



DEPARTMENT OF BOTANY

1.	Name of the department	BOTANY												
2.	Year of Establishment	1965												
3.	Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)	B.Sc. : CBZ, CBBt												
4.	Names of Interdisciplinary courses and the departments/units involved	NIL												
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.	Number of teaching posts													
	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Designation</th> <th>Sanctioned</th> <th>Filled</th> </tr> </thead> <tbody> <tr> <td>Professors</td> <td>NIL</td> <td>NIL</td> </tr> <tr> <td>Associate Professors</td> <td>3</td> <td>3</td> </tr> <tr> <td>Asst. Professors</td> <td>NIL</td> <td>NIL</td> </tr> </tbody> </table>		Designation	Sanctioned	Filled	Professors	NIL	NIL	Associate Professors	3	3	Asst. Professors	NIL	NIL
	Designation	Sanctioned	Filled											
	Professors	NIL	NIL											
Associate Professors	3	3												
Asst. Professors	NIL	NIL												



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

Name	Qualification	Designation	Specialization	Experience
Dr. R.K.Chandranatha	M.Sc, Ph.D.	Associate Professor	Mycology and Plant Pathology	32 years
Prof. K.S. Shailaja	M.Sc, M.Phil	Associate Professor	Embryology of Angiosperms and Morphogenesis	28 years
Prof. Sudha sandilya	M.Sc., M.Phil.	Associate Professor	Paleobotany and Palynology	22 years

11.	List of senior visiting faculty	Dr. N Satyananda, Associate Professor of Botany, Retd. Principal, Vijaya College, Bengaluru	
12.	Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty	NIL	
13.	Student -Teacher Ratio (programme wise)	30 : 1	
14.	Number of academic support staff	Sanctioned	Filled
		2	2
15.	Qualifications of teaching faculty with D Sc/ D.Litt. / Ph.D. / MPhil / PG	Ph.D	01
		M.Phil.	02
16.	Number of faculty with ongoing projects from	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		
	Publication per faculty	0	



	Number of papers published in peer reviewed journals	NIL
	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	17%
	b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies	NIL



Details of In – House Student Projects conducted

Academic year	% of students	Students involved	Class	Topic	Remarks
2011-12	13%	Prabhavathi Manjula Sushma Rakeshvarma O. Suresha	III sem	Study of structure and germination of pollen grains	
2012 – 13	26%	Mihirjoshi Anand Balaraj S Sharath Raj Supraja Parameshwari	I sem	Collection and study of Algae in Some water bodies of Bangalore city	
		Sushma Mahadevamma Kishore	V sem	Study of stomata in dicot plant	
		Kusuma Manjula	V sem	Collection and study of some angiosperms	
		Roshan	V sem	Study on trees of Pilikula Biological park, Mangalore	
2013-14	13%	Bindushree Chaitra Subhashini	V sem	Qualitative analysis of vit-C in fruits	Presented paper in a Conference
		Manjushree	III sem	Mushroom cultivation	Presented paper in a Conference
Average	17.33%				

23.	Awards / Recognitions received by faculty and students	
	Dr. R.K.Chandranatha , HOD, Botany was appointed as Member, Board of Management – Karnataka State Open University during the academic year 2012 – 13	
	Kishore III Sem CBZ 2011 – 12	Secured I Prize in Inter university lecture competition conducted by Karnataka Rajya Vijnana Parishat



