



SRI SATHYA SAI COLLEGE FOR WOMEN, BHOPAL

DEPARTMENTAL ACTIVITIES

SESSION- 2022-23



DEPARTMENT OF BOTANY AND MICROBIOLOGY

ABOUT THE DEPARTMENT OF BOTANY & MICROBIOLOGY

The Department of Botany was established in 1981 and Microbiology was introduced in 2006.

Botany as a subject is related to the study of plants and a career in it would mean studying in depth about plants, fungi, algae, diseases, growth, metabolism and the structure between different groups.

Microbiology is a broad discipline of biology with works with the function, structure, uses, and the existence of the microscopic organism (microorganisms). Microbiology is a broad term studying microorganisms that includes Bacteriology, Virology, Molecular biology, Mycology, Parasitology, and other branches. In the recent years, Microbiology has created a lot of buzz and gained popularity leading to a rush in the number of students who are looking forward to pursuing microbiology as a career.

Aims of the Department:-

- To motivate and guide students with quality education in Botany and Microbiology.
- To give them a wide spectrum of latest technology and new branches associated with Botany & Microbiology as a subject.
- To develop scientific skills.

COURSES OFFERED

- **B.Sc. Botany/ Microbiology**
- **Vocational Course on Medicinal Plants (First & Second Year)**
- **Certificate course on Medicinal Plants**
- **Field Project Work for UG Students**
- **Dissertation for PG Students**
- **Research Facilities offered to Ph.D Students**

Our Faculty

1. Dr. Renu Mishra

Associate Professor Botany, IQAC Coordinator

Ph.D., M.Sc. Botany (32 years of teaching experience)

Registered guide Botany and Microbiology in Barkatullah University

renumishra21@gmail.com

2. Dr. Shikha Mandloi

Assistant Professor Microbiology

Ph.D., MSc. Microbiology, B.Ed., PGDHE (21 years of teaching experience)

Registered guide Microbiology in Barkatullah University

shikha2671@gmail.com

3. Dr. Nishi Yadav

Assistant Professor Microbiology

Ph.D., MSc. Microbiology (11 years of teaching experience)

