



GOVERNMENT OF MAHARASHTRA
INSTITUTE OF SCIENCE

(Affiliated to Dr. Babasaheb Ambedkar Marathwada University, Aurangabad)

Nipat Niranjana Nagar, Caves Road,
Aurangabad- 431 004, Maharashtra

ANNUAL QUALITY ASSURANCE REPORT

2007-2008

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
(An autonomous institution of University Grants Commission)

P. O. Box No. 1075, Opp. NLSIU, Nagarbhavi, Bangalore – 5600 072,
Karnataka



Annual Quality Assurance Report (AQAR) of the IQAC

Academic Year
2007-08

PART –A

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year

1. Nurture the goals and objectives of the Institute with implementable solutions.
2. Encourage the faculty members to contribute to syllabi designing and revisions.
3. Motivate to the teaching staff in faculty development programmes.
4. Organize and encourage the participation at seminars/workshops/conferences.
5. Focus on research activities to be carried out by staff and students.
6. Providing consultancy services to industries and institutions.
7. Motivate the faculty members and students to participate in extension activities and community services.
8. Inviting experts from various fields and alumni for guest lectures, seminars, workshops, conferences, competitive exam guidance, arrangements for summer trainings, industry visits, etc.
9. Creating health awareness amongst the students.
10. Encourage students to participate in co- and extra-curricular activities. Various events viz., seminars, scientific exhibitions, Quiz and essay competition will be organized in the institute under the head of National Science Day to enhance the scientific awareness amongst students and common people.
11. Undertake efforts to submit research proposals to different funding agencies.
12. Organize Parents'-Teachers' meet in the Departments for increasing interactions between the parents, teachers and students.

PART-B

PART B – 1 Activities reflecting goals and objectives of the Institution

- Faculty members contributed to syllabi designing and revision as a part of various University Committees.
- Two faculty members completed refresher courses.
- Faculty members published research papers in peer-reviewed journals and guided research students in their Ph.D. work.
- Departments provided consultancy services to industries and institutions.

- Faculty members and students participated in extension activities and community services and implemented Solid Waste Management projects in District Central Jail and other public places.
- Students participated in co-curricular and extra-curricular activities such as seminars, science exhibitions, quiz and essay competitions during the National Science Day celebrations.
- Faculty members were sanctioned new research projects by funding agencies.

PART B – 2. New Academic programmes initiated (UG and PG): Nil

PART B – 3. Innovations in curricular design and transaction

Members of the Teaching Staff hold numerous responsible positions in University appointed committees, take important decisions and thereby contribute to value addition in the teaching-learning process. A list of staff members serving on University committees is given below:

- Dr.S. G. Gupta, Chairman, Ad-Hoc Board, Microbiology
- Dr. Mrs. S. M. Dharmadhikari, Member of Ad-hoc Board, Microbiology
- Dr.S. G. Gupta, Chairman, Ad-Hoc Board, Biotechnology
- Mr. S. G. Kulkarni, Chairman, Ad-Hoc Board, Biophysics
- Dr. S. M. Deshpande, Chairman, Ad-Hoc Board, Geology

All the above mentioned staff members were members of committees constituted for the purpose of framing syllabi of the respective PG programs.

PART B – 4. Interdisciplinary programme started

- The subjects in which postgraduate and research training is implemented are interdisciplinary in nature. The subject content and the papers of M.Sc. courses include the interdisciplinary and application-based approach. Students register for Ph.D. in Biotechnology under the interdisciplinary Ph.D. programme.

PART B –5 . Examination reforms implemented

- Examination reforms are under the purview of the University constituted Ad-hoc Boards of the concerned subjects. Therefore, the procedures adopted are as per the directives of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- Revised syllabi of various subjects were implemented as per the guidelines of the University. Examinations were conducted according to the pattern prescribed by the University.

PART B – 6. Candidates qualified: NET/SET/GATE etc.

Name of examination	Number of qualified candidates
NET	01

PART B – 7. Initiative towards faculty development programme

Participation of faculty members in various training courses / refresher courses.

Sr. No.	Name of faculty member	Faculty development programme	Department
1.	Mrs. S. K. Jangam	Refresher course at Academic Staff College, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Biotechnology
2.	Dr. M. A. Sonar	Refresher course at Academic Staff College, University of Pune, Pune	Geology

Teachers pursuing Ph.D.

