

# **DEPARTMENT OF BIOTECHNOLOGY**

1.	Name of the department	BIOTECHNOLOGY				
2.	Year of Establishment	2007				
3.	Names of Programmes / PG, M.Phil., Ph.D., Integrat Masters; Integrated Ph.D.,	B.Sc. : CZBt, CBBt Certificate Course Diploma Course				
4.	Names of Interdisciplin departments/u		NIL			
5.	Annual/ semester/choice (programme wise)	Semester System: Prior to 2014 – 15 Choice Based Credit system: 2014 – 15 onwards				
6.	Participation of the depart offered by other departme	NIL				
7.	Courses in collaboration with other universities, industries, foreign institutions, etc.					
	<ul> <li>i) Collaboration with Dr. Sridhar Bhat's Laboratory.</li> <li>ii) Collaboration with Vittal Malya Foundation for Scientific Research</li> </ul>					
8.	Details of courses/programmes discontinued (if any) with reasons					
	Number of teaching posts					
9.	Designation	Sanctioned	Filled			
<i>)</i> .	Professors	NIL	NIL			
	Associate Professors	1	1			
	Asst. Professors	1	1			

# 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
Mr. Gopalakrishna	M.Sc.(Zoology), M.Sc. (Biotechnology ) MBA	Associate professor	NIL	22
Mr. Bharat M. A	M.Sc.	Assistant Professor	NIL	04

11.	List of senior visiting faculty	NIL		
12.	Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty	NIL		
13.	Student -Teacher Ratio (programme wise)	27	:1	
14.	14. Number of academic support staff		Filled	
			01	
15.	Qualifications of teaching faculty with D Sc/ D.Litt. / Ph.D. / MPhil / PG	Ph.D M.Phil. PG	NIL NIL 02	
16.	Number of faculty with ongoing projects from	01		
	National Funding Agency	01		
	International Funding Agency	NIL		
	Grants Received	Rs.1,60,725=00 from UGC		



	UGC MRP Project Title: "A Study On Water Quality And Microbial Diversity of Few Ponds in Bannerghatta National Park, Karnataka."				
17.	Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received.	NIL			
18.	Research Centre /facility recognized by the University	NIL			
19.	Publications	2			
	Publication per faculty	1			
	Number of papers published in peer reviewed journals	2			
	National Journals	00			
	International Journals	02			
	Books Edited	NIL			
	Books Edited with ISBN Numbers	NIL			
	Impact factor				
	h – index				



# Publication of papers published in international journals

Sl. No.	Name of the Faculty	TITLE OF THE PAPER	JOURNAL	IMPACT FACTOR	CITATIONS
1	GOPALAKRISHNA	Ecology of Bannerghatta Kavalkere pond in relation to bacterial population	The International Journal of Science and Technology Aug 2014		
2	GOPALAKRISHNA	Water quality analysis of lentic water system of bannerghatta biological park, Bengaluru	International Journal of Current Research July 2014		

20.	Areas of consultancy and income generated	NIL
21.	Faculty as members in	
	a. National Committees	NIL
	b. International Committees	NIL
	c. Editorial Boards	NIL
22.	Student projects	
	a) Percentage of students who have done in-house projects including inter departmental/programme	40%
	b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies	31.8%

Regularly 15 to 25 students are undertaking Project training during vacations at Shreedhar Bhat's Laboratory with which Department has a tie-up through MOU



Year	No. of Students involved in project		
2009-10	25 students		
2010-11	40 students		
2011-12	18 students		
2012-13	30 students		
2013-14	25 students		
Average	28 students		

