigious universities such as the University of Sussex; London School of Economic and Political Science; SOAS, London; University of Birmingham; Graduate Institute, Geneva; University of Maryland, USA; NYU, Steinhardt, USA.

Weaknesses

- Lack of internal departmental mechanisms to maintain student placement data.
- Web platforms for intra-departmental interactions.

Opportunities

- Increased interest in global initiatives.
- Using social media to track placements in student cohorts.
- Using current student strength for small field departmental level research.

Challenges

- Responding to the diverse needs of students in terms of resources and pedagogy
- Establishing quality research and academic level publications

Future Plans

- Diversifying scholarships for students to address their varied needs.
- Exploring strategies for further pedagogical innovations.
- Undertaking research studies for policy analysis and capacity enhancement.
- Developing Add-on Courses.
- Establishing a Consumer Consultative Centre in 2016-17.

Evaluative Report

Department of Sanskrit

1. **Name of the Department:** Sanskrit
2. **Year of Establishment:** 1948
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
   UG: B.A. (H) Sanskrit; BA Programme, Discipline and Language Course
   PG: M.A. Sanskrit
4. **Names of Interdisciplinary courses and the Departments/units involved:**
   - Generic Elective Courses
   - Ability Enhancement Compulsory Course (AECC)
   - Discipline Centered Concurrent Courses (DCCC)
   - Interdisciplinary Concurrent Courses (IDC)
   - Credit and Qualifying Language: English and Hindi (for TYUP)
   - Allied Courses under the erstwhile FYUP
5. **Annual/semester/choice based credit system (programme-wise):**
   Choice Based Credit System (CBCS) in Semester Mode since 2015-2016.
6. **Participation of the Department in the courses offered by other departments:**
   - Generic Elective Course; B.A. (H), B.A.(Programme) and B.Sc. (H) Mathematics
   - Credit and Qualifying Language Course for humanities students (TYUP)
   - Interdisciplinary Concurrent Course, Discipline Centered Concurrent Course and Allied Course/Foundation (erstwhile FYUP) for Humanities and Mathematics
7. **Courses in collaboration with other Universities, Industries, Foreign institutions:** No
8. **Details of Courses/Programmes discontinued (if any) with reasons:** None
9. **Number of teaching posts**:

Post	Sanctioned	Filled
Associate Professor		2
Assistant Professor	3	3

10. **Faculty profile with name, qualification, designation, specialization:**

Name	Qual	Des	Specialization	Exp	Res Guidance
Dr. S. Shukla	Ph.D.	Associate Professor	Poetics and Literature	23	M.Phil.: 1 [A]; Ph.D.: 1 [A]
Dr. R. Arora	Ph.D.	Associate Professor	Grammar and Grammatical Philosophy	23	M.Phil. :1 [A] 2 [R]; Ph.D.: 6 [R]
Dr. M. Kumari	Ph.D.	Assistant Professor	Dharmshastra	15	M.Phil.: 1 [A], Ph.D.: 1 [A] 3 [R]
Mrs. S. Rani	M.Phil.	Assistant Professor	Dharmshastra	8	
Mrs. M. Bala	M.Phil.	Assistant Professor	Grammar	8	

Qual: Qualification; Des: Designation; [A]: Awarded; [R]: Registered; Exp: Experience in years

11. List of senior visiting faculty: None

12. Percentage of lectures, delivered, practical classes handled by Temporary faculty

Year	2011-2012		2012-2013		2013-2014		2014-2015		2015-2016	
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Lecture	14	42	34	38	26	12.5	15	29.3	12.7	16.8
Tutorials	5	16	11	14.4	5	-	6	9	4.9	4.6

13. Students-Teacher Ratio (Programme-wise): 12:1

14. Number of academic support staff (technical) and administrative staff, sanctioned and filled: None

15. Qualification of teaching faculty with D.Sc./D.Litt./Ph.D./M.Phil./PG:

Qualification	2011-12				2012-13				2013-14				2014-15				2015-16			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	3	3		2	3	3	1	1	2	3			2	2		1	3	3	1	1
M.Phil.	2	1			1			1	2	2			2	2			2	2		
M.A.			1				1	1			1	1			1	1				

P: Permanent; A: Temporary/*Ad hoc*; O: Odd semester; E: Even semester

16. Number of faculty with on-going projects from a) National, b) International funding agencies and grant received:

Title	Business Ethics: Business Leadership in Bhagavad Gita
Department Co-PIs	Mrs. M Bala
Students	Priyanka Tyagi, Pragati, Shubhra, Smriti Bala
Funding Agency	Innovation Project, University of Delhi
Grant	Rs. 3.5 lakh
Duration	2015-2016

17. Departmental projects funded by UGC, etc. and total grants received: None

18. Research Centre/facility recognized by the University: None

19. Publications:

Name	Authored: Books	Edited: Books/ Proceedings	Chapters: Books/ Textbooks	Papers: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular Resources	Popular Articles	Impact Factor	Citation Index
1. Dr. S. Shukla	1	2		7						
2. Dr. R. Arora				5		4				
3. Dr. M. Kumari		4		10				28		
4. Ms. S. Rani				2		1				
5. Ms. M. Bala				3		2				
6. Dr. A. Mishra [A]	2			4						

20. Area of consultancy and income generated: None

21. Faculty as members in National Committees, b) International Committees and c) Editorial Boards:

- Dr. S. Shukla was the Member of General Body of Delhi Sanskrit Academy for 4 years (2009-2012).
- American Bio-Graphical Institute chose Dr. U. Rustagi as distinguished standing member and has conferred her with an honorary appointment to the Professional Women's Advisory Board in 2004.

22. Students Projects:

a) Percentage of students who have done in-house projects including inter-departmental/programme

- 100% Students did interdisciplinary projects as part of the curriculum in Foundation Course- Sanskrit (FYUP).
- Interdepartmental projects: One teacher and four students are involved in a DU Innovation Project. Refer Item 16.

b) Percentage of students placed for projects in organization outside the institution i.e. research labs/industry/other agencies: None

23. Awards/Recognitions received by faculty and students:

Faculty Awards

a) Sanskrit Samaradhak Samman, 2009-10
- Dr. S. Shukla, Sanskrit Samaradhak Samman, Sanskrit Academy
- Dr. R. Arora, Sanskrit Samaradhak Samman, Sanskrit Academy
- Dr. M. Kumari, Sanskrit Samaradhak Samman, Sanskrit Academy
- Ms. S. Rani, Sanskrit Samaradhak Samman, Sanskrit Academy
- Ms. M. Bala, Sanskrit Samaradhak Samman, Sanskrit Academy

b) Dr. U. Rustagi (Retired)
i. Sanskrit Shikshak Sammaan by Lion's Club, Delhi, 1985.
ii. Sanskrit Shikshak Samman by Sanskrit Academy, Delhi, 2000.
iii. Indira Priyadarshini Puraskaar by Akhil Bhartiya Rashtriya Ekta Conference, New Delhi, 2001.
iv. Abdul Rahim Khan-Khana Purskar on Ved Tatha Prayavaran by Sanskrit Academy, New Delhi, 1997-1998 & Bharti Mishra Puraskar, Sanskrit Academy, Rajasthan, Sanskrit Saahitya Purskar, Government of Uttar Pradesh, 1996.
v. Abdul Rahim Khan-Khana Puraskar on Manu Smriti-an Appraisal by Sanskrit Academy, New Delhi, 1996-1997. Raashtriya Pratibha Samman (Saahitya Surbhi) on Sanskrit Novel-Jeevan Manjusha by Akhil Bharatiya Saahitya Sangam, Udaipur, 2015.
vi. Kalam Kalaadhar Puraskar on collection of poem titled Maun Shabd Mukhar Ho Uthe, Akhil Bhartiya Saahitya Sangam, Udaipur, 2015.

c) Dr. U. B. Gupta (Retired)
i. Sanskrit Shikshak Samman, Sanskrit Academy**,** Delhi, 2002-2003.
ii. Sanskrit Sahitya Sewa Samman, Sanskrit Academy, Delhi, 2006-2007.

Students' Awards

Award	2010-11	2011-12	2012-13	2013-14	2014-15
University Rank			1		1
Bela Gupta Memorial Award	2	1	2	2	2
Bhagyawati Rustagi Award	1	1	1	1	1
Sanyukta & D.N. Chaudhari Endowment	1	1	1	1	1
Rajeshwari Razdan Memorial Award	1	1	1	1	
Buti Foundation Award for Visually Challenged					1

24. List of eminent academicians and scientist/visitors to the Department:

- Prof. Gary Tubb, Chikago University
- Mr. Binoy K. Behl, Eminent Historian
- Prof. S.P. Narang, DU
- Prof. Satyavrat Shastri, DU
- Prof. Ramesh Bharadwaj, DU
- Prof. Kirti Jain, N.S.D.
- Shri Ashok Vajpeyi (Renowned Journalist)
- Dr. Karan Singh, Member of Parliament
- Prof. Mithilesh Chaturvedi, Head, Department of Sanskrit, DU
- Dr. Bhartendu Pandey, Associate Professor, DU
- Dr. Harsh Kumar, St. Stephen's College. DU
- Dr. Kanta Bhatia, Acting Principal, Bharati College, DU
- Prof. R.S. Sharma, Eminent Historian
- Dr. Kapila Vatsyayan, Director, Indira Gandhi National Centre for Arts
- Prof. Lokesh Chandra, Member of Parliament
- Dr. S.P. Gupta, Director, National Museum
- Dr. M. Athreya, Eminent Management Consultant
- Dr. L.M. Singhvi, Member of Parliament
- Padmavibhushan Smt. Sonal Mansingh
- Prof. Mohan Ram, University of Delhi
- Padmashri, Vidushi Geeta Chandran
- Sanjay Kaul, Founder & President, Petroleum & Energy Studies
- Dr. Induja Avasthi, Miranda House, DU
- Dr. Sushila Ambike, I.P. College, DU
- Dr. Urmila Rustagi, Miranda House, DU

25. Seminars/Conferences/Workshops organized & the source of funding:

a) Seminars

i) National Research Seminar in collaboration with Kalidas Academy of Music & Fine Arts, 03 December 2004.

ii) National Research Seminar in collaboration with Kalidas Academy of Music & Fine Arts, 26 November 2005.

iii) Seminar on Geeta, Geeta Sugeeta Kartavya, 22 September 2005.

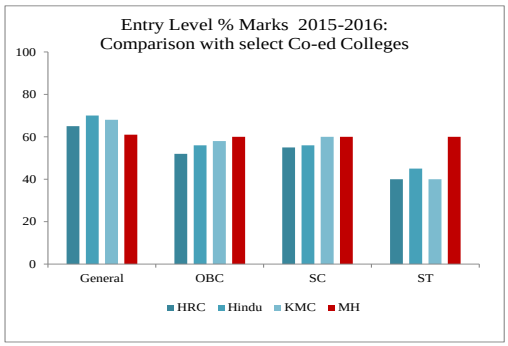
b) Workshop

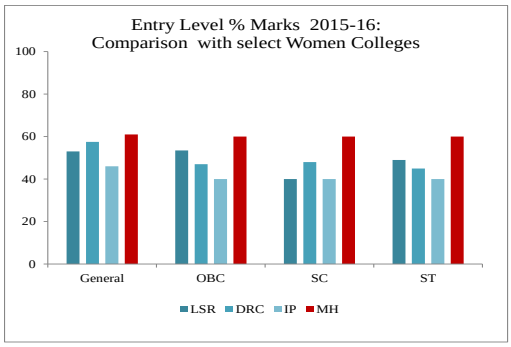
i) Workshop for undergraduate, postgraduate and research scholars, Professor Satyapal Narang, renowned Sanskrit Scholar, Former Head, Department of Sanskrit and Ex. Director of French Institute, University of Pondicherry, 05 August 2015 to- 06 August 2015.

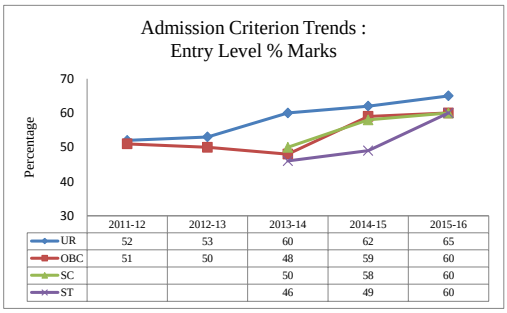
c) *Sanskrit Speaking Camp*

i) The Department organized Sanskrit Sambhashan Shivir in collaboration with Sanskrit Bharati, 12 September 2015-07 November 2015.

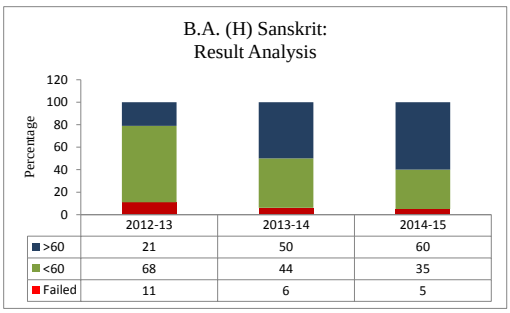
26. Student profile programme/course-wise:





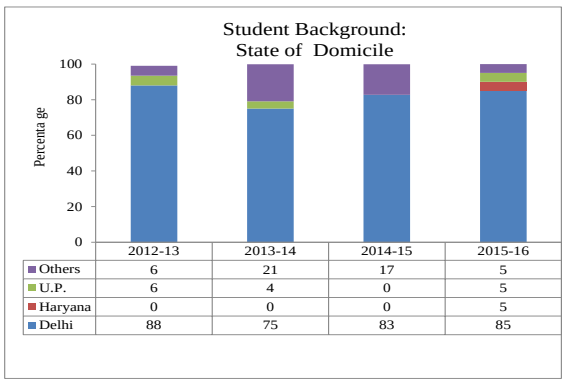


	2011-12	2012-13	2013-14	2014-15	2015-16
UR	52	53	60	62	65
OBC	51	50	48	59	60
SC			50	58	60
ST			46	49	60



	2012-13	2013-14	2014-15
>60	21	50	60
<60	68	44	35
Failed	11	6	5

27. Diversity of Students:



	2012-13	2013-14	2014-15	2015-16
Others	6	21	17	5
U.P.	6	4	0	5
Haryana	0	0	0	5
Delhi	88	75	83	85

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense service etc.?

From 2010 onwards, five students have cleared the UGC NET exam. Two students, namely, Ms Shiksha and Khushboo have started receiving the Junior Research Fellowship.

29. Students progression:

Year	Out of	PG	M.Phil.	Ph.D.	Students Placed
2009-2010	10	40%	20%	40%	Our experience tells us that about 50% of our students opt for teaching
2010-2011	13	46%	15%	15%	
2012-2013	17	23%			
2013-2014	17	35%			
2014-2015	19	26			

30. Details of Infrastructural facilities:

a) Library: There is a huge section of Sanskrit books in the college library. Every year many titles are added in the Sanskrit section. Faculty members and students also have access to a number of online books and journals through DU online library. The departmental library has a collection of selected research materials and textbooks. The collection is getting richer every year.

b) Internet facilities for staff and students: WiFi connectivity is available throughout the college campus. The Department has a computer, printer and scanner. All the teachers have been issued personal net books.

c) Classroom with ICT facility**:** All class rooms assigned to the Department are equipped with LCD projectors.

d) Faculty rooms: The Department has its own faculty room besides the staff lounge, this helps in working smoothly. Each member has a workstation and storage space.

31. Number of students receiving financial assistance from college, university, government or other agencies:

Year	College	DU	Government	Others	Total
2012-13	8			6	14
2013-14	10	4	2	6	22
2014-15	4		3	4	11
2015-16	6			5	11

32. Details on student enrichment programmes (special lectures/workshops/seminars) with external experts:

i) Lecture and cultural programmes are organized on the occasion of Sanskrit Day Celebration for enhancement of students' knowledge regarding importance, use and benefits of Sanskrit language.

ii) Student paper presentations.

iii) The Department organizes two lectures every year. These are Sanyukta Chaudhari Memorial Lecture and M.L. Gupta Memorial Lecture.

Sanyukta Chaudhari Memorial Lecture: Instituted in 1997.

- Gary Tubb, Becoming More: Sanskrit Literature and the Burden of the Past, 2015
- Geeta Chandran, Roots & Wings of Culture-A Dancer's perspective, 2013
- Shri Sanjay Kaul, President & Founder University of Petroleum & Energy Studies, Contemporary Teaching and Dynamic Learning for the Next Generation, 2012

- Shri Ashok Vajpeyi, Prampra-Bhodh, 2011
- Prof. Kirti Jain, Indian Theatre: Continuity and Changes, 2010

The previous eminent speakers include: Prof. Satyavrat Shasti, Mr. Binoy, K. Behl, Prof. H. Y. Mohan Ram, Padmavibhushan Smt. Sonal Mansingh, Dr. L.M. Singhvi, Dr. M. Athreya, Dr. Karan Singh, Prof. Kutumba Shastri, Dr. S.P. Gupta, Prof. Lokesh Chandra, Mr. Bharat Jhunjhunwala, Dr. Kapila Vatsayan and Prof. R.S. Sharma.

M.L. Gupta Memorial Lectures: Instituted in 1990

- Dr. Urmila Rustagi, Vedas and Environment, 2015
- Dr. Punita Sharma, Relevance of Astronomy in Jyotish Shastra, 2014
- Prof. Mithilesh Chaturvedi Self Management in Geeta, 2012
- Dr. Satyamurati, Sanskrit Chand Evam Gaayan, 2010

The previous eminent speaks include: Dr. Chand Kiran Saluja, Dr. Mohan Chand, Dr. Sushila Ambike, Dr. Induja Awasthi, Dr. Surykant Baali, Dr. Sita Nambiar, Dr. Santosh Kubbaa and Dr. Saroja Bhaate

iv) Sanskrit Sambhasan Shivir is conducted regularly for the students to enable them to learn conversation in Sanskrit.

v) The Department organizes educational trips enabling students to have hands on experience of Epigraphy and Archaeology every year. The students have been to Mehrauli Iron Pillar, Ashoka Pillars at Ferozshah Kotla and near Bara Hindu Rao, National Museum and Bhogilal Lehar Chand Institute of Indology.

vi) Workshop for UG, PG and research scholars from 05 August 2015 to 06 August 2015 by Prof. Satyapal Narang, renowned Sanskrit Scholar, former Head, Department of Sanskrit, and Ex-Director of French Institute, University of Puducherry.

vii) Inter-class competitions- To find out the talent of students, inter-class competitions are held in the starting of the session.

viii) The Department organizes Sanskrit speech, recitation, Vedamantroccāraa, Praśnamañcha, Aksharaśloka and Drama Competitions at Inter-college level.

ix) K.M. Rustagi and Kesar Devi Rustagi inter-college research paper presentation competition is organized by the Department.

33. Teaching methods adopted to improve student learning:

It has been our endeavour to make Sanskrit literature relevant in a modern context. We relate the text to its context, both past and present. For papers such as Epigraphy and Archaeology, academic trips to Mehrauli iron pillar, Ashoka Pillars, National Museum and Bhogilal Lehar Chand Institute of Indology are arranged. We have adopted multiple strategies to bring the text alive: even the humble effort of carrying to class, flowers mentioned in the text like "kashpushpa' and 'harshringar' has evoked interest in students. We are confident that over time the declining enrolment figures for Sanskrit will be reversed. Along with this, students are encouraged to pursue selective readings of Sanskrit magazines and journals besides other academic journals.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Faculty members and students of the Department have organized various extension and outreach activities such as NCC, NSS, Sports and SPIC MACAY.

35. SWOC analysis of The Department and Future plans:

***Strengths*:** It is a fact that being the oldest language Sanskrit's students come to know the history, culture, civilization of the ancient period. The teaching of Ethos, found in Sanskrit Literature makes the readers strong enough to fight odd circumstances. This is the beauty of the subject that it teaches values of human relationship to a person from the very childhood.

***Weaknesses*:** Most students in our Department come from economically weaker sections, who are not even able to pay their college fee. Even though the college and the department provides financial support to needy students, we feel that this is not enough. Also, the Department faces financial problems in conducting field trips for students which are essential for applying the knowledge they attain in classrooms. Inadequate allocation of funds therefore narrows down the opportunities to learn sometimes. The Department helps these students in achieving their goal by providing them financial, emotional and moral support.

Opportunities: The Department and students of Sanskrit have privilege to gain knowledge of various fields such as agriculture, geology, geography, astronomy, etc. Also one who knows Sanskrit can learn various Indian Languages such as Tamil, Telugu, Bengali, Marathi and many foreign languages like Russian, German, etc.

Sanskrit is the oldest literary language of South Asia; in ancient times its reach extended much beyond the borders of India. Today, the relevance of Sanskrit literature is recognized for knowledge ideas that cut across disciplinary boundaries and is indispensible to a deeper understanding of history, philosophy, law, political theory, science, medicine, arts and aesthetics, not to mention religion and religious scriptures.

***Challenges*:** In the contemporary scenario, Sanskrit is not a mother tongue language so it cannot be a medium of communication for everyday interaction. It has become a purely academic language. At the school level, students now have more options for the third language and most of the students seem to prefer foreign languages. Students are often not exposed to Sanskrit so they don't come to know the treasure found in it. Due to this attitude, the number of students is declining in colleges also. In spite of the current scenario, we at Miranda House are trying our best to promote the subject and its relevance in modern time.

Future Plans*:*

- The Department has plans to bring out with departmental magazine.
- Organizing National and International seminars/conferences.
- To inculcate and focus more on research in the form of innovation projects for all the students.
- Starting Add-on Courses.

Evaluative Report

Department of Sociology

1. **Name of the Department:** Sociology
2. **Year of Establishment:** 1972
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
   UG: B.A. (H) Sociology
4. **Names of Interdisciplinary Courses and the departments/units involved:**
   The students of Sociology study the following courses offered by other social science and humanities departments:
   - Generic Elective (GE)
   - Ability Enhancement Compulsory Course (AECC)
   - Credit and Qualifying Languages
   - Discipline Centered Concurrent Courses
   - Interdisciplinary Concurrent Courses
   - Allied courses under the erstwhile FYUP
   - Environmental Science
5. **Annual/ semester/choice based credit system (programme-wise):**
   Choice Based Credit System (CBCS) in the Semester Mode from 2015-16.
6. **Participation of the department in the courses offered by other departments:**
   The Department of Sociology offers the following courses:
   - Generic Elective courses to B.A. (H) students of other social sciences and humanities
   - Allied courses under the erstwhile FYUP
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** None
8. **Details of courses/programmes discontinued (if any) with reasons:** None
9. **Number of teaching posts:**

Post	Sanctioned	Filled
Associate Professor		2
Assistant Professor	2	1

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc. /D.Litt. /Ph.D. / M. Phil., etc.)**

Name	Qual	Des	Specialization	Exp Y
Dr. D. Mirchandani	Ph.D.	Associate Professor	Sociology of Education, Occupation, Policy and Reform; and Diaspora Studies, with specific reference to Zoroastrians	39
Dr. R. Bhatia	Ph.D.	Associate Professor	Health and Medicine, Knowledge, Environment	19
Dr. A. Berwa	Ph.D.	Assistant Professor	Religion, Kinship and Marriage, Fashion and Social Stratification	9
Dr. A. Kumar[A]	Ph.D.	Assistant Professor	Criminality, Urbanism	1.5

Dr. M. Kammingthang[A]	Ph.D.	Assistant Professor	Health and Medicine, Public Health	0.5
Ms. A. Chatterjee[A]	M.Phil.	Assistant Professor	Development, Urbanism, Social Stratification	1
Dr. M. Bandyopadhyay[R]	Ph.D.	Assistant Professor	Sociology of Organization, Governance, Masculinity, Criminality Violence and Urban Sociology	8

Qual: Qualification; Des: Designation; Exp: Experience in years; [A]: *Ad hoc*; [R]: Resigned

11. List of senior visiting faculty: None

12. Percentage of lectures delivered and tutorial classes held by temporary faculty:

Year	2011-2012		2012-2013		2013-2014		2014-2015		2015-2016	
Semester	Odd	Even	Odd	Odd	Odd	Even	Odd	Even	Odd	Even
Lectures			25	25	46	40	50	46	46	70
Tutorials			25	25	40	40	50	40	40	33

13. Student -Teacher Ratio: 18:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: None

15. Qualifications of teaching faculty with D.Sc./D.Litt./Ph.D./M.Phil./PG:

Qualification	2011-2012				2012-2013				2013-2014				2014-2015				2015-2016			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	4	4			4	4			4	4		1	3	3	1	1	2	3	3	2
M.Phil.			1	1			1	1				1			1	1			1	1

P: Permanent; A: Temporary/*Ad hoc*; O: Odd semester; E: Even semester

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: None

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

Title	More Miles on the Yamuna
Department Co-PI	Dr. R. Bhatia
Students	Ojaswini Bakshi, Chandrayee Goswami
Funding Agency	Innovation Project Scheme, DU
Grant	Rs.3 lakh
Duration	November 2013-March 2015
Title	GenderedSocialization:A Comparative Perspective of Matrilineal and Patrilineal Societies
Department Co-PI	Dr. D. Mirchandani
Students	Eisha Roy, Bhaswati Choudhury, Prerna Saharia, Puja Prasad, Priyanka Prasad
Funding Agency	Innovation Project Scheme, DU
Grant	Rs.3 lakh
Duration	November 2013-March 2015
Title	Miles on the Yamuna
Department Co-PI	Dr. R. Bhatia
Students	Aikantika Das, Priyanka Das, Priyakshi Pandey, Shunyo

	Dang
Funding Agency	Innovation Project Scheme, DU
Grant	Rs.10 lakh
Duration	2012-2013
Title	Inheriting Land, Endangering the Girl Child: Interrogating Land Productivity, Property Rights and Family Planning in Western Uttar Pradesh and Punjab
Department Co-PI	Dr. M. Bandyopadhyay
Students	Jayati Narain, Jyostna, Sakshi Sinsinwar
Funding Agency	Innovation Project Scheme, DU
Grant	Rs.10 lakh
Duration	2012-2013

18. Research Centre /facility recognized by the University: None

19. Publications:

Name	Authored/Co-authored: Books/ Monographs	Edited: Books/ Monographs/ Proceedings	Chapters: Books/ Textbooks	Papers: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular resources including e-resources	Popular Articles/ Films
Dr. D. Mirchandani	1		1			5	5	2
Dr. R. Bhatia			2	2		10	6	
Dr. A. Berwa			1			3		
Dr. M. Bandyopadhyay[R]	1		1	3		2		1
Dr. A. Kumar[A]			1	1		3		
Dr. M. Kammingthang[A]				2				
Ms. A. Chatterjee[A]				2	1	5		

Books

- Mirchandani, D. 2003. *Educational Theories, Policies and Reforms in India: Graduates in Perspective*, Delhi University Press, Delhi.
- Bandyopadhyay, M. 2010. *Everyday Life in a Prison: Confinement, Surveillance, Resistance,* Orient Blackswan, New Delhi, ISBN: 978-81-250-3833-7.

20. Areas of consultancy and income generated:

Dr. R. Bhatia has been involved with the National Institute of Open Schooling for online curriculum development, syllabus reviewand video and radio lessons. She is an Advisory Committee Board Member (Honorary), April 2015, Institute for Social Research and Development (ISRD), Chandigarh, and Advisory Committee Board Member (Honorary), April 2016, Voluntary Health Association of Punjab, Chandigarh.

21. Faculty as members ina) National Committees, b) International Committees and c) Editorial Boards: None

Membership of Professional Bodies:

Name	Professional Body
Dr. D. Mirchandani	Indian Sociological Society Indian Association for Canadian Studies Delhi Sociological Association
Dr. R. Bhatia	Indian Sociological Society International Sociological Association
Dr. A. Berwa	Indian Sociological Society

22. Student projects:

a) Percentage of students who have done in-house projects including inter-departmental/programme

Projects are not a mandatory part of the curriculum. However, since its inception the Department has strongly encouraged students to undertake project work. As a part of the curriculum under the erstwhile FYUP programme in 2013-14, 100% of first year students did a project. The Department has continued with the practice of encouraging students to do projects in areas of their interest. There were 42 projects in 2013-14 conducted mostly by individual students. In 2015-16 also 100% of the first year students did a project. There were 10large projects out of which one project conducted by 15 students on Understanding Disability aimed at exploring the different dimensions of disability in Delhi and Guwahati. The choice of projects is collaborative with the faculty, and the projects are designed to promote an understanding of the subject across papers. Regular series of lectures are held by the faculty members to teach students techniques and methods of sociological research. The projects involve fieldwork and the use of various research tools like questionnaires, interview schedules, focus group discussions, case studies, film making, social media, secondary sources of literature and other such methods. They are assessed on full class interactive presentations. The Principal and faculty of other departments are also often a part of these sessions. An illustrative list of the projects done by students is given below:

1. Role of Humour in Shaping our Social Reality
2. Matrilineal Khasi Society
3. Music as a Social Change
4. Disability in Society
5. Culture and its Effect on the Body Image in Society
6. Unseen Disability: A Short Film
7. Heteronormativity & Patriarchy
8. Shumang Leela - A Theatre Form of Manipur
9. Ji Memsahib - Domestic Workers
10. Photo Essay on Assam- Rituals & Influence of Cultural Diffusion
11. Bengal Ghoti Conflict in Kolkata
12. By the River Brahmaputra
13. Socio-cultural Study of the Jaunsaria Tribe of Dehradun District, Uttarakhand

Since 2012-2013, 75% of the faculty and 9% of our students have also been a part of Delhi University Innovation Projects which are inter-departmental as listed in Item 17.

b) Percentage of students placed for projects in organizations outside the institution, i.e.in Research laboratories/Industry/ other agencies

Approximately 15-20 % of Sociology students have regularly interned with a variety of other educational institutions, government, non-governmental organizations, newspapers and the corporate sector. Often this is on the students' initiatives. Students have been placed with various organizations, like Pravah, Goonj, Satark Nagrik Samiti, IYM, Pravah, Jagori, Jamshedpur Trust, Swechha, Jag Jagran Shakti Sangathan, Mazdoor Kisan Shakti Sangathan, Centre for Media and Communication, Aasra Trust, and Himalayan Environmental Studies and Conservation Organization. An illustrative list of some of the internships is given below:

1. Ritu Konsam: Centre for Legislative Research and Advocacy (CLRA), December 2015 to February 2016.
2. Upasana Sarma: Make a Difference (MAD): Ed Support Project, January 2014 to June 2015; Times of India, May to June 2014.
3. Archana Shivan: The Grey Matters: A Public Relations Firm, December 2015 to January 2016; Teach for India Project Awaaz, September 2015 to December 2015; Pratham, July 2015; CRY, June 2015.
4. Akangkhi Borthakur: North East Development and Finance Corporation (NEDFi): Aqua Weaves Project, June to July 2014; Utsah: Universal Team for Social Action and Help, NGO, Guwahati, June to July 2013.
5. Smriti Sikri: Pratham, NGO, October 2014 to January 2015; Educatum: School for Autistic Children, July 2015 to August 2015.
6. Prerna Singh: Leaders for Tomorrow, August 2013 to May 2014; Swechha, NGO, September 2014 to October 2014.
7. Gitanshi Sharma: Teach India, February to April 2014; International Centre for Culture and Education (ICCE), November 2014 to February 2015; WWF, September to October 2015.
8. Bhaswati Borthakur: Indian Council for Child Welfare, Assam, June 2015.
9. Niharika Parashar: The Times of India, May 2015 to June 2015.
10. Rajlakshmi Bhagawati: Operation Smile, Guwahati Cleft Care Centre, May 2015 to June 2015; Delhi Council for Child Welfare, June 2014.
11. Sumra Alam: Kamalini, NGO, May 2015 to June 2015.
12. Poonam Ghore: Umeed: A Drop of Hope, NGO, March to April 2016.
13. Richa Saikia: WWF, February 2016 to March 2016.
14. Rajendrani Sarkar: Kitab Club, NGO, January 2016 to March 2016.
15. Ishita Bhattacharjee: Hindustan Times, June 2015 to June 2016.
16. Palashi Das Umeed: A Drop of Hope, NGO: March to April 2016.
17. Subrasmita Sandilya: WWF, February 2016 to March 2016.
18. Eisha Roy: Teach India, November 2013; District Election Office (North), Delhi Assembly Election, October 2013; Samarpan Foundation, 2012-14; Indira Gandhi National Centre for Arts (IGNCA), September to October 2013.

23. Awards / Recognitions received by faculty and students:

Faculty Awards

Dr. D. Mirchandani

- World Education and Literacy Award for outstanding work done in the areas of literacy, including functional literacy, adult, non-formal and continuing education, instituted by International Association of Educators for World

Peace in September 2003. The award is affiliated to UN, ECOSOC, UNDPI and UNESCO.

- Shastri Indo-Canadian Faculty Research Fellowship by the Department of Foreign Affairs and International trade, Government of Canada through the Shastri Indo-Canadian Institute in 1997-1998.

Dr. R. Bhatia

- Distinguished Teacher Award by the University of Delhi, 2009

Students' Awards

International Achievements

1. Amrita Sengupta, Chevning Scholarship to pursue a one-year Masters at Oxford, 2015.
2. Madhurima Tandon, scholarship by King's College London to attend their Summer School, and was also selected as a delegate at the Harvard India Initiative Conference, 2014-2015.
3. Eisha Roy (2012-2015), Ambassador, King's College London, 2013-2014 and 2014-2015; Ambassador for Peace, Universal Peace Federation, United National Economic and Social Council, 2014-2015; Delegate in Italy, International Leadership Programme with United Nations, 2014-2015.
4. Puja Prasad and Priyanka Prasad were chosen to be a part of an 8-day all expenses paid trip to Japan under the JENESYS 2.0 Project, 2014-2015.
5. Avipsha Das, Indo-Dutch Collaboration Programme, Netherlands, 2012.
6. Ritika Sonam won the Erasmus Mundus Scholarship, funded by the European Commission and organized in partnership with some of the most prestigious universities in Europe and India, 2011-2012.
7. Bhaswati Choudhury and Simona presented their paper Effects on Migrants Due to Urbanization: A Study of Slum Areas in New Delhi, International Conference on Sustainable Development, IIT-Guwahati, 2011-2012.
8. Bhaswati's paper titled Deplorable Conditions of Tea Tribes in Assam, presented at the International Conference of Interdisciplinary Social Sciences, Barcelona, Spain, 25 to 28 June 2012.
9. Simona Sarma's paper titled Impact of Globalization on the Culture of Indian Youth: A Comparative Study between Rural and Urban Youth, presented at the International Conference of Interdisciplinary Social Sciences, Barcelona, Spain, 25 - 28 June 2012.

University Ranks

2009-2010			2010-2011			2011-2012			2012-2013			2013-2014			2014-2015		
I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
1	1	1	1	1	1	1	1		1						2		1

S.No.	Award	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
1	University Rankers Award	3	2	1		3	1
2	College Rankers Award	3	3	3	3	3	3
3	Miranda House Golden Jubilee Award	1	1				
4	Savitri Burman Award of Excellence		1				

5	Principal's Medal		1				
6	Angeli Qwatra Award	1	1				
7	B.S. Jolly Award for Community Engagement				1	1	
8	Amba Dalmia Award for Visually Challenged				1		
9	Yashoda Fellowship for the Visually Challenged			1			

24. List of eminent academicians and scientists/visitors to the department:

An illustrative list of some of the visitors and speakers is given below.

1. Andre Beteille, Padma Bhushan; Professor Emeritus, Sociology.
2. Patricia Uberoi, Institute of Economic Growth, DU.
3. Susan Visvanathan, The Centre for the Study of Social Systems (CSSS), JNU.
4. Savyasaachi, Department of Sociology, Jamia Millia Islamia.
5. Madhu Purnima Kishwar, Centre for the Study of Developing Societies (CSDS), Delhi.
6. Javed Abidi, National Centre for Promotion of Employment for Disabled People.
7. Shanti Auluck, Founder-Chairperson, Muskaan.
8. Anita Guha, Former Chairperson of the National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities.
9. Bishnupriya Dutt, Center for Arts & Aesthetics, JNU.
10. Lee Schimmoeller, Chair, Department of Human Resource Management, and Jimmy Roux, Chair, Associate Professor of Communication Studies, Lynchburg College, Virginia, USA.
11. Roma Chatterji, Department of Sociology, DU.
12. Abhijit Dasgupta, Department of Sociology, DU.
13. Surinder Jodhka, The Centre for the Study of Social Systems (CSSS), JNU.
14. Stephen Shute, Head, School of Law, Politics and Sociology, University of Sussex.
15. Baladevan Rangaraju, Centre for Civil Society.
16. Pramada Menon and Sumit Baudh, social activists
17. Wendy J. Hoskins, University of Nevada, Las Vegas (UNLV).
18. Rajni Parliwala, Department of Sociology, DU.
19. Murrey Millner, University of Virginia, USA.
20. K. Vinayagam, Former Chief Justice, Jharkhand.
21. Amita Singh, Centre for Law and Governance, JNU.
22. Anand Patwardhan, Documentary Filmmaker.
23. Yusuf Saeed, Jamia Millia Islamia.
24. Ian Jones, University of Bangor, UK.
25. Anita Ghai, social activist and Associate Professor, JMC, DU.

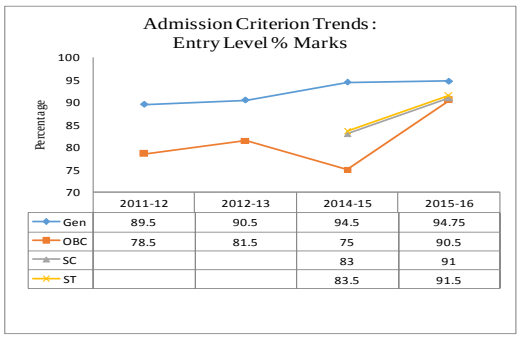
25. Seminars/ Conferences/Workshops organized & the source of funding.

- ICSSR sponsored National-level Seminar on Deconstructing Disability, 17 January 2014.

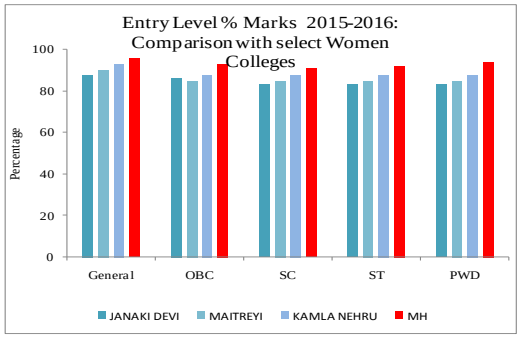
- Seminar and Recruitment Fair on Synchronizing Education and Employment Opportunities for Persons with Disabilities, organized by Lakshita, the Enabling Society, Miranda House, 26 September 2014.
- TERI sponsored Seminar Rhythms from 18-19 March 2013. The Seminar was organized in collaboration with Ms. M. Kumar and Dr. R. Parijat from Miles on the Yamuna, DU Innovation Project.

26. Student profile programme/course-wise:

As per University rules, the students have to fill a centralized admission form and the admission to a particular course is granted on the basis of the entry level percentage declared by the college(details are given in the graph below).

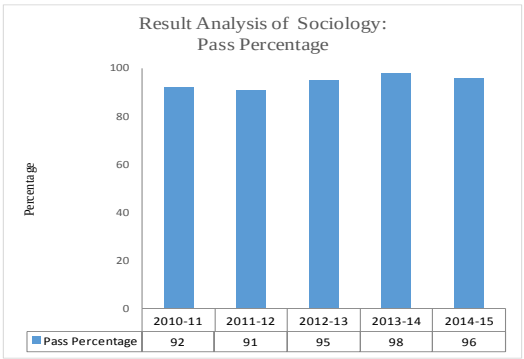


	2011-12	2012-13	2014-15	2015-16
Gen	89.5	90.5	94.5	94.75
OBC	78.5	81.5	75	90.5
SC			83	91
ST			83.5	91.5

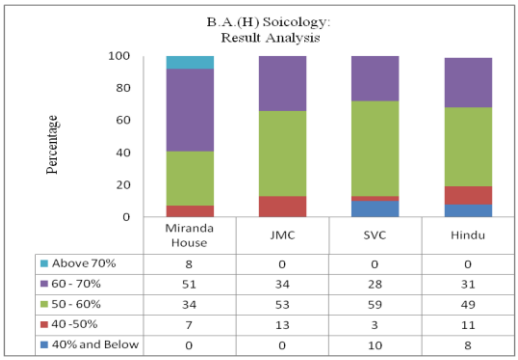


Graphs depict that Miranda House is a preferred college with a high cut-off percentage.

Pass Percentage: Over the past few years pass percentage has been above 90%.

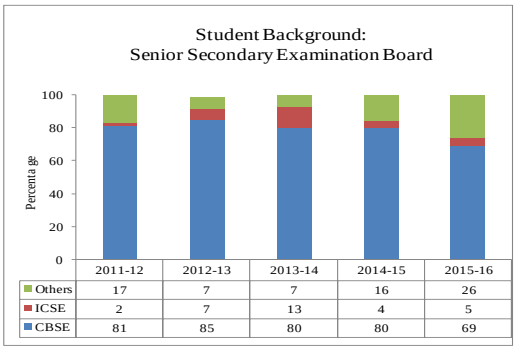


	2010-11	2011-12	2012-13	2013-14	2014-15
Pass Percentage	92	91	95	98	96

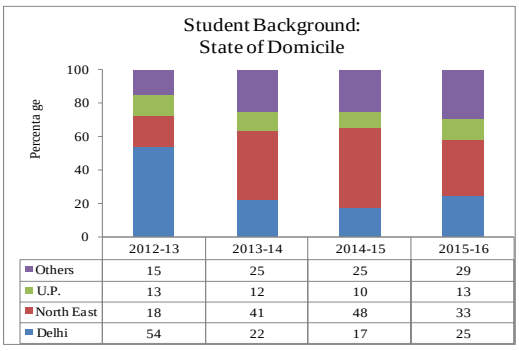


	Miranda House	JMC	SVC	Hindu
Above 70%	8	0	0	0
60 - 70%	51	34	28	31
50 - 60%	34	53	59	49
40 -50%	7	13	3	11
40% and Below	0	0	10	8

27. Diversity of Students:



	2011-12	2012-13	2013-14	2014-15	2015-16
Others	17	7	7	16	26
ICSE	2	7	13	4	5
CBSE	81	85	80	80	69



	2012-13	2013-14	2014-15	2015-16
Others	15	25	25	29
U.P.	13	12	10	13
North East	18	41	48	33
Delhi	54	22	17	25

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.:

Most Sociology students pursue post-graduation. There is no structured institutional mechanism for keeping track of student progression. However, it is noted that most students go for post- graduate studies in institutions like JNU,

Delhi University, and the Tata Institute of Social Sciences. As per the University of Delhi *ad hoc* panel, 2015-2016, 7% of the applicants are from the Department of Sociology. Some of the students have moved on to become faculty members in prestigious institutions across the country. For instance, Susan Visvanathan, JNU; Ravinder Kaur, IIT, Delhi; Radhika Chopra, Delhi School of Economics; Abha Chauhan, University of Jammu; Azailui, University of Hyderabad; and Manisha Singh, Jamia Millia Islamia. Those teaching in various colleges in the DU are: Geeta Jayaram, Sri Venkateswara College, Charu Kala and Rajyalakshmi, Janaki Devi Memorial College, Anurita Jalan and Mala Kapur Shankar Das, Maitreyi College, Anuradha Sharma, Jesus and Mary College, and Alka Malvankar(retired), Miranda House. Others have qualified various competitive exams: Preeti Agarwal (2007-2010) cleared the Civil Services Examination; Rosy Talukdar (2009-2012) has joined the Indian Police Service and Shilpa Goyal, visually impaired, has joined the State Bank of India as a Probationary Officer. Ankita Sharma too has joined the State Bank of India as a Probationary Officer.

29. Student progression:

Students do their post-graduation from various institutions in India like Delhi School of Economics under the University of Delhi, Jawaharlal Nehru University, Jamia Millia Islamia, Tata Institute of Social Sciences, Central University Hyderabad, and IIT. Some of them also go to international universities like London School of Economics, University of Manchester and to the United States of America.

Given below is an illustrative list of some of our students.

1. Amrita Sengupta (2007-2010), Chevning Scholarship, 2015, M.Sc. in Social Science of the Internet, University of Oxford.
2. Zeba Siddiqui (2007-2010), Research Officer at Indian Institute of Public Administration, 2016; M.A.,JNU, 2011-2013, M.Phil., Delhi School of Economics, DU, 2013-2015.
3. Nayyara Tabassum (2008-2011), M.A. Sociology, Delhi School of Economics, DU, 2011-2013, and is currently a Ph.D. student at the University of Cambridge.
4. Ritika Sonam (2009-2012), Erasmus Mundus Scholarship, at Amsterdam, 2010-2011; M.A. Sociology, Delhi School of Economics, DU, 2013-15; Consultant, Deloitte Consulting India, 2015.
5. Geetanjali Mohanty (2009-2012), M.Sc. Gender Policy and Inequalities, London School of Economic and Political Science, 2012.
6. Asmita Aasaavari (2009-2012), M.A. Sociology, Delhi School of Economics, DU, 2014. She was selected to work as Legislative Assistant to Members of Parliament (LAMP) programme in June 2012 from a pool of 1500 applicants. She was awarded the Krishnaraj Summer Research Fellowship (May 2013-June 2013).
7. Shivani Vaishnavi (2009-2012), M.A., South Asian University, New Delhi; Programme Officer at Voluntary Action, 2016.
8. Apoorva Ranjan (2009-2012), M.A., Tata Institute of Social Sciences, Mumbai, 2013-15 and is currently a Fellow at Bodh Shiksha Samiti.
9. Sakshi Dayal (2011-2014), M.Sc. Communication and Media Studies, London School of Economic and Political Science, 2015. She is currently working at the Indian Express.

10. Rohini Rai (2011-2014), is currently a Ph.D. student, University of Manchester, 2016.
11. Bhavya Durgesh Nandini (2012-2015), M.Sc. in Communication and Media Studies, London School of Economic and Political Science, 2015.
12. Saanchi Bamba (2012-2015), M.A., University of Glasgow, UK, 2016.
13. Mahima Sharma (2012-2015), Young India Fellowship, 2015.

30. Details of Infrastructural facilities:

a) Library: The Department library has an extensive selection of 452 books. The college library has 2812 Sociology books on the stacks.
b) Internet facilities for staff and students: All faculty members have been issued netbooks. The faculty room has a desktop and a printer-scanner. Students and faculty have access to the Digital Resource Centre for research and project work.
c) Classrooms with ICT facility: The Department has access to the required number of classrooms. All classrooms are fitted with multimedia projection facilities.
d) Faculty room: Each faculty member has a workstation and sufficient storage space.

31. Number of students receiving financial assistance from college, university, government or other agencies:

2014-2015: 2
2013-2014: 2
2012-2013: 1

32. Details on student enrichment programmes (special lectures/workshops/seminars) with external experts:

The learning of students is enriched with guest lectures, seminars, film screenings, projects and field work. For a detailed list of visitors refer to Item 24.

33. Teaching methods adopted to improve student learning:

A true Sociologist is a 'spy', i.e. going beyond the obvious. The uniqueness of Sociology demands that creative and imaginative methods are adopted to teach students. The Department believes in the adage that Sociology surrounds us and that the only way to be truly sociological is to dialogue with one another. Classroom teaching is not top down but is done in an interactive way through the use of chalk and talk, newspaper analysis, films, multimedia and field visits. One of the first lessons given to the students is based purely on visuals. Visual methods provide a means to understand the practices of representations as cultural texts, to develop interpretations of meanings in socio-cultural contexts, and to decode images of social relations and individual experience. These methods applied along with reading the relevant texts drive student motivation and interest in learning, and induce sociological imagination and critical thinking. When students learn to interpret visual images they are able to link seemingly impersonal and remote forces with the lives of real people in concrete institutional and symbolic environments.

There are also invited lectures, panel discussions and seminars on the same themes. The tools of a sociologist like the comparative method, qualitative and quantitative techniques are taught to the students through sharing of field work experiences by the faculty and also by the invited experts. They are then encouraged to apply the same methods to do fieldwork for their own projects.

The thrust is on linking theoretical ideas to everyday reality. They are taught to unravel the language of everyday life through not just the spoken word but also the unsaid. The aim is to help the students go beyond common sense and to distinguish between serious academic writing and rhetoric. The focus is on making the students understand that rhetoric surrounds us.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

As stated in question 22 a number of our students have been regularly interning with NGOs, like Pravah, Goonj, Satark Nagrik Samiti, IYM, Pravah, Jagori, Jamshedpur Trust, Swechha, Jag Jagran Shakti Sangathan, and Mazdoor Kisan Shakti Sangathan, Centre for Media and Communication, Aasra Trust, and Himalayan Environmental Studies and Conservation Organization, to name a few. As a part of these NGOs they have been involved with various social causes related to the environment, marginalized sections of society, media advocacy and many others. Within the college the students have been members of NSS and the Enabling Unit. In 2013-14, the NSS vice-president and in 2014-15, the president was from Sociology. In 2015-16, 40% of the students were actively involved with the Enabling Unit.

35. SWOC analysis of the department and Future plans:

Strengths: The Department has established a name for itself through rigorous hard work and commitment. There is a wholesome work culture that attracts the best students from all over the country. Teaching-learning is not just limited to the classroom but extends beyond it as well. Students learn the practice of Sociology through hands-on experiential learning through internships and projects. We also practice the motto of inclusivity and accessibility. Reading material is made accessible to the visually challenged students.

Weaknesses: The Department faces financial problems in conducting field research trips for students, which are essential to the discipline of Sociology. More resources in Hindi are required to help Hindi medium students to realize their potential. The small size of the Department acts as a constraint in many ways.

Opportunities: Regular organization of lectures, panel discussions and seminars by academicians, activists, filmmakers, and journalists helps the students develop a Sociological perspective and to see Sociology in practice. Through projects we help students develop creativity, innovation, critical thinking, analytical problem-solving, communication, multicultural and global understandings, and good written and communicative skills. The constant flux in the syllabi requires repeated engagement in curriculum development which gives an immense opportunity to keep up with the latest theoretical developments in Sociology.

Challenges: With access to more resources we would be able to explore more innovative Sociological techniques like film making and use of ICT. Careers today take place in an increasingly diverse global society and being able to work effectively with people from different cultures, ethnicities and nationalities is a major challenge that we face. There is a need to keep the syllabus constantly in sync with global trends. A different problem is that a growing amount of research is now conducted by journalists, think-tanks and private research organizations, which challenge the relevance of academic Sociology.

Future Plans: The Department looks forward to growth and expansion without compromising on the quality. The need is also to engage more with the external world to create employment and internship opportunities. The emphasis will also be on doing more research involving students. For this, more projects on a national and international platform are needed. This in future will also translate into a scholar in residence programme and also student exchange programmes on a larger scale. Visual sources play a growing role in social studies as well as in teaching as they offer new routes to understanding. The establishment of a visual resource centre for making and editing films is also on the agenda. For this there will be an emphasis on engaging with professional and documentary filmmakers and also working out long-term collaborations with them. One of the possible ways could be through application-based courses with an interdisciplinary thrust. This will not just lead to the expansion of the Department in terms of resources but will also translate into intra- and inter-college collaborations. Some key areas of research which the Department plans to explore in various ways are:

1. Internet and Communication Studies
2. Policy and Reforms
3. Ethnomethodology and Conversation Analysis
4. Law and Society
5. Medical Sociology
6. Science and Technology

Networking with professionals in other areas, and expanding the frontiers of the discipline with relevant Add-on Courses on leadership, development, methodology and the like, could also feature in a major way.

Evaluative Report

Department of Botany

1. **Name of the Department:** Botany

2. **Year of Establishment:** B.Sc. (H) Botany was launched in 1948 when the college was established. However, classes were held in the Department of Botany, DU, till 1973 when teaching of honours courses was transferred to the college.

3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

   UG: B.Sc. (H) Botany; B.Sc. Life Sciences
   PG: M.Sc. Botany. Students are admitted to the college but taught in the Department of Botany, DU.

4. **Names of Interdisciplinary courses and the Departments/units involved:**

   - Students of Botany currently take courses offered by the Departments of Chemistry, Zoology and English; and in Environmental Science.
   - Students of B.Sc. Life Sciences take courses in Botany, Zoology, Chemistry and English.

5. **Annual/semester/choice based credit system (programme-wise):**
   Choice Based Credit System (CBCS) in Semester Mode from 2015-2016.

6. **Participation of the Department in the courses offered by other departments:**
   Courses in Botany are taught to students of B.Sc. (H) Zoology, B.Sc. (H) Chemistry, B.Sc. Life Sciences, B.Sc. Physical Sciences and B.El.Ed.

7. **Courses in collaboration with other universities, industries, foreign institutions, etc**.:

   - As a constituent college, no course within the formal degree programme can be taught in collaboration with other educational entities.
   - An Add-on Course on Bioinformatics and *in silico* Medicine is offered in collaboration with the Department of Zoology, Miranda House. This 50-hour Certificate Course is self-financed. Eminent scientists and expert resource persons from ICGEB, IGIB, RCB, NIT, JNU, DTU and DU are associated with this course.

8. **Details of courses/programmes discontinued (if any) with reasons:** None

9. **Number of teaching posts:**

Post	Sanctioned	Filled
Associate Professor		3
Assistant Professor	4	4

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D./M. Phil., etc.):**

Name	Qual	Des	Specialization	Exp Y	Research Guidance
Dr. S. Moitra	Ph.D.	Associate Professor	Plant Tissue Culture	37	M.Phil.: 1, Ph.D.: 1
Dr. J. Subramanyan	M.Phil. Ph.D.	Associate Professor	Physiology of Reproduction in Seed Plants	25	

Dr. M. Bajaj	Ph.D.	Associate Professor	Reproductive Biology of Higher Plants	25	
Dr. S. Bahri	Ph.D.	Assistant Professor	Plant Ttissue Culture	15	
Dr. R. Shakya	Ph.D.	Assistant Professor	Plant Reproductive Biology and Biochemistry	10	
Dr. E. Geetanjali	Ph.D.	Assistant Professor	Algae in Carbon Sequestration	02	
Dr. Deepali	Ph.D.	Assistant Professor	Microbiology and Phycology	07	Ph.D.: $1^{[O]}$

Qual: Qualification; Des: Designation; Exp Y: Expeirence in years; [O]: Ongoing
Experience of Dr. Bahri includes 4 years of research and Dr. Deepali 1 year of research.

11. List of senior visiting faculty: None

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary faculty:

Year	2012-2013		2013-2014		2014-2015		2015-2016	
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Lectures	33	49	38	44	45	43	47	42
Practical classes	23	35	24	29	35	48	40	41

13. Student-Teacher Ratio (programme-wise): B.Sc. (H) Botany 11:1
B.Sc. Life Sciences 12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Laboratory Staff	Sanctioned	Filled
Lab Assistant	4	2
Lab Attendant	4	3
Museum Curator	1	

15. Qualifications of teaching faculty with D.Sc./D.Litt./Ph.D./M.Phil./PG:

Qual.	2011-12				2012-13				2013-14				2014-15				2015-16			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	8	8	3	3	7	8	2	4	7	7	2	4	7	7	3	4	7	7	4	4
M.Phil.	1	1	1	2	1	1	2	2	1	1	2	1	1	1	1	1	1	1	2	2

P:Permanent; A:Temporary/*Ad hoc*; O: Odd semester; E: Even semester

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

a) National

Number of faculty	Number of ongoing projects	Grant (lakh)
4	6	96.67

b) International: None

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: The Department has successfully completed five research projects over the last five years and there are six ongoing projects.