nishiyadavsis18@gmail.com

4. Ms. Supriya Gupta

Pursuing Ph. D., Barkatullah University, Bhopal

Lab attendant

1. Mrs. Sushma Upadhyay

2. Mrs. Seema Sahay

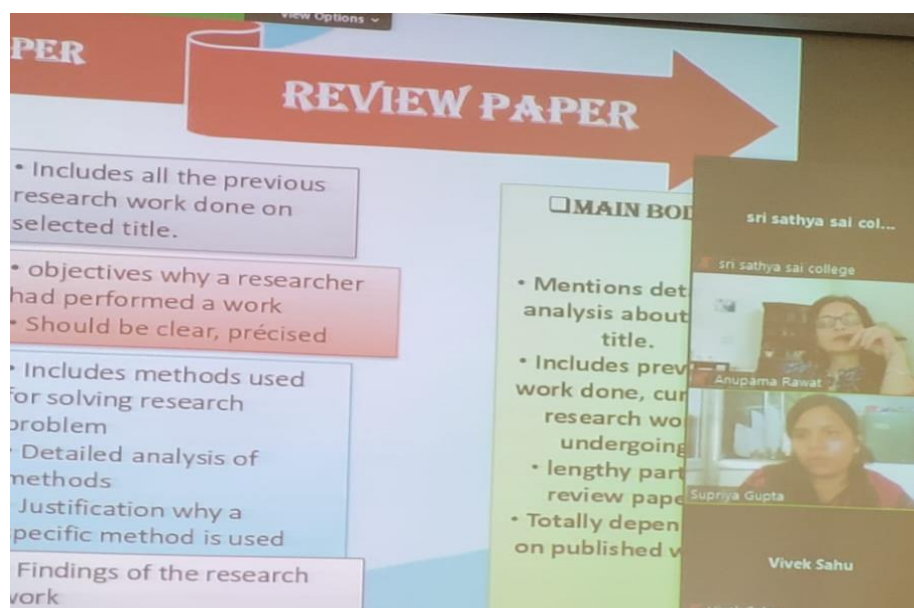
RESEARCH ACTIVITIES BY FACULTY



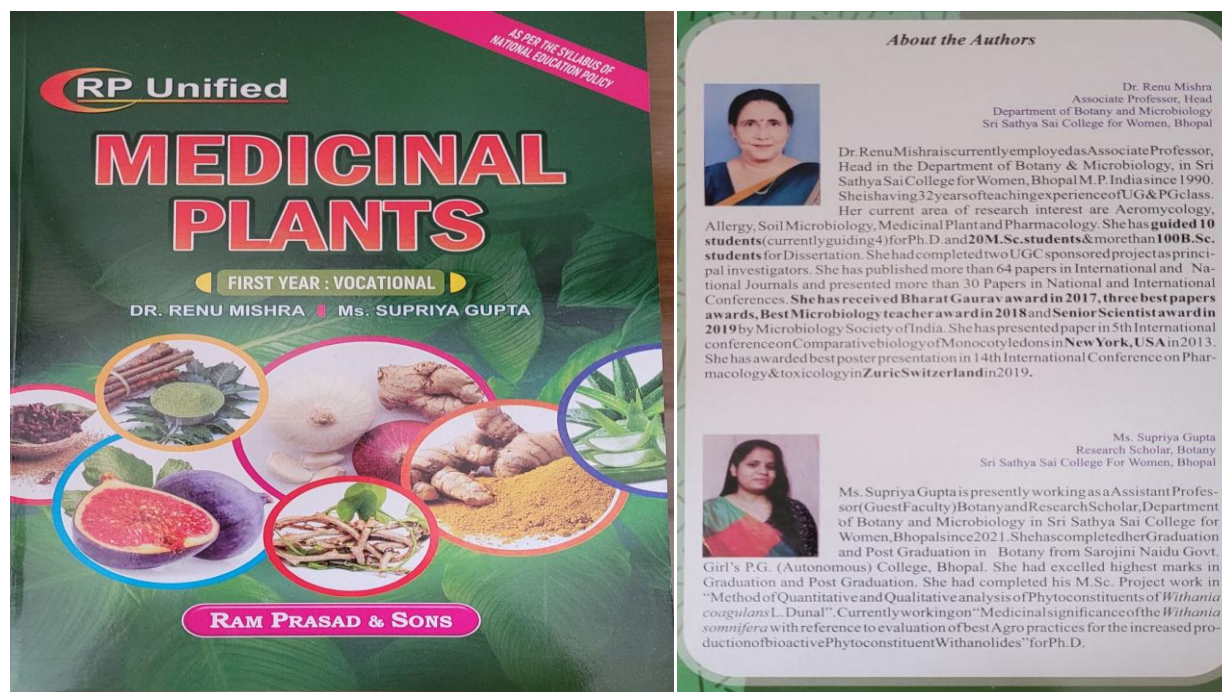
On 3rd- 4th September 2022, Dr. Renu Mishra & Ms. Supriya Gupta attended **National Seminar on Securing Human Health through the use of Medicinal plants** organized by MF-PARC, Bhopal and **Presented a Poster on “Indigenous and medicinal uses of *Withania somnifera* L. Dunal: A review ”**.



On 24th September 2022, All Department teachers Participated in a one **day National Seminar on “Revised Assessment and Accreditation Framework of NAAC”** organized by IQAC, SSSCW, Bhopal.



Ms. Supriya Gupta **Presented a Paper and Awarded Best Paper Presenter** on topic entitled “An illustration of writing a research paper and review paper: A review” in National seminar on Revised Assessment and Accreditation Framework of NAAC organized by IQAC, SSSCW, Bhopal

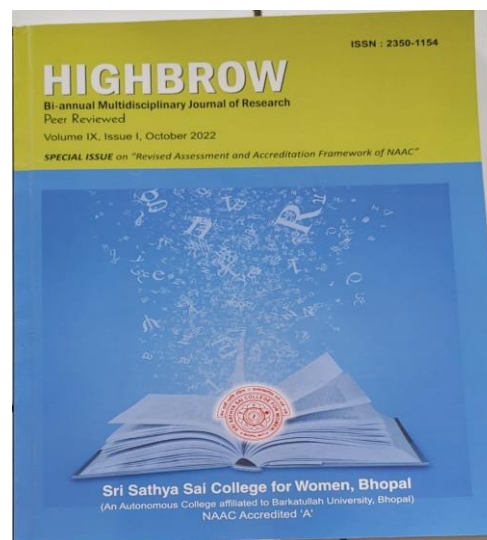


On September 2022, Dr. Renu Mishra and Ms. Supriya Gupta **written a book on Vocational course titled “Medicinal Plants”** was published by Ram Prasad & Sons with ISBN no. 978-93-95447-11-9



On 29th- 30th October 2022, **Dr. Renu Mishra Presented a paper** on Optimisation of carbohydrate sources for maximum production of Lovastatin under LSF in **International Conference on Biotechnology for Better Tomorrow ICBBT 2022** organised by **Udayana University, Bali, Indonesia**.

