



GARGI COLLEGE

UNIVERSITY OF DELHI



DEPARTMENT OF BOTANY

WELCOMES NAAC TEAM





INTRODUCTION



- Department of Botany was established in **1967**

- Main focus:

Teaching- objective is to complement the conventional branches of plant sciences with modern biology.

Research at students' and faculty level

Holistic Development: Environment awareness programs eg. workshops, plantation drives, co-curricular activities

COURSES

- Course offered: B.Sc. (H) Botany (since 1976)
- Courses and Programs taught: Core papers and General elective papers to
B.Sc. Life Sciences,
B.Sc. (H) Zoology,
B.Sc. (H) Microbiology,
B.Sc. (H) Chemistry,
Biology to B. El. Ed
- Environmental studies to students of Science, Commerce and Humanities



PRESENT POSITIONS



Teaching posts	Numbers
Professor	1
Associate Professor	2
Assistant Professor	15
Total	18

Non-Teaching staff	Numbers
Lab assistant	6
Lab attendant	3
Total	9

Teachers with Ph.D.	Teachers with Post doctoral experience
17	5

Broad Areas of specialization

Genetics
Molecular biology
Plant physiology
Plant Anatomy
Phycology
Mycology
Plant Biotechnology
Bioinformatics
Plant Systematics
Reproductive Biology



DEPARTMENTAL INFRASTRUCTURE



- Departmental Library
- Internet facility for staff & Students: Gargi College is a Wi-Fi enabled campus.
- Botanical Garden: Maintained for classroom practical material
- Museum specimens with Barcode
- Laboratories: 7 (Seven) - 4 for curriculum-based practicals and 3 are research laboratories.
 - Molecular Biology Laboratory: equipped with thermocycler, gel electrophoresis, gel doc, centrifuge, vortexer, and magnetic stirrer.
 - Plant Tissue Culture Laboratory: equipped with laminar flow, culture racks, weighing balance, autoclave, and refrigerator.
 - Bioinformatics Laboratory: For beyond curriculum projects
 - Students Laboratory (4): Fully equipped for curriculum-based practicals.

Plant biodiversity Laboratory (with museum specimen & dept. Library)



Botanical Garden



Thermocycler



Centrifuge



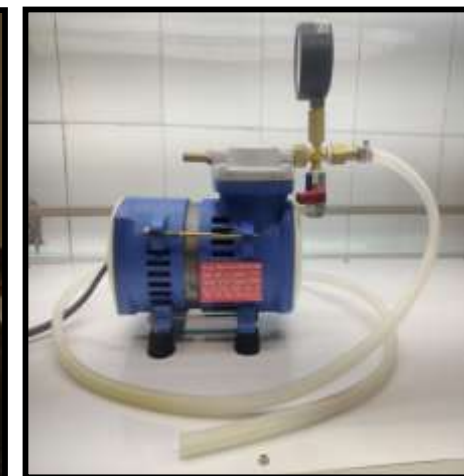
Gel Doc



Refrigerated Centrifuge



Vacuum Pump



-80°C Refrigerator



Deep Freezer



Stirrer



Plant Tissue Culture Laboratory



Plant Tissue Culture Lab



Laminar Flow



Culture Racks



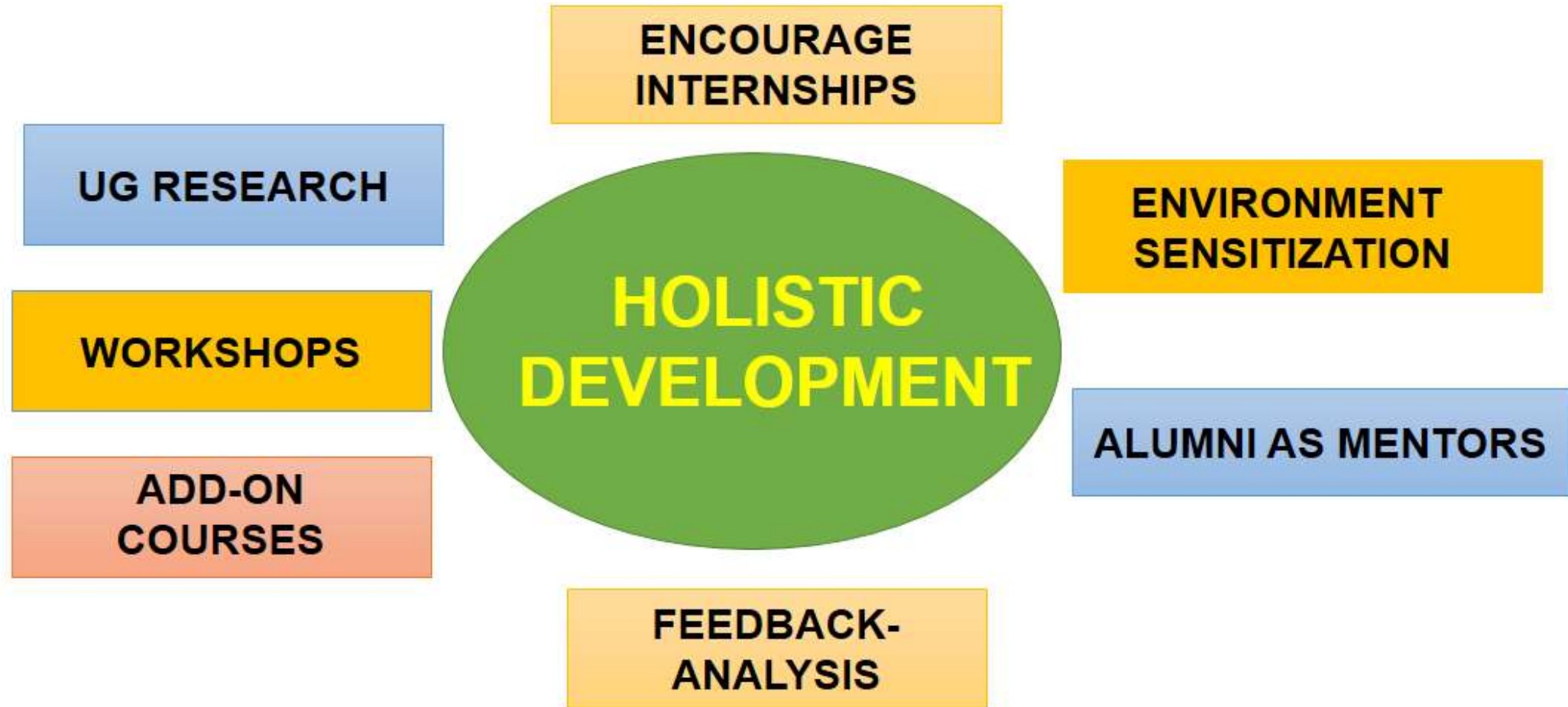
Autoclave



Grown Culture



Departmental Values and Best Practices





INSTITUTIONAL GRANTS RECEIVED BY THE DEPARTMENT



1. Star College Scheme (2009 – 2019) (funded by DBT)
2. Bioinformatics Infrastructure Facility (BIF-DBT) (2009-2020)



सत्यमेव जयते

Department of Biotechnology
Govt. of India

**Gargi College is the only Women's College in DU to be awarded BIF grant by
Dept. of Biotechnology, Govt. of India**

Research projects funded by Government agencies (2016-21)

S. No	Name of the Project	Teacher Mentor	Year
1.	Co-PI, Faculty Research Programme, Institute of Excellence Scheme	Dr Reema Mishra	2020-21
2.	Revealing Components and Mechanism of Systemic Acquired Resistance (SAR) in <i>Brassica juncea</i> . Funded by SERB, DST (Duration -3 years)	Dr. Anjana Rustagi	2018-21 (Feb 22)
3.	Creation of BIF under biology teaching through bioinformatics scheme. Funded by DBT (2017-20)	Dr Aparajita Mohanty and Dr Reema Mishra	2017-20



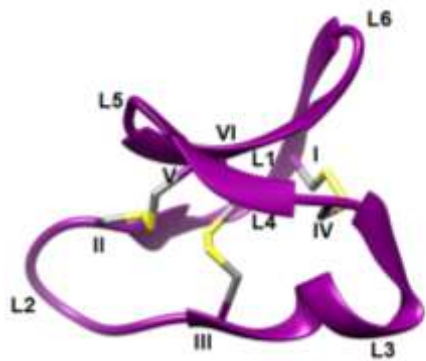
Research projects funded by Government agencies



Recent most addition (3rd Aug 2022)

Title : Proposal for Training in Bioinformatics

Funding agency: Department of Biotechnology



PI: Prof. Aparajita Mohanty

Co PI: Dr Reema Mishra

No. BT/PR40355/BID/7/970/2020
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF BIOTECHNOLOGY

Block 2, 6-8th Floors
CGO Complex, Lodhi Road,
New Delhi- 110 003
Dated:03.08.2022

ORDER

Sanction of the President is hereby accorded, under Rule 18 of the Delegation of Financial Powers Rules, 1978, for the implementation of the project entitled "**Proposal for Workshop /Training in Bioinformatics**" for a period of 2 Year 0 Month at a total cost of Rs. **1749920** (Rupees Seventeen Lakhs Forty Nine Thousand Nine Hundred and Twenty Only) on the terms and conditions detailed here under:-

2 The Project :

2.1 Title : "Proposal for Workshop /Training in Bioinformatics".

2.2 Details of the Investigators:

Principal Investigator:

Dr. Aparajita Mohanty
PI
Department of Botany,
Gargi College, University of Delhi,
Sirifort Road, New Delhi-110049

Co-Principal Investigator:

Dr. Reema Mishra
Assistant professor
Department of Botany,
Gargi College, University of Delhi,
Sirifort Road, New Delhi-110049

2.3 Objectives:

1. To organize workshops and training programs

2.4 Time Schedule:

The duration of the project will be 2 Year 0 Month from the date of the first release order.

2.5 Project Cost:

The total cost of the project is Rs. **1749920/-** (Rupees Seventeen Lakhs Forty Nine Thousand Nine Hundred and Twenty Only) as per details given below:

Budget Head	Year I	Year II	Total(Rs.)
Manpower	624960.00	624960.00	1249920.00
Contingency	25000.00	25000.00	50000.00
Travel	25000.00	25000.00	50000.00
Training /Workshop	200000.00	200000.00	400000.00
Total (Rs.)	874960.00	874960.00	1749920.00

Prof. Aparajita Mohanty



- **Best performing teacher Award (2019)** by **Directorate of Higher Education, NCT, Delhi, Govt of India**
- **Certificate of achievement** for the **Top Cited Article (2021)** "Natural and grafted cyclotides in cancer therapy: An insight" in the year 2020-21 in Journal of Peptide Science by Wiley publishers.

Teachers as research guides

S. No	Teachers recognized as research guides	Year
1.	Dr. Aparajita Mohanty	2018
2.	Dr. Priyanka Pandey,	2019
3.	Dr. Anjana Rustagi	2019

Number of student currently enrolled -2



WILEY

Top Cited Article 2020-2021



Congratulations to:

Aparajita Mohanty

whose paper has been recognized as a **top cited** paper in:

JOURNAL OF PEPTIDE SCIENCE

Natural and grafted cyclotides in cancer therapy: An insight



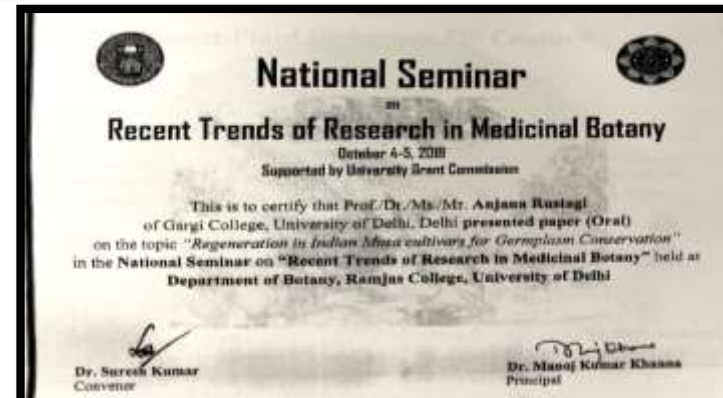
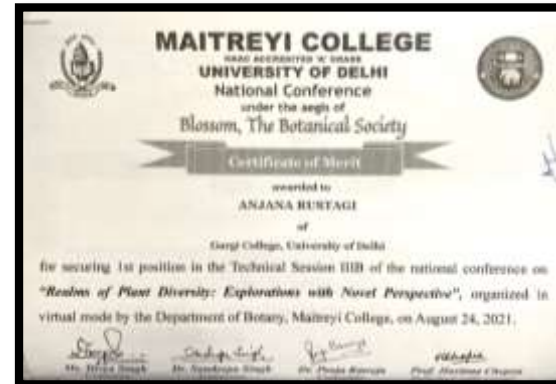


RECOGNITIONS TO TEACHERS



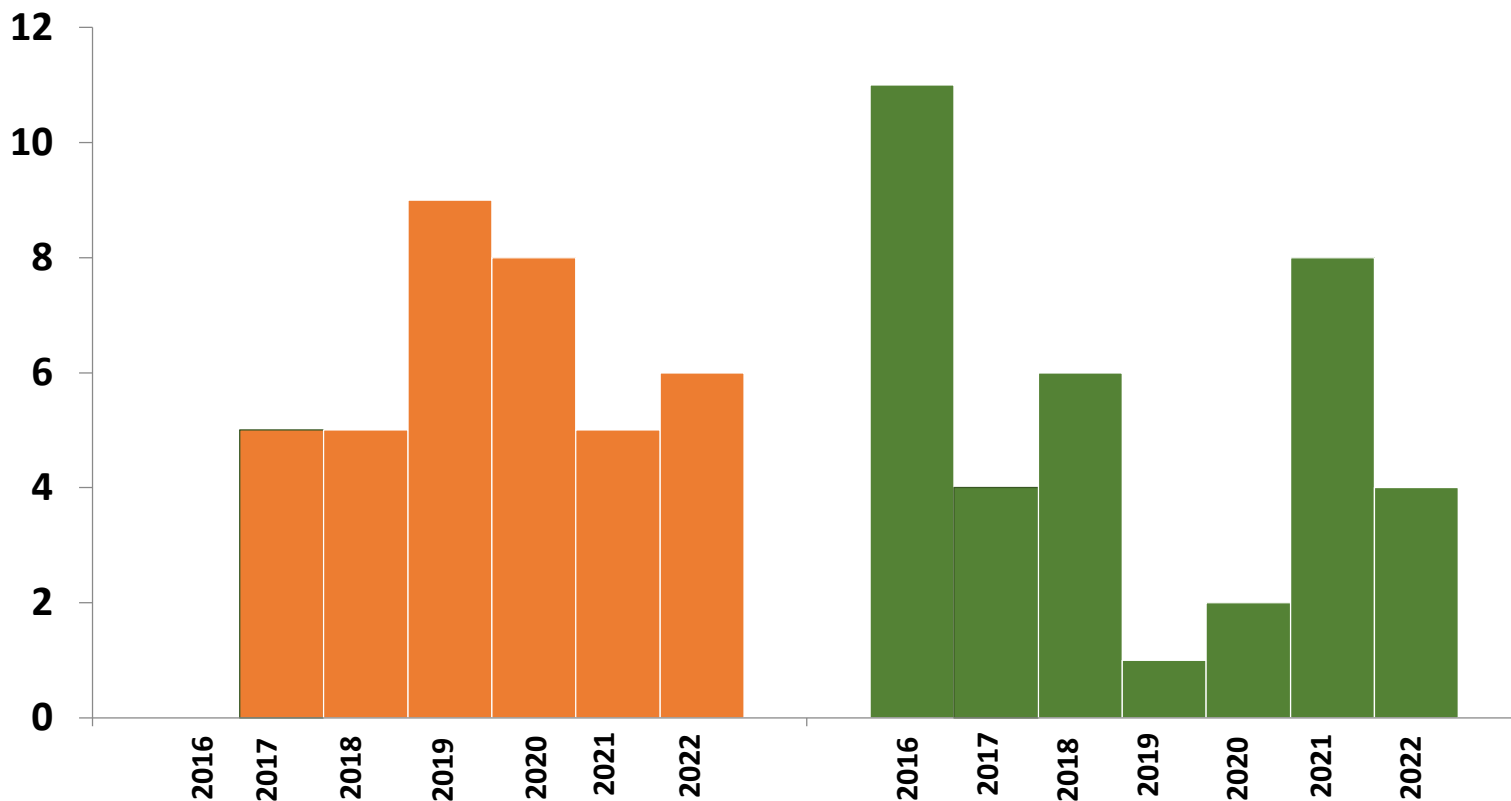
S.No	Name of Teachers	Category	Title of the programme	Year
1.	Dr. Anjana Rustagi	Best Poster Presentation	“Recent Development in Plant Stress Biology: translating laboratory research for human welfare (RDPSB-2018)” organized by Department of Botany, Central University of Jammu, Jammu and Kashmir during December 7th -8th 2018.	2018
2.	Dr. Renu Soni, Dr. Garvita Singh	1st position	“Intellectual Property Rights” organized by Shivaji College, University of Delhi, held on 6th November, 2019.	2019
3.	Dr. Renu Soni, Dr. Geeta, Dr. Reema Mishra	2nd position	“To Compare the Morphological, Anatomical, Physiological and Biochemical Characteristics of Medicinal Plants (<i>Ricinus communis</i> and <i>Ficus racemosa</i>) from Different Habitats” at National seminar on “Recent Trends of Research in Medicinal Plants and Applied Sciences”, held at Ramjas College, University of Delhi, March 27, 2019.	2019
4.	Dr. Renu Soni, Dr. Garvita Singh	2nd position	Interdisciplinary National Conference on “Intellectual Property Rights (IPR): Challenges and Prospects” organized by Department of Botany, Maitreyi College, University of Delhi, 22nd- 23rd October, 2019	2019
5.	Dr. Anjana Rustagi	Best Presentation	Oral ‘Use of Scientific and technical Technologies in Sustainable Environment’ organized by Gargi College, New Delhi during March 14th -16th 2019	2019
6.	Dr. Anjana Rustagi	Best Poster Presentation	‘Innovations in sustainable production and value chain management in banana’ organized by ICAR-National Research Centre for Banana, Trichy in association with Biodiversity International, Rome from February 22-25, 2020.	2020
7.	Dr. Anjana Rustagi	Best Poster Presentation	National Conference on “Realms of plant diversity: Explorations with novel perspective” held on 24th August 2021, organised by Maitreyi College, New Delhi.	2021
8.	Dr. Anjana Rustagi	Best Presentation	Oral (Technical session IIIB) at National Conference on “Realms of plant diversity: Explorations with novel perspective” held on 24th August 2021, organised by Maitreyi College, New Delhi.	2021
9.	Dr. Renu Soni, Dr. Garvita Singh	2nd position	Significance of Kitchen Pharmacy during Covid-19 pandemic in the Technical Session IIIB of the National conference on Realms of plant diversity: explorations with novel perspective. Organized by Maitreyi College, University of Delhi College, University of Delhi on August 24, 2021.	2021
10..	Dr. Preeti Agarwal	2nd position	Presenting paper on “In-silico analysis of ARF transcription factors, a key regulator of Auxin signaling pathway in wheat” in the National Conference on “Realms of Plant Diversity: Explorations with Novel Perspective”, organized in virtual mode by the Department of Botany, Maitreyi College, on August 24, 2021 in the Technical Session A of the national conference.	2021
11.	Dr. Garvita Singh	Consolation prize	oral presentation in 2nd International Conference on Recent Advances in Biotechnology & Nanobiotechnology (Int-BIONANO-2022), Amity University (Int-BIONANO-2022), 10-11 February 2022.	2022

