

ACADEMIC AND ADMINISTRATIVE AUDIT



"A++" Accredited by NAAC (2021)
with CGPA 3.52

SHIVAJI UNIVERSITY, KOLHAPUR.

Internal Quality Assurance Cell
ACADEMIC AND ADMINISTRATIVE AUDIT (AAA)

Academic Year: 2024-25

01. Name of the Department/Centres/Chairs/ Support Services: Department of Botany

02. Year of Establishment :1964

03. Type : Department

04. Names of programmes offered :

Number of Records - 1

Sr.No.	COURSE LEVEL	Programme Name	Branch Name	Ph.D
1	MASTER	Master of Science	Botany	Yes

05. When the curriculum was last revised

Number of Records - 1

Sr. No.	Programme Name	Branch Name	Revision Date	Revision Percentage
1	Master of Science	Botany	20-06-2023	50

06. Number of teaching posts Sanctioned/Filled :

Total Sanctioned - 15 Total Filled - 4

Type	Professor			Asso. Professor			Asst. Professor		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Sanctioned	2			4			9		
Recruited / Promoted	1	0	1	1	0	1	1	1	2
Vacant	1			3			7		
Temporary	0	0	0	0	0	0	0	1	1
Visiting Faculty	0	0	0	0	0	0	0	0	0
Adjunct Professor	0	0	0	0	0	0	0	0	0

07. Number of research projects of the year (on-going) : [Go to Portal](#)

Number of Records - 10

Sr. No.	Teacher Name	Name of the project	Name of the principal Investigator	Year of award	Duration	Funding Agency	Total amount of funds provided
1	Mansingraj Shahajirao Nimbalkar	"DBT-BUILDER –Shivaji University Interdisciplinary Life Science Programme for Advance Research and Education"	Principal Investigator		Start Date : 11-03-2022 End Date : Till Date	Department of Biotechnology (DBT)	3,29,00,000
2	Savaliram G Ghane	DST-FIST	Co-Principal Investigator		Start Date : 05-03-2021 End Date : 25-04-2025	Department of Science and Technology (DST)	57,00,000

Sr. No.	Teacher Name	Name of the project	Name of the principal Investigator	Year of award	Duration	Funding Agency	Total amount of funds provided
3	Kalyani Babasaheb Pawar	Evaluation of phytoremediation potential of selected plant species against toxicity of heavy metals	Principal Investigator		Start Date : 19-07-2023 End Date : 18-07-2025	Other	1,65,000
4	VARSHA DILIP JADHAV	Unlocking Portulaca potential : Value addition & Culinary Uses	Co-Principal Investigator		Start Date : 05-11-2024 End Date : 01-01-2026	Other	2,00,000
5	Mansingraj Shahajirao Nimbalkar	"Cost effective technology for drying and concrete preparation from surangi flowers for rural livelihood enhancement"	Principal Investigator		Start Date : 05-05-2025 End Date : Till Date	Other	4,25,000
6	Swaroopaa Amit Patil	Designing herbal carriers for dermal application	Principal Investigator		Start Date : 05-05-2025 End Date : Till Date	Rajiv Gandhi Science & Technology Commission (RGSTC)	3,65,000
7	Savaliram G Ghane	: Hydroponic Cultivation of Bacopa monnieri: Optimization, Phytochemical Enhancement, and Product Development	Principal Investigator		Start Date : 17-03-2025 End Date : 15-05-2025	Other	1,25,000
8	Savaliram G Ghane	Studies On Influence Of Led (Light-Emitting Diode) Light On Growth, Nutrition And Bioactives In Selected Sprouts, Microgreens, And Leafy Vegetables	Principal Investigator		Start Date : 19-07-2023 End Date : 25-04-2025	Other	2,70,000
9	Dattatrya Krishna Gaikwad	Startup product and process development under the Trade name "Shiv-Tej"- composite herbal Joint Pain Relief Oil, Skin Care Oil, composite herbal Tambul for Urine stone problems	Principal Investigator		Start Date : 01-04-2025 End Date : 28-03-2026	Other	1,50,000
10	VARSHA DILIP JADHAV	To Strengthening Research facilities in the department	Co-Principal Investigator		Start Date : 01-04-2022 End Date : 31-03-2027	Department of Science and Technology (DST)	45,00,000

08. Inter-institutional collaborative projects and associated grants received (Add details about beneficiaries, grants received and nature of collaboration) :

National collaboration	10
International collaboration	0

09. Departmental projects funded by DST-FIST, UGC-SAP/CAS, DPE, DBT, ICSSR, AICTE etc., : Total grants received :

Sr No	Name of the Department	Name of the Scheme	Name of the funding agency	Year of Award	Funds provided	Duration of award
1	Rajiv Gandhi Science and Technology Commission	Establishing demonstration fields and technology transfer for Quality Plant Production using Biotechnological Approaches Phase II	Unknown	2020	57,73,000	2020 - 2024
2	Rajiv Gandhi Science and Technology Commission	Designing of herbal carriers for dermal applicaiton	Unknown	2025	3,65,000	2025 - 2027
3	Rajiv Gandhi Science and Technology Commission	Cost effective technology for effective drying and concrete preparation from Surangi for rural livelihood enhancement	Unknown	2025	4,25,000	2025 - 2027

10. Department with UGC-SAP , CAS,DST-FIST, DBT, ICSSR and other recognitions by National and International Agencies :

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Sr No	Name of the Department	Name of the Scheme	Name of the funding agency	Year of Award	Funds provided	Duration of award
1	Rajiv Gandhi Science and Technology Commission	Establishing demonstration fields and technology transfer for Quality Plant Production using Biotechnological Approaches Phase II	Unknown	2020	57,73,000	2020 - 2024
2	Rajiv Gandhi Science and Technology Commission	Designing of herbal carriers for dermal applicaiton	Unknown	2025	3,65,000	2025 - 2027
3	Rajiv Gandhi Science and Technology Commission	Cost effective technology for effective drying and concrete preparation from Surangi for rural livelihood enhancement	Unknown	2025	4,25,000	2025 - 2027

11. Special research laboratories sponsored by / created by industry or corporate bodies

☰ Number of Records - 2									
Sr. No.	Name	Dimention	Capacity	Area	Establish Date	Sponsored / Created by	ICT Enabled	ICT Enabled Details	Geo Tagged Photo
1	Common Lab No II	40x20	30	800	15-06-1964	Industry	Yes	Common Lab No II With LCD Projector	View
2	Common Lab No I	40x20	30	800	15-06-1964	Corporate Bodies	Yes	Common Lab No I With LCD Projector	View

12. Number of publications during the year : [Go to Portal](#)

Sr No	Particulars	Numbers
1	Papers Presented	18
2	Number of Papers published	28
3	Number of Books with ISBN	1
4	Peer-reviewed papers (International)	11
5	Peer-reviewed papers (National)	2
6	Books - Authored	1
7	Books - Edited	0

