

Evaluative Report of the Biotechnology Department

1. Name of the department : **Biotechnology**
2. Year of Establishment : **2004**
3. Name of Programs /Courses offered : **UG: B.Sc.**
(UG, PG, M. Phil, Ph.D., Integrated Masters; Integrated Ph.D., etc.)
4. Names of interdisciplinary courses and the departments/units involved : **Zoology, Botany, Chemistry, Microbiology,**
5. Annual /semester /choice based credit System (Program wise) : **B.Sc. – Semester & CGPA**
6. Participation of the department in the Courses offered by another department : **Environmental Science, B. Pharmacy.**
7. Courses in collaboration with the other Universities, industries, foreign institution, etc. : **Nil**
8. Detail of courses /programs discontinued : **Nil**
(If any) with reasons
9. Number of teaching posts

Post	Sanctioned	Filled
Professors	0	0
Associate Professors	01	01 (Honorary)
Asst. Professors (CHB)	03	03

10. Faculty profile with name, qualification, designation, specialization, (D.Sc. / D. Lit / Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	Teaching Experience in years	No. of Ph.D. students registered
Dr. P. S. Lohar	M.Sc., M.Phil, Ph.D	Head, Associate Professor (Honorary)	Zoology (Physiology)	24	03
Mr. A. L. Patel	M.Sc.	Asst. Professor	Biotechnology	5	-
Miss. P. A. Paliwal	M.Sc.	Asst. Professor	Biotechnology	4	-
Miss. B. A. Chavan	M.Sc.	Asst. Professor	Biotechnology	3	--

11. List of senior visiting faculty :
 1. Dr. B. R. Kamble,
 2. Dr. J. C. Hundiwale
 3. Mrs. S. J. Chandratre
 4. Miss. Raksha Kankariya

12. Percentage of lectures delivered and practical classes handled (program wise) by temporary faculty:

Course	Theory	Practical
B. Sc.	100%	100%

13. Student-Teacher Ratio (Program wise) :

Course	Number of faculties	Number of Student	Ratio
B. Sc.	4	26	6.5:1

14. Number of academic support staff (technical) and administrative staff; sanction and filled:

Post	Post sanctioned	Post filled
Lab Assistant	01	01
Lab Attendant	01	01
Peon	00	00

15. Qualification of teaching faculty with D.Sc./D.Lit/Ph.D/M.Phil/PG:

Qualification	No. of Faculty
M.Phil., Ph.D.	01
M. Sc.	03

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: **Nil**

17. Department projects funding by DST-FIST; UGC, DBT, ICSSR etc. and total grants received: **Nil**

18. Research Centre / faculty recognized by University : The department is under the verge of getting recognition as PGR by North Maharashtra University, Jalgaon.

Dr. P. S. Lohar is recognized as Ph.D. Supervisor in Biotechnology by NMU, Jalgaon and under his guidance 3 students are doing research for their Ph.D. degree.

19. Publications:

- Publication per faculty
- Number of papers published in peer reviewed journals : (b1 – National , b2 – International b3 – Conference Proceedings) by faculty and students.
- Books with ISBN/ISSN numbers with details of publishers
- Impact Factor

Name of the Faculty	a	b1	b2	b3	c	d
Dr. P. S. Lohar	25	04	08	13	06 As a Reference in 24 Indian Universities.	0.3 & Variable

20. Areas of Consultancy and income generated: **Nil**

21. Faculty as members in

- a) National committees
- b) International Committees
- c) Editorial Boards

Faculty Name	Membership of	National/International / editorial Boards	Duration
Dr.P. S. Lohar	Indian Association of Aquatic Biology	--	Since June 1999 to this date
	--	International Journal of Biotechnology, Indore	Since 2010 to this date
	--	Biotechnology and Bioscience Research Journal, Bhopal	Since 2011 to this date
	--	Journal of Social Science, Humanity and Biological Science, Gwalior	Since 2010 to this date
	--	International Journal of Biodiversity and Conservation, Nairobi (Africa)	Since 2012 to this date
	--	International Journal of Herbs and Medicinal Plants (Canada)	2013-15
	World Academy of Science, Engineering and Technology	Journal of Medicine and Biological Science.	2013-15

22. Student projects

- a) Percentage of students who have done in house projects including inter departmental/program: **100% student of T.Y. B.Sc. does in house project.**
- b) Percentage of students placed for projects in organizations outside the institution i.e. in Research /Industry /other agencies: **Nil**

23. Awards/Recognitions received by faculty and students

Name of Faculty	Awards/Recognition	Duration
Dr. P. S. Lohar	Ph.D. Supervisor by NMU, Jalgaon	2010 to 2015
	First Ranker in Oral Presentation in international conference at Indore	20 -21 Feb 2011