Research Project	Funding Agency	Grant (lakh)
1. MH 01: Eureka! MyLab Developing Resources and Hands-on Science Activities and an Adaptation Accessible for Visually Impaired Co-PI: Dr. J. Subramanyan Duration: February 2016-January 2019; Ongoing	DU-Star	37.50
2. MH 02: Therapeutic Potential of Medicinal Plants: Culture, Extraction, Physico-chemical Characterization and Testing their Cytotoxic or Immunostimulatory Properties Co-PI: Dr. S. Bahri Duration: February 2016-January 2019; Ongoing	DU-Star	26.67
3. MH 305: Mobile! MyLab Anytime, Anywhere Co-PI: Dr. J. Subramanyan Duration: August 2015-July 2016; Ongoing	DU	6.50
4. MH 310:Sugarcane to Nanoparticles: Green Nanotechnology the Future PI: Dr. S. Bahri Duration: August 2015-July 2016; Ongoing	DU	5.00
5. MH 311: Phytoremediation of Heavy Metal Contamination and Extraction of Nanoparticles PI: Dr. S. Moitra and Co-PI: Dr. S.S. Roy Duration: August 2015-July 2016; Ongoing	DU	5.00
6. DBT Star College Scheme; Coordinator: Dr. S. Moitra; 2011-2016; Ongoing	DBT	16.00
7. MH 104: Miles on the Yamuna Co-PI: Dr. J. Subramanyan Duration: May 2012-July 2013; Completed	DU	10.00
8. MH 207: Eureka! My Lab Co-PI: Dr. J. Subramanyan Duration: November 2013-March 2015; Completed	DU	5.50
9. MH 102: Computational Modelling of Phytoregulatory Profile of Some Nanoparticles PI: Dr. A.Sehgal; Co-PI: Dr. S. Moitra, Dr. S. Bahri Duration: May 2012-July 2013; Completed	DU	10.00
10. MH 206: Nanoparticles and Plant Systems: *in vitro* and *in silico* Studies PI: Dr. S. Moitra and Co-PI: Dr. S. Bahri Duration: November 2013-March 2015; Completed	DU	6.50
11. Some Aspects of Reproductive Biology in Podostemaceae PI: Dr. A. Sehgal Duration: 2010-2013; Completed	UGC	10.24

18. Research Centre/facility recognized by the University: The Department leads and implements all Plant Science activities at DSKC and DBT Star initiative.The collaborative work done within this framework is now being aggregated to constitute Nanomaterial Research Laboratory.

19. Publications:

Name	Edited: Books/ Monographs/ Proceedings	Chapters: Books/ Textbooks	Papers: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular Resources	Popular Articles	e-Resources	Impact Factor	Citation Index	h-Index
1. S. Moitra	5	4	6		7	5		4	1.09	21	3
2. J. Subramanyan	4	1	6	2	8	20	6		3.92	6	1
3. M. Bajaj		2	3			9			5.62	64	3
4. S. Bahri	5	4	5		17	12			2.13	13	2
5. R. Shakya	1	1	3		4	7		3	2.95	12	1
6. E. Geetanjali		1	4		5	2			6.58	22	2
7. Deepali			5		1	2			10.95		
8. A. Sehgal[R]		1	11		7			5	21.15	189	8
9. M. Sethi[R]		3	7		8				10.74	106	7

[R]: Retired

20. Areas of consultancy and income generated:

E-lessons developed: Three teachers of the Department have developed e-content for NMEICT MHRD Project on Virtual Learning Environment, ILLL, DU. They have contributed 11 e-chapters.

Guest Faculty: Dr. S. Moitra has been a guest faculty member in the School of Planning and Architecture, Delhi, since 1999 till date. She teaches students of Master of Landscape Architecture. Dr. Moitra has also been a guest faculty member at IGNOU for 6 months in 2013 for M.Sc. Botany.

21. Faculty as members in a) National committees, b) International Committees and c) Editorial Boards:

Individual faculty members are members of various professional bodies.

	Faculty
Delhi University Botanical Society	5
Indian Science Congress Association (ISCA), Kolkata	1
Association of Teachers in Biological Sciences	1
Indian Phycological Society	1
International Society for Plant Morphologists	1
International Association of Sexual Plant Reproduction and Research	1
American Microbial Society (ASM), USA	1

22. Student projects:

a) Percentage of students who have done in-house projects including inter-departmental/programme

Projects conducted at the DSKC, Miranda House: Every year, the teachers of the Department have been guiding students for summer internship and about 20% of our students are involved. In the last five years, students have carried out projects on topics such as plant tissue culture, nanoparticles, seed germination, natural dyes, plant cells, enzymes, properties of soils and manures, and water bodies. Students from other colleges and universities have also been participating as interns in summer projects.

Projects as a part of the Course Curriculum: Cent percent students conduct projects as a part of the Course Work in Ecology, Embryology, Plant Resource Utilization and Physiology. Similarly, students prepare scrape books on Cell biology, reports on their visit to the Yamuna Biodiversity Park, field reports and models on Genetics.

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies

Refer Item 23 for students who have been awarded INSPIRE scholarships, POBE, and have been placed in different research institutions. Moreover, some of our undergraduates go to the Department of Botany, DU, for conducting summer projects.

23. Awards/Recognitions received by faculty and students:

Faculty Awards

Name of Teacher	Year	Award
S. Moitra	2016	First position awarded to the poster presented by S. Bahri, S. Moitra, S. Sekhri, & S. Ruhal, National Seminar on Water Quality in Urban Ecosystem, Eco-Club Shivaji College, DU, 22 March 2016
	2016	Second position awarded to the paper presented by S. Bahri, S.S. Bhatia, S. Moitra & N. Sharma, Indo-Portugese Workshop on Emerging Trends of Nanotechnology in Chemistry and Biology, Hansraj College and Deshbandhu College, DU, India, in association with University da Madeira, Portugal, 12-13 February 2016
J. Subramanyan	2012	Received Certificate of Appreciation for poster presentation by J. Subramanyan**,** A. K. Dave, A.A. Ali, N. Kanwa, S. Yadav, Sameera&S. Meena,International Symposium on Green Chemistry and Sustainable Development, Miranda House, DU, Delhi, 30-31 March 2012
	2013	Australian Leadership Awards Fellowship (ALAF): Building Leadership Capacity in Undergraduate Science Teaching in India (Host organization: University of Sydney)

	2016	Third position awarded to the poster presented by J. Subramanyan, P. Jolly, D. Manchanda & N.Sella, International Conference on Public Health: Issues, Challenges, Opportunities, Prevention, Awareness (Public Health 2016), Daulat Ram College, DU, Delhi, and KrishiSanskriti, New Delhi, 15-16 January 2016
S. Bahri	2012	Received Certificate of Appreciation for poster presentation by S. Bahri, J.H. Subrahmaniam, K. Agarwal & D. Bhola, International Symposium on Green Chemistry and Sustainable Development, Miranda House, DU, Delhi, 30-31 March 2012
	2013	Australian Leadership Awards Fellowship (ALAF): Building Leadership Capacity in Undergraduate Science Teaching in India (Host organization: University of Sydney)
	2016	First position awarded to the poster presented by S. Bahri, S. Moitra, S. Sekhri, & S. Ruhal, National Seminar on Water Quality in Urban Ecosystem, Eco-Club Shivaji College, DU, Delhi, 22 March 2016
	2016	Second position awarded to the paper presented by S. Bahri, S.S.Bhatia, S. Moitra & N. Sharma, Indo-Portugese Workshop on Emerging Trends of Nanotechnology in Chemistry and Biology, Hansraj College and Deshbandhu College, DU, India, in association with University da Madeira, Portugal, 12-13 February 2016
R. Shakya	2012-13	Fellowship under Faculty Training Programme for pursuing Masters in Systems and Synthetic Biology at the University of Edinburgh, Scotland, UK
	2014	Best Poster Award to B. Sharma, R. Shakya & S.C. Bhatla, International Conference of Electron Microscopy and XXXV Annual Meeting of Electron Microscope Society of India, 09-11 July 2014
A. Sehgal[R]	1993-96	UGC Career Award
M. Sethi[R]	1980-81	Mombusho Fellow

[R]: Retired within the last 5 years

Students' Awards

	Award	No. of Students					
		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
1.	University Rank Holders in B.Sc. (H) Botany		2	3	1	3	
2.	University Rank Holders in B.Sc. Life Sciences			1	1	2	
3.	INSPIRE Award for Higher Education					1	

						8	
4.	Golden Jubilee Award in Science	1					
5.	Golden Jubilee Appreciation Certificate			1		1	
6.	Science Quest Award		1	1	1	1	
7.	Students selected for POBE,JNCASR, Bangalore	1			2		
8.	Dr.Angeli Qwatra Award of Excellence (Science)	1		1			
9.	Lakshmi Krishnaswami Prize	2	2	2	2		
10.	Shyam Deviki Kaul Memorial Award	1	1	1	1		
11.	Savitri G. Burman Award of Excellence (Science)					1	
12.	KantaVenugopal Award in Genetics	1	1		1	1	
13.	DSKC Baseline Test Awards (Biology)	1	2	2	1	3	2
14.	Academic Prize for highest marks obtained in the M.Sc. Examination	1	1	1	1	1	
15.	Academic Prize for highest marks obtained in B.Sc.(H) Botany Examination	1	1	1	1	1	
16.	Academic Prize for highest marks obtained in B.Sc. Life Sciences Examination	1	1	1	1	1	
17.	Lead Earth Fellowship, TERI				2		
18.	Summer Research at IISER, Mohali					1	
19.	Google Student Ambassador of Miranda House			1			
20.	Summer course at Balustein Institute for Desert Research, Ben Gurion University, Israel			1			
21.	District Welfare Officer, Gaya, Bihar			1			
22.	Director of Higher and Technical Education, Government of Arunachal Pradesh		1		1	1	
23.	Bawa Balwant Singh Bhalla Award for Excellence in Sports and High Academic Achievement						1
24.	Lady Irwin School Alumnae Association (LISAA) Scholarship				1		
25.	Best Volunteer for MH Vatavaran			1			
26.	Best Volunteer for Fine Arts Society		1				
27.	Mohan Lal K.B. Mehta Memorial Award	1					

Every year several B.Sc. (H) students receive Science Meritorious Awards

24. List of eminent academicians and scientists/visitors to the Department:

Lectures organized by Botanical Society in the last five years are as follows:

Name	Organization/Institution	Year
Prof. Pradeep Burma	Department of Genetics, UDSC	2016
Dr. Neeti Sanan Mishra	ICGEB	2015
Prof. David Dilcher	Indiana University, USA	2015
Dr. Sanjay Kapoor	Department of Plant Molecular Biology, UDSC	2013

Dr. Prithipal Singh	Kirori Mal College, DU	2012
Prof. Anil Grover	Department of Plant Molecular Biology, UDSC	2012
Dr. Sandip Das	Department of Botany, DU	2011
Dr. Rajesh Tandon	Department of Botany, DU	2010
Prof. David Dilcher	University of Florida, Gainesville, Florida	2010

Manasi Ram Memorial Lectures: Till now 17 lectures have been delivered by top Scientist starting from 1998; list for last five years is as follows:

Name	Organization/Institution	Year
Dr. Krishna Achuta Rao	Centre for Atmospheric Sciences, IIT-D	2015
Prof. Alok Bhattacharya	School of Life Sciences, JNU	2014
Dr. S. Natesh	Formerly Senior Advisor, DBT	2013
Dr. Chetan Chitnis	ICGEB	2011
Prof. Ramesh Bijlani	Formerly Professor of Physiology, AIIMS	2011
Prof. Charusita Chakravarty	IIT-D	2010

Lectures organized under Add-on Course on Bioinformatics and *in silico* Medicine

Name	Organization/Institution	Year
Dr. Sandip Das	Department of Botany, DU	2014, 2016
Dr. Vipin Singh	Amity University	2014
Prof. Shailendra Goel	Department of Botany, DU	2014
Dr. Ashwini	Cluster Innovation Centre, DU	2014
Dr. Yasha Hasija	Department of Biotechnology, DTU	2014
Dr. Anchal Vishnoi	JNU	2014
Prof. Arun Jagannath	Department of Botany, DU	2014
Dr. Anshu Bharadwaj	ICGEB	2014
Dr. Aseem Mishra	ICGEB	2014
Dr. Latha Narayanan	Sri Venkateswara College, DU	2014
Dr.Vipin Singh	Amity University	2016
Dr. Yasha Hasija	DTU	2016
Dr. Asani Bhaduri	Cluster Innovation Centre, DU	2016

25. Seminars/Conferences/Workshops organized & the source of funding:

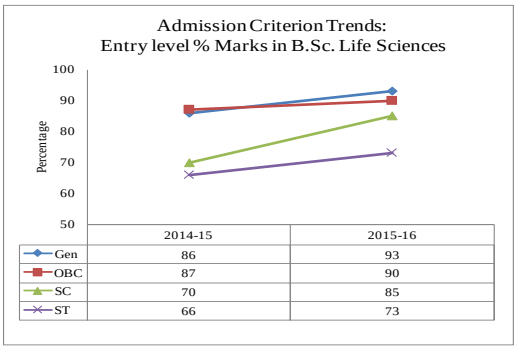
a) National

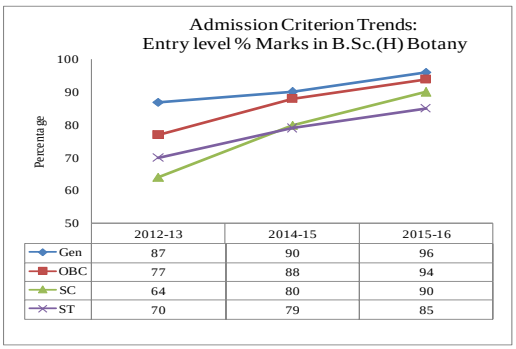
Workshop	Sponsors
1. From Symptom to Identification: Diagnosing Viral Disease in Plants for B.Sc. (H) Botany III year students; 31 March-01 April 2016	DBT-Star & DSKC
2. Green Nanotechnology for Beginners; 28 January 2016	DU Innovation Project MH 310
3. Training the Trainers: IPR Workshop; 15 January 2016	DBT-Star in

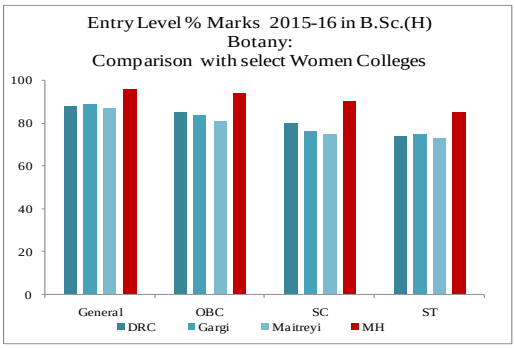
	collaboration with MHRD IPR Chair (Technical)
4. Bridge Course on Basic Laboratory Techniques for B.Sc. Life Sciences I year students; 26-30 October 2015	Self-financed
5. Bridge Course on Basic Laboratory Techniques for B.Sc. (H) Botany I year students; 12-16 October 2015	Self-financed
6. Effects of Nanoparticles on Plants; 18 March 2015	DBT-Star
7. Computational Profiling of Some Nanosystems; 30 May 2014	DU Innovation Project MH 206
8. Nanoparticles: Effects on Seedling Biology; 29 May 2014	DU Innovation Project MH 206
9. Tissue Culture: A Workshop for Science Students; 12-13 March 2014	DBT-Star & DSKC
10. Molecular Cloning for of B.Sc.(H) Botany students; 30 January-01 February 2013	DBT-Star
11. PCR and Blotting Techniques B.Sc. (H) Botany III year students; 27-29 February 2012	DBT-Star
12. Microscopy: Techniques and Applications; 27-28 September 2011	DBT-Star
13. Bioinformatics: Unravelling Genes and Proteins; 10-15 May 2010	UGC and CSIR
14. Gene Cloning & Expression: Bioinformatics &Wet Lab; 07-25 June 2010	UGC and CSIR
15. Applications of Culture Techniques in Plant, Animal and Bacterial Systems; 01-14 July 2009	UGC and CSIR
16. Biology Laboratory Course LS 206; 24-26 September 2008	ILLL & DSKC
17. INSPIRE Workshops: The Cell:Life's Playground, Designing Life: Small Experiments, DNA: Close Encounters	DST

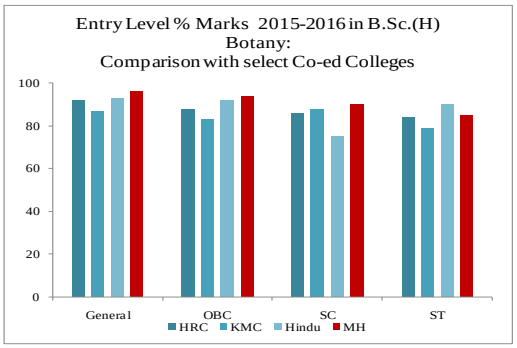
b) International: None

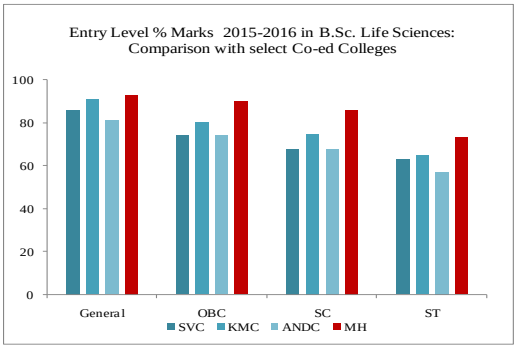
26. Student profile programme/course-wise:

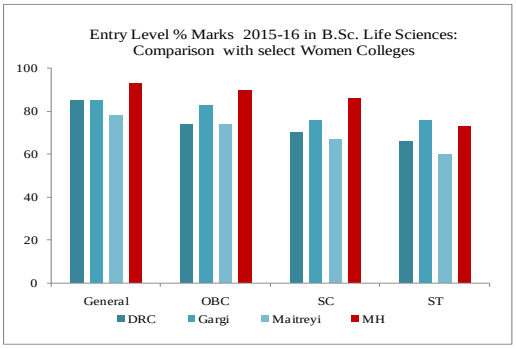


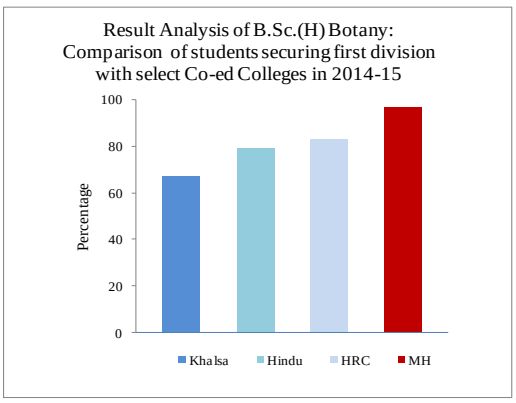


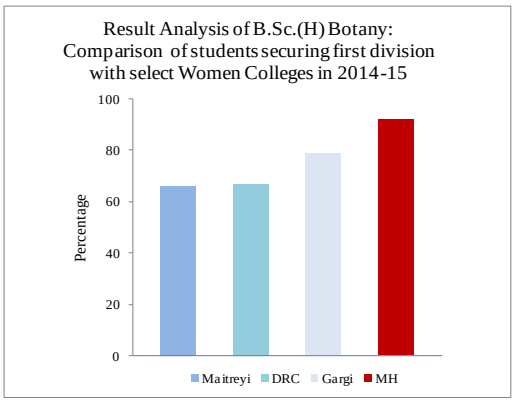


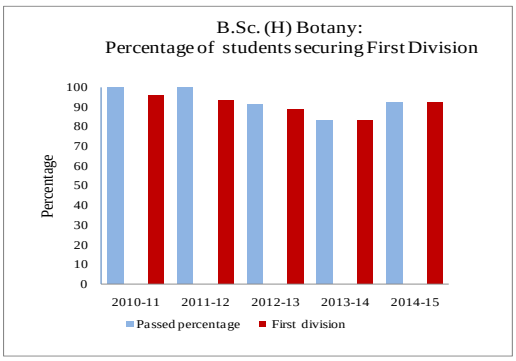


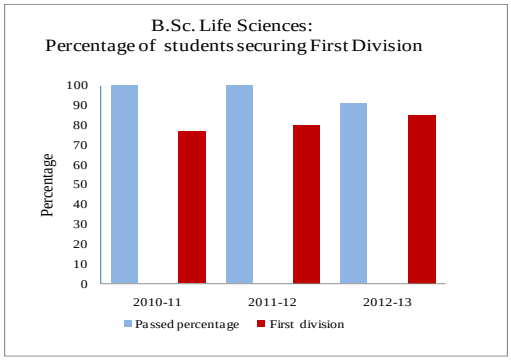






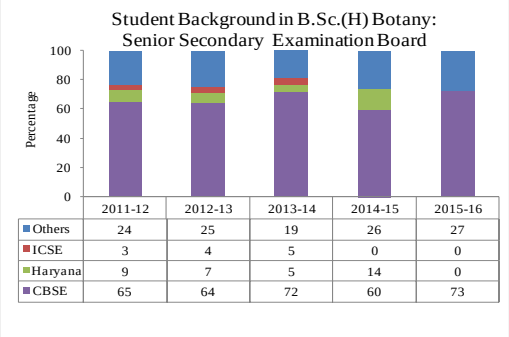




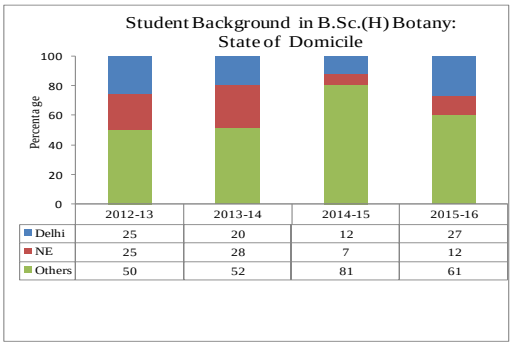


MH-Miranda House; DRC-Daulat Ram College; HRC-Hansraj College: KMC- Kirori Mal College; SVC-Sri Venkateswara College; ANDC: Acharya Narendra Dev College

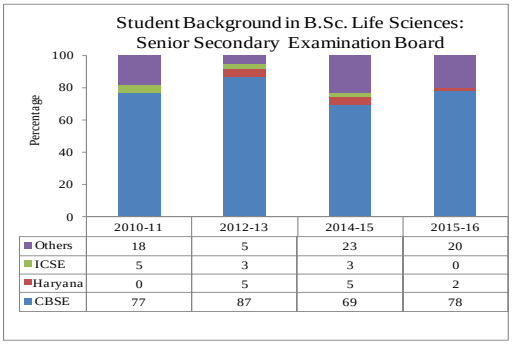
27. Diversity of Students:



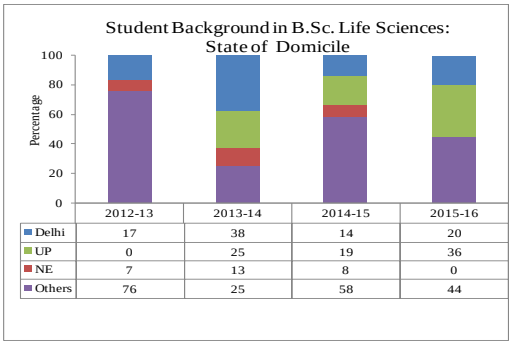
	2011-12	2012-13	2013-14	2014-15	2015-16
Others	24	25	19	26	27
ICSE	3	4	5	0	0
Haryana	9	7	5	14	0
CBSE	65	64	72	60	73



	2012-13	2013-14	2014-15	2015-16
Delhi	25	20	12	27
NE	25	28	7	12
Others	50	52	81	61



	2010-11	2012-13	2014-15	2015-16
Others	18	5	23	20
ICSE	5	3	3	0
Haryana	0	5	5	2
CBSE	77	87	69	78



	2012-13	2013-14	2014-15	2015-16
Delhi	17	38	14	20
UP	0	25	19	36
NE	7	13	8	0
Others	76	25	58	44

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense service?

Most of our M.Sc. students who pursue Ph.D. have cleared the NET, SLET or GATE and are recipients of the research fellowship. Refer Item 29.

29. Student progression:

From UG to PG:Many students move to other universities and to other disciplines, like Anthropology, Plant Molecular Biology, Biotechnology, Environmental Studies, Forensic Science, and Agrochemicals and Pest Management. On successful completion of their post-graduation, several students continue to pursue research in the Department of Botany, DU, and other prestigious institutionssuch as the National Institute of Plant Genome Research, Forest Research Institute University, Indian Institute of Technology, Indian Institute of Science Education and Research, the Departments of Plant Molecular Biology and Genetics in the South Campus, National Institute of Immunology, and TERI (The Energy and Resources Institute) University leading to Ph.D. Some students move on to social sciences after graduation and pursue social work, public health, water governance, and so on.

Year of passing	Number of students		Number of students who got admission in M.Sc. Botany*in DU		
	Appeared	Passed	Merit	Entrance	Total
2015	25	23	6	3	9
2014	30	25	7	5**	12
2013	36	35	9	6	15
2012	33	28	6	4	10

*Total seats in M.Sc. Botany in the University: 78

** Two B.Sc. Life Sciences students of the college got admission on the basis of the entrance exam

30. Details of Infrastructural facilities:

a) Library: The departmental library has a wide range of books (816) and is open to the students of the Department.
b) Internet facilities for staff and students: The college is WiFi enabled and accessible to faculty and students.In addition, all the teachers have been issued a netbook.
c) Classroomswith ICT facility: We have an access to all the classrooms of the college.The Department has 03 desktop computers. Additionally, there are 03 laptops for interactive sessions. All the classrooms and laboratories in the Department have LCD projectors. We are planning to do away with the traditional notice boards.
d) Faculty rooms: Two faculty rooms with individual workstations and personal storage space.
e) Museum: The museum maintains a rich collection of preserved specimens displaying plant diversity. There is a well-stacked herbarium having an extensive collection of specimens covering the entire spectrum of plants, collected from various parts of the country and abroad. We utilize the museum for holding some practical and theory classes.
f) Laboratories: There are two well-equipped laboratories for teaching purposes.One is devoted to practicals on Plant Physiology, Metabolism and Ecology and the other to Plant Diversity. The labs have all the instruments required for experiments in the curriculum including binocular microscopes, monocular microscopes, stereozoom microscopes, microscope with image projection system, colorimeters, spectrophotometer, digital balances, pH meter, vertical dual mini electrophoresis systems, horizontal mini electrophoresis systems, digital luxmeters, anemometer, BOD incubator, incubators, water baths, autoclave, UV transilluminator, microwave, refrigerators, and centrifuges. Labs are well stocked with sufficient glassware and chemicals to conduct the experiments. The qualified laboratory staff make arrangements for the practicals in the preparation room. We have enough space for storing the chemicals, reagents, fixed plant materials, charts and permanent microslides. The laboratory staff undergo on-job training regularly. The laboratory staff have proper seating arrangement.
g) DSKC Student Project Laboratory: Students working on different projects have full access to this lab.
h) Tissue Culture Laboratory: We have a well-equipped tissue culture lab which is used for carrying out research work under DU Star Innovation Projects, DU Innovation Projects and summer internship programme under DSKC, Miranda House.The laboratory has a laminar flow, culture trolley with photoperiodic clock, photomicroscope and fluorescence microscope.

31. Number of students receiving financial assistance from college, university, government or other agencies:

B.Sc. (H) Botany

Year	College	DU	Government	Others	Total
2012-13	2	8	1	3	14
2013-14	3	10	1	5	19
2014-15		9	2	3	14
2015-16				2	2

B.Sc. Life Sciences

Year	College	DU	Government	Others	Total
2012-13		1	1	1	3
2013-14	1	4			5
2014-15				2	2
2015-16	1				1

32. Details on student enrichment programmes (special lectures/workshops/seminars) with external experts:

Refer Item 24 for lectures delivered by experts; refer Item 25 for workshops and courses organized for students.

33. Teaching methods adopted to improve student learning:

- Use of PowerPoint presentations and charts in theory classes. Students are also encouraged to give PowerPoint presentations.
- Use of charts, herbarium and live specimens, permanent slides and PowerPoint presentations in practical classes.
- Interactive sessions are held in the routine classes.
- Class tests and presentations are held.Assignments are also given to the students.
- Students are taken to the nearby ridge, and the college botanical garden and the campus as a whole to learn the names of plants and understand biodiversity.
- Educational trips: Teachers accompany students to visit the Yamuna Biodiversity Park, Zoological Park, local research institutions, like the NBPGR, IARI, Department of PMB at the South Campus, IGIB, museums, and various exhibitions to improve learning.
- Outstation educational trips: Students are taken to hill stations to understand biodiversity and to collect plants. They have also visited research institutions and biodiversity parks such as the Forest Research Institute, Dehradun, Institute of Microbial Technology, Chandigarh, and Keoladeo National Park, Bharatpur.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- Besides many other community activities, as the Incharge of the college NSS unit Dr. J.Subramanyan had helped organize three Blood Donation Camps in the college in 1996, 1997 and 1998.
- Dr. M. Bajaj was a Staff Advisor of NCC from November 1996 to April 1997, and Convenor of NCC from May 1997 to April 2000.
- Students and teachers of the Department participated in a Tree Plantation Drive organized by the DDA in the Kamla Nehru Ridge, August 2014.
- Students and teachers participated in the *Sakura* (cherry blossom) Plantation Ceremonyjointly organized by the Institute of Bioresources and Sustainable Development, Imphal, and Gifu Cherry Blossom Association at Talkatora Gardens, President's Estate, Delhi. Delhi is the first city in India where this ceremony was being held.
- Our students participate actively in co-curricular activities such as NCC, NSS and sports.Four students of B.Sc. (H) Botany and 14 students of B.Sc. Life Sciences are part of NSS.

35. SWOC analysis of the department and Future plans:

Strengths

- The Department of Botany has very good infrastructural facilities.
- The faculty members are well qualified and dedicated.
- The laboratory staff are qualified and lend very good support.
- The Department attracts students from different states.
- Our minimum entry level percent marks are very high. We are able to maintain high standards and our pass percentage is almost 100%. In the year 2015, 92% students secured first division.

Weaknesses

- Although we have a very good hostel, yet many outstation students have to stay in rented accommodations.They take time to get accustomed to the new environment.
- The curriculum is largely based on the traditional system of teaching and we have to stick to the prescribed syllabus.
- The numerous activities organized for students takes away the teaching time.

Opportunities

- The college is close to the main Department of Botany, DU. This enables the teachers and students to attend lectures, conferences and meetings.
- The students can conduct summer projects in the main Department of Botany, and also in the various institutes in the city.
- The Department conducts Add-on courses/bridge courses/workshopsto provide hands-on training and to expose students to current advances in plant sciences. We invite experts for conducting workshops and sessions in add-on courses.
- We emphasize on the active participation of students in classes, and student-teacher interaction is a continuous process.
- The faculty members act as mentors and facilitators in the learning process. To enhance learning, the faculty members accompany the students on local and outstation educational visits.

Challenges

- The students who have studied in Hindi medium find it difficult to catch up with the other students.
- Financial support for the maintenance of instruments, including microscopes is limited.
- The numerous activities organized for students takes away the teaching time, and the teachers have to then take extra classes to compensate for the missed classes.
- The maintenance of botanical garden is difficult because of shortage of water and manpower.
- The funds provided for educational trips, the maintenance of the botanical garden, and the Botany museum are inadequate.

Future Plans

- Organization of bridge courses, workshops and seminars, particularly for students.
- Active participation in all in-house science activities, such as DSKC summer projects and INSPIRE camps.
- Participation in conferences, symposia and seminars by contributing oral and poster presentations.

- Holding monthly departmental colloquia wherein teachers can present a paper. This will help in exchange of information and widen the understanding of the subject as a whole.
- Taking up research projects. Conducting projects with students.
- Improving the documentation of the various matters relating to the Department. This will help in better organization and retrieval of information.
- Improving the inventory of permanent slides, and specimens.
- Improving the inventory of books in the departmental library, and increasing the accessions gradually to meet students' requirements.
- Documentation of requirements of physiology and ecology experiments to facilitate the conduct of laboratory exercises.
- Improving the botanical garden by planning a layout and by growing all the seasonal plants that are required for taxonomy and physiology experiments. Labelling the plants will help students in the learning process.
- Frequent organization of local educational visits to cater to specific needs of courses.

Evaluative Report

Department of Chemistry

1. **Name of the Department**: Chemistry
2. **Year of Establishment**: B.Sc. (H) Chemistry was launched in 1948 when the college was established. However, classes were held in the Department of Chemistry, University of Delhi, till 1972, when teaching of Honours courses was transferred to the college.
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**:
   UG: B.Sc. (H) Chemistry; B.Sc. Life Sciences
   PG: M.Sc. Chemistry
4. **Names of Interdisciplinary courses and the Departments/units involved:**
   Students of Chemistry take courses in Physics, Computer Science, Economics, Mathematics, English and Environmental Science.
5. **Annual/ semester/choice based credit system (programme-wise):**
   Choice Based Credit System (CBCS) in Semester Mode from 2015-16.
6. **Participation of the Department in the courses offered by other departments:**
   Generic Elective Chemistry: B.Sc. (H) Physics, Botany, Zoology, and Mathematics
   Ability Enhancement Compulsory Course (AECC): Environmental Science
   Chemistry Courses: For B.Sc. Life Sciences
7. **Courses in collaboration with other universities, industries, foreign institutions:**
   The Department offers a 60-hr self-financing Add-on Certificate Course Green Chemistry and Environment. In this course, talks are delivered by eminent scientists and resource persons from the University of Delhi and other universities, The Energy and Resources Institute (TERI), Institute of Genomics and Integrative Biology (IGIB), International Centre for Genetic Engineering and Biotechnology (ICGEB), IIT-Delhi, Indian Institute of Science Education and Research (IISER), Pune, and leading chemical industries such as Jubilant Chemsys, Zydus Cadilla, etc.
8. **Details of courses/programmes discontinued (if any) with reasons:** None
9. **Number of teaching posts:**

Post	Sanctioned	Filled
Associate Professor		4
Assistant Professor	10	10

10. **Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt. /Ph.D./M. Phil., etc.):**

Name	Qual	Des	Specialization	Exp Y	Research Guidance
Dr. A. Gulati	Ph.D.	Associate Professor	Physical Chemistry	37	
Dr. M.J. Verma	Ph.D.	Associate Professor	Inorganic Chemistry	35	
Dr. B. Roy	Ph.D.	Associate Professor	Inorganic Chemistry	32	
Dr. A.T. Sheikh	Ph.D.	Associate Professor	Physical Chemistry	31	

Dr. M. Pathak	Ph.D.	Assistant Professor	Physical Chemistry	11	
Dr. S.M. Sonkar	Ph.D.	Assistant Professor	Organic Chemistry	9	
Ms. N. Rani	M.Sc.	Assistant Professor	Organic Chemistry	7	
Dr. K. Saini	Ph.D.	Assistant Professor	Physical Chemistry	11	
Dr. M. Sharma	Ph.D.	Assistant Professor	Inorganic Chemistry	15	
Dr. S.S. Bhatia	Ph.D.	Assistant Professor	Physical Chemistry	8	
Ms. A. Kumari	M.Phil.	Assistant Professor	Organic Chemistry	6	
Dr. A. Lumb	Ph.D.	Assistant Professor	Organic Chemistry	3	
Dr. D. Rawat	Ph.D.	Assistant Professor	Inorganic Chemistry	8	
Dr. Poonam	Ph.D.	Assistant Professor	Organic Chemistry	3	

Qual: Qualification; Des: Designation; Exp Y: Experience in years

11. List of senior visiting faculty: None

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary faculty:

Percentage of classes taken by temporary, *ad hoc*, guest faculty										
Year	2011-2012		2012-2013		2013-2014		2014-2015		2015-2016	
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Lecture	17.7	7.8	16.5	18.5	12.5	12.5	35.3	30.8	nil	nil
Lab	17.7	5.7	16.7	18.6	15.1	15.1	34.8	27.1	4.5	nil

13. Student-Teacher Ratio (programme-wise): In 2015-16 even semester16:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Year	2011-12		2012-13		2013-14		2014-15		2015-16	
	S	F	S	F	F	F	S	F	S	F
Lab Assistant	12	12	12	12	12	12	12	12	12	12
Lab Attendant	09	09	09	09	09	09	09	09	09	09

S: Sanctioned; F: Filled

15. Qualifications of teaching faculty with D.Sc./D.Litt./Ph.D./M.Phil./PG.:

Qual.	2011-12				2012-13				2013-14				2014-15				2015-16			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	11	12	3	1	11	10	3	3	9	9	2	2	8	9	5	4	12	12		
M.Phil.	1	1			1	1			1	1			1	1			1	1		
M.Sc.	2	2			2	2			2	2			1	1	1		1	1		

Qual.: Qualification; P: Permanent; A: Temporary/*Ad hoc;* O: Odd semester; E: Even semester

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

a) National Funding Agency: Eleven faculty members are involved in ongoing DU Innovation and DU Star Innovation Research with a total grant of Rs.131.38 lakh.
b) International Funding Agency: None

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Project	Funding Agency	Grant (lakh)
MH 305: Mobile! MyLab Anytime, Anywhere Co-PI: Dr. B. Roy Duration: August 2015-16; Ongoing	DU	6.50
MH306: Design of Affordable Water Purification Devices Using Green and Eco-friendly Silver Nanoparticles PI: Dr. M. Pathak; Co-PI: Dr. M. Sharma Duration: August 2015-16; Ongoing	DU	6.50
MH 307: Antimicrobial Finishing of Textiles Using Eco-friendly Bioactive Agents Co-PI: Ms. N. Rani Duration: August 2015-16; Ongoing	DU	6.50
MH 308: Synthesis of Henna (*Lawsonia inermis*) based Scaffolds and Comparison of their Colour and Anti-microbial Activity PI: Dr. S.M. Sonkar; Co-PI:Dr. M.J. Verma, Dr. A. Lumb Duration: August 2015-16; Ongoing	DU	6.50
MH 310: Sugarcane to Nanoparticles: Green Nanotechnology - the Future Co-PI:Dr. K. Saini, Dr. S.S. Bhatia Duration: August 2015-16; Ongoing	DU	5.50
MH 311: Phytoremediation of Heavy Metal Contamination and Extraction of Nanoparticles Co-PI: Ms. A. Kumari Duration: August 2015-16; Ongoing	DU	5.50
MH 01: Eureka! MyLab Developing Resources and Hands-on Science Activities-an Adaptation Accessible for Visually Challenged Co-PI: Dr. B. Roy Duration: February 2016-2019; Ongoing	DU-Star	37.50
MH 03: 3R-Reduce Reuse Recycle Co-PI: Dr. B. Roy, Dr. A.T. Sheikh, Dr. M. Pathak Duration: February 2016-2019;Ongoing	DU-Star	40.88
Star College Scheme for Chemistry Department Department Coordinators: Dr. B. Roy, Dr. M. Pathak Duration: 2011-2016; Ongoing	DBT	16.00
MH 203: Efficacy of Natural Dyes in Dyeing and Imparting Antimicrobial Properties to Different Textile Materials Co-PI: Dr. M. Pathak Duration: November 2013-2015; Completed	DU	4.50

MH 204: More Miles on Yamuna Co-PI: Dr. S.M. Sonkar, Dr. K. Saini Duration: November 2013-2015; Completed	DU	3.50
MH 206: Nanoparticles and Plants Systems : *in vitro* and *in silico* Studies Co-PI: Dr. S.S. Bhatia Duration: November 2013-2015; Completed	DU	6.50
MH 207: Eureka! MyLab Co-PI: Dr. B. Roy Duration: November 2013-2015; Completed	DU	5.50
MH102: Computational Modelling of Phytoregulatory Profile of Some Nanoparticles Co-PI: Dr S.S. Bhatia May 2012-July 2013; Completed	DU	10.00
MH 104: Miles on the Yamuna Co-PI: Dr. B. Roy Duration: May 2012-July 2013; Completed	DU	10.00

18. Research Centre/facility recognized by the University:

The Department leads and implements all Chemical Science Activities at DSKC and DBT Star Initiative. The collaborative work done within this framework is now being aggregated to constitute the Nanomaterial Research Laboratory.

19. Publications:

Publication per faculty: 115/16 = 7

Name	No. of Publications in Peer Reviewed Journals	Papers in Conference Proceedings	Books	Chapters in Books	Impact factor	Citation index	h-index
Dr. A. Gulati	2		3		1.02	7	1
Dr. M. J. Verma	1				1.41	0	0
Dr. B. Roy	8	3			13.94	13	2
Dr. A.T. Sheikh	1				1.77	3	1
Dr. M. Pathak	10	3			14.11	61	4
Dr. S. M. Sonkar	2	1		1	4.30	4	1
Dr. K. Saini	12	4			15.28	25	3
Dr. M. Sharma	22	1	1		15.12	78	6
Dr. S.S. Bhatia	7	14			4.45	13	2
Dr. A. Lumb	11	1			22.53	88	5
Dr. D. Rawat	9		1		8.60	91	5
Dr. Poonam	6				17.01	12	2
Dr. R. Usha[R]				2			
Dr. S. Dhingra[R]	14		5			47	5

[R]: Retired

20. Areas of consultancy (and income generated):

CPDHE	Dr. S. Dhingra, Dr. A. Gulati
e-Books for CBSE	Dr. A. Gulati
ILLL	Dr. R. Usha, Ms. A. Popli, Dr. S. Ahuja, Dr. K. Kapoor, Dr. S. Dhingra, Dr. A. Gulati, Dr. M. J. Verma, Dr. B. Roy, Dr. A.T. Sheikh, Dr. M. Pathak, Dr. S.M. Sonkar
NCERT	Dr. A. Gulati, and Dr. A.T. Sheikh
NISCAIR	Dr. R. Usha

21. Faculty as members in National Committees b) International Committees c) Editorial Boards, etc.:

Editorial Boards

Dr. M. Pathak

- Reviewer, International Journal of Nanoscience, World Scientific Publishing
- Reviewer, Medicinal Chemistry Research, Springer

Dr. K. Saini

- Reviewer, Advanced Electrochemistry, American Scientific Publishers, USA

Dr. Poonam

- Guest Editor, Special issue(s) of Current Topics in Medicinal Chemistry
- Guest Editor for Special issue(s) of Chemical Biology Letters

Professional Bodies:

Membership of Professional Bodies	Faculty
Asia Pacific Chemical, Biological & Environmental Engineering Society	3
World Academy of Science, Engineering and Technology	2
Green Chemistry Network Centre	5
Association of Chemistry Teachers	3
Chemical Society of Indian Institute of Technology, Delhi	1
Indian Biophysical Society	2
Indian Science Congress Association	1
Indian Women Scientists Association	1
Indian Society for Analytical Scientists	5
Materials Research Society of India	1
Society for the Advancement of Library and Information Science	1
Electrochemical Society of India, IISc, Bangalore	1

22. Student projects:

(a) Percentage of students who have done in-house projects including inter-departmental/programme

Approximately 40% of the students work on undergraduate research projects during the summer vacation under DSKC. Some representative projects are: green synthesis of metal nanoparticles; anti-oxidant activity of fresh fruit juices; natural indicators; molecular modelling; analysis of sunscreens and oscillating reactions. These undergraduate summer interns act as mentors for high school students at the innovative workshops under the week-long DST INSPIRE Internship programme organized at Miranda House every year. Twenty students are team members of ongoing DU Innovation Projects. Eight students are engaged in DU-Star Innovation projects.

(b) Percentage of students placed for projects in organizations outside the institution, i.e.in Research laboratories/Industry/ other agencies

Approximately, 5% of the students go to different scientific organizations and institutions for summer internships. In 2011-12, Monika Chanu Chongtham attended the Summer Workshop on Conflict Resolution in Dublin, Ireland. Aditi Dave was selected in the same year for Global Citizenship - University of Delhi Award for UG students to visit the University of Melbourne, Australia, in October. Sandhya Bhatia of the 2010-13 batch was selected for Project Oriented Chemical Education Programme at JNCASR, a Summer Internship for 3 years.

23. Awards/Recognitions received by faculty and students:

Faculty Awards

Name	Award
R. Usha[R]	Distinguished Teacher Award, University of Delhi; 2009
B. Roy	AUSAID Australian Leadership Award Fellowship (ALAF): Building leadership capacity in undergraduate science teaching in India (Host organization: University of Sydney); 2013 Distinguished Teacher Award, University of Delhi, 2009
M. Pathak	AUSAID Australian Leadership Award Fellowship (ALAF): Building leadership capacity in undergraduate science teaching in India (Host organization: University of Sydney); 2013 Teaching Excellence Award for Innovation for Innovation Project MH 203 entitled Efficacy of Natural Dyes in Dyeing and Imparting Antimicrobial Properties to Different Textile Materials; 2015 Best Innovative Idea Certificate for Innovation Project MH 203 under Theme: Scientific Arena at Innovation Plaza, Antardhwani;2015 Best Display Award for Innovation Project MH 203 under Theme: Scientific Arena at Innovation Plaza, Antardhwani;2015
K. Saini	Best Poster Award in National Conference on Green Chemistry and Sustainable Technology for Society, organized by Department of Chemistry & Electrical and Electronic Engineering, Government Women's Engineering College, Ajmer,11-12 January 2016 Second Prize, Poster Presentation, National Conference Advanced Functional Material and Their Applications, Government Women's Engineering College, Ajmer; 2015

[R

Students' Awards

The Department has the following annual awards instituted by various donors:

Anita Tandon Award for Highest Marks in B.Sc. (H) Chemistry I year
Lakshmichand Dayawati Award for Academic Excellence in B.Sc. (H) II year
Nauneet Ram Ahuja Award based on Academic Excellence and Economic Means for B.Sc. (H) II year
G.K. Dhingra Award for Highest Marks in Organic Chemistry in B.Sc. (H) II year

Other awards

Award	No. of students				
	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Gold Medal for I Rank in B.Sc. (H) Chemistry				1	
INSPIRE Award for Higher Education	3	2	11	16	
Golden Jubilee Award in Science			1		1
Golden Jubilee Appreciation Certificate		1			
II Year Award of Excellence, Science		1			
College Science Award				1	
Lead Earth Fellowship, TERI		1			
II in Subira Award for Innovation	1				
Yashoda Falak Fellowship for Commitment to Social Change		1			
Golden Key New Member Community Service Award	1				
Felix Scholarship for M.Sc. at Oxford			1		
Erasmus Mundus Award for M.Sc. in Europe		1			
Jubilee Scholarship from British Council &UK Govt. for M.Sc. in UK		1			
Summer Workshop on Conflict Resolution, Dublin, Ireland	1				
Global Citizenship - University of Delhi Award for UG students to visit University of Melbourne, Australia	1				
NCC Best Cadet Award	1		1		1

University Rank Holders in B.Sc. (H) and M.Sc. Courses (cumulative)

	2010-2011			2011-2012			2012-2013			2013-2014			2014-2015		
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
B.Sc. (H)			1					1			1		1		
M.Sc.					1				1					1	

24. List of eminent academicians and scientists/visitors to the department in the last five years:

Rasayanika, the Department Society, has the privilege of hosting extremely distinguished visitors who have delivered lectures and interacted with students. Over the years, *Rasayanika*, has organized lectures by eminent scientists which include Dr. A.P.J. Abdul Kalam, Prof. Yashpal, Dr. M.G.K. Menon, Dr. R.A. Mashelkar, Dr. S.K. Brahmachari and Prof. Goverdhan Mehta. An illustrative list of other scientists, academicians and research scientists from industry who have delivered lectures in the Department over the last few years is given in the following table.

Name	Organization/Institution
A.S. Matharu	Centre for Excellence in Green Chemistry, University of York, UK
S. Sharma	Russ College of Engineering, Ohio University, USA

V. Brahmachari	ACBR
Dinesh Gupta	ICGEB
V.C. Kalia	IGIB
S. Chandrasekharan	Indian Institute of Science, Bangalore
Mihir K. Chaudhuri	North Eastern Hill University Shillong/ IIT-Guwahati
A. K. Ghosh	Department of Polymer Science, IIT-Delhi
Rajesh Prasad	Department of Physics, IIT-Delhi
V.M. Chariar	Centre for Rural Development & Technology, IIT-Delhi
Pravin P. Ingole	Department of Chemistry, IIT-Delhi
N.C. Barua	Regional Research Laboratory, Jorhat
Jeetender Chugh	Indian Institute of Science Education and Research, Pune
Alok Adholeya	TERI University
Ravi Aggarwal	Toxics Link, New Delhi
R.K. Saxena	Department of Microbiology, DU
Kasturi Dutta	JNU
Sudeshna Leighton	Department of Botany, DU
P.K. Patra	Jubilant Chemsys, NOIDA

25. Seminars/Conferences/Workshops organized & the source of funding:

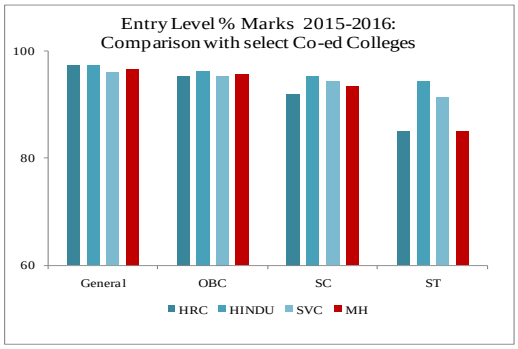
National

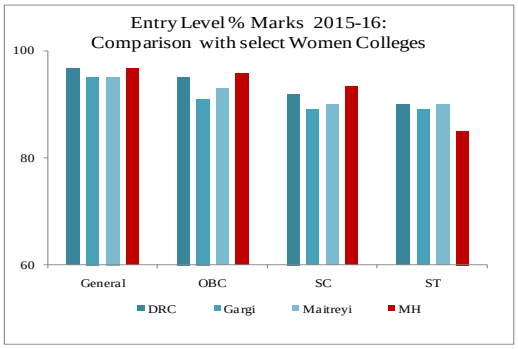
Workshop/Conference	Sponsors
Green Nanotechnology for Beginners, 2016	DU MH 310
Computational Chemistry and Bioinformatics, 2015	DBT-Star
Computational Methods in Drug Discovery, 2015	DBT-Star
Computational Chemistry for Chemistry Educators, 2011	DBT-Star
INSPIRE Workshops: Chemistry: The Green Pathway, Chemistry: Colours of Gold and All that/Colours of Gold and Silver, Molecular Modelling/Molecular Docking: Proteins and DNA, Going Green: Science for a Sustainable Future, Science on the Move: Collecting Data in the Field and Forensics: To Catch a Thief	DST

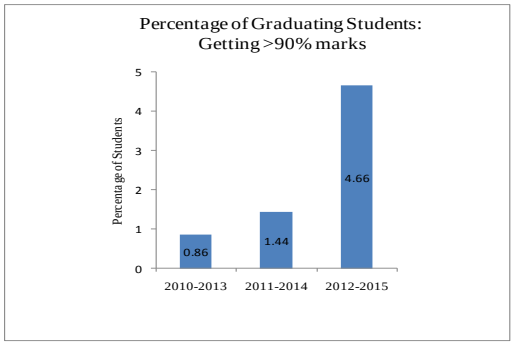
International: Symposium on Green Chemistry and Sustainable Development, funded by DBT, ICMR, INSA, Vigyan Prasar, 2012

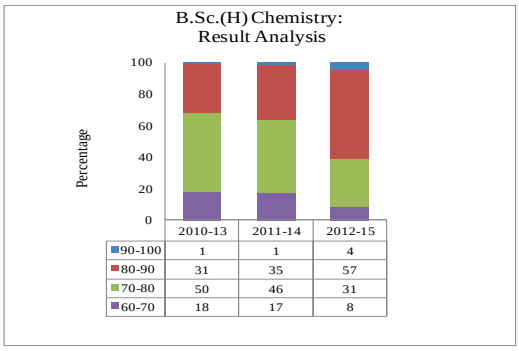
26. Student profile programme/course-wise:

Chemistry cut-off of the college compares favourably with the leading women's colleges and co-educational colleges of Delhi University as seen below. The Department has shown steady improvement in examination results of graduating students over the last few years with 57% students in the passing out batch of 2015 scoring between 80-90% and 4.7% students securing over 90% marks.

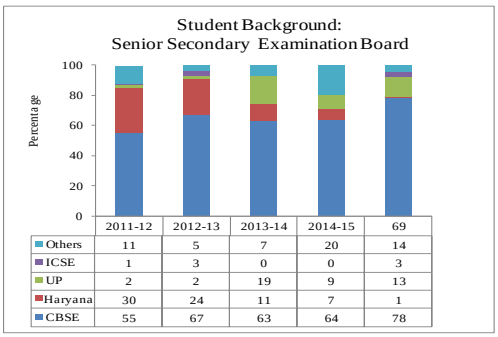


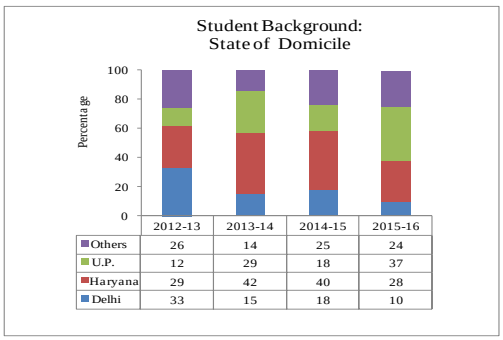


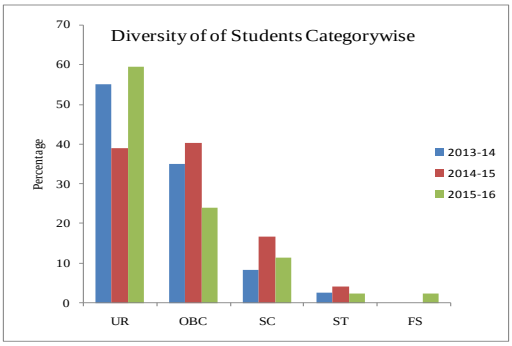




27. Diversity of Students:







28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services?

Competitive examination	Percent enrolled
NET/SLET/GATE/GRE	30
Civil Services/ Defence Services/DRDO/BARC	5
ONGC/HPCL/IPCL/Banking Services	5

29. Student progression:

Student progression	Percent enrolled
UG to PG	70
PG to M.Phil.	
PG to Ph.D.	20
Ph.D. to Post-Doctoral	15
Employed	
Campus selection	3
Other than campus recruitment	80
Entrepreneurship/Self-employment	5

30. Details of Infrastructural facilities:

a) Library: There are 3418 books in the Chemistry Section of the college library. The departmental library which is located in Room No. 152 has a total of 1165 books. All faculty members and students are members of the Department Library.
b) Internet facilities for staff and students: The Department shares the college WiFi facility.
c) ICT facilities: The Department uses 5 college lecture rooms, all of which are fitted with overhead projection facilities. The faculty room has a desktop with attached printer-scanner-copier. Faculty members have also been issued individual HP netbooks on request.
d) Laboratories: The Department has three well-equipped laboratories, one of which has been renovated with latest fittings. There are two instrumentation laboratories with a wide variety of instruments required for experiments included in the curriculum. The facilities of the DSKC are utilized by the students for project work beyond the curriculum. These include a Microwave Synthesis Station, an Atomic Absorption Spectrometer and a computer-interfaced instrumentation laboratory with a variety of sensors such as pH, conductivity, temperature, etc.

