

Departmental Annual Report – 3

Departmental Activities: Curriculum and Beyond

Department: Botany

Academic Year: 2021-22

Part A.1

Students undertaking project work/field work/internship as part of experiential learning component of coursework

S. No.	
	Course Name: B.Sc. (H)
1	Botany
	Paper Name: Industrial &
	Environmental Microbiology
	UPC: 32167601
	Semester: VI



Place of visit: Chandrawal Water Treatment Plant (Chandrawal Water Works No. II), Delhi Jal Board

Date: 30 March, 2022

Programme: B.Sc. (H) Botany

III Year

Course: Industrial & Environmental Microbiology

No. of students: 40

Accompanying teachers: Dr. Neetu Chaudhary & Dr. Laishram Sundari Devi

1. Field visit as per syllabus

2. Gave the students an overview of various methods and stages of water treatment before its release as municipal water supply



2. Course Name: B.Sc. (H)

Botany

Paper Name: Biofertilizer

UPC: 32163403 Semester: IV

Place of visit: BGA division, IARI, Pusa, New Delhi





Date: 15 March, 2022

Programme: B.Sc. (H) Botany

II Year

Course: B. Sc. (H) Botany

No. of students: 41

Accompanying teachers:

Dr. Madhu Bajaj

Dr. Saloni Bahri

Dr. Deepali

Dr. Priyanka Rathore

OBSERVATIONS:

- 1. Field visit as per syllabus
- 2. Gave the students an overview of various methods composting and culturing of BGA, Azolla for the benefit of agriculture.





Course Name: B.Sc. (H)

Botany

3.

Paper Name: Ecology

UPC: 32161402



Semester: IV

Place of visit: Yamuna Biodiversity Park, Delhi

Date: 1 April, 2022

Programme: B.Sc. (H) Botany

II Year

Course: B. Sc. (H) Botany

No. of students: 41

Accompanying teachers:

Dr. Somdutta Sinha Roy

Dr. L. Sundari

Dr. Priyanka Rathore

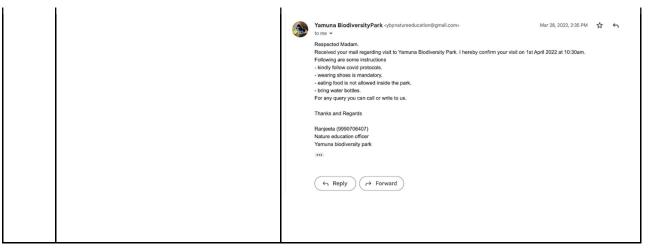
OBSERVATIONS:

- 1. Students learned about various floristic components of the Yamuna river valley.
- 2. They understood the plant-animal interactions and delicate balance that works in nature.









S.No	Name of the Student	Project Title	Supervised by
Course Name: B.Sc. (H) Botany Paper Name: Biofertilizer (SEC-1)	Aastha, Manisha Devi, Sandhya Kumari, Sheen Bhat, Suruchi Yadav, Vaishnavi	To study the count bacterial cells count in the root nodules of Melilotus collected from two different sites.	Dr Deepali Dr Priyanka Rathore
UPC: 32163403 Semester: IV	Yoshita Bhardwaj, Priyanka Kumari, Prachi Singh, Mrinalini Gupta, Sakshi Goel, Ishika	Comparative study of different compost from Delhi NCR using parameters of pH, NO3 and Organic matter content.	



Sapna Maurya, Shailza Bhati, Prateeksha Awasati, Neerati Krupa	Advent of bio controlling agents as savior against various plant disease and environment: A review
Poonam, Anuradha, Priti Kulhari, Amgoth Mahalakshmi, Puttala Thriveni, Bhukhya Nandini	Vermicomposting of organic waste and its effect in agriculture : A review
Sneha Mahato	Online Review: Biofertilizer as an alternative for Chemical Fertilizer
Aichea VA Sangma, Aseng Tayeng, Bidyaluxmi Khuraijam, Lobsang Tsekey, Ornella Khwairkpam, Sonam Yangchen	A Comprehensive Overview of Bio composting Techniques and Processes.



