

*Criterion III*

*Research, Consultancy and Extension*

### 3.1 Promotion of Research

#### 3.1.1 Does the institution have recognized research center(s) of the affiliating University or any other agency/organization?

Yes  No

- The college has research centers in the following subjects:  
*Science: Chemistry, Botany, Zoology, Biotechnology.*  
*Arts: English, Hindi and Philosophy*
- These centers have guiding teachers and they enroll students for their doctoral programs
- In science departments there is a provision for enrolling students for the degree of M.Sc. by Research
- All centres are affiliated to the University of Mumbai.

#### 3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

There is a Research Cell to promote research culture and monitor research activity. The committee comprises of teachers who are actively involved in research representing different faculty. Research activity constitutes research done by teachers and research scholars. The research committee has the Principal, Vice Principals and a team of four teachers who are actively involved in research. The committee plays the role of a facilitator.

- The committee organizes a workshop on how to write research proposals and provides information on various funding agencies in India and abroad.
- Encourages teachers to take up student and community related research projects.
- The committee organizes meeting of staff members to discuss topics of upcoming interest for research.
- The committee recommended and organized faculty development programmes for staff in research methodology, statistical skills etc.
- The committee recommended sharing of ideas among the staff members which was well received.
- On the recommendation of the Research Cell, we have launched a research journal "RJ Pragya" and have applied for an ISSN number.

#### 3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?

- The institution firmly believes that faculty should enjoy research and not do it out of compulsion.

- Over the years the institution has made a sincere effort in promoting research culture among its faculty members and students.
- Teachers who do not have a Ph.D. degree are motivated to enroll and complete Ph.D. In the last five years seven teachers have completed their Ph.D. degrees and ten have registered for their doctoral degree. Three teachers availed of the faculty development program scheme of UGC for completing their Ph.D. work.
- Our institution facilitates and encourages teachers to apply for FDP and in addition if required leave is granted to them for completion of their Ph.D. work.
- Seed money is given to teachers for initiating research work.
- Facilities in terms of advanced computing system are provided whenever there is a demand.
- The college has a very amenable atmosphere for promoting research culture among students and teachers. The laboratories are open during Sundays, holidays and vacations so that they can carry out research.
- Timely information on call for proposals is provided.
- Formats for submitting research proposals are made available on the computer so that faculty and students can prepare the proposals in the stipulated time period.
- Timely processing of research proposals and submission.
- Proper utilization of funds received and setting the audited statement of accounts.
- Final technical report on completion of the project.
- Teachers are encouraged to apply for recognition for PhD guide ship and to take up post-doctoral research.

#### 3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

To develop scientific temper and research culture teachers are encouraged to mentor student research. While guiding students for small research project teacher is motivated to take up research. Project work has become an integral part of teaching and this builds a scientific environment in the premises. An annual research fest is organized by the University of Mumbai named "Avishkar" in which our students and teachers take active participation. They have won gold medal at the inter university level. Students are encouraged to attend seminars and conference organized in the college or in other institution. This helps in developing a research temperament among the students.

**3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading research projects, engaged in individual/collaborative research activity etc.**