	V Sem CBZ 2012 - 13	held on 20 th March 2012
		Secured II Prize in Inter university lecture competition conducted by Karnataka Rajya Vijnaan Parishat held on 14 th March 2013
	Prof. K S Shailajja , Member of Board of Studies(BOS), Botany, Bangalore University	
24.	List of eminent academicians and scientists / visitors to the department	
a.	Prof. S B Sullia	Retd. Professor, Department of Microbiology and Biotechnology, Bangalore University and Professor Emeritus, Jain University
b.	Dr.S Sundar Rajan	Retd. Professor, Dept. of Botany , St. Josephs College and Research Head, Jain University
c.	Prof. K.N. Ganeshaiiah	Professor and dean, University of Agricultural Sciences, Bangalore
d.	Smt. Rukhmini	Assistant Director, Dept of Horticulture, Lalbagh, Bangalore
e.	Dr. Ravishankar	Vice-President R&D (life Sciences), Professor of Biotechnology, Dayananda Sagar Institutions, Bangalore
25.	Seminars/ Conferences/Workshops organized & the source of funding	NIL



a. National Conferences Participated by Students

Sl. No.	Name of the Student	Title of the Workshop/ Seminar/ Conference	Date	Organized by (Name of the institution or university)	Title of the paper presented
1	Kishore V sem CBZ	Conference on Biotechnological Approaches in Medicinal & Aromatic Plant Research	21st March 2013	Maharani's science college for women , Bengaluru	"Mucilage : The mysterious component in our daily food and cosmetics"
2	Bindushree Chaitra Bhat Subhashini Vsem CBZ	National conference on Bioveda- A treasure trove, urban biodiversity and health	6th, 7th Feb 2014	Jain University, Bengaluru	"Quantitative analysis of vitamin-c (ascorbic acid) in fresh fruits and fruit juice commonly available in Bangalore city"
3	Manjushree III sem CBBt	National level conference on Integrated urban waste management	27th, 28th Sept. 2013	Vijaya College, Bengaluru-4	"Production of white oyster mushroom (<i>pleurotus florida</i>) from waste paper"
4	Manjushree III sem CBBt	National level conference on waste management towards sustainable development in Indian context	24th, 25th Jan 2014	Maharani Laksmi Ammanni College, Bengaluru	"Waste Management- Production of White Oyster Mushroom from waste paper"



b. National Conferences participated by Faculty

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
1	Sudha Sandilya	National Conference on Developmental Biology- NACON D BIO -2010	15-17 Sep 2010	Dept.of Botany , Bangalore University Bangalore	Grasses of Bangalore

c. State Level and Regional Level Conferences Attended

Sl. No.	Name of the faculty	Title of the Workshop/ Seminar/ Conference	Indicate Regional level/ State level	Date	Organized by (Name of the institution or university)
1	Dr.R.K.Chandranatha	Orientation programme	State level	29 th Oct 2014	Bangalore university
2	Dr.R.K.Chandranatha	Botany Revised Syllabus(1 st &2 nd sem)	Regional	8 th and 9 th July 2011	Bangalore university
3	Dr.R.K.Chandranatha	Botany revised syllabus(6 th semester)	Regional	22-Feb-14	MLA College
4	K.S.Shailaja	Botany revised syllabus(6 th semester)	Regional	22-Feb-14	MLA College
5	Dr.R.K.Chandranatha	Botany revised syllabus(5 th sem)	Regional	17 th Aug 2013	K.L.E. College
6	Dr.R.K.Chandranatha	Man making education- Modern trends for paradigm shift	Regional level	23/02/2013	Karnataka
7	Dr.R.K.Chandranatha	Syndicate and academic council members workshop	State level	26 th Aug 2012	Organized by Bangalore University at Jnana Jyothi hall, Bangalore



Sl. No.	Name of the faculty	Title of the Workshop/ Seminar/ Conference	Indicate Regional level/ State level	Date	Organized by (Name of the institution or university)
8	Dr.R.K.Chandranatha	Colloquium on "Higher Education in 12 th Five Year Plan"	State level	23 rd Dec 2011	Karnataka State Higher Education Council and Centre for educational and social studies.
9	K.S.Shailaja	Disaster management-issues & solutions	State level workshop	Feb,2010	Maharanis Science college for women
10	K.S.Shailaja	Botany Revised Syllabus(1 st &2 nd sem)	Regional	July,2011	Bangalore university
11	K.S.Shailaja	Botany revised syllabus(5 th sem)	Regional	Feb,2013	K.L.E. College
12	Dr. R.K. Chandranatha	Zonal Level Seminar on Man-making Education – Modern Trends for a Paradigm Shift	Zonal	23 rd Feb 2013	Karnataka state higher education council Bengaluru
13	K S Shailaja	Workshop on 'Recent Techniques in Biological Sciences'	Regional	10th, 11th Feb 2012	Dayananda sagar college of Arts Science and Commerce
14	K S Shailaja	Science Academies' Workshop on "Taxonomy; Principles, Practices And New Developments;, at Jain University.	Regional	29th - 31st Jan 2013	Jain university JC Road campus Bangalore