Dr. Nishi Yadav and Dr. Renu Mishra **published a Paper on topic “Qualitative and quantitative analysis of various phytoconstituents in *Hyptis suaveolens* L. in different solvents”** *Journal of Indian Botanical society* Vol. 102 issue 3(2022) Listed in UGC care list, Impact Factor 5.94



Paper of Dr. Renu Mishra published on the topic “IQAC As a tool for building an organized methodology of Documentation & Internal communication in Higher institution :A Review” *Highbrow Bi-annual Multidisciplinary Journal of Research* Vol 9 issue 1, (2022)

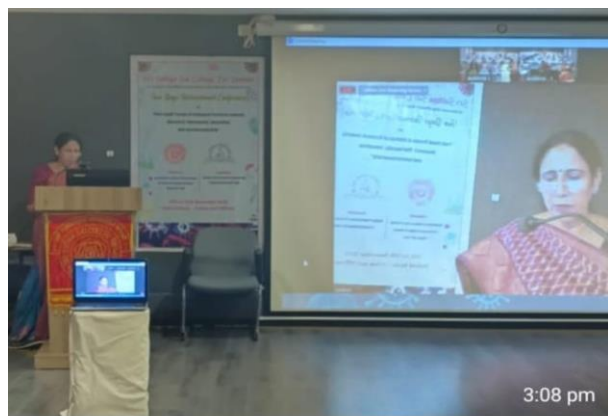
Paper of Dr. Shikha Mandloi published on the topic “Skill Enhancement in higher education institutions to ensure employability” *Highbrow Bi-annual Multidisciplinary Journal of Research* Vol 9 issue 1, (2022)

Paper of Dr. Nishi Yadav published on the topic “Green Audit: Approach for Sustainable Development” *Highbrow Bi-annual Multidisciplinary Journal of Research* Vol 9 issue 1, Page 121-126 (2022)

Paper of Ms. Supriya Gupta published on the topic “ An Illustration of writing a Research and Review Paper : A Review “ *Highbrow Bi-annual Multidisciplinary Journal of Research* Vol 9 issue 1, (2022)



On 11th- 12th November 2022, All Department teachers participated in a 2 Days International Conference Sponsored by MPCST, Bhopal on **theme “Post Covid Trends of Biological Sciences towards Research, Therapeutics, Innovation and Entrepreneurship”**.



Dr. Renu Mishra chaired the Technical Session -1 of the International Conference held on 11th November 2022.



Dr. Shikha Mandloi Coordinate the Session of Paper Presentation in Two Days International Conference.



Ms. Supriya Gupta Presented a Paper and awarded Best Paper Presenter on topic entitled “Green synthesis of silver nanoparticles using roots of *Withania somnifera* L. Dunal and its applications” A Review of Nanobiotechnology”

GOVERNMENT OF MADHYA PRADESH
मध्य प्रदेश सरकार

DEPARTMENT OF HIGHER EDUCATION / उच्च शिक्षा विभाग

Tutorial Title
STRUCTURE OF DNA

Topic Covered
B.Sc. First Year (Major Paper)- Unit 5

Presented By-
Dr. RENU MISHRA
H.O.D
Department of Botany & Microbiology
Sri Sathya Sai College for Women, Bhopal, M.P.

00:00:01

00:00:37

GOVERNMENT OF MADHYA PRADESH
मध्य प्रदेश सरकार

DEPARTMENT OF HIGHER EDUCATION

SUBJECT - Microbiology
PAPER - Microbial Techniques

TITLE - Principle and Applications of Microscopy

B.Sc. First Year (Major II)- Unit 1, Module - 1.1

Presented by:
Dr. Nishi Yadav
Asst. Prof. Microbiology
Sri Sathya Sai College for Women, Bhopal (M.P.)

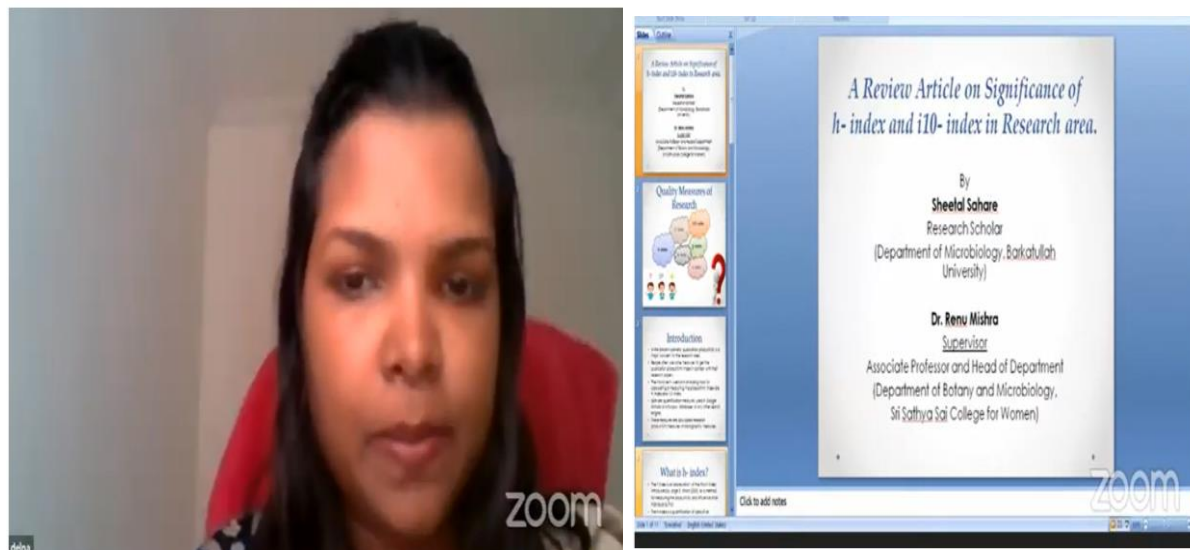
Dr. Renu Mishra and Dr. Nishi Yadav attended a **One week faculty development programme on E-content development** organized by Department of higher Education, Bhopal.