Average of total students for different years : 88

Percentage of students : 31.8 %

# 23. Awards and Recognitions received by faculty and students

**Smitha B.Rao** of CZBt Secured **7**<sup>th</sup> **Rank** in Bangalore University Examinations 2011

24.	List of eminent academicians and scientists / visitors to the department				
a.	Dr. M.R.N. MURTHY	Professor, Molecular Biophysics Unit, Indian Institute of Science			
b.	Dr. MANJUNATH	Scientist, Bristol Meyer Squib			
C.	Dr. RAVICHANDRA REDDY	Retd. Professor in Zoology, Bangalore			
d.	Dr. MAMATHA HANUMAPPA	Science writer and GWAS (Genome-wide association studies) curator, NexBio, Santa Clara, California, USA			
e.	Dr. RAVI KUMAR	Scientist. Dept. of Molecular Neurobiology, New York University, US			
f.	Dr. T.S SARAVANAN	Professor in Biotechnology and Research Coordinator, MGR University, Chennai			



g.	Prof. SHIVAMALLU	National College, Basvanagudi, Bangalore
h.	Mr. KAUSHIK HATTI,	Vittal Mallya Foundation for Scientific Research, Bangalore
i.	Dr. KRISHNAMURTHY	National Center for Biological Sciences, Bangalore

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

#### Regional Workshop conducted as Co - Organizers

"Two Day Workshop on Revised Curriculum of VI Semester B.Sc. Zoology Practical" for Bangalore University College Zoology Teachers, jointly in association with Zoology Department in Feb.2013.

#### Conferences attended

#### Gopalakrishna

- 1. Science Academies' Two day Lecture Workshop at Christ University-  $27^{th}$  and  $28^{th}$  January, 2012.
- 2. National Conference on Recent Advances in Biosciences at M.S.Ramaiah College, Bengaluru 28th March, 2014.

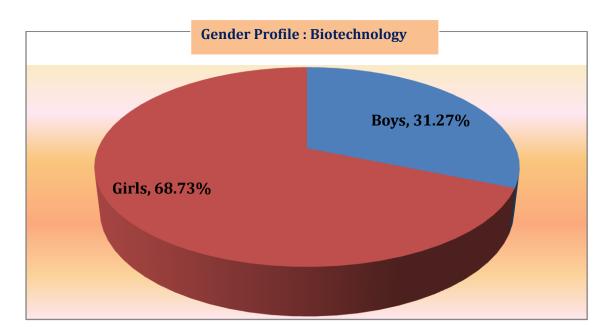
#### 26. Student profile programme/course wise

	Name of the Course / Programme	Applications Received		Enrolled			Pass Percentage
Year			Selected	Male	Female	TOTAL	(outgoing students)
2010 - 11		41	41	17	24	95	97.27%
2011 - 12		26	26	9	17	91	92.50%
2012 - 13	B.Sc.	21	21	3	18	81	92.31%
2013 - 14		39	39	15	24	82	95.24%
2014 - 15		25	25	10	15	85	



# **Gender Profile of Students**

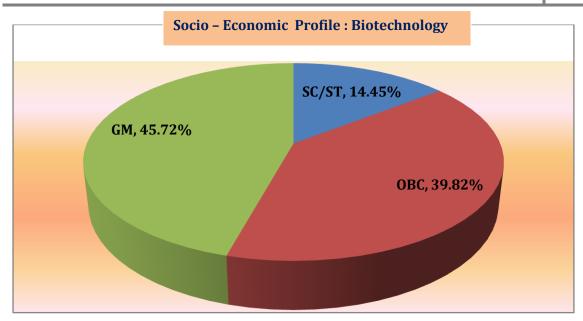
Academic Year	Boys	Girls	Total
2011 - 12	31	60	91
2012 - 13	21	60	81
2013 - 14	26	56	82
2014 - 15	28	57	85
Average Percentage	31.3	68.7	



Socio – economic profile of students

Academic Year	SC/ST	OBC	GM	Total
2011 - 12	14	24	53	91
2012 - 13	14	31	36	81
2013 - 14	11	40	31	82
2014 - 15	10	40	35	85
Average Percentage	14.5	39.8	45.7	