FACULTY ACHIEVEMENTS



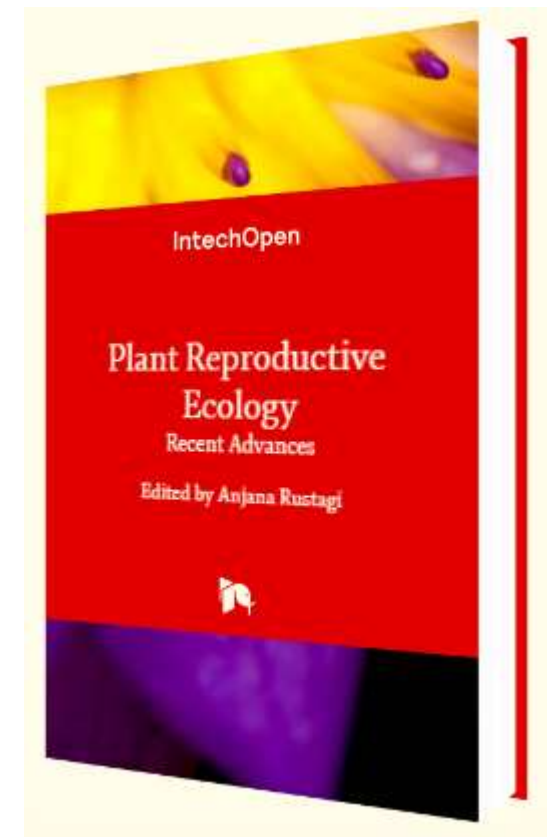
PUBLICATIONS (2016-2022)

Department of Botany	
No. of papers published in peer reviewed journals	27
Impact Factor (Range) (as per Clarivate list)	Up to 7.4
h-index of faculty members (as per Google Scholar)	Up to 14
Chapter in Books	24

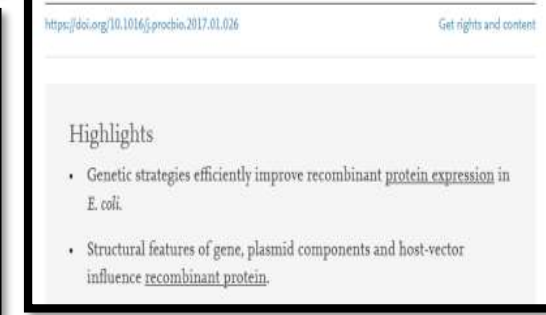
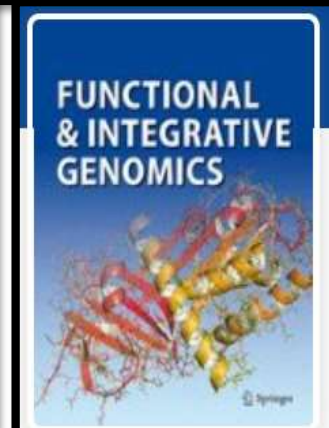
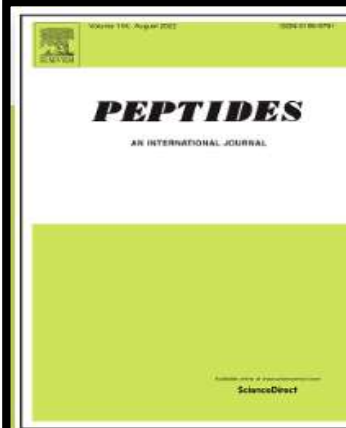
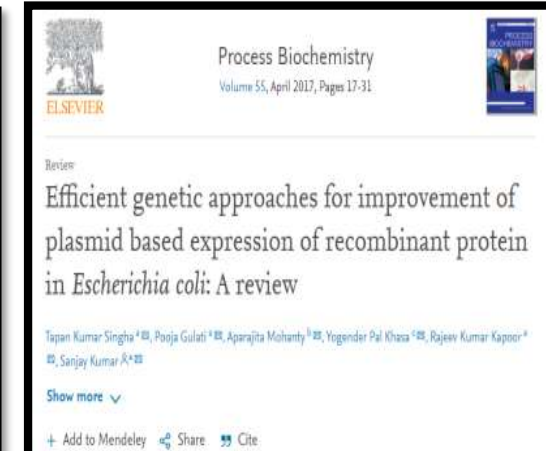
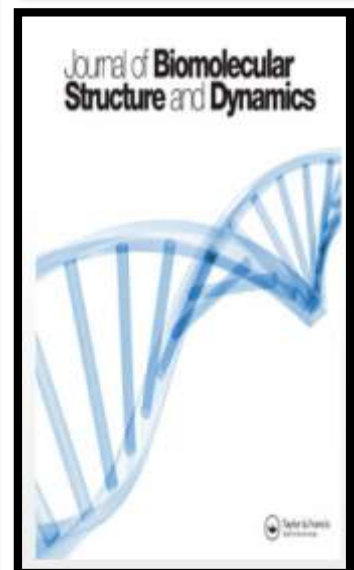
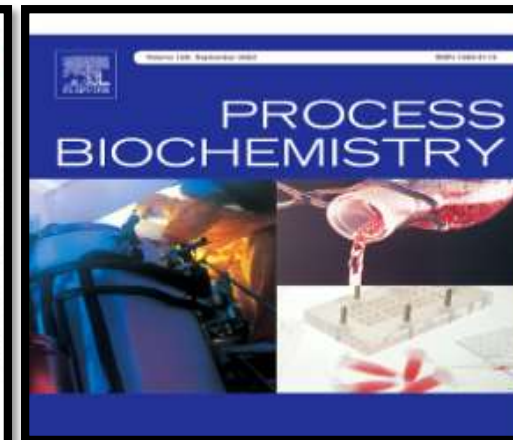
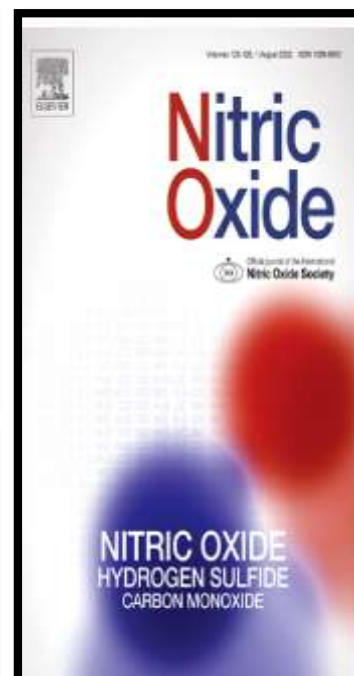


**No. of Publications in UGC
listed Journals (2016-22)**

**No. of book chapters
(2016-22)**

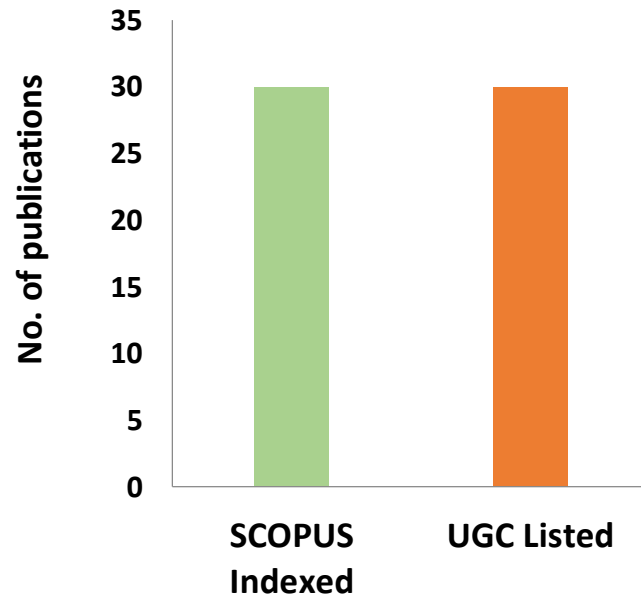


Book edited by Dr. Anjana Rustagi

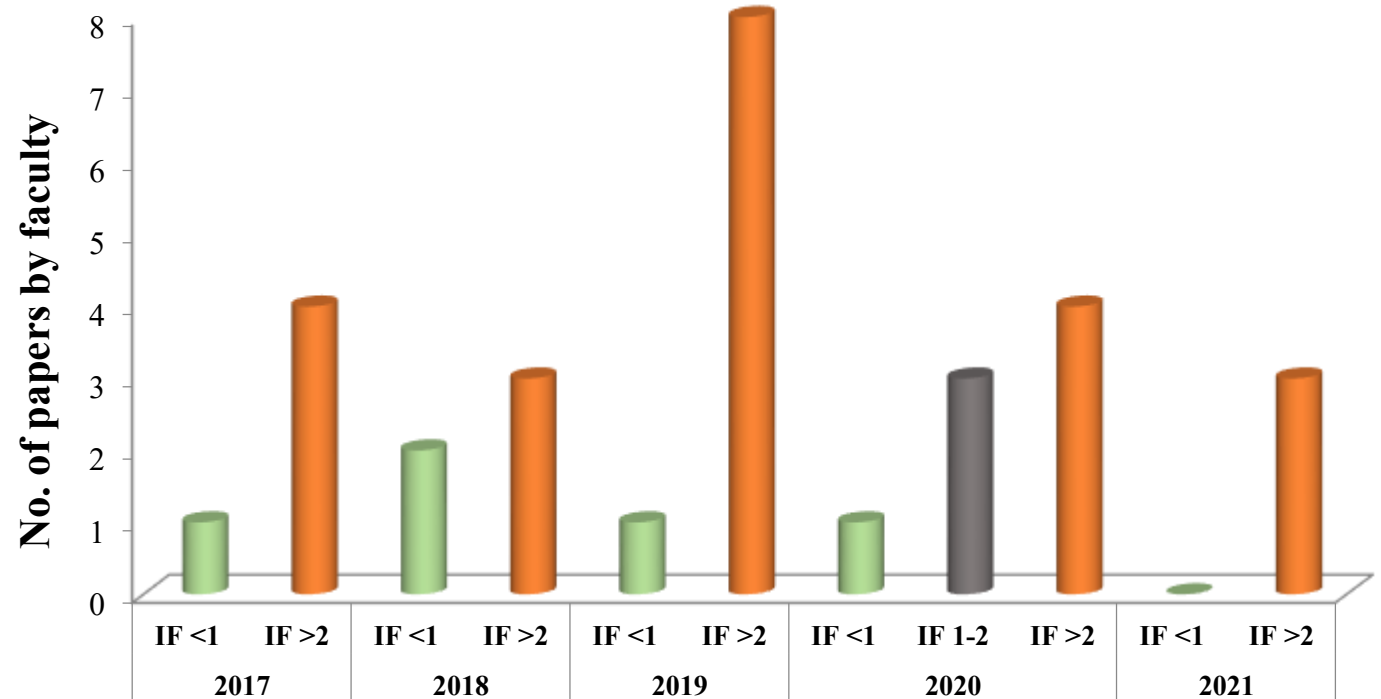


Research Publications: An analysis

Index-wise analysis of Research Publications (2016-2022)



Impact Factor-wise analysis of Research Publications (2016-2021)





Teacher Invited as Resource Persons



S.No	Name of Teachers	Title of the programme	Year
1.	Dr. Renu Soni, Dr. Geeta, Dr. Reema Mishra, Dr. Samira Chugh	Resource person of Skill enhancement Workshop on “Why to grow and how to Multiply Plants” held at Department of Botany in association with Garden committee, Gargi College, 26.09.2017	2017
3.	Dr. Anjana Rustagi	Delivered invited lecture entitled ‘Watering and Weeding’ in workshop on “Why to Grow and How to Multiply Plants” held at Department of Botany, Gargi College, 2017	2017
4.	Dr. Reema Mishra	Delivered an invited lecture in the Departmental Colloquium organized by Department of Botany, Miranda House held on August 9, 2018.	2018
5.	Dr. Aparajita Mohanty, Dr. Geeta, Dr. Renu Soni, Dr. Reema Mishra, Dr. Samira Chugh, Dr. Preeti Agarwal	Resource person and member of Organizing committee of Workshop on “Basic Skills in Computer Applications” held on 7-8.06.2018.	2018
6.	Dr. Reema Mishra	Resource person in the workshop titled ‘Mapping of QR Codes in Textbook of Biology Class XII with e-Content’ organized by department of Education in Science and mathematics, NIE, NCERT, Delhi.	2018
7.	Dr. Garvita Singh	Participated as resource person in tier two workshop on life science resources for teachers in higher education organized by NRCE, NIEPA New Delhi, 6-7 December	2018
8.	Dr. Renu Soni	Resource person in the workshop for the Development of Audio Video Resource on Experiments of Biology at Higher Secondary Stage Department of Education in Science and Mathematics, NIE, NCERT from 15.02.21-19.03.21	2021
9.	Dr. Renu Soni	Resource person in the workshop For the Development of Audio Video Resource on Experiments of Biology at Higher Secondary Stage, Department of Education in Science and Mathematics, NIE, NCERT on 24.03.21 and 26 .03.21	2021
10.	Dr. Reema Mishra	Resource person in the workshop for development of audio video resource on experiments of Biology at Higher Secondary stage, organized by Department of Education in Science and Mathematics NCERT, from March 22, 2021 to March 26, 2021.	2021



Teacher Invited as Resource Persons



S.No	Name of Teachers	Title of the programme	Year
11.	Dr. Renu Soni	Resource person in the workshop for development of audio/video resource in Biology at Higher Secondary stage, organized by Department of Education in Science and Mathematics, NIE, NCERT, 26.10.21- 28.10.21	2021
12.	Dr. Renu Soni	Resource person in the E-student Enrichment Program on “Mathematics for Biologists”, organized by Department of Botany Gargi College, University of Delhi, 09.07.2021 to 19.07.2021	2021
13.	Dr. Renu Soni	Expert and Resource person for the webinar on World Ozone day, organized by Technia Institute of Advanced Studies, Delhi, 16.09.21	2021
14.	Dr. Reema Mishra	Convener cum resource person of the E-student Enrichment Program on “Mathematics for Biologists” organized by Department of Botany Gargi College, University of Delhi, 09.07.2021 to 19.07.2021,	2021
15.	Dr. Reema Mishra	Resource person in the workshop for development of audio/video resource in Biology and Chemistry at Higher Secondary stage, organized by Department of Education in Science and Mathematics, NIE, NCERT, 21.09.2021.	2021
16.	Dr. Reema Mishra	Resource person in the workshop for the project ' Development of Learning Outcomes based resources under Road Map in Biology, Biochemistry at Higher Secondary Stage organized, Department of Education in Science and Mathematics, NIE, NCERT, 17-19.01.2022.	2022
17.	Dr. Aparajita Mohanty, Dr. Reema Mishra	Resource person in the workshop to review infographics developed based on Learning Outcomes in Biology at the Higher Secondary stage, DESM, NCERT, February 21-25, 2022.	2022
18.	Dr. Aparajita Mohanty, Dr. Reema Mishra	Resource person in the workshop to review infographics developed based on Learning Outcomes in Biology at the Higher Secondary stage to be held in DESM, NCERT, 15-17 March, 2022.	2022
19.	Dr. Anjana Rustagi	Invited talk on 'Regeneration and Genetic Transformation in Indian banana cultivars' at International conference on Advances and Innovations in Biotechnology and Allied Sciences organised by University Institute of Biotechnology, Chandigarh University in association with International Plant Propagators Society from 24th - 25th March 2022	2022



FACULTY ACADEMIC COLLABORATIONS (NATIONAL AND INTERNATIONAL)



University of Madrid, Spain: Collaboration with research group of Prof Juan Pedro Martin, Dept Biologia Vegetal

Research Area: Population genetics

Maharshi Dayanand University: Collaboration with research group of Dr. Sanjay Kumar

Research Area: Cyclic peptides

Maharshi Dayanand University: Collaboration with research group of Dr. Pooja Gulati

Research Area: Microbial Enzymes

Dept. of Plant Molecular Biology, DU: Collaboration with research group of Prof Sanjay Kapoor

Transcriptomics research

Jawaharlal Nehru University:

Transgenic plants

Objective evidence: Joint publications



FACULTY & CURRICULUM DEVELOPMENT



University of Delhi upgrades the curriculum / develops new curriculum
Faculty members are involved in curriculum development at all stages

4/23/22, 11:41 AM Gargi College Mail - NEP 2022 : course content

GARGI College

Dr. Aparajita Mohanty <aparajita.mohanty@gargi.du.ac.in>

NEP 2022 : course content
1 message

Head Botany <hobotany@du.ac.in> Sat, May 28, 2022 at 1:32 PM
To: Aparajita Mohanty <aparajita.gargi@gmail.com>, savindra@du.ac.in

Dear Colleagues,

You are requested to prepare the course content of the following DSC/SEC/GE paper along with a list of suggested readings:

Paper Title*	Category	Credits
Bioinformatics & Biostatistics	SEC	2

*can be modified later

Proposed team for making the course work is as follows:

S.No.	Name	College
1.	Dr. Aparajita Mohanty	Gargi
2.	Dr. Savindra	ZHC

Most recent:

Botany Course

development under

New Education Policy (NEP)