31. Number of students receiving financial assistance from college, university, government or other agencies:

Financial assistance to Chemistry students from various agencies over the last four years:

Year	Total	College	DU	DST INSPIRE	Other Govt.	Others
2015-16	10	3			3	4
2014-15	31		6	16	5	4
2013-14	40		17	11	2	10
2012-13	31	7	11	2	4	7

32. Details on student enrichment programmes (special lectures/workshops/seminars) with external experts:

Workshop/Conference	Source of funding
Bridge Course for B.Sc. (H) Chemistry I year, 2015	Self-financed
Nature at Work: Studying Biomolecules; 2013	DBT-Star
Mimicking Nature: Using Plant and Animal Resources for Chemical Reactions; 2013	DBT-Star
Add-on Certificate Course Green Chemistry and Environment	Self-financed

33. Teaching methods adopted to improve student learning:

In addition to the traditional lecture method of teaching the following methods are also adopted:

- Green Chemistry practices are communicated and followed by faculty and students.
- PowerPoint presentations are used whenever desirable.
- Students give presentations on pre-assigned topics followed by discussion.
- Tactile models are used for better understanding of molecular structures, stereoisomerism and crystal structures.

- An understanding of computer applications in Chemistry is imparted to students.
- Students are tutored to visualize and draw molecular structures and understand stereochemistry through individual hands-on use of Open Source Software, e.g. ArgusLab, ACD ChemSketch, etc.
- Students' level of knowledge and understanding is tested through pre- and post-lecture and pre- and post-lab quizzes.
- Additional study material, write-ups of experiments and question banks are provided to students.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

A number of Chemistry students have been and continue to be actively involved as members and office bearers of NCC (5 in 2015-16), NSS (44 in 2015-16) and the College Societies under the Miranda House Students' Union. The current MH Student Union, NSS and *MH-Vatavaran* Presidents are Chemistry students. In addition to the President and Vice- President, 24 Chemistry students are members of *MH-Vatavaran*.

All the faculty members, over the years, have been associated with one or more of the following activities:

- NSS
- Faculty Advisory Committee, Miranda House Students' Union
- College Societies and Committees such as Proctorial Committee; Garden Committee; Placement Cell; SPIC MACAY; Cafeteria Committee; *Jigyasa*, the Quiz Society; Debating Society; *Adwitiya*, the Fine Arts Society, and the Gandhi Study Circle.
- Several past and present faculty members have been closely associated with the founding and functioning of *MH-Vatavaran*, the Environment Society of the college. Currently, two faculty members are involved in the day-to-day functioning of *MH-Vatavaran* and the college Recycling Project.

35. SWOC analysis of the Department and Future plans:

Strengths: In addition to dedicated faculty and industrious non-teaching staff, the Department has well-equipped laboratories and a Departmental Library with a large number of books as mentioned in Point 30. The Department has shown steady improvement in examination results of graduating students over the last few years as shown under Point 26. The Departmental Society *Rasayanika* hosts an annual inter-college Scientific Paper Presentation Competition Eureka! in addition to other co-curricular activities such as *Prayog*, the labwork competition. The Departmental magazine *Rasayani* provides a platform for students to write articles on diverse scientific topics and about their experiences in college.

The Department has joined the global movement towards Green Chemistry which envisages the search for eco-friendly processes and products that can replace the present ones having a negative environmental impact. A sincere effort is being made to spread awareness about Green Chemistry and the environment among students and through them to the university community and society at large. To this end, the Department introduced a 60-hour self-financing Add-on Certificate Course Green Chemistry and Environment open to all undergraduates of the University of Delhi studying Chemistry. The course consists of lectures by the faculty and invited speakers, laboratory work, field

visits and students' presentations related to Green Chemistry and its Practices, Environmental Pollution and its Mitigation, Resource Conservation and Sustainable Development. The lectures are open to all students of the college while the rest of the activities are meant for the students registered for the add-on course.The field trips have included visits to TERIGram, Gurgaon, TERI University, New Delhi, National Institute of Solar Energy, Gurgaon, ITC Green Centre, Gurgaon, Airports Authority of India Paper Recycling Unit, Ruchi Vihar, Vasant Kunj, New Delhi, amongst others. The Environment Society *MH-Vatavaran* and the Green Chemistry course often organize common events such as the International Symposium Green Chemistry and Sustainable Development in 2012 and the National Workshop Art and Science of Paper Recycling in 2010.

Weaknesses: Insufficient funds for purchase of chemicals, glassware and equipment results in students having to work in groups. However, we try to turn this weakness into a strength by laying stress on peer learning, which has great advantages. The other benefit of group work is reduced consumption of chemicals, which is beneficial for the environment. Every effort is made to minimize wastage by recovery and reuse of chemicals wherever possible and reducing water consumption in the laboratory.

Opportunities: Undergraduate research is receiving enhanced global attention currently and the Department is making use of this opportunity by participating in a number of intra- and inter-disciplinary research projects. These include involvement in the DSKC summer internships, DU Innovation projects, Star Innovative projects and projects under the DBT Star College scheme.

Challenges: Motivating students to pursue higher education and careers in the sciences is a challenge. Another challenge is designing and carrying out 'green' eco-friendly experiments in keeping with the millennium goal of sustainable development while working within the prescribed format.

Future Plans: The Department of Chemistry will continue to strive for excellence in teaching while encouraging and guiding undergraduate research and making meaningful contributions to the corporate life of the college.

Evaluative Report

Department of Computer Science

1. **Name of the Department:** Computer Science
2. **Year of Establishment:** 1984
3. **Names of Programmes/Courses offered:**
   UG: B.Sc. Physical Science; B.Tech. Computer Science (for one batch admitted under erstwhile FYUP in 2013-14)
4. **Names of interdisciplinary courses and the departments/units involved:**
   In addition to Computer Science, students of B.Sc. Physical Science take courses offered by Departments of Physics, Mathematics, English; and Environmental Science.
5. **Annual/semester/choice based credit system (programme-wise):** Choice Based Credit System (CBCS) in semester mode has been implemented from 2015. The current framework for the three years is I year: CBCS; II year: TYUP; III year: B.Tech. under FYUP.
6. **Participation of the Department in the courses offered by other departments:**
   Generic Elective Courses: B.A. (H) and B.Sc. (H) students can opt for:

Introduction to Programming	I Semester
Introduction to Database Systems	II Semester
Computer Networks and Internet Technologies	III Semester
Information Security and Cyber Laws	IV Semester

7. **Courses in collaboration with other universities, industries, foreign institutions:**
   Add-on Course *Operations Research*: *Optimization for Better Decisions* is offered since 2006 in collaboration with the Department of Mathematics, Miranda House. This 36-hr self financing certificate course is taught by experts from Faculty of Management Studies, Department of Operations Research, Delhi University, Fostiima Business School and Lloyd Business School.
8. **Details of courses/programmes discontinued (if any) with reasons:**
   - In 2013-14, under FYUP, B.Sc. Physical Science was discontinued.
   - In 2014-15, rollback of FYUP, B.Tech. Computer Science was discontinued.
9. **Number of teaching posts:**

Post	Sanctioned	Filled
Associate Professor		1
Assistant Professor	2	1

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil., etc.):**

Name	Qual	Des	Specialization	Exp Y	Research Guidance
Dr. S. Aggarwal	Ph.D.	Associate Professor	Computational Biology	20	
Ms. A. Khattar	M.Phil.	Assistant Professor	Digital Watermarking Techniques	10	
Ms. P.R. Jain[A]	M.Phil.	Assistant Professor	Mining Bio-Medical Databases	13	
Ms. I. Pathak[A]	M.Tech.	Assistant Professor	Network Virtualization	1	

Qual: Qualification; Des: Designation; Exp Y: Experience in years; [A]: *Ad hoc*

11. List of senior visiting faculty: None

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary/*ad hoc*/guest faculty:

Year	2011-12		2012-13		2013-14		2014-15		2015-16	
Semester	O	E	O	E	O	E	O	E	O	E
Lectures	56	42	79	72	84	84	73	80	83	67
Practicals	55	37	71	60	69	69	61	75	72	54

P: Permanent; A: Temporary/*Ad hoc:* O: Odd semester: E; Even semester

13. Student-Teacher Ratio:~ 14:1

14. Number of academic support staff (technical) and administrative staff:

Year	2010-11		2011-12		2012-13		2013-14		2014-15		2015-16	
	S	F	S	F	S	S	F	F	S	F	S	F
Sc. Assistant	1	1	1	1	1	1	1	1	1	1	2	1
MTS		1		1		1		1		1		1

S: Sanctioned; F: Filled

15. Qualifications of teaching faculty with D.Sc./D.Litt/Ph.D./M.Phil./PG:

Qualification	2011-12				2012-13				2013-14				2014-15				2015-16			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.									1	1			1	1			1	1		
M.Phil.											1	1			1	1	1	1	1	1
M.Tech.																				1
M.Sc./MCA	2	2	1		2	2	1	1	1	1	2	2	1	1	2	1			1	

P: Permanent; A: Temporary/*Ad hoc*; O: Odd semester; E: Even semester

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Faculty and students of the Department are working collaboratively on two DU Innovation Projects.

Title	Mobile! MyLab Anytime, Anywhere
Department Co-PI	Dr. S. Aggrwal
Students	Saloni Bansal, Isha Gupta, Priya Bundela
Funding Agency	Innovation Project, University of Delhi
Grant	Rs. 6.5 lakh
Duration	2015-16
Title	Reward Network as a Form of Experiential Marketing
Department Co-PI	Ms. P. R. Jain
Students	Priyanka Gill, Paahuni Khandelwal, Richa Dewan, Kritika Arora, Palakh Shangle, Abhishikha Aggarwal
Funding Agency	Innovation Project, University of Delhi
Grant	Rs.3.5 lakh
Duration	2015-16

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Project	DBT Star College Scheme
Department Coordinator	Ms. A. Khattar
Funding Agency	DBT, Government of India
Grant	Rs. 5 lakh one-time, non-recurring

	Rs. 2 lakh recurring per academic year for 3 years
Duration	2011-2014

18. Research Centre/facility recognized by the University: None

19. Publications:

Dr. S. Aggarwal: Papers in Peer Reviewed Journals: 1
Papers in Conference Proceedings: 4

20. Areas of consultancy and income generated:

- Ms. A. Khattar was anchor of King's College London Delhi Summer School for the course *E-Business- The Online Entrepreneur*, June 2013.
- Ms. A. Khattar was guest faculty for MCA students in DU Department of Computer Science during academic year 2010-11.
- Ms. A. Khattar was the Coordinator for conducting the online examination of Environmental Science in collaboration with ILLL in 2009 and 2010.

21. Faculty as members in

a) National Committees, b) International Committees and c) Editorial Boards: None

22. Student Projects:

a) Percentage of students who have done in-house projects including inter-departmental/programme

100% students undertake project work as this is a mandatory part for some papers in Computer Science and Physics curriculum. Additionally, 9% students are working on DU Innovation Projects. Four students worked on robotics projects during DSKC summer workshop *Flavor of Research*, 2014. Two students undertook a project titled Dharohar entailing study of North Eastern State of Assam during excursion on DU Gyanodaya Express, 2014. Under FYUP, as part of Foundation Course on Information Technology, all first year students of the college, numbering more than 1000, undertook collaborative project work in multidisciplinary teams guided by the Department faculty.

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies

About 10% students work on projects with outside organizations. An illustrative list of student training and project work during internship with companies is given below.

- Vani Bhatia, B.Tech. III year, worked as an Exchange Support Manager in AIESEC, University of Delhi from February 2014 to January 2015. She also participated in annual Indo-Dutch Exchange Programme in June 2015. Vani worked for Technical Group Headquarters, Corps of EME, Indian Army for four weeks.
- Paahuni, B.Tech. III year, undertook Summer Internship at DUWA imparting Computer literacy to school students, June 2015.
- Kirti Sharma, Physical Science II year, interned with University of Chicago Delhi Centre and designed their publicity material, July 2015.
- Shruti Chandran, B.Tech. III year, worked on Android-SQLite Database management at Chai for one month in June 2015. She also managed designing and implementation of web based documents for research papers at IIT, Bombay for two months, July-September 2015.

- Mishita, B.Tech. III year, worked with R. F. Operations team of Tata Tele Services Ltd. using network kits for base towers. She worked for Technical Group Headquarters, Corps EME, Indian Army for 4 weeks.
- Anisha Malhotra, B.Tech. III year, worked as Campus Specialist with Hindustan Times at htcampus.com. She also worked for HT Media Ltd. on project Great Indian Football Action, 30 June 2015 to 30 July 2015.
- Abhishika Aggarwal, B.Tech. III year undertook summer project TEACH at The Indian Samaritan, a Non-Profit Organization from July 2015 to December 2015 and The Nizammudin Project, March 2016 to April 2016.
- Anisha Jain, Physical Science II year, worked in Aspiring Minds Assessment Pvt. Ltd., 30 May 2015 to 12 July 2015.
- Atmika Sharma, B.Tech. III year, worked on Field Service Management Software at Company (Impetus Pvt. Ltd.), 09 June 2015 to 30 July 2015.
- Ritika Bhardwaj, B.Tech. III year worked in Akosha Coraza Technologies Pvt. Limited, 18 August 2015 to 15 October 2015. She also worked for Edunuts Online Services.
- Manvi Aggarwal, Vani Bhatia, Mishita, B.Tech. III year, were selected to participate as exchange students in the Indo-Dutch programme, Management in Cultural Contexts held at Utrect Business School, The Netherlands, July 2015.

23. Awards/ Recognitions received by faculty and students:

Faculty Awards

- Ms. A. Khattar was awarded fourth position in e-Yantra Robotics Competition at IIT, Mumbai, 10-11 April 2014.

Students' Awards

- The College gives an annual Academic Award of Rs. 1,500 to the toppers of I, II and III year.
- Madan Mohan Chopra Memorial Award of Rs. 1,200 is given to the third year student who has the highest cumulative score in I and II year.
- Kasturi Memorial Award, is given to the student who has the highest cumulative score in Mathematics in I, II and III year.
- Vice-Chancellor's Student Fund was awarded to 8 students in 2012-13 of Rs. 3,000 each.

Computer Science students also received the following awards:

Award				Amt. (Rs.)
2011-12	University Rankers	Anamika Singh	B.Sc. PS III year	1,500
2012-13	Yashoda Fellowship	Mamta Kumari	B.Sc. PS I year	5,000
2013-14	Anu Bedi	Sarita	B.Sc. PS II year	6,000
	LISAA Scholarship	Indu Khatana	B.Tech. I year	5,000
	Yashoda Fellowship	Saloni Bansal	B.Tech. I year	10,000
	MHAA	Sarita	B.Sc. PS II year	5,000
2014-15	University Rankers	Shreya Puri	B.Sc. PS III year	2,500
	Sanyukta & D. N. Chaudhari Fellowship	Anshi Mishra	B.Sc. PS III year	5,000
	R.R.P. Sharma Memorial	Saloni Bansal	B. Tech II year	5,000

Excellence in Sports

2014-15	Bawa Balwant Singh Bhalla	Akanksha	B.Tech II year	5,000
	DU Inter-College Netball Tournament	Akanksha	B.Tech. II year	Winner
	DU Inter-College Athletics Meet	Akanksha	B.Tech. II year	II Position
	DU Inter-College Weight Lifting Championship	Akanksha	B.Tech. II year	II Position
	DU Inter-College Athletics Meet	Shruti Chandran	B.Tech. II year	II Position
	DU Inter-College Weight-lifting Championship	Shruti Chandran	B.Tech. II year	II Position

24. List of eminent academicians and scientists/visitors to the Department:

1. Ms. Debjani Ghosh, Vice President, Intel, October 2015.
2. Mr. Prashanto Roy, President and Chief Editor, Cyber Media Publications, 2015.
3. Dr. Vikas Sahni, University of Ireland, October 2015.
4. Dr. Neelima Gupta, University of Delhi, March 2015.
5. Dr. Arvind Singh, Deputy Secretary, National Defense College, February 2015.
6. Mr. Saket Modi, Lucideus, January 2014.
7. Ms. Raminder, HCL, March 2014.
8. Ms. Geetika Chadha, Imagenie Inc., February 2014.
9. Ms. Prachi Garg, Ghomophiro.com, March 2016.
10. Mr. Vibhor Gupta, WeekendR, April 2016.
11. Mr. Alexander Khalkho, Grade One India, December 2015.

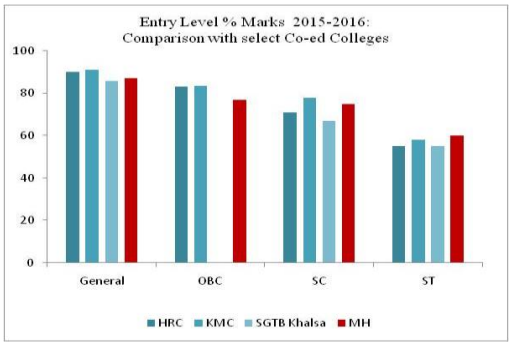
25. Seminars/Conferences/Workshops organized & the source of funding:

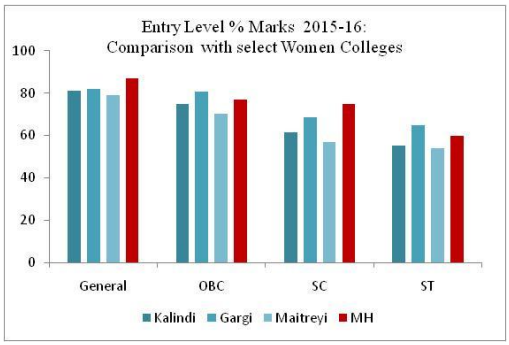
i) The following capacity building workshops for students were organized under the DBT Star College Project Scheme during 2011-2014:
   - Scientific Visualization of Life Systems
   - Robotics: Touching Lives
   - Ethical Hacking
   - Free and Open Systems Software (FOSS)
   - Science of Developing Android Apps
   - Campus to Corporate-Personality Enhancement Workshop
   - Red Hat (Linux)

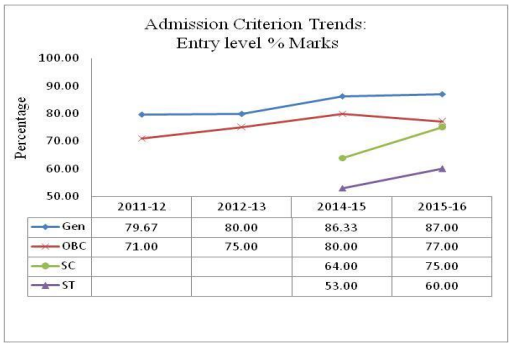
ii) The Department conducted a three-week extensive workshop in Android Application Development for students of the two DU Innovation Projects detailed in point 16 above.

iii) The students undertook an examination in C++ on 01 October 2014 under the Spoken Tutorial Project, an initiative of National Mission on Education through Information and Communication Technology (ICT), MHRD.

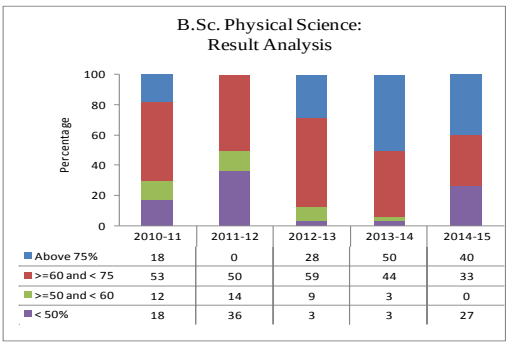
26. Student profile programme/course-wise:





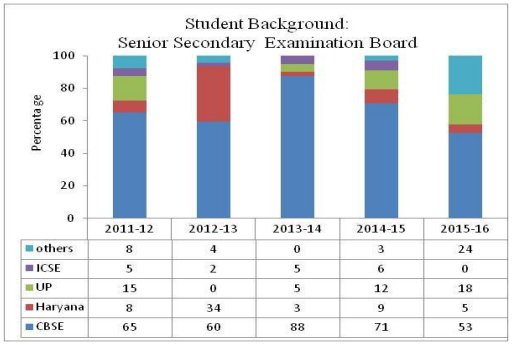


	2011-12	2012-13	2014-15	2015-16
Gen	79.67	80.00	86.33	87.00
OBC	71.00	75.00	80.00	77.00
SC			64.00	75.00
ST			53.00	60.00

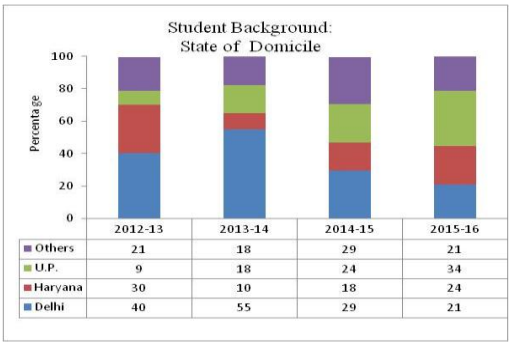


	2010-11	2011-12	2012-13	2013-14	2014-15
Above 75%	18	0	28	50	40
>=60 and < 75	53	50	59	44	33
>=50 and < 60	12	14	9	3	0
< 50%	18	36	3	3	27

27. Diversity of Students:



	2011-12	2012-13	2013-14	2014-15	2015-16
others	8	4	0	3	24
ICSE	5	2	5	6	0
UP	15	0	5	12	18
Haryana	8	34	3	9	5
CBSE	65	60	88	71	53



	2012-13	2013-14	2014-15	2015-16
Others	21	18	29	21
U.P.	9	18	24	34
Haryana	30	10	18	24
Delhi	40	55	29	21

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.: Data not available.

29. Student progression:

Students compete successfully at various entrance exams for post graduation. The Department can boast of a large number of alumnae working wonders in technology and management including: Dr. Nihita Goel Head, Information Systems Development Group, TIFR, Mumbai, Ms. Darpan, Wipro in USA, Ms. Prachi Garg, founder, Ghoomofiro.com and author, Super Women, Ms. Geetika Chadha, Corporate Stylist cum Image Consultant, entrepreneur and member of FICCI, owner, Imagenie. Dr. Priti Sehgal, a senior faculty member at Keshav Mahavidyalaya (DU), researcher in the area of Computer Graphics and Digital Image Processing. Several others contribute as faculty in universities and schools: Ms. A. Khattar and Ms. P. R. Jain at MH, Ms. Geeta Gupta at PGDAV College (DU) and Ms. Neelu Sanghi at SGTB Khalsa College (DU).

For the batch of 2014-15, the student progression is as under:

Post-Graduate Degree	16
Competitive Examinations	9

Jobs	6
Information not available	9

30. Details of Infrastructural facilities:

a) Departmental library: The college library has 800 titles on Computer Science, in addition to which the departmental library has 100 titles for ready reference.

b) Classrooms: The Department has access to WiFi enabled classrooms with projection facilities for all its needs. Interactive classes are also held in laboratory integrating lecture demonstrations and practical exercises. The lab is equipped with an Interactive Whiteboard Kit.

c) Faculty room: This makes available individual workstation and storage space for each of the four faculty members. Additionally, the technical staff has separate work area linked to the computer laboratory.

d) Internet facilities for staff and students: WiFi connectivity is available throughout the college campus. In addition to this, the Department has an internet connection over a MTNL line for its exclusive use.

e) Laboratories: The Department has a state-of-the-art laboratory with thirty five computers with latest configuration connected in a LAN, fully supported by Open Source Software as detailed below.

Item	Configuration	Quantity
Computer Systems HP 800 SFF	Processor Intel Core i-7, RAM 4 GB, Hard Disk 500 GB, DVD Writer, Keyboard, Mouse, HP TFT 18.5”	35
Laser Printers	HP LaserJet MFP 175 Wireless Printer HP LJ 1020 plus	1 1
Interactive Whiteboard Kit	EyeRis Micro 5090	1
Projector	NEC Projector S/N 1Z4016EC	1
Electronic Screen	Screen with Remote control (Automatic)	1
Laptops	f) DELL Laptop (Intel Core Duo T5870, 2.1 MHz, 15.4″ WXGA+ Display (1440 x 900 px), non-glare, 2 GB RAM, 320 GB HDD g) HP Laptop (HP Envy-4-1002TX, 3rd Gen. Intel Core i5, 1.7 GHz, 500 GB HDD, 4 GB RAM)	1 1
Netbooks	HP ATOM CPU N570, 1.66 GHz, @GB RAM, 250 GB HDD	2
Laptops for students	HP: Probook 445G1, AMD Elite A65350 M 2.9 GHz, RAM 8 GB, HDD 320 GB	20
UPS	APC 10 KVA having 36 batteries with 3hrs backup	1
Software	Ubuntu 12.0, Libre Office, Python 2.7, Mysql, GNU C++ Compiler, Scilab, MASM 6.15	

31. **Number of students receiving financial assistance from college, university, government or other agencies:**

Details of the financial assistance received by the students are:

	2012-13	2013-14	2014-15	2015-16
Government		1		2
DU		8		
College	2	3	1	1
Others	4	3	4	5
Total	6	15	5	8

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts:

- Workshop on *SQL Hands-on*, Vibhor Gupta, WeekendR, 09 April 2016.
- Workshop on *Presentation Skills*, Dr. Arvind Singh, National Defense College, February 2015.
- Workshop on *Science of Developing Android Applications*, Saket Modi, Lucideus, 22 and 24 January 2014.
- Workshop on personality Development *Campus to Corporate*, Ms. Geetika Chadha, Imagenie Inc., 26 February 2014.
- Workshop on *Red Hat* (*Linux*), ITSL Limited (Education Partners with Red Hat), 27 and 28 March 2014.
- Workshop on *Ethical Hacking*, Saket Modi, Lucideus, 06 March 2014.
- Workshop on *Robotics Touching Lives*, Thinklabs Technosolutions Pvt. Ltd., 09 and 10 April 2012.
- Workshop on *Scientific Visualization of Life Systems*, Alexander Khalkho, Grade One, India, 23 and 24 March 2012.

33. Teaching methods adopted to improve student learning:

Every student is allotted an individual computer for hands-on learning. Students are encouraged to refer to online content by leading universities and industry experts. Project based assignments are allocated to small groups of students to improve their coding, debugging and interpersonal skills. Group discussions and presentations on topics within the syllabus and on latest advances in IT industry are a regular activity. Participation in Massive Open On-line Courses (MOOCS) is highly encouraged. Contemporary tools like Google groups, Google forms and social media are rigorously used for communication amongst students and faculty. In view of motivating the young ladies to contribute innovatively to the knowledge revolution in this digital age, the technical society of the Department, *CompuAda*, holds a yearly inter-college event, *Orrey*, which sees large participation of students from within and outside Delhi. The society also organizes lectures, workshops, seminars, etc. as detailed in Items 24, 25 and 32.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

A large number of students take active part in NSS, NCC, Lakshita, and Enactus programmes in the college. The current list of NSS volunteers include: Adiba, Akansha Chauhan, Insha, Megha, Princy Mishra, Shradha Sharma and Yashika. The students active in NCC include Anuradha, Kajal Yadav, Sukanya and Surabhi Shukla. Saloni Bansal is a member of Lakshita.

35. SWOC analysis of the department and Future plans:

Strengths

- Practical classes along with the discussions supplement classroom teaching and help in developing both the programming and debugging skills of the students.

- Students are encouraged to do class room presentations on the latest advances in computer science which keep them abreast with the technology.
- To reduce paper waste we have accepted e-submission of the practical assignments on the CD.
- The computer lab equipped with latest i7 desktops having only FOSS software.

Weaknesses

- Currently, the support staff namely, one Scientific Assistant and one MTS, are *Ad hoc*. This leads to instability.
- The B.Sc. Physical Science course is amongst the two non-honours stream courses in the college. It does not draw the best students, who prefer the B.Sc. (H) Computer Science Course in other colleges. The workload limits the faculty strength to a maximum of four. This is rather small considering the responsibilities it shoulders in assisting the college to build the state-of-the-art technology environment for the entire campus.

Opportunities

- The Department is looking forward to start the B.Sc. (H) Computer Science Course from the next academic session. The university officials have already visited the college and the proposal is awaiting the final nod from the university.
- Our students are sufficiently well-trained and enterprising to meet the challenges of entrepreneurship. Some of them have initiated startups like mybanaras.com and are developing android applications and web portals for industry.

Challenges

- To make all the students ready for absorption in the industry, the Department wants to start an Add-on Course in Mobile app and website development. One such 3 weeks workshop was conducted for the DU Innovation Project students. The Department wants to run an Add-on Course on a similar track on a regular basis.
- Given the small size of the Department, it is indeed challenging to be a part of all IT related activities such as IT enabling of the students and faculty, maintaining the college website and IT infrastructure, IT related purchases and procurements.

Future Plans

- The Department is looking forward to start the B.Sc. (H) Computer Science Course from the next academic session.
- To make all the students ready for absorption in the industry, the Department wants to start an Add-on Course in Mobile App and Website Development.
- To strengthen their lifelong learning skills, the Department wishes to ensure that every student undertakes at least two MOOCs in their three years of stay at Miranda.

Evaluative Report

Department of Mathematics

1. **Name of the Department:** Mathematics
2. **Year of Establishment:**1948
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters, Integrated Ph.D., etc.):**
   - **UG**: B.Sc.(H) Mathematics, B.A. Programme in combination with Economics, Office Management & Secretarial Practice
   - **PG**: M.Sc. Mathematics
4. **Names of Interdisciplinary courses and the departments/units involved:**
   - Ability Enhancement Compulsory Course (AECC): Departments of English, Hindi, Sanskrit, Chemistry and Botany
   - Generic Elective (GE):All other departments
   - Credit Course (TYUP-II): Department of Physics, Chemistry, Economics, Philosophy, History, Political Science, English and Hindi
5. **Annual/semester/choice based credit system (programme-wise):**
   Choice Based Credit System (CBCS) in Semester Mode was introduced in 2015-16.
6. **Participation of the Department in the courses offered by other departments:**
   - B.El.Ed. (Liberal Option Paper): Department of Elementary Education
   - B.Sc. Applied Physical Science: Department of Computer Science
   - B.A. Programme Application Course
7. **Courses in collaboration with other universities, industries, foreign institutions:**
   The Department in collaboration with the Computer Science Department organizes a 36-hr Add–on Certificate Course *Operations Research*: *Optimization for Better Decisions*. The course has been designed in consultation with the experts from the Faculty of Management Studies and the Department of Operations Research, University of Delhi, who also taught in initial years. Current faculty is drawn from Fostiima Business School and Lloyd Business School.
8. **Details of courses/programmes discontinued (if any) with reasons:** None
9. **Number of teaching posts**

Post	Sanctioned	Filled
Associate Professor		3
Assistant Professor	9	9

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. /M. Phil., etc.,):**

Name	Qual	Des	Specialization	Exp Y	Research Guidance
Dr. S. Aggarwal	Ph.D.	Associate Professor	Multi-Objective Programming	32	Ph.D: 2 [o]
Dr. M. Srivastava	Ph.D.	Associate Professor	Vector Optimization and Variational Inequalities	29	Ph.D: 3[o]

Dr. S. Sharma	Ph.D.	Associate Professor	Mathematical Programming	26	Ph.D: 3[o]
Dr. R. Gupta	Ph.D.	Assistant Professor	Multi-Objective Programming	17	
Dr. M. B. Grover	Ph.D.	Assistant Professor	Mathematical Programming	14	
Ms. B. B. Gupta	M.Phil.	Assistant Professor	Operator Theory	8	
Dr. D. Verma	Ph.D.	Assistant Professor	Functional Analysis	11	
Ms. A. Verma	M.Sc.	Assistant Professor	Wavelets	7	
Ms. M. Arora	M.Phil.	Assistant Professor	Harmonic Analysis	10	
Dr. J. Talwar	Ph.D.	Assistant Professor	Numerical Analysis	2	
Dr. D. K. Verma	Ph.D.	Assistant Professor	Approximation Theory	2	
Mr. B. Singh	M.Phil.	Assistant Professor	Complex Analysis	5	
Dr. V. Dhaka[A]	Ph.D.	Assistant Professor	Coding Theory	4	
Ms. S. Gandhi[A]	M.Phil.	Assistant Professor	Commutative Algebra	2	
Ms. M. Upmanyu[A]	M.A.	Assistant Professor	Multi-Objective Programming	1	
Mr. N. Gupta[A]	M.Phil.	Assistant Professor	Complex Analysis	1	
Mr. J. Touthang[A]	M.Sc.	Assistant Professor		1	

Qual: Qualification; Des: Designation; [A]: *Ad hoc*; [O]: Ongoing; Exp Y: Experience in years

11. List of senior visiting faculty: None

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary/*Ad hoc*/guest faculty:

Year	2011-2012		2012-2013		2013-2014		2014-2015		2015-2016	
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Lecture	8	33	24	29	24	29	35	44	30	34
Laboratory	33	37	36	52	26	26	30	45	49	49
Tutorial	13	18	34	30	27	22	20	8	33	30

13. Student-Teacher Ratio: 16 : 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: None. However, the college has provided one Multitasking Staff (MTS) for Mathematics Computer Lab.

15. Qualifications (highest) of teaching faculty with D.Sc./D.Litt./Ph.D./ M.Phil./PG:

Qualification	2011-12				2012-13				2013-14				2014-15				2015-16			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	5	5	1	1	7	6	1	1	6	6	1	1	7	7	1	1	6	8	2	1
M.Phil.	4	4	0	1	3	3	1	0	3	3	1	1	2	1	1	2	2	3	2	2
M.A./M.Sc.	1	1	8	5	1	1	7	6	1	1	5	4	1	1	5	2	1	1	5	2

P: Permanent; A: Temporary/*Ad hoc*; O: Odd Semester; E: Even Semester

16. Number of faculty with on-going projects from a) National b) International funding agencies and grant received:

Title	Reward Network as a Form of Experiential Marketing (MH309)
Department Co-PIs	Dr. R. Gupta, Dr. M. B. Grover
Students	Harshita Aggrawala, Himani Gupta, Komal Aggarwal
Funding Agency	Innovation Project, University of Delhi
Grant	Rs. 3.5 lakh
Duration	2015-2016

17. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total grants received:

Project	A Study of Certain Optimization Problems and Application of Computer Aided Software
Principal Investigator	Dr. S. Suneja
Co-Principal Investigator	Dr. M. B. Grover
Funding Agency	UGC
Grant	Rs. 1.20 lakh
Duration	2010-2012

18. Research Centre/facility recognized by the University

- The faculty members, namely, Dr. S. Aggarwal, Dr. M. Srivastava and Dr. S. Sharma are supervising M.Phil./Ph.D. students registered with Department of Mathematics, University of Delhi.
- The faculty members are active participants in all programmes of DSKC established at Miranda House.

19. Publications

Name	Authored: Books	Edited: Books/ Proceedings	Chapters: Books/ Textbooks	Papers: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular Resources	h-index	Impact Factor	Citation Index
1. Dr. S. Aggarwal	01		02	17		03		3	12.17	43
2. Dr. M. Srivastava				14	01	03		6		254
3. Dr. S. Sharma				13				3	8.18	75
4. Dr. R. Gupta				04				1	2.36	70
5. Ms. M. B. Grover				10		05		4	5.4	61

6. Dr. D. Rani				03				2	9	2.2
7. Dr. J. Talwar				11		01		3	3.9	21
8. Dr. D. K. Verma				12		04		7	1.95	134
9. Dr. V. Dhaka[A]				06						
10. Ms. M. Upamanyu[A]				05						02
11. Dr. S. Suneja[R]				80		40				
12. Dr. V. Kaushik[R]				03						
13. Ms. L. Dhar[R]				07						

[A]: *Ad hoc*, [R]: Retired

20. Areas of consultancy and income generated: None

21. Faculty as members in National/International Committees/Editorial Boards:

Faculty	Professional Body/Committee/Society
Dr. S. Aggrawal	Operational Research Society of India Working Group on Generalized Convexity
Dr. M. Srivastava	Operational Research Society of India Working Group on Generalized Convexity
Dr. S. Sharma	Operational Research Society of India Working Group on Generalized Convexity
Dr. R. Gupta	Operational Research Society of India
Dr. M. B. Grover	Operational Research Society of India Working Group on Generalized Convexity
Dr. D. Rani	Research Group of Mathematical Inequalities, Australia

22. Student projects:

a) Percentage of students who have done in-house projects including inter-departmental/programme

- B.A. Programme III Year Application Course on Basic Mathematical Statistics has compulsory project highlighting applications to real world situations using statistical tools.
- Few students join DSKC summer workshop *Flavor of Research*.
- Under erstwhile FYUP, all students of the college numbering more than 1000, did project work under Foundation Course, *Building Mathematical Ability*.

b) Percentage of students placed for projects in organizations outside the institution, i.e. Research laboratories/Industry/other agencies:

A large number of students seek internships and projects. An illustrative list is given below:

- Nishika Bhatia undertook projects on *Traffic Comparison of Punjab Cities* during Gyanodaya 2013.She also cofounded Miranda's Maths Newsletter: Mathletics. It is an informative and fun Mathematics Newsletter which discusses interesting applications of Mathematics and also the latest advancements. It has a followership of about 1000 all over the world.
- Gargi Bhatt undertook winter internship on *Fuzzy Differential Equations* in National Institute of Technology, Bhopal, under the supervision of Dr. K.R. Pardasami during December 2014.

- Harshita Agarwala was a part of team working on two projects *Youth Perception of Politics, Education and Governance Initiative* and *Financial Literacy* during her internship with Outline India,2014.
- Rupsa Basu worked on a summer project under the supervision of Dr. Indranil Mukhopadhyay *R-programming in Demspter-Shafer Structures* at Indian Statistical Institute (ISI), Kolkata during 26 May-25 June2015. She also successfully participated in International Programme on *International Strategic, Management and Marketing* at HU Business School, University of Applied Sciences, Utrecht, The Netherlands, during 29 June-03 July 2015.
- Sonali Sinha undertook a project on *An Application of Burnside's Lemma to Platonic Solids* at IISER, Mohali, for 6 weeks during June-July 2015.
- Shivangee Acharya interned at Odisha Hydro Power Corporation (OHPC) and worked on determining tariff (unit prices of electricity) under the supervision of Director, Finance, OHPC, June 2015. She also undertook an internship at Medimint as Campus Ambassador under the supervision of Mr. Himanshu Singh, Co-CEO Medimint, during 25 December2015-25 February 2016.
- Vartika Garg undertook internship at State Bank of India, New Delhi, and worked on the reports *Increasing Insurance Penetration and Density in India-A Rural Perspective* under the mentorship of Mr. Gagan Sheel, Area Manager, SBI Life Insurance, during June-July 2015.

23. Awards/Recognitions received by faculty and students:

Students' Awards

- Special Mention: Mahenoor Ali is the first ever visually challenged (95%) student admitted in B.Sc. (H) Mathematics in the year 2013. She is an exceptionally bright student who has received Buti Foundation Award in 2014-15 and 2015-16. She has also cleared IIT JAM-2016 with All India Rank 504. To add another ground, she has been shortlisted for the interview for integrated Ph.D. at IISc., Bangalore, IISER, Mohali, and IISER, Bhopal.
- Every year the college gives following awards to the Mathematics students:

Awards	Criteria
D. N. Gulati Memorial Prize	Highest cumulative marks in I and II semester
Kasturi Memorial Prize	Highest marks in B.A. (H) at the end of part III
Prem Gulati Memorial Prize	I position in B.Sc.(H) and M.A.(F)/M.Sc.(F), respectively
Seema Bhasin Medal	Highest marks in combined part I and part II of B.Sc.(H) II year
Urmila Sharma Memorial Prize	Highest marks in B.Sc.(H) II year
Usha Thiagarajan Memorial Prize	I position in part I and part II exam, respectively
R.R.P. Sharma Memorial Award	Outstanding PwD student

- Other than the above awards, the student received the following awards:

	Award	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
1.	University Rankers Award	1	3	2	2	
2.	INSPIRE Scholarship	10	15	21	16	
3.	Miranda House Alumnae Association Awards		1			
4.	Miranda House Golden Jubilee Award			1		
5.	Anu Bedi Scholarship			1		
6.	Anjali Qwatra Award for Excellence					1
7.	Buti Foundation Awards for Visually Challenged				1	1
8.	Lady Irwin School Alumnae Association Scholarship			1		
9.	Yashoda Fellowship in Memory of Prof. Vinod Sena				1	1

Excellence in Sports

i) Monika Sharma
- Participated in Netball event in 35th National Games, 2016, Kerala, Senior National Netball. Championship and All India Inter-University Netball Championship, 2014-15.
- I position in DU Inter-College Netball Championship, 2013-14 and 2014-15.
- III position in DU Inter-College Basketball Championship, 2015-16.

ii) Harshita Chugh
- Participated in World Soft Tennis Championship 2015.
- I position in 12th Senior National Soft Tennis Championship 2015, Punjab.

iii) Garima participated in the National Softball Championship, 2013-14.

iv) Khushboo Chadha secured II position in 30th Senior Delhi State Netball Tournament, 2013.

24. List of eminent academicians and scientists/visitors to the Department:

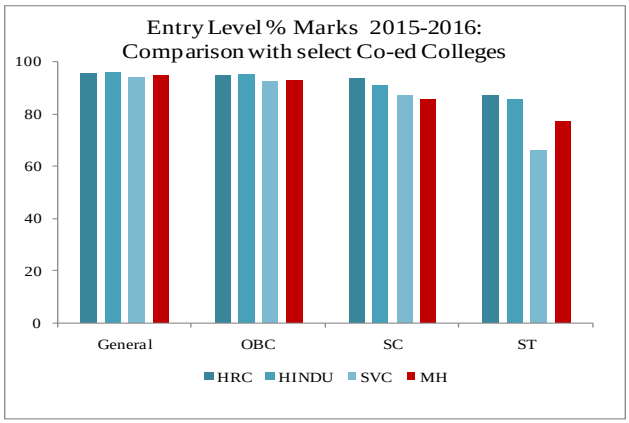
1. Prof. Shanti Narayan, Principal, Hans Raj College, DU
2. Prof. J.N. Kapoor, Vice-Chancellor, Meerut University
3. Prof. Kanti Swaroop, IIM, Ahmedabad
4. Prof. R.N. Kaul, Department of Mathematics, DU
5. Prof. Surendra Gupta, Department of Mathematics, IIT-Kanpur
6. Prof. Dinesh Singh, Vice-Chancellor, DU
7. Prof. R.K. Sharma, Department of Mathematics, IIT-Delhi
8. Prof. Rajender Bhatia, Department of Mathematics, ISI, Delhi
9. Prof. Ajit Iqbal Singh, Department of Mathematics
10. Prof. Kiran R. Bhutani, Department of Mathematics, the Catholic University of America
11. Prof. Prajneshu, Head, Biometrics Division, Indian Agricultural Statistics Research Institute (IASRI), PUSA, Delhi
12. Prof. M.K. Kadalbajoo, Department of Mathematics and Statistics, IIT-Kanpur
13. Dr. Sameer Chavan, Department of Mathematics and Statistics, IIT-Kanpur
14. Prof. Geetha Venkataraman, Department of Mathematics, Ambedkar University, Delhi

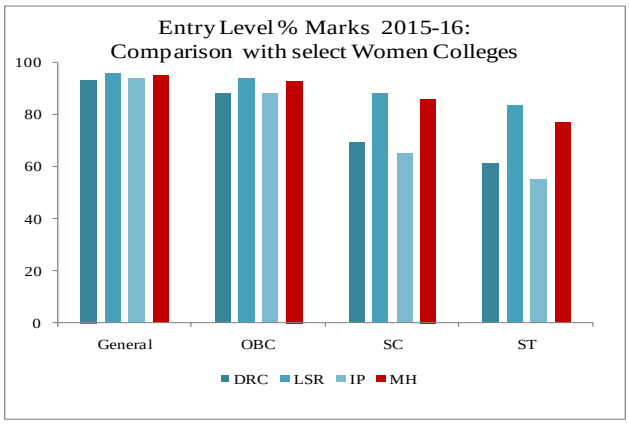
15. Prof. R. Vasudevan, Department of Mathematics, DU
16. Prof. B.K. Dass, Department of Mathematics, DU
17. Prof. C.S. Lalitha, Department of Mathematics, DU
18. Prof. Shobha Bagai, Cluster Innovation Centre, DU
19. Prof. V. Ravichandran, Head, Department of Mathematics, DU
20. Dr. Amber Habib, Shiv Nadar University, Greater Noida, Uttar Pradesh

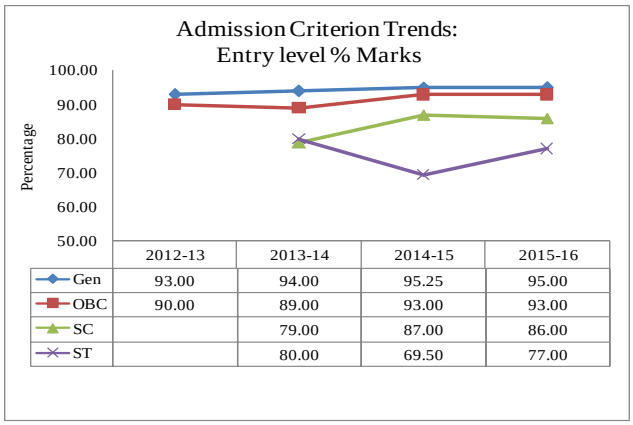
25. Seminars/Conferences/Workshops organized & the source of funding:

- Workshop *Real vs. Complex Analysis* was organized by the Department in collaboration with The Indian Mathematics Consortium in the college premises, 04-05April2016 by utilizing the in-house society funds.
- Workshop *Differential Equations and Mathematical Modelling* was independently organized by the Department,15 March 2011 by utilizing the in-house society funds.

26. Student profile programme/course-wise:



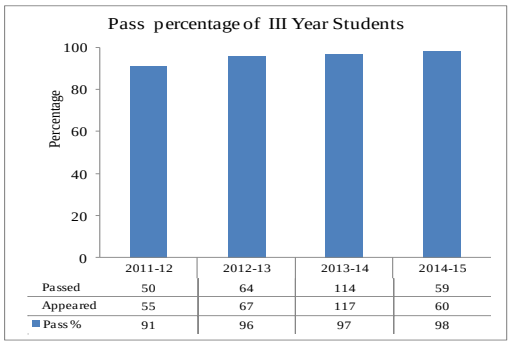




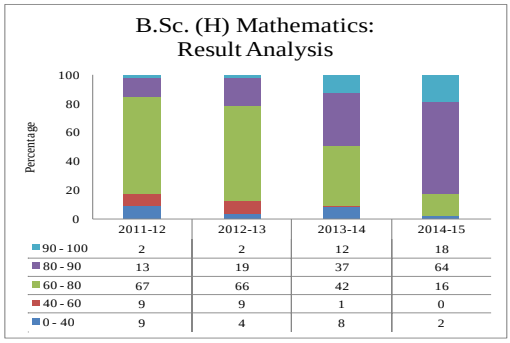
	2012-13	2013-14	2014-15	2015-16
Gen	93.00	94.00	95.25	95.00
OBC	90.00	89.00	93.00	93.00
SC		79.00	87.00	86.00
ST		80.00	69.50	77.00

Graphs depict that Miranda House is a preferred college with a high cut-off percentage.

Pass Percentage: Over the past few years pass percentage has been above 90%.

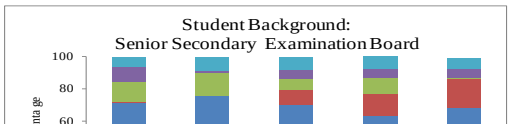


	2011-12	2012-13	2013-14	2014-15
Passed	50	64	114	59
Appeared	55	67	117	60
Pass %	91	96	97	98

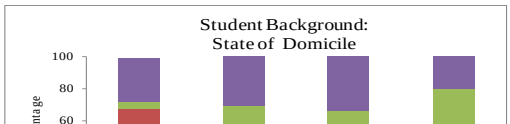


	2011-12	2012-13	2013-14	2014-15
90 - 100	2	2	12	18
80 - 90	13	19	37	64
60 - 80	67	66	42	16
40 - 60	9	9	1	0
0 - 40	9	4	8	2

27. Diversity of Students:



	2011-12	2012-13	2013-14	2014-15	2015-16
others	6	8	8	8	7
ICSE	10	2	6	6	5
Haryana	12	14	7	10	1
UP	1	0	9	14	18
CBSE	71	76	70	63	68



	2012-13	2013-14	2014-15	2015-16
Others	27	31	34	20
U.P.	5	33	35	51
Haryana	29	20	26	13
Delhi	38	16	5	16

28. How many students have cleared National and State competitive examinations such as NET, SLET, GATE, Civil Services, Defence Services, etc.?

Students of Mathematics from Miranda House have continued higher studies and research in prestigious Indian and International Institutions like DU, IIT, IIM, London School of Economics, etc. To mention a few: Kritika Jyotsana is in Indian Administrative Services (IAS), Nivedita Bhattacharjee is an Assistant Commissioner, IRS, Dr. Aparna Mehra is an Associate Professor at IIT, Delhi. Every year, 2-3 students clear NET/GATE examination.

29. Student progression:

Every year about 25-30 students pursue post-graduation, and 3 students go for M.Phil./Ph.D.

30. Details of Infrastructural facilities:

a) Library: There are about 5,500 books on Mathematics in the college library stack. Additionally, departmental library has 125 books.

b) Internet facilities for staff and students: The college campus is WiFi enabled and accessible to faculty and students. Department has a dedicated desktop with printer/scanner. Every faculty member has been issued a netbook/laptop on request.

c) Classrooms with ICT facility: The Department is utilizing 10-12 lecture rooms. All these rooms have LCD projection facility.

d) Laboratories: Mathematics Computer Lab has 25desktops and a printer on LAN, 2 laptops, a UPS and licensed version of the software Mathematical and MATLAB including modules for Partial Differential Equations Tool Box and Symbolic Math Tool Box. Detailed configuration is given in the table below:

Item	Configuration	Quantity
Server	IBM:Xenon3 GHZ, RAM 1 GB HDD 160 GB	1
Desktop	Dell Optiplex:i5 3.1 Ghz, 4 GB 500 GB	14
Desktop	HP: Intel Core 2 CPU, 1.50 GB, 80 GB	10
Laptop	Dell Vostro 1510 - 15.4" - Core 2 Duo T8100 - 2 GBRAM – 160 GB HDD	1
Online UPS	APC Online UPS 5KVA with 42 AH 16 batteries	1
Online UPS	APC Online UPS 1KVA with 100 AH 4 batteries	1

31. Number of students receiving financial assistance from college, university, government or other agencies:

Every year, the college provides merit-cum need based financial assistance to the students. The details of the number of students receiving the assistance are as follows:

Year	College	DU	Government	Others	Total
2012-13	9	-	1	7	17
2013-14	5	-	2	7	14
2014-15	2	-	5	8	15
2015-16	7	-	3	10	20

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts:

Refer to item 24 for special lectures by experts; refer to item 25 for workshops and seminars organized for students.

33. Teaching methods adopted to improve student learning:

Rigorous teaching of abstract Mathematics such as algebra, analysis has long rested on chalk and talk method in which students can follow the derivations of the critical steps. However, modern and contemporary teaching methods have also been adopted to meet the needs and aspirations of the students. With increasing digital technology, Mathematical software like MATLAB, Mathematica, Excel solver, etc., have been integrated in Mathematics lab. These are highly versatile software and are very much needed for better understanding and visualisation of mathematical concepts. Appreciating three dimensional surfaces by using simple commands and solving differential equations over arbitrarily shaped regions are few of them.

Individual and group-wise tutorials are held to counsel and help students in solving problems. PowerPoint presentations, hand-outs and projects are used to reinforce classroom instructions. Assignments, viva-voce, mock practical exams and quizzes are used to assess the level of understanding of the students.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Students of the Department take a very active role in co-curricular and extra-curricular activities of the college. Faculty members are also involved as convenors of the society. The quality of participation is illustrated through the following table:

Students	Achievements
Charu Singh	Secretary, Miranda House Students Union
Shameen Khurana	Best NSS volunteer
Sadhna Devi	Best NCC Cadet
Gargi Bhatt	Best volunteer for Gandhi Study Circle

In addition to the above achievements the students are also engaged in social activities. Aanchal Gargis currently taking charge as the Head of Ummeed- A Drop of Hope. Another student Aishwarya Aggarwal worked as a volunteer in Ummeed-Education For All Akanksha Tyagi is a member of the Non-Profit organization Knowledge For All which is a collaborative project to develop the first free, open tool of its kind for discovering, sharing and accessing scholarly journal literature. Some of the students are fellows of the nationwide movement Teach for India and National Service Scheme(NSS) and from time to time serve as volunteers in Blood Donation Camps and other activities. Since the last 4 years, Spandana Durga is associated with an on-going project on Lake Reconstructions. It is an initiative of NGO, Environmentalist Foundation of India (EFI), Hyderabad. She also conducts several teaching programme in Indian Railway Schools under NSS and holds several environmental responsibility quizzes and debates in schools across Hyderabad as a part of The Energy and Resources Institutes (TERI) environment programme.

Some of the faculty and students are actively engaged in Jigyasa, The Quiz Society of Miranda House. Spandana Durga of B.Sc.(H) Mathematics is the president of the society.

35. SWOC analysis of the Department and Future Plans:

Strengths: Being part of one of the best colleges in the National Capital Territory confers the Department prestige and credibility across the country. It, thus, attracts the best women students in the state and beyond.

The Department has a team of well-qualified, experienced and dedicated teachers who hold excellent academic records and made outstanding contributions in their respective fields of specializations and to the student community at large. This is clear from the information given in this report.

Apart from regular teaching engagements our faculty members take active leadership in extracurricular activities within and outside the college. These activities include ones that directly or indirectly have bearings on our social and environmental issues.

One major strength of the Department is its dynamic capacity of adapting to the changing education pattern like the recent introduction of practical classes using Mathematica, MATLAB, MS Excel Solver, LINGO, TORA, IOR, etc. for the students.

The Department makes best efforts to meet the need of students with disabilities. Appropriate mode of instructions and services are provided as per their needs.

All the above factors contribute towards equitable Mathematics learning of high quality and help prepare the students for future challenges.

Weaknesses: Lack of permanent laboratory staff poses some difficulty in practical classes. At present, there are no remedial classes for students to update them with basic skills in computers and Mathematics which are needed for their curriculum. The Department has no mechanism in place to keep track of outgoing students who join higher education or go to different fields. There is no apparent platform to industrial visits for our students to give a flavour of real world scenario.

Opportunities: A large number of students get internships and job opportunities through placement cell of the college. Students get opportunities for higher studies in India and abroad like, two of the students got selected to pursue ten

days workshop on Financial Mathematics held by University of Chicago at their Delhi centre. Later, students were offered admission to pursue higher studies with full fee concession at University of Chicago.

Challenges: The present day Mathematics students require an education that goes beyond what was needed by students in the past. This poses a significant challenge to today's Mathematics teachers. We experience frequent and major changes not only in the content of the syllabus but also the way in which the subject is taught. To be well-equipped with these challenging roles, the teachers themselves learn continuously to develop knowledge and skill through classroom discussion, research and participation in professional/faculty development programmes. With the changing scenario, it is a constant challenge for the faculty to keep students interested and motivated for research in Mathematics.