	Irya, Palak, Bhavna, Priya, Neetu	Survey on Organic Farming	
2. Course Name: B.Sc. (H) Botany Paper Name: Biostatistics (DSE-2) UPC: 32167502 Semester: V	All 43 students of V semester did the projects individually after collecting the data using google forms	All students had their individual project.	Dr. Somdutta Sinha Roy Dr. Rajeshwari/Dr. Veena Beri



Part A.2

Students undertaking project work/field work/internship (beyond the requirements of coursework)

Projects undertaken during DSKC Summer Internship (9 June-14 July 2022):

S.No.	Name of the Student	Project Title	Supervised by
1	(i) Mrinalini Gupta, B.Sc. (H) Botany II Year, Miranda House (ii) Nancy, B.Sc. (H) Botany II Year, Miranda House (iii) Poonam, B.Sc. (H) Botany II Year, Miranda House	A Study on Starch	Dr. Janaki Subramanyan



2	(i) Archana Singh, B.Sc.(H) Botany I Year, Miranda House	Effect of Vesicular Arbuscular Mycorrhiza on <i>Vigna</i> <i>radiata</i> under heavy	Dr. Madhu Bajaj, Dr. Saloni Bahri,
	(ii) Vanshika, B.Sc.(H) Botany I Year, Miranda House	metal stress	Di. Saloii Baiii,
	(iii) Lenthoibi Thokchom, B.Sc.(H)		Dr. Somdutta Sinha Roy
	Botany I Year, Miranda House		
	(iv) Tarana Sahreen, B.Sc.(H) Botany I Year, Miranda House		
	(v) Madhu Kumari, B.Sc.(H) Botany I Year, Miranda House		
	(vi) Geetansh, B.Sc.(H) Botany I Year, Hindu College		



3	(i) Garima Rao, B.Sc.(H) Botany, II Year, Miranda House	Effect of N,P,K on growth of <i>Allium cepa</i> roots	Dr. Madhu Bajaj,
	(ii) Angel Malhotra, B.Sc.(H) Botany, II Year, Miranda House		Dr. Saloni Bahri,
	(iii) Kumari khushi, B.Sc.(H) Botany, II Year, Miranda House		Dr. Somdutta Sinha Roy
	(iv) Neelakashi Goyal, B.Sc.(H) Botany, II Year, Hindu College		
	(v) Yash Makkar, B.Sc.(H) Botany, II Year, Hindu College		
4	(i) Aditi Asthana, B.Sc. (H) Botany, I Year, Miranda House	Fungi on Mars – A review	Dr. Madhu Bajaj,
			Dr. Saloni Bahri,



			Dr. Somdutta Sinha Roy
5	(i) Shambhavi Krishna, B.Sc. Life Science, I Year, Miranda House	Study of the genetic makeup of <i>Trifolium</i> pratense and its	Dr. Madhu Bajaj,
	(ii) Samriddhi Chaturvedi, B.Sc. Life Science, I Year, Miranda	medicinal effects – A review	Dr. Saloni Bahri,
	House		Dr. Somdutta Sinha Roy
6	(i) Nishtha Khushu, B.Sc. Life Science, I Year, Miranda House	Incorporation of plastids in animal cells: how will it help	Dr. Madhu Bajaj,
	(ii) Sadhna, B.Sc. Life Science, I Year, Miranda House	us? – A review	Dr. Saloni Bahri,
			Dr. Somdutta Sinha Roy
7	(i) Ishita Pahwa, B.Tech (Biotech),II Year, Amity University(ii) Agrima Singh, B.Tech(Biotech), II Year, AmityUniversity.	Role of phytochemicals and vitamins in fertility	Dr. <u>Renuka Agrawal</u>



COURSE BASED PROJECT (Experiential Learning)

Program name	Program code	Name of the Course that include experiential learning through project work/field work/internship	Course code	Year of offering	Name of the student studied course on experiential learning through project work/field work/internship
B.Sc. (Honours) Botany II Year, Semester III	556	Intellectual Property Rights (SEC) Duration: One Semester 42 Projects (Done individually and completed the project Successfully) This project is part of the IPR practical paper and it is part of question paper.	UPC- 32163302	2021	42 Students
B.Sc. (Honours) Botany II Year, Semester IV	556	Biofertilizers (SEC) Duration: One Semester Project: Online Review on 1. To count bacterial cell number in the Root Nodules of <i>Melilotus</i> Plant collected from two different sites and comparing the results. 2. Comparative study of different compost from Delhi NCR using parameters of pH, NO3 and Organic matter content	UPC- 32163403	2022	42 Students



		 Vermicomposting of organic wastes and its effects Online Review: Biofertilizer as an alternative for Chemical Fertilizers. A Comprehensive Overview of Biocomposting, Techniques & Processes This project is part of the Biofertilizers practical paper and it is part of question paper. All students successfully completed the project assigned. 			
B.Sc. (Honours) Botany III Year, Semester V	556	Biostatistics (DSE-2) Duration: One Semester Project: Analysis of 100 data points collected from within the college and analysed and interpreted using various biostatistical tools. Compulsory project work as part of practical CIE (Done individually and completed successfully.	UPC- 32167502	2021	42 Students
B.Sc. Life Science III Year, Semester VI	583	Intellectual Property Rights (SEC-4) Duration: One Semester 37 Projects (Done individually and completed the project Successfully) This project is part of the IPR practical paper and it is part of question paper.	UPC- 42163601	2022	37 Students



