

# Dr. Shyama Prasad Mukherjee Science and Commerce post Graduate College Kolar Road, Bhopal



Bhopal, Madhya Pradesh, India  
BX-91, F-Sector, Rajharsh Colony, Kolar Rd,  
Bhopal, Madhya Pradesh 462042, India  
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Long 77.419902°  
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## Department of Botany Since 1982

A botanical treatise or study especially of a particular system of biology.



## Mission

To inspire learner centric education and research oriented programme in a congenial and empowered environment.

## Vision

To conserve, sustain and explore Biodiversity

# About

- The department of Botany established in the year 1982 ,is one of the four disciplines which constitute the school of life sciences, in the most prestigious and one of the old Institute of the city of Lake, Bhopal. The department is running graduate, master's and doctoral degree programme. A well balanced curriculum having theory and practical and qualified faculty has been the strength of the department since its inception.
- The department is recognized with the advances in various aspects of plant science from basic taxonomy to molecular biology. The department has implemented add-on courses such as horticulture and personality development as vocational subjects as per the new NEP 2020. The department has also implemented choice based credit system for grading undergraduate students since the year 2020, which offers flexibility in structuring and assessment of courses.

The overall goal of Botany department to impart quality education and to motivate students for research in various fields of plant sciences.

# Botany Department Profile

Name of the department : Botany

Science> Botany

Year of Establishment : 1982

## Names of Programmes / Courses offered

Graduate degree (NEP-2020)	BSc 1 yr. Certificate 2 yr. Diploma 3.yr. Degree	Botany Zoology Chemistry Biotechnology	Botany (Major and Minor)	Others (Credit Based) Open/ elective subject	Vocational Subjects (Credit Based) -Horticulture -personality development
Master Degree (semester System)	M.sc.	Botany			
Doctor of philosophy	Ph.D.				



# PROFILE

Names of interdisciplinary courses and the departments/ units involved  
Bsc with Biotechnology, Botany, Zoology, Chemistry

- Annual / Semester / choice based Credit System (program wise)  
UG- Annual and choice based Credit System  
PG- Semester

- Number of teaching posts sanctioned/ filled-
- Sanctioned: 08
- Filled :08

- Number of academic support staff (technical and administrative)  
sanctioned and filled
- Sanctioned- 02
- Filled- 01

# Number of students registered since 2018-2022 (UG)

Year	No of admissions of UG
2016-17	145
2017-18	124
2018-19	161
2019-20	213
2020-21	109
2021-22	77

# Number of students registered since 2018-22 (PG)

Year	No.of Admission in PG	Remarks
2018-19	33	35 seats
2019-20	32	35 seats
2020-21	31	50 seats
2021-22	34	50 seats

# Faculty Profile



# Dr. Kirti Jain

Professor and Head of the Department (M.sc. Ph.D. ,LLB)



- **Teaching experience - 37 years**
- **Research experience - 15 years**
- **No. of Ph.D Awarded students -12**
- **Research Projects Completed: Minor 02, Major 01**
- **Attended FDPs/seminar and workshop- 48**
- **Research Paper published National /International -35**
- **Books Published – 03 (Co -author)**
- **Member of editorial Board and edited book - 01**
- **Seminar/Workshop/FDP Organized- 06**
- **Life Membership – International Journal -01, National 04**
- **Member Central board of studies, BU**
- **Incharge Rusa, World Bank and Semester Cell**
- **Invited Resource Person in different workshops**

# Dr. Aruna Jain

Professor(M.Sc., Ph.D)



Dr.Aruna jain  
Professor

- **Specialization...Plant physiology**
- **Teaching experience- 35 years**
- **Research experience -20 years**
- **No. of Ph.D awarded students- 07**
- **Chief Editor of books- 02**
- **Research paper published- 42**
- **Attended FDPs/seminar and workshop - 45**
- **Seminar/workshop Organized- 04**
- **Training Programs Organised (21 days)- 04**
- **Nodal Officer CM Helpline,(2016 -2017 ) ,AISHE (2017-19)**
- **In charge Semester Cell, Personality Development Cell (2017-2019)**
- **Invited Resource Person in different workshops**

Dr. Asha Sharma

Professor, (M.sc., Ph.D)

Specialization : Plant Pathology

Teaching experience : 37 years

No of books Published : 02

Attended FDPs/seminar and workshop : 50

Member in different committies of college

Member board of

studies in NEP 2020

Member board of

studies in MLB college





# Dr. S.D. Singh

Professor ( M.sc., Ph.D)