13. H-index of individual faculty :

Sr No	Name of the Faculty	H-index
1	Dr. Rajaram Vithoba Gurav	12
2	Dr. Dattatrya Krishna Gaikwad	17
3	Dr. Nikhil Babruwahan Gaikwad	21
4	Dr. Varsha Dilip Jadhav	18
5	Dr. Manoj Madhwanand Lekhak	15
6	Dr. Kalyani Babasaheb Pawar	3
7	Dr. Savaliram G Ghane	17
8	Dr. Swaroopa Amit Patil	8
9	Dr. Mansingraj Shahajirao Nimbalkar	23
10	Smt. Neha Chandrashekhar Wadmare	2
11	Shrirang Ramchandra Yadav	37
12	Tarikere Ganapati Nagaraja	6

Sr No	Name of the Faculty	H-index

14. Details of patents and income generated : **Data is not available.** [Go to Portal](#)

15. Areas of consultancy and Income generated from consultancy :

Sr No	Name of the Consultant	Name of the Consultancy project	Consultancy / Sponsoring agency	Year	Revenue Generated
1	Rajiv Gandhi Science and Technology Commission	Establishing demonstration fields and technology transfer for Quality Plant Production using Biotechnological Approaches Phase II	Unknown	2020	0
2	Rajiv Gandhi Science and Technology Commission	Designing of herbal carriers for dermal applicaiton	Unknown	2025	0
3	Rajiv Gandhi Science and Technology Commission	Cost effective technology for effective drying and concrete preparation from Surangi for rural livelihood enhancement	Unknown	2025	0

16. Revenue generated from corporate training : **Data is not available.**

17. Awards/Recognitions received at the National and International level by : Faculty / Doctoral/Post doctoral fellows / Students : **Data is not available.**

18. Number of students have cleared Civil Services and Defense Services examinations, NET, SET (SLET), GATE and other competitive examinations :

Sr No	Examinations	Number
1	RRB NTPC	0
2	IBPS Clerk	0
3	SBI Clerk	0
4	RBI Assistant	0
5	LIC AAO	0
6	SSC CGL	0
7	MPSC	0
8	IBPS PO	0
9	SBI PO	0
10	RBI Grade B	0
11	NDA	0
12	GATE	0
13	IES	0
14	UPSC Civil Services Exam	0
15	NET	0
16	SLET	0
17	GMAT	0
18	CAT	0
19	GRE	0
20	TOEFL	0
21	State Government examinations	0

19. List of doctoral, post-doctoral students and research associates :

a) From the host institution/university.

Sr No	Candidate Name	Registration Date	Synopsis Title	Subject	Guide Name	Awarded Date
1	CHOUGULE RUPALI NEMGONDA	01-07-2018	STUDIES ON APONOGETON SPECIES IN INDIA	Botany	MANOJ MADHWANAND LEKHAK	21-10-2024
2	KAMBLE PRATIK SUNIL	01-07-2017	EXTRACELLULAR BIOSYNTHESIS OF SOME TRANSITION METAL NANOPARTICLES FROM MEDICINAL PLANTS BAUHINIA RACEMOSA AND DRIMIA INDICA AND ITS APPLICATION IN MANAGEMENT OF GUAVA WILT	Botany	SWAROOPA AMIT PATIL	29-08-2024
3	OTARI SHREEDHAR SHASHIKANT	01-07-2019	BIOPROSPECTING AND CONSERVATION OF SELECTED BARLERIA SPECIES	Botany	SAVALIRAM GOGA GHANE	08-05-2025
4	PATIL PRIYANKA SURESH	01-07-2017	BIOCHEMICAL AND MOLECULAR ANALYSIS OF SOME SELECTED PROMISING SPECIES OF GENUS BRIDELIA	Botany	VARSHA DILIP JADHAV	29-10-2024
5	WALVEKAR KOMAL SHIVAJI	01-01-2020	PROFILING AND ELICITATION OF PHYTOCHEMICALS IN PINDA CONCANENSIS	Botany	MANSINGRAJ SHAHAJIRAO NIMBALKAR	10-10-2024

b) From other institution/university.

Sr No	Candidate Name	Registration Date	Synopsis Title	Guide Name	Awarded Date
1		-		Dr. Dattatrya Krishna Gaikwad	31-12-2024
2	Rupali Nemgonda Chougule	01-07-2018	Studies on Aponogeton species in India	Dr. Manoj Madhwanand Lekhak	21-10-2024

20. Research Scholars/ Post Graduate students getting financial assistance from the University/State/ Central Govt : Data is not available.

21. Average percentage of courses having focus of employability/entrepreneurship/skill development :

Sr No	Category Name	Name of the Course	Course Code	Name of the Programme	Activities with direct bearing on Employability/Entrepreneurship/Skill development	Year of Introduction
1	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	Compare morphological and anatomical trends in extinct Pteridophytes and Gymnosperms to reconstruct evolutionary lineages.	2001
2	Employability	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
3	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
4	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	Skills in identification of lower plants	2001
5	Employability	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
6	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
7	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	Demonstrate proper laboratory discipline, safety measures, and equipment care to ensure a safe and efficient working environment	2001
8	Employability	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
9	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
10	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001

Sr No	Category Name	Name of the Course	Course Code	Name of the Programme	Activities with direct bearing on Employability/Entrepreneurship/Skill development	Year of Introduction
13	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
13	Employability	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
13	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
13	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
13	Employability	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
13	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
13	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
13	Employability	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
13	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
14	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	This program, initiated by the Ministry of Environment, Forest & Climate Change (MoEF&CC), aims to train youth in green skills for environmental conservation and pollution management	2001
14	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
14	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	Skill to identify plants	2001
14	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
14	Employability	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
14	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
14	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
14	Employability	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
14	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
14	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
15	Employability	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
15	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
15	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
15	Employability	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001

Sr No	Category Name	Name of the Course	Course Code	Name of the Programme	Activities with direct bearing on Employability/Entrepreneurship/Skill development	Year of Introduction
154	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
155	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	Analyzing collected data to determine population trends, identify factors influencing population size, and make predictions about future population dynamics.	2001
156	Employability	Master of Science	205	Master of Science - Botany(CBCS)	General ecologists, including those specializing in population ecology, work in various settings such as universities, research institutions, and government agencies. They conduct research on population dynamics, study the interactions between species, and contribute to our understanding of ecological processes.	2001
157	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
158	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	the goal is to create a healthier, more resilient, and sustainable environment, while also empowering individuals and communities to become responsible stewards of nature	2001
159	Employability	Master of Science	205	Master of Science - Botany(CBCS)	Healthy ecosystems can support ecotourism, providing economic benefits to local communities while promoting conservation	2001
160	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
161	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	Experimental ecology offers a strong foundation for developing crucial skills highly valued in various professions, boosting employability. Key skills include critical thinking, data analysis, problem-solving, and communication, all essential for environmental consultancy, research, and related fields.	2001
162	Employability	Master of Science	205	Master of Science - Botany(CBCS)	In essence, experimental ecology provides a strong foundation for developing valuable skills that enhance employability across various sectors, from environmental fields to data-driven roles.	2001
163	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	Developing innovative solutions for waste management and resource recovery, creating eco-friendly products and services, and promoting sustainable business models.	2001
164	Skill Enhancement Courses	Master of Science	205	Master of Science - Botany(CBCS)	Specific skills related to pollution monitoring, waste management technologies, and environmental regulations are essential.	2001
165	Employability	Master of Science	205	Master of Science - Botany(CBCS)	Initiatives like GSDP are crucial for providing accessible training opportunities to a wider population, including school dropouts, and increasing the availability of skilled workforce.	2001
166	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
167	Employability	Master of Science	205	Master of Science - Botany(CBCS)	Population and community ecology rely heavily on quantitative methods, including statistical analysis and mathematical modeling to understand population trends and interactions.	2001
168	Entrepreneurship	Master of Science	205	Master of Science - Botany(CBCS)	NA	2001
169	Employability	Master of Science	205	Master of Science - Botany(CBCS)	Green skills can also enable individuals to start their own businesses in areas like sustainable agriculture, eco-tourism, or waste recycling.	2001