Future Plans: The Department is also planning to start a colloquium from next Academic Session so that the students will have an opportunity to participate in paper presentation and other academic endeavours. The Department is also planning to organize a workshop on Analysis on 10-12 August 2016 for which proposal has been sent to INSA for sponsorship. As few of our faculty members have been the recipients of NBHM scholarship, the Department is planning to have collaboration with NBHM for facilitating our faculty members and students. Faculty members wish to apply to DU Innovation Projects for setting up a vibrant Centre of Mathematics Education at Miranda House premises.

Evaluative Report

Department of Physics

1. **Name of the Department:** Physics

2. **Year of Establishment:**
   1948: Classes were held at the Department of Physics and Astrophysics, DU
   1988: Physics Department of MH was shifted to the College Campus

3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
   UG: B.Sc. (H) Physics; **PG:** M.Sc. Physics

4. **Names of Interdisciplinary courses and the Departments/units involved:**
   B.Sc. (Programme) Computer Science in collaboration with the Department of Mathematics and the Department of Computer Science.

5. **Annual/semester/choice based credit system (programme-wise):**
   B.Sc. (H) Physics: Choice Based Credit System (CBCS) from 2015.

6. **Participation of the Department in the courses offered by other Departments:**
   Physics is taught to the students of B.Sc. (H) Chemistry and B.Sc. (H) Mathematics.

7. **Courses in collaboration with other universities, industries, foreign institutions, etc**.: None

8. **Details of courses/programmes discontinued (if any) with reasons:** None

9. **Number of Teaching posts:**

Post	Sanctioned	Filled
Associate Professor		6
Assistant Professor	5	5

10. **Faculty profile with name, qualification, designation, specialization (D.Sc/D.Litt./Ph.D./M. Phil.):**

Name	Qual	Des	Specialization	Exp Y	Research Guidance
Dr. P. Jolly	Ph.D.	Principal	Theoretical Chemical Physics, Physics Education Research and Computer-based Technologies in Education	37	
Dr. S. Mahajan	Ph.D.	Associate Professor	Experimental Solid State Physics	41	
Dr. M. Verma	Ph.D.	Associate Professor	Physics Education Research and Experimental Material Science	30	
Dr. R. Rakshit	Ph.D.	Associate Professor	Passive Architecture	27	
Dr. Sanju	Ph.D.	Associate Professor	Non-linear Dynamics	20	
Dr. V. Verma	Ph.D.	Associate Professor	High Energy Physics	21	

Dr. A. D. Habib	Ph.D.	Assistant Professor	Cosmology	16	
Dr. N. B. Devi	Ph.D.	Assistant Professor	Plasma Processing of Nanomaterial	13	
Dr. M. Tomar	Ph.D.	Assistant Professor	Experimental Material Science	11	Ph.D.: $2^{[S]}$, $2^{[R]}$, $1^{[M]}$
Dr. C. Goel	Ph.D.	Assistant Professor	Applied Optics	10	
Ms. S. Devi	M.Sc., M.Phil.	Assistant Professor	Theoretical Condensed Matter Physics	6	
Dr. S. Singh[A]	Ph.D.[S]	Assistant Professor	Digital Signal Processing Wavefront Aberrations	5	
Dr. A. Sharma[A]	Ph.D.	Assistant Professor	Experimental Material Science	4	
Dr. Sandhya[A]	Ph.D.	Assistant Professor	Quantum Optics	3.5	
Dr. S. Singh[A]	Ph.D.	Assistant Professor	String Theory	2.5	
Dr. G. Ray[A]	Ph.D.	Assistant Professor	Experimental Condensed Matter Physics	1.5	
Ms. P. Kumari[A]	M.Sc.	Assistant Professor	Electronics	1.5	
Dr. J.K. Yadav[A]	Ph.D.	Assistant Professor	Cosmology	0.5	

Qual: Qualification; Des: Designation; Exp Y: Experience in years; [S]: Thesis submitted; [R]: Students registered; [M]: M.Tech.; [A]: *Ad hoc*

11. List of senior visiting faculty: None

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary/*ad hoc* faculty:

Year	2011-2012		2012-2013		2013-2014		2014-2015		2015-2016	
Semester	O	E	O	E	O	E	O	E	E	O
Lectures	30	35	25	61	62	50	47	68	54	31
Practicals	20	31	25	39	38	41	45	61	30	31

P: Permanent; A: Temporary/*Ad hoc:* O: Odd semester: E; Even semester

13. Student-Teacher Ratio (Programme-wise): 13:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Year	2011-12		2012-13		2013-14		2014-15		2015-16	
	S	F	S	F	S	F	S	F	S	F
Technical Staff	01	01	01	01	01	01	01	01	01	01
Lab Assistant	08	08	08	08	08	08	08	08	08	08
Lab Attendant	05	01	05	01	05	05	05	05	05	05

S: Sanctioned; F: Filled

15. Qualifications of teaching faculty with D.Sc./D.Litt./Ph.D./M.Phil./PG:

	2011-12				2012-13				2013-14				2014-15				2015-16			
	P		A		P		A		P		A		P		A		P		A	
	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	1	10	0	2	1	1	0	0	1	1	1	2	9	9	2	4	9	0	0	0
M.Phil.	1	1			1	1			1	1			1	1			1	1		

P: Permanent; A: Temporary/*Ad hoc:* O: Odd semester: E; Even semester

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

a) National Funding Agency

No. of faculty	No. of Projects	Grant (Crores)
3	9	12.9*

*Grants on Material Science Research are in collaboration with the Department of Physics and Astrophysics, DU.

b) International Funding Agency: None

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

Research Project	Sponsors	Grant* (lakh)
MH 01: Eureka! MyLab: Developing Resources and Hands-on Science Activities and an Adaptation Accessible for Visually Impaired PI: Dr. P. Jolly; Co-PI: Dr. M. Verma Duration: February 2016-2019; Ongoing	DU-Star	37.50
MH 03: 3R: Reduce, Reuse, Recycle PI: Dr. P. Jolly Duration: February 2016-2019; Ongoing	DU-Star	40.88
Core Development of College Infrastructure and Central Instrumentation Facility PI: Dr. P. Jolly February 2016-2019; Ongoing	DU-Star	26.90
MH 305: Mobile! My Lab PI: Dr. P. Jolly; Co-PI: Dr. M. Verma Duration: August 2015-2016; Ongoing	DU	6.50
Star College Scheme for Physics Department PI: Dr. P. Jolly; Co-PI: Dr. M. Verma Duration: 2011-2016; Ongoing	DBT	16.00
Validation and Improvement of Indigenously Developed Table-Top Surface Plasmon Resonance (SPR) System Co-PI: Dr. M. Tomar Duration: February 2015-July 2016; Ongoing	DST	86.00
Molecular Modelling of Halon Alternatives Co-PI: Dr. M. Tomar April 2015-December 2017; Ongoing	DRDO	264.77

Development of Thin Film Surface Acoustic Wave Device as a Platform for the Sensing Applications Co-PI: Dr. M. Tomar Duration: November 2014-2019; Ongoing	DST	424.38
Demonstration of GaN LED by PLD Co-PI: Dr. M. Tomar Duration: February 2014-August 2016; Ongoing	DeitY	70.80
MH 104: Miles on the Yamuna PI: Dr. P. Jolly; Co-PI: Dr. M. Verma Duration: May 2012-July 2013; Completed	DU	10.00
MH 207: Eureka! My Lab PI: Dr. P. Jolly; Co-PI: Dr. M. Verma Duration: November 2013-March 2015; Completed	DU	5.50
D. S. Kothari Centre for Research and Innovation in Science Education PI: Dr. P. Jolly Duration: 2008-2011; Completed	DST	313.20
Science Online: Development of a Multidisciplinary Microcomputer-based Laboratory PI: Dr. P. Jolly Duration: 2002-2003; Completed	DST	13.88
Investigation of Students Conceptions of Physics and Development of Research-based Instruction PI: Dr. P. Jolly Duration: 1999-2000; Completed	UGC	6.80
Refresher Course: New Directions in Physics Education Research-Implications for Teaching of College Physics PI: Dr. P. Jolly Duration: 1999-2000; Completed	DU	1.25
Integrating Computers in Physics Teaching; PI: Dr. P. Jolly Duration: 1998-2003; Completed	UGC	10.25
Learning through Investigative Projects: A Programme for Promotion of Scientific Interest in Youth PI: Dr. P. Jolly Duration: 1984-1986; Completed	DST	0.50
Models of Dark Energy: Theory and Observations Co-PI: Dr. A.D. Habib Duration: 2009-2012; Completed	DST	17.75
Development of Platinum based Micro Heaters /Micro Evaporation Sources for Space Applications PI: Dr. M. Tomar; Co-PI: Dr. A. Sharma Duration: November 2014-October 2015; Completed	ISRO	32.00
Development of Metal Oxide Thin Film Based Low Cost Sensors for CNG and PNG PI: Dr. M. Tomar; Co-PI: Dr. A. Sharma Duration: October 2013-2015; Completed	GAIL	95.40

Design and Development of Functional Materials for SAW Devices in Communication and Sensors Co-PI: Dr. M. Tomar Duration: October 2009-2011; Completed	NRB (DRDO)	47.40
Development of Low-cost Real Time Monitoring System for Detection of Harmful Gases (Phase-I) Co-PI: Dr. M. Tomar Duration: April 2010-2013; Completed	DeitY	103.44
Development of Low-cost Real Time Monitoring System for Detection of Harmful Gases (Phase-II) Co-PI: Dr. M. Tomar Duration: May 2012-2013; Completed	DeitY	8.81
Development of MOx (M=Te, Se, Ge) Exhibiting Negative TCD for SAW Devices PI: Dr. M. Tomar Duration: November 2010-2013; Completed	DST	18.24
Development of the Prototype of SAW Sensors for NOx Gas Co-PI: Dr. M. Tomar Duration: August 2009-February 2012; Completed	DST	28.18
Indigenous Development of Table Top Surface Plasmon Resonance (SPR) Setup Co-PI: Dr. M. Tomar Duration: October 2011-2013; Completed	DST	40.71
Multi-Layer Metallization and PLG for Advanced MEMs Devices Co-PI: Dr. M. Tomar Duration: January 2012-2013; Completed	DRDO	9.96
Australian Leadership Awards Fellowship (ALAF);Building Leadership Capacity in Undergraduate Science Teaching in India PI: Dr. P. Jolly; Co-PI: Dr. U. Malik, Dr. M. Verma Duration: April-April 2013; Completed	AUSAID	USD 57,413
PHYSWARE 2012: A Collaborative Workshop on Low-cost Equipment and Appropriate Technologies that Promote Undergraduate-Level Hands-on Physics Education throughout the Developing World (Teaching of Electricity and Magnetism) at MH PI: Dr. P. Jolly November-December 2012; Completed	ICTP, Italy CSIR INSA DST	Euro 10,000 + 3 lakh
PHYSWARE 2009: A Collaborative Workshop on Low-cost Equipment and Appropriate Technologies that Promote Undergraduate-level Hands-on Physics Education throughout the Developing World (Teaching of Mechanics) at Trieste, Italy PI: Dr. P. Jolly Duration: February 2009; Completed	ICTP, Italy	Euro 60,000

The American Physical Society and the Indo-U.S. Science & Technology Forum (APS-IUSSTF) Professorship Awards in Physics for hosting Prof. Dean Zollman, Kansas State University, USA. at DSKC, Miranda House PI: Dr. P. Jolly Duration: November-December 2012; Completed	Indo-US Science and Tech. Forum	USD 4000
Collaboration with AMSTEL Institute, University of Netherlands, Amsterdam, the Netherlands, International Cooperation for Use of ICT in Primary Education PI: Dr. P. Jolly; Co-PI: Dr. M. Verma, Dr. M. Tomar Duration: September-October 2007; Completed	AMSTEL Amsterdam	Euro 20,000

*In lakh unless specified otherwise

18. Research Centre/facility recognized by the University:

D.S. Kothari Centre for Research and Innovation in Science Education (DSKC): The DSKC for Research and Innovation in Science Education is established at Miranda House with grants from Department of Science and Technology. Science Departments are custodian of number of laboratories established under its aegis with the mandate of research in the college and organizing capacity building and education outreach programmes for students and faculty. Department is also recipient of the Department of Biotechnology Star College Grant wherein five Departments of Science, namely, Physics, Chemistry, Botany, Zoology and Computer Science have received funds for enriching and strengthening teaching-learning of basic sciences. With this mandate several skill building and training workshops have been organized.

Material Science Research Laboratory: The laboratory has equipment and facilities for ceramic and thin film fabrication using chemical route. This is mainly utilized by the summer interns and Ph.D. students for their work.

DSKC Robotics Laboratory: Miranda House had signed up for *e-Yantra* Lab Setup Initiative (eLSI) to set up a Robotics Lab in 2013-14. *e-Yantra* is a project sponsored by Ministry of Human Resource and Development with a goal to enable effective Embedded systems and Robotics education across colleges in India, by (i) providing training for teachers and students; (ii) engaging teachers and students in hands-on experiments with robots; and (iii) helping colleges to set-up Robotics labs/clubs.

19. Publications: Publications per faculty: 223/19 = 12

Name	Authored: Books	Edited: Books/ Proceedings	Chapters: Books/ Textbooks	Papers: Journals	Book Reviews: Journals	Papers:Conference Proceedings	Curricular Resources	Popular Articles	Impact Factor (cumulative)	Citation Index	h-index
Dr. P. Jolly				23		20			10.62		
Dr. S. Mahajan				5		2			5.80		

Dr. M. Verma			4	3		3			2.28		
Dr. R. Rakshit				4					10.80		
Dr. Sanju				2					3.31		
Dr.V. Verma				3					9.92		
Dr. A. D. Habib				22					89.23		
Dr. N. B. Devi				2		4			2.34		
Dr. M. Tomar				81		39			258.80	600	15
Dr. C. Goel			2	11					48.37		
Dr. A. Sharma[A]				19		12			55.89	212	8
Dr. S. Singh [A]				2		1			2.90		
Dr. S.N. Sandhya[A]				3					6.59	4	
Dr. G. Ray[A]				14					45.22		
Dr. S. Singh[A]				7					22.92		
Dr. J. K. Yadav[A]				4					9.12	150	4
Dr. U. Malik[R]				13					28.86		

[A]: *Ad hoc*; [R]: Retired

20. Areas of consultancy and income generated:

Dr. P. Jolly

- Member, Course Design Committee, IGNOU, 2000-2002
- Member, Advisory Team, Resource Material for Physics Teachers, Navodaya Vidyalaya
- Member, founding team to set up Centre for Science Education and Communication (CSEC) for improving teaching and communication of science at the college level, setting up an interaction with schools, to take science to the people, 1986
- Involved with the IIT (Delhi) for Educational Technology programmes for professional development of faculty from Regional Engineering Colleges, 1994-1998
- Academic programmes, Continuing education of the in-service teachers, Delhi Schools
- Judge and Mentor, INTEL Science Talent Discovery Project, 2002-2003
- Designed Computers in Education Course for teachers; contributed to blue-print for setting up an Educational Technology Unit, CIE
- Editorial Advisor Students' Britannica India, Volumes 1 to 7, 2000
- Encyclopedia Britannica Student Suite for Class VI to Class X, Lessons and Workbooks for Science, Encyclopedia Britannica (India) Pvt. Ltd.
- Design and Production, low-cost instruments for Science Education, Edutronics, 1982-1996

21. Faculty as members in a) National committees b) International Committees c) Editorial Boards:

Dr. P. Jolly

a) National Committees:
   - Project Review Monitoring Committee, *Establishing Gifted Education: May I help You Centre* at NIAS, Bangalore, Office of the Principal

Scientific Advisor to the Government of India, November 2015-October 2016

- Project Review Monitoring Committee, *Identification and Mentoring of Potentially Gifted Children in Science and Mathematics: Validating DIMP (Developmental Identification and Mentoring Package) Model in collaboration with Vigyan (Vijnana) Bharati*, Office of the Principal Scientific Advisor to the Government of India, May 2014-January 2016
- Selection Committee, Women Scientist Scholarship Scheme (WOS-C), Technology Information, Forecasting and Assessment Council, Patent Facilitating Centre, Department of Science and Technology (TIFAC-PFC-DST), 2006-present
- Member, Senior Jury, INSPIRE National Awards, 5th NLEPC (National Level Exhibition and Project Competitions) as part of India International Science Festival, organized by the Department of Science and Technology, IIT Delhi, December 2015
- Member, Committee on Faculty and Careers, constituted by Scientific Advisory Committee to the Cabinet (SAC-C), January 2015.
- Member, Committee for Formulating Guidelines on Mobility for Women in Science, under the scheme Knowledge Involvement in Research Advancement through Nurturing (KIRAN), Department of Science, December 2014
- Scientific Advisory Committee to the Cabinet (SAC-C), Government of India, 2012 onwards
- National Academy of Sciences India (NASI), Allahabad
- Research Advisory Committee-Material Science Division (RAC-MSD), Sriram Institute of Industrial Research, Delhi
- Member, Project Review Monitoring Committee for Project titled Identification of Gifted Children in Mathematics and Science (3-15 years) 2011-2014
- Member, Advisory Committee of the Indian National Science Academy on Gifted and Talented Children Issues in Science Policy Studies, 2009
- General Secretary, Indian Association of Physics Teachers, 2005-2008
- Member, Managing Board, National Science Centre and Museum, Delhi, 2006 2011
- Member, Expert Committee for Science and Technology for Women and Society, Department of Science and Technology, 2004-2011

b) International Committees:

- Chair, International Commission on Physics Education (ICPE), Commission 14 of International Union for Pure and Applied Physics (IUPAP), October 2005-2011
- Fellow, Institute of Physics (IoP), London, UK
- Vice President and Member, Executive Council, IUPAP, October 2005-2008

Advisory Committees:

- 11th International Conference on Physics, Society of Physicists of Macedonia, 22-25 September 2016, Macedonia
- World Conference on Physics Education, WCPE 2016: Contemporary Science Education and Challenges in the Present Society-Perspectives in Physics Teaching and Learning, Sao Paulo, 10-15 July 2016

- WCC Centenary International Conference on Viable Synergies in Mathematical and Natural Sciences, Women's Christian College, Chennai, 7 to 9 January 2016
- International Conference on Physics Education ICPE-EPEC 2013: Prague, Czech Republic, 5 to 9 August 2013
- ICPE-GIREP-MPTL World Conference on Physics Education 2012: The Roles of Context, Culture and Representations in Physics Teaching & Learning, Istanbul, Turkey,1 to 6 July 2012
- International Commission on Physics Education Conference ICPE 2011: Training Physics Teachers and Educational Networks, Mexico, 14 to21 August 2011
- GIREP-ICPE-MPTL Conference 2010, Teaching and Learning Physics today: Challenges? Benefits? Reims, France, 22-27 August 2010

Dr. M. Tomar

- Member, National Advisory Committee, NCMAMS-2015, University of Jammu, 02-04 March, 2015

c) Editorial Board:

- Dr. P. Jolly, Member, Editorial Board, Delhi University Journal of Undergraduate Research and Innovation (Science), DU

22. Student projects:

a) **Percentage of students who have done in-house projects including inter departmental/programme**

University of Delhi in 1982 introduced projects compulsory as part of B.Sc. (H) III Lab Course carrying 25% weightage in marks. The Department established itself as an early leader in Project-based learning in Physics. A formal programme was established in 1984 through DST funded project *Learning through Investigative Projects* wherein the entire III year classes of Miranda House and St. Stephen's college carried out Innovative year-long projects working beyond the class hours and through holidays. Some students of other colleges also joined in. In 1988, a UGC funded project *Integrating Computers in Physics Eduction* enhanced facilities for student project work which veered towards development of an indigeneous real time sensor based data acquisition laboratory. The work was reported through undergraduate publications and several National and International Conferences. The success of this work eventually led to invitation by DST to establish D. S. Kothari Centre for Research and Innovation in Science Education (DSKC). Major objective of DSKC is to facilitate Undergraduate Research. DSKC organize summer workshop *Flavor of Research* that draws about 200 students from all disciplines across colleges of University of Delhi and Institutions around the country. This year, Physics projects in multidisciplinary contexts have been carried out by 55 Miranda House students and 35 students from other colleges of DU. The undergraduate summer interns, numbering between 25 to 30, act as mentors for school students and conduct 4 Innovative Workshops at the week-long DST INSPIRE Internship programme organized at Miranda House every summer. The Physics Department has been collaborating on 4 DU Innovation Projects over the last four years. Three to four Physics students are team members of each of these projects.

All students undertake open ended problems in project mode in (i) Computational Physics and (ii) Microprocessor Lab courses. Top 5%

students of these courses undertake advanced projects related to high level microcontroller programming such as Arduino and Robotics. Work is carried out beyond class hours. In the erstwhile FYUP *Science and Life* Course, all first year students of the college, numbering more than 1000, undertook collaborative project work in multidisciplinary teams guided by the Department faculty. In 2014-2015, the entire B.Sc. (H) Physics II year students carried out a small project in Optics to develop Innovative experiments and resourse material for exhibitions held by the Department to celebrate the International Year of Light. These were also displayed at DU Annual Festival *Antardhwani* February 2015. Two students made poster and oral presentations at Inter-College festivals/conferences winning prizes at St. Stephen's and DDU College.

b) **Percentage of students placed for projects in organizations outside the institution, i.e. in Research laboratories/Industry/other agencies**

About 40% of the Physics students undertake projects every year during the summer as well as the winter vacations in various National and International Research Institutions. Of these, about 30% students of Physics Department (including I, II and III year) are recipients of the prestigious INSPIRE fellowship. As part of the INSPIRE fellowship, it is mandatory to undertake summer research internship at some institute other than the parent institution. An illustrative list of internships is given below:

- Pragya Chawla, B.Sc. (H) Physics III year, Mitacs Undergraduate Award for Outstanding Innovation, University of Lethbridge, Canada, May-August 2014
- Ishwita Saikia, B.Sc. (H) Physics III year, SURF-2011, LIGO, Caltech, 05 June-21 August 2011
- Sai Ahladini Tripathy, B.Sc. (H) Physics III year, International Science Camp by XLAB, University of Goettingen, Germany, 29 July to 23 August 2013
- Pragya Arora and Raagya Arora, B.Sc. (H) Physics III year, Indian Academy of Science (SRPF), IISc. Bangalore, 26 May-26 July 2016
- Saniya Heba, B.Sc. (H) Physics III year, QuIC Lab, Raman Research Institute, Bangalore, 01 June-28 July 2015
- Priyanka, B.Sc. (H) Physics III year, Harish Chandra Research Institute, June-July 2015
- Pooja Malik, B.Sc. (H) Physics III year, IIT, Kanpur, 30 May 2016
- Sarojini, Pooja and Saloni, B.Sc. (H) Physics IIIyear, Summer School, DU, June-July 2015
- Arini Kar, B.Sc. (H) Physics III year, Summer Research Fellowship Programme 2016, Saha Institute of Nuclear Physics, Kolkata
- Subhi Khantal, B.Sc. (H) Physics III year, RRI, Bangalore, 31 May-July 2016
- Upasana Mahapatra, B.Sc. (H) Physics III year, IISER, Mohali, 01 June-31 July 2015
- Priyanka Baghel, B.Sc. (H) Physics III year, HRI, 17 December 2015-17 January 2016
- Unnati Akhouri, B.Sc. (H) Physics II year, S. N. Bose Scholars Programme Institute-Princeton University, New Jersey, USA., 02 June-13 August 2016
- Nitya Gupta, B.Sc. (H) Physics II year, Student Intern, VC Office, DU, 10 June-07 July 2015

- Nitya, B.Sc. (H) Physics II Year, WAPP, Bose Institute, Darjeeling, 21-29 December 2015
- Manika Nagpal, B.Sc. (H) Physics II year, ISRO, Bangalore, 26 May-23 July 2015
- Supriya Sinha and Sonalika Purkayastha, B.Sc. (H) Physics II year, SINP, Kolkata, 01-30 June 2016
- Divya Pal, B.Sc. (H) Physics I year, SINP, Kolkata, 01 June-01 July 2016
- Ankita Das, Radhika Prasad and Sungandh Sirohi, B.Sc. (H) Physics I year, Homi Bhabha Centre for Science Education (HBCSE), TIFR, Mumbai, 08-17 June 2016
- Pragya Chawla and Garima Sharma, B.Sc (H) Physics III year, Bonn-Cologne Graduate School Admissions Academy, 22-26 March 2015
- Shruti Chakravarty, B.Sc. (H) Physics III year, IAS, Bangalore, June-July 2015
- Upasana Mohapatra, B.Sc. (H) Physics II year, IAS, Bangalore, June-July 2015
- Sonalika Purkayastha, B.Sc.(H) Physics I year, SINP, Kolkata
- Yakshi Gupta, B.Sc. (H) Physics III year, IISc., Bangalore, 2014
- Preeti, B.Sc. (H) Physics II year, IUAC, Delhi, 27 May to 25 June 2014
- Tamanna Joshi and Pragya Arora, B.Sc. (H) Physics I year, TIFR, 10 to 20 June 2014
- Taniya Ray, B.Sc. (H) Physics II year, NIUS (Physics), HBCSE, Mumbai, June 2013

23. Awards / Recognitions received by faculty and students:

a) *Faculty awards*

Dr. P. Jolly

- Australian Leadership Fellow Award fellowship (ALAF) from AUSAID**,** Australian Government, University of Sydney, Australia, 02-18 April 2013
- 2009 Fulbright New Century Scholar Award, May 2009 to April 2010
- American Physical Society Kilambi Ramavataram Fellowship, University of Maryland and Kansas State University,1995-1996
- Tata-Fulbright Travel Fellowship, United States Educational Foundation in India and Council of International Exchange of Scholars,1995-1996
- Commonwealth Academic Staff Fellowship,University of York, UK, 1986-87
- Ambassador Peace Award, Universal Peace Federation (UPF), 04 January 2014
- Lifetime Achievement Award by the Women's International Network (WIN) on the International Day for Elimination of Violence against Women, 25 November 2012
- 10th GR8! Women Awards, Education, The Indian Television Academy, 2011
- Dr. S. Radhakrishnan Smriti Rashtriya Shikshak Samman 2010, in Education by All India Freelance Journalist & Writer's Association, New Delhi, 04 September 2010
- Amity Women Achiever Award, Education, Amity University, Noida, at the 12th International Conference, INBUSH, 25 February 2010

- Dr. S. Radhakrishnan International Award for Excellence in Educational Leadership, All India Classic People Society, Ist Youth World Parliament, 23 September 2007

Dr. M. Verma and Dr. U. Malik

- Australian Leadership Award Fellowship (ALAF) from AUSAID**,** Australian Government, University of Sydney, Australia, 02-18 April 2013

Dr. M. Tomar

- Received the Excellence Award for Teachers in Colleges, 01 May 2016, the University of Delhi Foundation Day

Dr. C. Goel

- Received fourth prize in the e-Yantra teachers Robotics competition, IIT, Bombay, 10-11 April 2014

b) *Students' Awards*

Award	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
1. University Rankers Awards	3	4	6	3	4
2. INSPIRE Scholarship (DST)		9	46	64	93
3. MH Golden Jubilee Award (Science)	2	1			1
4. Savitri G. Burman Award of Excellence (Science)	1			1	
5. Subira Award for Science Innovation		4			
6. Nirmal D. Sagar	1	1	1	1	1
7. DSKC Baseline Test	3	3	3	3	3
8. DSKC Science Award		1	1	1	
9. Meera Singla Memorial	2	2	3	3	
10. Alumnae Association (Science)	1				1
11. Angeli Qwatra (Science)		1			1
12. Dr. K.S. Krishnan Gold Medal					1
13. Mohan Lal K. B. Mehta Memoria					1
14. NCC					1
15. Delhi Science Meritorious Award					13
16. Government of Arunachal Pradesh State Scholarship					1
17. Lady Irwin School Alumni Association					1
18. University Science Meritorious				12	
19. Vice-Chancellor Under Graduate Scholarship				4	
20. Buti Foundation Awards for Visually Challenged					1
21. Anu Bedi Scholarship	1		1		

24. List of eminent academicians and scientists/visitors to the Department:

- Dr. A.P.J. Abdul Kalam, Former President of India, ICPE, Vigyan Bhawan, 2005
- Prof. Ashok Sen, Harish Chandra Research Institute, Dirac Medal 2014, Padmabhushan 2013, INFOSYS 2009, Bhatnagar Award 1994, at Indian Physics and Mega Projects: Research on the Frontiers, MH, 2009
- Dr. Horst L. Stormer, Nobel Laureate 1998, ICPE Conference, Vigyan

Bhawan, 2005
- Dr. Klaus Klitzing, Nobel Laureate 1985, Annual Meeting of IUPAP Council and Commision Chairs, 2010
- Dr. Venkataraman Ramakrishnan, Nobel Laureate 2009, INSPIRE 2013
- Dr. Ellen Stofan, NASA, Chief Scientist, 2014
- Dr. John P. Holdern, Director, White House Office of Science and Technology Policy, Co-Chair of President Obama's Council of Advisors on Science and Technology, 2012
- Dr. Diane L. Evans, Director Earth Science and Technology Division, NASA, USA., 2015
- Prof. Michael Sayer, Emeritus Professor, Queen's University, Canada
- Prof. Priscilla Laws, Research Professor, Dickinson College, Carlisle, USA
- Prof. Elena Sassi, Universita di Napoli 'Federico II' Italy
- Prof. Dean Zollman, Kansas State University, USA
- Dr. Archana Sharma, Senior Scientist, CERN, Geneva, Switzerland
- Dr. Vandana Singh, Framingham State University, USA
- Prof. Rajarshi Roy, University of Maryland, USA
- Prof. Priyamvada Natarajan, Yale University, USA
- Dr. Vikas Sahni, University of Ireland, Ireland
- Dr. T. Qureshi, Centre for Theoretical Physics, Jamia Millia Islamia, Delhi
- Prof. Deshdeep Sahdev, Quazar Technologies, Delhi
- Dr. Ajay Lele: Research Fellow at Institute of Defence Studies and Analysis
- Prof. A. Mukherjee, Prof. A. Khare, Prof. T.R. Seshadri, Dr. K. Ranjan, Department of Physics and Astrophysics, DU
- Dr. S. Khushu, Deputy Director and HRD Coordinator, INMAS, DRDO
- Dr. P.K. Singh, Head, Energy Harvesting Division, NPL, Delhi
- Dr. Manoj U. Sharma, Head, SAW Division, SPL, DRDO
- Dr. Atul Jain, Director, Higher Education Academy for Development
- Prof. Pratima Daipuria, Associate Professor, JIMS, Delhi
- Prof. K. Thyagarajan, Former HOD, Physics Department, IIT-Delhi
- Prof. Rupa Manjari Ghosh, School of Physical Sciences, JNU
- Prof. Sanjay Puri, School of Physical Sciences, JNU
- Prof. Shubha Tole, Tata Institute of Fundamental Research, Mumbai
- Dr. L. Radhapiyari, SPL, DRDO

25. Seminars/ Conferences/Workshops organized & the source of funding:

a) National

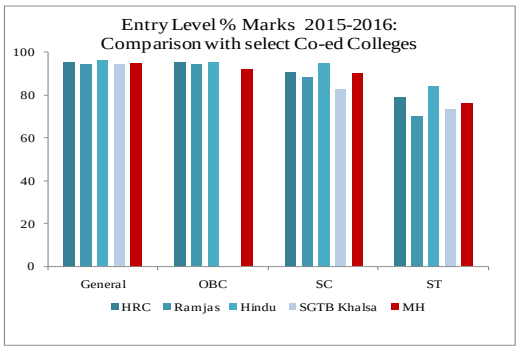
Workshops/Seminars	Sponsors
1. Workshop on Mobile Apps, March-April 2016	DU
2. INSPIRE Internship Programme, July 2015	DST
3. Workshop for PGT Physics teachers: Enhancing Conceptual Understanding of Physics with Real-time Computer-based Experiments, May 2015	DBT-Star
4. Summer Workshop for Undergraduate Science Students Flavor of Research: Investigative Projects in Multidisciplinary Contexts, June-July 2015	College
5. Sense it, Control it: Physical Measurements with LabVIEW: A Workshop for Students, March 2014	DBT-Star
6. Flavor of Research: Investigative Projects in Multidisciplinary Contexts, Summer Workshop for Undergraduate Science	College

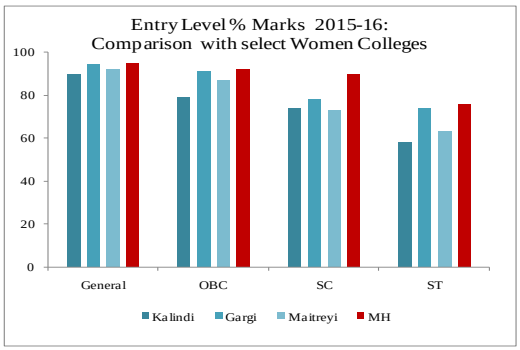
Workshops/Seminars	Sponsors
Students, June-July 2014	
7. Aero-modelling Workshop, February 2013	College
8. Summer Workshop for Undergraduate Science Students Flavor of Research: Investigative Projects in Multidisciplinary Contexts, June-July 2013	College
9. INSPIRE Internship Programme, December 2013 Workshops organized by the Physics Department: Physics: The World in Motion; Physics: Sense, Measure and Control the World; Amusement Park Physics and Robotics: Impacting Life	DST
10. Robotics: Impacting Life Science, March 2012	DBT-Star
11. Summer Workshop for Undergraduate Science Students Flavor of Research: Investigative Projects in Multidisciplinary Contexts, May-July 2012	College

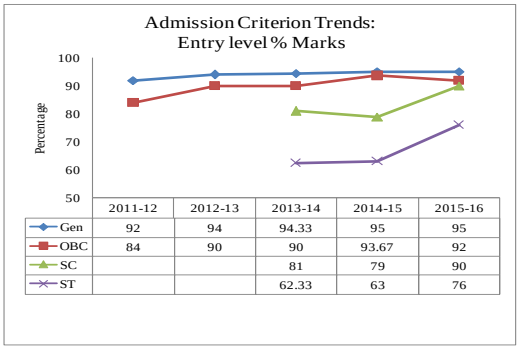
b) International

Workshops/Seminars	Sponsors
1. Interactive session: Dr. Diane L. Evans, Director, Jet Propulsion Laboratory, NASA, USA, February 2016	DBT-Star
2. Interactive session; Dr. Ellen Stofan, Chief Scientist NASA, November 2014	DBT-Star
3. REALM: Active Learning: Integrating Hands-on Experiments and Multimedia Resources, Collaborative Workshop for Undergraduate Physics Teachers. University of New South Wales, Australia, October 2013	DBT-Star
4. Seminar: The Role of Multiple Representations in Building 21st Century Scientific Literacy, Dr. S. R. Choudhury, Biggio Centre for Enhancement of Teaching and Learning, Auburn University, USA., September 2013	DBT-Star
5. PHYSWARE 2012:Collaborative Workshop on Low-cost Equipment and Appropriate Technologies that Promote Undergraduate Level Hands-on Physics Education throughout the Developing World, November-December 2012, Directors: P. Jolly, P. Laws, E. Sassi and D. Zollman	ICTP, CSIR, INSA, DST, DBT-Star

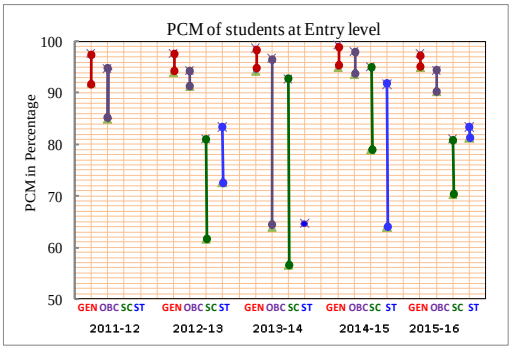
26. Student profile programme/course-wise:



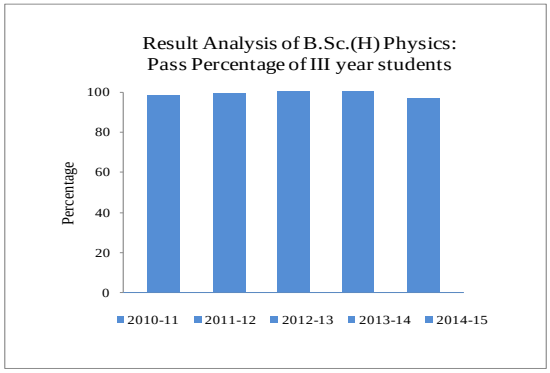


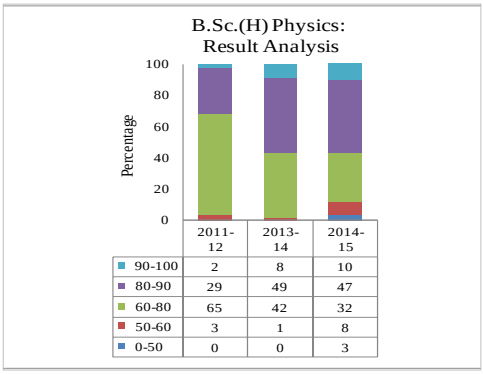


	2011-12	2012-13	2013-14	2014-15	2015-16
Gen	92	94	94.33	95	95
OBC	84	90	90	93.67	92
SC			81	79	90
ST			62.33	63	76



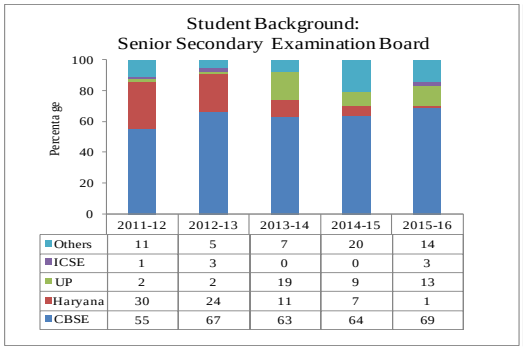
Pass percentage



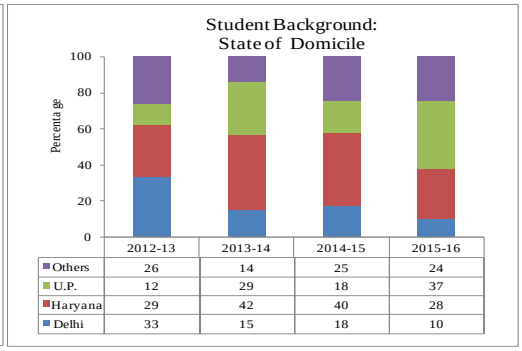


	2011-12	2013-14	2014-15
90-100	2	8	10
80-90	29	49	47
60-80	65	42	32
50-60	3	1	8
0-50	0	0	3

27. Diversity of Students:



	2011-12	2012-13	2013-14	2014-15	2015-16
Others	11	5	7	20	14
ICSE	1	3	0	0	3
UP	2	2	19	9	13
Haryana	30	24	11	7	1
CBSE	55	67	63	64	69



	2012-13	2013-14	2014-15	2015-16
Others	26	14	25	24
U.P.	12	29	18	37
Haryana	29	42	40	28
Delhi	33	15	18	10

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

Percent students who cleared NET, GATE, Defence Services are 10, 18 and 4, respectively. The data was collected through an online survey of alumni of the last five years (sample size: 49)

29. Student progression:

Students of the Department have a high retention rate in Physics. After their graduation, a significant number join prestigious research institutes in the country as well as universities abroad to pursue master and doctoral programmes. Several students have been awarded extremely prestigious awards and scholarships to enable them to carry out postgraduate and doctoral studies abroad. The illustrative list includes: K. Diana Devi, IAS, AIR-24, 2016; Nimisha Kumari, Ph.D. from University of Cambridge; Darshana Joshi, Ph.D. from University of Cambridge; Shikha Bhadoria, Ph.D. from Max Plank Institut fur Kemphysik, Germany. Some of the distinguished alumnae include: Dr.

Chakram S. Jayanthi, Professor and Chairperson, Department of Physics and Astronomy, University of Louisville Kentucky, U.S.A.; Dr. Sudha Srinivas, Associate Professor, Department of Physics, Northeastern Illinois University, Chicago; Dr. Vandana Singh, Framingham State University, U.S.A. Several others contribute as faculty in different Universities and colleges: Dr. P. Jolly (Principal, MH); Prof. Sumitra (Manipur University); Dr. S. Mahajan (MH); Dr. M. Verma (MH); Dr. U. Malik (MH); Dr. A. D. Habib (MH); Dr. N. B. Devi (MH); Dr. M. Tomar (MH); Dr. S. Roy (Principal, DR College); Dr. R. Jain (SVC); Dr. A. Garg (Gargi) and Dr. S. Sachdeva (SSC).

The student progression on the basis of the data collected through online survey of alumni of the last five years (sample size: 49) is:

Student Progression	Against % Enrolled
UG to PG	76
PG to Ph.D.	35
Ph.D. to Post-Doctoral	Information not available
Employed	26
Campus selection	15
Other than campus recruitment	85
Entrepreneurship/self-employment	4

30. Details of Infrastructural facilities:

a) Library: The Department maintains a departmental library for students as well as teachers. There are about 1000 catalogued books in the library which are purchased based on student's needs. The books are issued to students for a period of three days. Other than the departmental library, students are encouraged to use the college library which has 4470 Physics books for reference.

b) Faculty rooms: The Department has a committee room for discussions, meetings and interaction and four faculty rooms shared amongst the Physics Department faculty having workstation and personal storage space.

c) Internet facilities for staff and students: College has a high speed WiFi network supported by the Delhi University Computer Centre (DUCC). The facility can be used by all the students as well as the teachers in the college. Besides that, there is departmental computer laboratory with about 12 computers having internet access. All students and teachers of the Department can use it. The college has provided netbooks having internet facility to all permanent teaching staff in the college. Apart from that, the Department has a laptop also which can be issued to any faculty member on demand. All the students and teachers of the Department have access to two DSKC laboratories (30 computers) and college Digital Resource Centre. All the computers are WiFi enabled in the college.

d) Classrooms with ICT facility: All the classrooms and laboratories in the Department are WiFi enabled and fitted with LCD projectors. We also have two standalone LCD projectors which can be used on need basis.

e) Laboratories: Two main Physics laboratories in the Department are *Introductory Physics and Advanced Physics*. These are equipped with state-of-the-art equipment to perform variety of experiments in mechanics, optics, thermal physics, solid state physics, electricity, magnetism and modern physics. These laboratories also boast of modern electronics and communication equipment including analog and digital storage

oscilloscope, modern digital trainer kits, communication kits, arbitrary function generator, etc.

- *Computational Physics Laboratory* having about 12 WiFi enabled computers. In addition, we have another 40 laptops to run computer programming based curriculum courses.
- The Department is custodian of two well-equipped *Project Based Learning Laboratories* and one *Robotics Laboratory* under the aegis of DSKC. These laboratories are extensively utilized by the students for their interdisciplinary projects all through the year. There are around 15 programmable Robots with a huge variety of external sensors, servo motors, actuators, etc. Students carry out summer internship projects on Robotics in the Robotics laboratory.
- *Nanomaterials Research Laboratory* has facilities for the ceramic and thin film fabrication using chemical route.The equipment available in the laboratory include thermal evaporation unit, spin coater, tube furnace for annealing upto 1400 ^{o}C, sonicator, magnetic stirrer, hot plate, ball milling machine, pressing machine, etc.

31. Number of students receiving financial assistance from college, university, government or other agencies:

Year	College	DU	Government	Others	Total
2012-13	3	17	4	6	30
2013-14		10		6	16
2014-15		13	1	3	17
2015-16	1	2		5	8

32. Details on student enrichment programmes (special lectures/workshops/seminars) with external experts:

Every year following student enrichment programmes are organized:

- Visit to Inter-University Accelerator Centre on the Science Day (28 February)
- National Graduate Physics Examaination
- Baseline test in Physics
- Workshops for students on Robotics, Labview, Aero-modelling, etc.
- Seminars by eminent speakers on Frontiers of Physics
- Internships at reputed Indian and Foreign Research Organizations including Princeton University, RRCAT, ISRO, HBCSE, LIGO, Caltech, etc.

33. Teaching methods adopted to improve student learning:

- Some theory lectures such as mathematical physics, statistical physics, thermal physics, etc. are taught best by chalk and talk mode. While, some other papers such as solid state physics, microprocessor, computational physics, physics of instruments and devices, electricity magnetism require ICT tools for effective teaching like PowerPoint presentation, video presentations and simulations. Students are encouraged to refer to rich online resources like MIT course ware, NPTEL lectures, etc.
- Information on student assignment, lectures, etc. is shared between students and teachers using Google apps for education.
- All laboratories are conducted in hands on mode with multiple interactive sessions between students and teachers.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- The Department actively participates in all the activities organized by the college time to time, e.g. Swach Bharat Abhiyan, NSS and NCC activities. This year 66 students were involved with the NCC and NSS activities.
- Faculty members are part of various college societies including Student Union, Dramatics Society, Jigyasa, etc.

35. SWOC analysis of the Department and Future plans:

Strengths: The Department of Physics at Miranda House is identified with cutting-edge research, experienced faculty, state-of-the-art laboratories, bright and motivated students and a rich and diverse history. The Department boasts of an excellent faculty drawn from the entire spectrum of Physics and in keeping with the tradition plays the twin roles as educators and mentors to its students. Apart from practising innovative teaching methodologies inside the classroom, and motivating students to excel in Physics, the faculty goes that extra mile to ignite the inquisitive minds of its students by exposing them to frontier areas of research at the undergraduate level only.

Faculty members are recipient of prestigious national and international awards besides scholarships. *International Conference on Physics Education* (ICPE) was organized in 2005 that was inaugurated by the then President of India, Dr. A. P. J. Abdul Kalam and had Nobel Laureate Dr. Horst Stormer as Plenary speaker. The mega event led to plethora of National and International collaborations besides establishment of DSKC funded by Department of Science and Technology, Government of India by invitation to Dr. P. Jolly. This has since been followed by a number of seminar and workshops for the educators and students around the world. Some of the notable ones include: Research and Innovation in Physics Education (RIPE) meeting 2006; UNESCO sponsored workshsop ALOP Asia 2006; Indian Physics and Mega Physics 2009; Indian Association of Physics Teachers meetings; PHYSWARE 2012; REALM 2013; Workshops for school and college teachers and students on ICT, etc.

Faculty members have been regularly invited to visit reputed international institutions for research and collaborative work including AMSTEL Institute, Amsterdam; CERN, Geneva; University of Sydney, Australia; University of Puerto Rico, U.S.A.; University of Texas at San Antonio, U.S.A. to name a few. Department of Physics feels proud of the state-of-the-art research laboratory and equipments. Apart from addressing the needs of the students for syllabi defined curriculum, students get hands-on experience focussing on real-life research problems through exposure to specialised DSKC Laboratories: Multidisciplinary Project Laboratories; Robotics Laboratory and Nanomaterials Laboratory. Multiple sensor and data acquisition setups help organizing teacher and student training workshops on ICT in education regularly. These dedicated research facilities help students get an exposure to happening areas of research besides motivating them for pursuing higher studies and choosing research as a viable career option. Over the years, Miranda House students have established themselves as good researchers with good foundations. Every year, students are selected in various reputed research institutes for higher studies.

Weaknesses: In the past one decade, many of our distinguished faculty have retired from service and that lacuna has not been able to be filled because of

lack of permanent appointments. The college administration is working hard to put all the due processes in place and get these appointments done at the earliest.

Opportunities: We observe that in recent years undergraduate research is gaining great importance. The Department aims to use its rich experimental resources and brilliant faculty to propel research at undergraduate level. Every year a number of students from Miranda House as well as from different colleges in the University carry out summer internships at the DSKC. The Department plans to strengthen its collaborations with other institutes and Universities to help exchange of ideas and expertise. For example, this year itself the Department has signed a MoU with Tata Power as part of which, students from the Department will be involved in various research projects initiated by Tata Power.

Challenges: Research work along with teaching for the present generation of teachers and to include ICT in classroom teaching as a potential tool.

Future Plans

- To strengthen the research at the undergraduate level by motivating students to take up research projects all through the year. Focus will be to motivate first year students so that they have three years to complete the work.
- Summer workshops to impart the basics of robot-building and interfacing using Labview through hands-on sessions to teachers and students.
- Apply for more research grants to further strengthen the research.
- Introduction of Add-on courses in Nanotechnology, Medical Physics, Embedded systems, Computational Physics for data analysis, etc.
- Setting up of Modern Physics Laboratory.

Evaluative Report

Department of Zoology

1. **Name of the Department:** Zoology
2. **Year of Establishment:** 1973
3. **Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
   UG: B.Sc. (H) Zoology; B.Sc. Life Sciences
   PG: M. Sc. Zoology
   Ph.D.: Zoology
4. **Names of interdisciplinary courses and the departments/units involved:**
   Students of Zoology take courses offered by Departments of Chemistry, Botany, English; and Environmental Science.
5. **Annual/semester/choice based credit system (programme-wise):**
   Choice Based Credit System (CBCS) in Semester Mode from 2015-16.
6. **Participation of the Department in the courses offered by other departments:**
   Zoology is taught to students of B.Sc. (H) Botany, B.Sc. (H) Chemistry, B.Sc. Life Sciences, B.Sc. Physical Sciences and B. El. Ed.
7. **Courses in collaboration with other universities, industries, foreign institutions:**
   - An Add-on Course on Medical Biotechnology is offered since 2007. This self-financed 72-hr Certificate Course is taught by distinguished scientists from various research institutes such as AIIMS, ICGEB, IGIB, NII, VPCI, ICPO, ICMR, DBT, ACBR and DU.
   - The Department also offers a 50-hr self-financed Add-on Course on Bioinformatics and *in silico* medicine in collaboration with Department of Botany, MH, since 2014. Eminent scientists and expert resource persons from ICGEB, IGIB, RCB, NIT, JNU, DTU and DU are associated with this course.
   - *Science Setu*, in collaboration with NII, has been initiated in 2015 to bridge the gap between teaching and research at an early stage of student nurturing to motivate them to pursue science as a career.
8. **Details of courses/programme discontinued (if any) with reasons:** None
9. **Number of teaching posts:**

Post	Sanctioned	Filled
Associate Professor		2
Assistant Professor	6	6

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. /M. Phil. etc.):**

Name	Qual	Des	Specialization	Exp Y	Research Guidance
1. Dr. V. Thareja	Ph.D.	Associate Professor	Entomology	39	
2. Dr. N. Vashistha	M.Phil. Ph.D.	Associate Professor	Muscle Physiology	19	
3. Dr. R. Kumari	Ph.D.	Assistant Professor	Molecular Microbiology	14	Ph.D.: 1[B]
4. Dr. J. Arora	M.Phil. Ph.D.	Assistant Professor	Limnology	13	

5. Dr. S. Sharma	Ph.D.	Assistant Professor	Molecular Immunology	17	Ph.D.: 3[R], 1[S]
6. Dr. A. S. Naorem	M.Phil. Ph.D.	Assistant Professor	Applied Entomology	9	
7. Dr. M. Sharma	Ph.D.	Assistant Professor	Medical Microbiology	7	
8. Dr. S. Jit	Ph.D.	Assistant Professor	Environmental Microbiology	5	

Qual: Qualification; Des: Designation; Exp Y: Experience in years; [S]: Thesis submitted; [R]: Students registered; [B]: B. Tech. Experience for Dr. S. Sharma includes 6 years of research.

11. List of senior visiting faculty: None

12. Percentage of lectures delivered and practical classes handled (programme-wise) by temporary/*ad hoc*/guest faculty:

Year	2010-2011		2011-2012		2012-2013		2013-2014		2014-2015	
Semester	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Lecture	20	33	21	29	20	38	32	31	18	36
Laboratory	12	27	12	30	12	36	21	31	12	28

13. Student-Teacher Ratio (programme-wise): 12:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Laboratory Staff	Sanctioned	Filled
Laboratory Assistant	4	1
Laboratory Attendant	4	7
Museum Curator	1	

15. Qualifications of teaching faculty with D.Sc./D.Litt./Ph.D./M.Phil./PG:

Qualification	2014-2015		2013-2014		2012-2013		2011-2012		2010-2011	
	P	A	P	A	P	A	P	A	P	A
Ph.D.	8	4	8	4	8	4	8	4	6	
M.Phil.	3	3	3	2	3	2	3	1	3	3
M.A./M.Sc.	8	4	8	3	8	3	8	2	8	3
M.S.	1		1		1					

[P]: Permanent; [A]: *Ad hoc*

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

a) National

Faculty with ongoing projects	No. of ongoing projects	Grant (lakh)
5	8	193.14

b) International: None

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received:

I) Faculty

Project	Sponsor	Grant (lakh)
MH 03: 3R: Reduce, Reuse, Recycle Co-PI: Dr. J. Arora	DU-Star	40.88

Duration: February 2016-2018; Ongoing		
MH 02: Therapeutic Potential of Medicinal Plants: Culture, Extraction, Physico-chemical Characterization and Testing their Cytotoxic or Immunostimulatory Properties Co-PI: Dr. S. Sharma Duration: February 2016-2018; Ongoing	DU-Star	26.67
MH 307: Antimicrobial Finishing of Textiles Using Eco-Friendly Bioactive Agents PI: Dr. J. Arora; Co-PI: Dr. S. Jit Duration: August 2015-2016; Ongoing	DU	6.50
MH 306: Design of Affordable Water Purification Devices using Green and Eco-friendly Silver Nanoparticles Co-PI: Dr. R. Kumari Duration: August 2015-2016; Ongoing	DU	6.00
MH 308: Synthesis of Henna (*Lawsonia inermis*) Based Scaffolds and Comparison of their Color and Antimicrobial Activity Co-PI: Dr. M. Sharma Duration: August 2015-2016; Ongoing	DU	6.00
Molecular Cloning and Immunological Validation of Three Hypothetical Proteins of *M. tuberculosis* with Strong T-Cell Epitopes PI: Dr. S. Sharma; Co-PI: Dr. M. Sharma Duration: June 2013-June 2016; Ongoing	DBT	66.48
MH 203: Efficacy of Natural Dyes in Dyeing and Imparting Antimicrobial Properties to Different Textile Material PI: Dr. J. Arora; Co-PI: Dr. R. Kumari Duration: September 2013- 2015; Completed	DU	4.50
Cloning, Expression, Purification and Immunological Characterization of Myma Operon Protein PI: Dr. S. Sharma; Co-PI: Dr. M. Sharma Duration: September 2012-2015; Completed	CSIR	21.79
Star College Scheme for Zoology Department Coordinators: Dr. R. Kumari, Dr. S. Sharma Duration: 2011-2016; Ongoing	DBT	16.00
Cloning and Expression of Selected Intraphagosomal Expressed Genes of *Mycobacterium tuberculosis* PI: Dr. S. Sharma; Co-PI: Dr. M. Sharma Duration: November 2010- 2011; Completed	CSIR	5.85
Modulation of Toll-Like Receptor (TLR) Signaling by *Mycobacterium tuberculosis*: An Evasive Survival Strategy PI: Dr. S. Sharma; Co-PI: Dr. M. Sharma Duration: June 2006-2009; Completed	DST	11.04
Predicting Potential Inhibitors for *Mycobacterium tuberculosis* PI: Dr. S. Sharma; Co-PI: Dr. M. Sharma Duration: February 2014-2015; Completed	CSIR	2.25

II) Ph.D. Students

Project	Sponsor	Grant (lakh)
Iti Saraav, SRF Project: Immunological Studies of Myma (Rv3083) and Adhd (Rv3086) of Cell Wall Associated Protein of *Mycobacterium tuberculosis* for Possible Subunit Vaccine PI: Dr. S. Sharma Duration: February 2013-2016; Ongoing	ICMR	11.14
Swati Singh, JRF and SRF Project: Cloning, Expression and Immunological Evaluation of Latency Associated Genes of *Mycobacterium tuberculosis* PI: Dr. S. Sharma Duration: August 2012-2016; Ongoing	ICMR	13.47

18. Research Centre/facility recognized by the University:

Centre	Open Source Drug Discovery Centre, CSIR
Project Title	Cloning and Expression of Selected Intraphagosomal Expressed Genes of *Mycobacterium tuberculosis* and Expression and Immunological Evaluation of *MymA* Operon Proteins of *M. tuberculosis*
Department Co-PIs	Dr. S. Sharma and Dr. M. Sharma
Students	25 (UG & PG)
Funding Agency	CSIR
Grant	Rs. 27.64 lakh
Duration	2010-2016

DSKC Life Sciences Lab is recognized by BRS, Faculty of Science, for Ph.D. Dr. S. Sharma is supervising 3 Ph.D. students, of which one has submitted her thesis in 2015. Faculty members actively participate in DSKC programmes such as workshops, seminars and summer internships.

