



DEPARTMENT OF MICROBIOLOGY

1.	Name of the department	MICROBIOLOGY	
2.	Year of Establishment	2007	
3.	Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)	B.Sc. : BcGmb	
4.	Names of Interdisciplinary courses and the departments/units involved	Environmental Science and Public Health for B.Sc, B.Com, BBM, BCA	
5.	Annual/ semester/choice based credit system (programme wise)	Semester System : Prior to 2014 – 15 Choice Based Credit system: 2014 – 15 onwards	
6.	Participation of the department in the courses offered by other departments	NIL	
7.	Courses in collaboration with other universities, industries, foreign institutions, etc.	NIL	
8.	Details of courses/programmes discontinued (if any) with reasons	NIL	
9.	<b>Number of teaching posts</b>		
	<b>Designation</b>	<b>Sanctioned</b>	
	<b>Filled</b>		
	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
Smt. Madhumita Ghosh Dastidar	M.Sc., M.Phil	Associate Professor	Immunology	23 years
Smt. K. Malavika	M.Sc, MPhil.	Assistant Professor	Plant Biotechnology	8 years

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)	35 : 1	
14.	Number of academic support staff	<b>Sanctioned</b>	<b>Filled</b>
		01	01
15.	Qualifications of teaching faculty with D Sc/ D.Litt. / Ph.D. / MPhil / PG	Ph.D	NIL
		M.Phil.	02
16.	Number of faculty with ongoing projects from	NIL	
	National Funding Agency	NIL	
	International Funding Agency	NIL	
	Grants Received	NIL	
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	NIL
	Publication per faculty	0
	Number of papers published in peer reviewed journals	0
	National Journals	00
	International Journals	00
	Books Edited	NIL
	Books Edited with ISBN Numbers	NIL
	Impact factor	NIL
	h - index	NIL
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	Year	% of Students
	2010-2011	38%
	2011-2012	40%
	2012-2013	38%
	2013-2014	49%
	<b>Average</b>	<b>43%</b>

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies			
Year	Project work at	Topic of Project work	Percentage of students involved
2010 - 11	Sericulture Research Institute	Biofertilizers	14%
2010 - 11	SBL	Molecular biology Techniques	42%
2011 - 13	National Institute of Immunology, New Delhi	Summer Research Fellowship	2%
2011 - 12	SBL	Molecular biology Techniques	22%
2013 - 14	VSIX Analytical laboratory	HPLC method	22%
2013 - 14	Lalbagh Biocentre, Hulimavu	Mushroom Cultivation	18%
2014 - 15	Sericulture research Institute, Talaghattapura	Biofertilizers	23%



### 23. Awards and Recognitions received by faculty and students

Name of the Faculty	Title of the Conference/Seminar	Title of the paper or poster	Organized by	Date	Award
Madhumitha Ghosh Dastidar	National Seminar on Bioactive Compounds & Therapeutics	Poster (Superbugs-A Novel Way to Tackle)	Oxford College	27 <sup>th</sup> , 28 <sup>th</sup> Feb 2012	I Place
Madhumitha Ghosh Dastidar	National Seminar on Impact of Biotechnology on Human Welfare	Oral Presentation (Dandruff-Causative agent & Herbal Therapy)	Pooja Bhagavat PG Centre, Mysore	27 <sup>th</sup> , 28 <sup>th</sup> March 2013	II Place
Madhumitha Ghosh Dastidar	National Conference on Waste management towards Sustainable Development in Indian Context	Oral Presentation  Solid waste Mangement by Bio-Nanoparticles	Maharani Laxmi Ammani College	24 <sup>th</sup> , 25 <sup>th</sup> Jan 2014	Best Paper

Name of the Student	Title of the Conference/Seminar	Title of the paper or poster	Organized by	Date	Award
Supreeth.S	Emerging trends in chemistry with Emphasis in Environment	Poster A study of Antibiotic Resistance Bacteria	Vijaya college, R.V.Road	23-12- 2011	I Prize
Supreeth.S	National level Seminar on Depletion of Forest and Livelihood Concern	Paper Effect of Dimethyl Sulfoxide on Antibiotic	Christ college	17 <sup>th</sup> &18 <sup>th</sup> Feb 2012	I Prize