Total No. of teachers

involved in NEP: 4

Made syllabus for papers: 9

GARGI College

Dr. Aparajita Mohanty <aparajita.mohanty@gargi.du.ac.in>

Course content NEP 2022
1 message

Head Botany <hobotany@du.ac.in> Wed, Jun 22, 2022 at 5:23 PM
To: latessurjehani@du.ac.in, gauranureela@du.ac.in, Archana Singh <archanasingh@gmail.com>, archana singh <archanasingh@rcdu.ac.in>, Sunil Kumar Dhiman <skdhiman0206@gmail.com>, aparajita.mohanty@gargi.du.ac.in, mathur_botany@auobinda.du.ac.in

Dear Colleagues,

You are requested to prepare the course content (Theory & Practicals) of the following DSC/SEC/GE paper along with a list of suggested readings:

Paper Title*	Category	Credits
Advanced Tools and Analytical techniques in Plant Biology	DSC	2(T) + 2(P)

*can be modified later

Proposed team for making the course work is as follows:

S.No.	Name	College
1.	Dr. Tabassum Jehan	ZHDC
2.	Dr. Archana Singh	HRC
3.	Dr. Aparajita Mohanty	Gargi
4.	Dr. Reeta Kumari	DDUC
5.	Dr. Rashmi Mathur (Convener)	SAC
6.	Dr. Sunil Kumar Dhiman	KMC

Please, send the document latest by June 26, 2022 to the following email id: botany_nep22@gmail.com

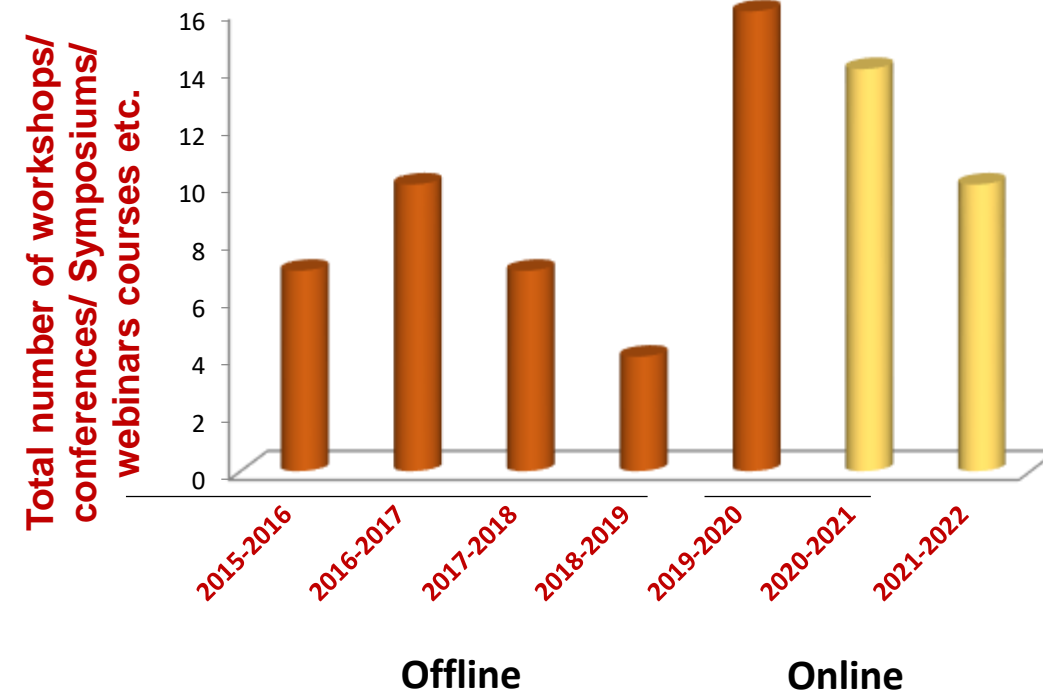
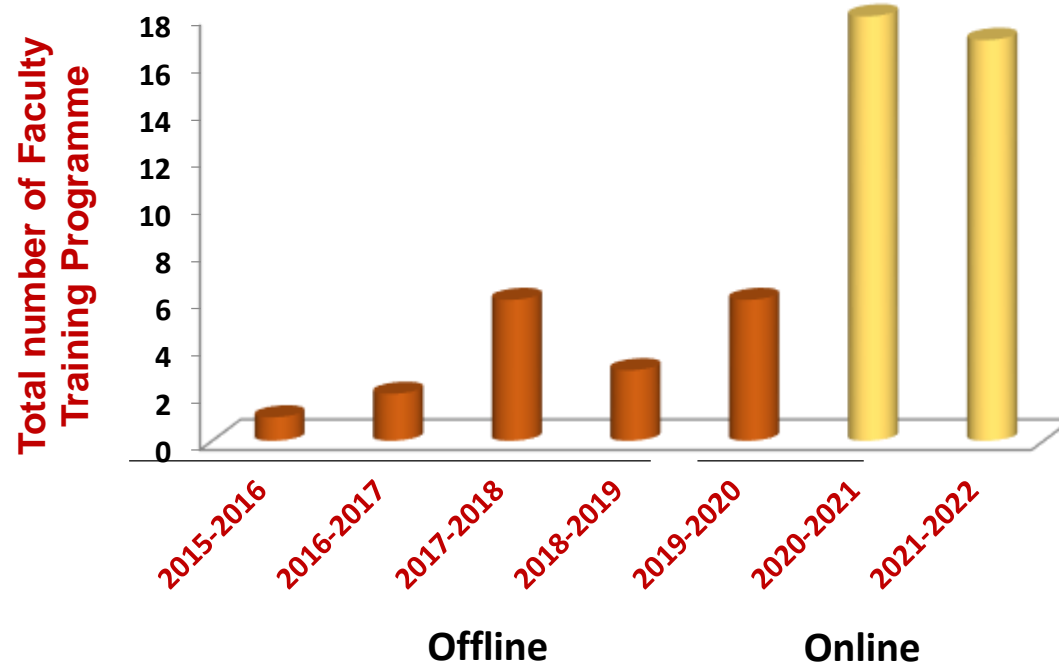
Looking forward to your cooperation.

Head of the Department

FACULTY TRAINING

Faculty Training Programme (Faculty Development Programme, Orientation course, Refresher course) attended by the faculty members

Workshops/ conferences/ Symposiums/ webinars/ courses attended by the faculty members





INSTITUTIONAL RESPONSIBILITY



IQAC

NAAC steering committee

**Gargi Pathfinder Award Committee
(Science)**

Eco-club committee

Equal Opportunity Cell

The Gargi College Media Cell

Medical committee

NIRF committee

**Bookshop/photostat/stationery
committee**

Prize committee

College magazine committee

Library committee

Garden committee

Northeast society

Alumni Association

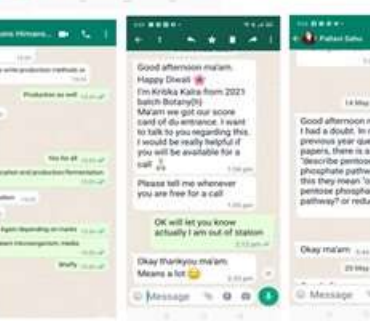
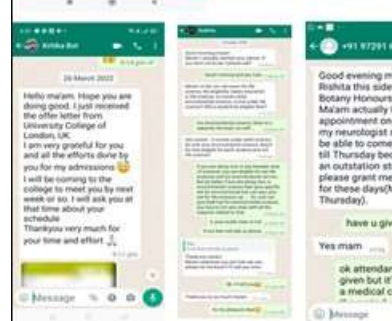
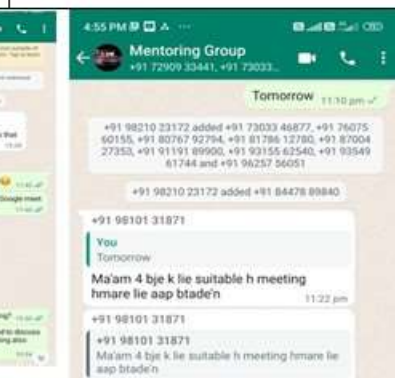
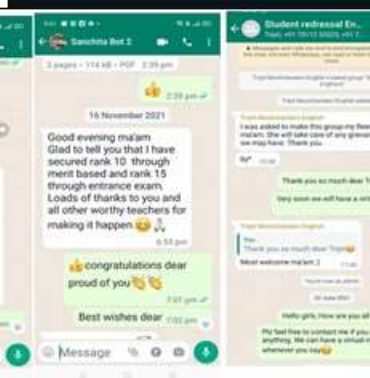
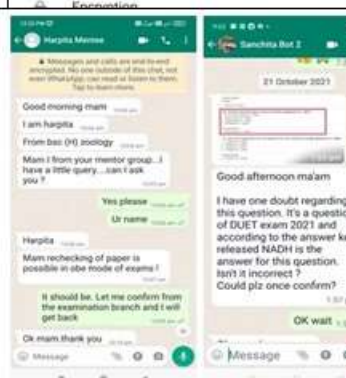
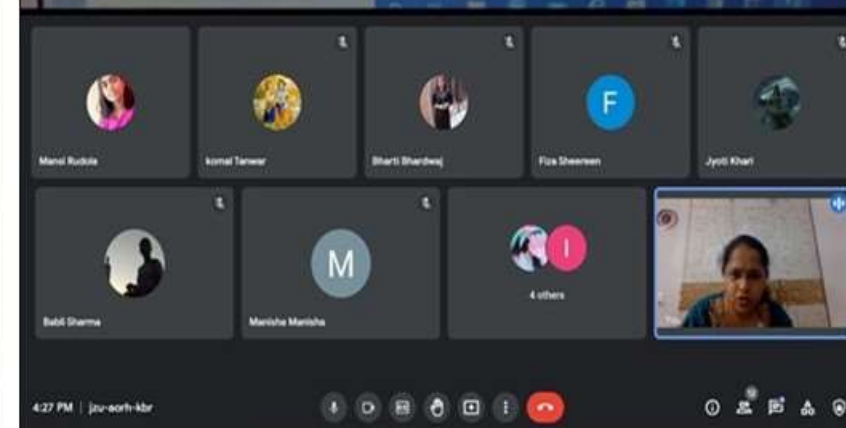
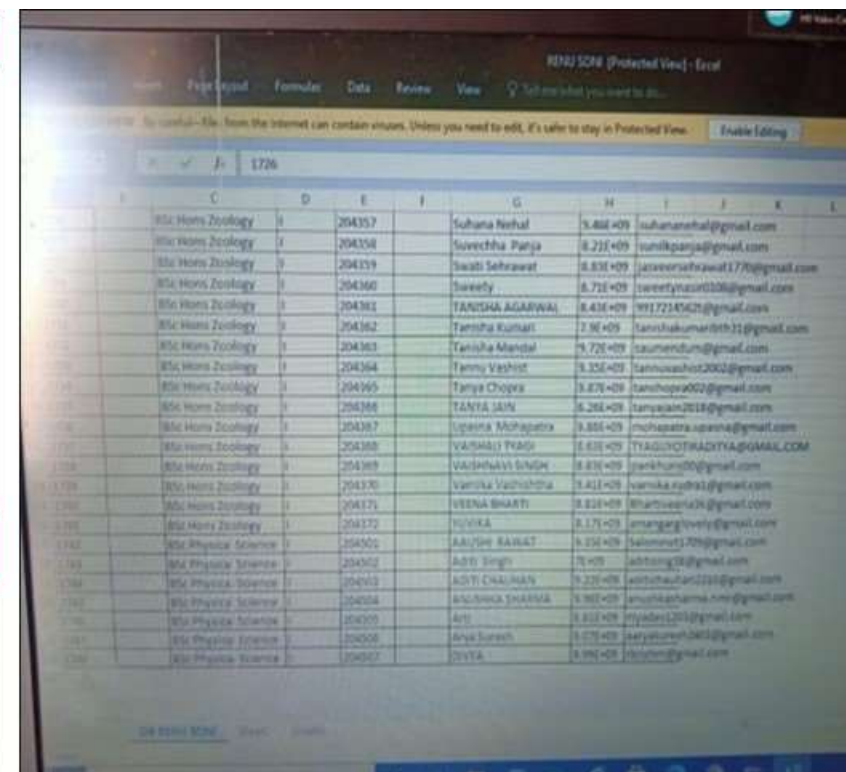
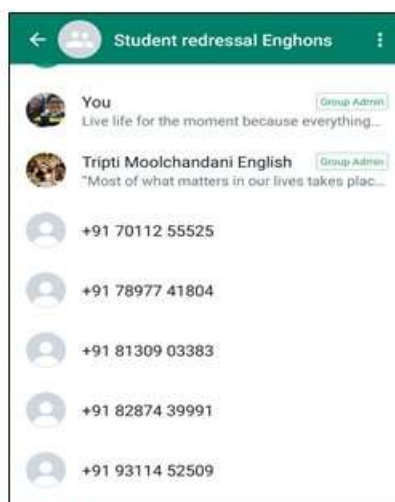
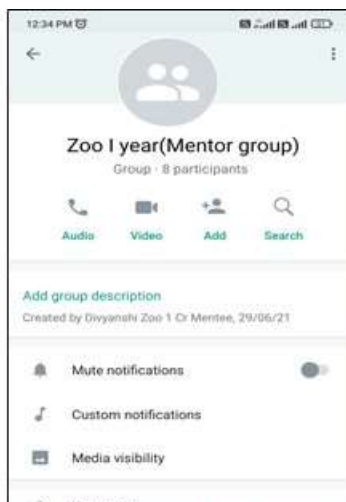
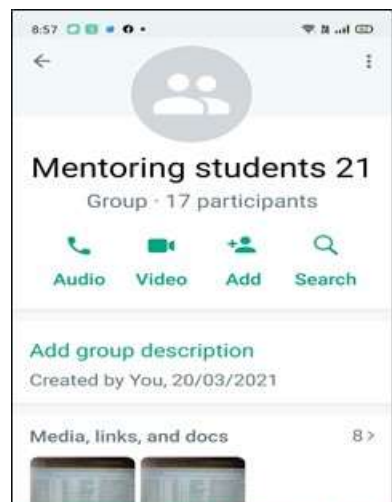
**Courses committee member-
Botany Department**

GB Member

**Foreign students welfare
committee**



MENTOR-MENTEE INTERACTION





Training course organized for the laboratory staff




Workshops / Summer Schools	Scientific Area (Target group)
Workshop June , 2018	Basic Skills in Computer Applications
Workshop December, 2019	Laboratory Methods and Techniques

Glimpses of workshop for lab staff

GARGI COLLEGE
(University of Delhi)

Under IQAC
Workshop Manual on
"Basic Skills in Computer Applications"
(June 07 and 08, 2018)

Organized by
Star College Scheme & Bioinformatics
Infrastructure Facility (DBT)



Patron: Dr. Promila Kumar
Convenor: Dr. Shashi Tyagi and Dr. Aparajita Mohanty
Members: Dr. Priyanka Pandey, Dr. Geeta,
Dr. Renu Soni, Dr. Reema Mishra



Department of Botany
(Under RIF, Gargi College)
in association with
IQAC, Gargi College
Organizes
Intercollege Workshop
On
"Laboratory Methods and Techniques"
(For Botany Lab staff)
10th December, 2019

Topics to be covered

- ♦ Safety Measures and Do's and Don'ts in the Lab.
- ♦ Preparation of Lab for Practical.
- ♦ Principle and Working of Equipment.
- ♦ Preparation of Solutions, Buffers and Stains.
- ♦ Preservation and Processing of Plant Material.
- ♦ Basics of Computers.



Patron: Dr. Promila Kumar
Convenor: Dr. Renu Soni
Co-Conveners: Dr. Geeta, Dr. Reema Mishra

Organizing Committee

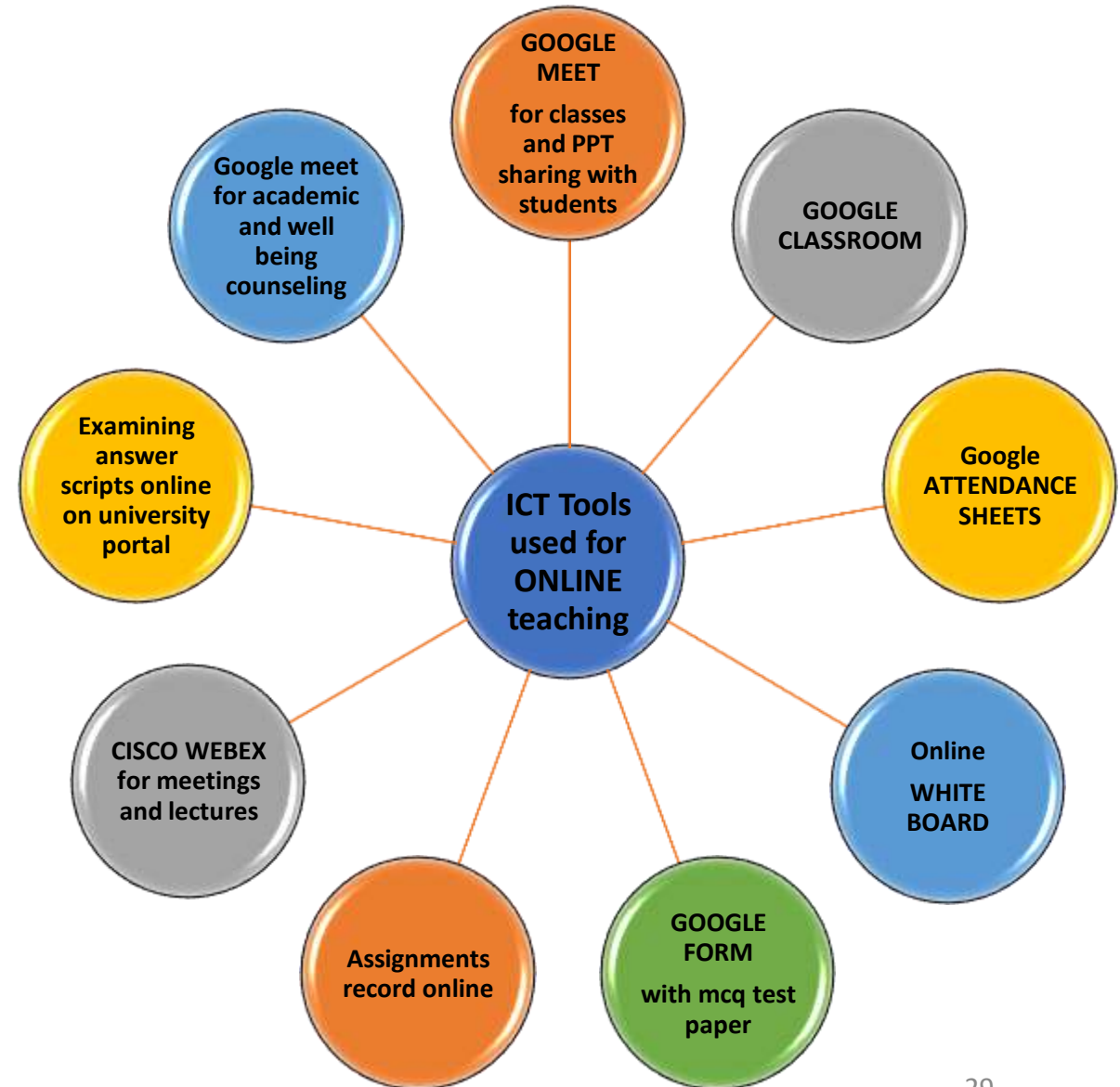
Dr. Geeta Mehra	Dr. Vera Kapi
Dr. Aparajita Mohanty	Ms. Ruchira Gupta
Dr. Priyanka Pandey	Dr. Garvita Singh
Dr. Laisna Judith	Dr. Neha Singh
Dr. Anjana Rustagi	Dr. Renu Puri
Dr. Gladys	Ms. Munni Sharma
Dr. Samira Chugh	Ms. Shashi Bala
Dr. Preeti Agarwal	Ms. Rajni