**Specialization : Forest Ecology**

**Teaching experience- 30 years**

**Research experience -22 years**

**Ph.D. supervised - 08**

**Member in editorial board of international journal**

**Co-author in 'Cytogenetics Discrepancies and Pendantic performance'**

**Life member International journals**

**: Journal of Remote sensing(photo nirvachak)**

**: Journal of Applied and Pour Biology**

**Member board of studies in "Atal Bihari Vajpayee Hindi Vishvidhyalaya, Bhoapl'**

**State government's Nominee Member in governing body of People's University , Bhopal.**

**Member of Roaster committee constituted by H.Ed., Barkatullah university, RGPV  
Technical University.**

**Member of PEER group of NAAC Commiitee of Barkatullah university.**

**Convener of Janbhagidari Samiti and B.Ed. Admission committee since 2021.**

**Convener of Green Audit, Energy and environment Audit Team.**

**Convener of Biometric Purchase Committee.**





# Ms. Rafat Fatma

Associate Professor (M.sc.)

Specialization in Cytogenetics and Plant

- Teaching experience- 36 years

Attended many FDPs/seminar

and workshops

Member in different committees of college

Nodal officer in

Minority Scholarship scheme at college level



# Dr. Sarla patel

M.sc., Ph.D

Specialization : Environment Science

Teaching experience-12 years

- Attended FDPs/seminar and workshop- 15
- Member in different committee of college
- Worked as NSS Officer : 2016-17



# Dr. Davendra Singh Patel

M.Sc., Ph.D

Specialization :Limnology

Teaching experience 10 years

- Books Published : 3 (Co -author)
- Attended FDPs/seminar and workshop- 12
- NCC Officer since : 2020
- Member in NSP Central Sector Scholarship
- Member in RUSA Lab Instrument Proposal Finalization Committee
- Member in World Bank Botany Instruments Specification Committee



# Dr. Shalini Nema

M.Sc., Ph.D

Specialization : Microbiology

Teaching experience-03 years

- Attended FDPs/seminar and workshop- 15
- Attended Orientation/refresher programme-02
- Member in different committee of college
- Worked as member of swami vivekanand career counselling cell: 2019-2022



# Faculty as member of Board of studies

Botany



- Dr. Kirti jain
- Dr. Aruna jain
- Dr. S.D. Singh

Microbiology



- Dr. Kirti jain

Biotechnology

- Dr. Aruna jain

## Visiting faculty

<b>01.</b>	Dr Arun Kumar Pandey	<b>V.C. of Mansarovar University, Sehore.</b>
02.	Dr Nasreen Siddiqui	<b>Principal Govt. Geetanjali College , Bhopal</b>
03	Dr S. k. Yadav	<b>Professor , DR. Harisingh GaurUniversity,Sagar</b>
04	Prof D. C . Atri	<b>Professor ' Delhi university , New Delhi</b>
05	Dr Shaukat Saeed Khan	<b>Rtd.,Professor , Saifia College, Bhopal</b>
06	Dr Bhaskar Chourasiya	<b>Professor , Guru Ghasidas University, Bilaspur</b>
07	Dr Mukesh Dixit	<b>◦ Professor , SNGGPG college, Bhopal.</b>
08	Dr. Ranjana verma	<b>Professor, IEHE Bhopal .</b>

