

Annual Report

Ph.D. Supervision

(To be maintained by those guiding Ph.D.)

Department: MATHEMATICS

Academic Year: 2021-22

Name of the Teacher: MANJARI SRIVASTAVA

Designation: PROFESSOR

Qualifications (Ph.D./D.Sc./D.Litt.): Ph.D.

Year of obtaining the above qualification: 1997

Year of recognition as research guide: 2010

Relevant page of the Recognition Letter as supporting document (if any): NA

Part A

Currently Enrolled Research Scholars

Name of the student:	Meenakshi Gupta
Year of registration:	2015
Supervisor:	MANJARI SRIVASTAVA
Co-supervisor, if any:	NA
Title of the thesis:	WELL - POSEDNESS AND STABILITY IN SET OPTIMIZATION
Whether receiving scholarship, Name of the scholarship:	NA

Relevant supporting document (issued by the BRS):

Dated :- 20-11-2015

The Chairperson
Board of Research Studies (Mathematical Sciences)
University of Delhi
Delhi-110007

Through: The Supervisor(s) and Head of the Department.

Subject: **Joining Report.**

Dear Sir/Madam,

In compliance of the Memorandum No.BRS(MS)/²⁰¹⁵2014/236
Dated 4-11-2015 regarding my provisional admission to the Ph.D Course
in the Department of Mathematics having paid the
necessary fees to the University Cashier vide Receipt No. 44160
dated 20-11-2015 (photocopy of the Receipt enclosed), I hereby
submit my **Joining Report**.

I am fully aware that my admission to Ph.D Course is provisional
subject to :-

- (i) Equivalence of my Degrees/Certificates by the University of Delhi,
- (ii) Successful completion of Course Work to be assigned by the
Departmental Research Committee within one academic year .
- (iii) Completion of other formalities like defence of the thesis topic in a
departmental seminar.
- (i) Award of Non-NET fellowship

I hereby undertake to abide by the final decision of the University with
regard to confirmation or cancellation of my provisional admission at any
stage.

I am also submitting/producing herewith originals of the following
certificates as required for verification:

- (i) Undergraduate and postgraduate (qualifying) Degrees/Certificates.
- (ii) Mark-sheets of undergraduate and postgraduate (qualifying)
examinations.

Math/2015/2823
23/11/15



Name of the student:	SAKSHI GUPTA
Year of registration:	2017
Supervisor:	MANJARI SRIVASTAVA
Co-supervisor, if any:	NA
Title of the thesis:	VARIATIONAL INEQUALITY AND ITS RELATED PROBLEMS
Whether receiving scholarship, Name of the scholarship:	UGC/JRF

Relevant supporting document (issued by the BRS):

Yours faithfully,

Rakshi

(Signature of the candidate)

Name SAKSHI GUPTA
Address: 50 Friends Apptz
Sec-9 Rohini, Delhi

Ph. (R) 011-27555051

(M) 9718466674

Email id. Rimple Rakshi@yahoo.com

1. manjari 2. ✓
(Signature(s) of the Supervisor and Joint Supervisor)

1. Name DR. MANJARI SRIVASTAVA
Department of Mathematics
Address Dept. of Maths, Miranda House
Chhatra Marg, Delhi University, Delhi
Ph. No. 9899228986
(M)No. _____

2. Name _____
Department of _____
Address _____
Ph. No. _____
(M)No. _____

[Signature]
अध्यक्ष / Head
(Signature of the Head)
Department of Mathematics
दिल्ली विश्वविद्यालय
University of Delhi
दिल्ली-110007 / Delhi-110007

Rakshi

Dated :-

The Chairperson
Board of Research Studies (Mathematical Sciences)
University of Delhi
Delhi-110007

Through: The Supervisor(s) and Head of the Department.

Subject: **Joining Report**

Dear Sir/Madam,

BRS/248/2017

In compliance of the Memorandum No.BRS(MS)/2017/174
Dated 18 Feb 2017 regarding my provisional admission to the Ph.D
Course in the Department of Mathematics having paid
the necessary fees to the University through online (photocopy of the
Receipt enclosed), I hereby submit my **Joining Report**.

I am fully aware that my admission to Ph.D Course is provisional
subject to :-

- (i) Equivalence of my Degrees/Certificates by the University of Delhi,
- (ii) Successful completion of Course Work to be assigned by the Departmental Research Committee within two semesters.
- (iii) Completion of other formalities like defence of the thesis topic in a departmental seminar.

I hereby undertake to abide by the final decision of the University with regard to confirmation or cancellation of my provisional admission at any stage.