Registration fees: INR 200 (to be paid on the day of workshop)
Last date of registration: 25.11.2019
Registration link
<https://forms.gle/qBTWW997LgGcG236>



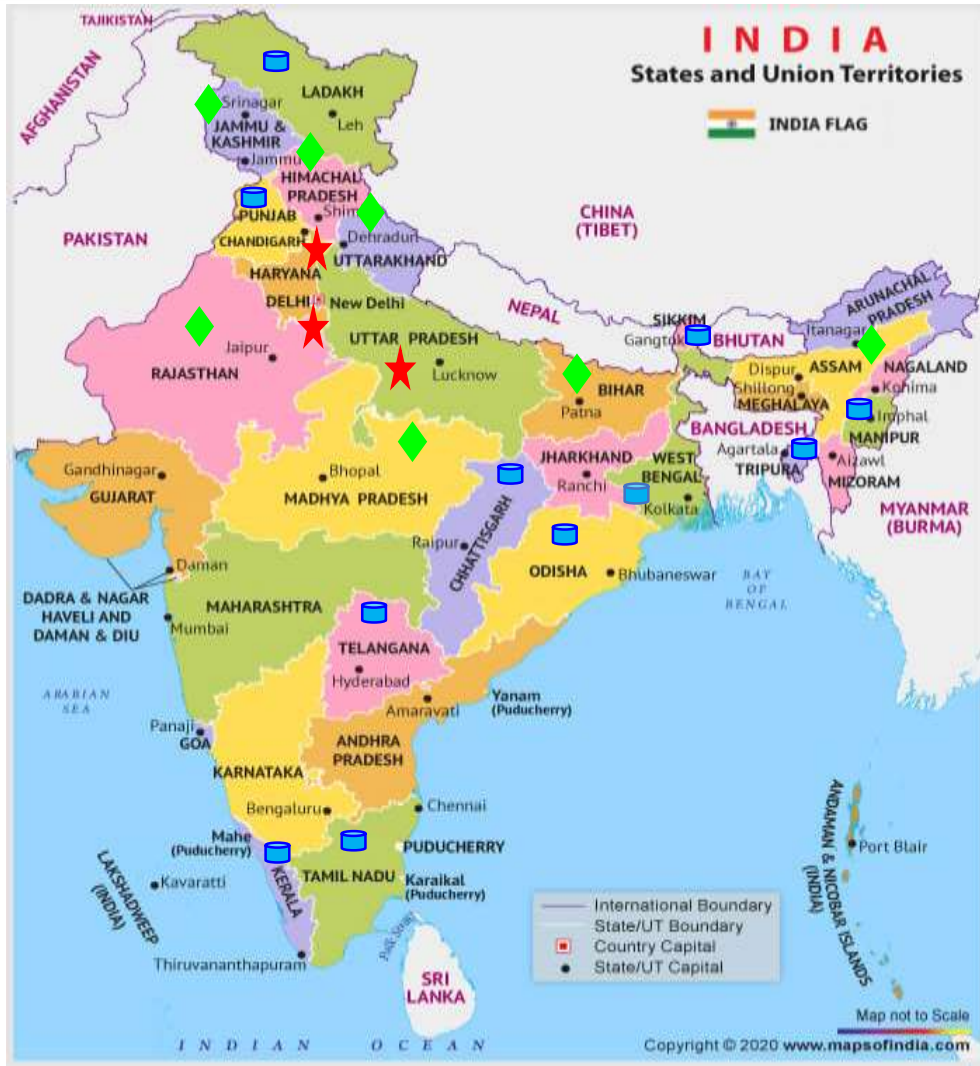
Teaching Methods adopted to improve student learning

- All our lecture theatres are ICT enabled to enhance the assimilation of the subject.
- Provide hands-on experience to students through workshops and summer training programmes.
- Organise field trips (virtual and physical), and visits to research institutes and industries.
- Frequent quizzes for students.
- Assignments and group discussions.
- Students seminars and presentations.
- All the teaching resources (including notes, ppt., reference videos and references used during online classes during pandemic) have been uploaded to google classroom.



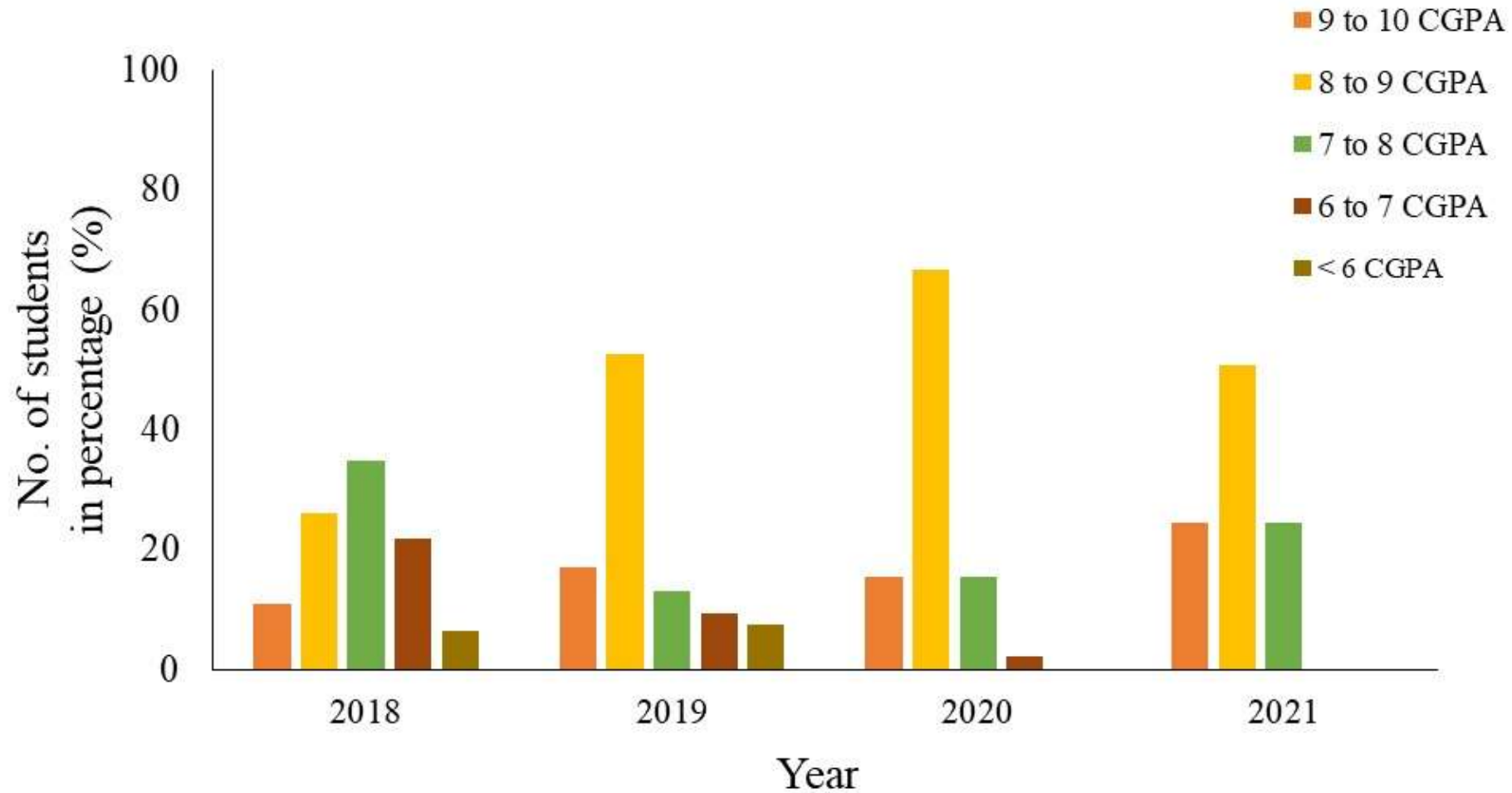
STUDENTS-CENTRIC INFORMATION

**Student diversity/Result analysis/
Awards/Collaborations/Publications/
Projects**



S. No.	States	Year and No. of Students					
		2016	2017	2018	2019	2020	2021
1	Arunachal Pradesh		2			2	
2	Assam	1	3	2	1		1
3	Bihar	1	3		2	1	3
4	Chhattisgarh			1			1
5	Delhi	13	10	12	12	12	8
6	Haryana	22	14	22	15	25	20
7	Himachal Pradesh	1	1	2	2	2	3
8	Jammu & Kashmir	3	3	3	3	3	3
9	Jharkhand		3	1		1	2
10	Kerala					1	1
11	Ladakh					1	1
12	Madhya Pradesh	1	1	1	2		3
13	Manipur		1	3			
14	Meghalaya	1					
15	Punjab	1	1				
16	Odisha	2				1	1
17	Rajasthan	3	3	2	1	3	6
18	Sikkim				1		
19	Tamil Nadu					1	
20	Telengna				1		
21	Tripura	1					1
22	Uttar Pradesh	17	13	10	16	12	7
23	Uttarakhand	2	2	2	1	1	3
24	West Bengal						1
	Total students	69	59	61	57	67	65
	Total states	14	13	12	12	14	17

RESULT ANALYSIS





STUDENTS ACHIEVEMENTS B.Sc. (H) BOTANY



Year	Class	University Rank	South Campus Rank	Students' names
2016-17	First Year	-	4 th	Anamika Saini
	Second Year	1 st	1 st	Avi Mendiratta
	Third Year	-	5 th	Nidhi Gupta
2017-18	First Year	5 th	1 st	Apoorva Vardhan, Minora Priya
	First Year	-	6 th	Sanchita
	Second Year	4 th	2 nd	Apoorva Vardhan
2018-19	Third Year	-	4 th	Asmita Saini, Samiksha Sharma
	First Year	10 th	4 th	Bisma Butool
	Second Year	4 th	4 th	Sakshi Dawer
2019-20	Third Year	5 th	1 st	Apoorva Vardhan, Minora Priya
	First Year	3 rd	1 st	Surbhi Mendiratta
	Second Year	1 st	1 st	Jayati Pandey, Akshita Sharma
2020-21	Third Year	-	5 th	Sanchita



Avi Mendiratta



Surbhi Mendiratta



Jayati Pandey



Akshita Sharma



Anamika Saini
Best All Round Student of B.Sc. (Hons.)
III year

STUDENTS ACHIEVEMENTS

2019-2020

Name of Student	Class	Award
Apoorva Vardhan	3rd year	Dr. Lalita Sehgal Memorial Award
Minora Priya	3rd year	Dr. Lalita Sehgal Memorial Award
Sakshi Dawer	2nd year	Sh F.C. Sehgal Memorial Award
Bisma Butool	1st year	Smt. Pratibha mukherjee memorial award

2020-2021

Name of Student	Class	Award
Sanchita	3rd year	Dr. Lalita Sehgal Memorial Award
Akshita Sharma	2nd year	Sh. F. C. Sehgal Memorial Award
Jayati Pandey	2nd year	Sh. F. C. Sehgal Memorial Award
Bisma Butool	1st year + 2nd year	Sh. Shiv Bhagwan Mundhara Memorial Scholarship
Surbhi Mendiratta	1st year	Pratibha Mukherjee Memorial Award

Co-Scholastic Achievements

2021-2022

Name of Participant	Class	Competition	Position Awarded
Nasra	3rd year	Photography competition	1st position
Shephali gupta	3rd year	Specimen sketching	2nd position
Riyanshi Joshi	3rd year	Poster making. Topic-Save ozone save life	1st position
Pallavi Sahu	3rd year	National Level Wildlife Photography Competition	2nd position
Jayati Pandey	3rd year	Poetry competition	1st position
Shreya Singh	3rd year	Essay Writing	1st position
		Collage Making	3rd position
		Poetry competition	2nd position
		Quiz Competition	3rd position
Divya Mangla	3rd year	Quiz Competition	2nd position
Shubhi Srivastava	2nd year	Poster Making Competition in Gargi Olympiad	3rd position
		Wildlife Quiz Competition	1st position
		Photography competition	2nd position
Tamanna Sharma	2nd year	E-Poster making competition	2nd position
		Paper Presentation Competition	4th position
		Wildlife Quiz Competition	2nd position
		Ozone Day Poster Making Competition	1st position
		Info graph poster making competition	3rd position
Ananya Chamola	2nd year	IntellectStormer	1st position
		Mismatched	2nd position
		Kalakriti- Poetry composition Competition	2nd position
Ankita Kumari Gupta	2nd year	Poster making competition	3rd position
		Zenith Poster/Logo Making Competition	1st position
Yashasvi Saini	2nd year	Kalakriti Inter College Poster Making Competiton	1st position



FINANCIAL ASSISTANCE AND SCHOLARSHIPS (2016-21)

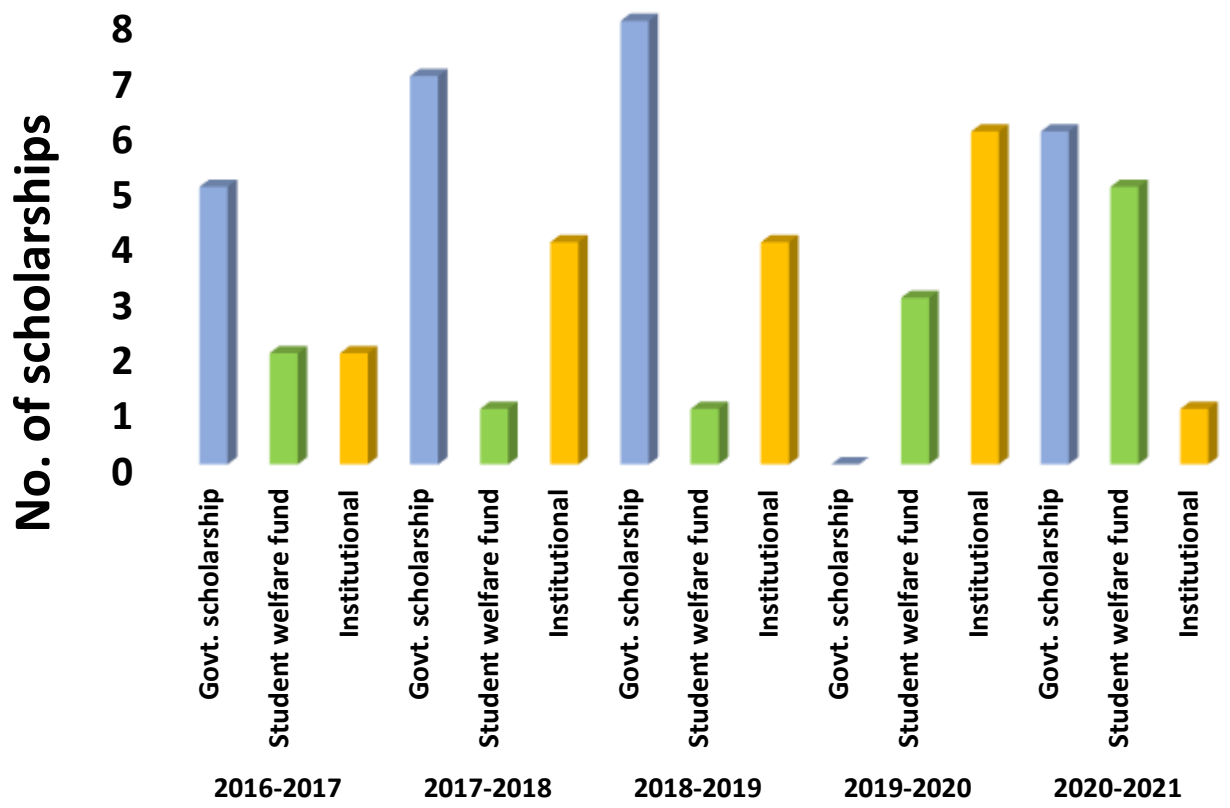


Government scholarship (NSP and INSPIRE)- 18 students

Student welfare fund - 12 students

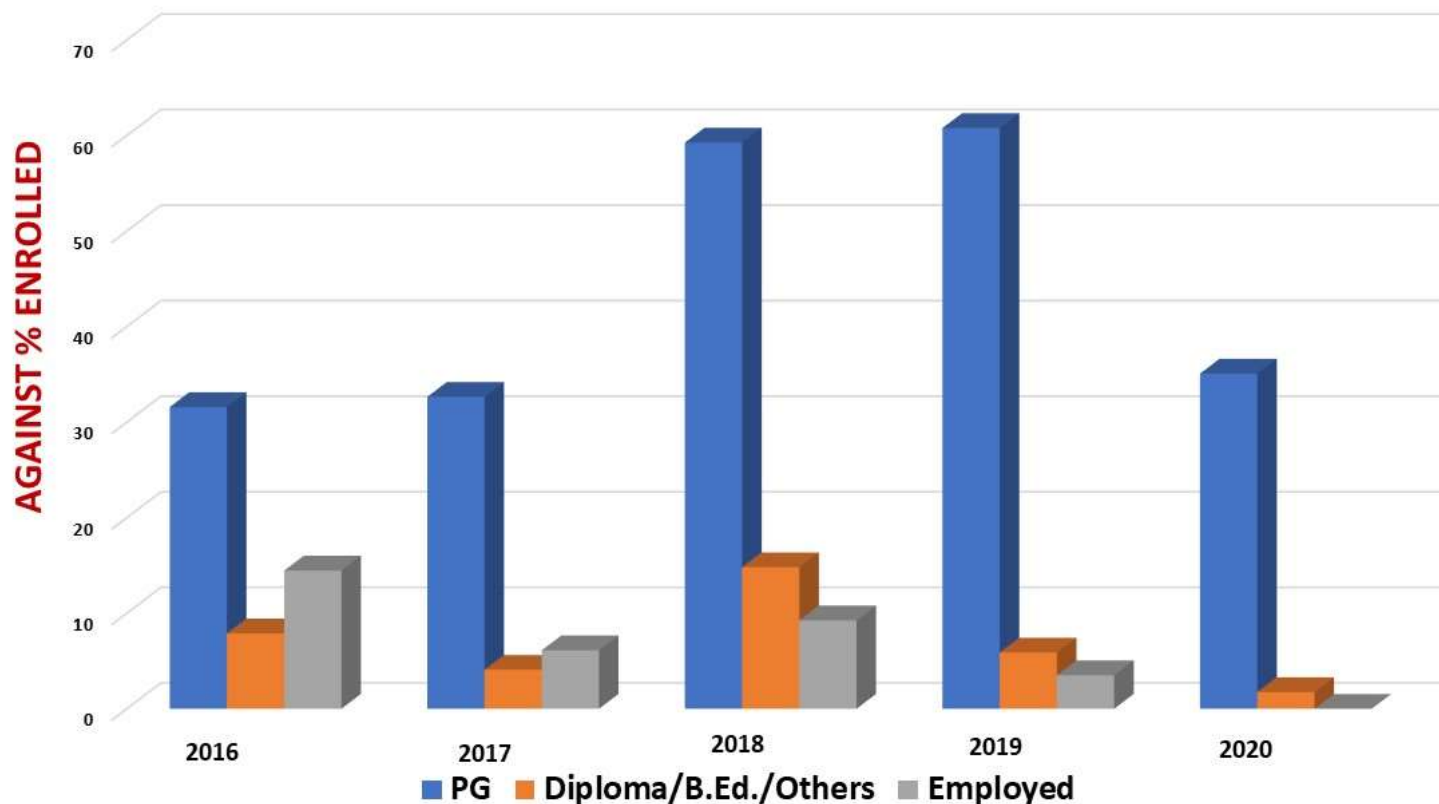
Institutional (Gargi college) – 11 students