Research Paper of Ms. Sadhma Siddiqui and Dr. Renu, Mishra published in **Scopus** on the topic “A Preliminary Screening for Isolation of Lovastatin Producing Unknown Fungi from Forest Region Pachmarhi, M.P. India” in Journal Neuroquantology, January 2023

Research Paper of Ms. Sadhma Siddiqui and Dr. Renu, Mishra published in Scopus on the topic “Optimization of Carbon Sources for Maximal Production of Lovastatin by forest soil fungal isolates under liquid state fermentation (LSF)” in Journal of Pharmaceutical Negative Results, January 2023.

RESEARCH ACTIVITIES BY STUDENTS / RESEARCH SCHOLAR

On 13th September 2022, Students of B.Sc. II Year attended a **National Workshop on DNA isolation and ELISA** organized by **BMHRC, Bhopal**



Paper Presentation of Ms. Delna on the topic entitled “Citation of an Article : A way to Promote research ethics” in One Day National Seminar on Revised Assessment and Accreditation Framework of NAAC Sponsored by NAAC and **awarded Consolation Prize.**

Paper Presentation of Ms. Sheetal Sahare on the topic entitled “A Review article on significance of h index and i10 index in research area” in One Day National Seminar on Revised Assessment and Accreditation Framework of NAAC Sponsored by NAAC and **awarded Second Prize.**

Paper of Ms. NS Delna & Dr. Renu Mishra published on the topic “Citation of an Article : A way to Promote research ethics” *Highbrow Bi-annual Multidisciplinary Journal of Research* Vol 9 issue 1, (2022)

Paper of Ms. Sheetal Sahare & Dr. Renu Mishra published on the topic “A Review article on significance of h index and i10 index in research area” *Highbrow Bi-annual Multidisciplinary Journal of Research* Vol 9 issue 1, (2022)



On 11th- 12th November 2022, **Ph.D Scholar Ms. Sheetal Sahare Presented a Paper** in the International Conference **Under the Guidance of Dr. Renu Mishra** on the topic entitled “Efficacy of Metallic Nanoparticles in mitigation of *Withania somnifera* L. Dunal lead Spot Diseases.



On 11th- 12th November 2022, **Students of B.Sc. Final Year (Ms. Anusree S Nair & Ms. Poonam Baghel presented a Paper** under the guidance of Dr. Renu Mishra in International Conference on topic entitled Medicinal Significance of Amla.



On 11th- 12th November 2022, **Students of B.Sc. II year (Ms. Aastha priya & Ms. Anjani) presented a poster in International Conference under the guidance of Dr. Shikha Mandloi and Dr. Nishi Yadav** on the Post Covid Trends of Biological Sciences towards Research, Therapeutics, Innovation and Entrepreneurship on the topic “Immunotherapeutic importance of *Withania somnifera* and *Ocimum tenuiflorum* against COVID-19” .

WORKSHOPS



On 23th December 2022 Dr. Nishi Yadav and Ms. Supriya Gupta participated in the workshop with students on **State youth policy at EPCO Bhopal.**



On 17th – 18th November 2022

Department organized a **Workshop on Jam, Jelly, pickle and juice preparation** in association with the Department of Home Science.

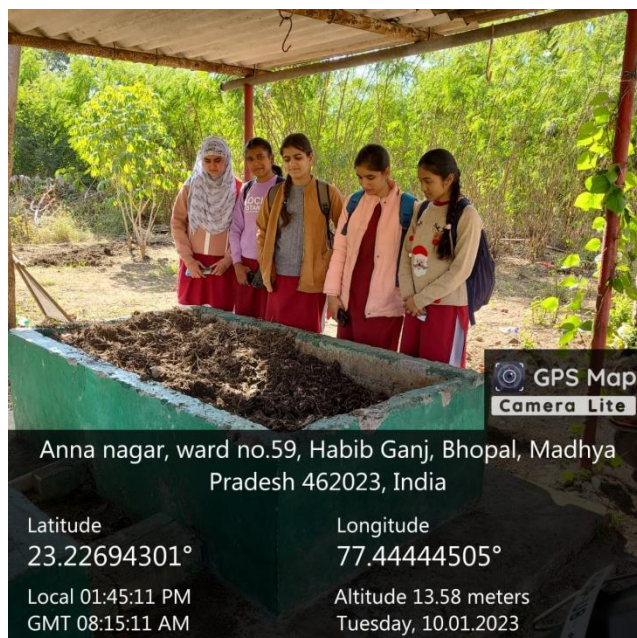
FIELD VISITS/ INDUSTRIAL VISIT

On 7th September 2022, Students of B.Sc. II Year Students visited the **College Campus for the identification of Plants** with Dr. Renu Mishra and Ms. Supriya Gupta