Name of the Faculty	Research Activity	Number of students guided/ projects undertaken/ Ph.D. students registered in the last four years		
Dr. Usha Mukundan	Guiding Ph.D. students, Major Research Projects sponsored by Government, consultancy work for industries, collaborative work with HUL	8 / 4 / 7	Mr. Vaishali Raikwar	Research work collaborative work with Amravati University, pursuing Ph.D.
Dr. Himanshu Dawda	Guiding students, research projects	1 / 2 / 2	Dr. Sucheta Golwakar	Guiding research student for M.Sc. by Research, student projects
Dr. Mrunalini Date	Research projects, guiding PG students for research projects	- / 1 / -	Dr. Smruti Thombre	Industrial consultancy research work, student research projects
Dr. Anil Avhad	Research projects, consultancy for EIZ projects	- / 1 / - Awarded Ph.D. in 2012	Dr. Tania Moses	Student research projects
Dr. Veena Kelkar	Research project	- / 1 / -	Ms. Dipti Kale	Student research projects, pursuing Ph.D.
Dr. P.G. Kale	Guiding students for Ph.D., research projects, EIA consulting	1 / 1 / 3	Ms. Rachana Acharya	Student research projects, industrial projects, submitted thesis for Ph.D. degree in Biotechnology
Dr. Janhavi Bhagwat	Research projects	- / 1 / -	Ms. Bharati Bhole	Student research projects
Dr. Bindu Achary	Research projects	- / 1 / - Awarded Ph.D. in 2013	Dr. Anagha Kamble	Research project
Mr. Deepak Poojary	Student research projects	-	Dr. Meher Mistry	Research project
Dr. R.S. Dubey	Guiding student, research projects	3 / 2 / 2	Dr. A.P. Pandey	Guiding Ph.D. students
Dr. Abhay Sawant	Guiding students for M.Sc. by Research, research projects	- / 2 / 1	Ms. Nita Chakravarty	Pursuing Ph.D. (on FDP)
Dr. Vaishnavi Sridhar	Research project	- / 1 / - Awarded Ph.D. in 2013	Ms. Sharmila Jajodia	Research project
Dr. Seema Ratnaparkhi	Research project	- / 1 / -	Dr. Sneha Deuskar	Collaborative work with University of Mumbai
Dr. Amol Kadam	Research work for Ph.D.	-	Ms. Neelambari Kulkarni	Pursuing Ph.D.
Dr. Sandesh Divekar	Research work for Ph.D.	Awarded Ph.D. in 2013	Dr. K. Raghunath	Guiding students
Dr. Charu Vatsa	Research projects	- / 1 / -	Dr. Mithilesh Sharma	Research projects
Dr. Kiran Kolwankar	Research projects, collaborative work with Max Planck Institute, IIT (Mumbai), NCBS, IMI (Chennai), Humboldt fellow	- / 2 / -	Dr. Shashi Mishra	Research projects
Mr. Devraj Pawar	Research project collaborative work with IUCAA, Italy, Amsterdam, on FDP for completing Ph.D.	- / 2 / -	Ms. Arundhati Chitre	Research projects
Dr. Nita Srivastava	Research project collaborative work with IIT (Mumbai)	- / 2 / - Awarded Ph.D. in 2013	Dr. Amit Valmiki	Collaborative work with Bonn University
			Ms. Rina Puradkar	Pursuing Ph.D. (on FDP)
			Mr. Bhushan Arekar	Research work leading to Ph.D.
			Mr. Steven Lobo	Research work leading to Ph.D.
			Ms. Nandini J.	Student research projects
			Ms. Lakshmi Iyer	Student research projects
			Ms. Selvi Nadar	Student research projects
			Ms. Archana Bhide	Student research projects
			Ms. Priyanka Lalwani	Student research projects

The department of Hindi and Philosophy have Honorary Professors who are research guides and are engaged in guiding students for Ph.D. degree.

**3.1.6 Give details of workshops/training programmes/ sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.**

Sr. No.	Workshop / Training Programme	Frequency
1.	How to write a research proposal	Twice/year
2.	Information on funding agencies - National and international	Once/year
3.	Faculty development programme in research methodology	Once/year
4.	Sharing of information on emerging research areas	Once/year
5.	Literature search for students	Once/year