Name of the Student	Title of the Conference/ Seminar	Title of the paper or poster	Organized by	Date	Award
		Resistant Bacteria			
Supreeth.S	National level Conference on Bioactive Compounds & Therapeutics	<b>Paper</b> Isolation of multiple drug resistant bacteria	Oxford College	27 <sup>th</sup> &28 <sup>th</sup> Feb,2012	I Prize
Varsha. N	National level Conference on Biotechnological Approaches in Medicinal & Aromatic Plant Research	<b>Paper</b> A study of various herbal antimicrobial agents on causative agent of Dandruff	Maharanis College	21 <sup>st</sup> & 22 <sup>nd</sup> March, 2013	II Prize
Shalini.S.G	National Level Conference on Integrated Urban Waste Management & Env Health	<b>Paper</b> A study on salon wastes & its impact on human health	Vijaya College, Bangalore	27 <sup>th</sup> & 28 <sup>th</sup> Sept. 2013	I Prize
Shankar.B.S	National level on Research in Science for Beginners Conference	<b>Poster</b> A Novel way to manage waste by Effective Microorganism	MLA College	30 <sup>th</sup> Sept &1 <sup>st</sup> Oct 2013	I Prize



24.	<b>List of eminent academicians and scientists / visitors to the department</b>	
a.	<b>Prof. S B Sullia</b>	Retd. Professor, Department of Microbiology and Biotechnology, Bangalore University and Professor Emeritus, Jain University
b.	<b>Dr.S Sundar Rajan</b>	Retd. Professor, Dept. of Botany , St. Josephs College and Research Head, Jain University
c.	<b>Prof. K.N. Ganeshiah</b>	Professor and dean, University of Agricultural Sciences, Bangalore
d.	<b>Smt. Rukhmini</b>	Assistant Director, Dept of Horticulture, Lalbagh, Bangalore
e.	<b>Dr. Ravishankar</b>	Vice-President R&D (life Sciences), Professor of Biotechnology, Dayananda Sagar Institutions, Bangalore
f.	<b>Dr. Rajamani</b>	Research Head, Art Of Living
g.	<b>Dr. RohitGoswami</b>	Manipalglobal Education Service
h.	<b>Dr. Ramakrishnan</b>	CMR Institute

25.	Seminars/ Conferences/Workshops organized & the source of funding National International	NIL
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### Conferences Attended by Faculty

#### i. National Conferences

Sl. No.	Name of the faculty	Title of the Workshop/ Seminar/ Conference	Date	Organized by (Name of the institution or university)	Title of the paper presented
1	Madhumita Ghosh Dastidar	Waste Management Towards Sustainable Development in India Contaxt	24 <sup>th</sup> and 25 <sup>th</sup> Jan2014.	Maharani Laxmi Ammani College,Bangalore	Solid Waste Management by Bionanoparticles



Sl. No.	Name of the faculty	Title of the Workshop/ Seminar/ Conference	Date	Organized by (Name of the institution or university)	Title of the paper presented
2	Madhumita Ghosh Dastidar	Integrated Urban Waste management & Urban Health	27 <sup>th</sup> and 28 <sup>th</sup> Sep 2013	Vijaya College, R.V.Road, Bangalore	Nanobioparticles & Its applications
3	Malavika.K	Integrated Urban Waste management & Urban Health	27 <sup>th</sup> and 28 <sup>th</sup> Sep 2013	Vijaya College, R.V.Road, Bangalore	Participated
4	Madhumita Ghosh Dastidar	National seminar on impact of bio technology on human welfare	27 <sup>th</sup> and 28 <sup>th</sup> Mar 2013.	Pooja Bhagavat Memorial PG Centre, Mysore	Dandruff causative agent and herbal therapy
5	Madhumita Ghosh Dastidar	A national conference on "Bio Active compounds and therapeutics"	27 <sup>th</sup> and 28 <sup>th</sup> Feb 2012	Oxford College, Bangalore	Superbugs-A Novel Way to tackle
6	Madhumita Ghosh Dastidar	Science for Mankind	2 <sup>nd</sup> and 3 <sup>rd</sup> Feb 2012	Jyothi Nivas College, Bangalore	Multiple Drug Resistant Bacteria-Health Problems & Remedies
7	Madhumita Ghosh Dastidar	Bioactive Compounds & Therapeutics	27 <sup>th</sup> and 28 <sup>th</sup> Feb 2012	Oxford College, Bangalore	Superbugs-A Novel Way to Tackle
8	Madhumita Ghosh Dastidar	Bioinformatics in Drug Designing	19 <sup>th</sup> and 20 <sup>th</sup> Jan 2012.	St. Joseph's College, Bangalore	Participated
9	Malavika.K	Bioinformatics in Drug Designing	19 <sup>th</sup> and 20 <sup>th</sup> Jan 2012	St. Joseph's College, Bangalore	Participated
10	Madhumita Ghosh Dastidar	Emerging Trends in Chemistry with Emphasis in Environment	23 <sup>rd</sup> Dec 2011.	Vijaya College, R.V.Road, Bangalore	DMSO-a Wonder Drug





Sl. No.	Name of the faculty	Title of the Workshop/ Seminar/ Conference	Date	Organized by (Name of the institution or university)	Title of the paper presented
11	Malavika.K	Emerging Trends in Chemistry with Emphasis in Environment	23 <sup>rd</sup> Dec 2011	Vijaya College,R.V.Road.Bangalore	Participated
12	Madhumitha Ghosh Dastidar	KSTA Annual Conference on Science Technology and Productization- A Means for Growth	5 <sup>th</sup> ,6 <sup>th</sup> Feb 2015	Oxford College, Bangalore	Fast Food Nutrition-A health Concern

#### ii. State and Regional Level Conferences

Sl. No.	Name of the faculty	Title of the Workshop/ Seminar/ Conference	Date	Organized by (Name of the institution or university)
1	Malavika.K	A workshop on "DNA finger printing technology, Molecurlars and Marker and bio informatics	28 <sup>th</sup> Feb and 1 <sup>st</sup> march 2014	Dayanand Sagar college,Bangalore
2	Malavika.K	Building blocks of the universe	12 <sup>th</sup> Feb,2013	Jyothi nivas college
3	Madhumita Ghosh Dastidar	Science&technology for societal Transformation	19 <sup>th</sup> and 20 <sup>th</sup> Dec,2012	Dayanand Sagar college,Bangalore
4	Malavika.K	Science & technology for societal Transformation	19 <sup>th</sup> and 20 <sup>th</sup> Dec,2012	Dayanand Sagar college,Bangalore
5	Madhumita Ghosh Dastidar	Faculty Development Programme	9 <sup>th</sup> to 11 <sup>th</sup> Feb,2011	Maharanis College For Women



Sl. No.	Name of the faculty	Title of the Workshop/ Seminar/ Conference	Date	Organized by (Name of the institution or university)
6	K.Malavika	Recent Trends in Botany& Medical Microbiology	27 <sup>th</sup> and 28 <sup>th</sup> Sep,2010	Maharani Lakshmi Ammanni College

### iii. Participation of Students in Conferences

Sl. No.	Name of the Student	Title of the Workshop/ Seminar/ Conference	Indicate Regional level/ State level/ National/ International level	Date	Organized by (Name of the institution or university)	Title of the paper presented
1	Supreeth.S	Emerging trends in chemistry with Emphasis in Environment	National	23-12-2011	Vijaya college, R.V.Road	A study of Antibiotic Resistance Bacteria
2	Supreeth.S	Depletion of Forest and Livelihood Concern	National	17 <sup>th</sup> & 18 <sup>th</sup> Feb 2012	Christ University	Effect of Dimethyl Sulfoxide on Antibiotic Resistant Bacteria
3	Soumya.S.Rao	Bioactive Compounds & Therapeutics	National	27 <sup>th</sup> & 28 <sup>th</sup> Feb,2012	Oxford College	A study of dandruff causing microorganisms
4	Supreeth.S	Bioactive Compounds & Therapeutics	National	27 <sup>th</sup> & 28 <sup>th</sup> Feb 2012	Oxford College	Isolation of multiple drug resistant bacteria
5	Priya .N	Science & technology for Societal Transformation	State	19 <sup>th</sup> & 20 <sup>th</sup> Dec 2012	Dayananda Sagar Colleg	Production of Bionanoparticles



Sl. No.	Name of the Student	Title of the Workshop/ Seminar/ Conference	Indicate Regional level/ State level/ National/ International level	Date	Organized by (Name of the institution or university)	Title of the paper presented
6	Varsha. N	Biotechnological Approaches in Medicinal & Aromatic Plant Research	National	21 <sup>st</sup> & 22 <sup>nd</sup> March, 2013	Maharanis College	A study of various herbal antimicrobial agents on causative agent of Dandruff
7	Shalini.S.G	Integrated Urban Waste Management & Env Health	National	27 <sup>th</sup> & 28 <sup>th</sup> Sept, 2013	Vijaya college, R.V.Road	A study on salon wastes & its impact on human health
8	Swathi.S	Integrated Urban Waste Management & Env Health	National	27 <sup>th</sup> & 28 <sup>th</sup> Sept, 2013	Vijaya college, R.V.Road	A Study of Hospital environment & effect on human health
9	Neha.N	Integrated Urban Waste Management & Env Health	National	27 <sup>th</sup> & 28 <sup>th</sup> Sept, 2013	Vijaya college, R.V.Road	Study of Food microorganism in various food outlets in Bangalore and waste management
10	Sanjana.S	Research in Science for Beginners	National	30 <sup>th</sup> Sept & 1 <sup>st</sup> Oct 2013	MLA College	Study of hospital ambience with respect to microorganism and waste management
11	Bhargavi.R	Research in Science for Beginners	National	30 <sup>th</sup> Sept & 1 <sup>st</sup> Oct 2013	MLA College	
12	Shankar.B.S	Research in Science for Beginners	National	30 <sup>th</sup> Sept & 1 <sup>st</sup> Oct 2013	MLA College	A Novel way to manage waste by Effective Microorganism
13	Supriya.S.P,	Workshop on Recent advances in Biology	State	31 <sup>st</sup> Jan, 1 <sup>st</sup> Feb 2014	CMR College	