19. Publications: Publications per faculty: 67/9 =7

Name	Peer Reviewed Journal	Conference Proceedings	Chapters in Books/ E-Chapters	Edited Books/ Books with ISBN	Number listed in International Database	Citation index	SNIP	SJR	Impact Factor	h-index
Dr. V. Thareja	6	2		1	6	52	03.04	2.66	11.03	
Dr. N. Vashishta	2			1	2	3			01.67	1
Dr. R. Kumari	9		1	2	9	269	11.09	11.70	33.31	6
Dr. J. Arora	4	1	1		4	73	02.39	01.65	05.34	2
Dr. S. Sharma	17	2			17	382	04.46	06.06	35.39	0
Dr. A. Naorem	3	1	5		3	9	01.96	01.55	04.17	1
Dr. M. Sharma	10	3			10	203	00.42	00.67	21.76	5
Dr. S. Jit	10		4		10	232	09.66	06.41	20.56	7
Dr. T. K. Bose[R]	6	1	6		6	56	01.36	01.46	04.84	
Total	67	10	17		67	1279	34.38	32.14	137.07	32

[R]:Retired; SNIP, SJR & IF are cumulative values

20. Areas of consultancy and income generated:

i) Dr. R. Kumari
- E-chapters: NISCAIR, 2007
- Editorial Reviews: ILLL, 2015

ii) Dr. J. Arora
- E-chapter: ILLL 2015
- Editorial Reviews: British Journal of Applied Science and Technology, 2016; Journal of Geography, Environment & Earth Science International, 2016
- Examiner: Ph.D. Thesis, Andhra University, 2012

iii) Dr. S. Sharma
- Editorial Reviews: Current Microbiology, 2016; Indian Journal of Medical Research, 2016; Immuno Targets and Therapy, 2015; African Journal of Biotechnology, 2015; Abstract book for 46th Union World Conference on Lung Health, 2015; Abstract book for 47th Union World Conference on Lung Health, 2016
- Examiner: M.Sc. Dissertations-ACBR, 2009; Department of Environmental Studies, 2015
- Ph.D. Advisor: Department of Microbiology, VPCI since 2013

iv) Dr. A. S. Naorem
- E-chapters: ILLL, 2014 and 2015

v) Dr. S. Jit
- E-chapters: ILLL, 2015 and 2016

vi) Dr. T. K. Bose
- E-chapters: ILLL, 2011 and NISCAIR, 2009

Honorarium, if any, paid as per Government of India rules.

21. Faculty as members in

a) National committees, b) International Committees, c) Editorial Boards:

Faculty members are part of various professional bodies as listed below:

a) National Committees	Faculty
1. All India Association for Advancing Research in Obesity	1
2. Association of Teachers in Biological Sciences	1
3. Indian Network for Soil Contamination Research	2
4. Association of Microbiologists of India	1
5. Association of Aquaculturist, CIFA	1
6. Indian Immunology Society	2
7. Indian Science Congress Association	1
8. Indian Women Scientists Association	1

b) International Committees	Faculty
1. American Society for Microbiology	2
2. International Society for Salt Lake Research	1
3. Federation of Immunological Societies of Asia-Oceania	2
4. International Union of Immunological Societies	2
5. International Heteropterist's Society	1
6. International Society for Infectious Diseases	2

Faculty	c) Editorial Boards
Dr. S. Sharma	Member, Journal of Pathology Research, Bioinfo Publications

22. Student projects:

a) **Percentage of students who have done in-house projects including inter departmental/ programme**

- Hundred percent students participated in curriculum based projects.
- Approximately, 40% students work on undergraduate research projects during the summer workshops under DSKC (Flavor of Research). Some representative projects are: Effect of antioxidants on longevity of *Drosophila*; Study of microbial diversity in environmental samples from various dump sites; Bioinformatics study of potential vaccine candidates for tuberculosis; Growth curve of *E. coli* under various physical conditions and formation of bio-film; Assessment of water quality of public water supply in areas in and around Delhi; Limnological studies on three shallow, eutrophic, man-made lakes in Delhi and Animal cell culture. These undergraduate summer interns act as mentors for high school students at the innovative workshops under the week-long DST INSPIRE Internship programme organized at Miranda House every summer. Fifteen students are team members of ongoing DU Innovation Projects. Six students are engaged in DU Star Innovation Projects.

b) **Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies:**
Approximately, 5% of the students go to different scientific organizations and institutions for summer internships. Some representative projects are: Amber Raja and Nikkee Kumari worked on project, Musculoskeletal Disorders at IIT, Kanpur. Stuti Mohapatra worked on project, Molecular techniques used for studying plant-microbe interactions at JNU, New Delhi. Udita Bansal worked on projects Resource partitioning among sympatric ungulates in Kanha Tiger Reserve, Madhya Pradesh and Monitoring Tiger, co-predators, prey and their habitat at Kanha National Park, Madhya Pradesh. Asima Abidi worked on Comparing olfaction in native and lab bred *Drosophila,* TIFR, Mumbai.

23. Awards / Recognitions received by faculty and students:

Faculty Awards

I) International Awards

i) Dr. N. Vashishta
- Australian Leadership Award Fellowship (ALAF), AUSAID, Australia, 2013

ii) Dr. R. Kumari
- DST-DAAD Personal Exchange Programme Fellowship, Germany, 2001
- BOYSCAST Fellowship by DST (GOI), UNIL, Laussane, Switzerland, 2009
- Faculty Training Programme (FTP) Fellowship by University of Delhi and University of Edinburgh, UK, 2011
- INSA-DAAD Bilateral Exchange Programme fellowship by DFG, Leipzig, Germany, 2013

iii) Dr. S. Sharma
- Australian Leadership Award Fellowship (ALAF) by AUSAID, Australia, 2013

- Australia-India Council-Post-Doctoral Biotechnology Fellowship, Australian National University, 2004
- Young Investigator Award, Australasian Society of Immunology (ASI), Australia, 2002
- Young Investigator Award, Federation of Immunological Societies of Asia-Oceania (FIMSA), Thailand, 2002

iv) Dr. S. Jit
- Visiting Research Fellowship, Swiss Federal Institute for Environmental Science and Technology (EAWAG), Switzerland, under Indo-Swiss Biotechnology (ISCB), 2010

v) Dr. T. K. Bose
- Special Appreciation Award from Faculty of University of Massachusetts, Boston, USA, 2014

II) National Awards

i) Dr. R. Kumari
- Best Oral and Poster Presentation Awards at Symposium on Recent trends in Biology, Maitreyi College, DU, 2015

ii) Dr. J. Arora
- Consolation Prize for poster presentation at National Symposium on Trends in Research and Innovations in Life Sciences at Undergraduate level, DDU College, DU, 2016
- Best Poster Presentation Award at National Symposium on Reproductive Health in India: Concerns and Awareness, Deshbandhu College, DU, 2016
- Best Oral Presentation Award and Best Poster Presentation Award at National Symposium on Man Made Diseases-An Urban Menace, Department of Zoology, Maitreyi College, DU, 2016
- Best Oral and Poster Presentation Awards at Symposium on Recent Trends in Biology, Maitreyi College, University of Delhi, 2015
- Best Oral and Poster Presentation Awards at Symposium on Environment: Challenges and Awareness, Deshbandhu College, University of Delhi, 2014

iii) Dr. S. Sharma
- DST Women Scientist, 2006-2009
- DST Young Scientist, 2002-2004

iv) Dr. S. Jit
- Consolation Prize for poster presentation at National Symposium on Trends in Research and Innovations in Life Sciences at Undergraduate level, DDU College, DU, 2016
- Best Poster Presentation Award at National Symposium on Reproductive Health in India: Concerns and Awareness, Deshbandhu College, DU, 2016
- Best Oral Presentation Award and Best Poster Presentation Award at National Symposium on Man Made Diseases-An Urban Menace, Department of Zoology, Maitreyi College, DU, 2016

III) University of Delhi Awards

i) Dr. R. Kumari
- Teaching Excellence Award for Innovation, University of Delhi, 2015

- Certificate of Appreciation for Best Innovative Idea and Best Display Award at Antardhwani, DU, 2015

ii) Dr. J. Arora

- Teaching Excellence Award for Innovation, DU, 2015
- Certificate of Appreciation for Best Innovative Idea and Best Display Award at Antardhwani, DU, 2015

Students' Awards

The Department has several endowment awards which are given to students excelling in specific papers every year. The four endowment awards in the Department are as follows:

- Agnes Scott Award
- Bose Karkun Award of Excellence in Biochemistry and Molecular Biology
- Chandra Sathiraju Award
- Saroj Kesar Meritorious Award

Apart from departmental awards, students have won various awards given at the college level as well as at University level. A list of awards and number of students for the last 5 years is as follows:

Award	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
University Rankers Awards	2				2
Principal's Medal	1		1		
Science Meritorious Award (DU)					3
MH Golden Jubilee Award (Science)			1		
College Academic Prize	3	3	3	2	2
Best participant in Jigyasa, the Quiz Society	1				
DSKC Baseline Test in Biology			1		
DSKC Science Award	1	1			
Savitri G. Burman Award of Excellence (Science)		1			
DSKC Science Quest Appreciation Award		1			
CSEC Science Quest Award			1	1	
Co-curricular Awards					
INSPIRE Scholarships (DST)					9
Best Poster Presentation Awards				2	2
Best Platform Presentation Awards				1	1
Extra-curricular Awards					
Best Sports Women of the year					1
Most Promising Athlete of the year				1	1
Most Talented Athlete of the year					1
Photographic competition			1		
Western dance competition					1

24. List of eminent academicians and scientists/visitors to the Department:

Name	Affiliation
Prof. S. Gupta	University of California, USA
Prof. R. Govindan	School of Medicine, Washington University, USA
Prof. Z. Livneh	Weizmann Institute of Science, Israel
Dr. C.A. I. Donahue	Memorial Sloan-Kettering Cancer Centre, USA
Dr. I. Singh	University of Lincoln, UK
Dr. A. Narayan	Yale University, USA
Dr. K. Pasha	Department of TRAFFIC, WWF
Prof. P. Malhotra	ICGEB
Prof. S. Jameel	ICGEB, Welcome Trust
Dr. A. Chandele	ICGEB
Dr. S. Rath	NII
Dr. P. K. Rath	NII
Dr. D. Sehgal	NII
Dr. R. Rani	NII
Prof. A. K. Tyagi	NIPGR
Dr. B. Pillai	IGIB
Dr. B. Taneja	IGIB
Dr. A. Bharadwaj	IGIB
Dr. R. Sharma	IGIB
Dr. K. Walia	ICMR
Dr. J. Gill	Regional Centre for Biotechnology
Dr. M. Bhardwaj	Institute of Cytology & Preventive Oncology
Dr. G. C. Varshney	Institute of Microbial Technology
Prof. M. Jassal	Department of Textile Technology, IIT-Delhi
Dr. A. K. Yadav	Translational Health Science and Technology Institute
Prof. N. K. Mehra	Department of Immunogenetics, AIIMS
Prof. D. N. Rao	Department of Biochemistry, AIIMS
Prof. N. Das	Department of Biochemistry, AIIMS
Dr. A. Raina	Department of Forensics Medicine, AIIMS
Dr. N. Bhatla	Department of Gynaecology and Obstetrics, AIIMS
Dr. D. Maheshwari	Department of Obstetrics and Gynaecology, AIIMS
Prof. M. Bose	Department of Microbiology, V P Chest Institute
Dr. M. Varma	Department of Microbiology, V P Chest Institute
Prof. D. Saluja	ACBR, DU
Dr. K. Natarajan	ACBR, DU
Dr. V. Brahmachari	ACBR, DU
Dr. A. Vishnoi	School of Life Sciences, JNU
Dr. S. Prakash	School of Life Sciences, JNU
Prof. R. Madhubala	School of Life Sciences, JNU
Prof. G. Das	Special Centre for Molecular Medicine, JNU
Prof. R. Lal	Department of Zoology, DU
Prof. K. Muralidhar	Department of Zoology, DU
Prof. Y. Singh	Department of Zoology, DU
Prof. V. Kumar	Department of Zoology, DU
Dr. R. Singh	Department of Zoology, DU
Dr. S. Mazumder	Department of Zoology, DU

Dr. A. C. Bharti	Department of Zoology, DU
Dr. S. Das	Department of Botany, DU
Dr. A. Bhaduri	Cluster Innovation Centre, DU
Dr. Y. Hasija	Department of Biotechnology, DTU

25. Seminars/Conferences/Workshops organized & the source of funding:

a) National

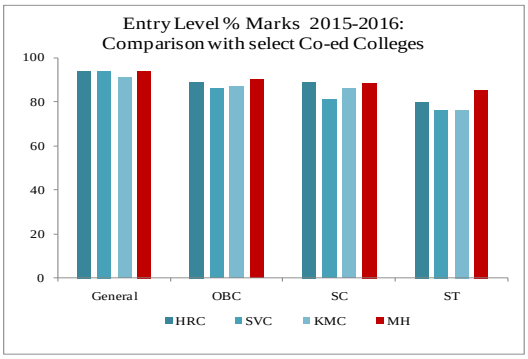
Conferences	Sponsor
CME (Continued Medical Education) on Recent Advances in Immunology; July 2014	UGC, DBT, ICMR, CSIR, IIS, BD India Pvt. Ltd.

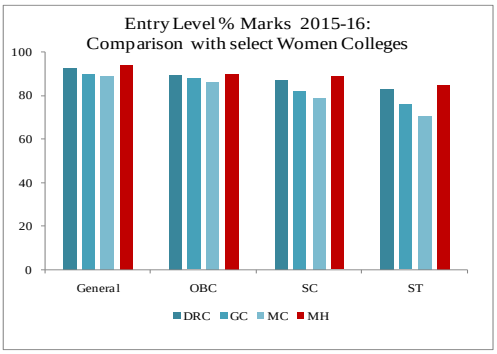
Workshops	Sponsor
1. Bioinformatics and Biostatistics: An Introduction; February 2016	DBT-Star
2. Bridge Course: Laboratory Instrumentation: Principle, Usage and Applications; October 2015	College
3. Eco-friendly Dyeing and Finishing of Textiles; October 2015	DU
4. Summer Workshop for Undergraduate Science Students Flavor of Research: Investigative Projects in Multidisciplinary Contexts; June-July 2015; June-July 2014; June- July 2013; May-July 2012	College
5. Applications of Flow Cytometry; March 2015	DBT-Star
6. *Drosophila*-A Smart Model for Biological Studies; March 2015	DBT-Star
7. Natural Dyeing of Textiles; March 2015	DU
8. Protein Modelling & Docking Studies for Rational Drug Design; March 2014	OSDD, CSIR and DBT-Star
9. Understanding Proteins: Structures and Functions; July 2013	DBT-Star
10. Techniques in Biotechnology; January 2013	ILLL, DU
11. Computational Biology; January 2012	DBT-Star
12. Concepts of Immunology and its Applications; July 2011	DBT-Star
13. INSPIRE Internship Programme i) Designing Life: Small Experiments and ii) DNA and Enzymes: Tiny but Mighty Players; 2010, 2011, 2013, 2015	DST
14. Gene Polymorphism and its Applications; July 2011	DBT-Star
15. Bioinformatics: Unravelling Genes and Proteins; May 2010	UGC and CSIR
16. Gene Cloning & Expression: Bioinformatics & Wet Lab; April 2010	UGC and CSIR

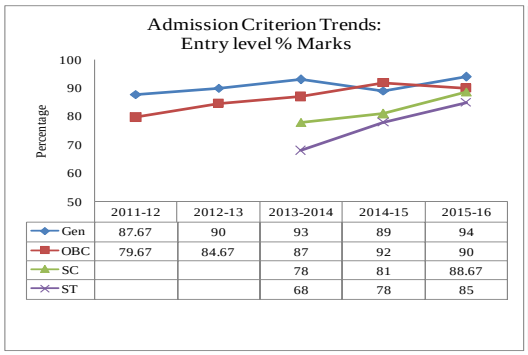
b) International

Workshops	Sponsor
Role of MHC Complex in Biology and Medicine; March 2016	DBT-Star

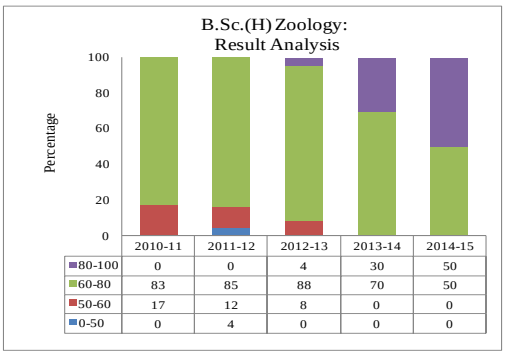
26. Student profile programme/course-wise:



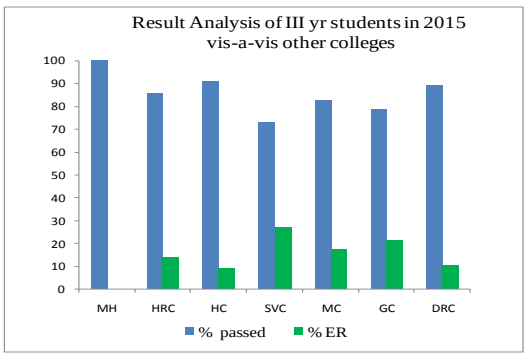


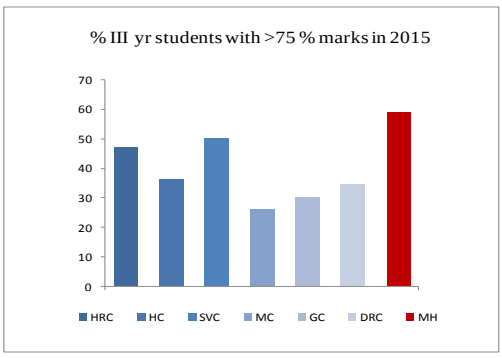


	2011-12	2012-13	2013-2014	2014-15	2015-16
Gen	87.67	90	93	89	94
OBC	79.67	84.67	87	92	90
SC			78	81	88.67
ST			68	78	85

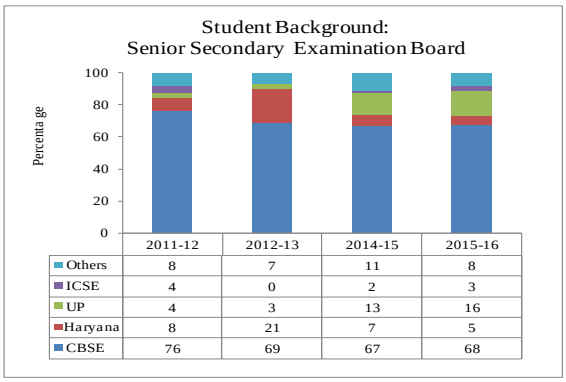


	2010-11	2011-12	2012-13	2013-14	2014-15
80-100	0	0	4	30	50
60-80	83	85	88	70	50
50-60	17	12	8	0	0
0-50	0	4	0	0	0

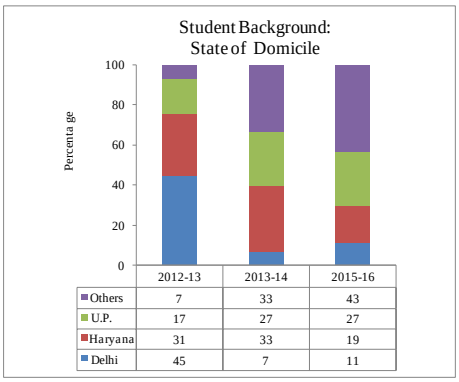




27. Diversity of Students:



	2011-12	2012-13	2014-15	2015-16
Others	8	7	11	8
ICSE	4	0	2	3
UP	4	3	13	16
Haryana	8	21	7	5
CBSE	76	69	67	68



	2012-13	2013-14	2015-16
Others	7	33	43
U.P.	17	27	27
Haryana	31	33	19
Delhi	45	7	11

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services?

Students pursue higher studies in diverse disciplines such as Zoology, Genetics, Biochemistry, MBA, Environmental Sciences and Biomedical Research. A large number from each academic batch clear several competitive exams such as NET, SLET, GATE, TIFR, etc.

29. Student progression:

Students have continued higher studies and research in prestigious Indian institutions like NCBS, NII, IGIB, ACBR, IISC, IIT, AIIMS, D.U., BIOCON Labs and in Universities abroad like University College of London, UK. Our alumni include lecturers in colleges of DU and teachers in top Delhi schools. A significant number have successfully diversified into pharmaceutical and healthcare services, Anthropology, IAS/IFS, MBA, print and audio-visual media and law.

30. Details of Infrastructural facilities:

a) Library: College library has 2500 books on different themes of Zoology for reference. Departmental library has 400 books and 50 e-books.

b) Faculty rooms: Department has 3 ergonomically designed faculty rooms having workstations and personal space for storage.

c) Internet facilities for staff and students: The entire Department is well-connected through Wi-Fi to the internet. Department has two desktop computers with printers and one HP Laptop. College has issued HP netbooks to all the faculty members. All the computers are WiFi enabled.

d) Classrooms/laboratories with ICT facility: All the laboratories and lecture rooms are WiFi enabled and are equipped with LCD projection system. A visualizer with a projector for overhead projection of books, articles and laboratory specimens is housed in the Museum. Biotechnology and Immunology laboratory has an image projection system fitted on a research trinocular microscope. The air-conditioned Zoology lecture theatre, equipped with audio-visual system, is used for organizing seminars and conferences. Besides this, college's Digital Resource Centre (DRC) with 50 WiFi enabled desktops is used for Bioinformatics classes.

e) Laboratories: The Department has two Undergraduate laboratories, an Entomology room, a Museum and two Research laboratories. A chemical preparation room and a store are also there.

- Undergraduate Laboratories: Two major UG laboratories in the Department are:
  - Morphology, Ecology and Animal Behavior Lab
  - Physiology, Biochemistry, Cell and Molecular Biology Lab

Equipment in UG labs: 20 Nikon binocular microscopes, 10 Olympus stereo-zoom microscopes, 50 monoculars and binoculars, spectrophotometer, centrifuges, laminar flow hood, shaker incubator, autoclave, fume hood, water baths, UV lamp, transilluminator, BOD incubator, -20º freezer, hot air ovens, dry bath, image projection system, electronic balances and hot plates.

- Entomology room: It is a multipurpose room used for conducting both theory as well as practical classes and also for research. Textile technology lab is housed in this room. Equipment: Dye bath, padding mangle, hot air oven, electronic balance and hot plates.
- Museum: A big air-conditioned room has a repository of well-labelled vertebrate and invertebrate specimens, slides, histological sections, insects, skull and bones.
- Biotechnology and Immunology lab: This research lab has animal cell culture facility.

  Equipment: Bio-safety cabinet, CO_2 incubator, inverted phase contrast microscope, cold centrifuge, vacuum pump and PCR machine.

- DSKC Life Sciences lab: It is a research lab that is extensively used by the Department for conducting research.
  Equipment: Gel-Doc, gradient thermocycler, real time PCR, cold centrifuge, flow cytometer, nanodrop, sonicator, -80º freezer, millipore water filtration system, bio-safety cabinet, shaker incubator, -20º freezer, ELISA reader, immunoelectrophoresis unit and electronic balances.

31. Number of students receiving financial assistance from college, university, government or other agencies:

Year	College	DU	DST INSPIRE	Government	Others	Total
2012-13	0	0	0	1	5	6
2013-14	1	4	0	1	0	6
2014-15	0	5	9	2	3	19
2015-16	0	0	0	0	4	4

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts:

The Department organizes various student enrichment programmes wherein experts and resource persons from renowned institutions are invited. Some of the major events are listed below:

1. National Symposium: CME (Continued Medical Education) on Recent Advances in Immunology (2014): Prof. K. Natarajan (ACBR), Prof. N. K. Mehra (AIIMS), Dr. Devinder Sehgal (NII), Prof. Gobardhan Das (JNU), Prof. Nibhriti Das (AIIMS), Prof. R. Madhumala (JNU), Dr. Girish Varshney (IMTECH), Dr. Anmol Chandele (ICGEB), Dr. Mausumi Bharadwaj (ICPO), Prof. D. N. Rao (AIIMS) and Dr. Shibnath Majumder (DU).
2. Add-on Course on Medical Biotechnology since 2007: Prof. Y. Singh (IGIB), Dr. Satyajit Rath (NII), Dr. Anupama Raina (AIIMS), Dr. Sujata Mohanty (AIIMS), Prof. Mridula Bose (VPCI), Prof. Mandira Varma (VPCI), Dr. Beena Pillai (IGIB), Dr. Bani Brahmachari (ACBR), Prof. Pawan Malhotra (ICGEB), Prof. Rup Lal (DU), Dr. Alka Sharma (DBT), Dr. Amit Yadav (THSTI) and Dr. Jameel A. Khan (Life Code Technologies).
3. Add-on Course on Bioinformatics and *in silico* Medicine since 2014: Dr. Vinod Scaria (ICGEB), Dr. Chaithanya Madhurantakam (TERI University), Dr. Vipin Singh (Amity University), Dr. Anchal Vishnoi (JNU), Dr. Yasha Hasija (DTU), Dr. Arun Jagannath (Department of Botany) and Dr. Anshu Bhardwaj (IGIB).
4. Workshops under DBT Star College Scheme
   i) Gene Polymorphism and its Applications, 2011: Prof. Vani Brahmachari (ACBR), Dr. Anupuma Raina (AIIMS), Dr. Mitali Mukerjee (IGIB), Dr. Mandira Verma (VPCI) and Prof. Narinder Mehra (AIIMS).
   ii) Concepts of Immunology and its Applications, 2012: Dr. Satyajit Rath (NII), Prof. D.N. Rao (AIIMS), Prof. K. Muralidhar (Department of Zoology, DU), Prof. Natrajan (ACBR) and Prof. N.K. Mehra (AIIMS).
   iii) Understanding Proteins: Structures and Function, 2013: Dr. Aseem Mishra (ICGEB), Dr. Laishram Rajendra Singh (ACBR), Dr. Jasmita Gil (RCB), Prof. Yogendra Singh (IGIB) and Dr. Anshu Bhardwaj (IGIB).
5. The Department society Synapse organizes a number of lectures on diverse issues such as Infertility, Endocrine disruptors, Chronobiology, Cancer

diagnostics, Biodiversity, Conservation, Immunology, Allergies, Breast Cancer, etc. Refer point 24 for list of external experts.

i) Workshops under OSDD-CSIR Centre: Protein Modelling and Docking Studies for Rational Drug Design Workshop, 2014: Dr. Anshu Bhardwaj (IGIB); Skype Talks by Dr. S Janardhan (IICT, Hyderabad), Dr. E.R. Azhagiya Singam (CLRI, Chennai), Dr. Balaji Prakash (IIT, Kanpur).

ii) Workshops under DU Innovation Project Scheme: Eco-friendly Dyeing and Finishing of Textiles, 2015: Prof. Manjeet Jassal (IIT, Delhi).

33. Teaching methods adopted to improve student learning:

- Visualization tools: The traditional chalk and talk method is supplemented with LCD projection system and use of visualizer for theory classes.
- E-Museum: Digitization of specimens, histological sections, Developmental Biology and Cell Biology slides for detailing and ease of observation has been created through imaging system housed in the Department. A new innovative way of mobile photography of the microscopic slides is being used by students. The Department has a large collection of short movies on environment related topics such as global warming, ozone depletion and waste management.
- Software and web-portals: Online as well as offline software are an integral part of the curriculum e.g. Phylip, Primer, MEGA, BLAST, Clustal W, Swiss Prot and other portals like NCBI, EMBL to name a few.
- Active learning strategies: Group discussions, case studies, book reviews, paper presentations, videos, animations, 3D simulations for structure and processes are some methods employed by faculty. Project based reports, assignments and E-posters are also a part of learning regime.
- Research projects: Experimental summer projects, Innovation projects and field based research projects help students develop interest in the subject and motivate them to pursue research as a career in future.
- Laboratory orientation and Bio-safety: Bridge Course is organized to acquaint first year students with the laboratory instruments and techniques. The faculty has prepared a Laboratory Bio-safety manual that is being followed to avoid any kind of accidental damage.
- Educational visits: Laboratory visits to renowned institutions like AIIMS, IGIB, ICGEB, NII and JNU and field visits to various conservation sites like Jim Corbett National Park, Aravali Biodiversity Park and National Zoological Park.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

The Department of Zoology has a vibrant society Synapse that organizes various activities and publishes its annual magazine Evolvere: the unfolding to ensure that the Department fulfills its social responsibility:

- Organization of Lectures for general public awareness ranging from Stress management, Endocrine disruptors, Life style diseases, Environmental management, Green technology, Tissue transplantation, Allergies, Diagnostics and treatment for cancer and infectious disease
- Screening of films for Environmental Awareness Programme
- Participation in Cleanliness Drive Programme on College campus as a contribution to Swaccha Bharat Abhiyan

- Contribution to the NSS society of MH by donating proceeds from several stalls organized during Department annual festival Impulse
- Promoting e-book usage and recycling of paper
- Advocating optimum use of electricity

35. SWOC analysis of the Department and Future plans:

Strengths

- Well-qualified and dedicated faculty members with diverse specialization.
- Emphasis on making cutting edge research and innovation in life sciences accessible to students.
- Enrich the knowledge of students beyond their prescribed syllabus and aim at their holistic development with hands-on training Workshops, Lectures/talks, Seminars and Conferences for better grasp of the subject.
- Encourage students to actively participate in different research projects and Add-on Courses of the Department to broaden their educational experience and encouragement for pursuit of an advanced degree.
- The Department teachers always show keen interest and participate in syllabus restructuring and e-book writing.
- Teachers are actively involved in guiding undergraduate and Ph.D. students, and regularly publish research articles in national/international journals and present papers in various national and international conferences.
- Faculty enthusiastically participate in faculty enrichment programme, bilateral scientific exchange programmes, DBT Star College Scheme, DST INSPIRE programme and Science Setu.
- Guidelines with reference to lab hazards and safety protocols as stipulated by ICMR and DBT are followed in our laboratories that include i) good laboratory practices, (ii) safety equipment, and (iii) laboratory design and facilities.
- Good Department library with rich collection of books and e-books.
- Dedicated and disciplined laboratory staff.
- Well-equipped laboratories, well-maintained museum with good collection of specimens along with an e-museum collection.

Weaknesses

- Limited industry-academia interactions.
- Infrastructure needs to be scaled up.
- Fewer training programmes for laboratory staff.

Opportunities

- Opportunities to pursue Ph.D.
- Workshops, conferences, symposia to update and exchange the knowledge and ideas amongst teachers, scientists, researchers and students.
- Skill oriented Add-on Courses for students.
- Bridge Courses for first year students to familiarize them with instrumentation usage.

Challenges

- The face of modern science research is ever changing and students are to be given an early exposure to technologies and frontiers of research.
- Upgradation of the existing infrastructure and expansion of research labs to accommodate more students and projects.
- Documentation of work done.

- Time-constraint of the students for doing research.
- Keeping track of student progression.
- Imparting knowledge of anatomy and physiology of animals to students due to ‘no dissections policy’.

Future Plans

- To strengthen research infrastructure by applying funding from various agencies.
- To establish a Central Instrumentation Facility that can promote the idea of trans-boundary inquiry.
- To tie up with industries for research and consultancy.
- To strengthen existing Bio-Discovery Lab Facility, wherein the Environment Group emphasizes on: Natural dyeing and antimicrobial finishing of textiles with an eco-friendly approach; Screening for antibiotic producers and xenobiotic degraders using a metagenomics approach; Development of whole-cell microbial biosensors. The Vaccine and Drug Discovery Group focuses on: Cloning, expression, purification and validation of new subunit vaccine candidates and drug targets for tuberculosis; Study of immunomodulatory and cytotoxic activity of medicinal plants.
- To organize workshops, conferences and seminars for students and faculty. Department has started applying for funds to organize an International Workshop on Basic and Translational Immunology to update students on latest advances in immunology research.
- To organize training programmes for laboratory staff.

Evaluative Report

Department of Physical Education

1. **Name of the Department:** Physical Education
2. **Year of Establishment:**1954
3. **Names of Programmes/Courses offered (UG, PG):**
   UG: Physical Education as a Discipline Course in combination with Hindi, History, Philosophy, Political Science, Sanskrit, as Application Course in B.A. Programme
4. **Names of Interdisciplinary courses and the departments/units involved:** None
5. **Annual/semester/choice based credit system (programme-wise):**
   Choice Based Credit System (CBCS) in Semester Mode was introduced in 2015-16.
6. **Participation of the Department in the courses offered by other departments**:
   B.El.Ed.: Department of Elementary Education
7. **Courses in collaboration with other universities, industries, foreign institutions etc.:** None
8. **Details of courses/programmes discontinued (if any) with reasons:** None
9. **Number of Teaching posts:**

Post	Sanctioned	Filled
Associate Professor		01
Assistant Professor	01	

10. **Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. /M. Phil., etc.):**

Name	Qual	Des	Specialization	Exp Y
Dr. A. Rana	Ph.D.	Associate Professor	Exercise Physiology and Track and Field	28
Dr. T. Routhan[A]	Ph.D.	Assistant Professor	Sports Biomechanics and Taekwondo	3
Ms. N. Devi[A]	M.P.Ed.	Assistant Professor	Sports Psychology and Softball	

Qual: Qualification; Des: Designation; [A]: *Ad hoc*; Exp Y: Experience in years

11. **List of senior visiting faculty**: None
12. **Percentage of lectures delivered and practical classes handled (programme-wise)by temporary, *ad hoc* and guest faculty:**

Year	2010-11	2011-12		2012-13		2013-14		2014-15	
Semester	Annual	Odd	Even	Odd	Even	Odd	Even	Odd	Even
Lectures	33	46	50	26	22	30	42	62	69
		17.3*							
Practical classes	33	58	53	27	22	30	43	61	69
		18.7*							

*Annual

13. **Student -Teacher Ratio (programme-wise):** 10:1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:** None

15. Qualifications of teaching faculty with D.Sc./D.Litt,/Ph.D./M.Phil./PG:

Qualification	2010-2011		2011-2012				2012-2013				2013-2014				2014-2015			
	P	A	P		A		P		A		P		A		P		A	
			O	E	O	E	O	E	O	E	O	E	O	E	O	E	O	E
Ph.D.	1		1	1	1	1	1	1	1	1	1	1			1	1	1	1
Others (PG)	1	1	1	1			1	1			1	1	2	2			1	1

P: Permanent; A: Temporary/*Ad hoc*; O: Odd semester; E: Even semester

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: None

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: None

18. Research Centre/facility recognized by the University: None

19. Publications:

Name	Authored: Books	Edited: Books/ Proceedings	Chapters: Books/ Textbooks	Papers: Journals	Book Reviews: Journals	Presentations: Conferences	Curricular: Resources	Popular Articles	Impact Factor	Citation Index
Dr. A. Rana	3		1			5	4			
Dr. S. Sharma[A]	1		1	2		2				
Dr. B. Pawar[A]	1		1	3		15				
Dr. T. Routhan[A]			2	8		14				
Mr. A. Basumatary[A]				5		1				

[A]: *Ad hoc*

20. Areas of consultancy and income generated: None

21. Faculty as members in a) National committees, b) International Committees and c) Editorial Boards:

Dr. A. Rana served as the Deputy Director General: Sports and Functional Areas in the XIX Commonwealth Games, 2010. She was instrumental in the smooth and efficient display of Boxing, Hockey, Swimming and Shooting in the Games.

22. Student projects:

a) Percentage of students who have done in-house projects including inter-departmental/programme: None

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies: None

23. Awards/Recognitions received by faculty and students:

Faculty Awards

Dr. A. Rana

- Rajiv Gandhi Khel Ratna Award
- Dr. Radha Krishnan Memorial Award

Students' Awards

Best Sports Women of the Year 1. Tapasya Changkakati(2015-16) 2. Tanu Sharma (2014-15) 3. Anjali Raina (2013-14)	Best Outgoing Athlete 1. Tapasya Changkakati(2015-16) 2. Tanu Sharma (2014-15) 3. Tanya Garg (2013-14)
Most Talented Athlete 1. Julie Boruah (2015-16) 2. Tapasya Changkakati(2014-15) 3. Bhawna Bisht (2013-14)	Best Promising Athlete 1 Deepika Sehrawat(2015-16) 2 Bharti (2014-15) 3 Tapasya Changkakati(2013-14)
Most Enthusiastic Athlete 1. Arshdeep Kaur (2015-16) 2. Anjali Raina (2014-15) 3. Tanu Sharma (2013-14)	Most Versatile Athlete 1. Himani Mor (2015-16) 2. Akanksha Kapur(2014-15) 3. Swati Goswami(2013-14)

2015-16

- Ms. Saloni Shokeen received Rs. 50,000 scholarship from Directorate of Education, Sports Branch, GNCT for winning Gold Medal in the International Taekwondo Championship.
- Ms. Saumya received Rs. 22,000 scholarship from Directorate of Education, Sports Branch, GNCT for winning Bronze Medal in the Senior National Taekwondo Championship.
- Ms. Deepika Sehrawat received Rs. 20,000 scholarship from Directorate of Education, Sports Branch, GNCT for winning Gold Medal in the All India Inter- University Taekwondo Championship.
- Ms. Bhavna received Rs. 20,000 scholarship from Directorate of Education, Sports Branch, GNCT for winning Gold Medal in the Archery National.
- Ms. Chinu received Rs. 10,000 scholarship from Directorate of Education, Sports Branch, GNCT for winning Bronze Medal in the Archery National.
- Ms. Tapasya Changkakati received Rs. 5,000 and Best Sports Women Year Award. She also received Rs. 3,000 and Best outgoing Athlete Award.
- Ms. Ayushi Bolia received Rs. 5,000 and Baba Balwant Singh Bhalla Award for Excellence in Academics & Sports.
- Ms. Julie Boruah received Rs. 3,000 and Most Talented Athlete Award.
- Ms. Deepika Sehrawat received Rs. 3,000 and Best Promising Athlete Award.
- Ms. Arshdeep Kaur received Rs. 3,000 and Most Enthusiastic Athlete Award.
- Ms. Himani Mor received Rs. 3,000 and Most Versatile Athlete Award.

2014-15

- Ms. Saloni Shokeen received Rs. 40,000 scholarship from Directorate of Education, Sports Branch, GNCT for winning Gold Medal in the Junior National Taekwondo Championship.
- Ms. Bhavna received Rs. 5,000 scholarship from Directorate of Education, Sports Branch, GNCT for winning Gold Medal in the Archery State Championship.

- Ms.Tanu Sharma received Rs. 5,000 and Best Sports Women Year Award. She also received Rs. 3,000 and Best outgoing Athlete Award.
- Ms. Akanksha Kapur received Rs. 5,000 and Baba Balwant Singh Bhalla Award for Excellence in Academics & Sports. She also received Rs. 3,000 and Most Versatile Athlete Award.
- Ms. Tapasya Changkakati received Rs. 3,000 and Most Talented Athlete Award.
- Ms. Bharti received Rs. 3,000 and Best Promising Athlete Award.
- Ms. Anjali Raina received Rs. 3,000 and Most Enthusiastic Athlete Award.

2013-14

- Ms. Anjali Raina received Rs. 5,000 and Best Sports Women Year Award. She also received Rs. 5,000 and Baba Balwant Singh Bhalla Award for Excellence in Academics & Sports.
- Ms. Tanya Garg received Rs. 3,000 and Best outgoing Athlete Award.
- Ms. Bhawna Bisht received Rs. 3,000 and Most Talented Athlete Award.
- Ms. Tapasya Changkakati received Rs. 3,000 and Best Promising Athlete Award.
- Ms. Tanu Sharma received Rs. 3,000 and Most Enthusiastic Athlete Award.
- Ms. Tanu Sharma received Rs. 3,000 and Most Versatile Athlete Award.

24. List of eminent academicians and scientists/visitors to the Department:

1. Dr. Jawahar Lal Jain, Former CMO, World University Service Health Centre
2. Dr. C. B. Singh, renowned Yogacharya of Gandhi Bhavan, DU
3. Dr. Kiran Sandhu, Former Head, Department of Physical Education & Sports Sciences, DU
4. Dr. D. K. Kansal, Former Principal, I.G.I.P.E.S.S., DU
5. Dr. Jitender S. Naruka, Former Director, Delhi University Sports Council
6. Dr. Sudharsna Pathak, Former Deputy Director, Delhi University Sports Council
7. Dr. Anil Kalkal, Director, Delhi University Sports Council
8. Ms. Asha Aggarwal, Arjuna Awardee & Deputy Director, Directorate of Education, GNCT
9. Ms. Roopam Harish Verma, General Secretary, Basketball Federation of India
10. Mr. Kapil Dev, Padma Bhushan Awardee (Cricket)
11. Ms. Kunjarani Devi, Padma Shri Awardee (Weight-lifting)
12. Mr. Samresh Jung, Arjuna Awardee (Shooting)
13. Ms. Bhuwneshwari Kumar, Arjuna Awardee (Shooting)
14. Mr. Khajan Singh Tokas, Arjuna Awardee (Swimming)
15. Mr. Abhishek Verma, Arjuna Awardee (Archery)
16. Ms. Indu Puri, Arjuna Awardee (Table Tennis)
17. Ms. Kiran Bedi, IPS and Social Activist
18. Ms. Nafisa Ali, Actress & Social Activist

25. Seminars/Conferences/Workshops organized & the source of funding:

- National
  - National Seminar on Sports Biomechanics and Exercise Science was jointly organized by Miranda House, St. Stephens College and Indian

Society of Biomechanics, 16-17 April 2011 by utilizing the in-house sports funds.

- Workshop on Volleyball & Strength Training by Mr. Jesse Boyd (USA), 15-17 September 2011 by utilizing the in-house sports funds.

- International**:** None

Student profile programme/course-wise:

Name of the Course/programme	Applications received	Selected	Enrolled	Pass percentage
Discipline Course (2014-15)	06	06	06	100
Discipline Course (2013-14)	04	04	04	100
Discipline Course (2012-13)	06	06	06	100
Application Course (2014-15)	17	17	17	100
Application Course (2013-14)	26	26	26	100
Application Course (2012-13)	10	10	10	100

Note: No Course in the year 2015-16 (FYUP)

26. Diversity of Students : Discipline Course

The students who opt for Physical Education are usually from CBSE (70-90%).

Note: Discipline Course was not offered in 2013-14 under FYUP

27. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services?

Sayema Ahmed cleared the NET (Physical Education).

28. Student progression:

Every year about three students pursue Post-Graduate Diploma in Physical Education, and further pursue post-graduation/M. Phil./Ph.D.

29. Details of Infrastructural facilities:

a) Library: The college library has 910 books in Physical Education. In addition, the departmental library has 178 books for ready reference.
b) Faculty room: The faculty room has sufficient space for the teachers.
c) Playfields and fitness centre: The college has provided adequate space for playfields. The Department has a fitness centre as well.

31. Number of students receiving financial assistance from college, university, government or other agencies:

Year	College	Delhi University	Government	Others	Total
2015-16	7		5		12
2014-15	7		2		9
2013-14	7				7

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts:

- The Certificate Course in Foundation of Yogasana was organized for students. The duration of the course was 36 hours (one month). A total of 60 students had participated. The resource person for the Course was Ms. Alka Singh, Yoga Therapist, D. Acu., D.N.Y.S., M.A. (Yoga).
- Lectures on First-Aid are regularly being organized in the college. The lectures aim at spreading awareness on First-Aid assessment skills primarily

during sports injuries and during medical and environmental emergencies. The lectures are held under St. John Ambulance.

- Aerobics classes are one of the regular activities of the college. The aerobics classes are being organized with the purpose to improve the performance efficiency of the students by improving their cardiovascular and neuromuscular systems. The classes are held under the supervision of certified experts.
- A Workshop on Volleyball and Strength Training was organized in the college to enhance the volleyball skills by implementing latest training methods. The resource person for the workshop was Mr. Jesse Boyd, U.S.A., 2011.
- A Workshop on Basketball Advanced Training was organized in the college to enable students to learn the advanced training skills for the improvement of their game skills. The resource person for the workshop was Ms. Shiba Maggon, International Player, 2011.

33. Teaching methods adopted to improve student learning:

- Lecturers through PowerPoint presentations
- Video Display teaching
- Field Visits/Projects/Assignments
- Open book tests/PowerPoint Presentations by students

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: N.A.

35. SWOC analysis of the Department and Future plans:

Strengths

- The faculty is well-qualified, experienced and dedicated, with demonstrated contributions in academics as well as sports.
- The Department is known for its well-organized and exemplary activities.
- Pioneered in starting Physical Education as a Discipline Course as well as Application Course in B.A. Programme.
- The Department facilitates14 sports which are consistently performing well.

Weaknesses

- The college is seeking funds for a multipurpose hall.

Opportunities

- Holistic development of students by offering fitness and wellness activities (Yoga and Aerobics).
- Specialized training/coaching for students seeking to excel in sports.
- Counselling is available for further studies and career Physical Education.

Challenges

- To ensure that more students opt for Physical Education.

Future Plans

- Introduction of Physical Education as Honours Course in Miranda House.
- To develop a Multipurpose Hall for promotion of Indoor games.
- To develop a well-equipped state-of-art gymnasium/fitness centre.
- To organize Certificate/Add-on Courses e.g. Sports Management and Sports Journalism in collaboration with International Universities/Organizations.
- To organize Seminars/Workshops on Physical Education for differently abled students.

Supporting Documents

List of Tables, Figures and Documents

Table No.	Details
1.3.3	Papers on Gender, Human Rights, Environment Education and ICT
1.1.7	Faculty Contributions to Course Development in other Institutions outside DU
2.1.3 (c)	Entry Level % Marks – First and Last Cut-Off for Courses on Offer for 2011-2012, 2012-2013, 2013-2014, 2014-2015
2.1.3 (d)	Comparison of Entry Level % Marks for B.Sc. Honours Courses with other DU Women Colleges at University of Delhi in 2015-16
2.1.3 (e)	Comparison of Entry Level % Marks for B.Sc. Programme Courses with other DU Women Colleges at University of Delhi in 2015-16
2.1.3 (f)	Comparison of Entry Level % Marks for B.A Courses with other DU Women Colleges at DU in 2015-16
2.1.3 (g)	Comparison of Entry Level % Marks for B.Sc. Honours Courses with Co-educational Colleges at University of Delhi in 2015-16
2.1.3 (h)	Comparison of Entry Level % Marks for B.Sc. Programme Courses with Co-educational Colleges at University of Delhi in 2015-16
2.1.3 (i)	Comparison of Entry Level % Marks for B.A. Courses with Co-educational Colleges at DU in 2015-16
3.1.6 (a)	Capacity Building Workshops and Training Programmes Conducted by Social Sciences and Humanities Departments
3.1.6 (b)	Capacity Building Workshops and Training Programmes Conducted by Science Departments
3.4.4 (a)	Faculty as Members in National Committees and Professional Bodies
3.4.4 (b)	Faculty as Members in International Committees and Professional Bodies
3.4.4 (c)	Faculty as members in Editorial Boards
3.7.4 (b)	Conferences/Seminars/Workshops organized with Eminent Scientists/Academicians
6.1.6	Current Position of Non Teaching Staff
DER*-23	University Rank Holders in B.A. (H) and B.Sc. (H) Courses (cumulative)
DER*-27	Educational Background of Students Admitted: Percentage Distribution Across Senior Secondary Examination Board

*DER: Department Evaluative Report

Fig. No.	Details
4.1.3 (a)	Master Site Plan of Miranda House Campus
4.1.3 (b)	Layout Plan of MH Academic Block: Ground Floor
4.1.3 (c)	Layout Plan of MH Academic Block: First Floor
4.1.3 (d)	Layout Plan of MH Library: Ground Floor
4.1.3 (e)	Layout Plan of MH Library: First Floor
4.1.3 (f)	Layout Plan of MH Library: Second Floor
4.1.3 (g)	Layout Plan of MH Hostel Old Block: Ground Floor
4.1.3 (h)	Layout Plan of MH Hostel Old Block: First Floor
4.1.3 (i)	Layout Plan of MH Hostel Old Block: Second Floor
4.1.3 (j)	Layout Plan of MH Hostel New Block: Ground Floor
4.1.3 (k)	Layout Plan of MH Hostel New Block: First Floor
4.1.3 (l)	Layout Plan of MH Hostel New Block: Second Floor
4.1.3 (m)	Layout Plan of Cafeteria
4.1.3 (n)	Layout Plan of Student Activity Centre
4.1.3 (o)	Layout Plan of New Academic Block: Ground Floor
4.1.3 (p)	Layout Plan of New Academic Block: First Floor
4.1.3 (q)	Layout Plan of New Academic Block: Second Floor
4.1.3 (r)	Changing Topology of Miranda House

Documents	Details
1.	UGC Recognition for affiliation to University of Delhi
2.	NCTE Recognition for B.El.Ed.
3.	AICTE Recognition for B.Tech
4.	Balance Sheet as on 31/03/2015
5.	Balance Sheet as on 31/03/2014
6.	Balance Sheet as on 31/03/2013
7.	Balance Sheet as on 31/03/2012
8.	Balance Sheet as on 31/03/2011

Table 1.3.3: Papers on Gender, Human Rights, Environment Education and ICT

Gender and Human Rights		
Course	Paper	Category
B.A. (H) English	Women's Writing	Core
	Gender and Human Rights Contemporary India: Women and Empowerment	GE
B.A. (H) Philosophy	Feminism and Bio-ethics	GE
B.A. (H) Political Science	Political Theory	Core
	Women, Power and Politics	GE
	Feminist Theory and Practice	Optional
B.A. (H) Sociology	Sociology of Gender	Core
	Gender and Violence	GE
B.A. (P)	Human Rights, Gender and Environment	Foundation, GE
Environment Education and Sustainable Development		
Course	Paper	Category
B.Sc. (H) Chemistry	Biochemistry and Environmental Chemistry, Industrial Chemicals and Environment	DSE
	Green Methods in Chemistry	SEC
B.A. (H) Economics	Development Economics	Core
	Economics of Health and Education, Environmental Economics	DSE
B.A. (H) Geography	Environmental Geography	Core
	Geography of Health and Wellbeing	DSE
	Sustainable Development, Climate Change: Vulnerability and Adaptation, Rural Development and Disaster Management	GE
B.Sc. (H) Physics	Renewable Energy and Energy Harvesting	SEC
Information and Communications Technology (ICT)		
Course	Paper	Category
B.Sc. (H) Chemistry	IT Skills for Chemists	SEC
B.Sc. (H) Mathematics	Numerical Methods, Mathematical Modelling and Graph Theory and C++ Programming	DSE
	LaTeX and HTML, Computer Algebra Systems and Related Software and Operating System: Linux	SEC
B.Sc. (H) Physics	Mathematical Physics (C1 Lab)	Core
	Mathematical Physics (C V Lab)	Core
	Computational Physics Skills	SEC
DSE: Discipline Specific Elective, SEC: Skill Enhancement Course, GE: Generic Elective		

Table 1.1.7: Faculty Contributions to Course Development in other Institutions Outside DU

Principal

Pratibha Jolly

- Member, Course Design Committee, IGNOU, 2000-02
- Editorial Adviser, Students' Britannica India, Volumes 1 to 7, 2000
- Editorial Adviser, Encyclopedia Britannica Student Suite for Class VI to X, Lessons and Workbooks for Science, Encyclopedia Britannica (India) Pvt. Ltd.
- Designed computers in Education course for prospective teachers; contributed to blue-print for setting up an Educational Technology Unit; CIE Academic programmes: Continuing education of in-service teachers; Delhi schools

Economics

Meeta Kumar

- Development of Resource Material for the Visually Impaired, NCERT, 2015

Elementary Education

Mukul Priydarshini

- B.El.Ed. Curriculum Framework Committee for NCTE Syllabus of B. El. Ed., 2016
- Reviewed and Revised the Existing NCTE Regulations, Norms and Standards of Teacher Education Courses, 2013
- Coordinated the review and revision of the drama syllabi of the B.El.Ed. Programme along with the theatre and music professionals, 2008
- Chief Adviser and Member, Hindi Textbook Committee, NCERT For Primary Classes and Middle Classes, respectively, 2007
- Development of the Hindi syllabi of NCF for NCERT, 2005
- Development of the Position Paper of the National Focus Group on Indian Languages as a part of the National Curriculum Framework, NCERT, 2004-05

Suvasini

- Development of Curriculum for Psychology for NCERT, after the development of the National Curriculum Framework, 2006
- Development of curriculum and syllabus for the paper Child Development and Cognition and Learning, in the M.A Education (Elementary) Programme at Tata Institute of Social Sciences, Mumbai, 2005-06

Shilpa Jaiswal

- Development of Mathematics Learning Kit, NCERT, 2013-15
- Development of User manual for Mathematics Learning Kit, NCERT, 2013-15

Vertika Chowdhary

- Validating and consultancy for packaging of special training material (Environmental Science), CARE, India, 2013

Geography

Punam Behari

- Member, Undergraduate Syllabus Review Committee of Sikkim University, 2004

Ritu Ahlawat

- Prepared online resource material Concept of Natural Systems in Physical Geography, Association for Geographical Studies, Study Material Series, 2013,
- IGNOU Open Distance Learning Text Course Material, 2012

Poonam Kumria

- Subject Expert Advisory Committee for the Preparation of Definitional Dictionary of Climatology for Creation of Hindi words and definitions, Government of India Commission for Scientific & Technical Terminology, 2015

Anindita Sarkar

- Course material preparation, Appreciation course on Population and Sustainable Development, Population Foundation of India (PFI) and IGNOU, 2013-14
- Writing and developing textbooks for National Council of Education Research and Training (NCERT) Geography Textbook for Class VII, 2007

Monika Vij

- Content writer, Delhi SCERT Geography books for Class VIII, 2006

Bashabi Gupta

- Development of IEC materials and teaching- learning modules for Medical teaching in India, 2009
- B.A. (H) Human Geography paper at IGNOU, 2013-14

History

Srimanjari.

- Resource person, M.A. in History: Indian National Movement. Quit India and its Aftermath;Prelude to Quit India; Quit India Movement, IGNOU, 2014
- Resource person, M.A. in History: Ancient and Medieval Societies. Block 1: Early Human Societies, IGNOU, 2013
- Resource person, Unit 3: Transition to Agriculture; Unit 4: The Neolithic Revolution. IGNOU, 2005, Reprint 2013
- Co-authored Bharat Ka Itihas, Part 3, Textbook for Class VIII for SCERT, 2004

Madhu Sharma

- Member, Syllabus and Course Material Development, Online Certificate Course for Elementary Teachers on Pedagogy of Educational Games and Activities CIET, NCERT, 2012

Philosophy

Raj Verma Sinha

- Developed course material for class XI for CBSE website, 2014-15
- Member, 3-member courses committee of Central Board of Secondary Education, New Delhi, for the revision and assessment of courses for class XI-XII in Philosophy, 2012-13

Political Science

Purnima Roy

- Prepared study material for the IGNOU Certificate Course on Population. Gender and Development, Unit 1, Sustainable Development and Sustainability (co- authored) and Unit 3 - Indian Legislation Related to Population and Development, 2013
- Member, Creation of Course on Human Rights, NCERT, 2011

Bijaylaxmi Nanda

- Developed Curriculum materials for Women and Gender Studies, IGNOU, 2010-11
- Coordinator & Member, Committee IGNOU, Certificate Course on Population and Sustainable Development and Developed Curriculum and Study Materials, 2005-06

Namrata Singh

- Material for Certificate Course on Sustainable Development, IGNOU, 2014
- Curriculum development for IGNOU certificate course on Population,Gender and Development, 2013
- Content writer, Gender, State and Community: Nation, Nationalism and Citizenship; and Religious Minorities and Communalism, for IGNOU course M.A in Women's and Gender Studies, 2011-12

Sociology

Reema Bhatia

- Content Developer for Law and Society, NIOS, 2015
- Expert for Curriculum development for Gender and Society, NIOS, 2013
- Member, Curriculum development for Sociology, National Institute of Open Schooling (NIOS) and Radio & Video Content Development, 2011

Chemistry

R. Usha[R]

- e-Content writer, NISCAIR, 2008-10

Adarsh Gulati

- Content writer, CBSE e-books, 2008-10
- Content writer, NCERT

Bani Roy

- Content writing and video recording of PG level Environmental Chemistry lessons for e-PG Pathshala Project, University Grants Commission, 2014-15
- Designing and preparing Laboratory Manual for high school Chemistry experiments Vigyan Prasar, 2011-12

Amrita T. Sheikh

- Content writer, NCERT

Mallika Pathak

- Designing and preparing Laboratory Manual for high school Chemistry experiments Vigyan Prasar, 2011-12

Sharda M. Sonkar

- Designing and preparing Laboratory Manual for high school Chemistry experiments Vigyan Prasar, 2011-12

Smriti S. Bhatia

- Content writing and video recording of PG level Environmental Chemistry lessons for e-PG Pathshala Project, University Grants Commission, 2014-15

Zoology

Tanima K. Bose[R]

- e-Content writer, NISCAIR, 2009

Rekha Kumari

- e-Content writer, NISCAIR, 2007

Table 2.1.3 (c): Entry Level % Marks – First and Last Cut-Off for Courses on Offer for 2011-2012, 2012-2013, 2013-2014, 2014-2015

Course	2011-2012				2012-2013			
	General		OBC		General		OBC	
	Max	Min	Max	Min	Max	Min	Max	Min
B.A. Programme	82.00-87.00	82.00-87.00	72.00-77.00	64.00-69.00	86.00-91.00	85.00-90.00	84.00-89.00	70.00-75.00
B.A. Programme Functional Hindi	77.00	72.00	74.00	70.00	81.00-86.00	68.00-75.00	79.00-84.00	66.00-73.00
B.A. (H) Economics	94.00-96.00	94.00-96.00	86.00-88.00	80.00-82.00	96.00-97.25	95.00-96.25	93.00-94.25	85.50-86.75
B.A. (H) English	79.30*	74.50*	69.30*	58.00*	82.40*	78.68*	74.16*	67.00*
B.A. (H) History	86.00-93.00	86.00-93.00	82.00-89.00	73.00-80.00	90.00-96.00	88.50-95.00	87.00-93.00	81.00-87.50
B.A. (H) Hindi	70.00-75.00	70.00-75.00	65.00-70.00	55.00-60.00	72.00-77.00	72.00-77.00	67.00-72.00	63.00-68.00
B.A. (H) Philosophy	81.50	81.50	76.50	64.50	87.00	84.00	82.00	79.50-85.50
B.A. (H) Pol. Science	87.90	87.90	77.00-80.00	75.50-78.50	92-95	91.75-95.00	84.00-87.00	83.00-87.00
B.A. (H) Sanskrit	52.00	50.00	51.00	45.00	55.00	53.00	54.00	50.00
B.A. (H) Sociology	89.50	89.50	86.50	77.00	90.50	90.50	85.00	81.50
B.A. (H) Geography	87.00	87.00	77.00	77.00	90.00	90.00	85.00	85.00
B.A. (H) Bengali	80.25	55.25			60.00	60.00	54.00	54.00
B.Sc. (H) Physics	92.00	92.00	88.00	82.00	95.00	94.00	94.00	90.00
B.Sc. (H) Chemistry	90.00	90.00	85.00	76.00	93.00	92.00	90.00	88.00
B.Sc. (H) Botany	80.00	80.00	77.00	63.00	85.00	85.00	82.00	81.66
B.Sc. (H) Zoology	88.00	87.00	80.00	79.00	90.00	90.00	85.00	84.67
B.Sc. (H) Mathematics	89.00-90.00	89.00-90.00	81.00-82.00	81.00-82.00	95.00	93.00	90.00	90.00
B.Sc. Physical Science	80.00	79.00-67.00	75.00	71.00	85.00	82.00	83.00	77.30
B.Sc. Life Science	80.00	80.00	77.00	64.00	83.00	83.00	80.00	77.00

* CATE Score

Table 2.1.3 (c): Entry Level % Marks – First and Last Cut-Off for Courses on Offer for 2011-2012, 2012-2013, 2013-2014, 2014-2015 (contd…)

Course	2013-2014									
	General		OBC		SC		ST		PwD	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
Economics	96.50-97.00	95.75-96.25	93.50-94.00	89.50-90.00	92.50-93.00	80.00-80.50	90.50-91.00	74.00-75.00		
English	95.00-97.50	92.50-97.50	90.00-95.00	79.00-87.00	88.00-93.00	75.00-82.00	90.00-93.00	81.00-87.00		
History	92.00-96.00	92.00-96.00	87.00-91.00	74.00-78.00	89.00	65.00	90.00	88.00		
Hindi	85.00-90.00	79.00-84.00	82.00-85.00	61.00-64.00	83.00-85.00	65-68	83.00-85.00	60.00-65.00		
Philosophy	91.00	85.00	87.25	60.00	84.00	58.00	78.00	73.00		
Pol. Science	96.50	93.50	94.00	78.00	94.00	76.00	94.00	85.00		
Sanskrit	80.00	60.00	75.00	48.00	75.00	50.00	75.00	46.00		
Sociology	94.00	93.00	88.00	75.00	86.00	76.00	88.00	88.00		
Geography	96.50	90.00	94.50	84.00	93.50	81.75	93.50	82.00		
Bengali	66.25	50.50	66.25	49.00	66.25	48.00	66.25	50.00		
Physics	94.33	94.33	90.00	90.00	89.33	81.00	83.67	62.33		
Chemistry	95.67	93.00	93.67	85.67	91.67	77.33	82.67	55.00		
Botany	91.00	87.00	89.00	77.00	88.00	64.00	81.00	67.00		
Zoology	93.00	93.00	88.00	87.00	88.00	78.00	85.00	68.00		
Mathematics	95.50	94.00	92.00	89.00	90.00	79.00	85.00	80.00		
Computer Science	97.25-98.00	94.50-98.00	95.75-96.00	91.25-94.00	94.50	88.00	93.50	70.00		

Table 2.1.3 (c): Entry Level % Marks – First and Last Cut-Off for Courses on Offer for 2011-2012, 2012-2013, 2013-2014, 2014-2015 (contd…)

Course	2014-2015									
	General		OBC		SC		ST		PwD	
	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. Programme	94.00-96.00	93.00-89.00	88.00-90.00	77.00-76.00	85.00-87.00	76.00-72.00	85.00-87.00	87.00-84.50	89.00-91.00	76.00
B.A.(H) Economics	97.00-75.00	96.75-96.00	95.00-97.75	92.75-92.00	92.50-93.25	84.25-83.50	92.50-93.25	80.75-80.00	91.00	91.00
B.A.(H) English	96.50-97.00	95.50-95.00	94.00-95.00	92.50-91.50	93.00-93.50	88.50-87.50	93.00-93.50	90.75-90.25	93.00-93.50	79.00
B.A.(H) History	95.00-97.00	96.25-94.25	88.00-90.00	88.00-90.00	87.00	84.75	89.00	89.00	90.00	76.00
B.A.(H) Hindi	84.00-88.00	84.00-80.00	81.00-86.00	79.00-72.50	80.00-85.00	78.00-72.00	80.00-85.00	67.00-60.00	80.00-85.00	80.00-85.00
B.A. (H) Philosophy	93.00	91.00	89.00	75.00	86.00	68.00	86.00	78.00	89.00	73.00
B.A. (H) Pol. Science	97.00	97.00	93.00	91.50	92.00	85.50	92.00	92.00	92.00	88.00
B.A.(H) Sanskrit	70.00	62.00 & Above	68.00	59.00 & Above	65.00	58.00 & Above	65.00	49.00 & Above	65.00	58.00 & Above
B.A.(H) Sociology	95.50	94.50	92.50	90.50	90.00	81.00	91.00	91.00	91.50	88.00
B.A.(H) Geography	96.00	93.50	93.00	92.75	92.00	86.00	92.00	92.00	91.00	80.00
B.A.(H) Bengali	62.00	57.00	60.00	52.00	60.00	52.00	60.00	52.00	60.00	52.00
B.Sc.(H) Physics	96.33	95.00	95.67	93.67	93.67	79.00	88.00	63.00	89.00	87.00
B.Sc.(H) Chemistry	95.67	95.00	94.00	92.00	93.00	80.00	85.00	70.00	92.00	87.00
B.Sc.(H) Botany	91.00	90.33	88.00	88.00	85.00	80.00	81.00	79.00	86.00	75.00
B.Sc.(H) Zoology	95.00	95.00	92.00	92.00	88.67	86.33	85.00	85.00	94.00	82.00
B.Sc.(H) Mathematics	96.25	95.25	95.00	93.00	93.00	87.00	90.00	69.50	93.25	83.00
B.Sc. Physical Science	94.00	86.33	93.00	80.00	92.00	64.00	89.00	53.00	89.00	75.00
B.Sc.Life Science	90.00	86.00	87.00	86.66	84.00	70.00	80.00	70.00	85.00	75.00

Table 2.1.3 (d): Comparison of Entry Level % Marks for B.Sc. Honours Courses with other DU Women Colleges in 2015-16

Course	Category	MH		Gargi		Kalindi		Maitreyi			
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. (H) Physics	Gen	96.67	95.00	96.00	94.33	91.00	90.00	95.00	92.00		
	OBC	95.33	92.00	91.00	91.00	87.00	78.50	93.00	87.00		
	SC	92.00	90.00	89.00	78.00	85.00	74.00	90.00	73.00		
	ST	85.00	76.00	89.00	74.00	80.00	58.00	90.00	63.00		
	PwD	90.00	89.00	60.00	57.00	80.00	58.00	90.00	87.00		
Course	Category	MH		DRC		Gargi		Maitreyi			
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. (H) Chemistry	Gen	96.67	95.00	96.66	93.00	95.00	94.00	95.00	91.00		
	OBC	95.67	92.00	95.00	88.00	91.00	91.00	93.00	85.00		
	SC	93.33	87.00	92.00	80.66	89.00	81.00	90.00	73.00		
	ST	85.00	79.00	90.00	63.00	89.00	80.00	90.00	71.00		
	PwD	90.33	90.00	92.00	67.00	60.00	60.00	90.00	87.00		
Course	Category	MH		DRC		IP		LSR		Maitreyi	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. (H) Maths	Gen	96.75	95.00	96.00	93.25	97.00	93.75	97.50	95.50	95.00	92.50
	OBC	95.25	93.00	94.00	88.00	96.00	88.00	97.50	93.75	93.00	87.50
	SC	93.50	86.00	90.00	69.00	95.00	65.00	96.00	88.00	89.00	79.00
	ST	90.25	77.00	87.00	61.00	95.00	55.00	95.00	83.50	89.00	73.00
	PwD	90.00	84.00	90.00	71.00	96.00	45.00	96.25	79.75	89.00	87.00
Course	Category	MH		DRC		Gargi		Maitreyi			
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. (H) Botany	Gen	96.00	93.00	91.00	88.33	89.00	89.00	90.00	87.00		
	OBC	94.00	87.33	89.00	85.33	86.00	84.00	88.00	81.00		
	SC	90.00	86.00	87.00	80.00	79.00	76.00	86.00	75.00		
	ST	85.00	80.00	85.00	74.00	79.00	75.00	86.00	73.00		
	PwD	85.00	82.00	90.00	80.00	60.00	60.00	86.00	86.00		
Course	Category	MH		DRC		Gargi		Maitreyi		-	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. (H) Zoology	Gen	96.67	94.00	93.00	91.00	92.00	90.00	90.00	89.00		
	OBC	95.33	90.00	91.00	87.00	90.00	88.00	88.00	86.33		
	SC	92.00	88.67	89.00	80.00	83.00	82.00	88.00	78.00		
	ST	85.00	85.00	85.00	78.66	83.00	76.00	88.00	67.00		
	PwD	87.00	83.67	90.00	90.00	60.00	60.00	88.00	87.00		

Table 2.1.3 (e): Comparison of Entry Level % Marks for B.Sc. Programme Courses with other DU Women Colleges at University of Delhi in 2015-2016

Course	Category	MH		Gargi		Kalindi		Maitreyi			
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. Physical Sc	Gen	94.00	87.00	89.00	82.00	84.00	80.30	90.00	79.00		
	OBC	92.00	77.00	85.00	80.66	82.00	75.00	88.00	70.33		
	SC	88.00	75.00	80.00	68.66	78.00	61.50	85.00	57.00		
	ST	85.00	60.00	80.00	65.00	78.00	55.00	85.00	54.00		
	PwD	89.00	87.00	60.00	58.00	78.00	57.00	85.00	82.00		

Course	Category	MH		DRC		Gargi		Maitreyi			
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. Life Science	Gen	93.00	93.00	95.00	85.00	87.00	85.00	82.00	82.00		
	OBC	90.00	89.67	94.33	74.00	83.00	80.00	80.00	74.33		
	SC	86.00	85.00	93.00	69.66	76.00	73.00	80.00	67.33		
	ST	84.00	73.00	88.00	66.00	76.00	69.00	80.00	60.00		
	PwD	83.67	83.67	93.00	62.00	60.00	58.00	80.00	78.00		

Table 2.1.3 (f): Comparison of Entry Level % Marks for B.A. Courses with other DU Women Colleges at DU in 2015-2016

Course	Category	MH		DRC		IP		KNC		LSR	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) Economics	Gen	97.50	96.25	97.00	95.50	98.00	95.50	97.00	95.25	98.00	97.50
	OBC	96.00	92.50	94.00	81.50	97.00	84.75	92.00	78.00	96.75	93.50
	SC	95.00	85.75	88.00	68.00	96.00	70.00	92.00	74.00	95.50	87.25
	ST	95.00	78.75	88.00	60.00	93.00	50.00	92.00	74.00	95.00	85.75
	PwD	95.00	86.00	90.00	68.00	95.25	50.00	92.00	73.00	95.00	83.50
Course	Category	MH		IP		LSR					
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) English	Gen	97.50	95.25	97.00	94.25	98.25	96.00				
	OBC	96.00	87.00	96.00	84.00	97.00	93.25				
	SC	94.00	85.50	96.00	84.00	96.00	90.25				
	ST	94.00	88.00	95.00	84.00	95.25	90.50				
	PwD	94.00	92.00	96.00	65.00	95.25	91.50				
Course	Category	MH		KNC							
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) Geography	Gen	95.50	95.50	93.00	91.50						
	OBC	93.00	93.00	91.00	78.00						
	SC	90.00	90.00	90.00	75.00						
	ST	92.00	92.00	90.00	86.00						
	PwD	92.00	92.00	89.00	73.00						
Course	Category	MH		DRC		IP		KNC		LSR	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) Hindi	Gen	85.00	84.50	88.00	80.00	87.00	81.50	82.00	78.00	82.00	82.00
	OBC	80.00	78.50	84.00	60.00	86.00	69.50	77.00	69.00	82.00	78.50
	SC	80.00	79.00	83.00	77.50	85.00	78.00	77.00	73.00	82.00	77.25
	ST	78.00	71.00	83.00	48.00	85.00	64.00	77.00	58.00	82.00	80.00
	PwD	85.00	85.00	83.00	81.00	86.00	80.00	77.00	72.00	96.25	81.75
Course	Category	MH		DRC		IP		LSR			
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) History	Gen	95.00	95.00	92.00	92.00	95.50	92.00	97.00	95.25		
	OBC	90.00	90.00	88.00	84.00	94.00	74.00	96.00	91.25		
	SC	87.00	87.00	86.00	79.00	93.00	74.00	95.25	90.25		
	ST	90.00	90.00	86.00	79.00	93.00	86.50	95.50	91.75		
	PwD	88.00	88.00	86.00	86.00	95.00	70.00	94.75	83.00		

Table 2.1.3 (f): Comparison of Entry Level % Marks for B.A. Courses with other DU Women Colleges at DU in 2015-2016 (contd..)

Course	Category	MH		DRC		Gargi		LSR			
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A.(H) Philosophy	Gen	92.00	88.50	86.00	85.50	85.00	84.75	94.75	91.00		
	OBC	90.00	78.50	82.00	73.00	80.00	70.00	94.00	82.25		
	SC	85.00	78.00	81.00	66.00	76.00	70.00	92.75	81.00		
	ST	89.00	80.00	81.00	74.00	76.00	75.00	94.00	84.75		
	PwD	90.00	89.00	80.00	67.00	60.00	58.00	93.75	83.00		
Course	Category	MH		DRC		IP		LSR			
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) Political Sc.	Gen	96.50	95.50	93.00	93.00	96.50	92.50	97.75	96.25		
	OBC	94.00	85.25	88.00	84.50	96.00	77.00	96.00	92.25		
	SC	93.00	90.00	88.00	87.00	96.00	79.75	96.00	91.00		
	ST	93.00	93.00	88.00	87.50	95.25	81.75	95.25	95.00		
	PwD	93.00	93.00	83.00	82.50	96.00	64.00	95.00	86.00		
Course	Category	MH		JDM		KNC		LSR		Maitreyi	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A.(H) Sociology	Gen	95.50	94.75	88.00	86.00	93.00	89.75	97.00	95.50	90.00	87.00
	OBC	93.00	85.00	86.00	69.00	88.00	68.00	96.00	91.00	85.00	70.00
	SC	91.00	83.00	83.00	69.50	88.00	67.00	95.75	87.50	85.00	70.00
	ST	92.00	91.50	83.00	81.00	88.00	61.00	95.50	92.50	85.00	78.00
	PwD	94.00	90.00	83.00	68.00	88.00	37.00	96.25	89.00	85.00	85.00
Course	Category	MH		DRC		IP					
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A.(H) Sanskrit	Gen	75.00	61.00	58.00	57.50	65.00	46.00				
	OBC	74.00	60.00	58.00	47.00	64.00	40.00				
	SC	72.00	60.00	56.00	48.00	63.00	40.00				
	ST	72.00	60.00	56.00	45.00	63.00	40.00				
	PwD	72.00	68.00	56.00	45.00	64.50	40.00				
Course	Category	MH		DRC		IP		LSR		Maitreyi	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. Programme	Gen	95.50	90.25	88.00	83.50	96.00	82.00	97.00	93.50	72.00-80.00	70.75-79.75
	OBC	90.50	68.00	85.00	65.00	92.50	56.00	96.00	91.50	68.00-74.00	50.00-59.00
	SC	87.50	77.00	84.00	73.00	91.00	67.00	95.25	89.50	66.00-73.00	63.00-72.00
	ST	87.50	80.25	84.00	60.00	88.00	60.00	94.50	90.00	66.00-73.00	47.00-56.00
	PwD	87.50	87.50	80.00	80.00	93.00	83.50	94.75	89.50	66.00-73.00	63.00-72.00

Table 2.1.3 (g): Comparison of Entry Level % Marks for B.Sc. Honours Courses with Co-Educational Colleges at DU 2015-2016

Course	Category	MH		HRC		Hindu		Ramjas		SGTB Khalsa	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. (H) Physics	Gen	96.67	95.00	97.33	95.33	98.00	96.00	96.66	94.66	96.00	94.00
	OBC	95.33	92.00	95.33	95.33	97.33	95.33	95.00	94.00	-	-
	SC	92.00	90.00	94.00	90.66	95.00	95.00	89.00	88.33	91.00	82.33
	ST	85.00	76.00	93.00	79.00	92.00	84.00	86.00	70.00	91.00	73.33
	PwD	90.00	89.00	93.00	60.00	92.00	62.00	90.00	72.00	80.00	66.00

Course	Category	MH		HRC		Hindu		SVC		-	
		Max	Min	Max	Min	Max	Max	Max	Max	Max	Max
B.Sc. (H) Chemistry	Gen	96.67	95.00	97.33	95.00	97.33	97.33	96.00	94.33	-	-
	OBC	95.67	92.00	95.33	93.00	96.33	96.33	95.33	89.67	-	-
	SC	93.33	87.00	92.00	84.00	95.33	95.33	94.33	75.00	-	-
	ST	85.00	79.00	85.00	62.00	94.33	94.33	91.33	71.00	-	-
	PwD	90.33	90.00	90.00	61.00	94.33	94.33	94.33	65.00	-	-

Course	Category	MH		HRC		Hindu		Kirori Mal		SVC	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. (H) Maths	Gen	96.75	95.00	97.50	95.75	97.50	96.00	97.50	95.50-96.00	97.00	94.25
	OBC	95.25	93.00	96.50	96.50	96.50	95.50	95.50	92.50-92.75	95.00	92.25
	SC	93.50	86.00	95.50	93.75	95.50	91.00	90.00	90.00	92.00	87.00
	ST	90.25	77.00	94.00	87.00	94.00	85.50	90.00	75.00-76.00	91.00	66.00
	PwD	90.00	84.00	94.00	60.00	94.00	94.00	90.00	70.00-73.00	91.00	65.00

Course	Category	MH		HRC		KMC		-		-	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. (H) Botany	Gen	96.00	93.00	94.00	92.00	95.00	90.00-93.00	-	-	-	-
	OBC	94.00	87.33	93.00	84.00	92.00	85.33-86.00	-	-	-	-
	SC	90.00	86.00	92.00	78.00	91.00	79.00-79.90	-	-	-	-
	ST	85.00	80.00	92.00	71.00	89.00	77.00-78.00	-	-	-	-
	PwD	85.00	82.00	92.00	60.00	85.00	60.00-64.90	-	-	-	-

Table 2.1.3 (g): Comparison of Entry Level % Marks for B.Sc. Honours Courses with Co-Educational Colleges at DU 2015-2016 (contd…)

Course	Category	MH		HRC		KMC		SVC		-	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. (H) Zoology	Gen	96.67	94.00	96.00	94.00	96.00	93.67-94.00	94.00	93.00	-	-
	OBC	95.33	90.00	94.00	89.00	93.00	87.00-88.00	92.00	86.00	-	-
	SC	92.00	88.67	92.00	89.00	92.00	84.00-86.00	90.00	81.67	-	-
	ST	85.00	85.00	86.00	80.00	90.00	80.00-84.00	87.00	76.00	-	-
	PwD	87.00	83.67	86.00	62.00	88.00	62.00-64.00	85.00	68.00	-	-

Table 2.1.3 (h): Comparison of Entry Level % Marks for B.Sc. Programme Courses with Co-educational Colleges at University of Delhi in 2015-2016

Course	Category	MH		HRC		KMC		SGTB Khalsa			
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. Physical Sc	Gen	94.00	87.00	97.00	90.00	91.00	90.66-91.00	93.00	85.66		
	OBC	92.00	77.00	95.00	83.00	90.00	83.33-84.33	-	-		
	SC	88.00	75.00	93.00	58.00	88.00	77.00-79.00	86.00	67.00		
	ST	85.00	60.00	93.00	55.00	85.00	58.00-60.00	80.00	55.00		
	PwD	89.00	87.00	93.00	65.00	81.00	81.00	75.00	54.00		
Course	Category	MH		HRC		KMC					
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.Sc. Life Sc	Gen	93.00	93.00	95.00	90.33	94.00	91.00-92.00				
	OBC	90.00	89.67	93.00	80.00	91.00	83.00-85.99				
	SC	86.00	85.00	92.00	75.00	90.00	80.00-84.99				
	ST	84.00	73.00	92.00	65.00	88.00	63.00-65.00				
	PwD	83.67	83.67	92.00	60.00	85.00	45.00-46.00				

Table 2.1.3 (i): Comparison of Entry Level % Marks for B.A. Courses with Co-Educational Colleges at DU 2015-2016

Course	Category	MH		HRC		Hindu		Ramjas		SVC	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) Economics	Gen	97.50	96.25	98.00	96.50	98.00	96.75	97.50	95.75	97.00	95.75
	OBC	96.00	92.50	95.50	92.25	96.00	94.00	95.50	90.50	95.50	90.75
	SC	95.00	85.75	95.00	89.50	93.00	90.00	92.50	86.00	94.50	82.00
	ST	95.00	78.75	93.00	79.00	92.00	82.00	92.50	72.00	93.50	75.00
	PwD	95.00	86.00	95.00	73.00	96.00	80.00	91.50	70.00	94.50	79.00

Course	Category	MH		HRC		Hindu		-		-	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) English	Gen	97.50	95.25	97.50	90.50	97.75	96.25	-	-	-	-
	OBC	96.00	87.00	95.50	90.25	96.25	93.00	-	-	-	-
	SC	94.00	85.50	93.00	89.75	94.00	90.00	-	-	-	-
	ST	94.00	88.00	93.00	87.00	94.75	88.75	-	-	-	-
	PwD	94.00	92.00	96.00	78.00	94.75	90.50	-	-	-	-

Course	Category	MH		KMC		Shaheed Bhagat Singh		Shivaji		-	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) Geography	Gen	95.50	95.50	96.50	94.32-95.50	88.00	88.00	93.00	90.00	-	-
	OBC	93.00	93.00	95.00	91.00-91.25	83.00	83.00	91.00	82.00	-	-
	SC	90.00	90.00	94.00	85.50-85.75	78.00	78.00	89.00	80.00	-	-
	ST	92.00	92.00	95.00	75.00-75.25	80.00	80.00	89.00	89.00	-	-
	PwD	92.00	92.00	94.00	78.00-80.00	65.00	65.00	89.00	45.00	-	-

Table 2.1.3 (i): Comparison of Entry Level % Marks for B.A. Courses with Co-Educational Colleges at DU 2015-2016 (contd…)

Course	Category	MH		HRC		Hindu		KMC		-	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) Hindi	Gen	85.00	84.50	87.00	85.00	92.00	92.00	90.00	82.00-84.00	-	-
	OBC	80.00	78.50	86.00	78.00	90.00	89.50	88.00	80.00-81.00	-	-
	SC	80.00	79.00	85.00	77.00	89.00	80.00	85.00	81.00-83.00	-	-
	ST	78.00	71.00	85.00	49.00	85.00	68.00	85.00	60.00-70.00	-	-
	PwD	85.00	85.00	85.00	85.00	89.00	89.00	85.00	85.00	-	-

Course	Category	MH		HRC		KMC		Ramjas			
		Max	Min	Max	Min	Max	Min	Max	Min		
B.A. (H) History	Gen	95.00	95.00	96.00	94.25	95.50	93.00-93.75	96.00	93.25		
	OBC	90.00	90.00	92.00	86.50	93.00	91.50-93.00	94.00	89.25		
	SC	87.00	87.00	90.00	90.00	91.00	91.00	92.00	86.75		
	ST	90.00	90.00	91.00	91.00	91.00	91.00	92.00	89.00		
	PwD	88.00	88.00	90.00	90.00	91.00	91.00	94.00	86.50		

Course	Category	MH		Hindu		-		-		-	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) Philosophy	Gen	92.00	88.50	95.00	90.75	-	-	-	-	-	-
	OBC	90.00	78.50	93.00	81.75	-	-	-	-	-	-
	SC	85.00	78.00	91.00	74.25	-	-	-	-	-	-
	ST	89.00	80.00	91.00	81.75	-	-	-	-	-	-
	PwD	90.00	89.00	91.00	63.00	-	-	-	-	-	-

Course	Category	MH		Hindu		Ramjas		SVC		-	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) Political Sc	Gen	96.50	95.50	97.50	96.00	97.00	97.00	94.75	94.75	-	-
	OBC	94.00	85.25	96.25	91.50	94.00	91.50	89.00	89.00	-	-
	SC	93.00	90.00	95.75	89.00	93.00	92.50	88.00	88.00	-	-
	ST	93.00	93.00	95.25	90.50	94.00	90.00	87.00	87.00	-	-
	PwD	93.00	93.00	95.00	92.00	92.00	92.00	90.00	90.00	-	-

Table 2.1.3 (i): Comparison of Entry Level % Marks for B.A. Courses with Co-Educational Colleges at DU 2015-2016 (contd…)

Course	Category	MH		Hindu		SVC		-		-	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) Sociology	Gen	95.50	94.75	95.50	95.50	92.00	92.00	-	-	-	-
	OBC	93.00	85.00	93.50	89.00	88.00	82.00	-	-	-	-
	SC	91.00	83.50	92.50	79.00	86.00	77.50	-	-	-	-
	ST	92.00	91.50	93.50	91.00	85.00	85.00	-	-	-	-
	PwD	94.00	90.00	92.50	85.00	87.00	77.00	-	-	-	-

Course	Category	MH		HRC		Hindu		KMC		-	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. (H) Sanskrit	Gen	75.00	61.00	72.00	65.00	70	70	70.00	68.00-70.00	-	-
	OBC	74.00	60.00	70.00	52.00	67	56	60.00	58.00-60.00	-	-
	SC	72.00	60.00	65.00	55.00	68	56	60.00	60.00	-	-
	ST	72.00	60.00	65.00	40.00	68	45	60.00	40.00-41.00	-	-
	PwD	72.00	68.00	65.00	40.00	67	45	60.00	40.00-41.00	-	-

Course	Category	MH		HRC		Hindu		Ramjas		SVC	
		Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
B.A. Programme	Gen	95.50	90.25	90.00-96.00	95.00	96	93.5	92	89.25	93	89
	OBC	90.50	68.00	89.00-94.00	81.00-87.00	94	89.5	90	80.5	88	81
	SC	87.50	77.00	88.00-91.50	86.50-90.00	92	91.5	88	82	86	81
	ST	87.50	80.25	89.00-92.00	86.00-90.00	90	90	88	80	86	77
	PwD	87.50	87.5	89.00-94.00	84.00-89.00	92	92	87	83	86	72

Table 3.1.6 (a): Capacity Building Workshops and Training Programmes Conducted by Social Sciences and Humanities Departments

Department of English	
2012-13	*Teaching of English* by Ms.Veena Bhambani
Department of Geography	
2015-16	*Geography and You* in collaboration with the IRIS Publication
	Disaster Risk Reduction in collaboration with NIDM and NDRF
2011-12	*Climate Change: Cloudbursts and Natural Hazards in Himachal Pradesh*in collaboration with DST, SHROT and KMC
Department of Economics	
2015-16	*Dynamic General Equilibrium Models Using Octave*
2012-13	*Economic Challenges in Making South Asia Free from Poverty and Deprivation* in collaboration with Ramjas College, University of Delhi
	India's Growth Story by Prof. Amartya Sen, Mr. Montek Singh Ahluwalia and *Dr. Prannoy Roy*
	Elevate My Bid: Business Administration in collaboration with R.A.G.E
Department of Elementary Education	
2015-16	*Critical Eye on Text books* in collaboration with CIE, University of Delhi
2012-13	*Innovative Practices in Teaching of Primary Grade Mathematics* by Mr. Dinesh Rastogi and Ms. Ruth Rastogi
2011-12	*The Structure of Indian School System and Related Issues*by Dr. Shulamit Rit Blatt, San Diego State University
Department of Political Science	
2015-16	*Wajood* in collaboration with CFAR and ASAP-India
	Women Studies with UWEC, USA
2013-14	*Law and Politics* by Prof. Michael Schute, University of Sussex, UK
	Gender and International Relations by Prof. Jill Stein, University of Birmingham
	Women Studies by Prof. Theresa Kent and Dr. Asha Sen, UWEC, USA
	Secularism by Prof. Rajeev Bhargava, CSDS
	Mapping the Idea of Political by Dr. Mohinder Singh, JNU
	Hannah Arendt and Self Determination by Dr. Saroj Giri, University of Delhi
Department of Sociology	
2011-12	*Self Analysis, Self Exploration from a Global Context* by Wendy J. Hoskins, University of Nevada
Department of History	
2011-12	*Walking In and Out of the Colonial Archive* by Prof. Shahid Amin, DU
Department of Sanskrit	
2015-16	*Sanskrit Research* by Prof. Satyapal Narang, University of Pondicherry
	Sanskrit Sambhashan in collaboration with Sanskrit Bharati
Women Development Cell	
2015-16	*Current Structure and Status of Statutory Mechanism under PC-PNDTA* in collaboration with the Union Ministry of Health and Family Welfare, UNFPA and National Foundation of India
	Why Feminism is Seen More as a Privilege than as Equality in collaboration with Action Aid
	Empowering Women through Skills and Economic Independence in

	collaboration with the Women's Feature Service and the Canadian High Commission
	Gender Workshop organized at Gender Mela, in collaboration with the Centre for Health and Social Justice, OBR, Women's Feature Service and Action Aid
2013-14	*Women and Law*
	Understanding Muzaffarnagar: Issues of Communalism
	Sexualities by Ruth Vanita
2012-13	*Violence Against Women* by Eve Ensler, Kamla Bhasin, Mallika Sarabhai, Abhijit Das and Anita Ghai

Table 3.1.6 (b): Capacity Building Workshops and Training Programmes Conducted by Science Departments

Department of Physics		
2015-16	*Interactive session* with Dr. Diane L. Evans, Director, Jet Propulsion Laboratory, NASA, USA	DBT-Star
2014-15	*Enhancing Conceptual Understanding of Physics with real-time Computer-based Experiments* for PGT Physics teachers	DBT-Star
	Interactive session with Dr. Ellen Stofan, Chief Scientist NASA	DBT-Star
2013-14	*Sense it, Control it: Physical Measurements with LabVIEW* for Students	DBT-Star
	REALM: Active Learning: Integrating Hands on Experiments and Multimedia Resources for Undergraduate Physics Teachers in collaboration with University of New South Wales, Australia	DBT-Star
	Aero-modelling workshop	MH
2012-13	*PHYSWARE 2012*: *Low-cost Equipment and Appropriate Technologies that Promote Undergraduate level hands-on physics Education throughout the Developing world*; Directors: P. Jolly, P. Laws, E. Sassi and D. Zollman	ICTP, CSIR, INSA, DST, DBT-Star
	Robotics: impacting life science	DBT-Star
Department of Chemistry		
2015-16	*Green Nanotechnology for Beginners*	DU-Innovation
	Computational Chemistry and Bioinformatics	DBT- Star
2014-15	*Computational Methods in Drug Discovery*	DBT- Star
2012-13	*Green Chemistry and Sustainable Development* (International)	DBT, ICMR, INSA, DST
2011-12	*Computational Chemistry for Chemistry Educators*	DBT- Star
Department of Zoology		
2015-16	*Role of MHC Complex in Biology and Medicine* (International)	DBT-Star
	Bioinformatics and Biostatistics: An Introduction	DBT-Star
	Laboratory Instrumentation: Principle, Usage and Applications, Bridge Course for B.Sc. (H) Zoology Part I students	MH
	Eco-friendly Dyeing and Finishing of Textiles	DU-Innovation
2014-15	*Applications of Flow Cytometry*	DBT-Star
	Drosophila-a Smart Model for Biological Studies	DBT-Star
	Natural Dyeing of Textiles	DU-Innovation
2013-14	*Protein Modelling &Docking Studies for Rational Drug Design*	OSDD, CSIR, DBT-Star
2012-13	*Understanding Proteins: Structures and Functions*	DBT-Star

	Techniques in Biotechnology	ILLL, DU
2011-12	*Computational Biology*	DBT-Star
	Concepts of Immunology and Its Applications	DBT-Star
	Gene Polymorphism and Its Applications	DBT-Star
2010-11	*Bioinformatics: Unraveling Genes and Proteins*	UGC, CSIR
	Gene Cloning &Expression: Bioinformatics &Wet Lab	UGC, CSIR
Department of Botany		
2015-16	*From Symptom to Identification: Diagnosing Viral Disease in Plants* for students of B.Sc. (H) Botany Part III	DBT-Star, DSKC
	Green Nanotechnology for Beginners	DU
	Training the Trainers: IPR Workshop	DBT-Star
	Basic Laboratory Techniques, Bridge Course for students of B.Sc. Life Sciences Part I	MH
	Basic Laboratory Techniques, Bridge Course for students of B.Sc. (H) Botany Part I	MH
2014-15	*Effects of Nanoparticles on Plants*	DBT-Star
2013-14	*Computational Profiling of Some Nanosystems*	DU
	Nanoparticles: Effects on Seedling Biology	DU
	Tissue Culture: A Workshop for Science	DBT-Star
2012-13	*Molecular Cloning* for B.Sc.(H) Botany students	DBT-Star
2011-12	*PCR and Blotting Techniques* for B.Sc. (H) Botany III students	DBT-Star
2010-11	*Microscopy: Techniques and Applications*	DBT-Star
	Bioinformatics: Unraveling Genes and Proteins	UGC, CSIR
	Gene Cloning & Expression: Bioinformatics & Wet Lab	UGC, CSIR
Department of Mathematics		
2015-16	*Real vs. Complex Analysis*	MH
2010-11	*Differential Equations and Mathematical Modelling*	MH
Department of Computer Science / ICT		
2015-16	*App Development Training Programme*	MH
	Learning Multimedia through Photoshop and Flash	MH
2013-14	*Bulk Email id Creation for students and Faculty on du.ac.in Domain, Live, Events Broadcast on You tube,* DUCC	MH
	Use of Google Apps for end users; Miranda House	Google
	Science of Developing Android applications	MH
	Introducing FOSS & Workshop On Linux	MH
2012-13	*Ethical Hacking*	
2011-12	*Robotics: Touching Lives*	DBT-Star
	Robotics: Impacting Life Science	DBT-Star
	Scientific Visualization of Life Systems	MH
	Training Modules on *Windows Server 2008 R2 Administration and Wireless Network Administration*	MH
2010-11	Three *ICT Workshops for Capacity Building of Faculty* in DU in collaboration with ILLL	DU

Table 3.4.4 (a): Faculty as Members in National Committees and Professional Bodies

Dr. Pratibha Jolly, Principal

- Scientific Advisory Committee to the Cabinet (SAC-C), Government of India, 2012 onwards.
- National Academy of Sciences India (NASI), Allahabad
- General Secretary, Indian Association of Physics Teachers; 2005-08
- Research Advisory Committee - Material Science Division (RAC-MSD), Shriram Institute for Industrial Research, Delhi
- General Secretary, Indian Association of Physics Teachers (IAPT)
- Project Review Monitoring Committee; *Establishing Gifted Education: May I Help You Centre* at NIAS, Bangalore, Office of the Principal Scientific Advisor to the Govt. of India, November 2015- October 2016
- Project Review Monitoring Committee; *Identification and Mentoring of Potentially Gifted Children in Science and Mathematics: Validating DIMP (Developmental Identification and Mentoring Package) Model in Collaboration with Vigyan (Vijnana) Bharati*, Office of the Principal Scientific Advisor to the Govt. of India, May 2014 - January 2016
- National Level Standing Committee (NLSC) for INSPIRE Internship Component of INSPIRE, Department of Science and Technology
- Senior Jury, INSPIRE National Awards, 5th NLEPC (National Level Exhibition and Project Competition) as part of India International Science Festival, organized by Department of Science and Technology, IIT-Delhi, 06 to 07 December 2015
- Selection Committee, Women Scientist Scholarship Scheme (WOS-C), Technology Information, Forecasting and Assessment Council, Patent Facilitating Centre, Department of Science and Technology (TIFAC-PFC-DST), 2006-present

Dr. Mukul Priyadarshini, Elementary Education

- Chief Advisor and Member of the Hindi Textbook Committee, NCERT, for Primary Classes and Middle Classes, respectively, 2007
- Member of the Sub-Committee, NCTE Delhi, Reviewed and Revised the Existing NCTE Regulations, Norms and Standards of Teacher Education Courses, 2013
- Nominated as Member of the Joint Review Mission of Teacher Education, Government of India,constituted by the MHRD, 2013

Ms. Vertika Chowdhary, Elementary Education

- Member Secretary of NCTE High Power National Committee working on recommendations of Justice Verma Commission, under the chairpersonship of Prof. V.Kaul, Member Secretary of NCTE National Committee working on Pre-School Education, under the chairpersonship of Prof. V. Kaul, 2014

Dr. Sreemati Chakravarti, Bengali

- Bengal Association, Karol Bagh Bangiyo Sanshad; Sahitya Academy Delhi; Bangiosahityo Parishad, Kolkata

Dr. Saswati Ganguli, Bengali

- Bengal Association, Delhi

Ms. Indira Prasad, English

- Member of the Standing Committee constituted by the UGC to advise the

University of Delhi on migration from FYUP, 2014

Dr. Poonam Kumria, Geography

- Advisory Committee for the Preparation of Definitional Dictionary of Climatology for Creation of Hindi Words and Definitions, Government of India Commission for Scientific & Technical Terminology, 2015
- Advisory Committee for the Preparation of Definitional Dictionary of Geography for Creation of Hindi Words and Definitions, Government of India Commission for Scientific & Technical Terminology, 2015

Dr. Monika Vij, Geography

- Training Committee at Academy of Administration, Bhopal, for Training of Newly Elected Panchayati Raj Representatives of Madhya Pradesh

Dr. Anindita Sarkar, Geography

- Subject expert in Indian Council of Social Science Research
- Member, Committee to prepare the Trend Report of the Sixth Round of Research Surveys in Geography, 2011

Dr. Srimanjari, History

- Member, Library Committee (National), National Archives of India, 2014

Dr. Bijayalaxmi Nanda, Political Science

- Advisory Board, Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act, Government of Delhi in 2015-16
- State Supervisory Board, Pre-Natal Diagnostic Techniques (PCPNDT) Act, Government of Delhi in 2013-15

Dr. Jayashree Pillai, Political Science

- Faculty Consultant, National Consumer Help Line Phase II, Ministry of Consumer Affairs, Government of India in 2010-2011
- Life Member of Indian Institute of Public Administration (IIPA), Govt. of India

Dr. Dinaz Mirchandani, Sociology

- Indian Sociological Society
- Indian Association for Canadian Studies
- Delhi Sociological Association

Dr. Reema Bhatia, Sociology

- Indian Sociological Society
- International Sociological Association

Dr. Avantika Berwa, Sociology

- Indian Sociological Society

Dr. Reena Kannojiya, Philosophy

- Lifetime Member, All India Philosophical Association, India

Dr. Pratibha Sharma, Philosophy

- Member, Indian Association for the Study of Religions
- Member, All India Philosophy Association

Dr. Alka Saharan, Philosophy

- Indian Council of Philosophical Research
- Indian Philosophical Congress
- Indian Society for Greek and Roman Studies
- Indian Society of Buddhist Studies

Dr. Mallika Pathak, Chemistry

- Asia Pacific Chemical, Biological & Environmental Engineering Society
- World Academy of Science, Engineering and Technology

- Green Chemistry Network Centre
- Association of Chemistry Teachers
- Indian Biophysical Society
- Indian Society for Analytical Scientists

Dr. Sharda Mahilkar Sonkar, **Chemistry**

- Asia Pacific Chemical, Biological & Environmental Engineering Society
- Green Chemistry Network Centre
- Association of Chemistry Teachers
- Indian Society for Analytical Scientists

Dr. Smriti Sharma Bhatia, **Chemistry**

- Asia Pacific Chemical, Biological & Environmental Engineering Society
- World Academy of Science, Engineering and Technology
- Green Chemistry Network Centre
- Association of Chemistry Teachers
- Indian Science Congress Association
- Indian Women Scientists Association
- Indian Society for Analytical Scientists
- Society for the Advancement of Library and Information Science
- Materials Research Society of India

Dr. Kalawati Saini, Chemistry

- Green Chemistry Network Centre
- Chemical Society of Indian Institute of Technology Delhi
- Indian Society for Analytical Scientists
- Electrochemical Society of India, Indian Institute of Science Bangalore

Dr. Malti Sharma, Chemistry

- Green Chemistry Network Centre
- Indian Biophysical Society
- Indian Society for Analytical Scientists

Dr. Monika Tomar, Physics

- Member, National Advisory Committee, NCMAMS-2015, University of Jammu, March, 2015

Dr. Sushma Moitra

- Delhi University Botanical Society

Dr. Janaki Subramanyan

- Delhi University Botanical Society
- Indian Science Congress Association (ISCA), Kolkata

Dr. Madhu Bajaj

- Delhi University Botanical Society

Dr. Saloni Bahri

- Delhi University Botanical Society
- Association of Teachers in Biological Sciences

Dr. Rashmi Shakya

- Delhi University Botanical Society

Dr. E. Geetanjali

- Indian Phycological Society

Dr. Nisha Vashishta, Zoology

- Member, All India Association for Advancing Research in Obesity
- Member, Association of Teachers in Biological Sciences (ATBS)

Dr. Rekha Kumari, Zoology

- Life Member, Indian Network for Soil Contamination Research (INSCR)
- Life Member, Association of Microbiologists of India

Dr. Jyoti Arora, Zoology

- Member, Association of Aquaculturist, CIFA

Dr. Sadhna Sharma, Zoology

- Life Member, Indian Immunology Society (IIS)

Dr. Monika Sharma, Zoology

- Life Member of Indian Immunology Society

Dr. Simran Jit, Zoology

- Member, Indian Network for Soil Contamination Research (INSCR), 2015-16

Table 3.4.4 (b): Faculty as Members in International Committees and Professional Bodies

Dr. Pratibha Jolly, Principal

- Chair, International Commission on Physics Education (ICPE), Commission 14 of International Union for Pure and Applied Physics (IUPAP) October 2005-11
- Vice President and member Executive Council, International Union for Pure and Applied Physics (IUPAP), October 2005-08
- Fellow, Institute of Physics (IoP), London, UK
- Vice President and Member, Executive Council, IUPAP, October 2005-08
- Country Representative of International Research Group in Physics Teaching, *Groupe Internationale de RechercheSurl'enseignement de la Physique* (GIREP)
- National Point of Contact of Asian Physics Education Network (ASPEN) from 2002-Present

Dr. Sreemati Chakravarti, **Bengali**

- International Congress for Bengal Studies

Dr. Reena Kannojiya, Philosophy

- Member, Global Justice and Human Rights, UK
- Associate Member, Council for Research in Values and Philosophy, USA

Dr. Janaki Subramanyan

- International Society for Plant Morphologists

Dr. Rashmi Shakya

- International Association of Sexual Plant Reproduction and Research

Dr. Deepali

- American Microbial Society (ASM), USA

Dr. Rekha Kumari, Zoology

- Member, American Society for Microbiology, 2013-14

Dr. Jyoti Arora, Zoology

- Member, International Society for Salt Lake Research (ISSLR)

Dr. Sadhna Sharma, Zoology

- Member, Federation of Immunological Societies of Asia-Oceania (FIMSA)
- Member, International Union of Immunological Societies (IUIS)
- Member, International Society of Infectious Diseases (ISID)

Dr. Anjana S. Naorem, Zoology

- Member, International Heteropterist's Society, 2005-07

Dr. Monika Sharma, Zoology

- Life Member of International Society for Infectious Diseases

Dr. Simran Jit, Zoology

- Member, American Society for Microbiology, 2013-14

Table 3.4.4 (c) Faculty as Members in Editorial Boards

Dr. Pratibha Jolly, Principal
- Member, Editorial Board, Delhi University Journal of Undergraduate Research and Innovation (Science), University of Delhi

Ms. Vertika Chowdhary, Elementary Education
- Associate Editor, Anweshika, National Journal, NCTE

Dr. Sreemati Chakravarti, Bengali
- Ajanta, Literary Magazine, Delhi

Ms. Gorvika Rao, English
- Member, Editorial board of literary journals IAWS and FORTELL

Dr. Anindita Sarkar, Geography
- Indian Council of Social Science Research: Theme Editor of *Watershed and Water Conservation Techniques and Water Marketing* under Land and Water Resources Theme in the Trend Report of Research Survey in Geography; 2011

Dr. Balvant, Hindi
- Editor of Hindi Journal, Hans, Delhi

Dr. Rama Yadav, Hindi
- Member, Editorial Board of Amrit, Journal published by Indian Embassy of Budapest, Hungary, 2013-15

Dr. Nisha Bala Tyagi, Philosophy
- Member, Editorial and Reviewer's Board of Athens Journal of Humanities and Arts: A journal of the Arts & Humanities Research Division of The Athens Institute for Education and Research; ISSN Number:2241-7702

Dr. Reena Kannojiya, History
- Editor/Reviewer for International Journal of History and Cultural Studies

Dr. Pratibha Sharma, Philosophy
- Advisor, Editorial Team, *Philosophica*

Dr. Sadhna Sharma, Zoology
- Member, Journal of Pathology Research, Bioinfo Publications

Dr. Mallika Pathak, Chemistry
- Reviewer, International Journal of Nanoscience, World Scientific Publishing
- Reviewer, Medicinal Chemistry Research, Springer

Dr. Kalawati Saini, Chemistry
- Reviewer, Advanced Electrochemistry, American Scientific Publishers, USA

Dr. Poonam, Chemistry
- Guest Editor, Special issue(s) of Current Topics in Medicinal Chemistry
- Guest Editor for Special issue(s) of Chemical Biology Letters

Table 3.7.4 (b): Conference/Seminars/Workshops organized with Eminent Scientists/Academicians

Academic Year 2014-15

- International Conference on *Education, Politics and Social Change*, funded by ICSSR, UNICEF, NUEPA, CARE India and APU

International Seminar

- *Genomics and Cancer*
  - Christine A. Iacobuzio-Donahue, Associate Director for Translational Research
  - David M. Rubenstein, Centre for Pancreatic Cancer Research and Department of Pathology, MemorialSloan-Kettering Cancer Centre, NY
  - Ramaswamy Govindan, Co-Director, Section of Medical Oncology, Director, Thoracic Oncology Program Department of Internal Medicine, Division of Oncology, Washington University School of Medicine, US
  - Zvi Livneh, Professor, Chair in Biomedical Research, Dean, Biochemistry Faculty, Weizmann Institute of Science, Rehovot, Israel
- *Global Justice,* Thomas Pogge, Professor, Yale University; Ashok Acharya, Professor, DU

National Seminars

- *Imagine You Are Gaza*
  - Achin Vanaik, Professor, Former Head, Department of Political Science, DU;Waiel Awad, Bureau Chief at the Syrian Arab News Agency
- CME (Continued Medical Education) on *Recent Advances in Immunology*, UGC, DBT, ICMR, CSIR, IIS, BD India Pvt. Ltd.
  - K. Natarajan, Director Infectious Disease Immunology lab (ACBR), DU
  - N. K. Mehra, Dean (Research) and Head, Deptartment Histo-compatibility and Immunogenetics, AIIMS
  - Devinder Sehgal, Staff Scientist (NII)
  - Gobardhan Das (JNU)
  - Nibhriti Das (AIIMS)
  - R. Madhumala (JNU)
  - Girish Varshney (IMTECH)
  - Anmol Chandele (ICGEB)
  - Mausumi Bharadwaj (ICPO)
  - D. N. Rao (AIIMS)
- *India's Growth Story*
  - Amartya Sen, Harvard University
  - Prannoy Roy, NDTV
  - Montek Singh Ahluwalia, Vice chairman of Planning Commission of India
- *Rethinking Capitalism: Alternative Systems or Solutions Within?,* Parth J. Shah, Founder-President of Centre for Civil Society; Nandini Dutta, Associate Professor, Miranda House
- *Indo-US Relations,* Sidharth Varadarajan, Writer, editor, analyst; Mirza Asmer Beg, Chairperson, Department of Political Science, Aligarh Muslim University
- *Lights, Camera and Action: Steps on Money Management,* Ranjan Verma, Founder Rupee Manager and Facilitator of Maximum Living Programme, in collaboration with Lady Shri Ram college, DU
- *Indian Economy: Macroeconomic Outlook,* Surajit Das, Assistant Professor,

JNU

- *Using Technical Analysis to Understand Capital Markets*, Kunal Sarougi, CEO of Equity Rush
- *Theory of Criticism in Literature,*Amitabo Chakravarty, MILLSD
- *Resistance and Resilience: Challenging the Social Construct of Disability,* Poonam Batra, CIE, DU
- Interactive session, DBT-star, Diane L. Evans, Director, Jet Propulsion Laboratory, NASA, USA; Ellen Stofan, Chief Scientist NASA
- *NASI award lectures*, DBT
  - Akhilesh K. Tyagi, Director, NIPGR
  - Debi P. Sarkar, Department of Biochemistry, UDSC
  - Manju Sharma, Padma Bhushan, Former Secretary, Department of Biotechnology, GOI
  - Vinod P. Sharma, Padma Bhushan, Founding Director, National Institute of Malaria Research (ICMR)

Academic Year 2013-14

- INSPIRE Internship Programme, DST
  - Sir Paul Maxime Nurse, Nobel Laureate 2001, President of the Royal Society and Chief Executive and Director of the Francis Crick Institute
  - Venkataraman Ramakrishnan, Nobel Laureate 2009, President of the Royal Society, Deputy Director, Medical Research Council (MRC) Laboratory of Molecular Biology (LMB), Cambridge Biomedical Campus, UK

National Seminars

- *Tagore and Buddhism*, Jayanti Chattopadhyay, Former Head, MILLSD
- *Rhythms: Miles on the Yamuna*, in collaboration with TERI
- *The Construction of a Social Identity*, Patricia Uberoi, Institute of Economic Growth (IEG)
- Resources for Enhancing Active Learning with Multimedia (REALM), DBT, George Hatsidimitris, School of Physics, University of New South Wales, Australia
- *Deconstructing Disability,* George Abraham, CEO, Score Foundation; Komal Kamra, Associate Professor, SGTB Khalsa College, DU

Academic Year 2012-13

- International collaborative workshop by PHYSWARE with International Commission on Physics Education
  - Priscilla Laws, Director, Dickinson College, USA
  - Elena Sassi, Director, University of Naples, Federico II, Italy
  - Dean Zollman, Director, Kansas State University, USA