Sr No	Category Name	Name of the Course	Course Code	Name of the Programme	Activities with direct bearing on Employability/Entrepreneurship/Skill development	Year of Introduction
28 2	Entrepreneurship	Master Of Science (New CBCS)	2341	Master of Science - Botany(CBCS)	Skill in identifying plants	2021
28 3	Skill Enhancement Courses	Master Of Science (New CBCS)	2341	Master of Science - Botany(CBCS)	Understanding of recombinant DNA technology, gene cloning, PCR, molecular markers (RAPD, AFLP, SSR), and genome editing tools (CRISPR-Cas).	2021
28 4	Employability	Master Of Science (New CBCS)	2341	Master of Science - Botany(CBCS)	Exposure to market-driven applications such as biofortification and phytoremediation.	2021
28 5	Entrepreneurship	Master Of Science (New CBCS)	2341	Master of Science - Botany(CBCS)	Critical thinking in troubleshooting molecular protocols.	2021
28 6	Skill Enhancement Courses	Master Of Science (New CBCS)	2341	Master of Science - Botany(CBCS)	Awareness of bioreactor use in plant biotechnology and scale-up techniques.	2021
28 7	Employability	Master Of Science (New CBCS)	2341	Master of Science - Botany(CBCS)	Interpreting data related to in vitro propagation, synthetic seed technology, and acclimatization.	2021
28 8	Entrepreneurship	Master Of Science (New CBCS)	2341	Master of Science - Botany(CBCS)	Understanding of large-scale micropropagation, somaclonal variation, and secondary metabolite production.	2021
28 9	Skill Enhancement Courses	Master Of Science (New CBCS)	2341	Master of Science - Botany(CBCS)	Familiarity with patenting procedures, technology transfer, and commercialization of biotech innovations,	2021
29 0	Employability	Master Of Science (New CBCS)	2341	Master of Science - Botany(CBCS)	Develop patentable products or processes in agriculture or environmental biotechnology.	2021
29 1	Entrepreneurship	Master Of Science (New CBCS)	2341	Master of Science - Botany(CBCS)	Evaluating biosafety risks, ethical implications, and public perception of GMOs and biotech products.	2021
29 2	Skill Enhancement Courses	Master Of Science (NEP20)	2353	Master of Science - Botany(CBCS)	Skill development in laboratory techniques	2022
29 3	Employability	Master Of Science (NEP20)	2353	Master of Science - Botany(CBCS)	To study lab safety and regulations	2022
29 4	Entrepreneurship	Master Of Science (NEP20)	2353	Master of Science - Botany(CBCS)	NA	2022
29 5	Skill Enhancement Courses	Master Of Science (NEP20)	2353	Master of Science - Botany(CBCS)	Skill development in Identification, Culture and Bioprospecting	2022
29 6	Employability	Master Of Science (NEP20)	2353	Master of Science - Botany(CBCS)	NA	2022
29 7	Entrepreneurship	Master Of Science (NEP20)	2353	Master of Science - Botany(CBCS)	NA	2022
29 8	Skill Enhancement Courses	Master Of Science (NEP20)	2353	Master of Science - Botany(CBCS)	Skill development in conservation of genetic resources and crop improvement	2022
29 9	Employability	Master Of Science (NEP20)	2353	Master of Science - Botany(CBCS)	NA	2022
30 0	Entrepreneurship	Master Of Science (NEP20)	2353	Master of Science - Botany(CBCS)	NA	2022
30 1	Skill Enhancement Courses	Master Of Science (NEP20)	2353	Master of Science - Botany(CBCS)	To master understand applications in crop improvement tech .I	2022
30 2	Employability	Master Of Science (NEP20)	2353	Master of Science - Botany(CBCS)	NA	2022
30 3	Skill Enhancement Courses	Master Of Science (NEP20)	2353	Master of Science - Botany(CBCS)	the process of acquiring and improving knowledge and abilities related to soil, including its properties, management, and conservation	2022

Sr No	Category Name	Name of the Course	Course Code	Name of the Programme	Activities with direct bearing on Employability/Entrepreneurship/Skill development	Year of Introduction
413	Skill Enhancement Courses	Master Of Science (NEP 2020)	2375	Master of Science - Botany	Experimental ecology offers a strong foundation for developing crucial skills highly valued in various professions, boosting employability	2023
414	Employability	Master Of Science (NEP 2020)	2375	Master of Science - Botany	Practical skills in ecological surveys, impact assessments, and monitoring are directly applicable to environmental consultancy positions.	2023
415	Entrepreneurship	Master Of Science (NEP 2020)	2375	Master of Science - Botany	NA	2023
416	Skill Enhancement Courses	Master Of Science (NEP 2020)	2375	Master of Science - Botany	Skill development in these areas involves acquiring knowledge and practical abilities in areas like plant identification, ecological sampling, data analysis, and understanding evolutionary processes.	2023
417	Employability	Master Of Science (NEP 2020)	2375	Master of Science - Botany	Universities and research centers offer positions for plant ecologists involved in basic and applied research, contributing to the understanding of plant ecology and its applications.	2023
418	Entrepreneurship	Master Of Science (NEP 2020)	2375	Master of Science - Botany	NA	2023
419	Skill Enhancement Courses	Master Of Science (NEP 2020)	2375	Master of Science - Botany	(EIA) skill development focuses on equipping individuals with the knowledge and practical skills to assess the environmental consequences of proposed projects and developments	2023
420	Employability	Master Of Science (NEP 2020)	2375	Master of Science - Botany	EIA skills are needed for reviewing and approving development projects and ensuring compliance with environmental regulations.	2023
421	Entrepreneurship	Master Of Science (NEP 2020)	2375	Master of Science - Botany	NA	2023
422	Skill Enhancement Courses	Master Of Science (NEP 2020)	2375	Master of Science - Botany	Pollution-related skill development and its impact on employability are crucial for both environmental sustainability and economic growth. By focusing on green skills, individuals can gain expertise in areas like waste management, pollution control, and environmental conservation, making them valuable assets in a growing green economy. This	2023
423	Employability	Master Of Science (NEP 2020)	2375	Master of Science - Botany	Increasing pollution levels worldwide are driving demand for skilled professionals in environmental management and pollution control.	2023
424	Entrepreneurship	Master Of Science (NEP 2020)	2375	Master of Science - Botany	NA	2023
425	Skill Enhancement Courses	Master Of Science (NEP 2020)	2375	Master of Science - Botany	Soil skill development focuses on equipping individuals with the knowledge and practical abilities needed to understand, manage, and improve soil health	2023
426	Entrepreneurship	Master Of Science (NEP 2020)	2375	Master of Science - Botany	NA	2023
427	Skill Enhancement Courses	Master Of Science (NEP 2020)	2375	Master of Science - Botany	Experimental ecology and energy studies offer a wide array of skill development opportunities. These fields require a combination of theoretical knowledge and practical skills, particularly in data collection, analysis, and experimental design	2023
428	Employability	Master Of Science (NEP 2020)	2375	Master of Science - Botany	Students gain knowledge and practical skills in areas like solar energy, biofuel conversion, and fuel cells.	2023
429	Entrepreneurship	Master Of Science (NEP 2020)	2375	Master of Science - Botany	NA	2023