Academic Year	2021-22	
Paper Name	SEC : Intellectual Property Rights	
Unique Paper Code	32163302	
Course	B.Sc. (H) Botany	
Programme Code	556	
Year	II Year	
Semester	III	
Total no. of students	42	

Projects completed

Individual IPR e-diary had to be submitted as part of the practical examination for the paper Intellectual Property Rights. They made the IPR e-diary on MS PowerPoint. Students were evaluated based on the product selected by them and the content including number of samples and their original photographs. Students selected topics of their choice from the syllabus such as Copyright, Trademark, GI Food, GI Industry, and others. They had to click the pictures of the

	B.SC (H) Botany II Year (2021-22)		3			
100	Year/Roll No	Name	-25	2020/667	Poznen	
1	2020/210	Aastru	26	2020/95	Budé-Shah	
1	2020/258	Alchee Victoria A Sangma	27	2020/329	Protockship bod	
1	2020/507	Alka	20	2020/204	PY'E GARGE.	
4	2020/353	Angoth Matelakshmi	20	2020/376	Priya Studios	
	2020/1491	Argel Mahotra	- 100	2020/1486	Priyanka Kurasi.	
i i	2020/1519	Anuradha	31	2020/332	District Districts	
7	2020/273	Awrq Tayong	10	2020/854	Séolá Rarii	
	2020/790	Shavna	33	2020/1566	Sandhya Quagas	
9	2020/328	Bhukya Nondrii	- 54	2020/1407	Seast Baout	
in.	2020/1472	Bidyakomi Kharaijam	35	2020/1525	Swike, Blub	
ii.	2020/792	Chetre	36	2020/373	Sheen Bhit	
17	2020/323	Dask Valvesi	37	2020/1837	Swite Heleta	
п	2020/903	Gorban Rico	38	2020/1539	Severa Seader	
и	2020/1494	large Glad	38	2020/22	Sistema Arya	
25	2020/727	bible	40	2020/1446	South Yaday	
16	2020/1461	Knoock Clooks	- 41	2020/227	ligenda las	
7	2020/119	Liberry, Sebal	62	2020/1736	Coolida Bhardwoj	
36	2020/1848	Menisha Davi		(5)	el.P	
20	2020/1856	Okiowick Oupta	_			
ĝo:	2020/1451	Herry	Teacher's			
11	2020/335	Okaçadi, Kirupa	Teacher's Signature:			
22	2020/1673	Oliv Gurani.				
TS:	2020/1771	Ormilla Sloudenware				
36	2020/379	066				



Miranda House UNIVERSITY OF DELHI

2021-22
Bio-fertilizers
32163403, SEC
B.Sc. (H) Botany
556
1V Semester
42

Projects completed

- To count Bacterial cell number in the Root Nodules of Melilotus Plant collected from two different sites and comparing the results.
- Comparative study of different compost from Delhi NCR using parameters of pH, NO3 and Organic matter content.
- 3. Vermicomposting of Organic Wastes and its Effects
- 4. Online Review: Biofestilizers, as an alternative for Chemical Fertilizer
- 5. A Comprehensive Overview of Biocomposting Techniques & Processes.

These projects were the part of B.Sc. (Hons) Botany curriculum and mandatory for whole class. Four different Projects had done by the class and students were divided in to 4 separate groups. Out of 4, two projects are online review. All had submitted project reports individual and their evaluation were done on the basis of report analysis and hands on. All groups had worked according to given project area, finished their work within time frame

B.SC (H) Botany II Year (2021-22)

8000	Year/Roll No	Name
1	2020/210	AASTHA
2	2020/258	AICHEA VICTORIA A SANGMA
3	2020/597	ALKA
4	2020/353	AMGOTH MAHALAKSHMI
5	2020/1491	ANGEL MALHOTRA
6	2020/1519	ANURADHA
7	2020/273	ASENG TAYENG
8	2020/780	BHAVNA
9	2020/328	BHUKYA NANDINI
10	2020/1472	BIDYALUXMI KHURADAM
11	2020/792	CHETNA
12	2020/323	DOODA VYSHNAVI
13	2020/503	GARIMA RAO