I am also submitting/producing herewith originals of the following certificates as required for verification:

- (i) Undergraduate and postgraduate (qualifying) Degrees/Certificates.
- (ii) Mark-sheets of undergraduate and postgraduate (qualifying) examinations.
- (iii) Matriculation/Higher Secondary/Secondary School Certificate for verification of date of birth.
- (iv) Certificate, in the case of SC/ST/OBC/PH category.

BRS (MS)

MS/2017/3412
27/7/17

Name of the student:	RUPLEEN KAUR (M. Phil.)
Year of registration:	2021
Supervisor:	MANJARI SRIVASTAVA
Co-supervisor, if any:	NA
Title of the thesis:	DIFFERENT ASPECTS OF SET OPTIMIZATION
Whether receiving scholarship, Name of the scholarship:	NA

Relevant supporting document (issued by the BRS):

Annual Progress Report
Name of Scholar:Rupleen Kaur Ahuja
Course: M.Phil
Roll No.: M2002
Date of Admission: 26/02/2021
Supervisor: Dr. Manjari Srivastava

26/02/2021 –10/08/2021: During this time period, I completed my coursework. The result of the coursework was declared on 27/09/2021. The subjects I studied during this period are given below:

RESEARCH METHODOLOGY, RESEARCH AND PUBLICATION ETHICS, ADVANCED FUNCTIONAL ANALYSIS, CONVEX AND NON-SMOOTH ANALYSIS and INTRODUCTION TO SEVERAL COMPLEX VARIABLES.

27/09/2021 to Present: I read papers for my dissertation. The topics of the papers read are as follows:

- 1) Chahn Yong Jung, Muhammad Shoaib Saleem, Waqas Nazeer, Muhammad Sajid Zahoor, Attia Latif, and Shin Min Kang(2020): Unification of Generalised and p-Convexity, Journal of Function Spaces, Hindwai.
- 2) Tadeusz Antczak and Najeeb Abdulaleem(2019): Optimality and Duality results for E-differentiable multiobjective fractional programming problems under E-convexity, Journal of Inequalities and Applications, Springer Open Journal.
- 3) Yu Han (2021): Connectedness of the approximate solution sets forset optimization problems, Optimization, Taylor and Francis
- 4) Emrah Karaman, Mustafa Soyertem, Ilknur Atasever Guvenc, Didem Tozkan, Mahide Kucuk, Yalcem Kucuk(2018): Partial order relations on family of sets and scalarizations for set optimization, Positivity, CrossMark.
- 5) Sunila Sharma and Priyanka Yadav (2021): Optimality and Duality in non-smooth vector optimization with non-convex feasible set, RAIRO Operations Research.

At present, I am reading a book named 'Non-Linear Programming' by Olvi L. Mangasarian.

Future Plan: I will explore more research papers and books relevant to my topic of dissertation and will try to accomplish my work in the stipulated time.

Rupleen Kaur

Signature
(Research Scholar)

manjari

Signature
Dr. Manjari Srivastava
(Supervisor)

C.S. Lalitha

Signature
Prof. C.S. Lalitha
(Advisory Committee)

Lalitha

Signature
Dr. Pratima Rai
(Advisory Committee)



Miranda House

UNIVERSITY OF DELHI

Part B

Research Scholars who have completed Ph.D.

Name of the student:	REKHA GUPTA
Year of registration:	2010
Year of obtaining Ph.D.:	2016
Supervisor:	MANJARI SRIVASTAVA
Co-supervisor, if any:	NA
Title of the thesis:	OPTIMALITY ND DUALITY IN MULTI OBJECTIVE PROGRAMMING USING GENERALISED CONVEXITY

Relevant supporting document (issued by the BRS):

Relevant supporting document for award of Ph.D. (Certificate/Degree/Result issued to student on successfully completing Ph.D.):



Miranda House UNIVERSITY OF DELHI

दिल्ली विश्वविद्यालय



University of Delhi

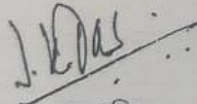
विद्या-वाचस्पति * Doctor of Philosophy (Ph.D.)

प्रमाणित किया जाता है कि नवम्बर, 2016 में
ऑप्टिमलिटी एंड ड्यूरैलिटी इन मल्टीओब्जेक्टिव प्रोग्रामिंग यूजिंग जनरलाइज्ड
कॉन्वेक्सिटी

पर शोध प्रबंध स्वीकृत हो जाने के उपरांत रेखा गुप्ता पित्रकुलनाम रेखा अग्रवाल
को 2016 के दीक्षांत समारोह में दिल्ली विश्वविद्यालय की
विद्या-वाचस्पति की उपाधि प्रदान की गई।
विभाग: गणित

This is to certify that after approval of the thesis on
Optimality and Duality in Multiobjective Programming Using Generalized
Convexity

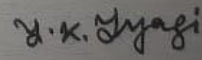
in November, 2016 Rekha Gupta nee Rekha Aggarwal
qualified for the degree of Doctor of Philosophy (Ph.D.) of this University.
The said degree was conferred upon him/her at the convocation held in 2016.
Department: Mathematics



कुलसचिव
दिल्ली विश्वविद्यालय
Registrar
University of Delhi



दिल्ली, दिनांक 19 नवम्बर, 2016
Delhi, Dated the 19th November, 2016



कुलपति
दिल्ली विश्वविद्यालय
Vice Chancellor
University of Delhi

नामांकन संख्या SH-619/2000
Enrol. No.