Scholarships (2016-2021)



STUDENT PROGRESSION

STUDENT PROGRESSION 2016-2020



List of PG Institutes

- Ambedkar University, Delhi
- Christ University
- IBAB, Bangalore
- University of Miskolc
- JNU
- Banaras Hindu University
- University of Delhi
- Indian Institute of Forest Management
- ICFAI Business School, Hyderabad
- Aligarh Muslim University
- Department of Botany DU
- Fergusson College, SPPU
- TERI School of Advanced Studies
- Department of Botany, Panjab University Chandigarh
- Amity Institute of Horticulture Sciences and Research
- The Energy And Resources Institute, School Of Advanced Studies
- California State University Northridge
- KU Leuven, Belgium
- University of Padua, Italy

COLLABORATION BETWEEN GARGI COLLEGE AND NATIONAL INSTITUTE OF IMMUNOLOGY (NII) SCIENCE SETU PROGRAM- A DBT initiative

- Visits to advanced laboratories
- Internships at NII
- Interactions with Scientists
- Talks by scientists


On National Science Day (28th February 2022), NII invited students of the Department of Botany, Gargi College for an interactive session with young researchers and scientists





IN-HOUSE COLLABORATION

Online course to enrich students with new tools and techniques in sciences



Department of Botany
in collaboration with
Department of Mathematics
Gargi College
University of Delhi
Under the aegis of IQAC and BIF, Gargi College
is organizing an online

Student Enrichment Program
on
Mathematics for Biologists

for
B.Sc. (Program) Life Science students of
Gargi College

July 09, 2021 - July 19, 2021

- Registration is free and on first-cum-first-serve basis. E-certificate will be given to all the participants on the basis of attendance and assignment.
- Seats are limited. Kindly register at the earliest.


Link for Registration: <https://forms.gle/BWWLYIXA1uiyNoCT6>

Broad Course Structure

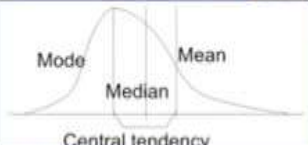
- Measures of central tendency and dispersion
- Correlation analysis
- Test of significance
- Basics of Excel, R and SPSS

Patron: Dr. Promila Kumar

Conveners: Ms. Arshmeet Kaur Dr. Anjana Rustagi
Dr. Geeta Dr. Reema Mishra




DATA




Mode Median Mean


Central tendency



Standard Deviation



Arshmeet Kaur is presenting




MATHEMATICS IN BIOLOGY

- ♦ Enzyme Kinetics: Michaelis-Menten Curve, Enzyme
- ♦ Physiology: How big can a cell be? Absorption Vs consumption rates
- ♦ Ecology: Spacing in a school of fish
- ♦ Epidemiology: Outbreak of diseases and mathematical models for prediction
- ♦ Evolution: Hardy-Weinberg equilibrium
- ♦ Finance: Series at random
- ♦ Probability: Mendelian crosses

ARSHMEET KAUR
Department of Mathematics
Gargi College

REC



Arshmeet Kaur, Dr. Anjana Rustagi, Dr. Geeta, Promila Kumar, Kajal Dubey, Anjali Maurya, Sweta, 54 others, You, Ishita Dubey, Shivani Yadav, Manpreet Kaur, Gargi Rapoor, Harshita Agrawal, Arshmeet Kaur, Dr. Geeta, Dr. Reema Mishra, Anshu Priya, Khushi Choudhary, Dr. Anjana Rustagi, Shivani Solanki, Manta Rapoor, Vikas Marubhar Khari, Mariya Khan, Roshita Maurya, Kirti Gautam, Sweta, manta rapoor, Anshu Yadav, Bhavika Chhabani, Shashi Shita, Kajal Dubey, Ritika Yadav, Divya Bagaria, 20 others, You

1:10 PM | SEP2021 Inaugural Lecture

2:47 PM | Basics of R and SPSS

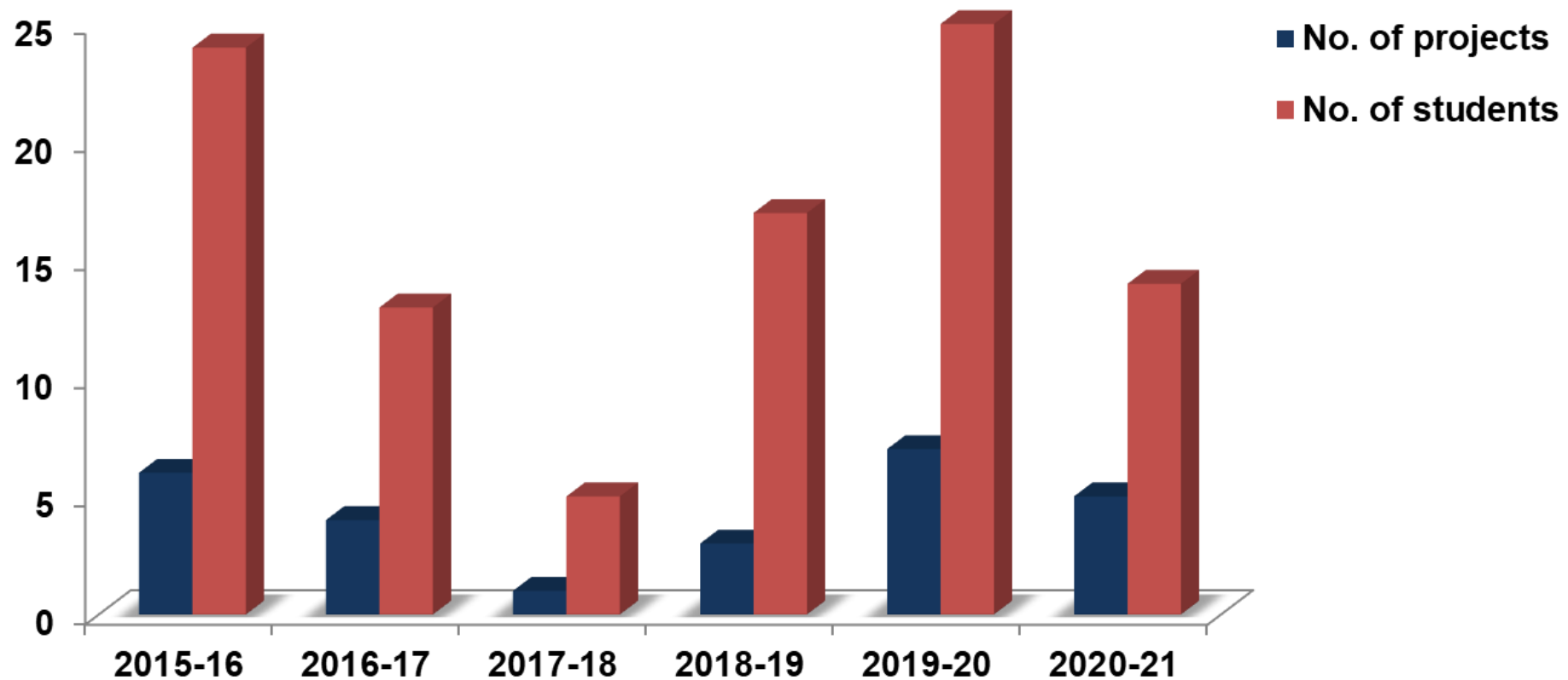
STUDENT RESEARCH & ENRICHMENT



STUDENTS' PROJECT



Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
PG Dissertations				1		3





UG/PG Projects 2016-2022



In silico analysis of YUCCA gene family of *Oryza sativa*

HIMANSHI
HARSHITA AGARWAL
ISHITA DEBNATH
BSc. (Prog.) Life Sciences, II year

SHORT TERM PROJECT UNDER BIF
(2020-2021)

GARGI COLLEGE
UNIVERSITY OF DELHI
SIRI FORT ROAD, NEW
DELHI-110049

Title: In silico analysis of YUCCA gene family of *Oryza sativa*
Students: Himanshi, Harshita Agarwal, Ishita Debnath
Mentors: Dr. Aparajita Mohanty and Dr. Reema Mishra

**In Silico Analysis of
BRASSINOSTEROID INSENSITIVE 1
(OsBRI1) Gene Family of Rice**

SHORT TERM PROJECT UNDER BIF
(2019-2020)

GARGI COLLEGE
UNIVERSITY OF DELHI
SIRI FORT ROAD, NEW
DELHI-110049

Students: Dr. Gauri, Dr. Reema Mishra
Mentors: Dr. Gauri and Dr. Reema Mishra

**Review on Horticultural
Geographical Indications of India:
Botanical aspect**

A project report submitted under
"Star College Scheme"
Gargi College
University of Delhi

(Project Mentors) Submitted by:
Dr. Reema Mishra and Dr. Gauri Singh
Eek Sharma,
Sakshi Sharma,
Gargi College, Boney House, 1st year
Bhaskar Sharma (Bhaskar Sharma, Boney House, 1st year)

Morphological, physiological and biochemical aspects of
Azadirachta indica and *Ficus religiosa* plants grown at three
different sites

A project report submitted under
"Star College Scheme"
Gargi College
University of Delhi

Submitted by:
Dr. Reema Mishra, Dr. Gauri Singh, Dr. Reema Singh
Mentors:
Dr. Reema Mishra, Dr. Gauri Singh, Dr. Reema Singh

**UNDERSTANDING THE ROLE OF
PHOTOSYNTHETIC AND SUNSCREEN
PIGMENTS IN ANABAENA SP. UNDER UV-B
STRESS**

Pathfinder Project Report
Submitted under UGC Scheme
GARGI COLLEGE, UNIVERSITY OF DELHI
(2017)

Submitted by:
Anshika Singh, Anshika Singh, Anshika Singh
Mentors:
Dr. Gauri Singh

**Amplification and sequence analysis of a flower
specific promoter (*OsLPS4*) from rice**

SHORT TERM PROJECT UNDER
"PATHFINDER PROJECT"
2016-17

GARGI COLLEGE,
UNIVERSITY OF DELHI
SIRI FORT ROAD, NEW DELHI-110049

Mentors: Dr. Reema Mishra, Dr. Gauri Singh
Students: Chetankumar, Divya Kataria, Bhavani Kataria

**Assessment of the effects of exogenous application of 24-
EBL on the biotic stress tolerance potential on *Brassica
juncea* cv. Varuna (Indian mustard)**

DISSERTATION
Submitted by
RAHIMI CHOUDHARY
Under the supervision of
Dr. JYENDRA KUMAR SAINI
(Assistant Professor, Department of Microbiology, Central University of Haryana)
AND
Dr. ANJANA RUSTAGI
(Assistant Professor, Department of Botany, Gargi College, University of Delhi)

In the partial fulfillment for the award of the degree of
MASTER OF SCIENCE
in
MICROBIOLOGY
SCHOOL OF INTERDISCIPLINARY AND APPLIED SCIENCES
CENTRAL UNIVERSITY OF HARYANA,
MAHENDERGARH-HARYANA
JUNE, 2021

**Bioinformatics analysis of cyclic mini-proteins:
Cyclotides and knottins in Fabaceae**

SUBMITTED BY:
Sunanda Gautam
M.Sc. Biotechnology

SUBMITTED TO:
DR. APARAJITA MOHANTY
Assistant Professor
DR. REEMA MISHRA
Assistant Professor

BIOINFORMATICS INFRASTRUCTURE FACILITY GARGI
COLLEGE, UNIVERSITY OF DELHI

**IN SILICO ANALYSIS AND SUBSEQUENT SCREENING
OF CYCLOTIDES FOR THEIR PUTATIVE ROLE AS
BIOPESTICIDES**

DISSERTATION PROJECT
Submitted to
Amity Institute of Biotechnology, Noida, Uttar Pradesh
MASTER OF SCIENCE IN
HORTICULTURE (POST HARVEST TECHNOLOGY)
Submitted by
Ms. TAMMINENI RAJITHA

Under The Guidance of
DR. APARAJITA MOHANTY
Assistant Professor
DR. REEMA MISHRA
Assistant Professor

BIOINFORMATICS INFRASTRUCTURE FACILITY GARGI
COLLEGE, UNIVERSITY OF DELHI

**Genome-wide identification of *Asparaginyl Endopeptidases*
(*Vacuolar Processing Enzymes*) genes in *Oryza sativa*, *Sorghum
bicolor* and *Zea mays***

DISSERTATION PROJECT
Submitted to
Amity Institute of Biotechnology, Noida, Uttar Pradesh
MASTER OF SCIENCE IN
BIOTECHNOLOGY
Submitted by
Ms. Viola Raina

Under The Guidance of
DR. APARAJITA MOHANTY
Assistant Professor
DR. REEMA MISHRA
Assistant Professor

BIOINFORMATICS INFRASTRUCTURE FACILITY GARGI
COLLEGE, UNIVERSITY OF DELHI



Student Publications (2021-22)



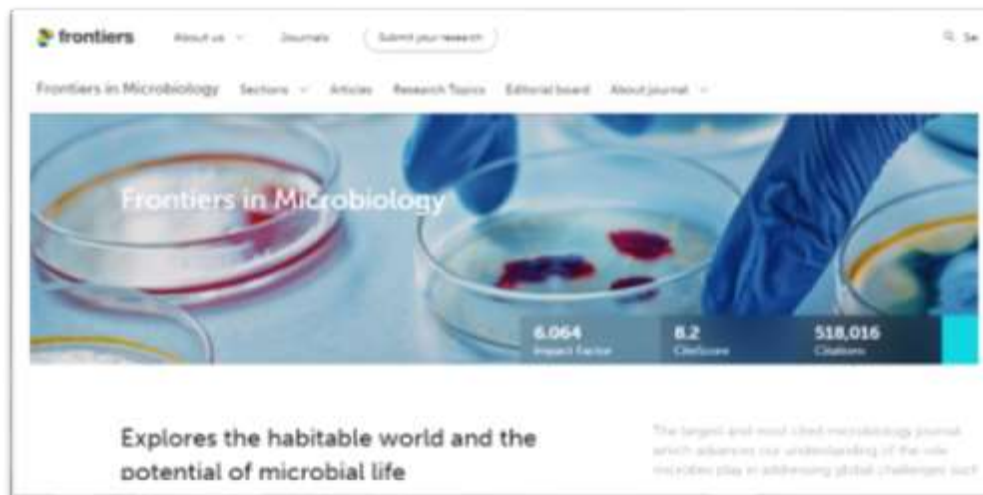
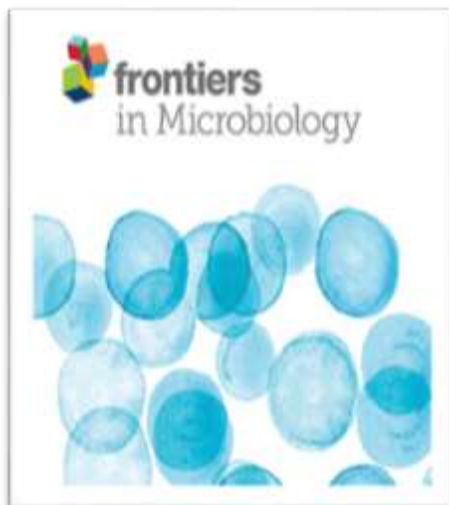
- **Shambhawi, Srivastava, S., Mishra, A., Mishra, R., & Mohanty, A. (2022).** Biopesticidal potential of cyclotides: an insight. *Phytochemistry Reviews*, 1-21. IF: 7.47
- **Agarwal, P., Soni, R., Kaur, P., Madan, A., Mishra, R., Pandey, J., Singh, S. and Singh, G., 2022.** Cyanobacteria as a Promising Alternative for Sustainable Environment: Synthesis of Biofuel and Biodegradable Plastics. *Frontiers in Microbiology*, p.2412. IF: 6.064
- **Singh, G., Sahu, P., Sharma, A., Butool, B., Sarkar, R., Mishra, R., & Soni, R. (2022).** Public Awareness About The Usage Of Medicinal Herbs Found In The Kitchen And Their Potential Against Covid-19 Disease. *Plant Archives*, 22(1), 288-296.
- **Zabin, D., Shekher, A., Yadav, M., Soni, R., and Singh G., (2022).** Synthesis and Characterization of Silver Nanoparticles using Leaf Extracts of Medicinal plants and its Impact on *Anabaena doliolum*. *Journal of Scientific Research ,BHU*, 66(1), 208-223.
- **Bharadwaj, B., Sahu, K., Kumari, N., Sharma, S., Tamanna, Geeta, Mishra, R., & Soni, R. (2021).** Morphological, physiological and biochemical facets of *Ricinus communis* and *Ficus racemosa* plants grown at three different sites. *HANS SHODH SUDHA*, 1, 50–63.
- **Sharma, K., Kumar, S., Chugh, S., Soni, R. (2021)** Impact of Covid-19 Pandemic on Biotic and Abiotic Factors of the Environment. *Akademios*.



