

Department of Biochemistry

1. Name of the department: **Department of Biochemistry**
2. Year of Establishment: UG- 1985
PG-1994
Other Carrier Oriented Programme
CCLT: 2008
DCLT: 2009
ADCLT: 2010
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., and Integrated Masters; Integrated Ph.D., etc.): UG, PG, Ph.D, Carrier Oriented Programme.
4. Names of Interdisciplinary courses and the departments/units involved:
 - i) Biochemistry/Microbiology/Chemistry
 - ii) Faculties such as Biochemistry and Microbiology shares the teaching of paper Metabolism, Industrial Microbiology, Clinical Biochemistry and Quality Assurance Management.
 - iii) Antimicrobial activity is done at Microbiology department while analysis on HPLC is done at Biochemistry department thus sharing of instruments takes place for research.
5. Annual/ semester/choice based credit system (programme wise): Semester for UG and PG with CBCS for PG.COP parallel to B.Sc. course.
6. Participation of the department in the courses offered by other departments: Yes, The faculties teaches the Biochemical portion in department of Zoology, Biotechnology and Chemistry, Similarly faculties from Zoology department teaches Physiological part in Biochemistry department.
7. Courses in collaboration with other universities, industries, foreign institutions, etc.: NIL
8. Details of courses/programmes discontinued (if any) with reasons: NIL
9. Number of teaching posts

	Sanctioned	Filled
Professors	-	-
Associate Professors	02	02
Asst. Professors	01	Nil

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

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Z.H.Khan	M.Sc. Ph.D.	Associate Prof. and HOD	Biochemical, Pharmacology and Toxicology	Teaching: 30 Research: 35	16 students
Mr.S.M.Mular	M.Sc. B.Ed.	Associate Prof.	Fermentation & Food Science	Teaching: 28 Research: 11	-
Dr.Nazia D. Khan	M.Sc. B.Ed. Ph.D	Assistant Professor, (Adhoc Basis)	Plant Biochemistry	Teaching: 10 Research: 05	-
Ms. Sangita S. Kunjwani	M.Sc.	Assistant Professor, (Adhoc Basis)	Plant Biochemistry	Teaching: 09 Research: 04	-
Ms..Indira B.Soneji	M.Sc.	CHB UG	Plant Biochemistry	Teaching: 03 Research: 01	-
Ms.Kiran R.Damodar	M.Sc. B.Ed.	CHB PG	Plant Biochemistry	Teaching: 03 Research: -	-
Ms.Yogita S. Thakare	M.Sc.	CHB PG	Plant Biochemistry	Teaching: 01 Research: -	-
Mr.Tabrez Makrani	M.Sc. B.Ed.	CHB PG	Plant Biochemistry	Teaching: 02 Research: 02	-
Mr.Saqib Khan	M.Sc.	CHB PG	Plant Biochemistry	Teaching: 04 Research: 02	-
Ms. Dhanashree V. Deshmukh	M.Sc.	CHB PG	Plant Biochemistry	Teaching: 01 Research: -	-
Ms.Nikhat Sultana	M.Sc.	CHB PG	Bioinformatics	Teaching: 02 Research: -	-

11. List of senior visiting faculty

Dr. M.S. Kachole, Dr. K .R. Gawai, Dr, Sharique Ali, Dr.S.P.Govindwar, Dr. Riyyaz Syed

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

UG: 30%

PG: 80%

13. Student -Teacher Ratio (programme wise)

UG: 20:1

PG: 2:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and

filled: Technical Staff: Sanctioned: 1 Filled: 1

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.
3 Ph.D.
8 M. Sc.
16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: NIL
17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: 2 Minor Research Projects completed: 1.40 Lac.
1 Major Research Projects completed: 7.16 Lac.
18. Research Centre /facility recognized by the University: Research Laboratory is recognized
by SGB Amravati University, Amravati
19. Publications:
 - a) Publication per faculty

Number of papers published in peer reviewed journals (national / international) by faculty and students