14	2020/1494	IRYA GOEL
15	2020/727	ISHIKA
16	2020/1461	KUMARI KHUSHI
17	2020/119	LOBSANG TSEKEY
18	2020/1848	MANISHA DEVI
19	2020/1856	MRINALINI GUPTA
20	2020/1451	NANCY
21	2020/335	NEERATI KRUPA
22	2020/1673	NITU KUMARI
23	2020/1771	ORNELLA KHWAIRAKPAM
24	2020/579	PALAK
25	2020/667	POONAM
26	2020/95	PRACHI SINGH
27	2020/329	PRATEEKSHA ASATI
28	2020/204	PRITI KULHARI
29	2020/376	PRIYA BHASKAR
30	2020/1486	PRIYANKA KUMARI
31	2020/332	PUTTALA THRIVENI
32	2020/854	SAKSHI RANI
33	2020/1566	SANDHYA KUMARI
34	2020/1497	SAPANA MAURYA
35	2020/1525	SHAILZA BHATI
36	2020/373	SHEEN BHAT
37	2020/1837	SNEHA MAHATO
38	2020/1539	SONAM YANGCHEN
39	2020/22	SOUMYA ARYA
40	2020/1446	SURUCHI YADAV
41	2020/227	VANSHIKA
42	2020/1736	YÖSHITA BHARDWAJ

Teacher's Signature:

augali



Academic Year	2021-22
Paper Name	Biostatistics
Unique Paper Code	32167502, DSE-2
Course	B.Sc. (H) Botany
Year	3 Year
Semester	V semester
Total no. of students	42

Projects completed

Biostatistics is an applied paper and with this in mind the students have to do a small project individually and present it in lieu of the practical internal examination. The project report had to be submitted in the the form of power-point presentations and orally presented in the class. Evaluation is on the basis of how well they have applied different aspects of statistical analysis to the data that they have collected. Each student is expected to collect data from within the college campus (minimum 100 data points) and analyse the data for different measures of central tendencies like mean, median, mode, perform students t-test and find out correlation between two variables. They are expected to formulate their own hypothesis and then accept or reject the same based on their calculations.

Each student had collected the data individually and randomly. Their project topics ranged from a study of marks obtained v/s hours of study; number of chapatis eaten in a day v/s weight of the individual; Pocket money v/s deoderent brand used etc to laboratory based studies like salt concentration v/s plant height, nitrogen concentration v/s plant weight etc.

Hindaller

Seinharley Teacher's Signature:



Academic Year	2021-22	
Paper Name	SEC 4: Intellectual Property Rights	
Unique Paper Code	42163601	
Course	B.Sc. Life Sciences	
Programme Code	583	
Year	III Year	
Semester	VI	
Total no. of students	37	

Projects completed

Individual IPR e-diary had to be submitted as part of the practical examination for the paper Intellectual Property Rights. They made the IPR e-diary on MS PowerPoint. Students were evaluated based on the product selected by them and the content including number of samples and their original photographs. Students selected topics of their choice from the syllabus such as Copyright, Trademark, GI Food, GI Industry, and others. They had to click the pictures of the products themselves. Google photos of the products were not allowed.

b. e.e.		oobie biloses a
	8.5c, Life Science (8. Year[2023-22]	
688	Marie	Baldia
1	ADITI BHARDWAL	2019/3285
2	AKANKSHA ANANO	2010/3685
. 8	AMBITPAL	2019/3587
-	ANULYA	2019/3263
5	ANISHA RAJ	2019/3154
n	ANUSHKA DAYAL	2019/3312
7	CHARVI SAINI	atacyeros
0.0	CHRANT TOMER	2019/1825
9	DECRANSHI AGARIWAL	2019/3246
10	DEEPIKA DODDI VENKATA	2019/568
11	APODEVA	2010/302
12	DRENTH KOHLI	2019/3702
13	ISHIKA	2010/3824
16	K USHA RANI	2019 / 1132
15	KAVYA SHARMA	2019/1244
3.0	KHUSHBOO GUIDAR	2019/385
17	KOMAL YADAV	2010/1525
18	KRITIKA JAYANT	2019/1570
10	MAHIMA	2010/1542
700	ware easy beginning to been page.	2022012404

21	MUSEAN MAHESHWARI	2019/1859	
22	MAMITA MISHRA	2010/1488	
23	MEHA	2019/1540	
24	NDHA NANDINI	2010/1201	
25	PIPACY	2019/1290	
26	PRATIBHA GANGWAR	2019/462	
27	PRIHA RANA	2019 / 1340]
28	SAKSHI KUSHIVANA	2019/528	
23	SAPNA YADAV	2019/1292	
30	SHIEKA KADYAN	2010/1421	
313	SHIVANI	2010/1288	
32	ЗИЛЕУА СИВИВНИЛІ	2010/1702	
313	SNEHA	2010/1813	
34	SWETA	2010/1798	
:03	TENZIN DECHEN	2010/1663	
36	VANSHIKA BHARDWAZ	2010/1171	
:37	VYAEHYA SINGH	2019/1301	

Teacher's Signature: