

Shri Shivaji Education Society Amravati's
Science College, Congress Nagar, Nagpur
 Internal Quality Assurance Cell

DEPARTMENT OF MICROBIOLOGY

INTERNAL ACADEMIC AUDIT

Session 2022-2023

1. A. Faculty Strength:

Faculty	Recruited	Vacant	Remarks
Regular	01	-	-
CHB	02	-	-
Ad-hoc	06	-	-
Non-teaching	04	-	-

B. Faculty Profile:

Name	Highest Qualification	Designation	Specialization	Teaching Experience
Dr. Pranita Gulhane	M.Sc., Ph.D., B.Ed.	Assistant Professor (P.G.)	Microbiology	16.5 years (Assistant Professor 1.5 Year + Adhoc lecturer 15 years + C.H.B lecturer 1 year)
Dr. Manpreet Kaur	M.Sc., Ph.D., B.Ed., M.Phil.	Assistant Professor (Adhoc)	Microbiology	4 years (Adhoc lecturer 2 years + C.H.B. lecturer 2 years)
Mrs. Madhuri Walvekar	M.Sc.	Assistant Professor (Adhoc)	Biotechnology	4 years (Adhoc lecturer 2 years + C.H.B lecturer 2 years)
Dr. Sapna Baghel	M.Sc., Ph.D.	Assistant Professor (Adhoc)	Biotechnology	Nil
Ms. Sanchari Sarkar	M.Sc., SET, B.Ed., GATE	Assistant Professor (Adhoc)	Microbiology	3 years (Adhoc lecturer 2 years + C.H.B lecturer 1 year)

Ms. Shivani Gohane	M.Sc., SET, GATE	Assistant Professor (Adhoc)	Microbiology	2 years (Adhoc lecturer 1 year + C.H.B lecturer 1 year)
Dr. Priya Fuke	M.Sc, Ph.D, B.Ed.	Assistant Professor (Adhoc)	Microbiology	2 years (Adhoc lecturer 1 year + C.H.B lecturer 1 year)
Dr. Sonali Shende	M.Sc, Ph.D.	Assistant Professor (C.H.B)	Microbiology	2 years (C.H.B lecturer 2 years)
Ms. Priya Gaidhane	M.Sc, SET	Assistant Professor (C.H.B)	Microbiology	Nil

2. Student's strength

Year	Group	Number of Students Admitted
B.Sc. Semester I	CMBT	86
	CBM	35
	CZM	33
	Total	154
B.Sc. Semester III	CMBT	71
	CBM	27
	CZM	28
	Total	126
B.Sc. Semester V	CMBT	79
	CBM	29
	CZM	39
	Total	147
M.Sc. Semester I	Microbiology	23
M.Sc. Semester III	Microbiology	20
Ph.D.	NA	NA
Value Added Program	Certificate in Fruit Processing & Wine Technology	20
	Biofertilizers & Biopesticides	22

P. G. STUDENT INDUCTION PROGRAMME	Yes
ACADEMIC PLANNINGS	Yes
BRIDGE COURSE TAUGHT	Yes
REMEDIAL COURSE TAUGHT	Yes

3. Student Performance

A. Result Analysis (Winter 2022) UG & PG:

Programme Name	Number of students who appeared in the final year examination	Number of students who passed in final year examination	Pass Percentage
B.Sc Sem I Microbiology	152	56	36.84%
B.Sc Sem III Microbiology	124	56	45.16%
B.Sc Sem V Microbiology	158	141	89.24%
MSc Sem I Microbiology	23	15	65.21%
MSc Sem III Microbiology	20	15	75%

B. Result Analysis (Summer 2023) UG & PG:

Programme Name	Number of students who appeared in the final year examination	Number of students who passed in final year examination	Pass Percentage
B.Sc Sem II Microbiology	147	98	66.66%
B.Sc Sem IV Microbiology	126	89	70.63%
B.Sc Sem VI Microbiology	147	121	82.31%
MSc Sem II Microbiology	20	18	90%
MSc Sem IV Microbiology	19	17	89.47%

C. Achievements

A- (Medals/Awards/Prizes at University level):

Sr. No.	Name of the Student	Class	Title
1	Mr. Shashank Tidke	B.Sc. III rd year	Dr. N.U. Rao Gold medal For Securing the highest marks in the B.Sc. Microbiology Summer 2023 Exam.

B- Merit Position of UG Students in RTMNU:

Sr. No.	Year	Name of the Students	Merit Position
1.	Summer 2022	Nazish Jeevaji	7 th Merit
2.		Sakshi Bobdey	8 th Merit
3.		Komal Waghmare	9 th Merit
4.		Vrunda Borkar	8 th Merit

C- Merit Position of PG Students in RTMNU:

Sr. No.	Year	Name of the Students	Merit Position
1.	Summer 2023	Hiteshi R.Wadibhasme	1st Merit (CGPA- 9.00)
2.		Tanuja C. Sable	2nd Merit (CGPA-8.84)
3.		Neha D. Mahant	4th Merit (CGPA- 8.54)
4.		Savita B. Khandate	5th Merit (CGPA- 8.47)

4. Student's Progression:

No. of Students Enrolling in Higher Education	Name of Institution joined	Name of Program admitted to
Summer 2022		
UG to UG to PG (04)		
Ms. Nazish Jeevaji	IISc, Bangalore	M.Sc Biotechnology
Mr. Ankit Pajai	Hislop College, Nagpur	M.Sc Biotechnology
Ms. Sakshi Bobde	Hislop College, Nagpur	M.Sc Biotechnology
Ms. Sharvari Kshirsagar	Hislop College, Nagpur	M.Sc Biotechnology
Summer 2023		
UG to UG to PG (14)		
Ms. Rujuta Ramteke	Science College Congress Nagar, Nagpur	M.Sc Microbiology
Ms. Arshiya Mushtaque	Science College Congress Nagar, Nagpur	M.Sc Microbiology
Ms. Ronit Banerjee	NIV, Pune	M.Sc Virology
Ms. Adithya Kalalattu	IISER, Pune	Integrated Ph.D. Programme
Ms. Shashank Tidke	Savitribai Phule Pune University, Pune	M.Sc biotechnology
Ms. Shreshtha Chanda	VIT, Vellore	M.Sc Applied Microbiology
Ms. Poonam Singh	ICFAI Business School ,Mumbai	MBA
Mr. Raj Rajkarosiya	D.Y. Patil College, Pune	M.A English

Ms. Kaushalya Dhabale	Hislop College, Nagpur	M.Sc. Biotechnology
Mr. Tejas Shripal	RGBC, Nagpur	M.Sc. Biotechnology
Ms. Vrushali Yawalkar	RGBC, Nagpur	M.Sc. Biotechnology
Mr. Sushant Nimborkar	Vit, Vellore	M.Sc. Biomedical Genetics
Ms. Vaishnavi Shimpi	University of Glasgow	M.Sc Biomedical Sciences
Ms. Anshita Arora	University of Nottingham	M.Sc Cancer Immunology & Biotechnology
PG to Research	Nil	Nil
Placement		
On-Campus		
Ms. Triveni Pardhi	Science College, Congress Nagar, Nagpur	Assistant professor (Adhoc)
Off-Campus		
Ms. Neha Mahant	Care hospital, Nagpur	Clinical research coordinator
Ms. Aishwarya Mohatkar	IGGMC, Nagpur	Clinical research coordinator

(i) Students' publication in Conferences/ Journals:

Title of the Paper	Name of Author	Title of journal	Year of publication
Nil	Nil	Nil	Nil

(ii) Students' participation in Seminar/ Conferences:

Sr. No.	Name of Students	Conference type	Participation as
1	B.Sc 1 st , 2 nd , 3 rd & M.Sc Microbiology 1 st &2 nd year students	State Level Workshop on "Entrepreneurship: Gateway for Science scholars" (20 th December 2022)	Student delegate
2	B.Sc 1 st , 2 nd , 3 rd & M.Sc Microbiology 1 st &2 nd year students	Workshop on "Covid-19 detection by RT-PCR method" (2 nd January 2023)	Student delegate
3	B.Sc 2 nd year student & M.Sc Microbiology	Indian Science Congress Association (3 rd -7 th January 2023)	Student delegate

	1 st &2 nd year students		
4	B.Sc 1 st , 2 nd , 3 rd & M.Sc Microbiology 1 st &2 nd year students	Seminar on "Strategizing and Planning for the Competitive exams" (18 th March 2023)	Student delegate
5	B.Sc 1 st , 2 nd , 3 rd & M.Sc Microbiology 1 st &2 nd year students	Inter-collegiate Skill based workshop on "Intellectual Learning Strategies & Skill Development" (4 th March 2023)	Student delegate

(iii) Students' Extension Activity/ Extracurricular activity

Sr. No.	Name of the activity	The number of students who Participated
1.	Calendar making competition (19 th - 30 th July, 2022)	56 participants participated
2.	State Level Workshop on "Entrepreneurship: Gateway for Science scholars" (20 th December 2022)	200 participants participated
3.	Workshop on "Covid-19 detection by RT-PCR method" (2 nd January 2023)	40 participants participated
4.	Scientific model making competition (28 th February, 2023)	89 participants participated
5.	Intercollegiate Skill Based Workshop "Intellectual Learning Strategies & Skill Development" (4 th March, 2023)	165 participants participated
6.	Seminar on "Strategizing & planning competitive exams" (18 th March, 2023)	120 participants participated
7.	Dental check up Camp & Guest Lecture on "Dental Hygiene" (19 th April, 2023)	112 participants participated