Sr.no.	Name of faculty	No. of papers in National Journal	No. of papers in International Journal	Total	Mono graphs	Chapter in Books	Books Edited	Books with ISBN/ISSN numbers with details of publishers	Citation Index	SNIP	SJR	Impact factor	h-index
1.	Dr.Z.H. Khan	06	40	46	-	-	-					1 to 4	
2.	Mr.S.M. Mular	00	02	02	-	-	-					1 to 3	
3.	Dr.Nazia D.Khan	02	08	10	-	-	-					1 to 3	
4.	DrPhareen Khatib	00	03	03	-	-	-					1 to 3	
5.	MsSangita S. Kunjwani	01	04	05	-	-	-					1 to 3	

- Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- Monographs
- Chapter in Books
- Books Edited
- Books with ISBN/ISSN numbers with details of publishers
- Citation Index
- SNIP
- SJR
- Impact factor
- h-index

20. Areas of consultancy and income generated: Consultancy provided through Clinical Laboratory 'Shivsundar Diagnostic Lab' free of cost.

21. Faculty as members in

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

National Committees:

- Chairman Board of Studies in Biochemistry, Amravati University from 1/4/1987 till 1990.
- Member of Academic Council of Amravati University from 1/4/1987 to 31/3/1990.
- Member of Faculty of Science and Board of Studies in Biochemistry from 1/4/1990 till date.
- Member of RRC of Amravati University since 1995.
- Member, Subject examination committee
- Member of Sub-committee of Board of studies in Biochemistry and including microbiology for revision and preparation of syllabi as per UGC guidelines.
- Member of Board of studies in Biochemistry in Kashmir University, Shrinagar.
- Member of Board of Studies in veterinary Biochemistry & clinical Biochemistry of Maharashtra Animal and Fishery Science University Animal, Nagpur.

- Member of Society of Biological Chemist, India.
- Member of Association of Microbiologist of India.
- Member of Indian Society of Agricultural Biochemistry.
- Ex. Director Service to Youth, Rotary Club of Akola East.
- Member, Institutional Animals Ethics Committee, PG Institute of Vet. & Animal Sc. Akola.

Editorial Boards:

1. Bioscience Biotechnology Research Communications, ISSN: 0974-6455
2. Deccan Current Science. ISSN: 0975-3044
3. New Interdisciplinary National Research journal,ISSN No. 2279-0349

Reviewer of the Journals:-

- i) Journal of Biopharmaceutical and Biotechnology, ISSN no. 0939-6411
- ii) Indian Journal of Biochemistry and Biophysics, ISSN no. 0975-0959

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/programme: In-house projects are compulsory to all the students and 100% completes it.
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: NIL

23. Awards / Recognitions received by faculty and students:

Dr. Z. H. Khan:

- a) International travel award was granted by world congress of Pharmacology to attend conference in San Francisco, America
- b) Invited as subject expert for selection of Lecturers in Medical Colleges by J & K Public service Commission, Jammu in Feb.2009
- c) Invited for Consultation by R &D of Saudi Pharmaceutical, Buraidha, Saud Arabia (UAE) in July 2009.
- d) Honored and Awarded with “Fellowship of Indian Association of Agriculture Biochemists” on 12th December 2013 during “International Conference on Role of Plant Biochemistry and Biotechnology in food and Nutrition security” and 12th conventional of the Indian Society of Agricultural Biochemists, Kanpur December 11- 14, 2013.
- e) Honored and Awarded with “Seva Gauraw Puraskar” by Honourable Vice Chancellor of SGB Amravati University Dr. Jaikiran Tidake on 1st May 2014.