Sr No	Category Name	Name of the Course	Course Code	Name of the Programme	Activities with direct bearing on Employability/Entrepreneurship/Skill development	Year of Introduction
497	Entrepreneurship	Master of Science NEP 2020	12073	Master of Science - Botany	Skill development in numerical taxonomy and cladistics	2024
498	Skill Enhancement Courses	Master of Science NEP 2020	12073	Master of Science - Botany	Agriculture and Horticulture industries: for mass multiplication of elite plant varieties.	2024
499	Employability	Master of Science NEP 2020	12073	Master of Science - Botany	Biotech labs and Research organizations: for work in plant genetic engineering, molecular biology, and conservation.	2024
500	Entrepreneurship	Master of Science NEP 2020	12073	Master of Science - Botany	Commercial production of disease-free planting material (e.g., banana, sugarcane, orchids).	2024
501	Skill Enhancement Courses	Master of Science NEP 2020	12073	Master of Science - Botany	Will help Agricultural biotechnology firms (e.g., seed companies, agro-biotech R&D)	2024
502	Employability	Master of Science NEP 2020	12073	Master of Science - Botany	Knowledge of molecular diagnostics, biosensors, and biopharming.	2024
503	Entrepreneurship	Master of Science NEP 2020	12073	Master of Science - Botany	Insight into biotechnological innovations and patentable technologies. Exposure to market-driven applications such as biofortification and phytoremediation. Awareness of regulatory and biosafety standards necessary for setting up a biotech-based enterprise.	2024
504	Skill Enhancement Courses	Master of Science NEP 2020	12073	Master of Science - Botany	NA	2024
505	Employability	Master of Science NEP 2020	12073	Master of Science - Botany	NA	2024
506	Entrepreneurship	Master of Science NEP 2020	12073	Master of Science - Botany	NA	2024
507	Skill Enhancement Courses	Master of Science NEP 2020	12073	Master of Science - Botany	Skill development in Identification, Culture, and Bioprospecting	2024
508	Employability	Master of Science NEP 2020	12073	Master of Science - Botany	NA	2024
509	Entrepreneurship	Master of Science NEP 2020	12073	Master of Science - Botany	NA	2024
510	Skill Enhancement Courses	Master of Science NEP 2020	12073	Master of Science - Botany	Skills in isolation of bioactive molecules	2024
511	Employability	Master of Science NEP 2020	12073	Master of Science - Botany	Skills in isolation of Secondary metabolites	2024
512	Entrepreneurship	Master of Science NEP 2020	12073	Master of Science - Botany	Skills in characterization of bioactive molecules	2024
513	Skill Enhancement Courses	Master of Science NEP 2020	12073	Master of Science - Botany	Skill in plant identification	2024
514	Employability	Master of Science NEP 2020	12073	Master of Science - Botany	NA	2024
515	Entrepreneurship	Master of Science NEP 2020	12073	Master of Science - Botany	NA	2024
516	Skill Enhancement Courses	Master of Science NEP 2020	12073	Master of Science - Botany	Skills in plant breeding	2024
517	Employability	Master of Science NEP 2020	12073	Master of Science - Botany	Skills in Chromosome studies	2024
518	Entrepreneurship	Master of Science NEP 2020	12073	Master of Science - Botany	Skills in Hybridization	2024

Sr No	Category Name	Name of the Course	Course Code	Name of the Programme	Activities with direct bearing on Employability/Entrepreneurship/Skill development	Year of Introduction
519	Skill Enhancement Courses	Master of Science NEP 2020	12073	Master of Science - Botany	Skills in identification of plant diseases	2024
520	Employability	Master of Science NEP 2020	12073	Master of Science - Botany	NA	2024
521	Entrepreneurship	Master of Science NEP 2020	12073	Master of Science - Botany	NA	2024
522	Skill Enhancement Courses	Master of Science NEP 2020	12073	Master of Science - Botany	Skill development in Identification, Culture, and Bioprospecting	2024
523	Skill Enhancement Courses	Master of Science NEP 2020	12073	Master of Science - Botany	Identification of gymnosperms	2024
524	Employability	Master of Science NEP 2020	12073	Master of Science - Botany	Identification of Pteridophytes	2024
525	Entrepreneurship	Master of Science NEP 2020	12073	Master of Science - Botany	Knowing fossils	2024
526	Skill Enhancement Courses	Master of Science NEP 2020	12073	Master of Science - Botany	Identification of gymnosperms	2024
527	Employability	Master of Science NEP 2020	12073	Master of Science - Botany	Identification of Pteridophytes	2024
528	Entrepreneurship	Master of Science NEP 2020	12073	Master of Science - Botany	Knowing fossils	2024

22. Value Added Courses : **Data is not available.**

23. List and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the curriculum :

Sr No	Programme	Branch	Name of the Paper	Semester	Category Name
1	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Plant Tissue Culture	3	Environment and Sustainability
2	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Molecular Biotechnology & Genetic Engineering	3	Environment and Sustainability
3	205 - Master of Science	527 - Botany(CBCS)	Population & Community Ecology	3	Environment and Sustainability
4	2375 - Master Of Science (NEP 2020)	527 - Botany	Biology and Diversity of Pteridophytes, Gymnosperms and Palaeobotany	1	Environment and Sustainability
5	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Biology And Diversity Of Pteridophytes,Gymnosperms And Palaeobotany	1	Environment and Sustainability
6	205 - Master of Science	527 - Botany(CBCS)	Energy,Ecology & Envi-II(Population & Community Ecology)	3	Environment and Sustainability
7	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Systematics	2	Environment and Sustainability
8	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment : Environment and its aspect Pra.	1	Environment and Sustainability
9	12073 - Master of Science NEP 2020	527 - Botany	Angiosperm Systematics	2	Environment and Sustainability
10	12073 - Master of Science NEP 2020	527 - Botany	Energy, Ecology and Environment : Population and Community Ecology	2	Environment and Sustainability
11	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	The Evolution and Classification of Angiosperms	3	Environment and Sustainability
12	2375 - Master Of Science (NEP 2020)	527 - Botany	Field Project	2	Environment and Sustainability