(iv) Participation of Students in online/MOOCs courses/ NPTEL/ SWAYAM

Sr. No.	Name of the Students	MOOCs / NPTEL/ SWAYAM
-	-	-

5. Faculty

I. Research Paper Publications

A. Total Number of publications:

- i) International - 03
- ii) National -

B. Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of	Title of journal	Year	Citati	Institution	Numbe
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	Author		of publication	on Index	al affiliation as mentioned in the publication	r of citations excluding self-citation
Efficacy of Commonly Used Decontaminants on Bacterial Contamination on Food Garnishes	Pranita Gulhane	International Journal of Innovative Research in Technology	2023		S.S.E.S.A's Science College, Congress Nagar, Nagpur-12	
Antimicrobial Potential of <i>Andrographis paniculata</i> against Oral Pathogens	Pranita Gulhane and Manali Kakde	International Journal of Research and Analytical Reviews	2023		S.S.E.S.A's Science College, Congress Nagar, Nagpur-12	
Comparative Account on Antibacterial Activity and Phytochemical Analysis of Green Tea and Black Tea	Pranita Gulhane and Asmita Phopate	Journal of Emerging Technologies and Innovative Research	2023		S.S.E.S.A's Science College, Congress Nagar, Nagpur-12	

C. Faculty participation in conferences/seminars/workshops and symposia:

Name of the Faculty	Title of Conference/Seminar/workshop Attended	Period	Level International/National/State/University/College	Whether Presented papers	Whether abstract/paper published in Souvenir/Abstract Book
Dr. Pranita Gulhane	The 108 th Indian Science Congress on "Science & Technology for Sustainable Development with Women Empowerment"	January 3 rd - 7 th , 2023	National	Poster presentation	Yes. Abstract published
	International Conference on "Recent Trends in Multi-Disciplinary Research"	January 14 th - 15 th 2023	International	Oral Presentation	Yes. Abstract published

	National Conference on "Biotechnology for Better Tomorrow"	January 22 nd – 24 th , 2023	National	-	-
	National Conference on "Research Innovations in ICT & Computing Technologies"	March 27 th – 28 th , 2023	National	Oral presentation	Yes. Abstract published
	National Conference on "Women in Science & Entrepreneurship"	April 2 nd , 2023	National	-	-
Ms. Sanchari Sarkar	The 108 th Indian Science Congress on "Science & Technology for Sustainable Development with Women Empowerment"	January 3 rd – 7 th , 2023	National	-	-
Dr. Priya Fuke	The 108 th Indian Science Congress on "Science & Technology for Sustainable Development with Women Empowerment"	January 3 rd – 7 th , 2023	National	-	-
Ms. Shivani Gohane	The 108 th Indian Science Congress on "Science & Technology for Sustainable Development with Women Empowerment"	January 3 rd – 7 th , 2023	National	-	-

Ms. Madhuri Walvekar	The 108 th Indian Science Congress on "Science & Technology for Sustainable Development with Women Empowerment"	January 3 rd - 7 th , 2023	National	-	-
Dr. Manpreet Kaur	The 108 th Indian Science Congress on "Science & Technology for Sustainable Development with Women Empowerment"	January 3 rd - 7 th , 2023	National	-	-
Dr. Sapna Baghel	The 108 th Indian Science Congress on "Science & Technology for Sustainable Development with Women Empowerment"	January 3 rd - 7 th , 2023	National	-	Yes

D. Awards to Faculty members

Name of Teacher	Title of the Award	Title of Agency/ Conference	National / International
Dr. Pranita Gulhane	Research Excellence award-2023 (25 th May 2023)	Institute of Researchers, Wayand, Kerala	National
Microbiology Department	Best Microbiology Department Award for the session 2022- 2023 (9 th January 2024)	Microbiologists Society, India	National

6. Number of functional MoUs with institutions, other universities, industries, corporate houses, etc. during the year

The organization with which MoU is signed	Year of signing MoU	Duration	List the actual activities under each MOU year wise	Number of students/teachers who participated under MoUs
1) Microbiologists Society India, C-2/12, Parijatak apartment, Naikwadinagar, Osmanabad-453101, Maharashtra, India.	23-08-2022	5Years	<ul style="list-style-type: none"> • Use of Resource persons through Microbiologists Society & college. • Organization of various awareness programs for the society. • Organized meetings, symposia, workshop and exhibition. • Publications for the benefit of society, industries and researchers. 	14 Teachers + 105 students
3) Bharat Eco Solutions & Technologies, Aashirwad, Lane No 12 B, Garmal, Dhayari, Pune-411041	10-05-23	5 years	<ul style="list-style-type: none"> • Establishment of scientific and educational cooperation. • Exchange of research material and scientific information. • Workshops & Symposias 	14 Teachers + 168 Students