000009



Miranda House UNIVERSITY OF DELHI

Name of the student:	GARIMA VIRMANI
Year of registration:	2010
Year of obtaining Ph.D.:	2017
Supervisor:	MANJARI SRIVASTAVA
Co-supervisor, if any:	NA
Title of the thesis:	WELL-POSEDNESS IN VARIATIONAL INEQUALITIES

Relevant supporting document (issued by the BRS):

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दिल्ली विश्वविद्यालय



University of Delhi
विद्या-वाचस्पति * Doctor of Philosophy (Ph.D.)
प्रमाणित किया जाता है कि अप्रैल, 2017 में
वेल-पोसडेनेस इन वरिएशनल इनिक्वलिटीज़

पर शोध प्रबंध स्वीकृत हो जाने के उपरांत **गरिमा वीरमनी**
को 2017 के दीक्षांत समारोह में दिल्ली विश्वविद्यालय की
विद्या-वाचस्पति की उपाधि प्रदान की गई ।
विभाग: गणित

This is to certify that after approval of the thesis on
Well-Posedness in Variational Inequalities

in April, 2017 **Garima Virmani**
qualified for the degree of Doctor of Philosophy (Ph.D.) of this University.
The said degree was conferred upon him/her at the convocation held in 2017 .
Department: Mathematics


कुलसचिव
दिल्ली विश्वविद्यालय
Registrar
University of Delhi




कुलपति
दिल्ली विश्वविद्यालय
Vice Chancellor
University of Delhi

दिल्ली, दिनांक 18 नवम्बर, 2017
Delhi, Dated the 18th November, 2017

नामांकन संख्या
Enrol.No. HR-641/04



029343



Miranda House

UNIVERSITY OF DELHI

Name of the student:	KANIKA SHARMA (M.Phil.)
Year of registration:	2010
Year of obtaining M.Phil.:	2012
Supervisor:	MANJARI SRIVASTAVA
Co-supervisor, if any:	NA
Title of the thesis:	OPTIMALITY AND DUALITY IN MULTIOBJECTIVE PROGRAMMING PROBLEMS

Relevant supporting document (issued by the BRS):



Miranda House UNIVERSITY OF DELHI

नामांकन संख्या MT-692/2003
Enrol. No.

अनुक्रमांक 706
Roll No.



UNIVERSITY OF DELHI

प्रमाणित किया जाता है कि सन् 2011 में परीक्षा के
उपरांत दर्शन-शि्षणात की उपाधि के योग्य सिद्ध होने पर

कनिका शर्मा

को 2012 के दीक्षांत-समारोह में उक्त उपाधि प्रदान की गई।

विषय गणित

श्रेणी प्रथम (विशिष्ट योग्यता सहित)

*This is to certify that having been examined in 2011 and
found qualified for the degree of Master of Philosophy*

Kanika Sharma

was admitted to the said degree at the Convocation held in 2012.

Subject Mathematics

Division First (with Distinction)

Ras

कुलसचिव
दिल्ली विश्वविद्यालय
Registrar
University of Delhi

दिल्ली, दिनांक 24 मार्च, 2012
Delhi, Dated the 24th March, 2012

DLSA

कुलपति
दिल्ली विश्वविद्यालय
Vice-Chancellor
University of Delhi



Miranda House

UNIVERSITY OF DELHI

Name of the student:	HIMANSHI SINGH (M.Phil.)
Year of registration:	2010
Year of obtaining M.Phil.:	2012
Supervisor:	MANJARI SRIVASTAVA
Co-supervisor, if any:	NA
Title of the thesis:	GENERALISED CONVEXITY IN OPTIMIZATION

Relevant supporting document (issued by the BRS):

Name of the student:	
Year of registration:	
Year of obtaining Ph.D.:	
Supervisor:	
Co-supervisor, if any:	
Title of the thesis:	

Relevant supporting document (issued by the BRS):

Name of the student:	
Year of registration:	
Year of obtaining Ph.D.:	
Supervisor:	
Co-supervisor, if any:	
Title of the thesis:	



Miranda House

UNIVERSITY OF DELHI

Relevant supporting document (issued by the BRS):