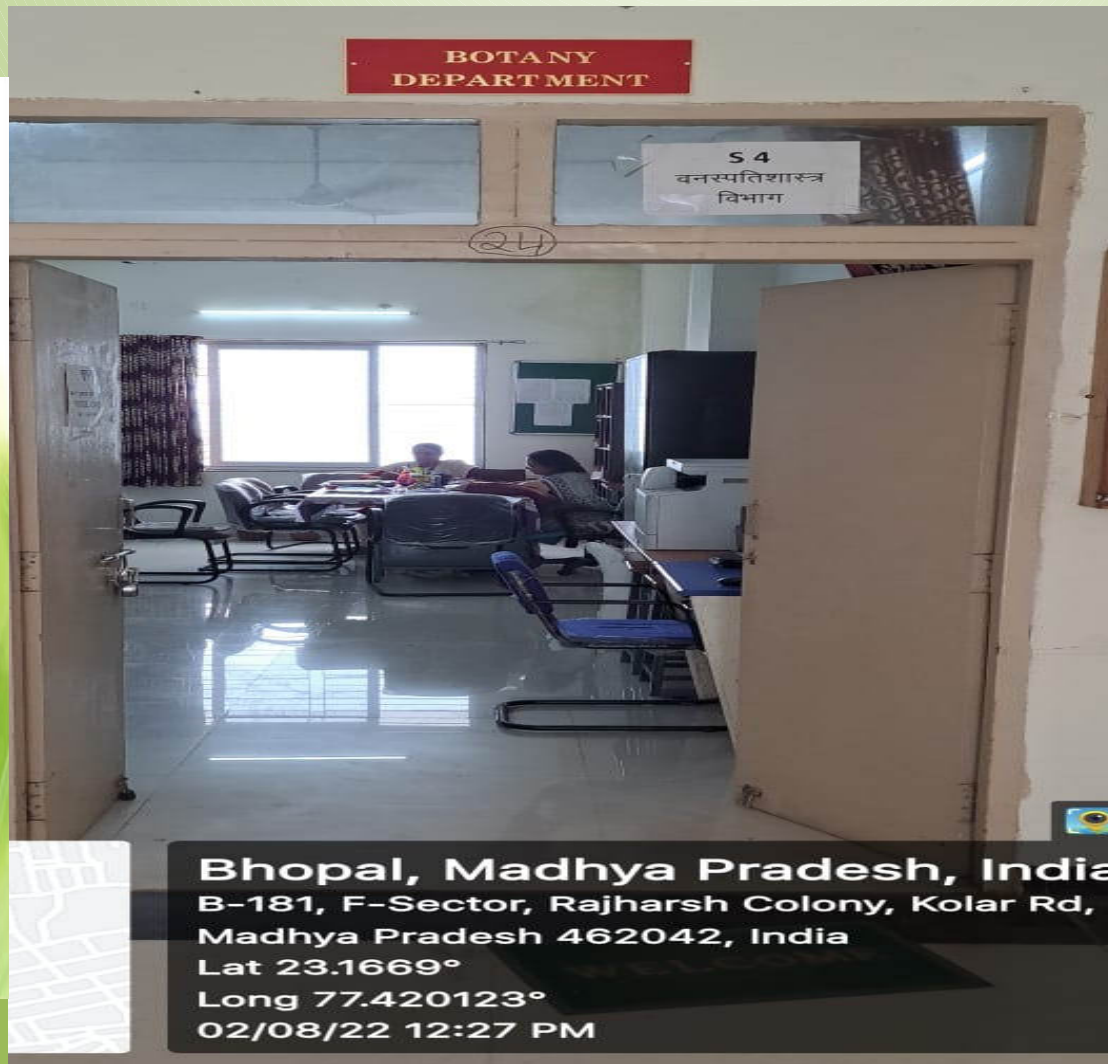
## Visiting faculty

08	Dr. Ranjana verma	Professor, IEHE Bhopal .
09	Dr. Swati Khare	professor., govt. MLB college, Bhopal
10	Dr. Abha rani Pandey	Professor, Govt. MVM Bhopal.
11	Dr. Aparna Laskar	Professor, SNGGPG college, Bhopal
12	Dr. Ritu Thakur Bais	Professor, Govt. MLB college Bhopal
13	Dr. Pratibha singh	Rtd., and incharge principal of SNGGPG college, Bhopal
14.	Dr. G.S. Jarial	Senior faculty, MP CON, Bhopal

# Infrastructure

## Department of Botany

B → Beautifully  
O → Organized role  
T → Towards  
A → Achieving  
N → Nature's  
Y → Yields





# Library



Department of Botany is having an excellent computerised as well as manual library facility with more than 325 books in different disciplines of Botany and even have number of research journals in the main library.

Moreover, internet facilities is freely provided to the students to keep them updated on the recent developments in the research field. The department is having an excellent space for reading and learning . Even , the department library is updated every year with the latest collection of national and international authors.

# LIBRARY



Play Video

## Well equipped Lab facilities

The department of Botany has well equipped undergraduate and post graduate Lab with preserved plant specimen and slides of all groups of plants ranging from Algae to Angiosperms.



Play Video

# Molecular Biology Lab.

The department of Botany has well equipped post graduate Molecular biology Lab with latest and sensitive equipments including laminar air flow, centrifuge, hot air oven, autoclave , spectrophotometer and electrophoresis chamber etc.



Play Video

# Seed bank

Department of botany is holding a seed bank to facilitates the students with the importance of conservation of seeds of genetically pure variety.