Sl. No.	Name of the faculty	Title of the Workshop/ Seminar/ Conference	Indicate Regional level/ State level	Date	Organized by (Name of the institution or university)
15	Smt. Sudha Sandilya	Workshop on 'Recent Techniques in Biological Sciences'	Regional	10th, 11th Feb 2012	Dept. of Botany, Bangalore University Bangalore

26. Student profile programme/course wise:

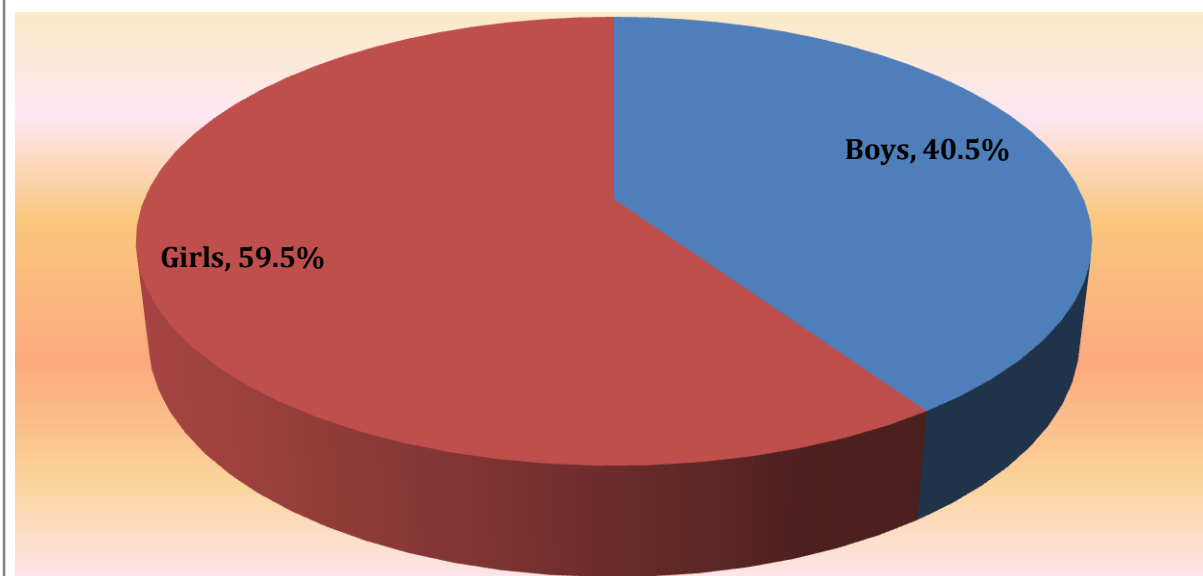
Year	Name of the Course / Programme	Applications Received	Selected	Enrolled in I Year		TOTAL All Years	Pass Percentage (outgoing students)
				Male	Female		
2010 - 11	B.Sc.	46	46	25	21	78	80.00%
2011 - 12		40	40	11	29	95	77.27%
2012 - 13		54	54	22	32	116	90.00%
2013 - 14		53	53	22	31	119	93.75%
2014 - 15		42	42	18	24	159	

Gender Profile of Students

Academic Year	Boys	Girls	Total
2011 - 12	44	51	95
2012 - 13	40	76	116
2013 - 14	46	73	119
2014 - 15	68	91	159
Average Percentage	40.5%	59.5%	