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

Sr. No.	<i>Eminent visitors</i>
1.	Dr .S. S.Pawar
2.	Dr. H F.Daginawala
3.	Dr. C. T.Hash
4.	Dr. Zainuddin
5.	Dr. K .R. Gawai
6.	Dr. M.S. Kachole
7.	Dr. Aqueel Khan
8.	Dr. C. B. Powar
9.	Dr. Absar Ahmad
10.	Dr. A. M. Deshmukh
11.	Dr. MVR Reddy
12.	Dr. Qayyum Hussain
13.	Dr. S. P. Gowindwar
14.	Dr. Mumtaz Baig
15.	Dr. Jahagirdar
16.	Dr.Shardual Wagh
17.	Dr.G.Gyanath
18.	Dr.Saify Tayyab
19.	Dr.Sharique Ali

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

a) National

b) International

26. Student profile programme/course wise:

2010-2011

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Sc. I	50	37	21	16	72.97%
B.Sc II	23	23	19	04	52.17%

B.Sc. III	24	24	13	11	100%
M.Sc I	22	11	01	10	90.90%
M.Sc II	11	11	04	07	100%
CCLT	27	27	13	14	100%
DCLT	12	12	06	06	100%
ADCLT	-	-	-	-	-

2011-2012

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Sc. I	52	31	18	13	54.84%
B.Sc II	29	29	16	13	75.88%
B.Sc. III	28	28	21	07	71.43%
M.Sc I	12	09	03	06	78%
M.Sc II	10	10	00	10	90%
CCLT	31	31	15	16	100%
DCLT	18	18	09	09	100%
ADCLT	06	06	04	02	100%

2012-2013

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Sc. I	45	38	18	20	84.21%
B.Sc II	27	27	13	14	74.07%
B.Sc. III	22	22	09	13	95.45%
M.Sc I	15	10	03	07	100%
M.Sc II	08	08	02	06	100%
CCLT	36	36	10	26	100%
DCLT	16	16	03	13	100%
ADCLT	05	05	02	03	100%

2013-2014

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Sc. I	40	35	16	19	74.29%
B.Sc II	36	36	17	19	63.89%
B.Sc. III	23	23	12	11	73.91%
M.Sc I	11	07	03	04	57.14%
M.Sc II	10	10	03	07	100%
CCLT	13	13	02	11	100%
DCLT	26	26	08	18	100%
ADCLT	04	04	00	04	100%

*M = Male *F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.Sc.	95%	2.5%	2.5%
M.Sc.	100%	-	-
Ph.D	100%	-	-
COP	100%	-	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? NIL

29. Student progression

Student progression	Against % enrolled
UG to PG	35%
PG to M. Phil.	-

PG to Ph.D.	20%
Ph.D. to Post-Doctoral	-
Employed	—
• Campus selection	
• Other than campus recruitment	80%
Entrepreneurship/Self-employment	10%

30. Details of Infrastructural facilities a)

Library: **Books**= 180

Journals = 15

Ph.D thesis =11

Project reports =48

b) Internet facilities for Staff & Students: Available

c) Class rooms with ICT facilities:

432 sq.ft Available

d) Laboratories: 1 UG, 2 PG and 1

Research lab is available

31. Number of students receiving financial assistance from college, university, Government or other agencies: About 80% students receiving GOI, Minority scholarship, Student freship.

32. Details on student enrichment programmes (special lectures / workshops / Seminar) with external experts: Guest Speakers from other Universities and Institutes delivers lecture to students. Examiners coming for practical examination and for conducting Ph.D viva also Guides and delivers lecture to our students.

33. Teaching methods adopted to improve student learning:

- ✓ Seminars
- ✓ Assignments
- ✓ Project presentation
- ✓ Group discussion.
- ✓ Use of teaching aids such as charts
- ✓ OHP
- ✓ LCD projector

✓ Virtual classroom methods

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

Department is actively involved in extension activities as under:

- Students of department donate blood regularly to needy person voluntarily.
- Biochemists Association of Biochemistry Students arranges Blood donation and Blood grouping camp on **15th August** and on **Dr Punjabrao Deshmukh's Jayanti** , in December every year.
- PG students of department checks blood sugar level of staff members.
- PG students participate in blood grouping camps.
- Under extreme calamities like flood, riots etc. Students serves to affected people.
- Students are members of N.S.S.
- Students also provides their services in beautification & cleaning of city.
- Different camps arranged for Blood Grouping, Hemoglobin check up, Biochemical Investigations as per the following table....
- **Following are the few extension activities of the last 4 years**