List

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list

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## Internet/WiFi facility for staff and students

Staff Room and PG classroom of the department is having modern audio- visual facilities for faster update and latest information.



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# Botanical garden

Botanical specimens are integral part of the study of Botany, botanical garden with all the necessary specimen is must for better understanding the importance of conservation. Department of Botany is maintaining a botanical garden and Green House with QR coded plant specimen .



Play Video

# Astro Garden

Garden is being constructed on the basis of Zodiac Sign.



# Students persuing Ph.D

Professor	Name of student	research interest
Dr. Kirti jain	1.Neelam Kalakar 2.Iffat Khan 3.Kalpana Gavande 4.Pooja singh 5.Shoaib mohd. Malik 6.Najeeb Husain Wani 7. Farooq Ahmed Ahanger 8.Arif Ahmad rathor	:Phytochemical and anti microbial studies activity :In vitro Micro – propagation : Medicinal plants :In vitro propagation and formulation of Herbs :Enzyme characteristics : phytochemical studies of seeds
Dr. Aruna jain	1.Ranjeet Singh 2.Sunita Jhariya 3.Deepmala Bramhe	:Physiological studies on Soyabeen : ffect of biofertilizers and chemical fertilizers. :Effect of INM
Dr. S. D. Singh	1.Monika Singh 2.Hafiz Islam 3. Irfan rashid	:Phytochemical analysis of seeds :Growth response and physiology :Heavy Metals

## Events and HAPPENINGS

Department is not merely involved with the class room teaching rather it also carries out lot many activities like field visit, excursion tour, seminars , webinar and even arranging guest lectures from learned resource person, hence, enhancing both knowledge and personality.

### ➤ **Field Visit**

- 26 Feb 2022
- visit to organic farm at Kolhan's Kala, Sehore M.P.

### ➤ **visit to Bhimbethika, Raisen, M.P.**

- 12 March 2022, an archeological site

### ➤ **Guest Lecture ( for P.G. students)**

- 15-16 march 2022, 20-30 sept. 2022

### ➤ **Visit to water and Land Management institute, Bhopal**

- 25 march 22

### ➤ **Students participated in Walkathon on World Environment**

- June 22

### ➤ **Training program on "importance of sustainable palm oil and other vegetable oils**

- 7 June



Here's a glimpse of few:

Play video



# ECOCLUB





# Faculty development and entrepreneurship programme

Department is conducting various FDP programmes in order to train the youth not only for curriculum fulfillment but also considering the fast changing technology in mind and equip them with future technologies leading to a successful and sustainable career.









# NEWS HEADLINES

019

## प्रोफेसरों ने फूलों की खेती और नर्सरी मैनेजमेंट की बड़ी जानकारीयां साझा की

श्यामाप्रसाद मुखर्जी महाविद्यालय के बॉटनी डिपार्टमेंट में कार्यशाला

गुड इवनिंग, भोपाल

आज के हाईटेक युग में लोग काफी व्यस्त रहते हैं और हमारी दिनचर्या में तनाव और व्यस्तता बढ़ गई है। हमें विपरीत परिस्थितियों में जीवन जीने के लिए जहां मैनेजमेंट सीखना जरूरी है, वहीं आने वाली नई पीढ़ी को बचपन से ही जब वो नर्सरी में हो उन्हें भी मैनेजमेंट सिखाना चाहिए। यह बात पेड़-पौधों से आसानी से सीखी जा सकती है। जिस तरह किसी पौधे को नर्सरी में पैदा किया जाता है और बढ़ा होने पर वह पर्यावरण प्रबंधन में भागीदार बनता है। उसी तरह हमारे जीवन में भी नर्सरी मैनेजमेंट जरूरी रहता है।

यह कहना है डॉ माधुरी मोदक का वे एक कार्यशाला को सम्बोधित कर रही थी जो नर्सरी मैनेजमेंट पर थी। शासकीय डॉ. श्यामा प्रसाद मुखर्जी विज्ञान एवं वाणिज्य महाविद्यालय में आयोजित सात



दिवसीय कार्यशाला के तीसरे दिन नर्सरी मैनेजमेंट पर कार्यशाला का आयोजन किया गया। फेकल्टी डेवलपमेंट प्रोग्राम के तहत एन्टरप्रेन्योरशिप पर एक सप्ताह चलने वाले इस आयोजन को महाविद्यालय का वनस्पति विभाग करवा रहा है। तीसरे दिन नर्सरी मैनेजमेंट विशेषज्ञ डॉ माधुरी मोदक ने इस तकनीक को विस्तार से समझाया तथा इसके विभिन्न पहलुओं पर चर्चा की। उन्होंने कहा की पेड़ पौधे न केवल पर्यावरण के