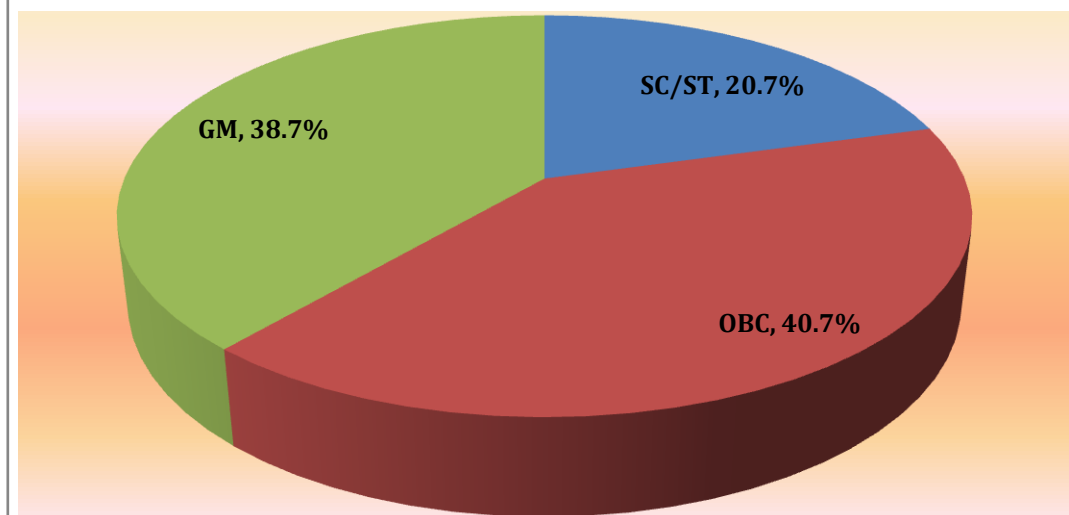
Gender Profile : Botany



Socio - Economic Profile of Students

Academic Year	SC/ST	OBC	GM	Total
2011 - 12	16	37	42	95
2012 - 13	22	47	47	116
2013 - 14	27	46	46	119
2014 - 15	36	69	54	159
Average Percentage	20.7%	40.7%	38.7%	

Socio - Economic Profile : Botany





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 (CBZ and CBBt)	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			
	Year	No. enrolled	Total No.	%age
UG to PG (Botany)	2010 - 11	1	6	16.67%
	2011 - 12	1	22	4.5%
	2012 - 13	5	31	16.3%
	2013 - 14	1	32	3.13%
	Average	2	23	10.15%
PG to M.Phil.	NA			
PG to Ph.D.	NA			
Ph.D. to Post-Doctoral	NA			
Employed ● Campus selection	Data provided under student support services from placement cell			



● Other than campus recruitment	Year	No. appointed	Total No.	%age
	2010 - 11	2	6	33.43%
	2011 - 12	10	22	45.45%
	2012 - 13	6	31	19.35%
	2013 - 14	15	32	46.88%
	Average	8.25	23	36.25%
Entrepreneurship/Self-employment	NIL			

30.	Details of Infrastructural facilities	
a.	LIBRARY	
	Books Main Library	3555 Books
	Department Library	110 Books
b.	Internet facilities for Staff & Students	Available
c.	Class rooms with ICT facility	02 Class rooms
d.	Laboratories	01
	Area of the Laboratory	2000 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	
	❖ BIO- REAP : Seven students of B.Sc. (CBZ) during the years 2011 – 13 enrolled and successfully completed a 2 year course (Bio reap) conducted by	