International Seminars

- *Brain, Cognition and Learning*
  - Brendan Weekes, Chair Professor in Communication Sciences and Director of the Language, Science and Disorders Laboratory, Associate Dean (Research), Faculty of Education, The University of Hong Kong
  - Nancy Laws, Director, Centre for Information Technology in Education, and Associate Dean, Faculty of Education, University of Hong Kong
  - Angel Lin, Associate Professor and Associate Dean (Learning and Teaching), Faculty of Education, University of Hong Kong

- Stephen Andrews, Dean, Faculty of Education, The University of Hong Kong
- Nirmala Rao, Director of Graduate Studies and Associate Dean, Graduate School University of Hong Kong
- John Spinks, Senior Advisor to the Vice Chancellor and Director of Undergraduate Admissions and International Student Exchange, University of Hong Kong

- *Memory, Forgetting and Self Identity,* Daniel Raveh, Professor, University of Tel Aviv

National Seminars

- *Delhi: The Saga of a Mega City (Space, Society & Culture),* Rajni Abbi, Mayor of Delhi; Sidharth Mishra, Associate Editor, The Pioneer
- Financial Literacy Seminar, Rajeev Garg, Director of BSE, Delhi
- *Common Characteristics of Indian Philosophy*, Chanda Chatterjee, former faculty member, Miranda House
- *20thCentury Short Stories,* Sharmishtha Sen, Zakir Husain College, DU

Table 6.1.6: Current Position of Non Teaching Staff

S. No.	Section	Staff	
		Permanent	**Contractual**
1.	Administration	09	04
2.	Accounts	04	03
3.	Physics Lab	14	-
4.	Chemistry Lab	16	05
5.	Botany Lab	05	04
6.	Zoology Lab	04	05
7.	Computer Science Lab	-	02
8.	Elementary Education	-	01
9.	Library	11	04
10.	Hostel	01	01
Group 'D'			
11	Mess	05	12
12	Garden	04	09
13	Security	02	16
14	Sanitation	03	12

Table DER 23: University Rank Holders in B.A. (H) and B.Sc. (H) Courses (cumulative)

B.A. (H)	2011-2012			2012-2013			2013-2014			2014-2015			2015-2016			Total
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	
Bengali			01		01	01	01			01	01	01		01		08
Economics											01					01
English											01					01
Geography					01			01			01	01		01	01	06
Hindi																
History											01					01
Music		01	01						01	01			01			05
Philosophy	01		01								01	01				04
Political Sc		01	01	01		01				01						05
Sanskrit				-		01					01					02
Sociology	01			01				01		01		01		01	01	07
B.A. Prog							01		01		01					03
B.El. Ed.																
B.Sc. (H)	2011-2012			2012-2013			2013-2014			2014-2015			2015-2016			
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	
Botany	02			01		01		01					01	01		07
Chemistry					01			01		01						03
Maths		01		01							01					03
Physics		01		01	01	01					01					05
Zoology											01	01				02
B.Sc. Life Sc					01		01				01		01		01	05
B.Sc. Phy Sc	01										01					02
Total	05	04	04	05	05	05	03	04	02	05	13	05	03	04	03	**70**

M.A./	2011-2012			2012-2013			2013-2014			2014-2015			2015-2016			Total
M.Sc.	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III	
Hindi	01						01									02
Economics																
English											01					01
History					01		01	01			01					04
Mathematics							01		01							02
Music	01								01					01		03
Philosophy		01	02				01					01				05
Sanskrit																
Anthropology														01		01
Botany				01	01		01				01				01	05
Chemistry		01				01					01					03
Physics			01							01					01	03
Zoology																
Total	02	02	03	01	02	01	05	01	02	01	04	01		02	02	**29**

Table DER 27: Educational Background of students admitted. Percentage Distribution Across Senior Secondary Examination Board

Course: B.A. (H)/ B.A. Prog/ B.El.Ed/B.Sc. (H)/ B.Sc. Prog	Percent Distribution Across Senior Secondary Examination 2015-2016													
	CBSE	ICSE	ISC	Haryana	Rajasthan	Punjab	West Bengal	Assam	Karnataka	Kerala	J&K	Other	Foreign	UP
Bengali	50.00						50.00							
Economics	79.71	5.80	1.45									8.69	4.35	
English	89.29	4.76	2.38						1.19			1.19		1.19
Geography	78.18	5.45	1.82	1.82						1.82		9.09		1.82
Hindi	77.61	2.99		1.49	1.49							4.48		11.94
History	86.46	7.29	2.08						1.04			3.13		
Music	92.31	7.69												
Philosophy	82.93	7.32	2.44									2.44		4.88
Political Sc	90.63			1.56	1.56							6.25		
Sanskrit	81.82	4.55		4.55								9.08		
Sociology	76.93	9.62							3.85			9.60		
B.A. Prog	86.57	3.70		0.93	0.92						0.92	4.19	0.46	2.31
B.El. Ed.	97.96	2.04												
Botany	70.00											6.67		23.33
Chemistry	73.08		2.56	2.56	2.56	1.28			1.28		1.28	3.87	2.56	8.97
Maths	68.42	5.26	2.63	1.32					1.32			2.63		18.42
Physics	69.16	2.80		0.93						0.93	0.93	14.96		13.08
Zoology	67.57	2.70		5.41							2.70	5.40		16.22
B.Sc. Life Sc.	80.00		6.67	4.44							2.22	2.22		4.44
B.Sc. Physical Sc.	52.63		5.26	7.89	2.63	5.26						7.91		18.42

Table DER 27: Educational Background of students admitted. Percentage Distribution Across Senior Secondary Examination Board (contd…)

Course: B.A. (H)/B.A. Prog/ B.El.Ed/B.Sc. (H)/ B.Sc. Prog	Percent Distribution Across Senior Secondary Examination 2014-2015													
	CBSE	ICSE	ISC	Haryana	Rajasthan	Punjab	West Bengal	Assam	Karnataka	Kerala	J&K	Other	Foreign	UP
Bengali	80.00						20.00							
Economics	89.16	9.63										1.20		
English	88.46	3.84		2.56							2.56	2.56		
Geography	91.08		1.79		1.79							3.58		1.79
Hindi	90.32											1.61		8.06
History	77.78	7.41		1.85								11.1		1.85
Music	80.00	5.00		5.00								5.00		5.00
Philosophy	82.22	4.44	6.66	2.22								4.44		
Political Sc	90.36											9.63		
Sanskrit	87.88			3.03	3.03							6.06		
Sociology	84.62	5.77									1.92	5.76		1.92
B.A. Prog	80.43	5.3	1.06	4.76	0.53		0.53					2.12	0.53	4.76
B.El. Ed.	98.00		2.00	-										
Botany	59.52			14.28							4.76	7.14		14.28
Chemistry	63.38	2.82		5.64		1.41					4.23	1.41		21.13
Maths	62.50	7.5		10	1.25	1.25					1.25			13.75
Physics	63.53			7.06		7.07						9.43		9.41
Zoology	66.67	2.22		6.66							6.66	4.44		13.34
B.Sc. Life Sc.	69.23			5.12								12.81		10.25
B.Sc. Physical Sc.	70.59	5.88		8.82								2.94		11.76

Table DER 27: Educational Background of students admitted. Percentage Distribution Across Senior Secondary Examination Board (contd…)

Course: B.A. (H)/ B.A. Prog/ B.El.Ed/ B.Sc. (H)/ B.Sc. Prog	Percent Distribution Across Senior Secondary Examination 2013-2014													
	CBSE	ICSE	ISC	Haryana	Rajasthan	Punjab	West Bengal	Assam	Karnataka	Kerala	J&K	Other	Foreign	UP
Bengali	100.00													
Economics	81.82	11.69										6.49		
English	84.27	4.49									2.25	6.75	2.24	
Geography	86.02	6.45		4.30								1.08	1.08	1.08
Hindi	89.41			2.35								3.53		4.71
History	84.62	10.77			1.54							3.07		
Music	70.00	10.00										10.00		10.00
Philosophy	78.33	8.33		1.67								11.67		
Political Sc	83.70		8.70	2.18								5.42		
Sanskrit	92.00			4.00								4.00		
Sociology	78.57	12.50										8.93		
B.A. Prog														
B.El. Ed.	97.96	2.04												
Botany	67.39	2.17		4.35								26.09		
Chemistry	78.57	1.79		14.29								1.77	1.79	1.79
Maths	70.11	5.75		6.90	1.15	1.15								9.20
Physics	66.28			8.14								8.14		17.44
Zoology	69.23			10.26						2.56		7.69		10.26
B.Sc. Life Sc.				-										
B.Tech. Computer Sc.	87.50	5.00		2.50										5.00

Table DER 27: Educational Background of students admitted. Percentage Distribution Across Senior Secondary Examination Board (contd…)

Course: B.A. (H)/ B.A. Prog/ B.El.Ed/B.Sc. (H)/B.Sc. Prog	Percent Distribution Across Senior Secondary Examination 2012-2013													
	CBSE	ICSE	ISC	Haryana	Rajasthan	Punjab	West Bengal	Assam	Karnataka	Kerala	J&K	Other	Foreign	UP
Bengali	50.00											50.00		
Economics	78.13	12.50		3.13								3.12	3.06	
English	81.25	10.94									1.56	6.24	1.56	
Geography	89.09	3.64		1.82	1.82							1.82	1.82	
Func. Hindi	42.86	14.29		14.29										28.57
Hindi	84.48			3.45								3.44	3.45	5.17
History	75.00	15.00		2.50								5.00	2.50	
Music	80.00								10.00			10.00		
Philosophy	72.73	15.91										6.81	2.27	2.27
Political Sc	80.23	8.20								3.28		1.64	1.64	4.92
Sanskrit	78.95											10.52	5.26	5.26
Sociology	85.45	7.27								1.82		3.64		1.82
B.A. Prog	84.42	8.54		1.51	1.51				0.50			1.50	1.00	1.00
B.El. Ed.	98.24			1.75										
Botany	64.29	3.57		7.14								25.00		
Chemistry	70.79	1.12		23.6								3.36	1.12	
Maths	76.19	1.59		14.29	1.59							4.76	1.59	
Physics	66.67	3.03		24.25								4.55		1.52
Zoology	68.97			20.69								6.90		3.45
B.Sc. Life Sc.	86.84	2.63		5.26								5.26		
B.Sc. Physical Sc.	59.57	2.13		34.05	2.13							2.13		

Table DER 27: Educational Background of students admitted. Percentage Distribution Across Senior Secondary Examination Board (contd…)

Course: B.A. (H)/ B.A. Prog/ B.El.Ed/B.Sc. (H)/B.Sc. Prog	Percent Distribution Across Senior Secondary Examination 2011-2012													
	CBSE	ICSE	ISC	Haryana	Rajasthan	Punjab	West Bengal	Assam	Karnataka	Kerala	J&K	Other	Foreign	UP
Bengali	100.00													
Economics	74.17	9.20	4.60									10.88	1.15	
English	78.95	14.04		1.75				1.75				3.51		
Geography	88.53	4.92		1.64	1.64			1.64					1.64	
Hindi														
Func. Hindi	71.43		7.14	14.29								7.14		
History	90.00											10.00		
Music	60.00			10.00				20.00						10.00
Philosophy	86.36	6.82										4.55		2.27
Political Sc	75.00	13.54		1.04				3.13				6.25		1.04
Sanskrit	100.00													
Sociology	67.39	17.39		2.17								13.05		
B.A. Prog	77.90	8.83		3.31	2.76				0.55			3.35	2.20	1.10
B.El. Ed.	98.24			1.76										
Botany	64.71	2.94		8.82								17.65		5.88
Chemistry	67.57	5.40		20.27								4.06		2.70
Maths	71.43	12.70		11.91								3.17		0.79
Physics	56.62	3.61		31.32							1.20	4.84		2.41
Zoology	76.00	4.00		8.00								8.00		4.00
B.Sc. Life Sc.	82.86	2.86										14.29		
B.Sc. Physical Sc.	65.00	5.00		7.50								7.50		15.00