Sr No	Programme	Branch	Name of the Paper	Semester	Category Name
13	2375 - Master Of Science (NEP 2020)	527 - Botany	Cell and Molecular Biology	2	Environment and Sustainability
14	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Biodiversity, conservation and utilization	4	Environment and Sustainability
15	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	The Evolution and Classification of Angiosperms	3	Environment and Sustainability
16	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Experimental Ecology and Energy Studies	4	Environment and Sustainability
17	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Practical - II	2	Environment and Sustainability
18	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Plant Ecology And Evolution	1	Environment and Sustainability
19	2375 - Master Of Science (NEP 2020)	527 - Botany	Research Project	3	Environment and Sustainability
20	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Angiosperm Taxonomy Floristics & Biosystematics	4	Environment and Sustainability
21	205 - Master of Science	527 - Botany(CBCS)	Environmental issues, assessment and Restoration	4	Environment and Sustainability
22	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Environmental Issues, Assessment and Restoration	4	Environment and Sustainability
23	205 - Master of Science	527 - Botany(CBCS)	Energy ,Ecology & Environment-III (Exp,Eco.&Ene.Studies)	4	Environment and Sustainability
24	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Environment .& Its Aspects.	3	Environment and Sustainability
25	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Tools And Techniques	1	Environment and Sustainability
26	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Application and Prospects of Plant Tissue Culture	4	Environment and Sustainability
27	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Biology And Diversity Of Algae, Fungi And Bryophytes	1	Environment and Sustainability
28	12073 - Master of Science NEP 2020	527 - Botany	Plant Biotechnology : Molecular Biotechnology and Genetic Engineering	2	Environment and Sustainability
29	2375 - Master Of Science (NEP 2020)		Plant Biotechnology : Plant Tissue Culture	1	Environment and Sustainability
30	205 - Master of Science	527 - Botany(CBCS)	Energy,Ecology & Envi-I(Env.& Its Aspects.)	3	Environment and Sustainability
31	2375 - Master Of Science (NEP 2020)	527 - Botany	Practical-I	1	Environment and Sustainability
32	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Phylogeny & Floral Biology of Angiosperms	4	Environment and Sustainability
33	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Taxonomy : The Evolution and Classification of Angiosperms Pra.	1	Environment and Sustainability
34	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Angiosperm Taxonomy Floristics & Biosystematics	4	Environment and Sustainability
35	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment : Environment and its aspect	1	Environment and Sustainability
36	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Environmental Issues, Assessment and Restoration	4	Environment and Sustainability
37	2375 - Master Of Science (NEP 2020)	527 - Botany	Research Project	4	Environment and Sustainability
38	2375 - Master Of Science (NEP 2020)	527 - Botany	Plant Biotechnology Molecular Biotechnology and Genetic Engineering II	2	Environment and Sustainability
39	2375 - Master Of Science (NEP 2020)	527 - Botany	Practical-II	1	Environment and Sustainability

Sr No	Programme	Branch	Name of the Paper	Semester	Category Name
40	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment :Polulation and Community Ecology II	2	Environment and Sustainability
41	2375 - Master Of Science (NEP 2020)	527 - Botany	Plant Ecology and Evolution	3	Environment and Sustainability
42	205 - Master of Science	527 - Botany(CBCS)	Biodiversity, conservation and utilization	4	Environment and Sustainability
43	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment: Environmental Issues, Assessment and Restoration	4	Environment and Sustainability
44	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Biology And Diversity Of Fungi,Algae And Bryophytes	1	Environment and Sustainability
45	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Cell and Molecular Biology	2	Environment and Sustainability
46	2375 - Master Of Science (NEP 2020)	527 - Botany	Cytogenetics and Crop Improvement	3	Environment and Sustainability
47	12073 - Master of Science NEP 2020	527 - Botany	MMT-102 Biology and Diversity of Pteridophytes, Gymnosperms and Palaeobotany	1	Environment and Sustainability
48	12073 - Master of Science NEP 2020	527 - Botany	Energy, Ecology and Environment : Population and Community Ecology PR	2	Environment and Sustainability
49	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Modern Trends in Angiosperm Taxonomy	3	Environment and Sustainability
50	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Biology And Diversity Of Pteridophytes,Gymnosperms And Palaeobotany	1	Environment and Sustainability
51	2375 - Master Of Science (NEP 2020)	527 - Botany	Practical-V	3	Environment and Sustainability
52	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Population & Community Ecology	3	Environment and Sustainability
53	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment: Experimental Ecology and Energy Study	3	Environment and Sustainability
54	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Application Regulation and Patenting Biotechnology	4	Environment and Sustainability
55	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Environment ,& Its Aspects.	3	Environment and Sustainability
56	205 - Master of Science	527 - Botany(CBCS)	Energy,Ecology & Environment-IV(Env. Issue,Assessment & Res)	4	Environment and Sustainability
57	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Practical III	3	Environment and Sustainability
58	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Tools And Techniques	1	Environment and Sustainability
59	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Taxonomy: Phylogeny and Floral Biology of Angiosperm	4	Environment and Sustainability
60	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Plant Ecology & Evaluation	4	Environment and Sustainability
61	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Plant Tissue Culture	3	Environment and Sustainability
62	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Population & Community Ecology	3	Environment and Sustainability
63	205 - Master of Science	527 - Botany(CBCS)	Biology and Diversity of Fungi, Algae, and Bryophytes	1	Environment and Sustainability
64	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Practical I	1	Environment and Sustainability
65	205 - Master of Science	527 - Botany(CBCS)	Environment ,& Its Aspects.	3	Environment and Sustainability

Sr No	Programme	Branch	Name of the Paper	Semester	Category Name
66	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Taxonomy : Modern Trends in Angiosperm Taxonomy II	2	Environment and Sustainability
67	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment: Environmental Issues, Assessment and Restoration	4	Environment and Sustainability
68	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Application Regulation and Patenting Biotechnology	4	Environment and Sustainability
69	12073 - Master of Science NEP 2020	527 - Botany	MEPR-107.3 Energy, Ecology and Environment: Environment and its aspect- PR	1	Environment and Sustainability
70	205 - Master of Science	527 - Botany(CBCS)	Experimental Ecology and Energy Studies	4	Environment and Sustainability
71	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment : Polulation and Community Ecology	2	Environment and Sustainability
72	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Biodiversity : Conservation and Utilization	1	Environment and Sustainability
73	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Angiosperm Systematics	2	Environment and Sustainability
74	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Molecular Biotechnology & Genetic Engineering	3	Environment and Sustainability
75	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Taxonomy: Phylogeny and Floral Biology of Angiosperm	4	Environment and Sustainability
76	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Experimental Ecology and Energy Studies	4	Environment and Sustainability
77	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Experimental Ecology and Energy Studies	4	Human Values
78	205 - Master of Science	527 - Botany(CBCS)	Population & Community Ecology	3	Human Values
79	2375 - Master Of Science (NEP 2020)	527 - Botany	Plant Ecology and Evolution	3	Human Values
80	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment : Environment and its aspect	1	Human Values
81	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Environmental Issues, Assessment and Restoration	4	Human Values
82	12073 - Master of Science NEP 2020	527 - Botany	Energy, Ecology and Environment : Population and Community Ecology	2	Human Values
83	12073 - Master of Science NEP 2020	527 - Botany	Energy, Ecology and Environment : Population and Community Ecology PR	2	Human Values
84	205 - Master of Science	527 - Botany(CBCS)	Energy, Ecology & Envi-II(Population & Community Ecology)	3	Human Values
85	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Biotechnology and Genetic Engineering	3	Human Values
86	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment: Experimental Ecology and Energy Study	3	Human Values
87	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Taxonomy : Modern Trends in Angiosperm Taxonomy II	2	Human Values
88	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment : Environment and its aspect Pra.	1	Human Values
89	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	The Evolution and Classification of Angiosperms	3	Human Values
90	12073 - Master of Science NEP 2020	527 - Botany	MEPR-107.3 Energy, Ecology and Environment: Environment and its aspect- PR	1	Human Values
91	205 - Master of Science	527 - Botany(CBCS)	Energy, Ecology & Envi-I(Env.& Its Aspects.)	3	Human Values
92	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment :Polulation and Community Ecology II	2	Human Values
93	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Angiosperm Taxonomy Floristics & Biosystematics	4	Human Values