On 12th September 2022, 12 students of B.Sc. II went for an **Industrial visit to Asita Industries, Govindpura** with **Dr. Nishi Yadav** and **Ms. Supriya Gupta**



On 29th November 2022 an **Field visit to B.Sc. I year students for Organic Farming : Scope and Applications** was organized.



On 1stDecember 2022 **field visit for timber yielding plants** in College Campus and near by areas.



On 6th December 2022, **Botany B.Sc. I , II, III Industrial Visit to MFP-PARC (Vindhyan Herbal) Bhopal** learns about various medicinal plants and learns how to prepare medicines.



On 24TH December 2022 Botany Students visited to the International Van Mela and understand the rich Cultural and Medicinal heritage of the country.





On 11th January 2023 Students of B.Sc. II Year went for an **Industrial visit to Groundnut oil extraction unit, Awadhपुरi .**



On 17th January 2023, the Department organized **industrial visit to Sanchi Dairy Sangh for B.Sc. / M.Sc. Students**

GROUP DISCUSSION/ EXPERT LECTURE



On 27th September 2022, An **Expert Lecture** was organized on **Sexual Harassment at Workplace** by Eminent Speaker **Dr. Anju Bajpai**, HOD People's University and Women Independent Director ITDC, Delhi



12th October 2022

An **Expert Lecture** was organized on **Social Ethics** by **Ms. Pallavi Mishra**, NLU, Delhi.

SRI SATHYA SAI COLLEGE FOR WOMEN, BHOPAL
(An Autonomous College affiliated to Barkatullah University Bhopal, M.P. India
NAAC Accredited "A" Grade)



**Expert Lecture On
Prospects of Commercial
Cultivation of Medicinal Plants**

Date- 09th December 2022
Time- 12:00 PM- 01:00 PM
Venue- College Auditorium
Mode- Hybrid Mode
(Both Online & Offline)

Organized By
Department of Botany & Microbiology

Resource Person



Dr. GURPAL SINGH JARIYAL
Ex-Director Sahayog Micro management and
Livelihood Initiatives
Assistant General Manager MPFCO Ltd.
Bhopal (Subsidiary of IFCI Ltd.) Work
Experience-38 years



Dr. RENU MISHRA
HOD
Dept. of Botany & Microbiology

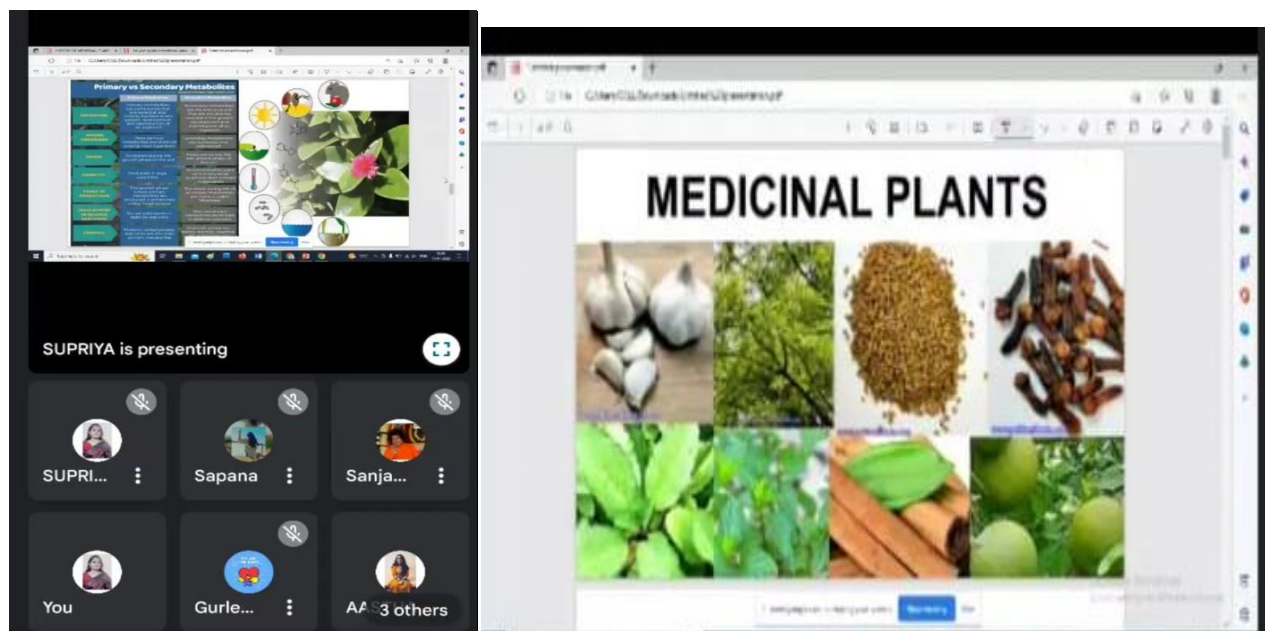
Join us with the given Youtube Link-
<https://youtu.be/gzZOOlg4Xfg>