**3.1.7 Provide details of prioritised research areas and the expertise available with the institution.**

Sr. No.	Department	Expertise available
1.	Economics	Tourism and economic implications, economy in China
2.	English	English literature
3.	Geography	Impact of urbanisation
4.	Hindi	Analysis of Hindi novels
5.	History	Parsi communities, diaspora
6.	Kannada	Short stories
7.	Marathi	Analysis of Marathi novels, feminism
8.	Philosophy	Religion
9.	Political Science	Surveillance studies
10.	Sociology	Informal sector and their sociological problems, gender-related issues
11.	Commerce and Accountancy	Marketing, small-scale industries
12.	Botany	Plant tissue culture, conservation of medicinal plants, mangrove ecosystem, systematics, waste water treatment, secondary metabolite extraction and analysis, plant transformations, hairy root cultures, bioreactors and scale up studies, Industrial enzymes and effect of it on cell wall microstructures.
13.	Chemistry	Corrosion, natural products, chelating agents, polymers
14.	Physics	Neural networks, black holes, synthesis and characterisation of nanoparticles
15.	Zoology	Antioxidant enzymes, effect of medicinal plants, studies on water quality from polluted areas, zooplankton studies
16.	Biotechnology	Methanogen isolation and characterisation, cloning of genes, isolation and assay of microorganisms from soil and other sources and their application in waste management, antibacterial and antifungal assays
17.	Computer Science & IT	Web page development, customised software for various applications

**3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?**

- The college has premier research Institutes in its vicinity. Researchers from these institutes are invited to deliver guest lectures to our students and staff. This provides a platform for a meaningful interaction with researchers of eminence.
- Individual departments have programs in which researchers are invited to talk to the students.
- Our alumni who are researchers in premier research Institutes when they are in Mumbai are invited to interact with the staff and students and share their experiences.
- Alumni have also contributed by providing funds for small research projects as a consultancy work.

**3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?**

The following staff members have used their sabbatical leave for research work. This has resulted in progress in their research work leading to Ph.D. degree and publications.

- Dr. Kiran Kolwankar (Physics) visited Max Planck University twice for collaborative research work
- Mr. Devraj Pawar (Physics) (on FDP from 2012) visited Italy for collaborative research work.
- Dr. Vaishanvi Sridhar (Chemistry) completed Ph.D (FDP 2011)
- Dr. Amita Valmiki (Philosophy) visited Bonn University, Germany for collaborative research work
- Ms. Rina Puradkar (Philosophy) is pursuing Ph.D. (on FDP from 2013)
- Ms. Neeta Chakravarty (English) is pursuing Ph.D. (on FDP from 2013)
- Dr. Anagha Kamble (History) visited

These teachers have motivated other teachers to enroll for Ph.D. and avail leave under the Faculty Development Program of UGC and when they come back would pursue further research in their areas of expertise.

**3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/ advocating/ transfer of relative findings of research of the institution and elsewhere to students and community (lab to land).**

Our institution has been one of the pioneering Institutions to have projects funded by industries. Research is aimed at progress of Knowledge. The

protocols standardized in research work have now become a part of the curriculum. This has been a great learning experience since practicals are based on authentic research work. We are in close interaction with the industries/research organizations so as to empower our students to be good researchers. We have undertaken environmental impact assessment for private companies. Teachers in humanities have taken up projects which have direct bearing with the community like problems of some community like Parsis, or trade related community like flower sellers near temples, or some tribal communities.

### 3.2 Resource Mobilization for Research

#### 3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

There is no allocation in regular budget for research as the Government does not have any such allocation. However, the faculty is encouraged to write research proposals to obtain grants and also the overheads are provided to the researchers for research work. All infrastructural support is provided by the institution. All students' projects are supported by the institution.

#### 3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

Yes  No

As a part of the faculty recharge program and motivate young faculty to take up research work our college provides seed money for purchase of some basic equipment's. In the last four years a sum of two lakhs and a small facility has been made available for setting up a nanotechnology laboratory where two staff members from Physics department are conducting research work. Students are also being trained in this upcoming area. The staff members who have availed the seed money have subsequently applied for research projects for financial assistance.

#### 3.2.3 What are the financial provisions made available to support student research projects by students?

Student research projects are at three levels UG, PG and doctoral. In doctoral work the students work under the research guide who provides funds from their research projects or they are supported by the Institution by providing all the required infrastructure, chemicals, glassware's etc. UG and PG projects are mainly supported from the fee that is collected. DST has

sanctioned an amount of Rs. 67 Lakhs under the DST-FIST program for strengthening teaching and research at undergraduate and postgraduate levels in science departments. Efforts are underway to procure funds for student projects from funding agencies like DBT.