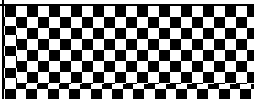


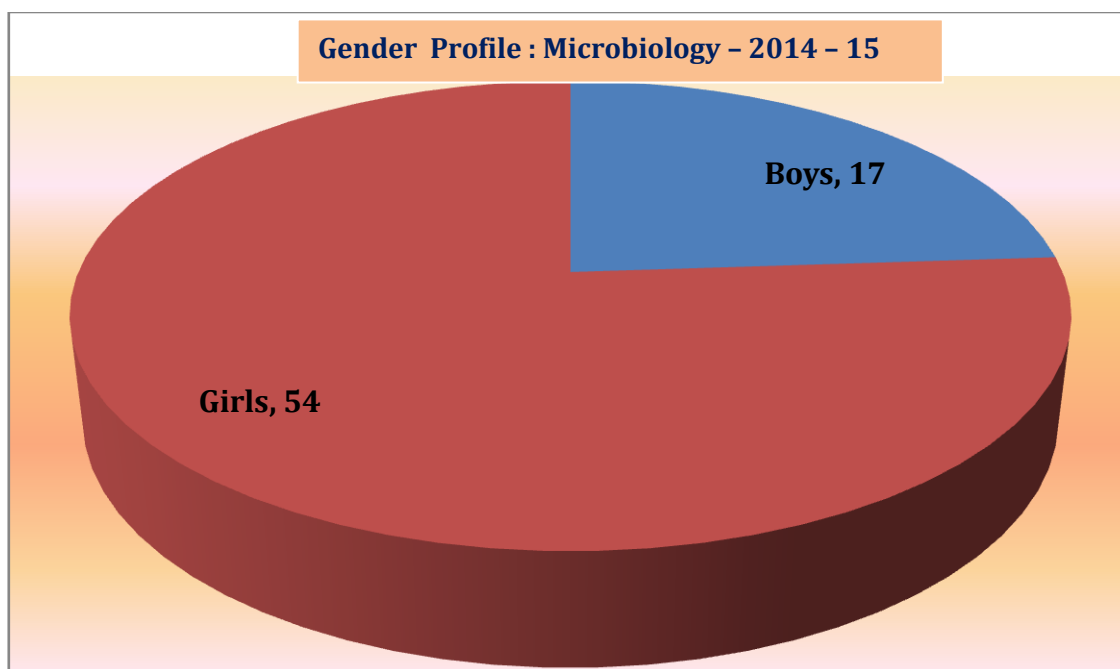
Sl. No.	Name of the Student	Title of the Workshop/ Seminar/ Conference	Indicate Regional level/ State level/ National/ International level	Date	Organized by (Name of the institution or university)	Title of the paper presented
14	Lakshmi shree.B.R	Workshop on Recent advances in Biology	State	31 <sup>st</sup> Jan, 1 <sup>st</sup> Feb 2014	CMR College	
15	Shankar.B.S	Beyond the Frontiers in Science and Technology	National	27 <sup>th</sup> & 28 <sup>th</sup> March 2014	Oxford College	Waste management by effective microorganism
16	Pooja.Y.V	Beyond the Frontiers in Science and Technology	National	27 <sup>th</sup> & 28 <sup>th</sup> March 2014	Oxford College	A Novel way to utilize waste hair by adsorbing oil

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

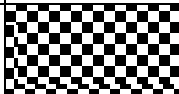
Year	Name of the Course / Programme	Applications Received	Selected	Enrolled in I Year		TOTAL All Years	Pass Percentage (outgoing students)
				Male	Female		
2010 - 11	B.Sc.	17	17	4	13	57	100.00%
2011 - 12		21	21	6	15	54	91.30%
2012 - 13		16	16	6	10	45	100.00%
2013 - 14		30	30	7	23	65	88.24%
2014 - 15		24	24	6	18	71	