Organizers
Dr. Shikha Mandloi
Dr. Nishi Yadav
Ms. Supriya Gupta



On 8th December 2022 Lecture was organized on **Commercial cultivation of Medicinal Plant** by **Dr. Gurpal Singh Jharial**

E- LEARNING



The screenshot shows a presentation titled "MEDICINAL PLANTS" with various images of medicinal plants and their parts. The presentation is being viewed on a screen, and a Zoom interface is visible in the foreground, showing a list of participants including SUPRIYA, Sapana, Sanja..., You, Gurle..., and AA 3 others.

The Students according to latest NEP 2020 was educated with the aid of technology. Students are taught with the help of presentation, online classes, videos, pictures , graphs etc. for better learning.

MOUs

The Department has signed MOUs with Vindhya Herbal, EPCO, SNGGPG, Sanchi Dugdh Sangh.



MOU with Sanchi Dugdh Sangh, Bhopal



MOU with MFP-PARC (Vindhyan Herbal)



MOU with SNGGPG College, Bhopal

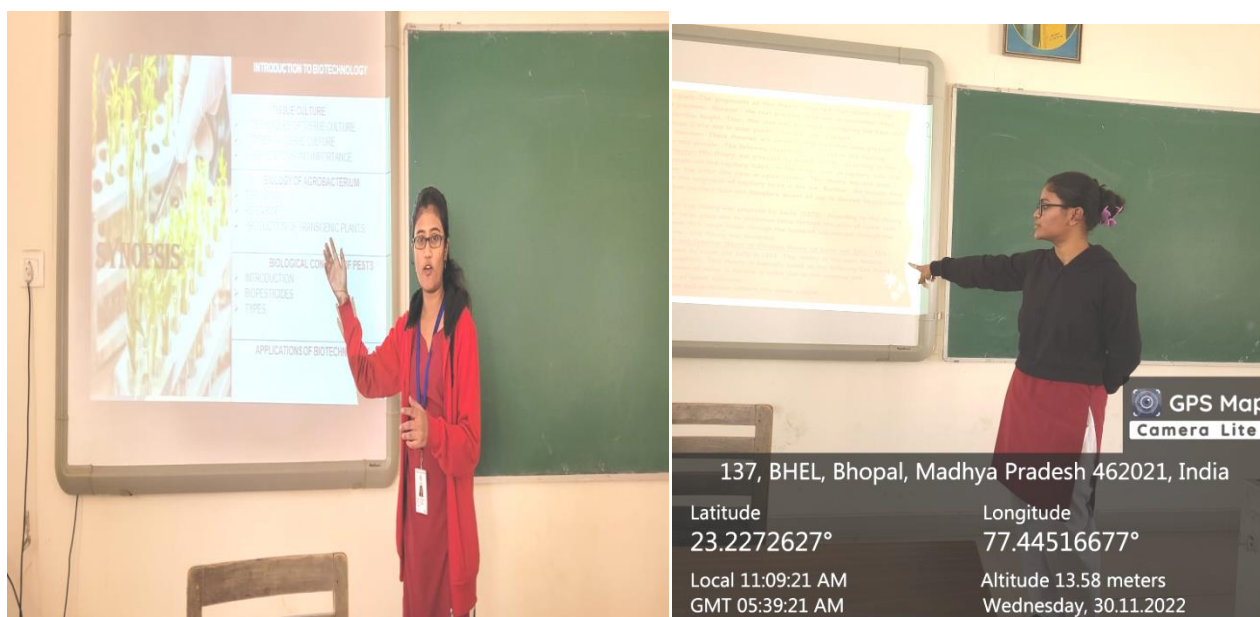
POSTER /PPT/CHARTS/MODEL COMPETITION

<p>World Breastfeeding Week 2022</p> <p>WORLD BREASTFEEDING WEEK 2022 IS OBSERVED FROM 1 TO 7 AUGUST TO CREATE AWARENESS ABOUT THE IMPORTANCE OF BREASTFEEDING FOR BOTH THE MOTHER AND BABY'S HEALTH.</p> <p>NOTE- Certificates shall be provided to all the Participants. First 3 Winners shall be Awarded with prizes along with Certificate.</p>	<p>RULES</p> <ol style="list-style-type: none"> 1. EACH PARTICIPANTS CAN SUBMIT ONLY ONE POSTER. 2. THE POSTER MUST BE MADE ON THE A3 SIZE 11.7 X 16.5 INCHES) SHEET WITH MARGINS (0.5 INCHES) DRAWN WITH BLACK PEN/MARKER. 3. POSTER CAN BE MADE USING PENCIL, CRAYON, WATERCOLOR, OIL PAINT ETC. 4. PHOTOGRAPHS, WIRES, OTHER 3D OBJECTS, PRINT-OUTS WON'T BE ACCEPTABLE. 5. IT SHOULD BE ORIGINAL AND HANDMADE. 6. THE TOPIC OF POSTER AND THEME SHOULD BE CLEARLY MENTIONED AT THE TOP MARGIN OF THE POSTER. 7. POSTER SHOULD CONTAIN PERSONAL DETAILS LIKE NAME, CLASS, CONTACT NUMBER ETC. ON THE BACK SIDE OF THE POSTER. 