#### 3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

The science departments use the facilities which are available in other departments. We firmly believe in maximum utilization of resources specially instruments are shared facility. The department of Botany, Zoology and Biotechnology has shared facilities which have resulted in maximum output from these departments. The concept of green chemistry initiated by the Chemistry department is being adopted by other departments.

#### 3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

The college maintains an inventory of all the equipment's. The expensive equipment's are maintained under AMC. In addition the staff is also trained for operation and maintenance. As mentioned earlier, we firmly believe in maximum utilization of resources. Since the Botany and Zoology departments co-exist they share all the facilities which have been acquired over a period of time.

#### 3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.

Yes  No

- During the period of 2003-2008 the department of Botany received funds of Rs. 14 Lakhs under the DST-FIST program
- Hindustan Unilever Ltd. has funded three projects in the last five years for developing research facility
- Sanctioned Rs. 67 lakhs by DST under DST-FIST program 2013.

3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organisations. Provide details of on going and completed projects and grants received during the last four years.

#### Minor Research Projects funded by Univ. of Mumbai:

Name of the Investigator	Project Title	Amount Sanctioned (Rs.) & Year
<i>Political Science</i>		
Mr. Bhushan Arekar	A study of the role of socialisation agencies in development of political values among the students in the colleges of University of Mumbai	11,500/-   one year (2010-2011)
<i>Sociology</i>		
Dr. Shashi Mishra	Problems and challenges faced by women in aviation industry	15,000/-   one year (2010-2011)
Ms. Arundathi Chitre	Gender related issues	10,000/-   one year (2010-2011)
<i>Accountancy</i>		
Dr. Saraswathy Moorthy	Study of skill development among commerce students	14,500/-   one year (2010-11)
<i>Botany</i>		
Dr. Himanshu Dawda	Studies on propagation of mangroves	25,000/-   one year
Dr. Anil Avhad	Adaptive measures in some halophytes	25,000/-   one year
<i>Chemistry</i>		
Mr. S.R. Shastri	Studies on spinel compounds	23,000/-   one year (2010-2011)
Mr. D.S. Borse	Novel methods for synthesis of substituted derivatives of coumarins	25,000/-   one year (2010-2011)
Dr. Abhay Sawant	Studies on constituents of cashew kernels	21,400/-   one year (2012-2013)
Dr. Charu Vatsa	Synthesis characterization and biological activity studies of antimony complexes containing protic ligands.	25,000/-   one year (2011-2012)
Dr. Vaishnavi Sridhar	Process development for recovery of metals from sea nodules by solvent extraction	21,400/-   one year
Mr. Mandar Medhi	Purification and morphological study of carbon nanomaterial	38,000/-   one year
	Porous carbon nano materials from agro waste and its hydrogen adsorption studies	21,400/-   one year (2012-2013)
Dr. R.S. Dubey	Synthesis and characterisation of new biocides for mitigation of microbial corrosion problems of marine structures	40,000/-   one year
	Studies on corrosion behaviour of 316-L stainless steel used as surgical implants	25,000/-   one year (2010-2011)
Dr. Manisha Bhattacharya	Emulsification of mustard oil	26,000/-   one year
Dr. Asawari Mokal	Extraction of Kokum butter from kernel of <i>Garcinia indica</i> and purification upto Cosmetic/Pharma grade	15,000/-   one year (2010-2011)