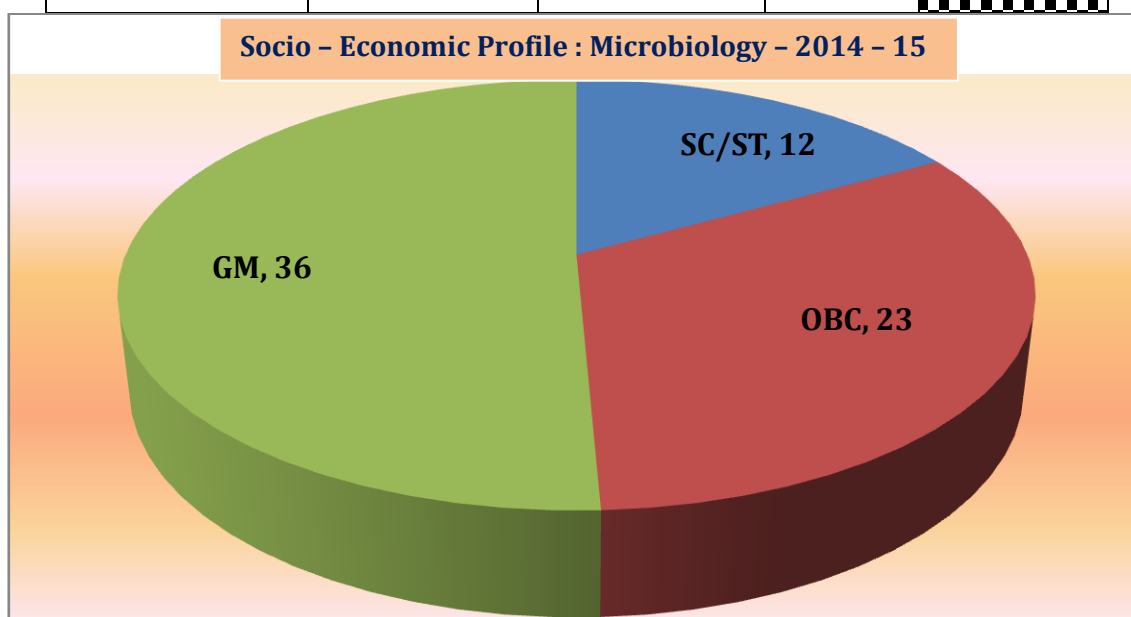
**Gender Profile of Students**

Academic Year	Boys	Girls	Total
2011 - 12	14	40	54
2012 - 13	14	31	45
2013 - 14	18	47	65
2014 - 15	17	54	71
<b>Average Percentage</b>	<b>26.8</b>	<b>73.2</b>	



**Socio - economic profile of students**

Academic Year	SC/ST	OBC	GM	Total
2011 - 12	5	17	32	54
2012 - 13	5	20	20	45
2013 - 14	9	29	27	65
2014 - 15	12	23	36	71
<b>Average Percentage</b>	<b>13.2</b>	<b>37.9</b>	<b>48.9</b>	





## 27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
BSc (BcGMb)	100%	NIL	NIL

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

**Tanushree.N.** – (2009 – 2012 BSc BcGMb) :

Cleared **NET** in Life Sciences in 2014

## 29. Student progression

Student progression	Against % enrolled			
	Year	No. enrolled	Total No.	%age
UG to PG (Microbiology)	2010 - 11	13	23	56.52%
	2011 - 12	7	23	30.43%
	2012 - 13	3	12	25%
	2013 - 14	7	17	41.18%
	<b>Average</b>	<b>7.5</b>	<b>18.75</b>	<b>38.28%</b>
PG to M.Phil.	NA			
PG to Ph.D.	NA			
Ph.D. to Post-Doctoral	NA			
<b>Employed</b> ● Campus selection	Data provided under student support services from placement cell			
● Other than campus recruitment	No Data			
Entrepreneurship/Self-employment	NIL			



30.	Details of Infrastructural facilities	
a.	LIBRARY	
	<b>Books</b>	
	Main Library	3555 Books
	Department Library	70 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.