8. SUBMIT YOUR POSTERS ON OR BEFORE 4 AUGUST IN BOTANY LAB. 	<p>SRI SATHYA SAI COLLEGE FOR WOMEN, BHOPAL (M.P.)</p> <p>Department of Botany & Microbiology and NSS In Association with Department of Paediatric, Gandhi Medical College, Bhopal</p> <p>POSTER MAKING COMPETITION World Breastfeeding Week 2022 Theme- Step Up Breastfeeding ; Education and Support</p> <p>For any query, Contact us- 9425014870, 9479962722, 8827320081</p>
--	---	--



On 6th August 2022, The Department organized a **Poster making competition** in association with **Paediatric Department, Gandhi Medical College, Bhopal** was organised on the theme **“Support Breastfeeding: Close to Mothers”** on the occasion of **“World breastfeeding week”**. Winners of competition were awarded with Trophy & Certificates.

Expert lecture by Dr. Rajesh Tikkas, Prof. of Pediatric, and Dr. Poorva Gohiya Asso. Prof., Gandhi Medical College Bhopal on benefits of Breast feeding.



Presentation Competition



Model Presentation

STUDENT PROJECTS/ DISSERTATION

The students of our Department pursuing Project works-

- Preparation of vermicompost and compost from Kitchen waste
- Identification and Cultivation of Medicinal Plants
- Identification of Bacteria from the Contaminated Water
- Collection and Identification of different seeds and their dispersal mechanism

FIELD PROJECT BY THE STUDENTS FROM SNGGPG COLLEGE, BHOPAL

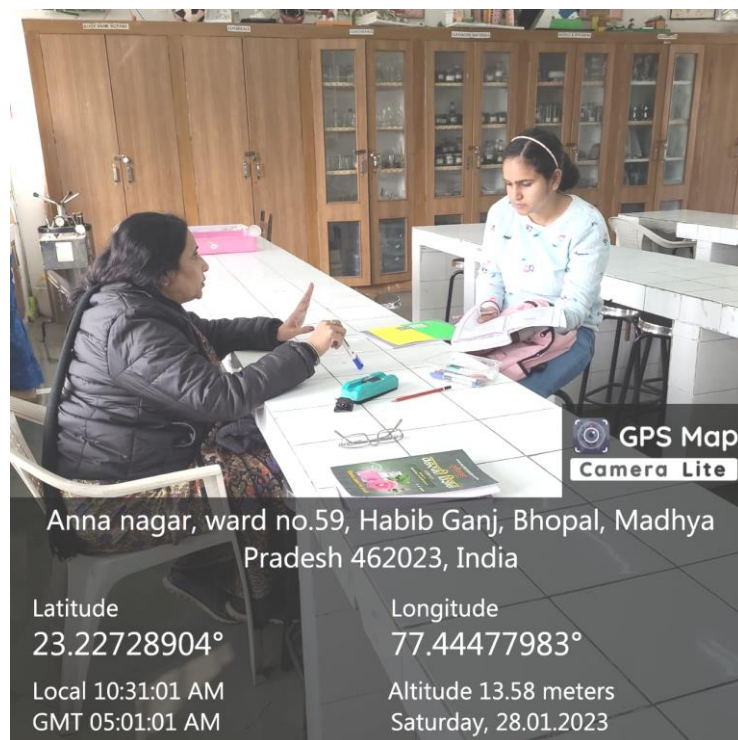


40 Students of SNGGPG College, Bhopal completed an Out House Field Project on the Topic titled Phytochemical Analysis of Medicinal Plants from 24th January to 2 February.

REMEDIAL CLASSES FOR SLOW LEARNERS



For Better learning of the weak students, remedial classes are organized.



The students also help each other in understanding the content and clearing the doubts.

BOARD OF STUDIES



On 15th October 2022 the **Department** organized meeting of **Board of Studies** for **Botany, Microbiology, EVS, Vocational Courses**.