Sr.no.	Date	Place	Activity	No.of samples
1.	26/12/2010	Dept. of Biochemistry, Shri Shivaji College, Akola	Blood donation Camp	20
2.	15.02.2011	Khandala	Kidney function Test	70
3.	18.12.2011	Ugawa	Blood Grouping camp	92
4.	26/12/2011	Dept. of Biochemistry, Shri Shivaji College, Akola	Blood donation Camp	21
5.	14/01/2012	Dept. of Biochemistry, Shri Shivaji College, Akola	Blood donation Camp	35
6.	20.10.2012	Dept. of Biochemistry, Shri Shivaji College, Akola	Blood Grouping camp	50
7.	16.12.2012	Sanghwi Mohadi	Blood Grouping camp	102
8.	11.02.2013	Girls Hostel, Shri Shivaji College. Akola.	Hb% & Blood Grouping camp	206
9.	11.03.2013 onwards	Dept. of Biochemistry, Shri Shivaji College, Akola	Blood Grouping camp	150
10.	22.06.2013	Dept. of Biochemistry, Shri Shivaji College, Akola	Blood Grouping camp	30
11.	22.08.2013	Girls Hostel, Shri Shivaji College. Akola.	Hb% & Blood Grouping camp	51
12.	06.02.2014	Shri Shivaji High School, Main Branch, Akola	Hb% & Blood Grouping camp	100
13.	21/04/2014	Department of Biochemistry, Shri Shivaji College, Akola	β-thalassemia detection camp	120
14.	21/11/2014	Department of	Celebration of	100

		Biochemistry, Shri Shivaji College, Akola in collaboration with GMC, Akola and Kasturi Charitable Society, Akola.	World Diabetic day and diabetic detection camp	
15.	14/12/2014	NSS camp arranged at Goregaon, Tq & Dist. Akola	Hb% & Blood Grouping camp	110
16.	25/12/2014	Department of Biochemistry, Shri Shivaji College, Akola	Blood Grouping Camp	150
17.	26/12/2014	Department of Biochemistry, Shri Shivaji College, Akola	Blood donation camp	20

35. SWOC analysis of the department and Future plans

SWOC Analysis

❖ Strength:-

- ✓ The only Department in Amravati University with PG and Research facilities.
- ✓ As subject is having high demand with great Scope, all the students are in proper placement.
- ✓ Consultancy Services.
- ✓ Department is conducting Carrier Oriented Courses in Clinical Lab. Technology.
- ✓ The Department is having PG and Research activities hence it have MoU with National and International Research Organizations.

❖ Weakness:-

- ✓ There is no grant for PG course hence no permanent staff.
- ✓ Department is not having lavatory Unit hence difficulty in sample collection.
- ✓ No separate Research Laboratory.

❖ Opportunities:-

- ✓ As the seats for PG has been increased, more students have opportunity for opting Biochemistry.
- ✓ There is opportunity to start Post Doctoral research and appoint Post Doctoral fellow
- ✓ There is opportunity to avail funds from different funding agencies for Research work and student fellowship.

❖ Challenges:-

- ✓ As new courses are starting, students are diverting to those courses. It is challenge to maintain Quality and Strength of department under such circumstances.
- ✓ It is a challenge to get appropriate faculty in the subject.

Future Plans

- 1) Strengthen the existing Research Activities for the development of the region in collaboration with research organization and industries.
- 2) Implementation of Major Research Projects and availing funding from various agencies.
- 3) To enhance facility of Departmental Lab
- 4) To set up Molecular Lab
- 5) To set up Animal House Facility for in-vivo studies.
- 6) Establishment of Cell Lines Lab.

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