लिए जरूरी है बल्कि हम इनसे जीवन के बारे में भी बहुत कुछ सीख सकते हैं। फूलों और पेड़ पौधों की नर्सरी उस बच्चे की तरह होती है जब वो बचपन में स्कूल जाता है अपने व्याख्यान के बाद नर्सरी एक्सपर्ट डॉ मोदक ने प्रोफेसरों के साथ लाल घाटी की नर्सरी का दौरा भी किया और लाइव जानकारीयां साझा की।

इसी तरह कार्यशाला में चौथे दिन अमित सक्सेना ने फूलों की खेती पर प्रशिक्षण दिया। उन्होंने भारत की एवं अन्य देशों की फूलों की खेती का

तुलनात्मक विवरण दिया एवं भारतीयों में कम होती खेती की रूचि पर भी जानकारी साझा की। उन्होंने झरबेरा, गुलाब, गेन्दा, केलेन्डुला, आदि पौधों की खेती का कैसे होती है बताया। खेती की आधुनिक तकनीकों के तहत उन्होंने पॉलीहाउस के निर्माण और फूलों के रखरखाव की विशेष सावधानियां भी बतलाई एवं इसके बाजार प्रबंधन पर भी प्रकाश डाला।

इस कार्यक्रम का संचालन डॉ. रफत फातिमा द्वारा किया गया। कार्यक्रम का आयोजन विभागाध्यक्ष वनस्पति शास्त्र की प्रमुख डॉ. कीर्ति जैन द्वारा किया जा रहा है जिसमें डॉ. सरला पटेल, डॉ. देवेन्द्र सिंह पटेल, डॉ. नीतुप्रिया लचौरिया, डॉ. इला जैन भी शामिल थे। इस कार्यक्रम के लिए महाविद्यालय की प्राचार्य डॉ. रागिनी तिवारी ने विशेष मार्गदर्शन दिया कार्यशाला में प्राध्यापकों ने अमित सक्सेना से वन तो दू वन चर्चा भी की।

## गुड इवनिंग



## मशरूम फार्मिंग आज स्वरोजगार का बड़ा माध्यम : राजेश पाटिल

गुड इवनिंग, भोपाल

शासकीय डॉ. श्यामा प्रसाद मुखर्जी विज्ञान एवं वाणिज्य महाविद्यालय में फेकल्टी डेवलपमेंट प्रोग्राम के तहत एन्टरप्रेन्योरशिप पर चला रही कार्यशाला में अब मशरूम फार्मिंग पर एक्सपर्ट राजेश पाटिल द्वारा व्याख्यान दिया गया। उन्होंने मशरूम की विभिन्न प्रजातियों जैसे स्ट्रॉट मशरूम, अगिस्टर, फ्लोरेन्स

मशरूम आदि की खेती का प्रशिक्षण दिया। उन्होंने इनके बाजार प्रबंधन पर भी प्रकाश डाला। उन्होंने मशरूम बेग के निर्माण जैसे आखर भूत जानकारी से लेकर उनके स्पॉन बनाने के तरीकों उनकी हावोमिंग, इत्यादि की भी जानकारी दी। उन्होंने मशरूम फार्मिंग की स्वरोजगार का भी बड़ा माध्यम बताया। कार्यक्रम का संचालन डॉ. रफत फातिमा द्वारा किया गया। कार्यक्रम का आयोजन