# 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.	100%	NIL	NIL

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

No Data Available

# 29. Student progression

Student progression	Against % enrolled
UG to PG	70%
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed  Campus selection	10%
● Other than campus recruitment	20%
Entrepreneurship/Self-employment	NIL



30.	Details of Infrastructural facilities	
a.	LIBRARY	
	<b>Books</b> Main Library	330 Books
b.	Internet facilities for Staff & Students	Available
C.	Class rooms with ICT facility	02 Class rooms and Laboratory
d.	Laboratories	01
	Area of the Laboratories	900 sq.ft. Shared with Genetics

31.	Number of students receiving financial assistance from college, university,  Government or other agencies	Data furnished under student support services		
32.	Details of Student Enrichment Programmes			
	List of Invited Lectures Orga	nized		

Sl. No.	DATE	SPEAKER	ТОРІС
1	11.01.2010	Dr. Ahmed Anees, Al-Amin college	Facts and myths about Snakes
2	07.02.2011	Mr. Kaushik S. Hatti, Dept. Bioinformatics, Vittal Mallya Scientific Research Foundation, Bangalore	Bioinformatics
3	26.07.2011	Dr. Nirranjan Aradhya- Tumkur University	Climate change-Global warming
4	30.06.2012	Dr. Shivamallu –National College	Environment and its impact
5	25.07.2012	Prof. M.R.N. Murthy Professor, Molecular Biophysics, IISc.	Uncommon commonsense
6	10.08.2012	Dr. Ravikumar – Scientist. Dept. of Molecular Neurobiology, Newyork	Biotechnological Applications in Pharmaceutical industries



Sl. No.	DATE	SPEAKER	ТОРІС
		University, US	
7	17.01.2013	Prof. T.S.Saravanan – Dept. of Biotechnology, Dr. MGR University, Chennai	Anti cancer properties of Green tea
8	20.8.2013	Dr. Manjunatha k. Rama Rao- Scientist, Bristol Meyor Squib, Bangalore.	Drug Designing – Roots and Branches
9	29.08.2013	Dr. Mammatha Hanumappa- GWAS (Genome-wide association studies) curator, NexBio, Santa Clara, California, USA,	A local Biologists Journey
10	29.01.2015	Dr. Subbakrishna, Prof and Head, Dept. of Biostatistics and Health Science, NIMHANS, Bengaluru.	Biological Sciences – Scope and Opportunities.

# 33. Teaching methods adopted to improve student learning

- a. Chalk and Talk
- b. Visual charts
- c. Permanent slides
- d. CDs
- e. Digital camera for cytological works.

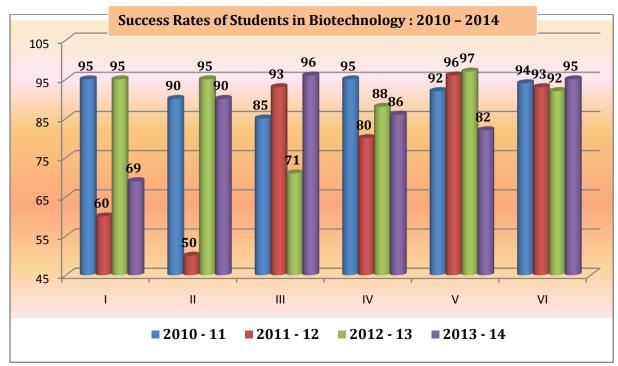
# 34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

- > Participation in environmental awareness programmes
- Participation in national festivals



#### I. Trends in Success Rates of students

Sem	2010 - 11	2011 - 12	2012 - 13	2013 - 14
I	95	60	95	69
II	90	50	95	90
III	85	93	71	96
IV	95	80	88	86
V	92	96	97	82
VI	94	93	92	95