7. Research funds sanctioned and received from various agencies, industries and other organizations

Nature of the Project	Duration	Name of funding Agency	Amount Sanctioned	Amount Received

NA	NA	NA	NA	NA
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8. Books Published

Author	Book		Book Edited
	Title	ISBN and Date	Chapter
Dr. Pranita B. Gulhane	Explore the World of Drugs and its Delivery System	978-93-5915-167-0 (10/06/2023)	-

9. Research Guidance by Faculty during the year

Name of the guide	Ph.D		
	Awarded	Submitted	Registered
NA	NA	NA	NA

10. Generation of funds through internal and external sources such as donations, consultancy, self-financing courses and so on.

Name of the nongovernment funding agencies/ individuals/ self-financing courses /consultancy service.	Purpose of the Grant/Fund	Fund generated in rupees.
-	-	-

11. Alumni Engagement

a. Contributes significantly to the development of the institution through financial and other supports.

- Dr. Asifa Qureshi, Senior Scientist, NEERI, Nagpur, alumna of B.Sc Microbiology 1991 pass out batch performs the duty as an external examiner in Microbiology department's practical exam.
- Dr. Savita Movade, Entrepreneur in biofertilizer production, Nagpur, alumna of 1987 pass out batch was invited as a guest speaker for skill based course.
- Dr. Samiksha Raut, Associate Professor, University of Alabama, Birmingham, U.S.A, alumna of 2000 pass out batch was invited as a guest speaker for career opportunities in abroad.

11. Action Plan of the Department

Different activities are planned to conduct in the upcoming academic session (2021-2022) which includes-

- Inauguration of Microbiologist society student's unit.
- Welcome and felicitation of B.Sc and M.Sc Microbiology students.
- National/ International conference/ workshop/ seminar/ symposium.
- Guest lectures of eminent Academicians/ Scientists/ Researchers.
- Debate competition.
- Quiz competition.

- Scientific model exhibition
- Calendar Making competition.-
- Agar art competition

12. Best Practices of the department

Department always organizes various activities for the benefit of students. Under Microbiologists Society India, UG and PG microbiology students are encouraged to participate in various academic and extracurricular activities at college level as well as activities those organized by MSI. Teachers students interaction is encouraging which inculcate competitive and humanitarian spirit in the students. Those activities are given in under-

- Bridge course conducted for newly admitted students for B.Sc and M.Sc Microbiology.
- Microbiologists Society student's unit inaugurated at and under it various departmental activities are organized for students.
- "Best Student award" is given in collaboration with Microbiologists Society, India to one student each from B.Sc and M.Sc from Microbiology Department.
- Students Seminars are conducted on Life Sciences.
- Calendar making competition on Life Sciences was conducted.
- Scientific model competition was organized.
- Agar art competition was organized.
- Microbiology students participation as volunteer in Vaccination Drive of COVID-19 organized at college.
- International workshops & webinars organized for students & faculty.
- Calendar making activity on biography of Founder President Dr. Punjabrao alias Bhausaheb Deshmukh on the occasion of his Birth Anniversary.
- Parent Teacher Meetings are conducted.
- Under Teacher Mentor Scheme, interaction with students regarding any academic problem is discussed and solved.
- Career counseling is done to B.Sc and M.Sc final year students.

13. SWOT Analysis

Strength -

- Well equipped Microbiology laboratory and experienced teaching staff and non-teaching staff.
- Most of the B.Sc students get admission to M.Sc.
- Most of the students secure jobs after B.Sc and M.Sc.
- All teachers complete allotted syllabus in time satisfactorily.

- Department has good facilities for research activities.
- Excellent performance of Meritorious students in RTM Nagpur University examination.

Weakness- Limited laboratory space. Posts of regular teaching staff are vacant.

Opportunities- There are job opportunities in this field that is vaccine development, research analyst, pathology laboratory technician, Quality Control officer, Food and Drug Administrator officer, District Malaria officer, Clinical Laboratory technician, etc.

Threat- Technology moving out of Microbiology domain

Date:



Dr. Pranita Gulhane
Head of the Department
Dr. Pranita Gulhane
HEAD
Department of Microbiology
Science College, Congress Nagar,
NAGPUR.