	Indian Institute of Science, Bangalore with a scholarship of Rs. 5000/- per student.												
	❖ Students of VI sem received 4 days training in horticultural techniques at Lalbagh Training Centre from 28-01-2015 to 31-01-2015.												
	❖ Guest Lecture on “ Fun in studying science ” by Prof . K.N. Ganeshiah , Professor and Dean, University of Agricultural Sciences, Bangalore on 09 th June 2014												
	❖ Guest Lecture on “ Importance of Horticulture in day to day life ” by Smt. Rukhmini , Assistant Director, Dept. Of Horticulture, Lalbagh, Bangalore on 23 rd Aug 2012												
	❖ Guest Lecture on “ Algal Biotechnology for Nutrition and Energy Needs ” by Dr. Ravishankar , Vice – President R&D(Life Sciences), Professor of Biotechnology, Dayananda Sagar Institutions, Bangalore held on 2 nd Feb 2015												
	❖ Maintaining a green house that also provides facilities for experiments conducted by students in the campus.												
	<p>❖ Visits to Renowned research institutes where research activities are in progress.</p> <table border="1" style="margin-left: 40px;"> <thead> <tr> <th>Academic year</th> <th>Place visited</th> <th>Students involved</th> </tr> </thead> <tbody> <tr> <td>2009-10</td> <td>Lalbagh Botanical Gardens</td> <td>V sem</td> </tr> <tr> <td>2011-12</td> <td>Lalbagh Botanical Gardens</td> <td>V sem</td> </tr> <tr> <td>2013-14</td> <td>Azyme Bioscience, Bengaluru</td> <td>VI Sem</td> </tr> </tbody> </table>	Academic year	Place visited	Students involved	2009-10	Lalbagh Botanical Gardens	V sem	2011-12	Lalbagh Botanical Gardens	V sem	2013-14	Azyme Bioscience, Bengaluru	VI Sem
Academic year	Place visited	Students involved											
2009-10	Lalbagh Botanical Gardens	V sem											
2011-12	Lalbagh Botanical Gardens	V sem											
2013-14	Azyme Bioscience, Bengaluru	VI Sem											



• Field visits to study taxonomic aspects of wild plants.		
Academic Year	Place visited	Students involved
2011-12	Savanna durga	V sem
2012-13	Yelahanka	V sem
2013-14	Pyramid valley region, Kanakapura road	V sem
2014-15	Siddarabetta	V Sem

33. Teaching methods adopted to improve student learning

- ❖ Chalk and talk method
- ❖ ICT Methodology with PPT Presentations
- ❖ Question bank / Assignment
- ❖ Remedial class
- ❖ Extra coaching for students involved in Sports, cultural, NCC, NSS and Co – Curricular activities
- ❖ Student Seminars conducted on
 - topics already covered in the class (to know if students have learnt the topic),
 - new topics (to encourage them to find the content on their own through self-study).
 - General topics (to encourage them to gather information through media and other sources and discussions)
- ❖ Small projects related to practical syllabus to encourage them to learn beyond the syllabus and get inclination towards research.
- ❖ Visits to Research laboratories, botanical gardens like Lalbagh and short specimen collection trips.
- ❖ Identification of weak students and offering them extra academic support on one on one basis.
- ❖ Bridge courses
- ❖ Discussion of old question papers.