Sr. No.	Name of Faculty member	Department	Year of Registration
1	Ms. Shahnaz Farooqui	Microbiology	1993
2	Ms. P.N. Puthan	Microbiology	1993
3	Mrs. V.N. Wadekar	Biophysics	2008
4	Mrs. A.S. Vinchurkar	Biophysics	1987
5	Mrs. S.K. Jangam	Microbiology	2000
6	Dr. A. G. Jadhav	Microbiology	2006
7	Dr. A. N. Dongre	Geology	2005

PART B – 8. Total number of seminars/workshops conducted:

- Seminar series was conducted under National Science Day celebrations organized under the aegis of National Council for Science and Technology and Rajiv Gandhi Science and Technology Commission, Government of India.. The theme of the programme was “Understanding the Planet Earth”.
- Department of Microbiology organized a unique awareness program on “Basic Principles of Microbiology with reference to techniques used to study Bio-deterioration and conservation of Monuments” for the students of Diploma in Archeology, Archeological Survey Of India, New Delhi.

PART B – 9. Research Projects a) Newly Implemented b) Completed

Sr. No.	Name	Funding Agency	Completed/Newly implemented
1	Dr. S. G. Gupta	Board of College and University Development, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Newly implemented

2	Dr. S. M. Deshpande	Board of College and University Development, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Newly implemented
3	Dr. Sahera Nasreen	Board of College and University Development, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Newly implemented

PART B – 10. Patents Ganagered, if any: Nil

PART B – 11. New Collaborative Research Programme: Nil

PART B – 12. Research grants received from various agencies

Sr. No.	Name	Funding agency	Amount (Rs.)
1	Dr. S. G. Gupta	BCUD, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20,000
2	Dr. S. M. Deshpande	BCUD, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	10,000
3	Dr. Sahera Nasreen	BCUD, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20,000
	Total		50,000

PART B – 13. Details of Research Scholars

S. N.	Name of Research Scholar	Subject	Name of the Guide	Year of Registration	Year Of Award
1	Mr. Dhale Datta A.	Botany	Dr.S.K.Markandeya	2007	---
2	Mr.Faisal Chause	Botany	Dr.Sahera Nasreen	2007	---
3	Mr. Ashfaque Khan	Botany	Dr. Sahera Nasreen	2005	2008
4	Mr. Chavan V.B	Botany	Dr. Sahera Nasreen	2003	2007
5	Ms.Shaista Parvin	Botany	Dr.Sahera Nasreen	2007	

6	Mr. Vishal Shinde	Botany	Dr.Sahera Nasreen	2007	
7	Ms. Munera Farooque	Botany	Dr.Sahera Nasreen	2007	
8	Mr. Deepak Pardhe	Botany	Dr. R. A. Satpute	2007	
9	Mr.Govankoppa R.B.	Botany	Dr. R. A. Satpute	2007	
10	Mr.Nimbalkar A. N.	Botany	Dr. R. A. Satpute	2007	
11	Mr.Hungend S.B.	Microbiology	Dr. S .G. Gupta	2007	
12	Mr. Ghogre P.D.	Microbiology	Dr. S .G. Gupta	2007	
13	Mr. Aher K. K.	Geology	Dr.S. M. Deshpande	2007	
14	Mr.Shinde P. D.	Geology	Dr.S. M. Deshpande	2007	
15	Mr.Gaikwad S. G.	Geology	Dr. M.A. Sonar.	2007	
15	Mr. Ingole S.T.	Geology	Dr. M.A. Sonar.	2007	
16	Ms. Kranti Engade	Microbiology	Dr. S.G. Gupta	2000	2007
17	Mr. Narendran	Botany	Dr. K.G. Joshi	2003	---

PART B – 14. Citation Index of Faculty members and impact factor

Sr. No.	Name of the faculty member	Department	Impact factor	Citations
1	Dr. R.A. Satpute	Botany	0.18	
2	Dr. S.G. Gupta	Microbiology	-	
3	Dr.Mrs. S.M. Dharmadhikari	Microbiology	0.087	
4	Dr. Mrs. S.A. Peshwe	Microbiology	0.087	
5	Dr. A.G. Jadhav	Microbiology	0.087	
6	Dr. S.M. Deshpande	Geology	0.06	
7	Dr. A.N. Dongre	Geology	3.04	

PART B – 15. Honor's / Awards to the faculty

- Dr.R.R. Deshpande was appointed as Joint Director, Higher Education, Maharashtra State by Director of Higher Education, Govt. of Maharashtra.
- Dr.R.R. Deshpande was nominated as member Board of management of Gokhale Institute of Politics and economics (Deemed University) by Director of Higher education, Govt. of Maharashtra for 2006-2013.
- Dr. R. R. Deshpande worked as a Honourable secretatory of Bhartiya Vidya Bhavan's Aurangabad Kendra since 2005. He initiated to establish unique solid waste disposal units in 10 prisons of Aurangabad region under the CLEAN India program in association with Bhartiya Vidya Bhavan Kendra Aurangabad.
- Dr. R.R. Deshpande was invited as a Resouce Person at Short Term Training Course on Chemical Conservation of Monuments organized at Aurangabad by Archeological Survey of India, Dehradun.
- Dr. R. R. Deshpande was invited as a resource person at UGC sponsored State Level Seminar on "Role of Microorganisms in Industrial Effluent Treatment" organized by KSK Arts,Science and Commerce College Beed.
- Dr. R. R. Deshpande was invited for presentation on "Organic waste management through city farming" at Workshop on Conservation of Cultural Heritage held at INTACH, Marwar, Jodhpur Chapter, Umaid Bhavan Palace, Jodhpur.
- Dr. M. A. Sonar received recognition Ph.D. Guideship in of Geology.
- Dr. Mrs. S.M. Dharmadhikari received recognition of Ph.D guideship in Microbiology
- Dr. Mrs. S.A.Peshwe received recognition of Ph.D guideship in Microbiology

PART B – 16. Internal Resources generated

Sr. No.	Name of Department	Resource generated (Rs.)
1.	Biophysics	800
2.	Geology	2000

Consultancy services are also offered by Microibology and Botany department.

PART B – 17. Details of Departments getting SAP, COSIST / DST / FIST etc. assistance / recognition

- Nil

PART B – 18. Community services

- Debate competition, popular lectures and slide shows were organized for school and college students on the topic "Understanding Planet Earth" on the occasion of National Science Day Celebrations.
- Essay writing competitions were organized for school and college students on the occasion of National Science Day Celebrations.

- Dr. R. R. Deshpande was involved in the following environment action programs in association with Bharatiya Vidya Bhavan, Aurangabad Kendra and CLEAN India Program (Community Led Environment Action Network of Development Alternatives, New Delhi) supported by European Action Commission and Foundation Ensemble, France Project (Community Environment Action for Sustainable Development):
 - i. City farming workshop at Bharati Vidyapeeth's New Law College (Sangli), MGM-JNEC college campus (Aurangabad), Forest office (Aurangabad), Holy Cross English High School (Aurangabad), Dnyan Prakash Vidyamandir (Aurangabad), Savarkar College (Beed), Aurangabad District Prison (Aurangabad), Central Prison (Nashik), Parbhani Central Prison (Parbhani), Varadganesh mandir (Aurangabad), Tapadia Natyamandir (Madhurangan, Aurangabad), Station Cell Armed Forces Cantonment (Aurangabad).
 - ii. Tree plantation program, graveyard, Waluj village, Aurangabad.
 - iii. Solid waste disposal using Vermi Biosanitizer and Sujala Biosanitizer, unique 7-pit cyclic program successfully at following places: Aurangabad Central Prison, Open Prison Paithan (District Aurangabad), Nanded District Prison, Osmanabad District Prison, Dhule District Prison, Jalgaon District Prison, Parbhani District Prison, Vedantnagar (Aurangabad) and Beed District Prison.
 - iv. Activities related to JalTara Filtration System (Unique Slow Sand Filtration) designed by Development Alternatives, New Delhi: awareness and action program at Tourism Department (Aurangabad), Atra Pharmaceuticals (Waluj, Aurangabad), AMC Nutan School (Aurangabad).

PART B – 19. Teachers and Officers newly recruited: Nil

PART B – 20. Teaching, Non-Teaching ratio

Teaching: Non- Teaching
1.19:1

PART B – 21. Improvement in the Library Services

- New books and periodicals were purchased during the academic period.
- Reprographic service was made available to all students and staff.

PART B – 22. New books / Journals subscribed and their values

Purchase of journal/books	Total number of journals/books	Cost in Rs.
Indian journals	18	26325
Foreign journals	10	240394.45
Books	233	1,19692.6
Total	261	3,86412.05

PART B – 23. Courses in which student assessment of teachers is introduced and action taken on students' feedback

Student feedback was obtained for all the courses conducted in the Institute. Based on the serious note of the feedback the specific issues are addressed with immediate effect.

The teachers are assessed regularly through the performance appraisal and confidential reports and on the basis of the teaching record, attendance record, annual report and result record.

PART B – 24. Unit cost of education

Year	Student Intake	Unit cost with salary component (Rs.)	Unit cost with non-salary component (Rs.)
2007-08	184	59782.60	13793.47

PART B – 25. Computerization of administration and the process of admissions and examination results and issue of certificates

1. The administration section is partially computerized and therefore computerized mechanism is used for administration and process of admission.
2. Admission process is executed through computerization since 1992.
3. Examination process is under the purview of the affiliating University and it is computerized.
4. College has its own website, which is updated for the convenience of the users.
5. College has its own e-mail address for timely and convenient communication with students, parents and other stakeholders.

PART B – 26. Increase in the infrastructural facilities: Nil

PART B – 27. Technology up gradation:

- The lectures and seminars in all the departments were engaged by faculty members using LCD Projectors and other ICT resources.
- Internet facilities were used by students and faculty members for downloading educational resources and literature for research work.

PART B – 28. Computer and internet access and training to teachers and students

- Computer training was made mandatory to the teaching and non-teaching staff.
- Common Internet facility was made available in library.
- Students were trained in basics of computer education.

PART B – 29. Financial aids to students

The state government provides financial assistance for the students from weaker sections in the society such as the SC/ST/OBC and economically backward class. Approximately 50% of the students from M.Sc. course receive the scholarships and free

ships. The institute facilitates disbursement of the financial aid from the government in the form of:

- Government of India Scholarship
- Government of India freeship
- Scholarship for economically backward (EBC) students
- Minority scholarship
- Scholarship for wards of Primary teachers (PTC)
- Scholarship for wards of secondary teachers (PTC)
- Merit scholarship

PART B – 30. Activities in support from alumni association

- Alumni employed at national and International institutions visit the Institute and mentor the students.
- The Alumni are invited to interact with students and faculty members, share their expertise, deliver lectures and suggest revisions in the syllabi.
- Alumni support students of the Institute in recruitments and summer trainings.

PART B – 31. Activities in support from Parent – Teacher Association

- Parent-teacher association is yet to be established in the Institute. However, parents are invited for feedback on the curriculum. Parents and teachers meet regularly and parents are kept apprised of the Departmental and Institutional activities.
- The faculty members interact closely with the parents to appraise them about the progress of the students and expectations of the institute.
- Parents are invited for discussion or counseling in order to find solutions for problems faced by individual students.

PART B – 32. Health Services

The health facility is available at all the Government hospitals. In addition, the students can visit DKMM Homeopathic Hospital which is adjacent to the Institute.

PART B – 33. Performances in sport activities

- Students participated in annual sports event which is conducted by the institute every year.

PART B – 34. Incentives to outstanding sports person

- During annual social gathering various sports events like Cricket, Volley ball, Chess, Table tennis and Badminton were organized. Students were felicitated for their outstanding performances.

PART B – 35. Students achievements and Awards

- Students of all Departments secured top positions in University Merit Lists.

- Students volunteered in NSS activities throughout the year and participated in NSS camps.
- One student qualified CSIR –UGC- NET.
- Students participated in the debate competition, science and technology exhibitions conducted during National Science Day Celebrations and won prizes in the competitions.