Student Publications (2021-22)



Impact Factor: 7.47



Impact Factor: 6.064





PATHFINDER AWARDS WINNERS



2016

Title- Screening of secondary metabolites in some selected plants and evaluation of their anti-oxidant potential

Students: Sonia, Sandhya Yadav, Anshu Chitkara

Mentor : Dr. Kiran Prabha

2017

Title- Understanding the Role of Photosynthetic & Sunscreen Pigments in Anabaena sp. under UV B Stress.

Students: Ankita, Rozy Yadav, Shivani Sharma

Mentor : Dr. Garvita Singh



2022

Title- Comparative analysis of TP53 gene encoding for tumor protein p53 in different organisms to understand the molecular mechanism of cancer resistance

Student: Yashasvi Saini

Mentor : Dr. Geeta




WORKSHOPS/WEBINARS CONDUCTED

Workshops / Summer Schools	Scientific Area (Target group)	No. of Participants
August 30-31, 2017	Workshop on Analytical Techniques in Biochemistry	30
September 26, 2017	Workshop on Why to grow and how to multiply plants	50
January 9, 2019	Workshop on Adulteration in Food and Preparation of Herbal Cosmetics	80
May 11, 2020	National webinar on Virtual classes Tools: Google classroom, Google meet and you tube	150
July 19, 2021	Webinar on Floral Gardening Skills	105
May 18, 2022	Webinar on Diversity, Perception and Awareness in Plants	78

GLIMPSES OF WORKSHOPS/WEBINARS CONDUCTED

Workshop on ANALYTICAL TECHNIQUES IN BIOCHEMISTRY
(August 30th and 31st, 2017)

STAR COLLEGE SCHEME, DEPARTMENT OF BIOCHEMISTRY




ORGANIZED BY
DEPARTMENT OF BOTANY, GARGI COLLEGE
UNIVERSITY OF DELHI

Venue: Lab 1 (Department of Botany)
Time: 9:00 a.m.

Patron: Dr. Fromila Kumar
Coordinator: Dr. Shashi Tyagi
Convener: Dr. Renu Soni
Organizing Committee: Dr. Gita Mehra, Dr. Reema Mehra, Dr. Geeta Prakash, Dr. Arpita Rastogi, Dr. Samia Chugh

Department of Botany
in association with
Gargi College
Organizes
Skill Enhancement Workshop
on
"Why to Grow and How to Multiply Plants"



Date: 24th September, 2017
Venue: Botany Lab 1
Time: Registration 8:45 am
Inauguration 9:15 am

Patron: Dr. Fromila Kumar
Coordinator: Dr. Shashi Tyagi
Convener: Dr. Renu Soni
Organizing Committee: Dr. Gita Mehra, Dr. Reema Mehra, Dr. Geeta Prakash, Dr. Arpita Rastogi, Dr. Samia Chugh

GARGI COLLEGE
(University of Delhi)

Under IQAC
Workshop Manual on
"Basic Skills in Computer Applications"
(June 07 and 08, 2018)

Organized by
Star College Scheme & Bioinformatics
Infrastructure Facility (DBT)



Patron: Dr. Fromila Kumar
Convener: Dr. Shashi Tyagi and Dr. Aparajita Mohanty
Members: Dr. Priyanka Pandey, Dr. Geeta, Dr. Renu Soni, Dr. Reema Mishra

WORKSHOPS & WEBINARS (2016-22)

WORKSHOPS

Workshop on ANALYTICAL TECHNIQUES IN BIOCHEMISTRY (August 30th and 31st, 2017)

Participants: 30

Workshop on Why to grow and how to multiply plants (September 24, 2017)

Participants: 50

Workshop on Adulteration in Food and Preparation of Herbal Cosmetics (January 5, 2019)

Participants: 80

WEBINAR

National webinar on Virtual classes Tools: Google classroom, Google meet and you tube (May 11, 2020)


Participants: 150

Feedback

Glances



AVNI THE ECO CLUB
Gargi College, University of Delhi in association with
Star College Scheme
Lecture cum Demonstration Workshop
On
"Adulteration in Food and Preparation of Herbal Cosmetics"



Date: January 19, 2019
Time: 12.30 pm
Venue: Botany Lab

Patron: Dr. Fromila Kumar
Convener: Dr. Shashi Tyagi
Co-Conveners: Dr. Renu Soni, Dr. Geeta, Dr. Reema Mehra
Organizing Committee: Dr. Geeta Mehra, Dr. Manisha Singh, Dr. Taruna Singh, Dr. Himani Chaudhan, Dr. Nisha Bani

Department of Botany
Gargi College
University of Delhi
is organizing a webinar on

Virtual Classes Tools
Google Classroom, Google Meet and YouTube



Dr. Arpita Kaul, Assistant Professor
Sri Venkateswara College
University of Delhi

Date: May 11, 2020
Time: 11:00 am to 01:30 pm
Via GoToMeeting

Patron: Dr. Fromila Kumar
Convener: Dr. Renu Soni
Organizing Committee: Botany Department, Gargi College, Mr. Anuj Bhardwaj (STA, Computer)

Registration link: <https://forms.gle/CNEdw3n3c9G18P8>
There is no registration fees

GARGI COLLEGE
University of Delhi
GARDEN COMMITTEE
IN ASSOCIATION WITH
DEPARTMENT OF BOTANY
ORGANIZES
A WEBINAR ON THEME
FLORAL GARDENING SKILLS
"Bring Home Nature And Get Soulfully Connected"



Speaker: Dr. Karunaa Paul Gupta
(Nature Enthusiast, Garden Architect & 3D Ceramic Artist)
Alumna of Gargi College

July 19, 2021 | Cisco Webex | 11:00am

Patron: Prof. Fromila Kumar
Convener: Dr. Renu Soni
Technical Support: Mr. Anuj Bhardwaj



ADD ON/ CERTIFICATE PROGRAMS OFFERED



S. No.	Add -on/Certificate programs	Year	No. of Students	Duration
1.	Role of Biotechnology in Environment Management	2015-16	52	One Academic Session
2.	E-Student Enrichment Program "Multidisciplinary Facets of Science"	2019-20	76	21 days
3.	Plant Systematics: Classical to Molecular Approach	2020-21	459	6 days
4.	Eco-friendly Agriculture	2021-22	27	1 semester
5.	E-Student Enrichment Program "Mathematics for Biologists"	2021-22	72	11 days



ONLINE ADD-ON COURSE

ECO-FRIENDLY AGRICULTURE

October 2021 onwards



INAUGURAL LECTURE

Dr. Gita Mathur (Retd.) Associate Professor, Department of Botany, Garg College





ECO-FRIENDLY AGRICULTURE AND BIOFERTILIZERS

Dr. Gita Mathur (Retd.) Associate Professor, Department of Botany, Garg College



DEFINITION AND CONCEPT OF ORGANIC FARMING



Dr. Yashvir S Shrivastava
Principal Scientist and Former Professor, Division of Agronomy, IARI Pusa



BIOFERTILIZERS A NEW TOOL FOR SUSTAINABLE DEVELOPMENT

Dr. Ravita Khosla (Retd.) Associate Professor, Department of Botany, Zubei Hattaji Delhi College



Students Enrolled: 28



PRODUCTIVITY, QUALITY AND SAFETY OF ORGANIC PRODUCTS

Dr. Dinesh Kumar
Principal Scientist, Division of Agronomy, IARI Pusa



PUSA KRISHI VIGYAN MELA VISIT



MY WASTE, MY RESPONSIBILITY: REGENERATIVE LIFESTYLE WORKSHOP

Ms Renu Mirhas
Creator: PURE WASH & Ranju compostbin
Founder: Hack Kachra Kranti, WoW Delhi & Shield Citizen's Initiative







VERMICOMPOSTING: AN INTERACTIVE ONLINE WORKSHOP

Ms Vani Murthy and Mr Vinu Sri Iyengar
Founder and Member, SWMT



VERMICOMPOSTING: A STEP TOWARDS ORGANIC FARMING

Dr. Jisha Prasad (Retd.) Associate Professor, Department of Botany, Garg College



ORGANIC FOOD AND PRODUCTS

Dr. Shashi Tyagi
Former Principal and Retd. Associate Professor, Department of Botany, Garg College





Ms Vani Murthy and Mr Vinu Sri Iyengar
Founder and Member, SWMT





Dr. Gita Mathur (Retd.) Associate Professor, Department of Botany, Garg College





Dr. Dinesh Kumar
Principal Scientist, Division of Agronomy, IARI Pusa





Dr. Ravita Khosla (Retd.) Associate Professor, Department of Botany, Zubei Hattaji Delhi College





Dr. Gita Mathur (Retd.) Associate Professor, Department of Botany, Garg College





Dr. Dinesh Kumar
Principal Scientist, Division of Agronomy, IARI Pusa





Dr. Ravita Khosla (Retd.) Associate Professor, Department of Botany, Zubei Hattaji Delhi College





Dr. Gita Mathur (Retd.) Associate Professor, Department of Botany, Garg College





Dr. Dinesh Kumar
Principal Scientist, Division of Agronomy, IARI Pusa



STUDENT FEEDBACK

Dr. Gita Mathur (Retd.) Associate Professor, Department of Botany, Garg College

Dr. Ravita Khosla (Retd.) Associate Professor, Department of Botany, Zubei Hattaji Delhi College

Dr. Dinesh Kumar
Principal Scientist, Division of Agronomy, IARI Pusa

Dr. Shashi Tyagi
Former Principal and Retd. Associate Professor, Department of Botany, Garg College

Ms Vani Murthy and Mr Vinu Sri Iyengar
Founder and Member, SWMT

Ms Renu Mirhas
Creator: PURE WASH & Ranju compostbin
Founder: Hack Kachra Kranti, WoW Delhi & Shield Citizen's Initiative

GLIMPSES OF COURSES

Add-on Course on Role of Biotechnology in Environment Management Under DBT- Star College Scheme (2016-17)

The Department of Botany is always intended to widen the roots of knowledge among the students. With the objective of providing extra knowledge to the students, the department introduced an Add-on course on Role of Biotechnology in Environment Management under DBT-star college scheme (2016-17). Students from all the science departments of the college were enrolled in this course. The course included lectures by various eminent speakers and field trips for better learning, thus, fulfilling the motive of developing potential for excellence.

- Special Highlights**
- Major causes and associated remedies for the air pollution and recent monitoring systems along with bio-filters, bio-scrubbers etc. together with knowledge about the Sustainable Development Goal (SDG), climate adaptation, mitigation, biodiesel, bio-refinery, bioplastic, biofuel etc.
 - Recovery of degraded ecosystem by the help of biotechnological means such as phytoremediation, ecological restoration technologies, millennium ecosystem program, climate change, pollution, ecosystem contamination, habitat loss and ecosystem services such as regulating services, cultural services and various supporting services.
 - Proper waste management and various aspects of role of biotechnology in environmental management.

Glimpse of Lectures Conducted During Add-on Course



Field Trip was Organized for the Students of the Add-on Course to Yamuna Biodiversity Park and CRDT, IIT Delhi



E-Student Enrichment Program 'Multidisciplinary Facets of Science' (2019-20)

Total Number of Participants: 76

Glimpse of the Sessions Conducted During 21 Days of the SEP 2019-20

Details of the Speakers and Sessions				
Speaker	Designation	Title	Date	
Dr. Shashi Tyagi	Former Principal and Associate Professor, Gargi College, University of Delhi	Student Enrichment Program and Curriculum Vision	July 08, 2020	
Dr. Ashwini Pandey	Senior Prof., Department of Plant Molecular Biology, South Campus, University of Delhi	Circular RNA: Biogenesis and Functions	July 16, 2020	
Dr. Mahabubuddin Akbar	ETEST Learning Networks Lead, Allotment Science Center, UAE	Engaging and Inspiring Young People in Science	July 22, 2020	
Dr. Ramesh Prakash	Former Associate Professor, Gargi College, University of Delhi	Learning About the Current Pandemic: An Overview of SARS-CoV-2	July 27, 2020	
Dr. Gita Mathur	Former Associate Professor, Gargi College, University of Delhi	Developing Synthetic Tissues with Lessons from Nature	July 28, 2020	
Dr. Geeta	Assistant Professor, Gargi College, University of Delhi	Multiple topics	Multiple dates	
Dr. Arjun Bhatnagar	Assistant Professor, Gargi College, University of Delhi	Multiple topics	Multiple dates	
Dr. Ramesh Mathur	Assistant Professor, Gargi College, University of Delhi	Multiple topics	Multiple dates	

This program is so interesting and helpful for me. In the starting of the program we are aware about the newer opportunities of our stream in future. I am very thankful to all teachers for organizing this event and one of the most important thing which make this whole program more interesting is guest lectures, which are so much relevant, amazing, funny and useful for us. I am very glad to join this program. Again, great thanks to my teachers.

Feedback

- This program was very enriching and very interactive. I really enjoyed it. This program make me utilize this pandemic time very effectively and getting knowledge on biotechnology. Which is really a beautiful portion of biology. Thank you for initiating such programme and make us improving our skill.
- This program was truly engaging, interactive and enriching. I learnt many new things and was able to use my free time productively to learn something which has improved my knowledge and skills. All the topics covered were relevant, well explained and will help me in future. I really want to thank the college principal and teachers for taking the initiative and coming up with such a program and really look forward to other such program in future.

E-Student Enrichment Program 'Mathematics for Biologists' (2020-21)

Total Number of Participants: 72

Glimpse of the Sessions Conducted During 19 Days of the SEP 2020-21

Schedule of the Sessions		
Date	Speaker	Topic
July 09, 2021	Mr. Arshant Kaur	Introductory lecture on 'Mathematics for Biologists'
July 10, 2021	Dr. Geeta	Data representation and tabulation
July 12, 2021	Dr. Geeta	Measures of Central Tendency
July 13, 2021	Dr. Ramesh Mathur	Basics of Excel
July 14, 2021	Dr. Arjun Bhatnagar	Range, Mean deviation, Standard deviation, Variance and Coefficient of variation
July 15, 2021	Dr. Arjun Bhatnagar	Range, Mean deviation, Standard deviation, Variance and Coefficient of variation (cont.)
July 16, 2021	Mr. Arshant Kaur	Test of significance
July 17, 2021	Mr. Arshant Kaur	Test of significance (cont.)
July 18, 2021	Dr. Geeta	Correlation analysis
July 19, 2021	Dr. Ramesh Mathur	Role of Plants as Nature's Purifier for Improving Indoor Air Quality
July 20, 2021	Mr. Manpreet Kaur	Basics of R and SPSS

Feedback

- Basic measures of tendency and how are they different were clearly explained. These tools will help me in my further research projects or future studies. Looking forward to more such programs.
- The content is very useful for future aspects. The practice of questions really helped. Such sessions should be conducted regularly.
- We got to know about different graphs, different statistical tools like mean median mode and we studied about correlation it was very helpful and resourceful.
- The knowledge of mathematics with it's application in various fields of biology can help us in various experiments in future in our research fields.

Neha, B.Sc (hons) Botany, 2nd year, Acharya Narendra Dev College, DU

This short term course is complete use of these days when students don't know what to study. The initiative taken by Gargi College is worth. I can connect the lecture of each day to the next given by professors. The professors are dedicated to solve the query of students. The other important part of these sessions is its **time management**, the session starts on time each and every day and ends on a sweet note.

Jasmine Kaur, BSc.(h) botany , 4sem, Sri guru tegh bahardur khalsa college (SGTB), DU

I'm very glad that I got a great opportunity to attend this short term course of plant systematics... Presenter was very knowledgeable and offered valuable information and tips. I really enjoyed the program. These concepts and the material presented will most definitely be incorporated into my resources. I learned several key pieces of information that will greatly improve my ability to publish. I really appreciated to the teachers and all the members of Gargi college who took this great effort towards us.

Nandini Killa, BSc (H) Botany, Hans Raj College

While sitting back at our home, our seat was taken to the profundities of Systematics, leaving no page unturned, by touching the sphere of Classification, Taxonomy and even the more complex topics like DNA barcoding. I extend my heartfelt gratitude towards the organizers and speakers who didn't let the present dismal circumstances perpetuate a bottle-neck in our learning process.

Akanksha Jha, BSc general 1st semester, IGNOU

Each and every day during this course when I woke up by reading your study material of the upcoming session and waiting for the prof. to come live and explain that all to me. I am full of enthusiasm and feel delighted to be the part of your amazing session as being an open university student I usually, have less chance to attend this kind of seminar so I really feel blessed today to write all my experience. The most vital thing of that webinar is every prof was so kind gentle towards the students they even reply our doubt through their mail id, they explained each and every topic like a story it was so clear to me know.

Pallavi Dutta, BSc hons Biochemistry, Shivaji college, DU

I am pursuing undergraduate degree in biochemistry from Shivaji college, DU. I had keen interest in plant systematics as I belong to doopars region that is rich in plant biodiversity and I always wanted to know and study about these species. I am very grateful to Department of Botany of Gargi College that they organized this course and this has benefited me a lot. I specially liked the lecture of Prof. R Geeta as she cleared all my doubts regarding molecular phylogenetics.

Neha Chaudhary, B.Sc Botany (H) R.G.P.G. College , Meerut

Plants are the real scientist of the world

Aditya Sharma, B.Sc Botany (H) Guru Ghasidas University, Chhattisgarh

Overall course of 6 days was very informative and innovative it helped me a lot during this lockdown to enhance my knowledge regarding my course.