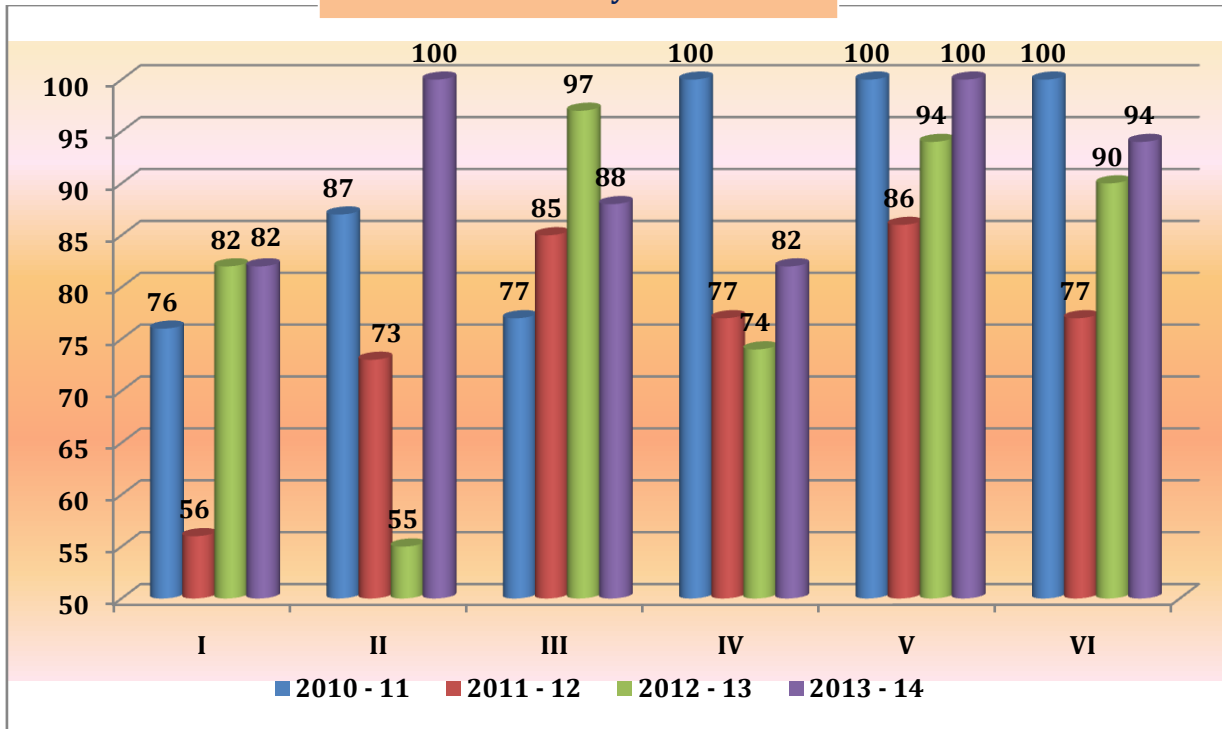
- ❖ Providing printed study materials and lab manuals
 - ❖ Bio visual contents of syllabus like charts, PowerPoint presentations, Animations, Videos, ...
 - ❖ To encourage the students to attend regular weekend programs conducted by the IISc faculty called THE BIOREAP.
 - ❖ Wall magazines for improving writing & presentation skill among students.
34. Participation in Institutional Social Responsibility (ISR) and Extension activities
- Planting of trees in and around the campus
 - Planting of medicinal plants in T. Narasipura under Rural Education Project of BSHSES
 - A Biogas plant for waste management has been installed in the campus
 - Participation in environment awareness programmes and ecological importance values.
 - Participation in NSS and NCC programmes.
 - Participation in national festivals.

I. Trends of Success Rate in Botany Department

Sem	2010 - 11	2011 - 12	2012 - 13	2013 - 14
I	76	56	82	82
II	87	73	55	100
III	77	85	97	88
IV	100	77	74	82
V	100	86	94	100
VI	100	77	90	94