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	<b>NIL</b>

### 33. Teaching methods adopted to improve student learning

- Chalk and talk
- Power Point Presentation
- Overhead projectors utilized for classroom teaching
- Audio-visual effects (Films, Videos, Subject related Pictures etc)
- Group discussion method.
- Co-operative learning
- News Paper/ Magazine articles

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

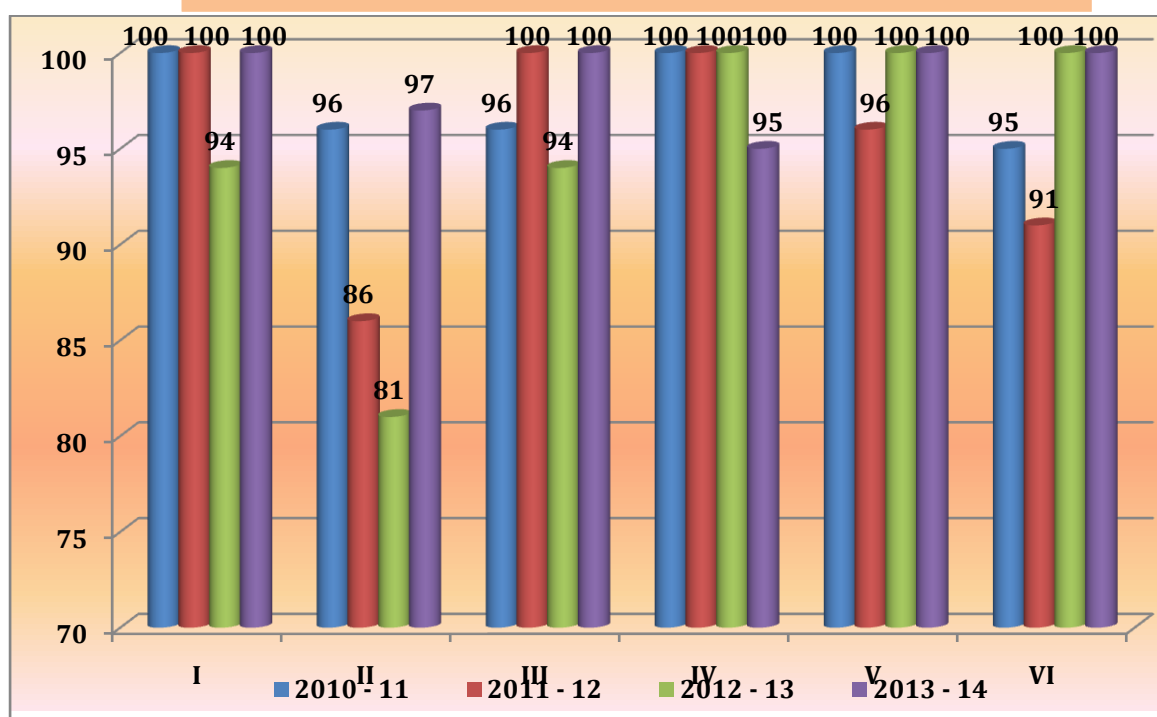
- Planting of trees in and around campus.
- Planting of medicinal plants in T. Narasipura under Rural Education Project of BSHSES.



**I. Trends in Success rates of students for the past four years**

Sem	2010 - 11	2011 - 12	2012 - 13	2013 - 14
I	100	100	94	100
II	96	86	81	97
III	96	100	94	100
IV	100	100	100	95
V	100	96	100	100
VI	95	91	100	100