Sr No	Programme	Branch	Name of the Paper	Semester	Category Name
94	205 - Master of Science	527 - Botany(CBCS)	Environment .& Its Aspects.	3	Human Values
95	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Environment .& Its Aspects.	3	Human Values
96	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Biology And Diversity Of Algae, Fungi And Bryophytes	1	Human Values
97	2375 - Master Of Science (NEP 2020)	527 - Botany	Biology and Diversity of Pteridophytes, Gymnosperms and Palaeobotany	1	Human Values
98	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Biodiversity : Conservation and Utilization	1	Human Values
99	205 - Master of Science	527 - Botany(CBCS)	Environmental issues, assessment and Restoration	4	Human Values
100	2375 - Master Of Science (NEP 2020)	527 - Botany	Biotechnology and Genetic Engineering	3	Human Values
101	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Angiosperm Taxonomy Floristics & Biosystematics	4	Human Values
102	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment: Environmental Issues, Assessment and Restoration	4	Human Values
103	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Modern Trends in Angiosperm Taxonomy	3	Human Values
104	205 - Master of Science	527 - Botany(CBCS)	Biodiversity, conservation and utilization	4	Human Values
105	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Environmental Issues, Assessment and Restoration	4	Human Values
106	12073 - Master of Science NEP 2020	527 - Botany	Angiosperm Systematics	2	Human Values
107	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Biodiversity, conservation and utilization	4	Human Values
108	2375 - Master Of Science (NEP 2020)	527 - Botany	Practical-II	1	Human Values
109	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment: Environmental Issues, Assessment and Restoration	4	Human Values
110	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Population & Community Ecology	3	Human Values
111	2375 - Master Of Science (NEP 2020)	527 - Botany	Energy, Ecology and Environment : Polulation and Community Ecology	2	Human Values
112	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Phylogeny & Floral Biology of Angiosperms	4	Human Values
113	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Angiosperm Systematics	2	Human Values
114	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Experimental Ecology and Energy Studies	4	Human Values
115	205 - Master of Science	527 - Botany(CBCS)	Energy,Ecology & Environment-IV(Env. Issue,Assessment & Res)	4	Human Values
116	205 - Master of Science	527 - Botany(CBCS)	Experimental Ecology and Energy Studies	4	Human Values
117	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Taxonomy: Phylogeny and Floral Biology of Angiosperm	4	Human Values
118	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Taxonomy : The Evolution and Classification of Angiosperms Pra.	1	Human Values
119	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Systematics	2	Human Values
120	205 - Master of Science	527 - Botany(CBCS)	Energy ,Ecology & Environment-III (Exp,Eco.&Ene.Studies)	4	Human Values

Sr No	Programme	Branch	Name of the Paper	Semester	Category Name
12 1	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Population & Community Ecology	3	Human Values
12 2	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Environment .& Its Aspects.	3	Human Values
12 3	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Modern Trends in Angiosperm Taxonomy	3	Human Values
12 4	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Taxonomy: Phylogeny and Floral Biology of Angiosperm	4	Human Values
12 5	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	The Evolution and Classification of Angiosperms	3	Human Values
12 6	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Biodiversity, conservation and utilization	4	Professional Ethics
12 7	12073 - Master of Science NEP 2020	527 - Botany	Plant Biotechnology : Molecular Biotechnology and Genetic Engineering	2	Professional Ethics
12 8	2375 - Master Of Science (NEP 2020)	527 - Botany	Plant Biotechnology Molecular Biotechnology and Genetic Engineering II	2	Professional Ethics
12 9	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Angiosperm Taxonomy Floristics & Biosystematics	4	Professional Ethics
13 0	205 - Master of Science	527 - Botany(CBCS)	Biodiversity, conservation and utilization	4	Professional Ethics
13 1	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Phylogeny & Floral Biology of Angiosperms	4	Professional Ethics
13 2	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Systematics	2	Professional Ethics
13 3	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Application and Prospects of Plant Tissue Culture	4	Professional Ethics
13 4	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Modern Trends in Angiosperm Taxonomy	3	Professional Ethics
13 5	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Plant Tissue Culture	3	Professional Ethics
13 6	2375 - Master Of Science (NEP 2020)	527 - Botany	Research Project	3	Professional Ethics
13 7	12073 - Master of Science NEP 2020	527 - Botany	Angiosperm Systematics	2	Professional Ethics
13 8	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Taxonomy: Phylogeny and Floral Biology of Angiosperm	4	Professional Ethics
13 9	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	The Evolution and Classification of Angiosperms	3	Professional Ethics
14 0	2375 - Master Of Science (NEP 2020)	527 - Botany	Plant Biotechnology: Application and Prospects of Plant Tissue Culture	3	Professional Ethics
14 1	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	The Evolution and Classification of Angiosperms	3	Professional Ethics
14 2	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Angiosperm Taxonomy Floristics & Biosystematics	4	Professional Ethics
14 3	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Plant Tissue Culture	3	Professional Ethics
14 4	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Application Regulation and Patenting Biotechnology	4	Professional Ethics
14 5	2375 - Master Of Science (NEP 2020)		Plant Biotechnology : Plant Tissue Culture	1	Professional Ethics
14 6	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Taxonomy: Phylogeny and Floral Biology of Angiosperm	4	Professional Ethics
14 7	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Taxonomy : Modern Trends in Angiosperm Taxonomy II	2	Professional Ethics

Sr No	Programme	Branch	Name of the Paper	Semester	Category Name
148	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Angiosperm Systematics	2	Professional Ethics
149	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Molecular Biotechnology & Genetic Engineering	3	Professional Ethics
150	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Application and Prospects of Plant Tissue Culture	4	Professional Ethics
151	2375 - Master Of Science (NEP 2020)	527 - Botany	Angiosperm Taxonomy : The Evolution and Classification of Angiosperms Pra.	1	Professional Ethics
152	2353 - Master Of Science (NEP20)	527 - Botany(CBCS)	Application Regulation and Patenting Biotechnology	4	Professional Ethics
153	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Molecular Biotechnology & Genetic Engineering	3	Professional Ethics
154	2375 - Master Of Science (NEP 2020)	527 - Botany	Plant Biotechnology: Application, Regulation and Patenting Biotechnology	4	Professional Ethics
155	2341 - Master Of Science (New CBCS)	527 - Botany(CBCS)	Modern Trends in Angiosperm Taxonomy	3	Professional Ethics