PART B – 36. Activities of the guidance and counseling unit

- Students were provided with information regarding admissions; counseling is done at the start of every academic year. Counseling is done throughout the year to explain the scope, applicability and opportunity in the concerned subjects.
- Students are guided for various competitive exams.
- Woman's redressal cell addressed the problems of girl students' and provided counseling.

PART B – 37. Placement services provided to students

- Students are being provided guidance for getting good placements in different industries as well as various government organizations.
- Guidance/recommendations are given to students for joining different organizations for summer trainings and placements.
- The copies of employment advertisement have been displayed throughout the year for providing assistance in placements.

PART B – 38. Development programme to non-teaching staff

The non-teaching staff members were encouraged to undertake the computer courses.

PART B – 39. Healthy practices of the Institution

- The institute motivated the students to organize programmes such as Annual Gathering, National Science Day and Guest Lectures and seminars.
- Microbiology and Botany departments provided microbial cultures free of cost to various colleges.
- Botany department offered services to the Government Forensic Laboratory.
- Summer trainings were organized for students in various industries.
- Students are guided and motivated to prepare concise but in-depth descriptive cards of terms/concepts pertaining to the syllabus, now popular as the "R R Pattern".

PART B – 40. Linkages developed with national / International, Academic / Research bodies

- The following students were selected by various industries/organizations for summer project/training:

Name of the student	Department	Name of the research institute	Duration
Ms. Tahsin Bennur	Biotechnology	Best Biotech Bengaluru	15 Days
Ms.Gauri Pradhan	Biotechnology	Best Biotech Bengaluru	15 Days
Ms.Archana Rathod	Biotechnology	Best Biotech Bengaluru	1 Month
Ms.Mrudula Kalyankar	Biotechnology	Best Biotech Bengaluru	1 Month
Ms.Monica Mankar	Biotechnology	Best Biotech Bengaluru	1 Month
Ms.Smita Rahane	Biotechnology	NCCS, Pune	1 Month
Mr. Avinash Khandagle	Biotechnology	Wockhardt	1 Month
Mr.Santosh Kharse	Biotechnology	Wockhardt	1 Month
Mr. Vivek Tembhukar	Microbiology	ACTREC, Mumbai	2 months
Ms. Jyoti Darwante	Microbiology	ACTREC, Mumbai	2 months
Ms. Shraddha Bakshi	Microbiology	Concept Pharmaceuticals Aurangabad	2 months
Ms. Tanmayee Aradhye	Microbiology	Vikas Dairy, Jalgaon	2 months

PART B – 41. Any other relevant information the institutions wishes to add:

- Dr. R. R. Deshpande participated as a trainee at Workshop on Conservation of Cultural Heritage held at INTACH, Mehrangarh, Jodhpur Chapter, Jodhpur.

PART – C Outcomes achieved by the end of the year

1. Faculty members contributed to syllabi designing and revision as a part of various University Committees.
2. Two faculty members completed refresher courses.
3. Faculty members published research papers in peer-reviewed journals and guided research students in their Ph.D. work.
4. Departments provided consultancy services to industries and institutions.
5. Faculty members and students participated in extension activities and community services and implemented Solid Waste Management projects in District Central Jail and other public places.
6. Students participated in co-curricular and extra-curricular activities such as seminars, science exhibitions, quiz and essay competitions during the National Science Day celebrations.
7. Faculty members were sanctioned new research projects by funding agencies.

PART – D Detail plans of the institution for the next year

1. Strongly support goals and objectives of the Institute with implementable solutions.
2. Encourage the faculty members to contribute to syllabi designing and revisions.
3. Motivate to the teaching staff in faculty development programmes.
4. Organize and encourage the participation at seminars/workshops/conferences at the state and national level.
5. Focus on research activities to be carried out by staff and students.
6. Provide consultancy services to industries and institutions.
7. Motivate faculty members and students to participate in extension activities and community services.
8. Submitting proposals to the Public Works Department for maintenance/repairs/construction of facilities in the Institute premises.
9. Inviting experts from various fields and alumni for guest lectures, seminars, workshops, conferences, competitive exam guidance, arrangements for summer trainings, industry visits, etc.
10. Creating health awareness amongst the students.
11. Encourage students to participate in co- and extra-curricular activities.
12. Undertake efforts to submit research proposals to different funding agencies.