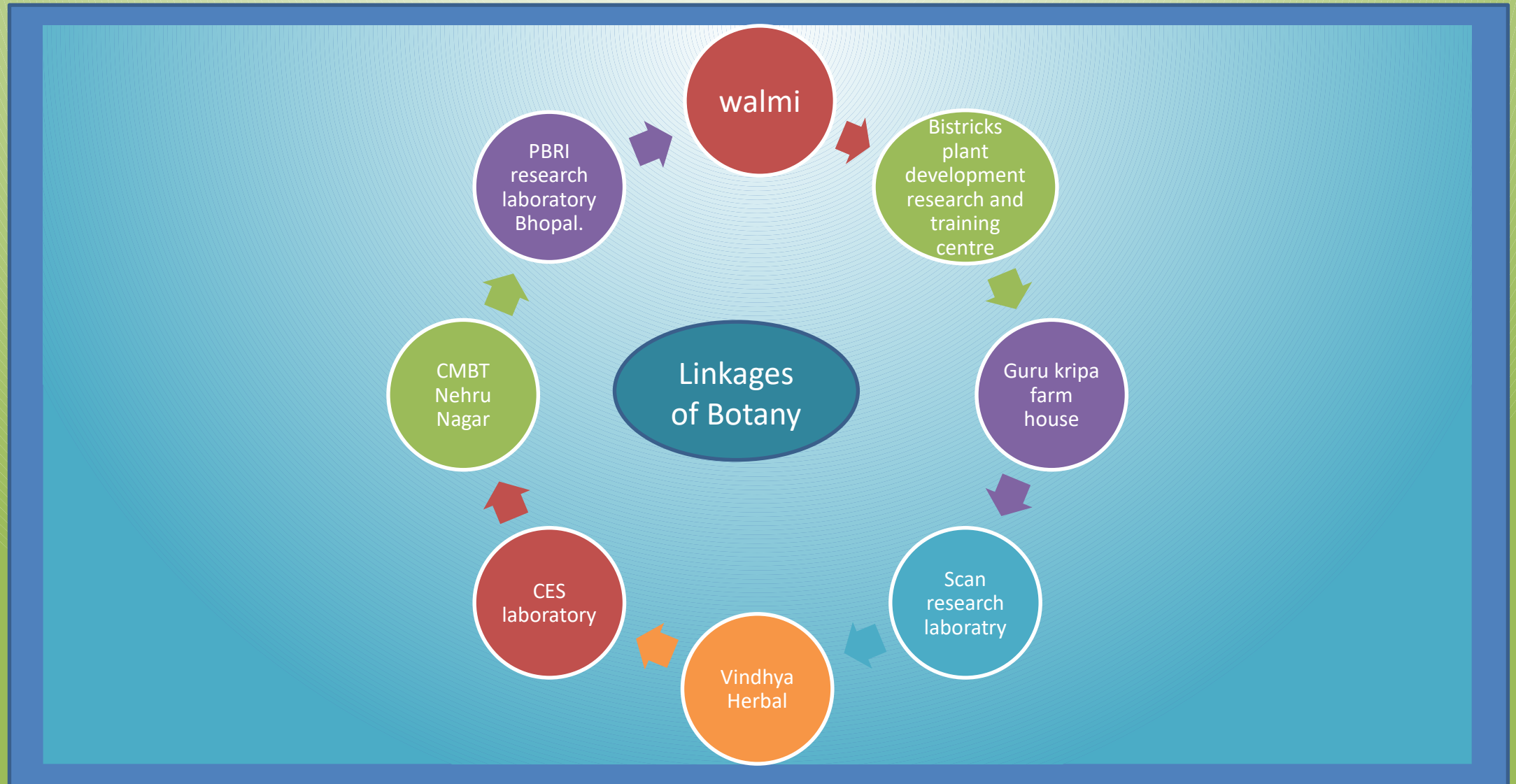
विभागाध्यक्ष वनस्पति विभाग की डॉ. कीर्ति जैन द्वारा किया जा रहा है जिसमें डॉ. सरला पटेल, डॉ. देवेन्द्र सिंह पटेल, डॉ. नीतुप्रिया लचौरिया, डॉ. इला जैन आदि भी सहयोग हैं। अभी तक इस कार्यशाला में नर्सरी मैनेजमेंट, फ्लोवर फार्मिंग, बोनसाई टेक्निक्स आदि पर एक्सपर्ट्स अपने व्याख्यान दे चुके हैं सोमवार की कार्यशाला का अंतिम दिन है।





# Linkages with other organizations

In order to create effective education systems and effective learning environment, expanding theoretical and practical views, sharing curriculum and acquiring new teaching strategies.