**Trends in success Rate of Microbiology Students : 2010 -2014**

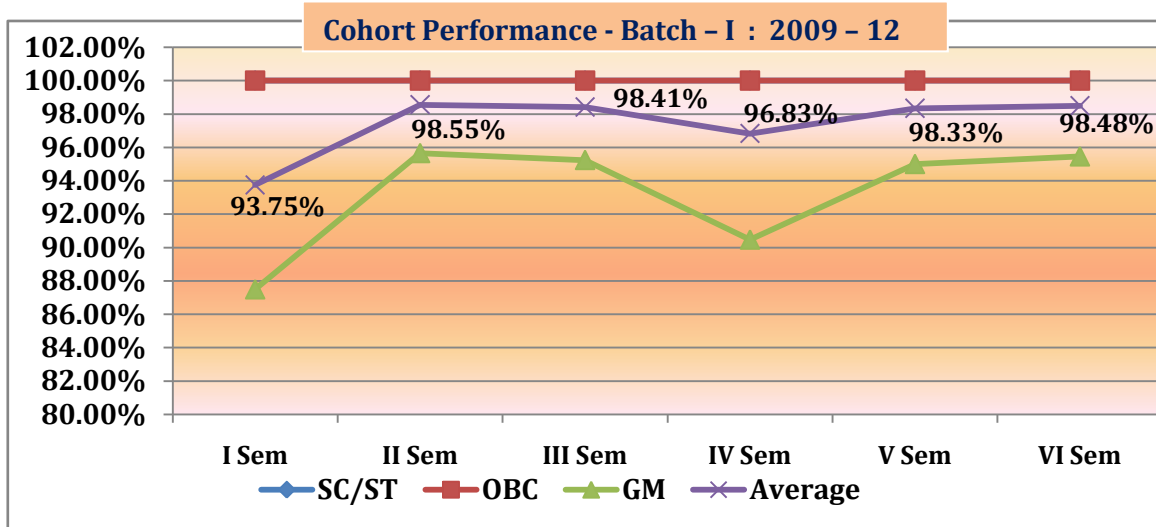


**II. Cohort performance of the last three batch of students**

**Batch - I : 2009 - 12**

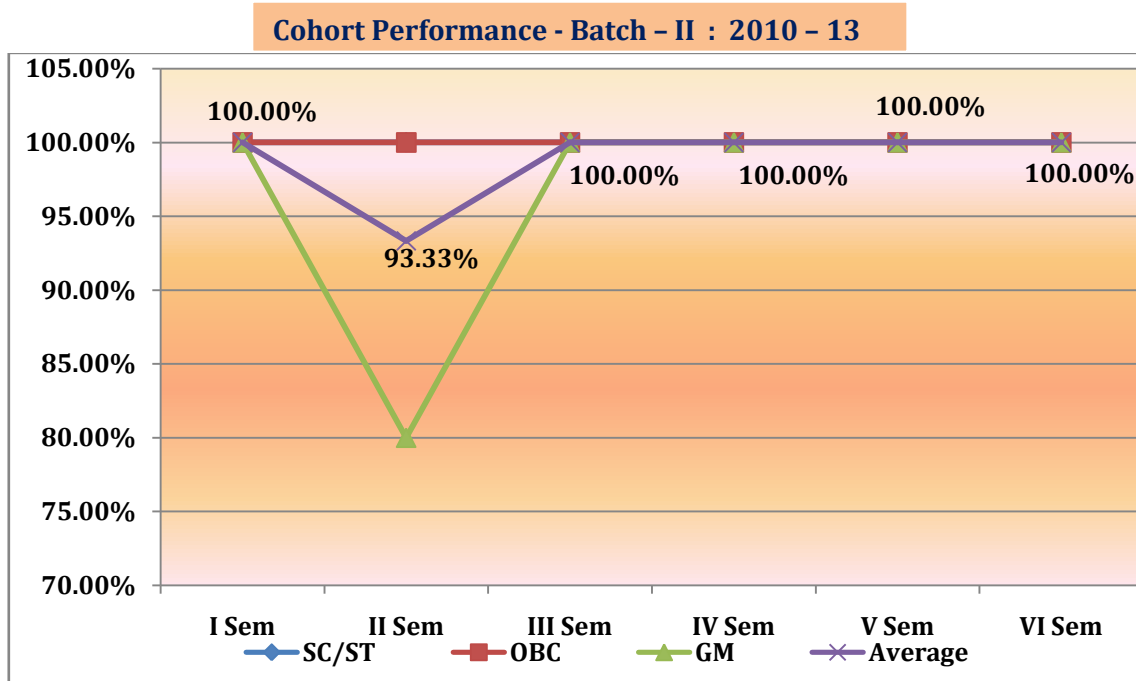
Category	I Sem	II Sem	III Sem	IV Sem	V Sem	VI Sem
SC/ST	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
OBC	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
GM	87.50%	95.65%	95.24%	90.48%	95.00%	95.45%
<b>Average</b>	<b>93.75%</b>	<b>98.55%</b>	<b>98.41%</b>	<b>96.83%</b>	<b>98.33%</b>	<b>98.48%</b>





**Batch - II : 2010 - 13**

Category	I Sem	II Sem	III Sem	IV Sem	V Sem	VI Sem
SC/ST	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
OBC	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
GM	100.00%	80.00%	100.00%	100.00%	100.00%	100.00%
<b>Average</b>	<b>100.00%</b>	<b>93.33%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