Name of the Investigator	Project Title	Amount Sanctioned (Rs.) & Year
<i>Physics</i>		
Dr. Neeta Srivastava	To investigate the mechanism of transport and the nature of charge carriers in conducting carbon nanomaterials.	30,000/-   one year (2011-2012)
Mr. Devraj Pawar	Timing and spectral properties of Neutron stars	15,000/-   one year (2010-11)
<i>Zoology</i>		
Dr. Bindu Achary	Studies on the effects of antidepressant in rat by SDS PAGE	18,000/-   one year
Ms. Sanika Gupte	Study of insect diversity in vermicomposting unit	20,000/-   one year
Dr. Janhavi Bhagwat	Anti-inflammatory properties of some medicinal plants	30,000/-   one year
<i>Biotechnology</i>		
Dr. Sucheta Golwalkar	Micropropagation of <i>Annanas comosus</i>	40,000/-   one year (2010-2011)

#### Minor Research Projects funded by UGC:

Name of the Investigator	Project Title	Amount Sanctioned (Rs.) & Year
<i>English</i>		
Ms. Sharmila Jajodia	Interrogating existential trauma in Anita Desai's fiction	60,000/-   two years (2010-2012)
<i>Sociology</i>		
Dr. Shashi Mishra	Informal Sectors	
Ms. Arundhati Chitre	Social problems of Mumbai Police force	75,000/-   two years (2012-2014)
<i>Botany</i>		
Dr. Himanshu Dawda	Studies on callus and root cultures of <i>Rubia cordifolia</i> and identification of marker constituents using HPTLC	1,00,000/-
Dr. Mrunalini Date	Conservation and genetic diversity of <i>Rauwolfia</i>	82,000/-
<i>Chemistry</i>		
Dr. Seema Ratnaparkhi	Extraction, identification of active constituents from <i>Glyricidia sepium</i> and development of bait to be used as a rodenticide	97,000/-
<i>Physics</i>		
Dr. Kiran Kolwankar	Phase transition in non-equilibrium statistical models	70,000/-
Mr. Devraj Pawar	Self-organised critical phenomena on fractals	80,000/-
Dr. Neeta Srivastava	To investigate the nature of charge carriers and the mechanism of transport in conducting carbon nanotubes	1,00,000/-   two years

**Collaborative Research Projects:**

- Dr. Meher Mistry (Department of History), The Genealogy of the Seth and Sethna Family: 1930 -2010" at the K.R. Cama Oriental Institute, Mumbai sponsored by The F.H.B. Sethna Legacy Trust, Mumbai. (November 2009-2013).
- Mr. Devraj Pawar, Department of Physics Co investigator in DST sponsored project. Probing relativity in the vicinity of black holes using ASTROSAT (2012-2014), in collaboration with IUCA Pune.

**Major Research Projects (2009-2013):**

- Dr. Usha Mukundan (Botany) Somatic embryogenesis and studies on genetic variability in *Emblia officinalis* Gaertn. (2006-2009) Completed, UGC-funded Rs. 9,72,000/-
- Dr. Kiran Kolwankar (Physics) Studies of patterns and synchronization in Neuronal Networks using coupled non-linear oscillators (2009-2012) Completed, DST-funded Rs. 12,70,000/-
- Dr. Usha Mukundan (Botany) Studies on peroxidase production by hairy root cultures of *Azadirachta indica* (2010-2013) Completed, UGC-funded Rs. 10,36,000/-
- Dr. Anagha Kamble (History) History of Migration to Southern Assam: A Socio-Cultural Study, 1947-1971 (2013) Ongoing, UGC-funded Rs. 6,42,000/-

**Industrial Sponsored Projects:**

- Dr. Usha Mukundan (Botany) Studies on theanine production by root cultures of *Camellia sinensis* (2010-2012) Completed, funded by HUL, Rs. 7,18,000/-
- Dr. Usha Mukundan (Botany) Understanding the role of aluminium during callus proliferation and regeneration of tea callus (2012-2013) Completed, funded by HUL, Rs. 1,00,000/-
- Dr. Usha Mukundan (Botany) Disruption of microstructure of tea using exogenous enzymes (2013-2016) Ongoing, funded by HUL, Rs. 13,02,000/-

**3.3 Research Facilities****3.3.1 What are the research facilities available to the students and research scholars within the campus?**

The college has upgraded its facilities with the growing needs of research in the campus.