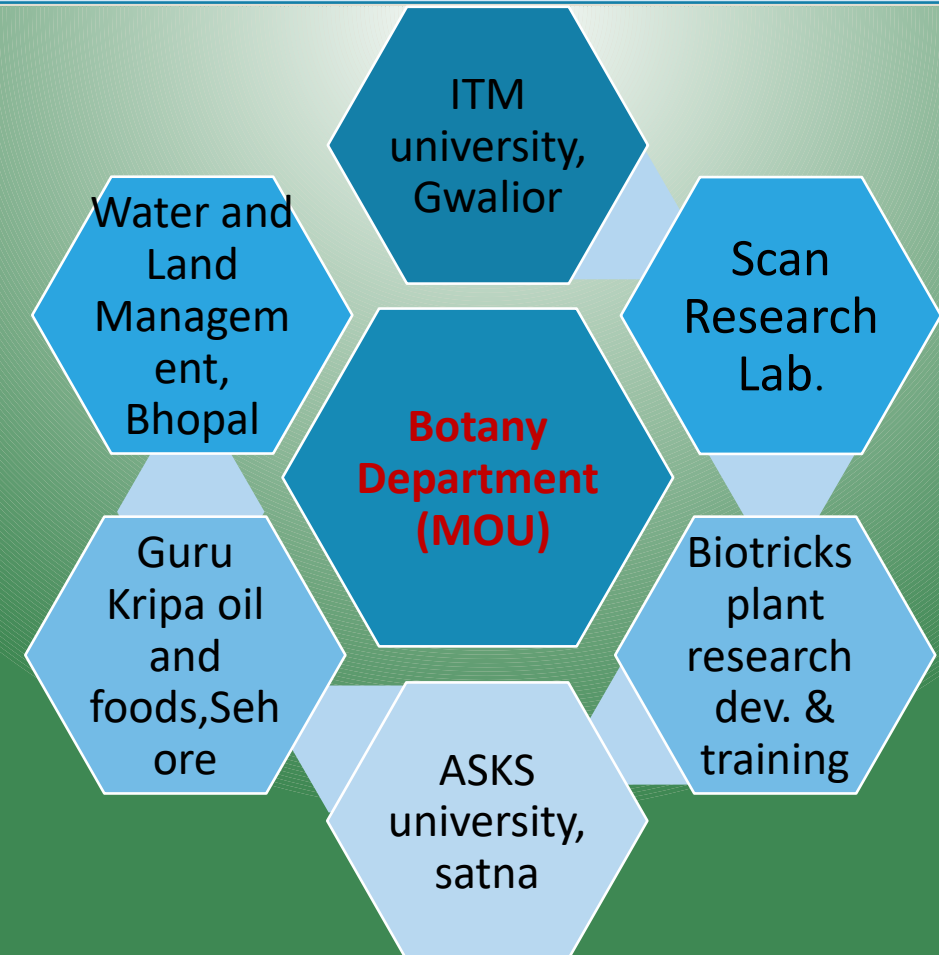


# Memorandum of Understanding (MoU)

Our academic linkage along with MOU and active cooperation with the well established and reputed organizations which will further enhance the profile of both student and the department.

## Benefits :

- Project collaboration
- Internships
- Research
- Higher studies
- Guest faculty knowledge exchange



# Project work UG

Session	No of Students	Institute	Topics
2016-17	65	Biotricks Plant research and training centre	PTC and biofertilizer
2017-18	70	Biotricks plant research and training centre	PTC and biofertilizer
2018-19	65	Biotricks Plant research and training centre	Plant tissue culture and biofertilizer
	09	Centre for molecular biology research	Molecular techniques
2021-22	39	Gurukrupa farms(kolans kala,phanda)	Organic farming
	14	Creative lab	Instrumentation

# Internship PG

Session	No.of students	Name of the institution	Topic	% outside the institution
2019-20	14	Scan Research lab	Phytochemical analysis of medicinal plants	100
2020-21	32	MP. Con Ltd.	Medicinal and aromatic plant cultivation and processing	100
2021-22	29	Scan Research lab	Phytochemical analysis of medicinal plants	100

# Achievements (2017-2023)

The department achievement not merely depend upon teaching and good academic records, but in true sense , it lies in placing students at the best place. List of few students holding positions in well established firms or as an entrepreneur:

- 1.Mohammad Irfan: Assistanyt Professor in university of jammu
- 2.Fayaz Ahmed: Nutrient officer in mahila and bal Vikas, Block Level
- 3.Imityaz: Enterpreneur as owner of apple Orchid
- 4.Mr. Sunil Burasi: assistant professor in Ratlam Degree College
5. Ms. Monica: Guest Faculty in BHEL college, Bhopal
- 6.Muzaffar Dar: Assistan Professor, S.P. College, Shrinagar
7. Deepmala Bramhu : assistant professor as guest faculty , Nasrullahganj
8. Ranjeet sahu : research associate in agriculture college, Sehore
9. Pooja Singh: guest lecturer in BHEL college, Bhopal.