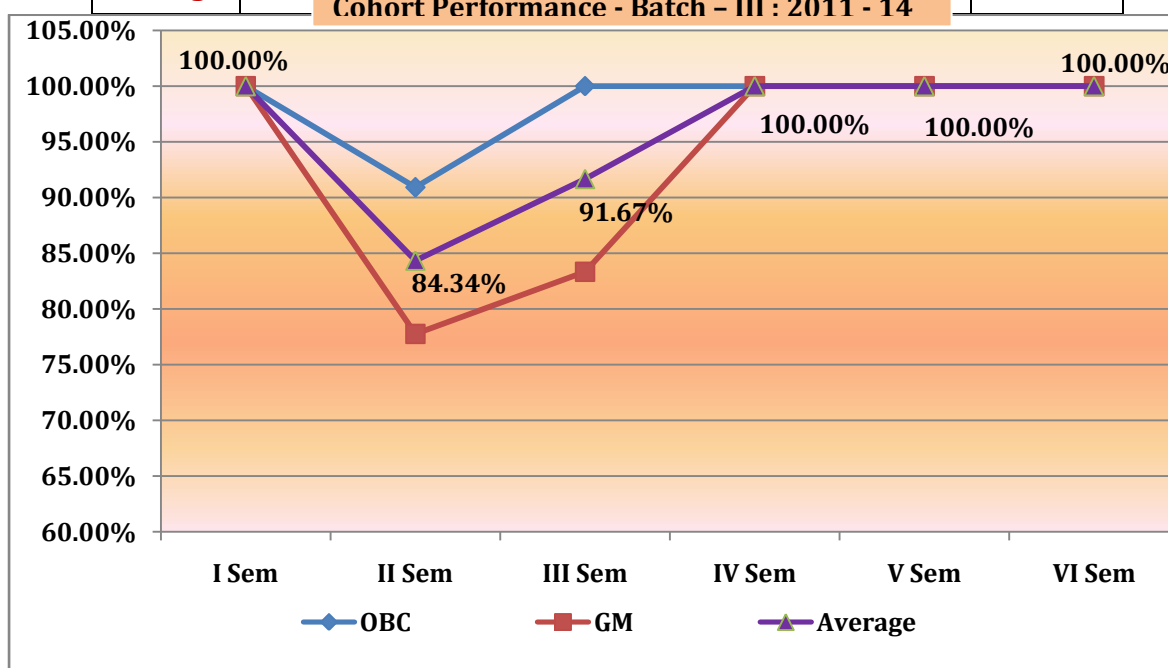


SC/ST merged with OBC. Average shows little variation but is quite stable.



**Batch - III : 2011 - 14**

Category	I Sem	II Sem	III Sem	IV Sem	V Sem	VI Sem
SC/ST	NA	NA	NA	NA	NA	NA
OBC	100.00%	90.91%	100.00%	100.00%	100.00%	100.00%
GM	100.00%	77.78%	83.33%	100.00%	100.00%	100.00%
<b>Average</b>	<b>100.00%</b>	<b>84.34%</b>	<b>91.67%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>



**35. SWOC analysis of the department and Future plans**

**Strengths**

- Less teacher-student ratio and individual attention.
- Excellent course structure enables the student to utilize the techniques in industry.
- Students of the department are academically brilliant and also in extracurricular activities.
- Dedicated teachers and eager students work as an ideal combination for information generation
- Provide research activities to students.



- Good motivation.
- Good results and obtain good positions in industries and research labs.
- Students visit to hospitals, industries, pathological labs and other research laboratories to get acquainted with the current research areas.

### Weaknesses

- Space constraint in the laboratory.
- Inadequate alumni participation
- Insufficient journals both in the department and library
- Regular Parent Teacher meetings are not arranged.

### Opportunity

- Guiding and orienting students seek admission in national level institutions
- Conduct guest lectures/workshops to bridge academics and job oriented industries.
- To acquire more MoUs with relevant companies and research laboratories
- Coaching students to face competitive examinations like JAM, KAS, etc.
- Float Add on course like Dairy techniques , Food science, Clinical research, etc

### Challenge

- Inconsistent Workload policy of the management
- Inadequate opportunities in campus recruitments

### Future plans

- To establish a fully equipped modern Microbiology laboratory
- To introduce a diploma course and certificate course related to food & dairy microbiology



- To expose the students to various programmes pertaining to the subject in India and abroad.
- To implement co curricular activities by introducing research based projects.
- To celebrate various National, International days or week like World Health Week, World Food Day by arranging exhibition and popular talks.
- To publish departmental magazine monthly or yearly to encourage students in writing articles.
- To collaborate with various research institutions and industries to make the students competent for better placement.
- To get research incentives like felicitation to students for in house research activities
- To organize and participate in workshop, seminars & conferences.
- To invite resource person from research institutes and industries.
- To subscribe journals, magazines and to expand the departmental library.
- To conduct extra classes to make them competent to clear exams like JAM, NET/SLET, GATE etc

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