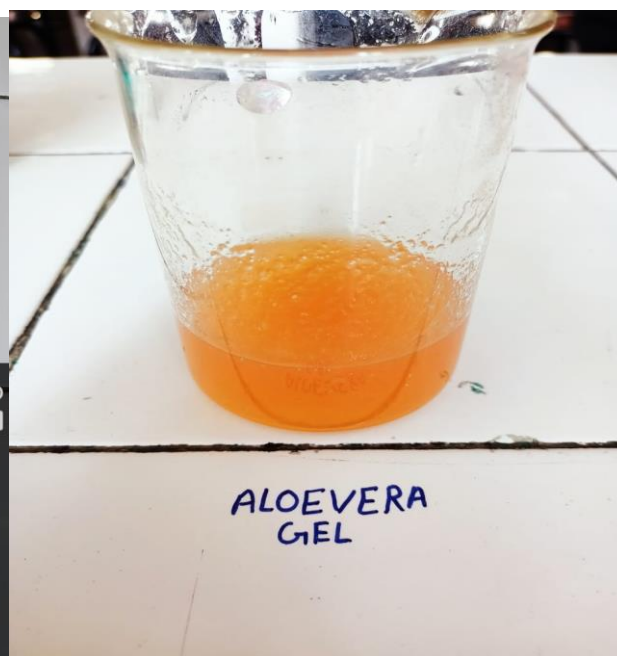
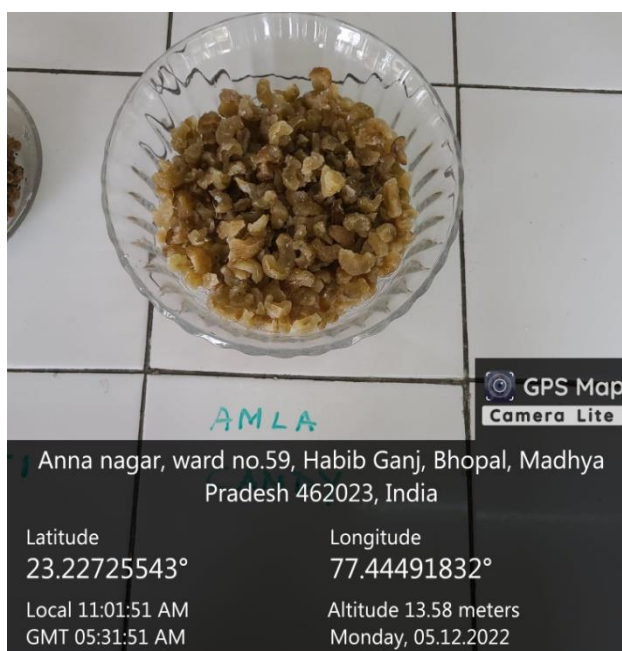
On 25th August 2022, **Ms. Supriya Gupta** attended Board of studies meeting as Alumni in SNGGPG College, Bhopal



On 29th September 2022, **Dr. Renu Mishra** attended Board of Studies meeting in Barkatullah University, Bhopal

On 22th November 2022 Examination committee meeting at BU Board of studies at BU 24th November 2022.

ENTERPRENURSHIP & SKILL DEVELOPMENTACTIVITIES



Students of Vocational course and Certificate course of Medicinal Plants prepared Amla candies, Chawanprash, Aloe Vera gel etc



Students of B.Sc. First year prepared vermicompost in the college and marketed in the college campus

Students of B.Sc. Second Year (Minor Subject) learned about the preparation of food color, herbal decoction, jelly, jams, pickles, juice, herbal color, hair oil, Rose water, Rose oil, perfume, oil from mint etc



Students of Vocational and Certificate course learned about the Cultivation, maintenance and Harvesting of Medicinal Plants.

Learned about extraction of Phytochemical from the Plants by Soxhlet apparatus, Maceration, Decoction etc.

OTHER ACTIVITIES



On 9th July 2022, the **Department Conducted Induction Programme for first year students in college auditorium**. Teachers told students about various significant days, various gardens of the college, college level sexual harassment committee and various activities organized by environment society.



On 28th July 2022, **Tree Plantation activity was organized on the occasion of World Nature Conservation Day** under the supervision of Dr. Renu Mishra, Dr. Shikha Mandloi and Dr. Nishi Yadav.



On 6th October 2023 Dr. Shikha Mandloi delivered a Lecture on the topic **Teaching of Mahatma Gandhi** in the College campus.



On 27th to 20th December 2022, Dr. Shikha Mandloi served as a **Resource Person** at SNGGPG, College.

CELEBRATIONS OF SOME IMPORTANT DAYS



Independence day celebration



Distribution of the Blankets to the fourth grade employee



**Attended Launching of Hindi Medium Medicinal Books by
the State Government**



Environmental Friendly College Campus



Examination Center of Bhoj University, Bhopal



Subject Specialist at Mansarovar University Ph. D. RDC Viva