Sruthi S Nair, B.Sc Botany (H) All Saints' College, Kerala

Firstly I thank all the teachers who taught us.. And it was really an innovative programme for the students like us as am from Kerala we could get more knowledge

Pracheta Palit, B.Sc Botany (H) Bethune College, University of Calcutta

The course was highly informative and I enjoyed all the classes. During this lockdown period it is a great initiative taken up by Gargi College to organise such free courses so that students from all over the country could join the session and learn from the eminent speakers. Thank you for giving me the opportunity. The knowledge I have gathered is surely going to help me in my higher studies and also this course has easily taught taxonomy and systematics in such a lucid way because students consider this subject to be vast and boring. Once again thank you so much.

Jaspreet Kaur, B.Sc Botany (H) Panjab University

The course has been an excellent initiative by team Gargi to bring fruitful lectures in Plant Systematics from the authorities working in this area. The idea of live

Kasturi Chakraborty, B.Sc Botany (H) Burdwan University, West Bengal

Every session was enriched with information. The whole course structure so well arranged. I found it very helpful. It was great opportunity for me to learn from eminent personalities. So I just want to thank Gargi college for thinking of this innovative webinar. I will love to join again for any other enriched session like this. So I will request you to arrange more like this in future. Thank you again I'm blessed to hear you all.

It was a very informative session. It taught the basic things like the importance of having clarity in thoughts while choosing the Career, how to make a effective resume, how to stand out from others etc.

It was great! Looking forward to more such career guidance sessions!

Got to know so much about what I was searching here and there! This session helped me clear my doubts and confusion.

Advised the resume making and all gonna help me life long, whenever I go.

Thank you so much for organizing such sessions!

It was a very informative webinar. Summarise provided information that I did know wanted to know. So thank you so much for that session. I will apply lots of those selection criteria in my life while going for my higher studies.

Its very helpful! Thank you!

No suggestions

Always its awesome

Pls do organize this type of webinar lecture in future for the students who are still exploring their interest

Not just summarizing

NA

Its a wonderful session, looking for another lecture like this one in coming days

This was a very wonderful session and I would suggest to organize such type of wonderful sessions more and more for our knowledge so that we can use this knowledge in our future lives.

Its always up to me

Will help me in future

It was an really amazing and informative session

It was great session

All the speakers cleared the doubts

The lectures was very helpful

The webinar was very informative and attractive and helpful

It was overall good

The session was very informative. All basic in my mind all the details our speaker had suggested

Looking forward to more such sessions in future

Best webinar

Its a informative webinar and I believe he to clear my doubts

meeting was like very informative

It was very informative

This was a very informative session to choose a better career option. As I am a student I was much aware session for us. There was a very useful tips for job, research, interview etc. Thank you for organizing such useful session

It is very good and makes my doubt clear about my career.

Lecture was really informative... the title was itself very catchy and interesting...

It was good

Man explained everything very well

The topic of the lecture was very good. It was such a nice and elaborative session. Thank you

I couldn't understand most of them

Man was amazing her way of explaining is too good! Overall are good!! Thank you so much again for your great support and time too!!

Useful for academic career

Informative session

It was superb

It was really helpful

The webinar was very informative

It was a wonderful and very informative session

It was really informative session.

It was very helpful



The Add-on course on Eco-friendly Agriculture was very relevant and practical. The lectures were given on a wide variety of topics making sure to cover all the important aspects of eco-friendly agriculture. The offline trip to Krishi Mela and the hands-on session was both interesting and helped in inter-relating the literature with the practical. The structure of the course and its delivery was logically and smooth. It was a helpful and intriguing course and would highly recommend students to take it up for a whole new practical experience.

- Yashasvi Saini , B Sc (H) Botany



This course is designed around a very significantly relevant topic to each one of us and the course covered all the aspects of the title. I was interested in this course for various reasons and I can say that this course has met all my expectations. The sessions organized were directly from the eminent personalities of this field and it was a great experience to learn directly from them. Several workshops and field trips were organized which helped us understand things much better and gave us a kind of first-hand experience of things. I would highly recommend this course to students who are interested in agriculture, in the environment, in their surroundings, or in a healthy and sustainable lifestyle. It will help you make conscious choices about your lifestyle and your surroundings.

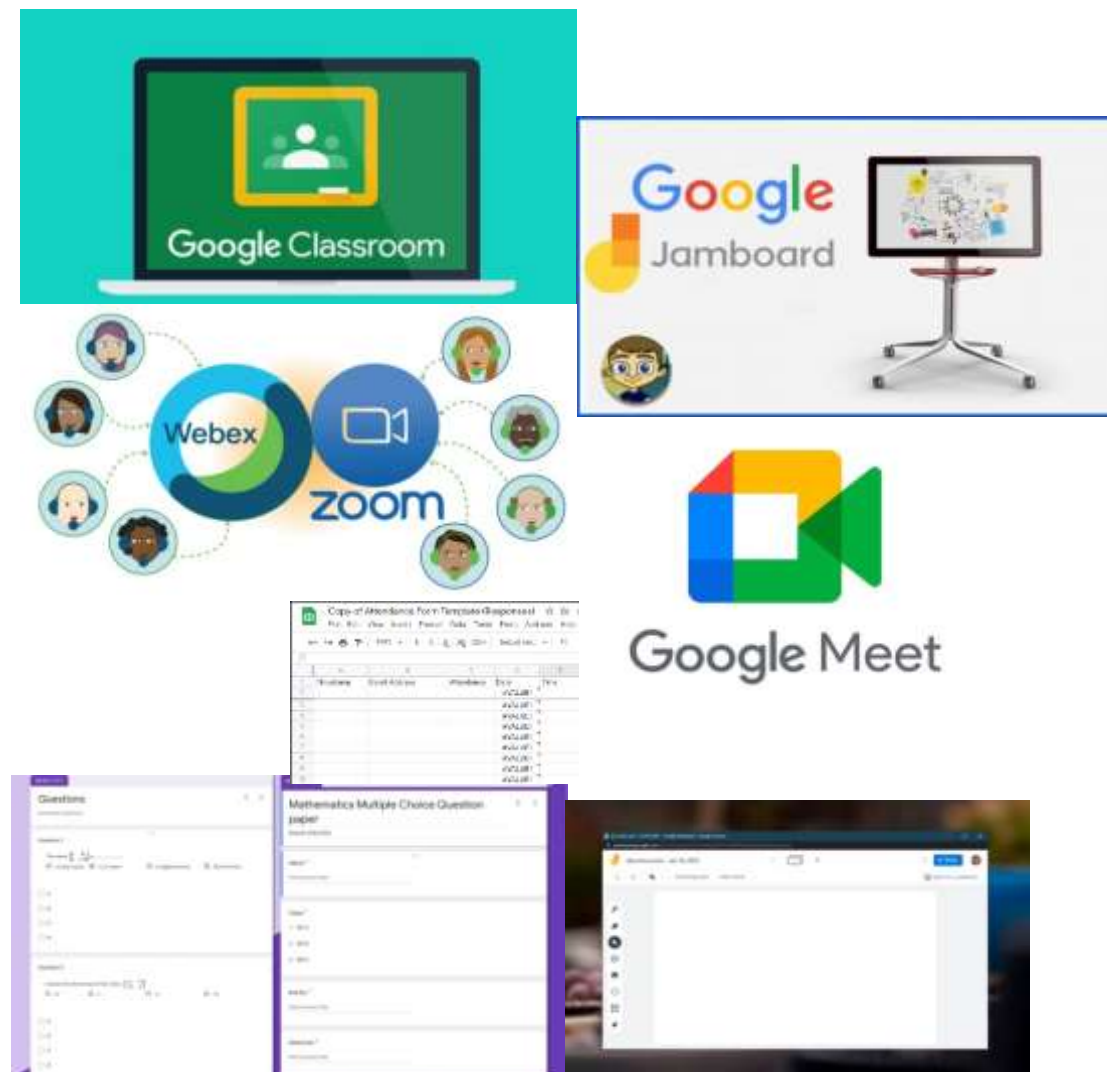
- Rinky Bhaskar, B A (H) Philosophy



The lectures were very helpful and the speakers were really interactive. The Field Trip was my favourite of them all and I actually have all the pamphlets still with me as my father is Farmer and it will be helpful for myself as well as my father.

- Tanya Jain, B Sc (H) Zoology

STUDENT ENRICHMENT THROUGH GARGI COLLEGE BOTANICAL SOCIETY (GCBS)



- **Inaugural and valedictory lecture**
- **Lecture series, Workshops, Short-term course, Student Enrichment Programme**
- **Competitions (inter and intra-departmental)**
 - Paper presentation
 - Quiz
 - Photography
 - Best out of waste
 - Salad making
 - Pot painting/ Face painting
 - Paper Quilling art
 - Photography
 - Botanical fashion show, etc.
- **Field trips/ Industrial visits**
- **Flower show and sapling distribution in collaboration with Garden Committee**
- **Scintillation –Science Fest**



BOTANICAL EVENTS: TOWARDS HOLISTIC DEVELOPMENT



Lectures, Workshops, Educational Trips

Field trip to CRDT, IIT-DELHI



BOTANICAL EVENTS: TOWARDS HOLISTIC DEVELOPMENT



Mountain Day photography Competition



Best Out of Waste Competition

Sapling distribution



Teacher's Day Celebration, Anthesis Cover Page Designing, Newspaper Crafting, Alumni Meet , Scientific Fashion Walk and Salad Making Competition





Field Trips and Visits



S. No	Field Trips/Visits/Title of linkage	Name of the partnering institution/ industry/ research lab	Year
1.	Botanical excursion to Manali	-	2 October 2017 to 6 October, 2017
2.	Institute visit	Yakult Factory, Sonapat	March 6, 2018
3.	Outreach program	TBGRI, Trivendrum	February 26, 2019 to March 02, 2019
4.	Excursion to Shimla	Central potato research institute	September 28, 2019 to October 02, 2019
5.	Institute visit	Yakult Factory, Sonapat	April 15, 2019
6.	Centre for Science (CSE) in coordinating a user perception survey of city bus passengers in Delhi (2019)	Centre for Science	24th July, 2019 to 31st July, 2019
7.	Summer Faculty Research Fellow Programme (2019)	School of Chemistry, IIT Delhi	May 13, 2019 to July 14, 2019



**Botanical Excursion, Manali
(2017)**



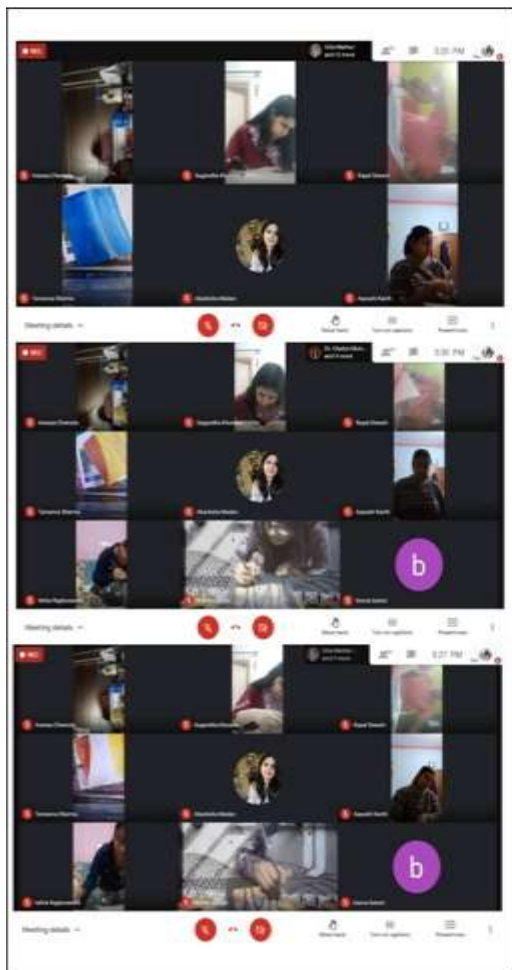
**Botanical excursion, Central Potato Research
institute, Shimla (2019)**



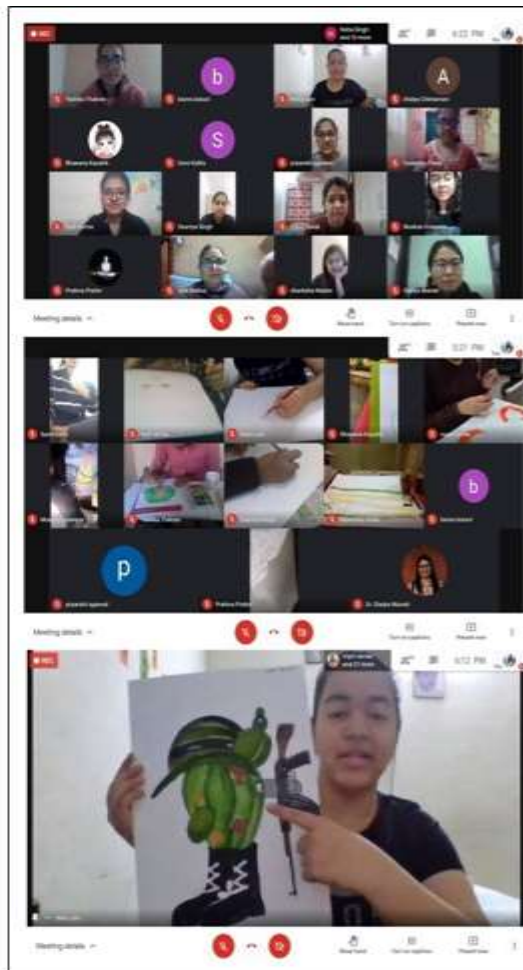
Outreach Program, TBGRI, Trivandrum (2019)

INDUSTRIAL TOUR – YAKULT DANONE (2018, 2019)





**Green Canvas
Competition (2020-21)**




**Character Drawing
Competition (2020-21)**

**Department of Botany
Gargi College
University of Delhi**

is organizing
VIRTUAL INDUSTRIAL TOUR
to
YAKULT DANONE
SONEPAT HARYANA, INDIA


DATE: APRIL 19, 2022
TIME: 12 PM



Patron
Prof. Promila Kumar
Organizing Committee
Dr. Renu Soni (TIC) **Dr. Reema Mishra**
Dr. Geeta **Ms. Ruchitra Gupta**



**Virtual visit to Yakult
(2021-22)**

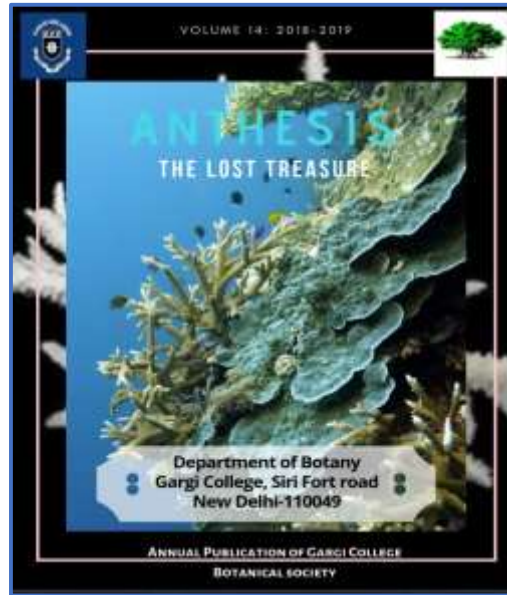
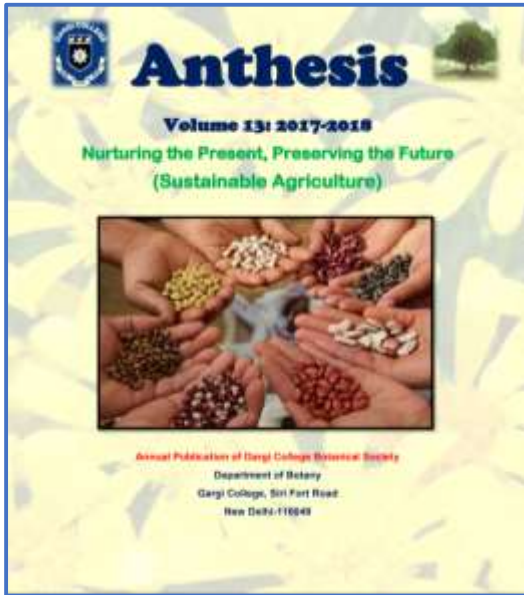
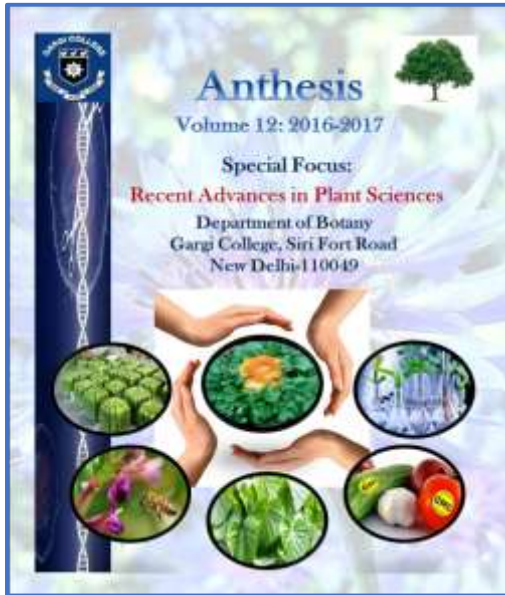
Glimpses of the Event