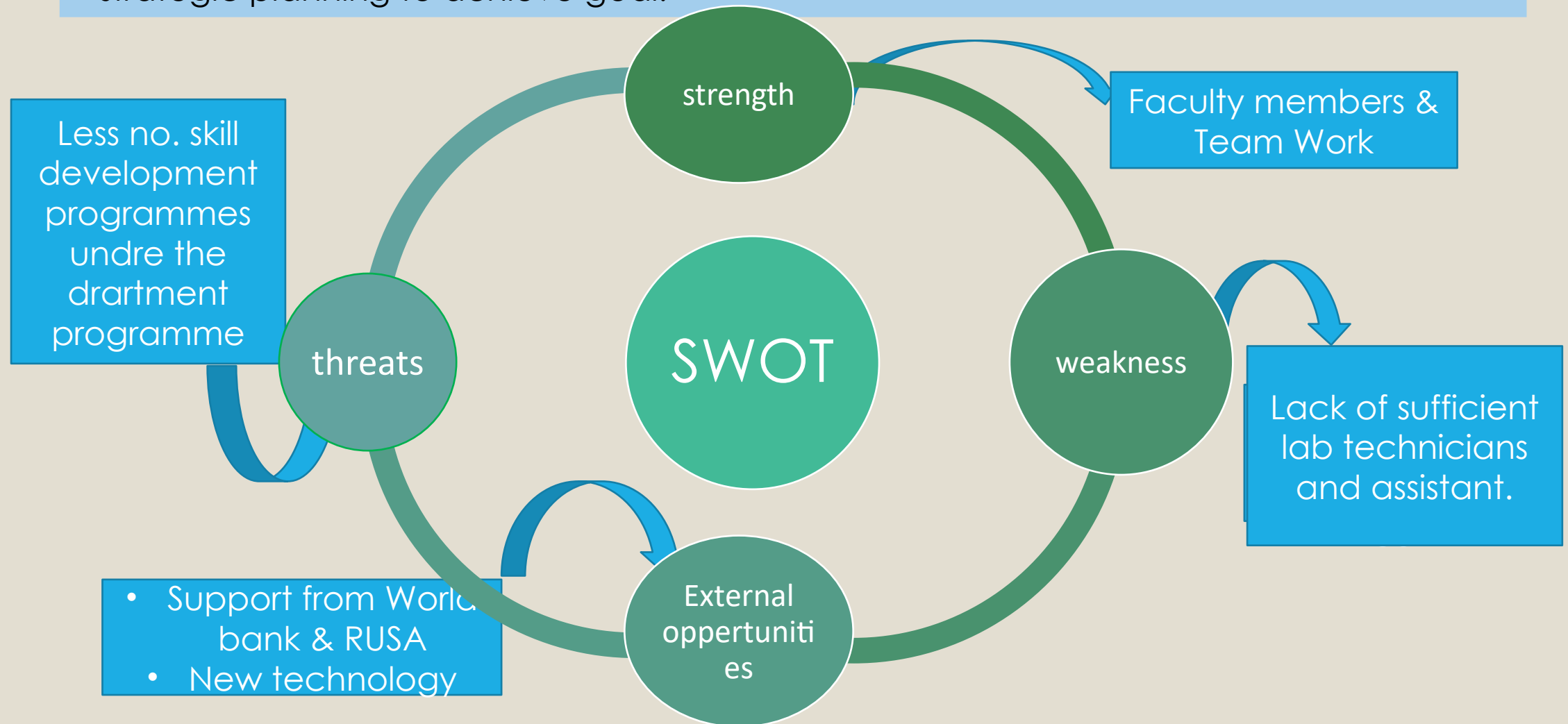
# Placement of UG and PG students

Some are listed below:

Name	Graduate from	Name of the institute joined
sanju rajput	Bsc	CISF ministry of home affairs
Monika jaiswal	Bsc	Constable, katara hills
Rakesh shivale	Bsc	Lab tech., BMHRC
Priyanshu Chawada	Msc	Cashier , J K hospital
Anamika raghuvanshi	Msc	PGT teacher
Vikram kushwah	Msc	Wear house operator, lateri
Ram Barosa	Msc	Self entrepreneur (garden Developer)
Deevan singh Tawar	Msc	KFc
Sangeeta Ahirwar	Msc	Receptionist( galaxy hospital)

# SWOT Analysis

- To identify and analyze internal strength, weakness, external opportunities and threats, department evaluate its competitive position from time to time and then develop strategic planning to achieve goal.



Thank you