Success Rate : Botany - 2010 - 14

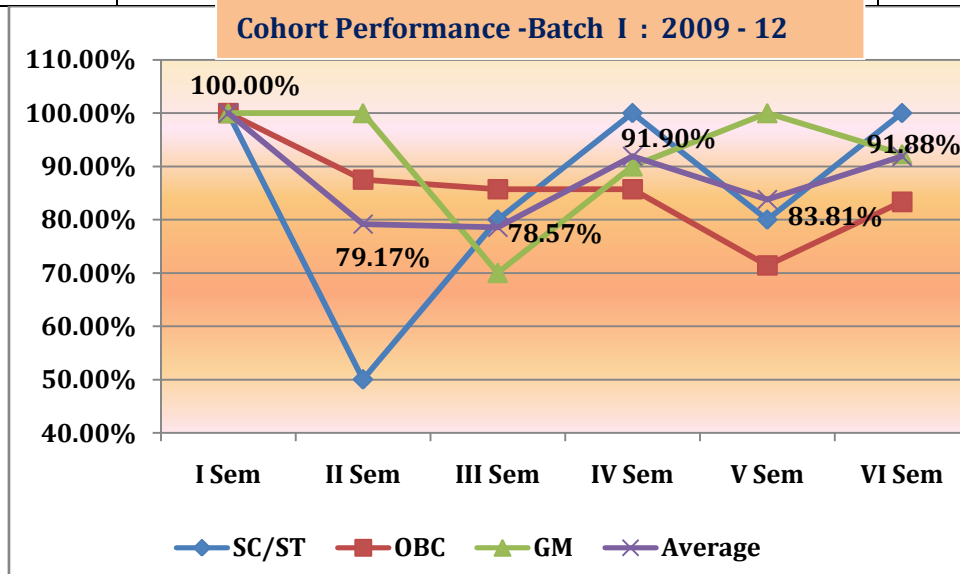


II. Cohort Performance of Students

Batch - I : 2009 - 12

Category	I Sem	II Sem	III Sem	IV Sem	V Sem	VI Sem
SC/ST	100.00%	50.00%	80.00%	100.00%	80.00%	100.00%
OBC	100.00%	87.50%	85.71%	85.71%	71.43%	83.33%
GM	100.00%	100.00%	70.00%	90.00%	100.00%	92.31%
Average	100.00%	79.17%	78.57%	91.90%	83.81%	91.88%