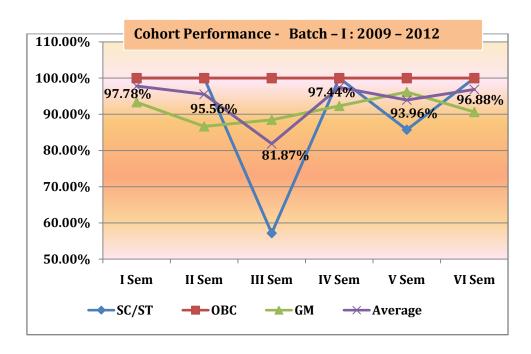


# I. Cohort performance of the last three batch of students

Batch - I: 2009 - 12

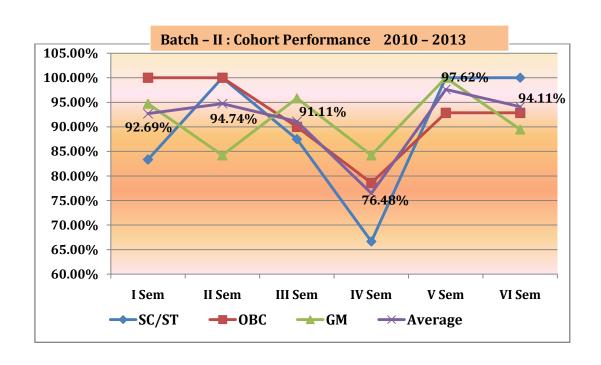
Category	I Sem	II Sem	III Sem	IV Sem	V Sem	VI Sem
SC/ST	100.00%	100.00%	57.14%	100.00%	85.71%	100.00%
OBC	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
GM	93.33%	86.67%	88.46%	92.31%	96.15%	90.63%
Average	97.78%	95.56%	81.87%	97.44%	93.96%	96.88%





Batch - II: 2010 - 13

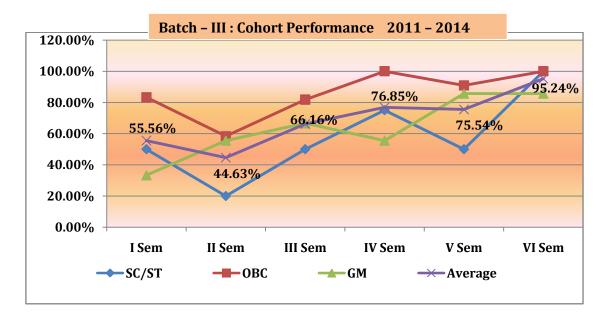
Category	I Sem	II Sem	III Sem	IV Sem	V Sem	VI Sem
SC/ST	83.33%	100.00%	87.50%	66.67%	100.00%	100.00%
OBC	100.00%	100.00%	90.00%	78.57%	92.86%	92.86%
GM	94.74%	84.21%	95.83%	84.21%	100.00%	89.47%
Average	92.69%	94.74%	91.11%	76.48%	97.62%	94.11%





Batch - III: 2011 - 14

Category	I Sem	II Sem	III Sem	IV Sem	V Sem	VI Sem
SC/ST	50.00%	20.00%	50.00%	75.00%	50.00%	100.00%
ОВС	83.33%	58.33%	81.82%	100.00%	90.91%	100.00%
GM	33.33%	55.56%	66.67%	55.56%	85.71%	85.71%
Average	55.56%	44.63%	66.16%	76.85%	75.54%	95.24%



35. SWOC analysis of the department and Future plans:

#### **Strengths**

- 1. Competent Faculty
- 2. Good Results
- 3. Research Activity

#### Weaknesses

- 1. Insufficient advertisement.
- 2. Poor campus placement in life science section.

#### **Opportunities**

- 1. More Industrial interactions.
- 2. To set up Research centre.

#### **Challenges**

1. Developing laboratory with more sophisticated modern infrastructure



# **FUTURE PLANS:**

- 1. A Tie-up through MOU with Bristol Meyer Squib for students training and projects in 2015-16.
- 2. Starting Finishing School in Biotechnology on lines of Vision Group in Biotechnology, within next 2 years.

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