24. Number of students admitted in programmes offered :

Sr No	Level of Programme	Name of the programme	Intake	June 2024/May 2025	June 2023/May 2024	June 2022/May 2023	June 2021/May 2022
1	MASTER	Master of Science - Botany	50	51	48	0	0
2	MASTER	Master of Science - Botany(CBCS)	0	0	0	52	54

Ph.D. Level

Sr No	Subject	2024-2025		2023-2024	
		Intake	Admission	Intake	Admission
1	Botany	9	1	8	6

25. Teacher Student Ratio : 14 : 1

26.Details of student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences (add separate sheet, if necessary) :

Sr. No	Student-centric Assessment approach	Proof
1	Seminar/ Presentations, Viva-voce/ Oral Examination	
2	Assessment of Field Projects/ OJT/Internship	
3	Learning Outcome Attainment	

27. Use of ICT enabled tools including online resources for effective teaching and learning process (add separate sheet, if necessary) :

ICT enabled tools Details*

28. Details for initiatives regarding Slow and Advanced Learners : Data is not available. [Go to page](#)

29. Details of Personal Counseling and Mentorship programmes for students :

Details*

30. Average percentage of placement of outgoing students (Placement Percentage: 50%)

Sr No	Name of student	Name of the employer with contact details	Package received in Rs.	Programme graduated from
1	Purohit Divya Ramesh	PRT - 0231 2326011	3,00,000	Master of Science - Botany

31. Percentage of student progression to higher education : Data is not available.

32. Number of Ph.D. scholars working at present during the year : Data is not available.

33. Number of Ph.D. awarded during the year :

☰Number Of Requests - 16				
Sr No	Name of the Ph.D Scholar	Name of the guide/s	Year of registration of the scholar	Year of award of Ph.D
1	Barwant Mukul Machhindra	Vanita Chandrashekhar Karande	01-07-2018	31-05-2025
2	Biranje Snehal Sudhir	Anjali Rajendra Patil	01-07-2017	22-03-2025
3	Bornak Sushant Ishwar	Anjali Rajendra Patil	01-01-2020	23-04-2025
4	Bramhadande Sneha Pradeep	Girish Gajanan Potdar	01-07-2018	08-03-2025
5	Chougule Rupali Nemgonda	Manoj Madhwanand Lekhak	01-07-2018	21-10-2024
6	Gore Nitin Tanaji	Mahendra Laxman Ahire	01-07-2019	24-04-2025
7	Gosavi Sandeep Shivaji	Kamble S. S.	01-07-2018	29-03-2025
8	Gurav Kumod Nathuram	Patil Vyankatrao Pandurang	01-01-2019	30-09-2024
9	Inamdar Shabbir Nurmahmmad	Mahendra Basappa Waghmare	01-01-2020	03-06-2024
10	Kamble Pratik Sunil	Swaroopaa Amit Patil	01-07-2017	29-08-2024
11	Natekar Pratik Dilip	Anjali Pandurang Patil	01-07-2018	25-04-2025
12	Otari Shreedhar Shashikant	Savaliram Goga Ghane	01-07-2019	08-05-2025
13	Patil Priyanka Suresh	Varsha Dilip Jadhav	01-07-2017	29-10-2024
14	Pawar Ganesh Babaso	Yadav Shrirang Ramchandra	01-01-2016	30-12-2024
15	Shaikh Sumaiya Shahabuddin	Mahendra Laxman Ahire	01-07-2019	24-04-2025
16	Walvekar Komal Shivaji	Mansingraj Shahajirao Nimbalkar	01-01-2020	10-10-2024

34. Other programmes offered by the department (Bridge Course/ Certificate Course / Diploma Course / Skill Development Course) : Data is not available.

35. Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled during the year. : Data is not available.

36. Total no. of research projects (completed during the year) : [Go to Portal](#)

Sr. No.	Teacher Name	Name of the project	Name of the principal Investigator	Year of award	Duration	Funding Agency	Total amount of funds provided
1	Mansingraj Shahajirao Nimbalkar	“Assessment of Plant Diversity and Ecological Resilience in Landslide-Prone Ghat Areas: A Disaster Perspective”	Principal Investigator		Start Date : 19-10-2024 End Date : 30-03-2025	Industry Sponsored	15,00,000
2	Manoj Madhwanand Lekhak	Network Programme for Enrichment and Update of Database on Genome Related Information for Indian Spermatophyta and Archegoniatae Taxa- Phase II	Principal Investigator		Start Date : 28-10-2021 End Date : 27-10-2024	Department of Biotechnology (DBT)	33,00,480
3	Swaroopaa Amit Patil	Establishing demonstration fields and technology transfer for Quality Plant Production Using Biotechnological Approaches. Phase II	Co-Principal Investigator		Start Date : 07-08-2020 End Date : 06-08-2024	Rajiv Gandhi Science & Technology Commission (RGSTC)	57,73,000

37. Number of computers available in Department Computer Facility / Laboratory / Office :

Total Students	No. of computers	Computer Ratio
170	95	2:1

38. Number of equipment available in the Department

a) Number of equipment available in the Department (Current Year) [Go to page](#)

Number of Records - 10			
Sr.No	Equipment –Existing worth > Rs. 1.00 Lakhs	Quantity	Purchase Value
1	Flow Cytometer A flow cytometer is a powerful analytical tool used to analyze and sort cells and other microscopic particles. It works by measuring the physical and chemical characteristics of individual cells as they pass in a fluid stream through a laser beam. This allows for the identification, quantification, and sorting of cells based on various parameters, including size, shape, complexity, and the presence of specific surface markers or intracellular molecules.	1	1000000
2	High-performance liquid chromatography (HPLC) It is needed to study several metabolites, their quantification and characterization.	1	2800000
3	Multimode Microplate Reader Multimode microplate readers are versatile instruments used in life science research and other fields for various applications, primarily involving the analysis of reactions in microplates. These readers can perform multiple detection methods, including absorbance, fluorescence, luminescence, and more, making them suitable for a wide range of assays	1	1500000
4	Polymerase chain reaction (PCR) PCR is a laboratory technique for rapidly producing (amplifying) millions to billions of copies of a specific segment of DNA,. It is commonly used for a wide variety of applications including genotyping, cloning, mutation detection, sequencing, microarrays, forensics, and paternity testing.	1	273000
5	Refrigerated centrifuge A refrigerated centrifuge is a laboratory equipment used for the separation of temperature sensitive macro molecule and cellular structures.	1	558379
6	Rotor-Gene Q MDx 5plex HRM (real-time PCR) The Rotor-Gene Q 5plex is a real-time PCR instrument used for various molecular biology applications. It excels in quantitative PCR (qPCR), high-resolution melt (HRM) analysis, genotyping, and pathogen detection due to its unique rotating design and multi-channel detection system	1	1771932
7	Scanning Electron Microscope (SEM) Widely used in Biological and Material Sciences for research	1	6534119
8	Stereo Microscopes It is used for three dimensional details of biological samples	1	264418
9	UV-visible double beam Spectrophotometers UV-visible Spectrophotometry is used to measure the concentration and purity of an unknown sample.	1	499800
10	Ultra low temperature Cabinet – Ultra Freeze It is used by laboratories for storing drugs, enzymes, biological materials, tissue samples etc. Maintaining a temperature between -30° to -40° Fahrenheit, the low temperature is ideal for storing sensitive materials that have high perishability.	1	299775

b) Number of equipment available in the Department (Last Year) [Go to page](#)