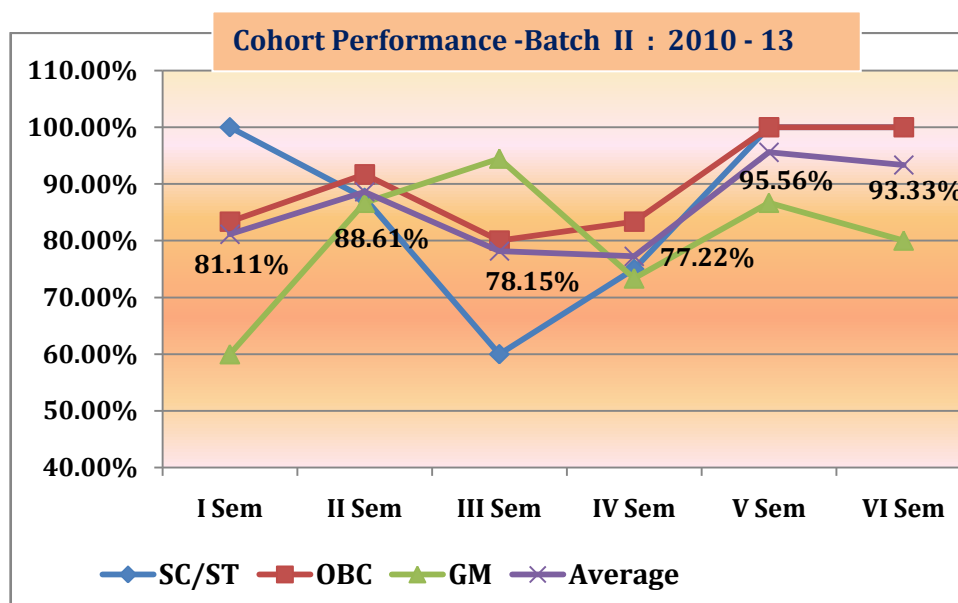
Cohort Performance -Batch I : 2009 - 12





Batch - II : 2010 - 13

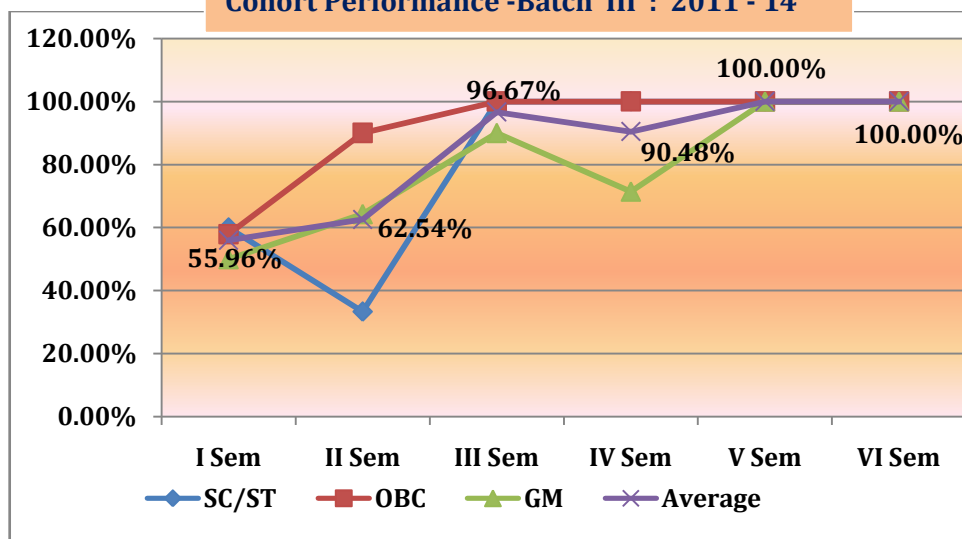
Category	I Sem	II Sem	III Sem	IV Sem	V Sem	VI Sem
SC/ST	100.00%	87.50%	60.00%	75.00%	100.00%	100.00%
OBC	83.33%	91.67%	80.00%	83.33%	100.00%	100.00%
GM	60.00%	86.67%	94.44%	73.33%	86.67%	80.00%
Average	81.11%	88.61%	78.15%	77.22%	95.56%	93.33%



Batch - III : 2011 - 14

Category	I Sem	II Sem	III Sem	IV Sem	V Sem	VI Sem
SC/ST	60.00%	33.33%	100.00%	100.00%	100.00%	100.00%
OBC	57.89%	90.00%	100.00%	100.00%	100.00%	100.00%
GM	50.00%	64.29%	90.00%	71.43%	100.00%	100.00%
Average	55.96%	62.54%	96.67%	90.48%	100.00%	100.00%

Cohort Performance -Batch III : 2011 - 14



Student Achievement

Bindushree A has secured 10th rank in Bangalore University B.Sc examinations 2013-2014.

35. SWOC analysis of the department and Future plans

Strengths

- Individual attention to the student because of less teacher student ratio.
- Good infrastructure.
- Good Peer team support and motivation.
- Steady increase in student strength. Impressive increase in student admission belonging to weaker sections of the society
- Good improvement in results ,good pass percentage among SC/ST and OBC students.

Weaknesses

- Lack of research activities.
- Limited knowledge of computer applications.
- Insufficient adoption of advanced techniques in teaching, learning process.
- Poor link with alumni.

Opportunities

- Motivation for research activities – collaborative research work can be done with prestigious research institutes in the City.



- Participation in seminars/workshops for better exposure.
- To bridge academics and industries for better job opportunities.
- Creating more connectivity among alumni through social network and other means

Challenges

- Workload instability due to inconsistent government policies.
- Emergence of new life science courses affecting the enrolment to Botany course

Future plans

- Establishing a herbarium with specific focus on spices and medicinal plants.
- Introducing short term job oriented training programme for students in horticultural techniques under the directorate of horticulture department, Govt. of Karnataka at Lalbagh botanical gardens
- Strengthening infrastructure and Modernization of labs

❖ FACULTY DEVELOPMENT PLAN

- Attending workshop, seminars and conferences more frequently.
- Taking up minor research projects
- Enrolling to Ph.D programs
- Attending short term courses

❖ UPDATION OF LEARNING RESOURCES

- Subscription to more number of journals/ magazine
- Expansion of departmental library