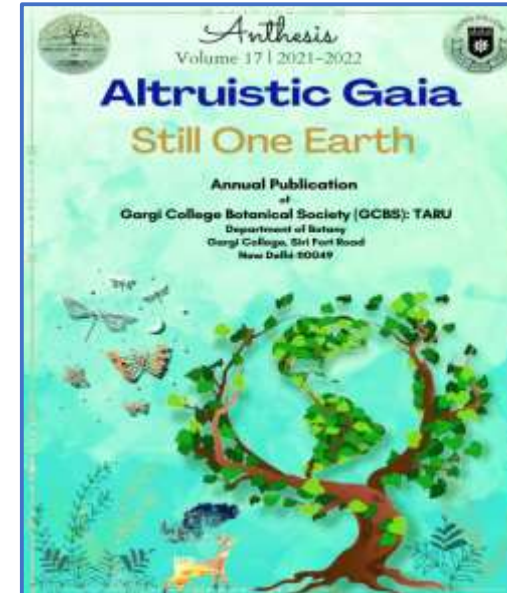
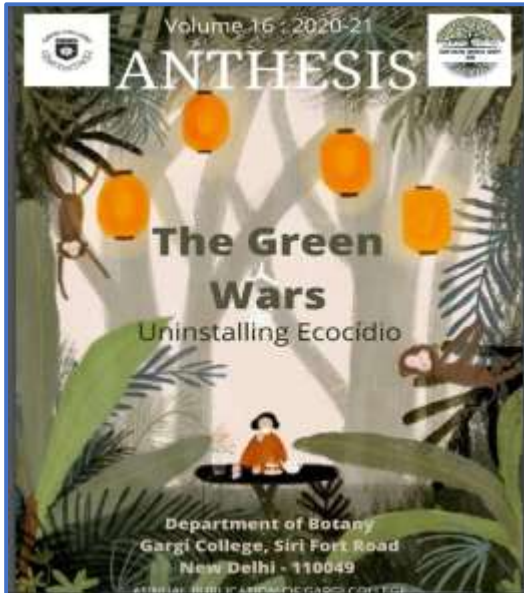
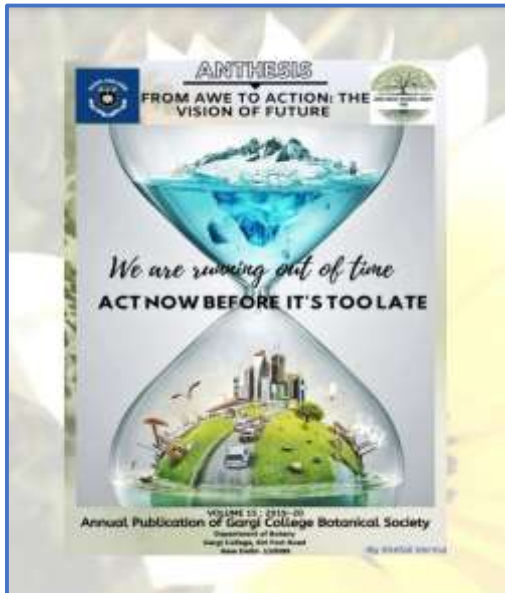
**Virtual Botanical Excursion
(2021-2022)**

ANTHESIS VOLUMES



<https://gargicollege.in/wp-content/uploads/2022/04/Anthesis-Issue-17.pdf>

<https://gargicollege.in/wp-content/uploads/2018/06/ANTHESIS-MAGAZINE-2020-2021-FINAL-Compressed-version.pdf>





ENVIRONMENT SENSITIZATION

Collaboration with CSE's

BIOWASTE MANAGEMENT

PLANTATION DRIVE

July 24-31, 2019 CSE's initiative on Air pollution and public transport reforms in Delhi



Ecobiotechnological approaches for biowaste utilization



Add-on course on Role of Biotechnology in Environment Management



Add-on course on Role of Biotechnology in Environment Management



Retirement of faculty member and non-teaching staff of the department (session 2020-2021 and 2021-2022)



Naming of Plants and trees growing in the campus with the important features and uses



Compiled Cultivated Perennials of Gargi College –An Illustrated Guide released on 31st July, 2018

ENVIRONMENT SENSITIZATION

First Flower Show “Gargi Blooms 2020: 4th March, 2020”



2nd flower show “Gargi Blooms 11th March 2022”



Swachh Bharat Abhiyaan on September 15, 2016



Sacred Garden-Navgraha Vatika



Saplings distribution



Saplings distribution to the participants of the workshop- "Laboratory Methods and Techniques" held on 10th December, 2019



Saplings distributed to the participants of the workshop- "Why to Grow and How to multiply Plants" held on 26th September, 2017

DISTINGUISHED ALUMINI



Dr. Suman Govil
Superannuated as
Adviser, Department of
Biotechnology,
Government of India



Dr. Ratna Sircar
Associate Professor,
Department of Psychiatry,
ZUCKER HILLSIDE
HOSPITAL, New York



Dr. Pinky Agarwal
Staff Scientist V,
National Institute of Plant
Genome Research,
New Delhi



Dr. Saloni Mathur
Staff Scientist IV,
National Institute of Plant
Genome Research,
New Delhi



Dr. Sohini Deb
Postdoc
University of Copenhagen
Department of Plant and
Environmental Sciences
Denmark.



Dr. Priya Punjabi
Associate Professor,
Department of Botany
University of Delhi



Ms. Bidisha Bhattacharya
Project Lead and Technical
Specialist, OHSU Institute of
Environmental Health
Portland Oregon



Ms. Astha Batra,
Future Business Council,
Australian Conservation
Foundation



Dr. Ragini Rai
Post-doctoral Fellow,
Nanyang Technological
University, Singapore



Dr. Atika Chandra
Associate Professor
Maitreyi College
Delhi University



Ms. Swati Chugh
Producer | Director |
Writer | Editor



Ms. Preetam
Sub Inspector
Delhi Police

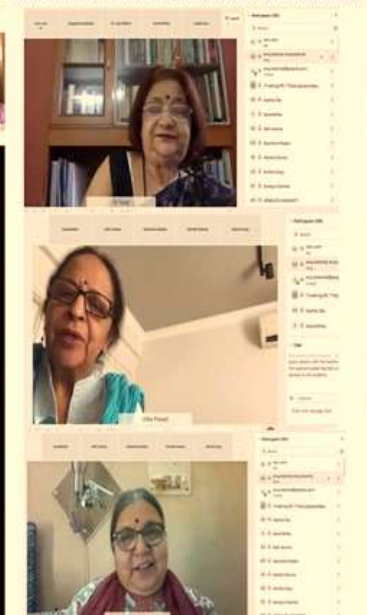
GLIMPSES OF ALUMNI MEET/ INTERACTION SESSIONS/LECTURE SERIES



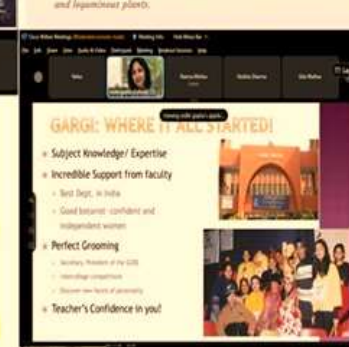
GLIMPSES OF ALUMNI INTERACTION 2021



INTERACTION WITH SUPERANNUATED TEACHERS



INTERACTION WITH OUR ALUMNI FROM BATCH 2020



EXTENSION SERVICES & INTERNSHIPS

NGOs/Volunteer work	Students involved
Wishes and Blessings (Squad for Change)	Shubhi Srivastava Tamanna Sharma
Vishalakshi Foundation	Deepanshi Singh
Connecting Dreams Foundation	Kalpna Jha
Umeed	Kalpna Jha, Muskan Goswami
Girl Up	Pallavi Sahoo
GSS (Science)	Tamanna Sharma, Kalpna Jha, Ananya Chamola, Devyani Dwivedi, Shubhi Srivastava, Shephali Gupta, Muskaan Goswami, Rupal Siwach
NCC	Niva Parmar, Rupal Siwach
NSS (Project Alfaaz)	Shephali
Vidya Jyoti Project	Rupal Siwach



Our students are members of various societies in the college

NCC
ENACTUS
IRIS
SPORTS
NSS



Upma Garg



PROCTOR SCIENCE
(2019-20)



Alsa Mohsin
Joint secretary of students
sports council 2022-2023



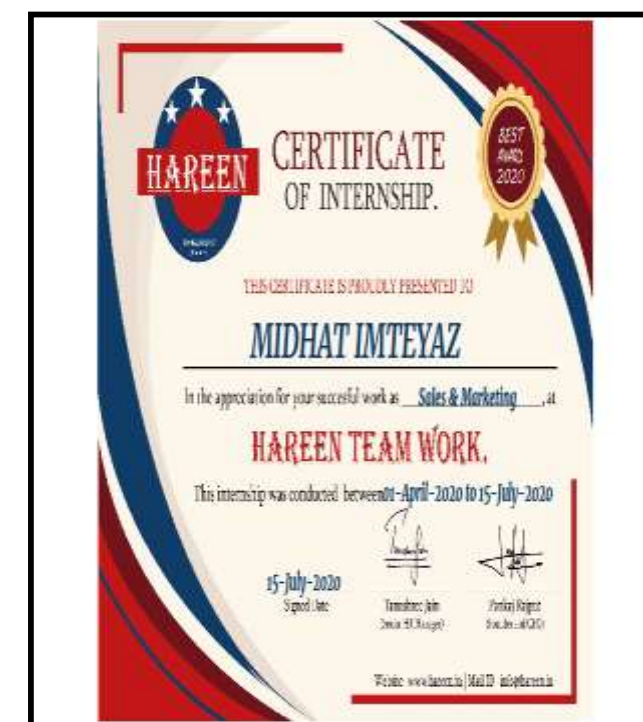
INTERNSHIPS

S.No.	Student	Internships undertaken (2020- 2021)
1.	Ananya Chamola	Desh Ke Mentor/ Mentoring volunteer (Govt. of NCT of Delhi), October 2021 - January 2022
		Team Everest NGO/ Graphic Designing intern, 20th November 2021 - 4th December 2021
		Team Everest NGO/ Just Volunteer program, 2nd October 2021- 8th October 2021
		Team Everest NGO/ Curriculum writing intern, 25th September 2021 - 9th October 2021
		Team Everest NGO/ Upcycling intern, 20th August 2021 - 26th August 2021
		Team Everest NGO/ Art intern, 26th July 2021 - 9th August 2021
		Team Everest NGO/ Curriculum writing intern, 23rd June 2021 - 7th July 2021
2.	Devyani Diwedi	Growth Internship as a Programme Manager with goDutch , 27th November 2020- 27th January 2021
3.	Shubhi Srivastava	Content writing with The Visionific Organization, 9th January 2021- 9th February 2021
4.	Surbhi Chaturvedi	Bootcamp on “Python and Machine Learning” by ShapeAI, 7 days
5.	Yashasvi Saini	Content and Editorial Department under The Erudite, 15th June 2021- 15th August 2021

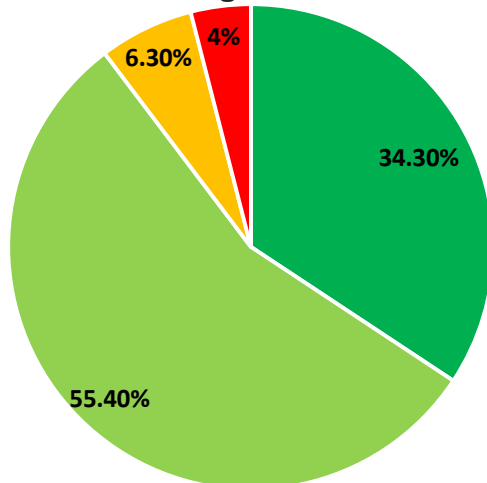


INTERNSHIPS

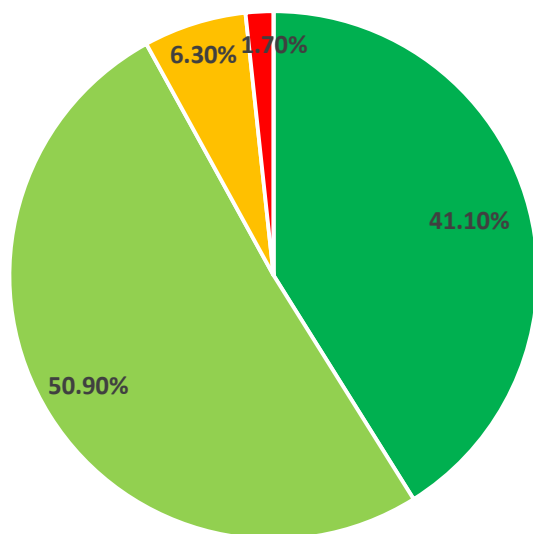
S.No.	Student	Internships undertaken (2020- 2021)
6.	Muskaan Veer	Business development associate intern, 12 th April 2021- 12 th June 2021 Senior business development associate, 21 st July 2021- 21 st Nov. 2021
7.	Midhat Imteyaz	Sales and Marketing Intern-Hareem Team Work, 1 st April 2020- 15 th July 2020 Campus Ambassador-UPSIDE ME, 13 th July 2020- 25 th August 2020 Programme Associate-Children's Education Trust, 1 st August 2020- 30 September 2020



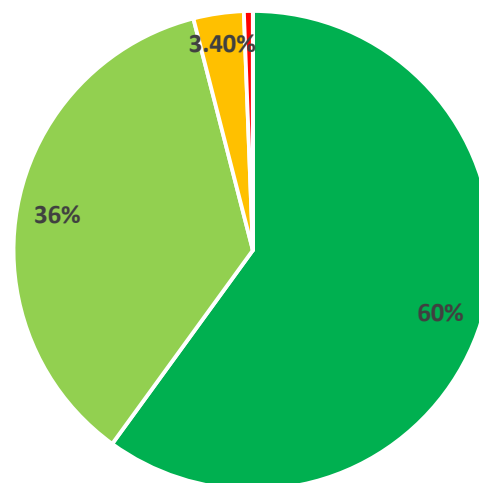
Q. Teachers of Botany department are very encouraging and help in providing a conducive environment to students for learning and holistic development.



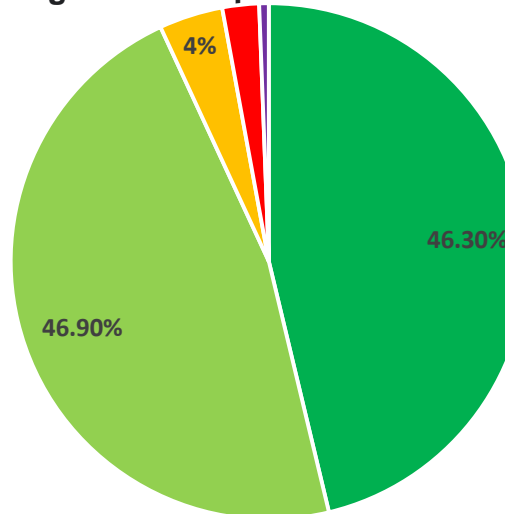
Q. Teachers of Botany department respond effectively to students' doubts and suggestions.



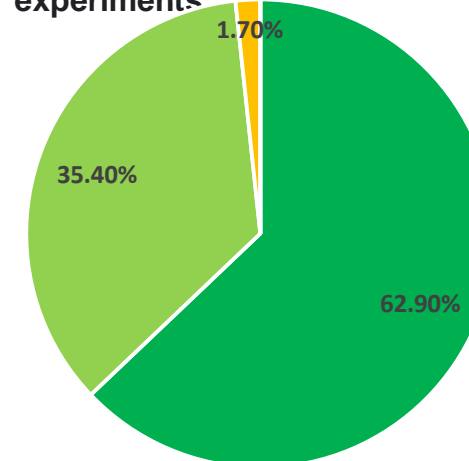
Q. Teachers of Botany department conducted online classes effectively during COVID-19 pandemic using a number of tools such as videos, PDFs, PPTs etc.



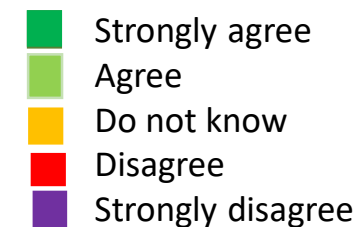
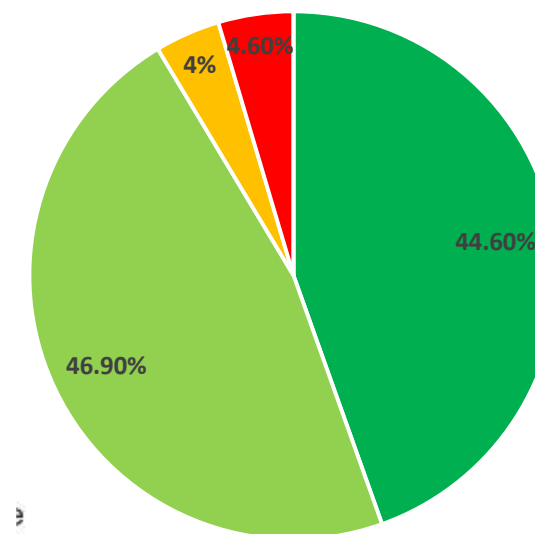
Q. Course resources or materials were posted online by teachers on Google Classroom and tests/ quizzes were also conducted online during COVID-19 pandemic.



Q. Lab staff is very efficient and assists in providing clean glassware, chemicals and plant materials for the conduction of experiments



Q. Botany laboratories and museum are well maintained to conduct practical and study specimens.





USP OF DEPARTMENT



- **Promote UG research evidenced by**
 - Student publications in high IF journals**
 - Awards for poster/paper presentations in conferences**
- **Follow Eco friendly practices**
- **Encourage minimal use of paper**
- **Digitalizing information (e.g. QR labels for museum specimen)**
- **Sharing of e-material**
- **Plantations drives, Sapling distribution, Flower shows**
- **Workshops on environment friendly practices**
- **Alumni as mentors**

STRENGTH

- Self-motivated, highly qualified faculty having expertise in diverse fields and experienced and dedicated non teaching staff.
- Beyond curriculum research by students evidenced by publications and awards.
- BIF-DBT(2009-20) maintained by the Department of Botany caters to the teachers and students for *in silico* research.
- Maintenance of flora of the college, plantation drives, flowers shows organized.

WEAKNESS

- More thrust for Financial/academic collaboration with the industries is required.
- Internships with stipends are difficult.
- Number of students, mentored to pursue research projects cannot be increased due to a heavy academic schedule and limited funding.

SWOC analysis

OPPORTUNITIES

- DBT funding enables us to conduct workshops, seminars for the faculty, non-teaching staff and the students.
- Covid was a blessing in disguise as new opportunities for online teaching and virtual lab sessions were conducted
- Bioinformatics Facility funded by DBT has motivated students and teachers to carry out bioinformatics research .
- Students get the opportunity to do projects, present their research work in conferences .
- Students are able to publish papers which helps them to get admission in PG courses in universities abroad.

CHALLENGES

- To encourage more innovative and motivated research.
- To teach a highly heterogeneous class of students.
- To allow some wet experiments to be performed individually by student.

FUTURE PLANS

1. Thrust to involve more students in research.
2. Infrastructure in terms of instruments will be strengthened.
3. More Workshops and Seminars will be conducted.
4. More educational field trips will be organised to explore the plant diversity in nature.
5. Outreach programs will be planned for a good number of students through collaboration with research institutes and schools in Delhi and outside.

Thank you