24. List of eminent academicians and scientists/visitors to the department:

Name	Position
Dr. Vasant Jadhav	Director, Merck United State of America
Dr. V.L.Maheshwari	Director, School of Life Sciences, NMU, Jalgaon
Dr. B.V. Pawar	Dean, Science Faculty, NMU, Jalgaon
Mr. Swapnil Potdar	Bioinformatician, Institute for Molecular Medicine, Finland
Dr. Sachin R.Patil	Taxonomist, Zoological survey of India, Jabalpur
Mr.V.V.Patil	Entomologist, NCL, Pune
Dr. U.K.Patil.	Head, Dept.of Biotechnology,R.C.Patel college ,Shirpur
Dr.K.P.Narkhede.	Head, Dept.of Microbiology, .M.J.College Jalgaon
Dr.M.M.Jogi	Asso.Prof. ,Dept.of Microbiology, Shahada College
Prof.S.J. Chandratre	Asso.Prof., Dept.of Microbiology, .M.J.College Jalgaon
Dr. R.D.Shelar	Asso.Prof., Dept.of Microbiology, Z.B.Patil College ,Dhule
Dr.S.V.Bhalsing	Assi.Prof.,Dept.of Biochemistry, NMU Jalgaon
Dr.Nitin Patil	Head, Dept.of Microbiology, SSVPS,College Dhule
Dr.Pritam Shinde	Asso.Prof.,Agriculture College ,Dhule.
Mr.Shashikant Joshi	Assi.Prof., Dept.of Microbiology, Pratap College ,Amalner
Miss Sarojini Deshmukh	Assi.Prof., Dept.of Microbiology, Z.B.Patil College ,Dhule

25. Seminars/Conferences/Workshops organized & the source of funding

- a) National : Nil
b) International : Nil

26. Student profile program / course wise for academic year 2011-12

Name of the course/program (refer question no. 4)	Applications received	Selected	Enrolled		Pass percent age
			Male	Female	
F.Y.B.Sc.	13	13	06	07	100%
S. Y. B. Sc.	07	07	04	03	86%
T. Y. B. Sc	09	09	05	04	88%

27. Diversity of students:

Name of the course	% of students from the same state	% of the students from other State	% of the students from abroad
B. Sc.	100%	-	-

28. How many students have cleared national and state competitive examinations such as NET, SET, GATE, Civil Services, Defense services etc.: **Nil**

29. Student Progression:

Students Progression	Against % enrolled
UG to PG	80%
PG to M. Phil.	-
PG to Ph.D.	-
Ph. D. to Post – Doctoral	-
Employed	
• Campus selection	5%
• Other than campus recruitment	70%
Entrepreneurship /Self-employment	2%

30. Details of Infrastructure facilities

- Library: Nil, However in Central library there are 1098 books of life sciences and 6000 e-Books.
- Internet facilities for self & Students: **Internet connection is available with one Node.**
- Class rooms with ICT facility: **We use to make arrangement of ICT facilities in the existing class rooms, as per requirement.**
- Laboratories : **LAB 1: 90 sq.m.**
LAB 2: 75 sq.m.

31. Number of students receiving financial assistance from college, University, government or other agencies: During each academic year admitted students receive GOI scholarship.

Total No. of Students	College (Earn and Learn Scheme)	University (Poor Boys Fund)	GOI
29	--	--	29

32. Details on student enrichment programs (special lectures / workshops/seminars) with experts:

Name of the Expert	Topic	Date
Dr. Vasant Jadhav (Scientist MERCK, US)	r- DNA Technology	18/07/2009
Mr. Swapnil Potdar (Persistant Software, Pune)	Bioinformatics	20/08/2010
Mr. Sachin R Patil (ZSI, Pune)	Bio-Diversity and Conservation	26/08/2011
Prof. V. L. Maheshwari (Director School of Life Sciences NMU Jalgaon)	Challenges and new frontiers in life sciences	06/09/2012
Mr. Swapnil Potdar (Molecular Modeling, Finland)	Computer Aided Drug Designing	10/02/2013

Sr. No.	Name of the programme	Level of Programme	Year	Number of students participated
1.	Poster and Model Exhibition	College	2008-2009	27
2.	Poster and Model Exhibition	University	2010-2011	120
3.	Blood group Detection	College	2010-2011	130
4.	Poster and Model Exhibition	University	2011-2012	70
5.	Blood group Detection and Hb Estimation	College	2011-2012	113
6.	Poster and Model Exhibition	University	2012-2013	50

33. Teaching methods adopted to improve student learning

- Power Point Presentation
- Video show
- Use of Over head Projector
- LCD
- Use of Charts, Models, live and preserved Specimens
- Group discussion
- Student Seminars and assignments

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- a) Organization and active Participation in Blood donation camp
- b) Active Participation in tree Plantation Campaign.
- c) Arrange blood &Hb detection camp.
- d) Active participation in AIDS awareness programme
- e) Promotion of Environmental awareness.

35. SWOC analysis of the department and future plans.

Strengths:

- The department is on the verge of getting approval as PG Research Center by NMU.
- Three students are doing research to acquire the Ph.D.in thrust areas of biotechnology
- Regular research papers publication in peer-reviewed journals with ISSN.
- Staff members are a part of statutory bodies of North Maharashtra University including Senate.
- Punctuality in completing records and practical.

Weaknesses:

- Admission to the course is given without entrance test.
- Students are admitted without merit.

Opportunities:

- Graduate students can opt for post-graduation studies in the University department.
- Graduate students have job opportunities in Medical and Pharmaceutical companies.
- UG and PG students can start their own small scale business.
- There are opportunities for students in the field of education, research, medicine and social organizations.

Challenges:

- Granting new senior colleges in the Chopda city and in Chopda Tahsil can hamper the strength of the students in the department as well as in the Institution.
- Being rural area and lack of industrial sectors, job availability is a challenge.

Future plans:

- On approving the PGR laboratory of Biotechnology Department by the University, the institute intended to start post graduate studies.
- Major research projects will be submitted.
- The proposal for organizing National/International conference will be submitted.
- To run an interdisciplinary certificate course.