Number of Records - 10			
Sr.No	Equipment - added during the last year	Quantity	Purchase Value
1	Flow Cytometer A flow cytometer is a powerful analytical tool used to analyze and sort cells and other microscopic particles. It works by measuring the physical and chemical characteristics of individual cells as they pass in a fluid stream through a laser beam. This allows for the identification, quantification, and sorting of cells based on various parameters, including size, shape, complexity, and the presence of specific surface markers or intracellular molecules.	1	1000000
2	High-performance liquid chromatography (HPLC) It is needed to study several metabolites, their quantification and characterization.	1	2800000
3	Multimode Microplate Reader Multimode microplate readers are versatile instruments used in life science research and other fields for various applications, primarily involving the analysis of reactions in microplates. These readers can perform multiple detection methods, including absorbance, fluorescence, luminescence, and more, making them suitable for a wide range of assays	1	1500000

Sr.No	Equipment - added during the last year	Quantity	Purchase Value
4	Polymerase chain reaction (PCR) PCR is a laboratory technique for rapidly producing (amplifying) millions to billions of copies of a specific segment of DNA,. It is commonly used for a wide variety of applications including genotyping, cloning, mutation detection, sequencing, microarrays, forensics, and paternity testing.	1	273000
5	Refrigerated centrifuge A refrigerated centrifuge is a laboratory equipment used for the separation of temperature sensitive macro molecule and cellular structures.	1	558379
6	Rotor-Gene Q MDx 5plex HRM (real-time PCR) The Rotor-Gene Q 5plex is a real-time PCR instrument used for various molecular biology applications. It excels in quantitative PCR (qPCR), high-resolution melt (HRM) analysis, genotyping, and pathogen detection due to its unique rotating design and multi-channel detection system	1	1771932
7	Scanning Electron Microscope (SEM) Widely used in Biological and Material Sciences for research	1	6534119
8	Stereo Microscopes It is used for three dimensional details of biological samples	1	264418
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10	Ultra low temperature Cabinet – Ultra Freeze It is used by laboratories for storing drugs, enzymes, biological materials, tissue samples etc. Maintaining a temperature between -30° to -40° Fahrenheit, the low temperature is ideal for storing sensitive materials that have high perishability.	1	299775

39. Pass percentage of Students in last year :

Sr No	Programme Code	Programme Name	No. of students appeared in the final year examination			No. of students passed in the final year examination		
			Male	Female	Total	Male	Female	Total
1	020309007	Master of Science - Botany(CBCS)	2	3	5	1	1	2

40. Infrastructure :

Sr No	Particulars	Number of participant
1	Classrooms	6
2	Laboratories	12
3	Library	1
4	Ladies Separate Room	1
5	Museum	0

41. Number of Seminars/Conferences/workshops, etc. conducted during the year :

Sr No	Particulars	Name	Date	Number of participant
1	Workshops/Seminar/Conference	One day workshop on Visualization, Processing and Interpretation of Biological Data	27/07/2024	0
			26/09/2024	25
		TECHNIQUES FOR EXTRACTION AND QUANTIFICATION OF PLANT METABOLITES	26/09/2024	20
		TECHNIQUES FOR EXTRACTION AND QUANTIFICATION OF PLANT METABOLTIES	24/10/2024	20
		A two-day workshop on Chromosome Botany in the hotspot of biodiversity: implications for plant taxonomy	23/12/2024	0
			01/05/2025	0
2	Other	A session on counselling for M. Sc. I and II students- Urmila Chavan	10/07/2024	0
		Academic Board Meeting	26/07/2024	6

Sr No	Particulars	Name	Date	Number of participant
		Inauguration of Computer laboratory	27/07/2024	0
		RAC meeting	19/08/2024	0
		RAC meeting	02/09/2024	0
		RAC meeting	18/09/2024	0
		Study tour for M.Sc. I students	06/10/2024	0
		Guest lecture- Prof. N.S. Chavan	03/02/2025	0
		RAC meeting	03/02/2025	0
			10/04/2025	0
			10/04/2025	0
			01/05/2025	0

42. Number of Seminars/Conferences/workshops, etc. attended by the faculty during the year : [Go to Portal](#)

Sr No	Particulars	Name	Date	Number of participant
1	Seminars			0
2	Conferences			1
3	Workshops			5
4	Others (specify)			0

43. Number of Teachers undergoing online / face-to-face FDP, PDP, Orientation/ Induction programme / Refresher Course, Short Term course during the year.:

Data is not available. [Go to Portal](#)

44. Number of Awards/Recognition/Patents during the year conducted during the year : Data is not available.

45. Details of Alumni Meet : Data is not available.

46. Details of Five Distinguished Alumni : Data is not available.

47. Any two best/healthy practices of department (Title of the practice, Objective of the practice, Context, The practice, Evidence of success, Problems encountered and resources required , Note optional) :

Data is not available. [Go to page](#)

48. Achievement and Unique features of the department :

Unique features : 1. Herbarium has been recognized by 'The New York Botanical Garden' in 2009 and its acronym is 'SUK'. 2. DST-FIST supported Department. 3. UGC DRS-II-SAP assisted Department. 4. Lead Botanical Garden for Western India. 5. Number of Projects sponsored by various funding agencies like UGC, MOEF, DST, DBT, MPCB, NAIP, Govt. of Maharashtra, RGSTC, ENVIS, BRNS etc.

Achievement : • Lead Botanical Garden : - 42 acres • Computer Laboratory with Internet Facility. • Multipurpose Hall 'Nilambari' • Departmental Library • Museum • Herbarium • Best Department Award for the year 2021-22 • Patent granted 21-22 • D. Sc. Degree awarded to Dr. S. R. Yadav • Prof. Y. S. Murthy Gold Medal Award of Indian Botanical Society 2022-23 to Dr. M. M. Lekhak • Prof. S. N. Dixit Gold medal Award of Indian Botanical Society 2022-23 to Dr. S. M. Patil • Research distigutish award in ethnopharmacology 2022

49. Any other information that indicate distinctiveness of the department not covered so far :

other information*

50. Strength, Weakness, Opportunities and Challenges (SWOC) of the department (five points each) :

Strength*

Weakness*

Opportunities*

Challenges*

51. Plan of action for the next academic year. :

Details*

Signature of the NAAC Coordinator

Signature of the HOD

Commendations by AAA Committee:

Recommendation by AAA Committee:

Grade obtained by the Department:
(A = Excellent, B = Very Good, C = Good, D = Fair, E = Poor)

Name and Signature of the Members of the AAA Committee :

1. _____

2. _____

3. _____

4. _____

5. _____