Fig. 4.1.3 (a): Master Site Plan of MH Campus

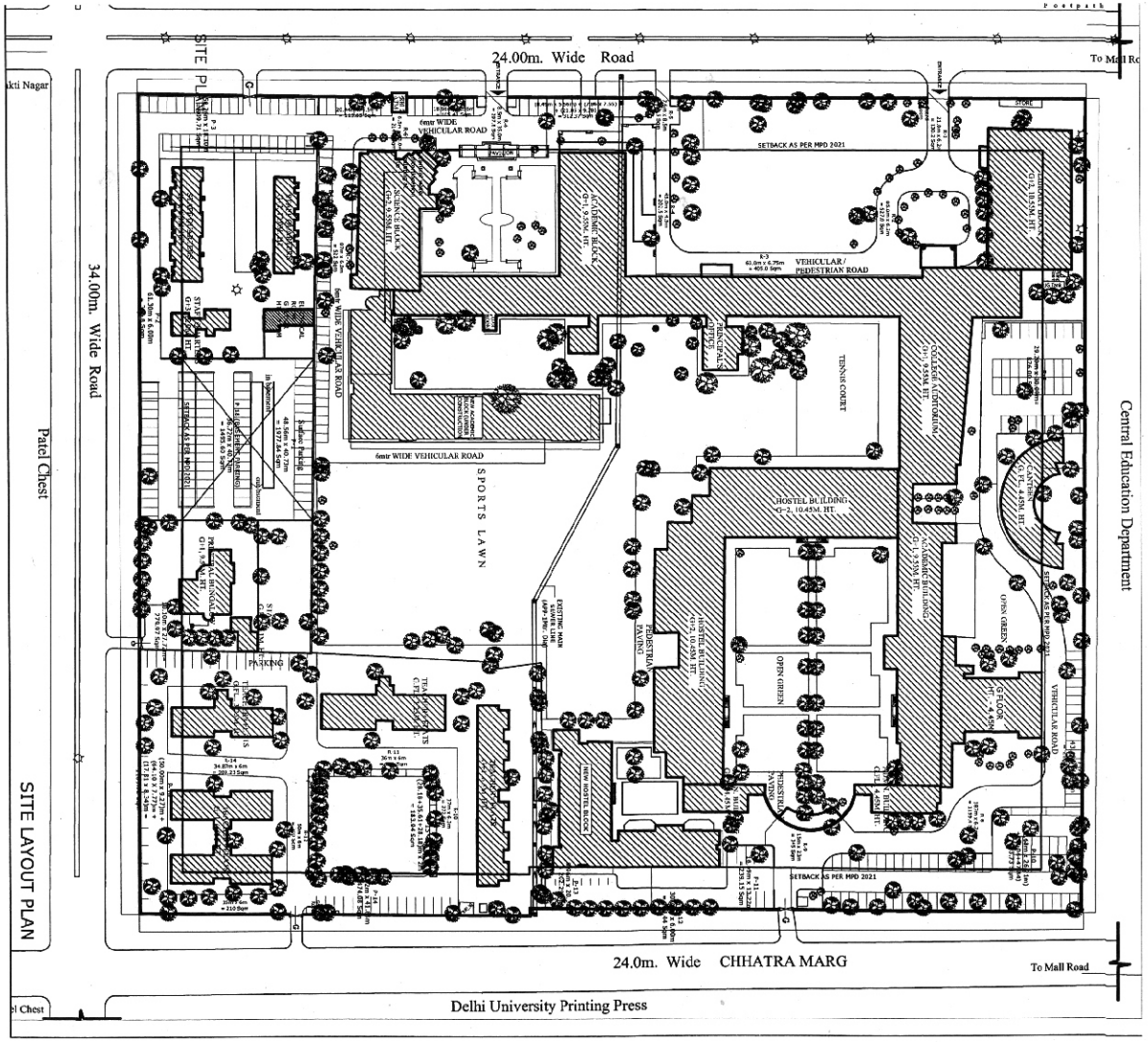


Fig. 4.1.3 (b): Layout plan of MH Academic Block : Ground Floor

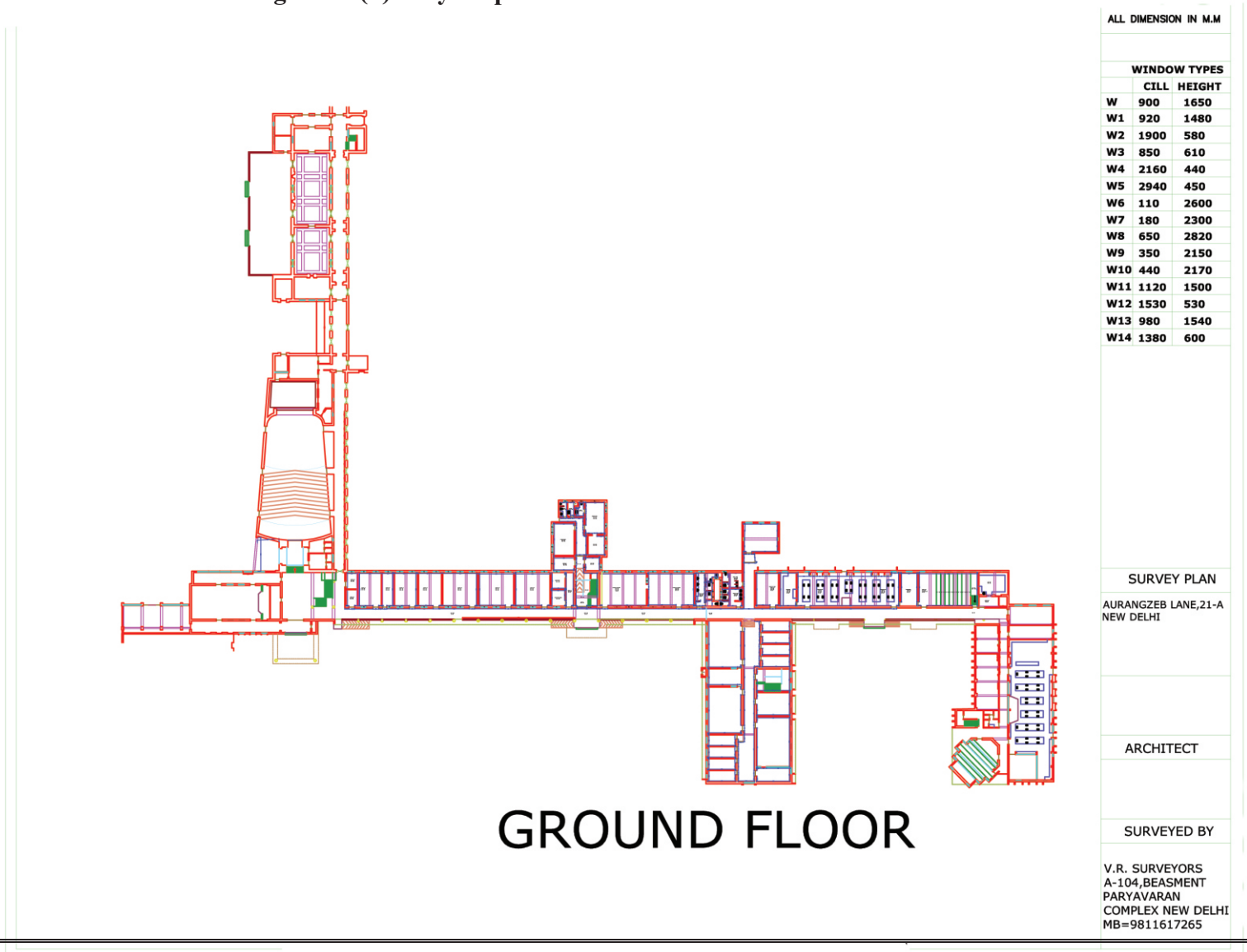


Fig. 4.1.3 (c): Layout plan of MH Academic Block : First Floor

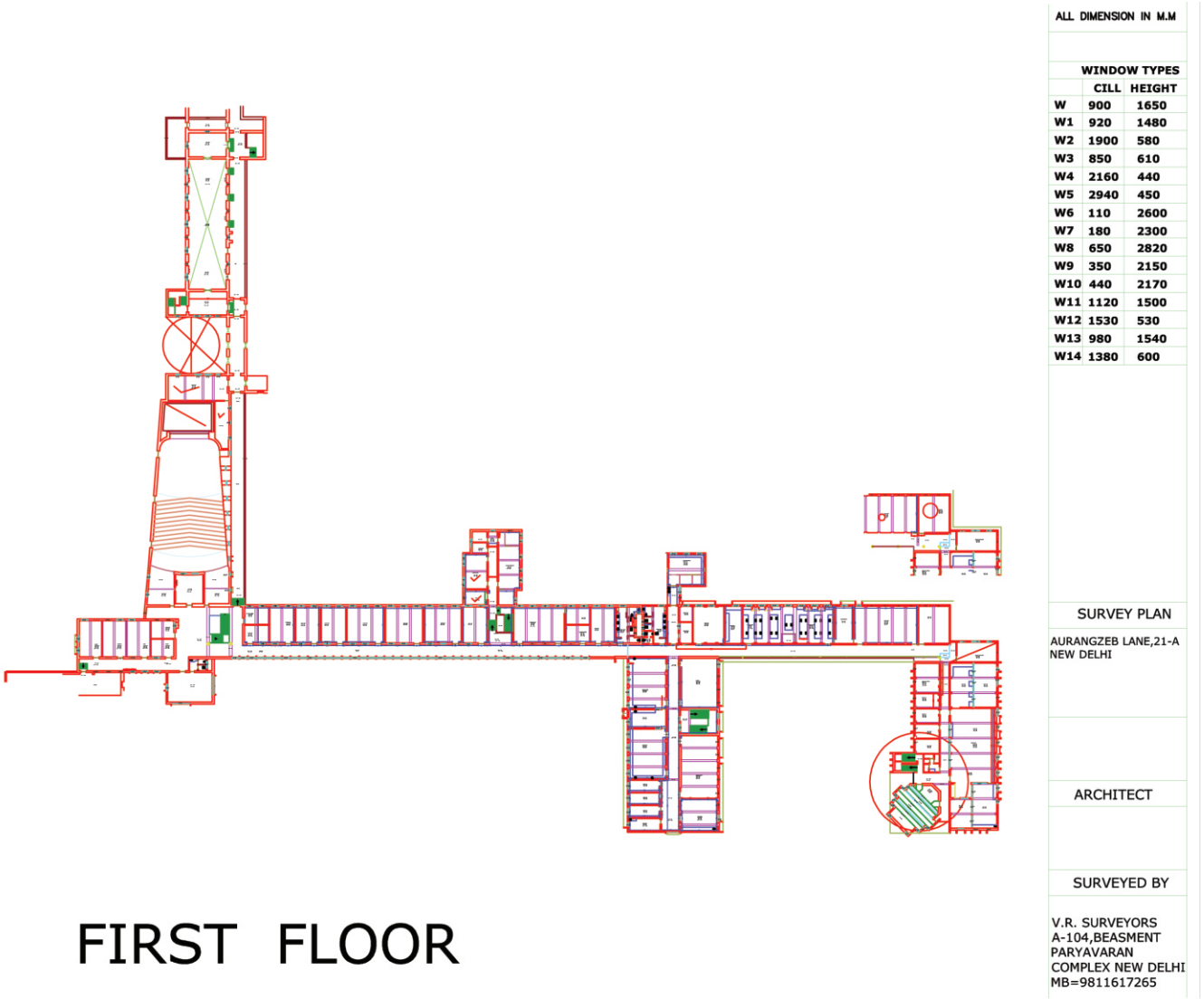


Fig. 4.1.3 (d): Layout plan of MH Library: Ground Floor

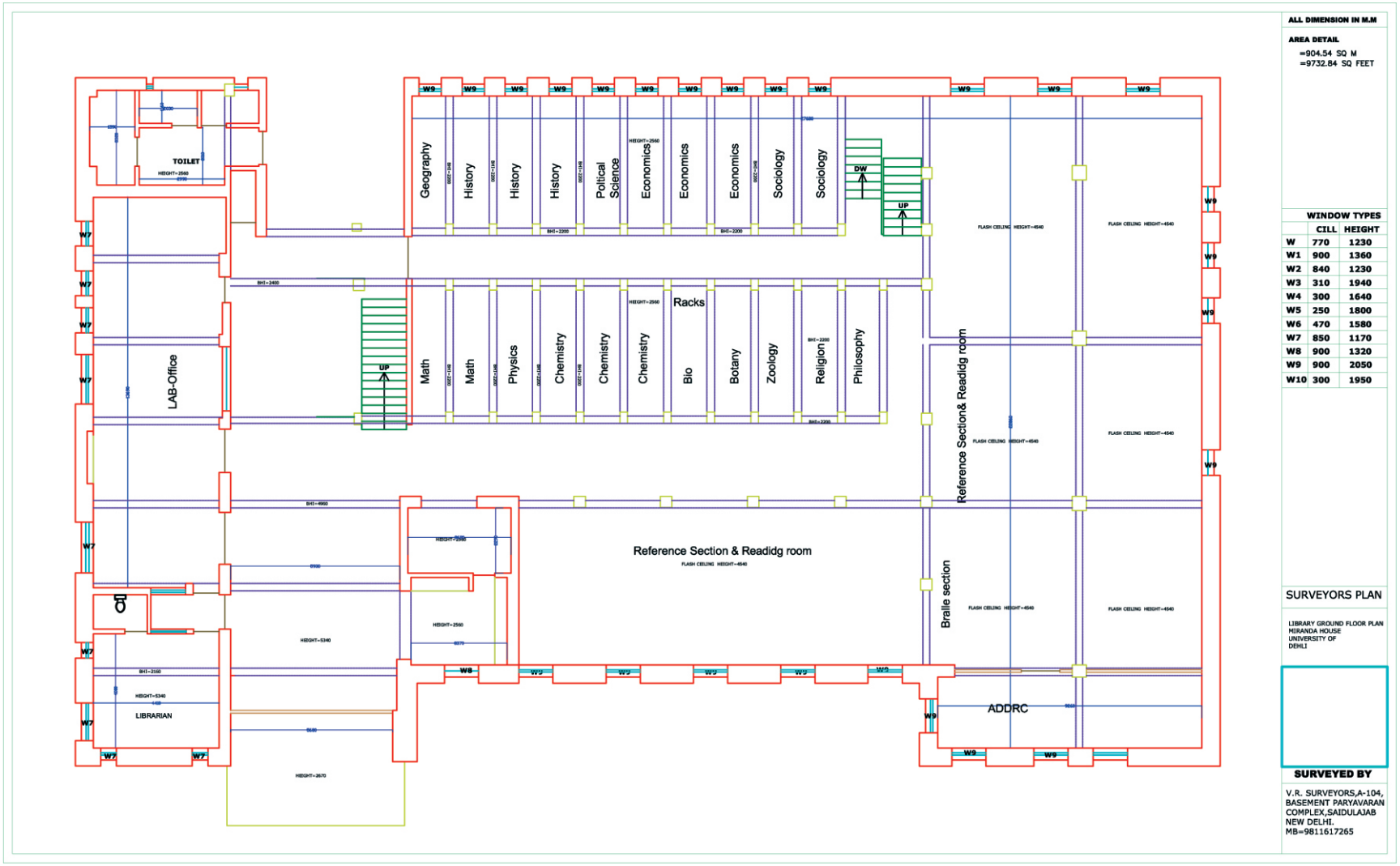


Fig. 4.1.3 (e): Layout plan of MH Library: First Floor

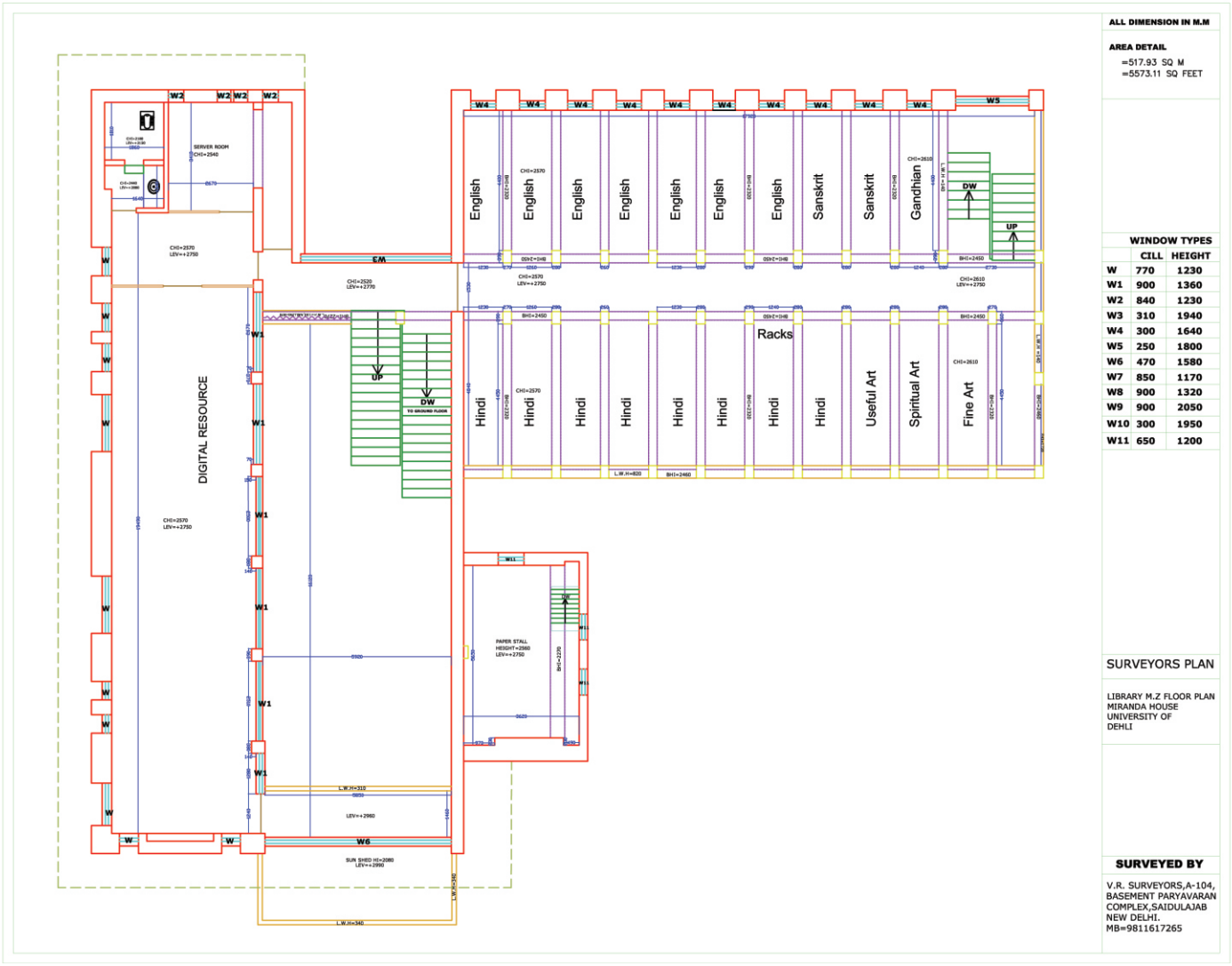


Fig. 4.1.3 (f): Layout plan of MH Library: Second Floor

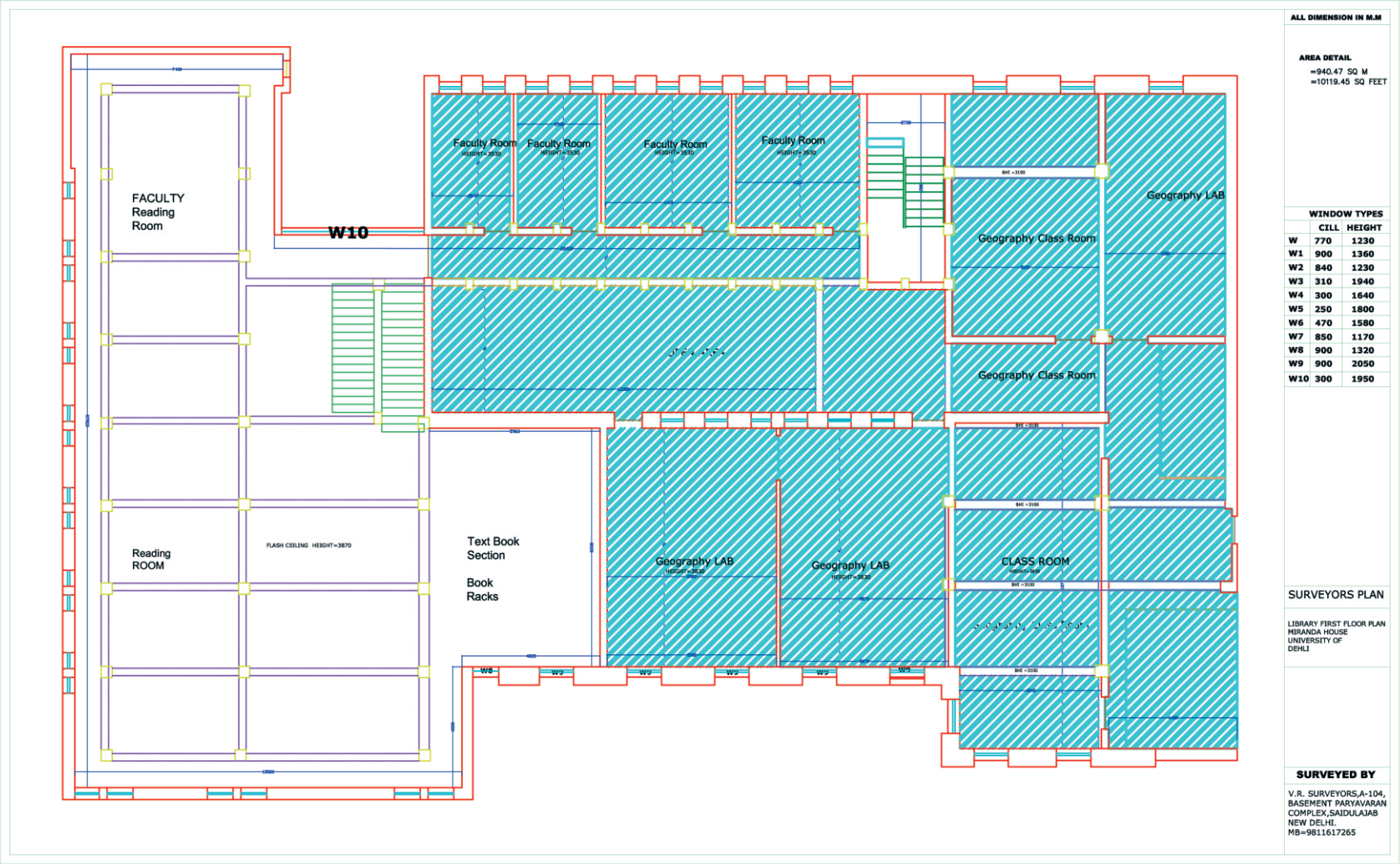


Fig. 4.1.3 (g): Layout plan of MH Hostel Old Block: Ground Floor

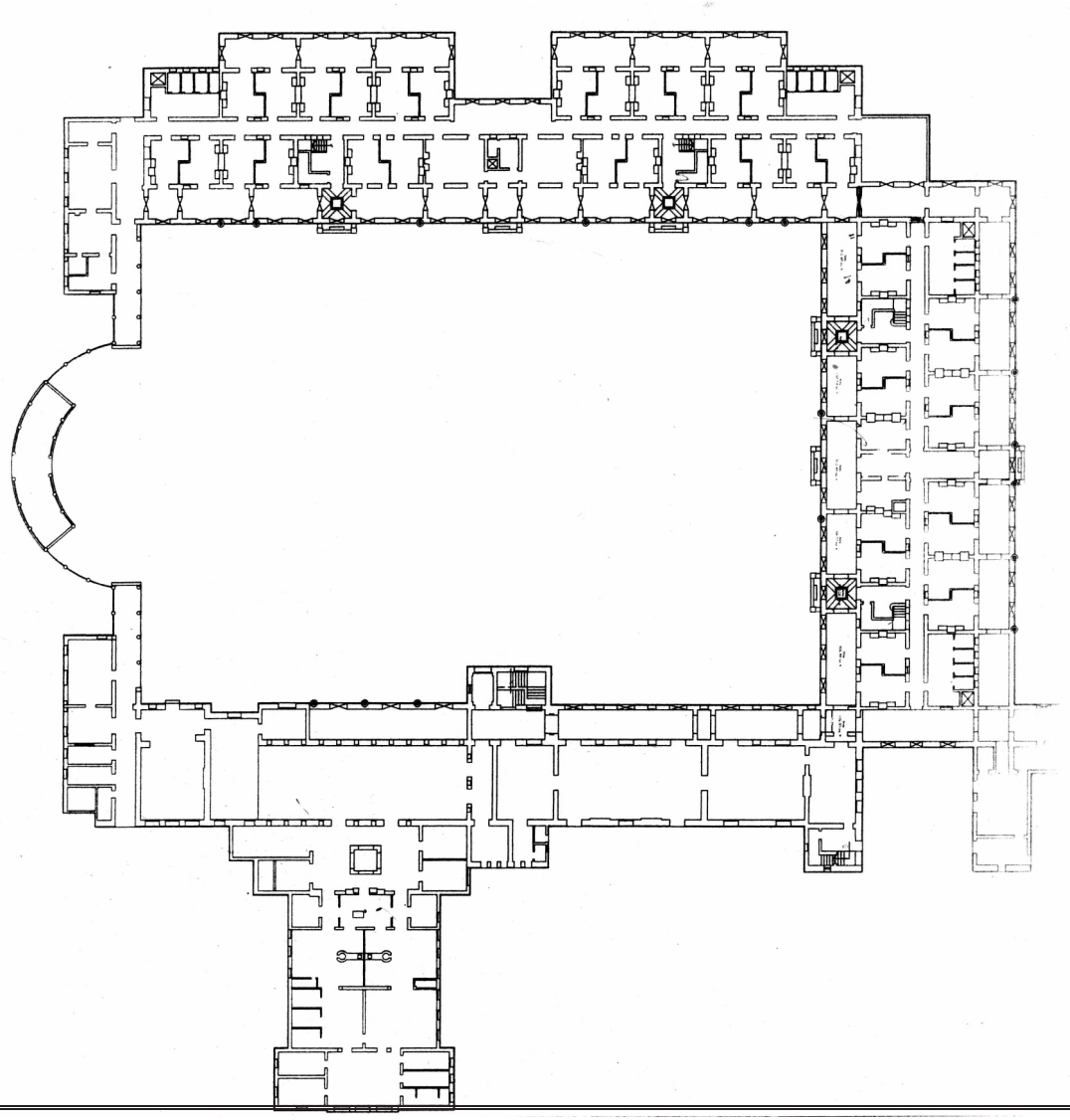


Fig. 4.1.3 (h): Layout plan of MH Hostel Old Block: First Floor

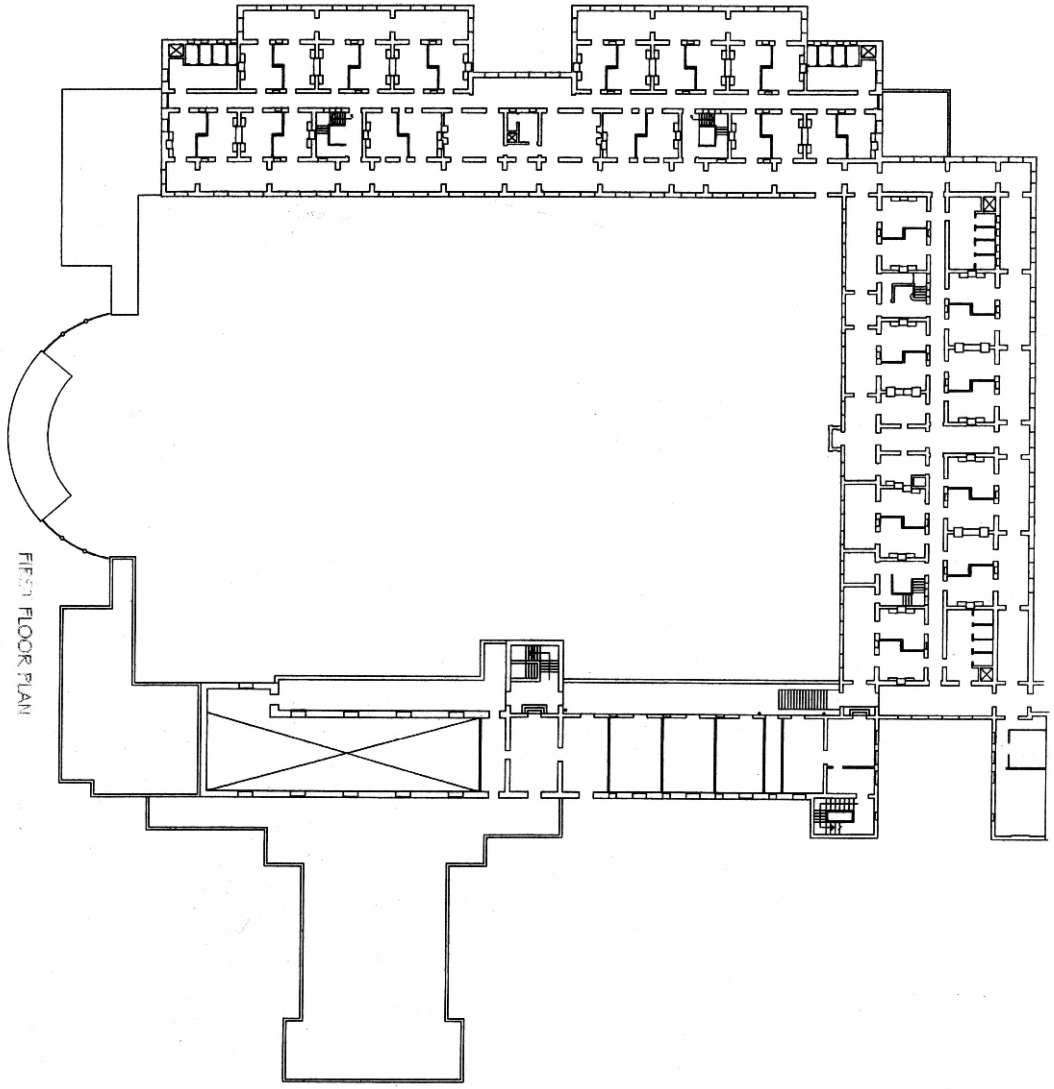


Fig. 4.1.3 (i): Layout plan of MH Hostel Old Block: Second Floor

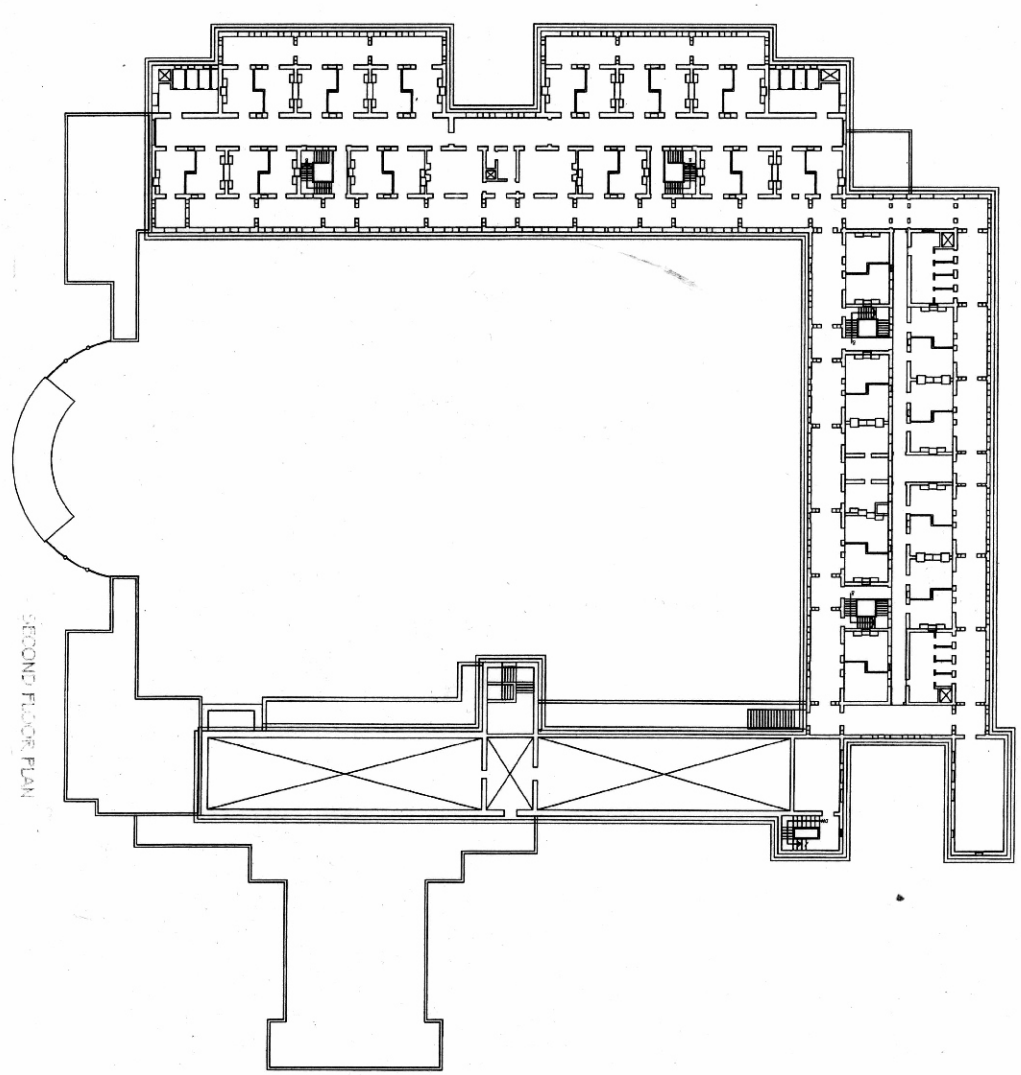


Fig. 4.1.3 (j): Layout plan of MH Hostel New Block: Ground Floor

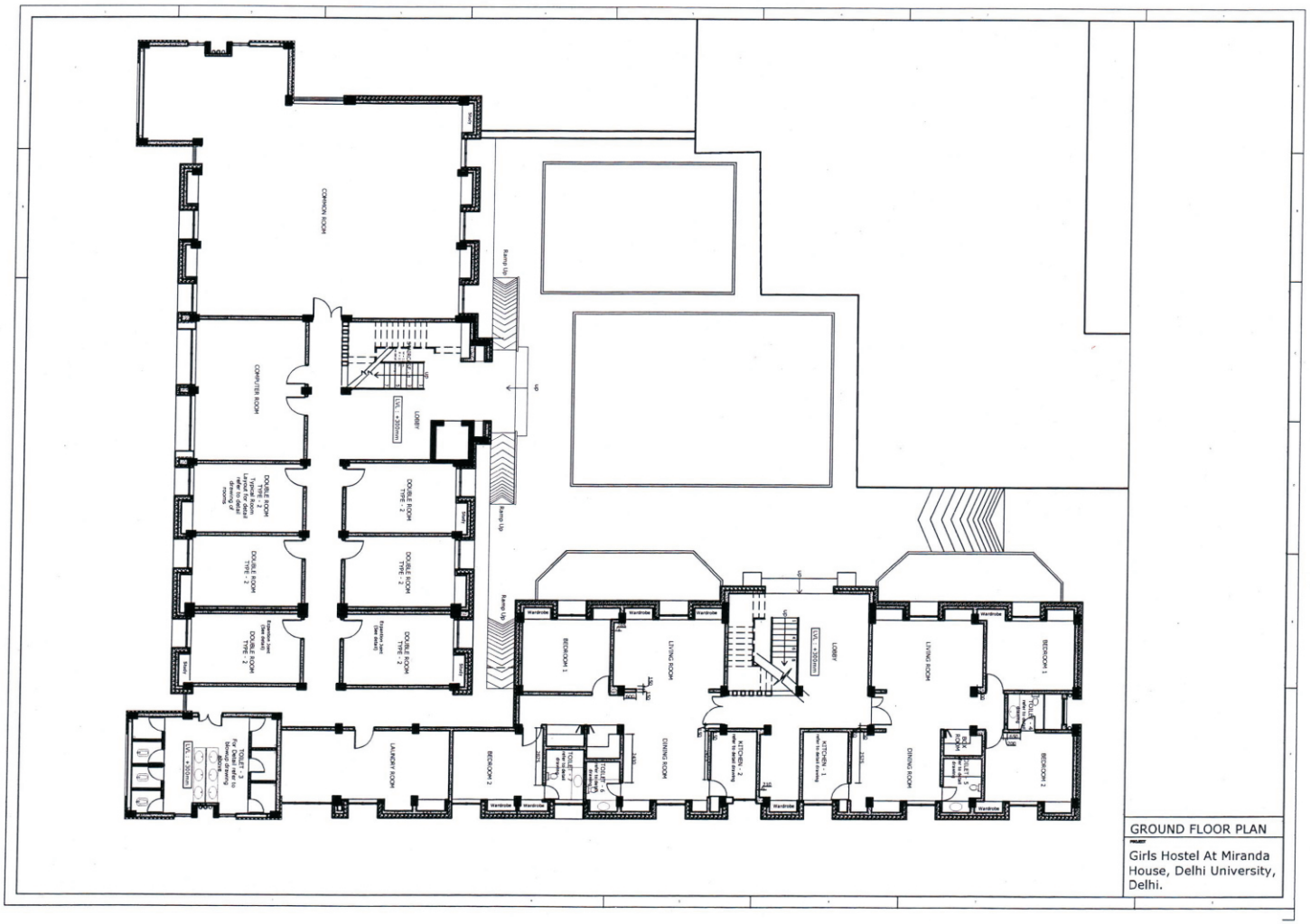


Fig. 4.1.3 (k): Layout plan of MH Hostel New Block: First Floor

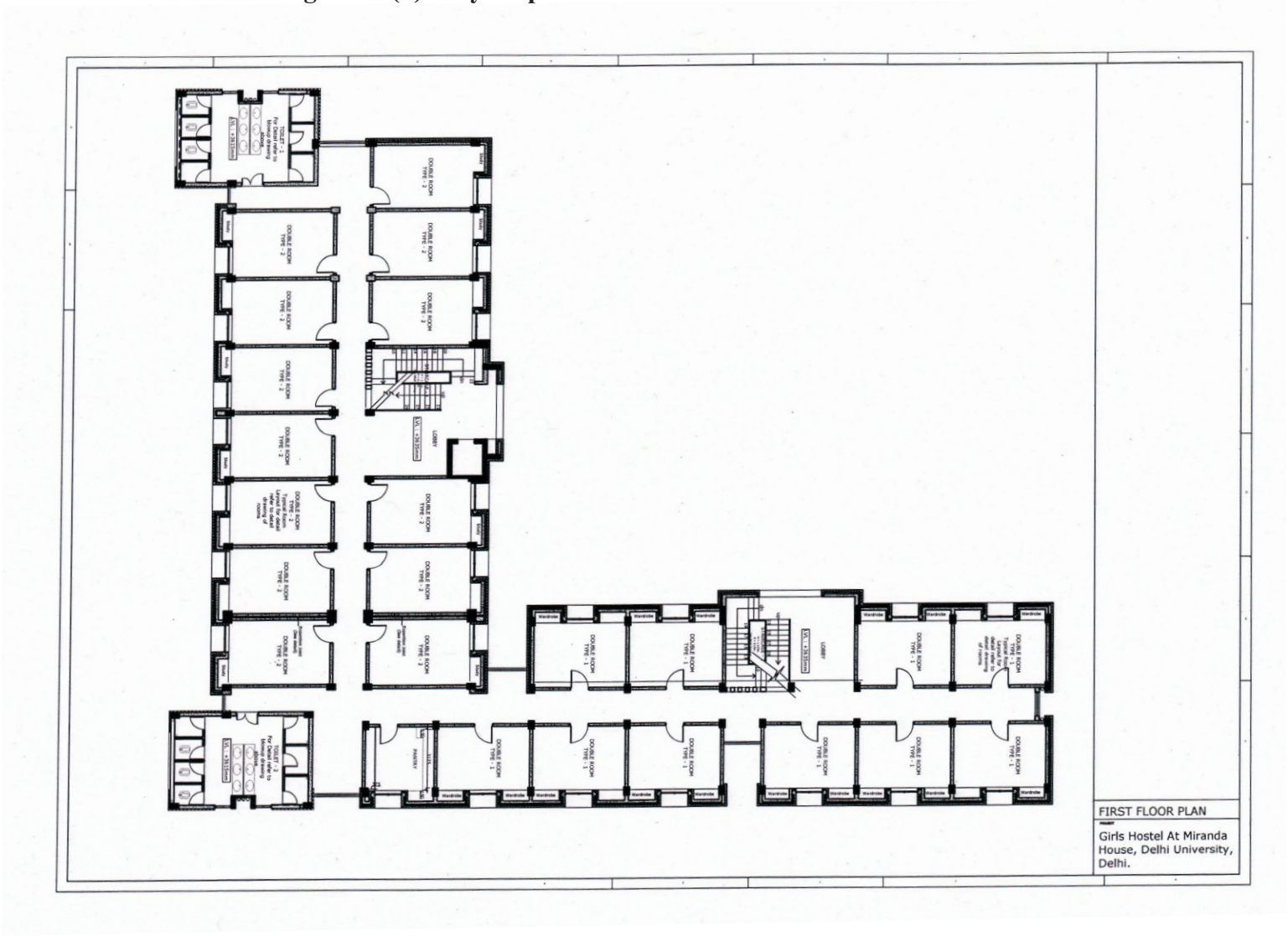


Fig. 4.1.3 (l): Layout plan of MH Hostel New Block: Second Floor

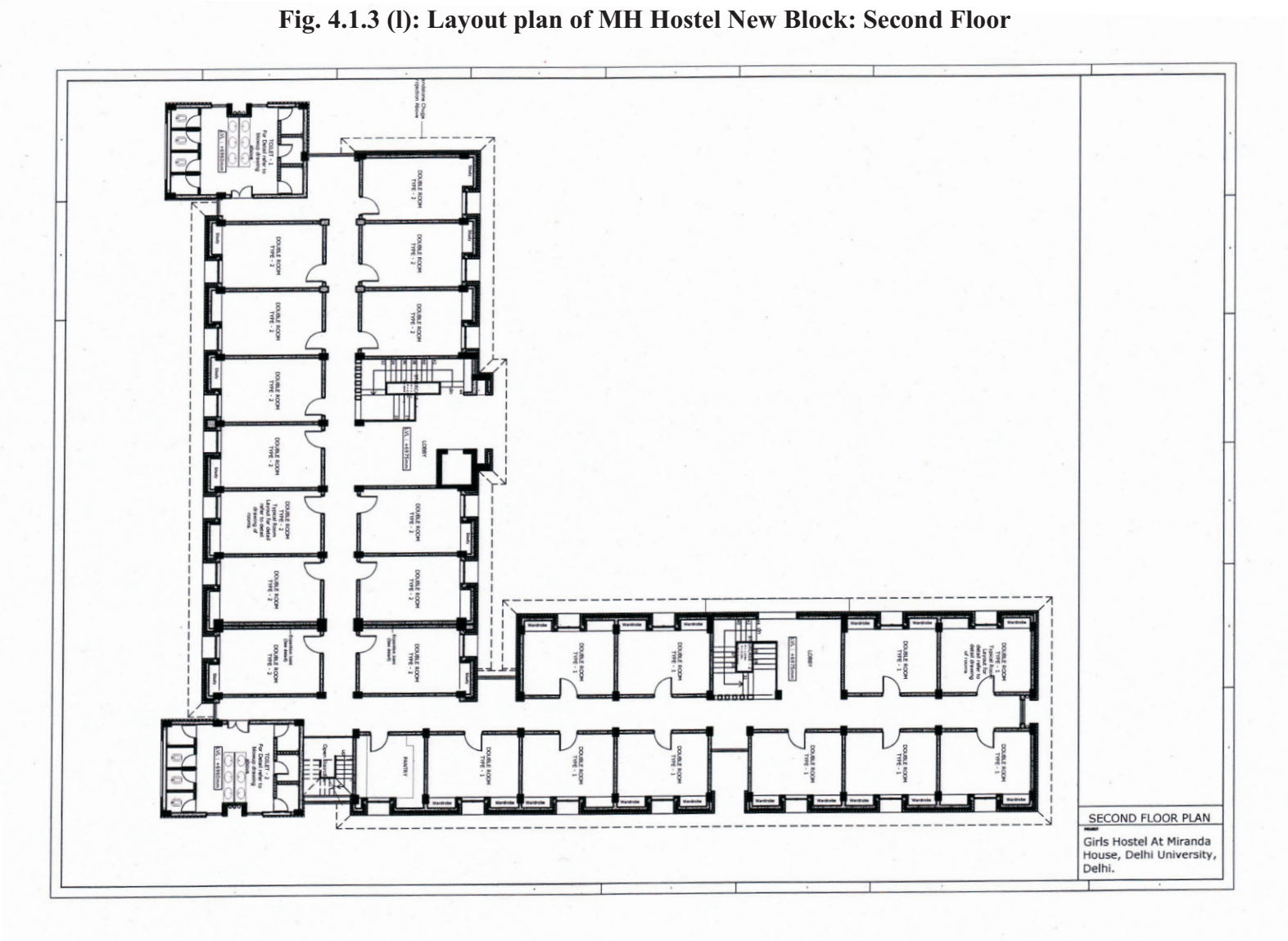


Fig. 4.1.3 (m): Layout plan of MH Cafeteria

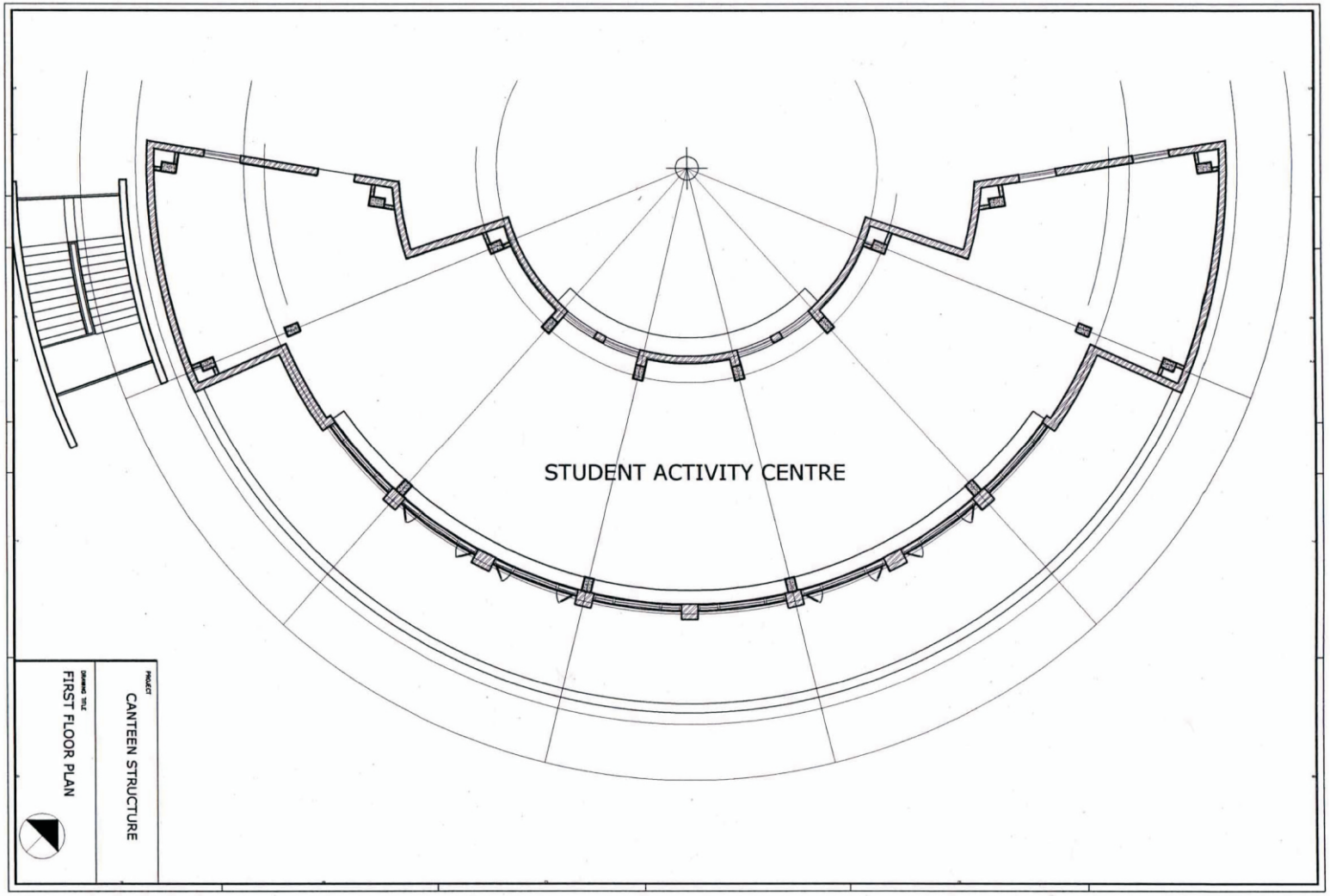


Fig. 4.1.3 (n): Layout plan of Students Activity Centre

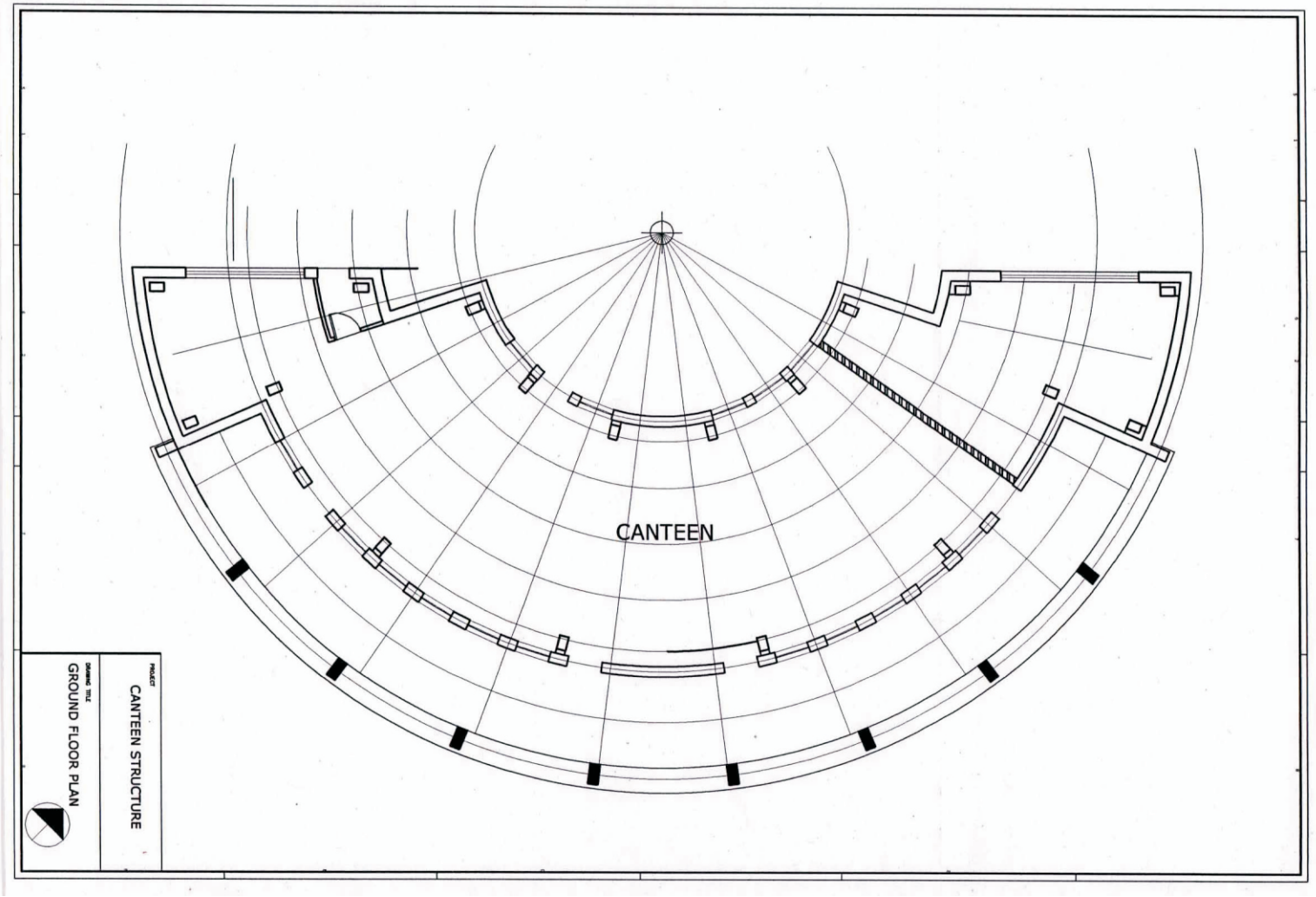


Fig. 4.1.3 (o): Layout plan of New Academic Block: Ground Floor

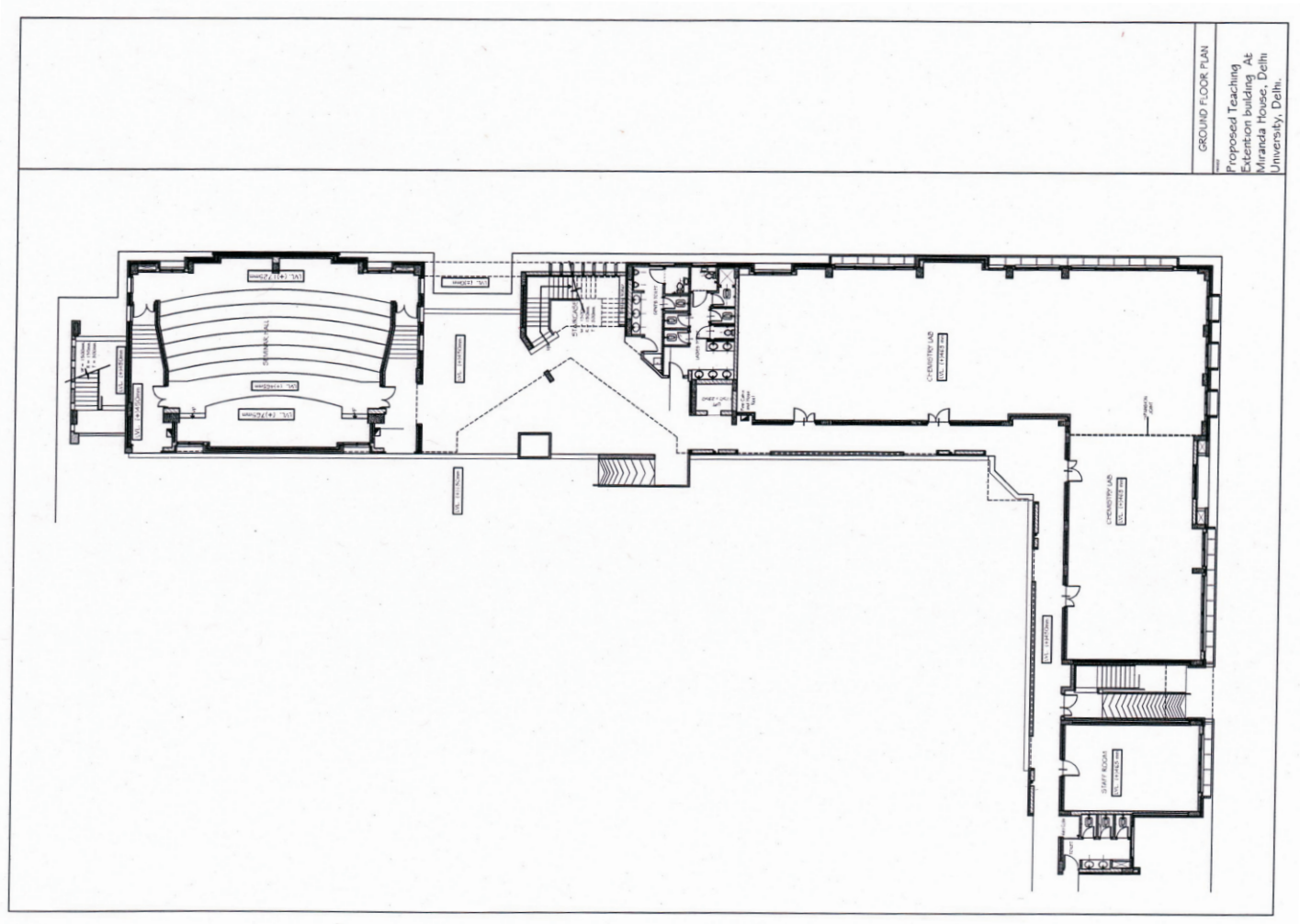


Fig. 4.1.3 (p): Layout plan of New Academic Block: First Floor

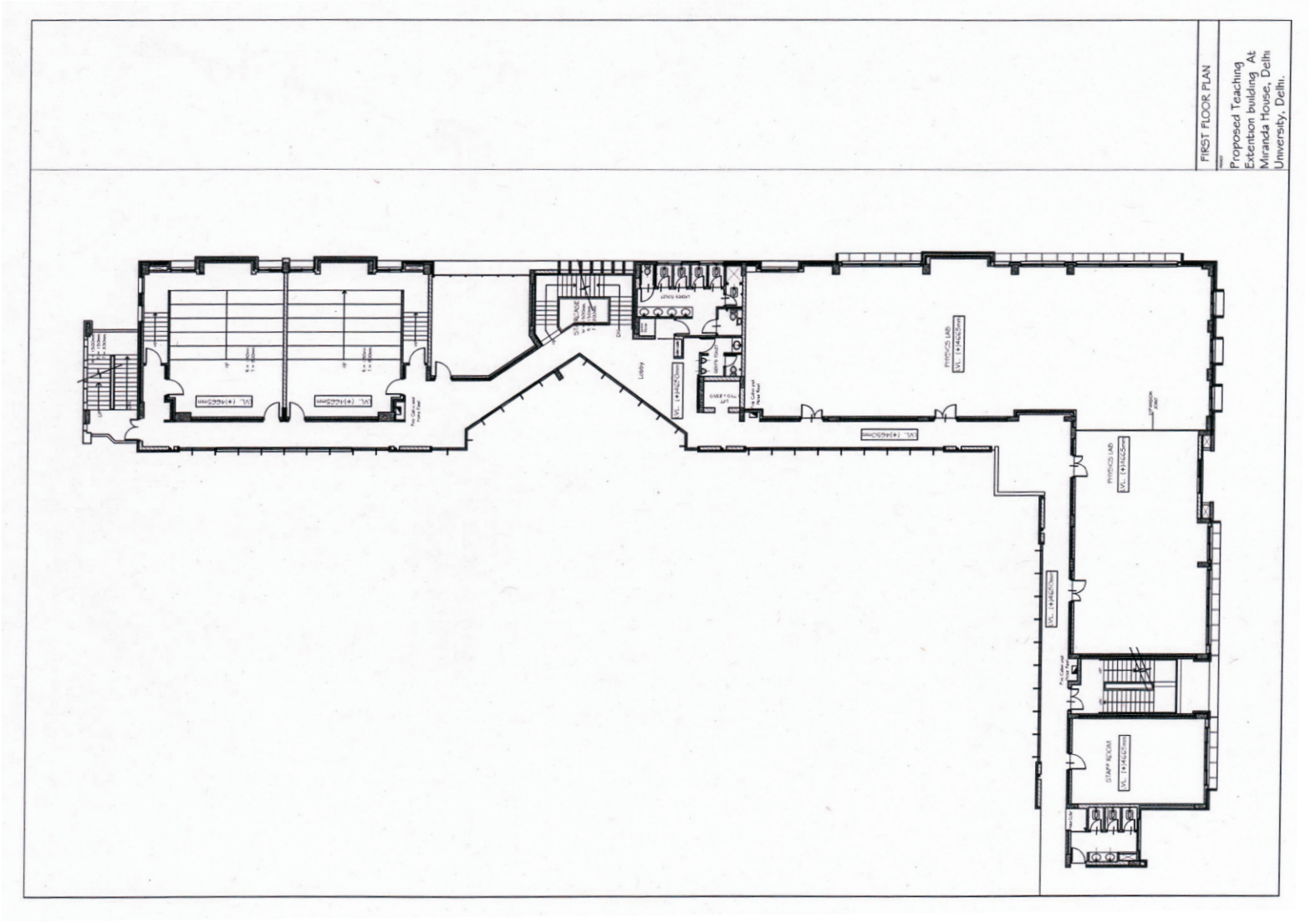


Fig. 4.1.3 (q): Layout plan of New Academic Block: Second Floor

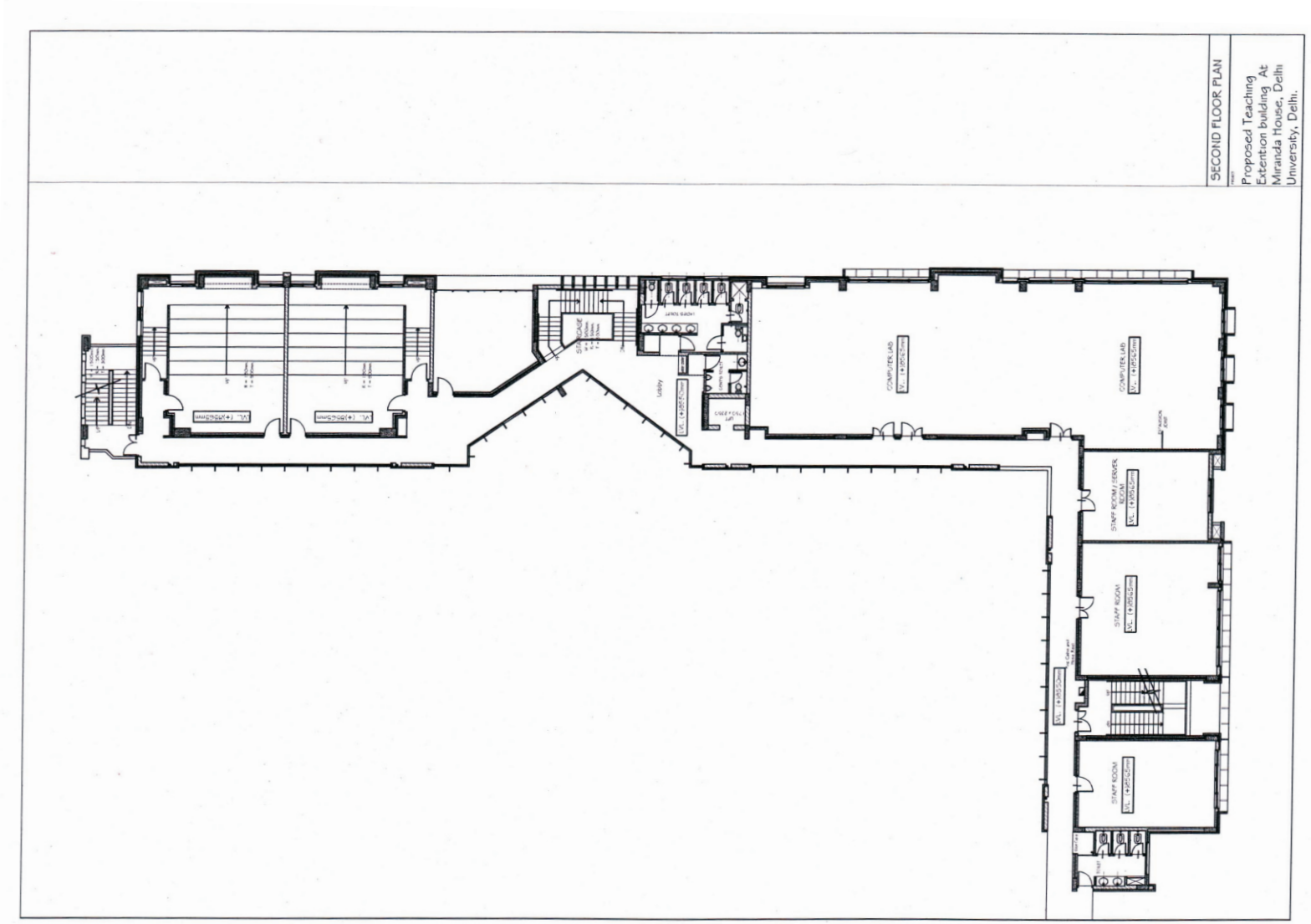


Fig. 4.1.3 (r): Changing Topology of Miranda House

Ph. 23236351, 23232701, 23237721
23234116, 23235733, 23232317
23236735, 23239437, 23239627

Extension No. 413 (CPP-I Colleges)
UGC Website: www.ugc.ac.in

ज्ञान–विज्ञान विमुक्तये
SPEED POST

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बहादुरशाह जफर मार्ग
नई दिल्ली-110 002
UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110 002

F. No. 1-1/2004 (CPP-I/C)

October, 2012

The Principal,
Miranda House
Patel Chest Marg, University Enclave
Delhi – 110 007

Sub: - Recognition of **Miranda House, Patel Chest Marg, University Enclave, Delhi – 110 007** under Section 2 (f) & 12 (B) of the UGC Act, 1956.

Sir,

With reference to your letter No. F.VI/2012/13 dated 07-09-2012 on the above subject I am directed to say that the name of **Miranda House, Patel Chest Marg, University Enclave, Delhi – 110 007** established in the year of **1948**, affiliated to **University of Delhi, Delhi** is included in the list of Colleges maintained under Section **2 (f) & 12 (B)** of the UGC Act, 1956 under the head **Government Constituent** College teaching upto **Master's** Degree'.

Yours faithfully,

(Sunita Gulati)
Section Officer

राष्ट्रीय अध्यापक शिक्षा परिषद्
(भारत सरकार का एक विधिक संस्थान)
उत्तर क्षेत्रीय समिति

गुरुर्गुरुतमो धाम
NCTE

NATIONAL COUNCIL FOR TEACHER EDUCATION
(A STATUTORY BODY OF THE GOVERNMENT OF INDIA
Northern Regional Committee

MIRANDA
RECEIVED 7/7
SR. No. 2028
SIGN
Date 05 JUL 2005

F.NRC/NCTE/F-3/DH-193/2004/ 2028
APN02320

By Speed Post / Registered

ORDER

Miranda House, Patel Chest Marg, University of Delhi, Delhi – 110 007 had submitted an application to the Northern Regional Committee of National Council for Teacher Education for grant of recognition for starting B. El. Ed. Course of Four year duration in terms of Section 14(1) of the NCTE Act, 1993.

2. Now, therefore, in exercise of the powers vested under Section 14(3)(a) of the NCTE Act, 1993, the Regional Committee hereby grants recognition to Miranda House, Patel Chest Marg, University of Delhi, Delhi – 110 007 for B. El. Ed course of Four years duration w.e.f. 28th June 2005 with an annual intake of 35 (Thirty Five only) subject to fulfillment of the following before commencement of the session :-

(a) Appointment of the faculty members duly qualified and staff as per the norms of NCTE / State Govt. / University is to be completed before the commencement of the session.
(b) The countersigned statement of all faculty members from the Registrar of the affiliating university should be submitted before the commencement of the academic session.
(c) The institution shall adhere to all the other regulations and guidelines as framed by NCTE from time to time.
(d) The institution shall within one month of the receipt of Recognition order, convert the Endowment Fund account into a Joint Account in the form of FDR for a period of not less than 60 months (Five Years) in a Nationalized Bank only to be operated along with an official of the Regional committee.
(e) That the Reserve Fund for an amount equal to three months salary of the teachers & staff be created within one month from the date of issue of this order and maintained in the form of FDR in favor of the management/ institution, for a period of not less than sixty months (five years) in a Nationalized Bank.
(f) Non-compliance of the above mentioned conditions shall cause action under section 17(1) of NCTE Act, 1993.

2. Recognition is subject to the condition that the affiliating body shall ensure that, among other things, the institution has appointed required number of faculty members (including Principal / Head of Department), as per the norms of the NCTE/UGC/Affiliating Body.

3. Further, the recognition is subject to fulfillment of all such other requirements as may be prescribed by other regulatory bodies like UGC and State Government, etc.

Contd....2

P. Jolly
07/07/05

कार्यालय : ए–46, शान्ति पथ, तिलक नगर, जयपुर–302004 (राजस्थान)
कार्यक्षेत्र : उत्तर प्रदेश, उत्तरांचल, दिल्ली, हरियाणा, पंजाब, चण्डीगढ़, हिमाचल प्रदेश, राजस्थान

Office : A-46, Shanti Path, Tilak Nagar, Jaipur-302004 (Rajasthan
Jurisdiction : U.P., Uttranchal, Delhi, Haryana, Punjab, Chandigarh, H.P., Rajasth...
Website : http://www.ncte-in.o

NCT Rec

4. The institution shall submit to the Regional Committee a **Self-Appraisal Report** at the end of each academic year along with a copy of the approval of the affiliating University / State Directorate of Education about the appointment of faculty members and the Statement of Annual Accounts duly audited by a Chartered Accountant.

5. If the institution contravenes any of the above conditions or any of the provisions of the NCTE Act, Rules, Regulations and Orders made or issued thereunder, the Regional Committee may withdraw the recognition under the provisions of Section 17(1) of the NCTE Act.

6. Please acknowledge receipt of this order together with its enclosures.

By Order

(N. R. Murali)
Regional Director

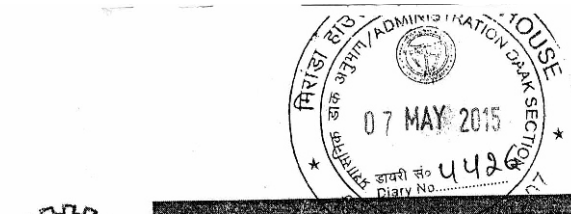
The Manager,
Government of India,
Department of Publications, (Gazette Section),
Civil Lines,
Delhi – 110054.

Copy to: -

1. The Secretary, Department of Elementary Education and Literacy, Ministry of Human Resource Development Government of India, Shastri Bhawan, New Delhi.
2. The Education Secretary, Government of National Capital Territory of Delhi, Old Secretariat, Delhi.
3. The Director, Directorate of Education, I/C Teacher Education, Government of NCT of Delhi, Old Secretariat, Delhi – 110 054.
4. The Registrar, University of Delhi, Delhi – 110 007– to ensure compliance of the clause 4 of the recognition order, in case the institution is not found to have complied with the said requirements, the University shall withhold the affiliation and report the same to NRC, NCTE.
5. The Member Secretary, National Council for Teacher Education, Hans Bhawan, Wing II, B. S. Zafar Marg, New Delhi– 110002.
6. The Principal, **Miranda House, Patel Chest Marg, University of Delhi, Delhi – 110 007** (A copy of the procedure for creation of Endowment Fund and Reserve Fund is enclosed.)
7. The Under Secretary (Computer Cell), National Council for Teacher Education, I.P.Estate, I.G.I.Stadium, New Delhi.
8. The Computer Cell (NRC), Jaipur.

04/7/07

Regional Director



257 14/5/15 V/A IV T.I.C. Comp Sc.

All India Council for Technical Educatio
(A Statutory body under Ministry of HRD, Govt. of India
7th Floor, Chandralok Building, Janpath, New Delhi- 110 00
Phone: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.o

F. No. AICTE/NWRO/DU Colleges/MH/1-2558093861/2013-14

Date: 29/04/2015

To,

The Vice Chancellor
University of Delhi
University of Enclave
Delhi - 110007

Sub: Letter of Special Approval for the Technical courses run by colleges affiliated to University of Delhi for the academic year 2013-14.

Ref: MHRD letter No. 20-2/2015 TS-II dated 16-02-2015

Sir/Madam,

University of Delhi has changed the duration of all Degree Courses from 3 years to 4 years in the A/Y 2013-14. The duration has again been rolled back to 3 years on the direction of UGC. The duration of B. Tech Programme has however been retained to 4 Years. Further, the approval of AICTE for the 4 Year B. Tech Programme has not been obtained by these institutions. With a view to streamline this, UGC has issued guidelines to University of Delhi vide letter No. 43-10/2013(CU dated 29/06/2014 and University of Delhi forwarded the UGC guidelines to all its colleges for necessary action.

Further, MHRD vide letter No. 20-2/2015 TS-II dated 16-02-2015 has informed that the matter regarding approval of 4 year B. Tech Programmes under the colleges of University of Delhi has been examined in the Ministry. In the light of MHRD directions under clause 20 (I), chapter 4 of AICTE Act, 1987 and the subsequent approval of E.C. in its meeting held on 07/04/2015 and Council Meeting held on 09/04/2015 and 27-04-2015, I am directed to convey the onetime special approval to

Regional Office	NWRO, Chandigarh	Application Id	**1-2558093861**
Name of the Institute	MIRANDA HOUSE,	Institute Address	UNIVERSITY OF DELHI, DELHI -- 110007
Institute Type	Government aided		

to conduct following courses with the intake indicated below for the academic year 2013-2014

	Application Id : **1-2558093861**			Course	Full / Part Time	Affiliating Body	Intake for 2013-14 as certified by University of Delhi	PIO	NRI
S. No.	Programme	Shift	Level						
1	ENGINEERING AND TECHNOLOGY	Ist Shift	UG	COMPUTER SCIENCE	Full Time	University Of Delhi	36	NA	NA

All Institutions shall fulfill the following general conditions:

1. The Institution shall not conduct any course(s) in the field of technical education in the same premises / campus and / or in the name of the Institution without prior permission / approval of AICTE. If found so, appropriate action as per the notified regulations shall be initiated against the Institution.

2. The institution shall operate only from the approved location, and that the institution shall not open any off campus study centers / extension centers directly or in collaboration with any other institution / university / organization for the purpose of imparting technical education without obtaining prior approval from the AICTE. If found so, appropriate action as per the notified regulations shall be initiated against the Institution.
3. The tuition and other fees shall be charged as prescribed by the Competent Authority of the University of Delhi within the overall criteria prescribed by the Council from time to time. No capitation fee shall be charged from the students / guardians of students in any form. If found so, appropriate action as per the notified regulations shall be initiated against the Institution by the Competent Authority of the University of Delhi .
4. The teaching and other staff appointed for the course shall fulfill the qualifications and experience prescribed by the Council from time to time and pay scales are as per the norms prescribed by the Council from time to time.
5. It shall be mandatory for the institution to maintain a Website providing the prescribed information. The Website information must be continuously updated as and when changes take place.
6. It is open for the Competent Authority of the University of Delhi to carry out random inspections round the year for verifying the status of the Institutions to ensure maintenance of norms and standards.
7. The Institution by virtue of the approval given by the Council shall not automatically become claimant to any grant-in-aid from the Central or State Government.
8. The Institute shall take appropriate measures for prevention of ragging in any form, in the light of AICTE regulation "Prevention and Prohibition of Ragging in Technical Institutions, Universities including Deemed to Universities imparting technical education" Regulation 2009 (F.No. 37-3/Legal/AICTE/2009 dated 01/07/2009). In case of failure to prevent the instances of ragging by the Institutions, appropriate action as per the notified regulations will be taken.
9. This is a "One time approval" given to the institute for the batch admitted in 2013-14 only and will not be valid for any other technical course without prior approval of the Council.
10. The institute shall submit compliance report of the affidavit regarding the deficiencies existing in the institution within the time duration, failing which, appropriate disciplinary action will be taken.

The Management of the Institute shall strictly follow further conditions as may be specified by the Council from time to time. The Competent Authority of the University of Delhi will monitor the Academic Progress and also other administrative matters from time to time and any violation of the above conditions and / or non- adherence to the norms and standards prescribed by the Council, mis-representation of facts and submitting factually in correct information will be liable for penal action

Dr P.B. Ullagaddi
Advisor-II (Approval Bureau)

Copy to:

1. **The Regional Officer,**
   Plot No. 1A, 5th Floor, DTE(Pb..) Building,
   Dakshin Mark, Sector 36-A, Chandigarh-160 036

2. **The Secretary to GoI**
   Higher Education, MHRD, Shastri Bhawan, New Delhi

3. **The Director Of Technical Education,**
   (Higher & Technical Education)
   Muni Maya Ram Marg,
   Pitam pura, ,
   Near T V. Tower, Delhi-110088

4. **The Registrar, University of Delhi** to submit an undertaking stating that the syllabus of the B. Tech courses under the Four Year Undergraduate Programme introduced by it in the AY 2013-14 is at par to the curriculum imparted in AICTE approved institutions. Further the University shall have periodic review of the academic progress in respect of courses under intimation to the Council.

5. **The Principal / Director,**
   Miranda House, University Of Delhi
   Delhi – 110007

6. **Guard File(AICTE)**

P Sally
07/05/15

MIRANDA HOUSE
UNIVERSITY OF DELHI

BALANCE SHEET AS AT 31.03.2015

Amount in Rupees

SOURCES OF FUND	Schedule	Current Year	Previous Year
CORPUS/ CAPITAL FUND	1; Page 4	242778330	153115625
DESIGNATED/ EARMARKED/ ENDOWMENT FUNDS	2; Page 5	63731199	58489149
CURRENT LIABILITIES & PROVISIONS	3; Page 6	122739205	87504012
TOTAL		**429248734**	**299108786**

Amount in Rupees

APPLICATION OF FUNDS	Schedule	Current Year	Previous Year
FIXED ASSETS	4; Page 10,		
Tangible Assets	Page 11	68924647	72845512
Intangible Assets		0	0
Capital Work-In-Progress		0	0
INVESTMENTS FROM EARMARKED/ ENDOWMENT FUNDS	5; Page 12		
Long Term			
Short Term		33375109	28580570
INVESTMENTS - OTHERS	6; Page 13	69036129	54878635
CURRENT ASSETS	7; Page 14	197650362	81219523
LOANS, ADVANCES & DEPOSITS	8; Page 15	60262487	61584546
TOTAL		**429248734**	**299108786**

SIGNIFICANT ACCOUNTING POLICIES	20; Page 28-30
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS	21; Page 31

S.O. Accounts Bursar Principal

MIRANDA HOUSE
UNIVERSITY OF DELHI

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31.03.2015

Amount in Rupees

PARTICULARS	Schedule	Current Year	Previous Year
A. INCOME			
Academic Receipts	**9; Page 16**	3701562	3601691
Grants/ Subsidies	**10; Page 17**	489735198	310574000
Income from Investments	**11; Page 18**	18748216	8477551
Interest Earned	**12; Page 19**	2467361	1933704
Other Income	**13; Page 20**	1246703	121065
TOTAL (A)		**515899040**	**324708011**
B. EXPENDITURE			
Staff Payments & Benefits (Establishment Expenses)	**14; Page 21**	360076843	304879887
Academic Expenses	**15; Page 22**	2343650	48429
Administrative and General Expenses	**16; Page 23**	14782673	15575228
Transportation Expenses	**17; Page 24**	3649	22407
Repair & Maintenance	**18; Page 25**	8563934	3725746
Finance Cost	**19; Page 26**	19878	17560
Depreciation	**4; Page 10,11**	9440165	9847481
TOTAL (B)		**395230792**	**334116738**
Balance being excess of Income over Expenditure (A-B) Transfer to Designated Fund		120668248	(9408727)
(-) Transferred to Building fund **(See Annexure-1.1; Page 27)**		43091094	8477551
Others		0	0
Balance Being Surplus/ (Deficit) Carried to Capital Fund		**77577154**	**(17886278)**

SIGNIFICANT ACCOUNTING POLICIES **20; Page 28-30**
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS **21; Page 31**

S.O. Accounts **Bursar** **Principal**

UNIVERSITY OF DELHI

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31.03.2015

Amount in Rupees

RECEIPTS	Current Year	Previous Year	PAYMENTS	Current Year	Previous Year
I. Opening Balances:			I. Expenses		
a) Cash Balances	0	0	a) Establishment Expenses	360076843	304765045
b) Bank Balance			b) Academic Expenses	2343650	0
i) In Current Accounts	0	0	c) Administrative Expenses	13959562	0
ii) In Deposit Accounts	83459205	80580570	d) Transportation Expenses	21892	0
iii) Saving Accounts	81219521	74288701	e) Repair & Maintenance	8339176	0
			e) Prior period expenses	0	0
II. Grants Received			II. Payment against Earmarked/ Endowment Fund	35883615	52804877
a) From Government of India/UGC	489362000	310574000			
III. Academic Receipts	3701562	4098189	III. Payment against Sponsored Projects/ Schemes	2615634	0
IV. Receipts against Earmarked/ Endowment Fund	37790044	55911620	IV. Payment against Sponsored Fellowships/ Scholarships	589858	0
V. Receipts against Sponsored Projects/ Schemes	926002	0	V. Investment and Deposits made		
			a) Out of Earmarked/ Endowment Funds	0	0
			b) Out of Own Funds (Investments- Others)	0	0
VI. Receipts against Sponsored Fellowships/ Scholarships	589858	0	VI. Term Deposits with Scheduled Banks	0	0
VII. Income on Investments from	0	0	VII. Expenditure on Fixed Assets and Capital Work-in-Progress	0	0
a) Earmarked/ Endowment Fund	2655029	0	a) Fixed Assets	5519300	7483524
b) Other Investments	14157494	0	b) Capital Work-in-Progress	0	0
VIII. Interest Received on			VIII. Other Payments including statutory payments	0	5633306
a) Bank Deposits					
b) Loans and Advances					
c) Savings Bank Accounts	2467361	1933704			
IX. Investments Encashed	0	0	IX. Refunds of Grants	0	0
X. Term Deposits with Scheduled Banks encashed	0	0	X. Deposits and Advances	4082288	5666058
XI. Other Income (Including prior Period Income)	1246703	0	XI. Other Payments	38424109	307045615
XII. Deposits and Advances	5414824	4956160	XII. Closing balances		
			a) Cash Balances	0	0
XIII. Miscellaneous Receipts including Statutory Receipts	9751339	10742017	b) Bank Balance		
			i) In Current Accounts	0	0
XIV. Any Other Receipts	39176583	304992192	ii) In Deposit Accounts	102411238	83459205
			iii) Saving Accounts	197650360	81219523
	771917525	**848077153**		**771917525**	**848077153**

S.O. Accounts **Bursar** **Principal**

MIRANDA HOUSE
UNIVERSITY OF DELHI
BALANCE SHEET AS AT 31ST MARCH, 2014

Amount in Rs.

CAPITAL FUND AND LIABILITIES	Schedule No.	Current Year	Previous Year
Capital Fund	1	153115625	152913550
Earmarked \Endowment Fund	2	58489149	58468022
Current Liabilities and Provisions	3	99171587	82385286
TOTAL		**310776361**	**293766858**
ASSETS			
Fixed Assets	4	72845512	26107546
Capital Work-in-Progress	5	0	48906963
Current Assets, Loan Advances etc	6	237930849	218752349
TOTAL		**310776361**	**293766858**

S.O. Accounts

Bursar

Principal

MIRANDA HOUSE

UNIVERSITY OF DELHI

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31ST MARCH, 2014

Amount in Rs.

Particulars	Schedule No.	Current Year	Previous Year
(A) INCOME			
Grants\Subsidies	7	310574000	333542000
Fees\Subscriptions	8	3598967	3206396
Interest Earned	9	1933704	2033273
Other Income	10	123789	92143
TOTAL (A)		**316230460**	**338873812**
(B) EXPENDITURE			
Establishment Expenses	11	304765045	289168833
Other Administrative Expenses	12	19504212	16496265
Depreciation	4	9847481	7058544
Total (B)		**334116738**	**312723642**
Excess of Income over Expenditure / (Expenditure over Income)		(17886278)	26150170
Balance being Excess/Deficit carried to Capital Fund		**(17886278)**	**26150170**
Significant Accounting Policies	13		
Contingent Liabilities and Notes on Accounts	14		

S.O.Accounts Bursar Principal

UNIVERSITY OF DELHI

RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31ST MARCH, 2014

Amount in Rs.

Receipts	Current Year	Previous Year	Payment	Current Year	Previous Year
Opening Balances in Bank			Salary & Allowances	304765045	289168833
(i) Savings Accounts					
College Account	2314596	3817686	***(b) Administrative and General Expenses***		15230808
Salary Account	42086653	25767563			
Other Earmarked Funds A/Cs	29887452	11099894	*Revenue Payments against earmarked funds*	52804877	62667196
(ii) Fixed Deposit Accounts					
OBC Infra. Grant	52000000	67000000	Special Grants		793448
Other Earmarked Funds	28580570	27990570	Purchase of Fixed Assets	7483524	5794916
			Miscellaneous	0	324869
Grants Received			***Other Payments***		
From UGC	310574000	333542000	Advances & Adjustment A/c	4596708	3773449
Special Grants	0	972000	Festival Advance	161250	150000
			Other Bodies Transactions / Current Libilities	307045615	89250054
Interest Received from Bank			University Dues	5633306	5060696
From Salary & College A/c	1933704	2033273	Secuirty	904350	36758
			Recoverable Amounts	0	18907141
Other Receipts			Cycle Advances	3750	3000
Fees and Subscriptions	4098189	3206396			
Advances & Adjustment	3797855	2647149			
Other Receipt from Earmarked funds	55911620	84653440	**Closing Balances in Bank:**		
Secuirty	997430	51758	**(i) Saving Accounts**		
Recoverable Amounts		215606	College Account	1005566	2314597
University Dues	10742017	9606977	Salary Account	52849663	42086653
Cycle Advance	4250	6000	Other Earmarked Funds A/Cs	27364294	29887452
Festival Advance	*156625*	167375	**(ii) Deposit Accounts**		
Other Bodies Transactions / Current Libilities	304992192	72486766	OBC Infra. Grant	54878635	52000000
Miscellaneous	0	765987	Other Earmarked Funds	28580570	28580570
TOTAL	**848077153**	**646030440**		**848077153**	**646030440**

S.O. Accounts

Bursar

Principal

MIRANDA HOUSE
UNIVERSITY OF DELHI
BALANCE SHEET AS AT 31ST MARCH, 2013

Amount in Rs.

Particulars	Schedule No.	Current Year	Previous Year
CAPITAL FUND AND LIABILITIES			
Capital Fund	1	204,913,550	189,244,900
Earmarked \ Endowment Fund	2	58,468,022	39,090,464
Current Liabilities and Provisions	3	30,385,286	33,969,167
TOTAL		293,766,858	262,304,531
ASSETS			
Fixed Assets	4	26,107,546	28,996,585
Capital work-in-progress	5	48,906,963	42,891,544
Current Assets, Loan, Advances etc	6	218,752,349	190,416,402
TOTAL		293,766,858	262,304,531

S.O. Accounts | Bursar | Principal

MIRANDA HOUSE
UNIVERSITY OF DELHI
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2013

Amount in Rs.

Particulars	Schedule No.	Current Year	Previous Year
(A) INCOME			
Grants\Subsidies	7	333,542,000	261,710,000
Fees\Subscriptions	8	3,206,396	3,026,706
Interest Earned	9	2,033,273	1,264,108
Other Income	10	92,143	403,535
TOTAL (A)		**338,873,812**	**266,404,349**
(B) EXPENDITURE			
Establishment Expenses	11	289,168,833	240,761,660
Other Administrative Expenses	12	16,496,265	15,078,405
Depreciation	4	7,058,544	8,030,059
Total (B)		**312,723,642**	**263,870,124**
Excess of Income over Expenditure / (Expenditure over Income)		26,150,170	2,534,225
Balance being Excess (Deficit) carried to Capital Fund		**26,150,170**	**2,534,225**
Significant Accounting Policies	13		
Contingent Liabilities and Notes on Accounts	14		

S.O.Accounts

Bursar

Principal

(2)

MIRANDA HOUSE
UNIVERSITY OF DELHI
RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31ST MARCH, 2013

Amount in Rs.

Receipts		Current Year	Previous Year	Payment		Current Year	Previous Year
Opening Balances In Bank							
(i) Saving Accounts				Establishment Expenses			
College Account	3,817,686			Salary & Allowances		289,168,833	240,761,660
Salary Account	25,767,563						
Other Earmarked Funds A/Cs	11,099,894	40,685,143	64,952,261	Administrative Expenses		15,230,808	14,368,306
(ii) Fixed Deposit Accounts				Revenue Payments against earmarked funds		62,667,196	80,434,659
OBC Infra Grant	67,000,000			Special Grants		793,448	1,615,133
Other Earmarked Funds	27,990,570	94,990,570	-	Purchase of Fixed Assets		5,794,916	10,976,295
Grants Received				Miscellaneous		324,869	622,393
From UGC		333,542,000	261,710,000				-
Special Grants		972,000	848,682	Other Payments			
Interest Received from Bank				Advances & Adjustment A/c		3,773,449	1,343,488
From Salary & College A/c		2,033,273	1,264,108	Festival Advance		150,000	191,250
				Other bodies transations / Current Liabilities		89,250,054	142,245,130
Other receipts				University Dues		5,060,696	7,413,995
Fees and Subscriptions		3,206,396	3,026,706	Security		36,758	58,940
Advances & Adjustment		2,647,149	1,338,988	Recoverable Amounts		18,907,141	55,919,682
Other Receipt from Earmarked funds		84,653,440	84,544,511	Cycle Advances		3,000	11,875
Security		51,758	43,940	Closing Balances In Bank			
Recoverable Amounts		215,606	25,463,828	(i) Saving Accounts			
University Dues		9,606,977	7,539,185	College Account	2,314,597		
Cycle Advances		6,000	5,000	Salary Account	42,086,653		
Festival Advance		167,375	149,750	Other Earmarked Funds A/Cs	29,887,452	74,288,702	40,685,143
Principal's Residence		-	2,110,000	(ii) Deposit accounts			
Other bodies transactions / Current Liabilities		72,486,766	142,392,324				
Miscellaneous		765987	1258666	OBC Infra. Grant	52,000,000		
				Other Earmarked Funds	28,580,570	80,580,570	-
TOTAL		646,030,440	596,647,949			646,030,440	596,647,949

S.O. Accounts

Bursar

Principal

MIRANDA HOUSE
UNIVERSITY OF DELHI
BALANCE SHEET AS AT 31ST MARCH, 2012

Amount in Rs.

CAPITAL FUND AND LIABILITIES	Schedule No.	Current Year	Previous Year
Capital Fund	1	186862654	166882373
Reserves and Surplus	-		
Earmarked \Endowment Fund	2	11099894	14983255
Secured Loans and Borrowings	-		
Unsecured Loan and borrowings	-		
Deferred Credit Liabilities	-		
Current Liabilities and Provisions	3	33969167	36154103
TOTAL		231931715	218019731
ASSETS			
Fixed Assets	4	24605773	20981731
Investment - From Earmarked \Endowment Funds	5	------	------
Investment -Others	-		
Current Assets, Loan, Advances etc	6	207325942	197038000
Miscellaneous Expenditure (to the extent not written off or adjusted)			
TOTAL		231931715	218019731

S.O. Accounts

Mallika Verma
Bursar

Pratibha Tolly
Principal

MIRANDA HOUSE

UNIVERSITY OF DELHI

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31ST MARCH, 2012

Amount in Rs.

Particulars	Schedule No.	Current Year	Previous Year
(A) INCOME			
Grants\Subsidies	7	261710000	267550000
Fees\Subscriptions	8	3026706	2543877
Interest Earned	9	1264108	1067812
Other Income	10	403535	317916
TOTAL (A)		266404349	271479605
(B) EXPENDITURE			
Establishment Expenses	11	235968509	220603109
Other Administrative Expenses	12	19871556	16952036
Depreciation		6180459	4732527
Total (B)		262020524	242287672
Excess of Income over Expenditure / (Expenditure over Income)		4383825	29191933
Balance being Excess/Deficit carried to Capital Fund		4383825	29191933
Significant Accounting Policies	13		
Contingent Liabilities and Notes on Accounts	14		

S.O.Accounts

Bursar

Principal

MIRANDA HOUSE
UNIVERSITY OF DELHI
RECEIPITS AND PAYMENTS FOR THE YEAR ENDED 31ST MARCH, 2012

Amoiunt in Rs.

Receipts		Current Year	Previous Year	Payment		Current Year	Previous Year
Opening Balances				*Expenses*			
Bank Balance				*(a) Establishment Expenses*			
(i) Current Account				Salary & Allowances		235968509	220603109
(ii) Savings Accounts							
State Bank of India	7298562			*(b) Administrative Expenses*		19871556	16952036
State Bank of India (Salary A/c)	42670444						
Earmarked Bank Accounts	14983255	64952261	28526062	*Payments against earmarked funds*		88427872	52466688
(iii) Deposit accounts							
Grants Received				*Special Grants*		2182915	688461
a) From UGC		261710000	267550000				
Interest Received from Bank				*Expenditure on Fixed Assets*			
Interest received from Salary/College A/c		1264108	1067812	Purchase of Fixed Assets		9804500	4149296
Interest received from Earmarked Funds		663230	620294	Miscellaneous / Reserve & surplus		622393	586160
Special Grants		648682	2034000				
Other Income				*Other Payments*			
Fees and Subscriptions		3026706	2543877	Advances & Adjustment A/c		1343488	1600107
Sale of Publications				Principal's Banglow			388375
Income from Building lands etc				Festival Advance		191250	135000
Miscellaneous / Reserve & surplus		855131	389789	Other bodies transations / Current Libilities		134145831	50028009
				University Account		7413995	6927914
Any other receipts				Security (Receipts)		58940	
Advances & Adjustment		*1338988*	*1659660*	Recoverable Amounts		55919682	66999346
Other Receipt from Earmarked funds		*83881281*	*55126510*	Conveyance Advance		11875	1200
Other receipts		403535	317916				
Security (Receipts)		43940	35000				
Recoverable Amounts		25463828	60236837	*Vii Closing Balances*			
University Dues		7639185	6253372	(i) Cash in hand			
Conveyance Advance		5000	2400	(ii)Bank Balance			
Festival Advance		149750	123600	(a)College Account	3817686		7298562
Principal's Banglow		2110000	2637000	(b) Salary Accounts	25767563		42670444
Other bodies transations / Current Libilities		142392324	57353833	© Earmarked Bank Accounts	11099894	40685143	14983255
TOTAL		596647949	486477962			596647949	486477962

S.O. Accounts Bursar Principal

MIRANDA HOUSE UNIVERSITY OF DELHI

BALANCE SHEET AS AT 31ST MARCH, 2011

Amount in ₹

CAPITAL FUND AND LIABILITIES	Schedule No.	Current Year	Previous Year
Capital Fund	1	166882373	70534045
Reserves and Surplus	-		
Earmarked \Endowment Fund	2	14983255	11703139
Secured Loans and Borrowings	-		
Unsecured Loan and borrowings	-		
Deferred Credit Liabilities	-		
Current Liabilities and Provisions	3	36154103	32420594
TOTAL		**218019731**	**114657778**
ASSETS			
Fixed Assets	4	20981731	21564962
Investment - From Earmarked \Endowment Funds	5	----------	----------
Investment -Others	-		
Current Assets, Loan, Advances etc	6	197038000	93092816
Miscellaneous Expenditure (to the extent not written off or adjusted)			
TOTAL		**218019731**	**114657778**

S.O. Accounts Bursar Principal

MIRANDA HOUSE UNIVERSITY OF DELHI

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31ST MARCH, 2011

Amount in ₹

Particulars	Schedule No.	Current Year	Previous Year
(A) INCOME			
Grants\Subsidies	7	267550000	221173315
Fees\Subscriptions	8	2543877	2271193
Interest Earned	9	1067812	991780
Other Income	10	317916	241726
TOTAL (A)		271479605	**224678014**
(B) EXPENDITURE			
Establishment Expenses	11	220603109	223947786
Other Administrative Expenses	12	16952036	11114540
Depreciation		4732527	5310981
Total (B)		242287672	240373307
Excess of Income over Expenditure / (Expenditure over Income)		29191933	(15695293)
Less: Depreciation relating to Previous Years			(25227808)
Balance being Deficit carried to Capital Fund		**29191933**	**(40923101)**
Significant Accounting Policies	13		
Contingent Liabilities and Notes on Accounts	14		

S.O.Accounts Bursar Principal

MIRANDA HOUSE

UNIVERSITY OF DELHI

RECEIPITS AND PAYMENTS FOR THE YEAR ENDED 31ST MARCH, 2011

Receipts			Amoiunt in ₹	Payment			Amoiunt in ₹
		Current Year	Previous Year			Current Year	Previous Year
I.Opening Balances				*I. Expenses*			
Bank Balance				*(a) Establishment Expenses*			
(i) Current Account				Salary & Allowances		220603109	223947786
(ii) Savings Accounts							
State Bank of India	1081315						
State Bank of India (Salary A/c)	15741608						
Earmarked Bank Accounts	11703139	28526062	17206359				
(iii) Deposit accounts				*(b) Administrative Expenses*			
				Administrative expenses		16952036	11114540
II. Grants Received				Prepaid expenses			
a) From UGC		267550000	221173315	grants & subsidies			
b) Donation/Grants from Earmarked A/c		0	565424	*II (a) Payments against earmarked funds*		52466688	23466888
III Interest Received from Bank							
Interest received from Salary/College A/c		1067812	991780	*II (b) Payments against funds for various Projects*			
Interest received from Earmarked Funds		620294	320425	*Special Grants*		688461	343680
Special Grants		2034000	105953				
				III Investments and deposits made			
IV, Other Income							
Fees and Subscriptions		2543877	2271193	*IV Expenditure on Fixed Assets*			
Sale of Publications				Purchase of Fixed Assets		4149296	6930609
Income from Building lands etc				Miscellaneous / Reserve & surplus		586160	303350
Miscellaneous / Reserve & surplus		389789	569880	*V. Finance Charges*			
				VI. Other Payments			
				Advances & Adjustment A/c		1600107	1512808
				Principal's Banglow		388375	611573
VI. Any other receipts				Festival Advance		135000	123000
				Other bodies transations / Current Libilities		50028009	269391058
Advances & Adjustment		*1659660*	*1461255*	University Account		6927914	4480751
Other Receipt from Earmarked funds		*55126510*	*26866967*				
Other receipts		317916	241726	Recoverable Amounts		66999346	7512477
Securirty (Receipts)		35000	3165	Conveyance Advance		1200	1500
Recoverable Amounts		60236837	6496728	*VII Closing Balances*			
University Dues		6253372	4613891	(i) Cash in hand			
Conveyance Advance		2400	3000	**(ii)Bank Balance**			
Festival Advance		123600	89400	(a)College Account	7298562		
Principal's Banglow		2637000		(b) Salary Accounts	42670444		
Other bodies transations / Current Libilities		57353833	295285621	© Earmarked Bank Accounts	14983255	64952261	28526062
TOTAL		486477962	578266082			486477962	578266082

S.O. Accounts Bursar Principal

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