- Department of Chemistry has Electrochemical measurement system, Gamry Instrument Inc. USA, Electrochemical Impedance Spectroscopy (EIS) software with paint test, pull off adhesion tester,

precision balances, flame photometer, polarimeter, pH meters, conductivity meter, spectrophotometer,

- The departments of Botany and Zoology share their facilities and thus have many instruments available for research. These includes an air conditioned Instrument Laboratory equipped with Laminar air flow, Illuminated racks, Spectrophotometer, Colorimeters, pH meters, centrifuges, precision balance, several gel electrophoresis units both vertical and submarine, power packs, centrifuge, microscope with computer interface.

- Department of Botany, which is recognized by DST-FIST, has an air conditioned Plant Biotechnology laboratory exclusively for doctoral students. The controlled environment tissue culture laboratory has two laminar airflows, shaker, illuminated shaker, HPLC, UV Visible Spectrophotometer, Precision balances, pH meters, cryocan, freezer, Fridge, Millipore water filtration unit, storage racks for chemicals. Gel electrophoresis units, power packs, micropipettes. A complete set up for bioreactor is available. They have a departmental library. Preparation area with autoclaves of different capacities. The terrace garden is used for acclimatization of tissue cultured plants and to educate students on various gardens and garden practices. The terrace garden is used by students of PG Diploma in Horticulture and Landscape Gardening for research project work.

- Department of Biotechnology also has a common instrumentation area for PG and doctoral students. This includes a HPTLC, thermal cyclor (PCR unit), gel documentation system, UV trans illuminator, UV Visible Spectrophotometer, several electrophoresis units, power packs, precision balances, pH meters, colorimeters, Spectrophotometer, shaker, incubator shaker, entire set up for microbiology work. A well-equipped culture room for plant and animal cell cultures. This includes separate laminar air flows horizontal and vertical, CO2 incubator, stereoscopic microscope with facility for photomicrography. Laminar air flow for microbial cultures, fridge, incubator shaker, oven, incubator, Biogas unit for studies on solid waste management large scale and experimental models, Microscope with computer interface for educating students. Access to computer and internet facility to all teachers for printing and publication.

- Department of Physics is equipped with computers for higher end computing skills. Students are encouraged to take part in research. A unit for Nanotechnology has been set up with instrument for preparing nanoparticles. The department has a 6" telescope made by college students.

**3.3.2 What are the institutional strategies for planning,**

*upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?*

With the aim to optimize utilization of funds and resources expensive instruments are shared. As and when new facility has to be created in emerging area college provides with startup funds and encourages teachers to write proposal for sustaining the projects. In addition at the institutional level we compete for funds for supporting student and teacher research. Some of the Post graduate development grants from UGC has been sanctioned under the XIth plan for Chemistry, Botany and Zoology departments. An additional grant from UGC has helped to strengthen teaching and research facilities in the college. We have been recently sanction Rs. 67 lakhs by DST under the DST FIST program for strengthening UG and PG teaching and research facilities in the college. We have been short listed for the DBT Star College. We also interact with industry and work in their priority areas for providing solutions for some of the problems faced by these industries.

*3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If 'yes', what are the instruments/ facilities created during the last four years.*

Hindustan Unilever Ltd. has funded two projects in the last four years in which a high resolution microscope with computer interface has been purchased. For preparation of nanoparticles special facility has been provided by our Institution to the teachers. In addition we have procured an additional JASCO UV-630 Visible Spectrophotometer.

*3.3.4 What are the research facilities made available to the students and research scholars outside the campus/ other research laboratories?*

Our supportive alumni and our excellent relationship with research institutions has enabled us to provide research project work to students and additional facilities to research scholars in these leading research Institutions like BARC, ACTREC, Haffkine Institute, Hinduja Hospital, Metropolis Laboratories, Ranbaxy, KEM Haematology Centre, Jaslok Hospital, CCMB, NCCS, NIRRH, Anchrom, Marico, Yashraj Biotech, Akzo Nobel, Cipla Watson, Johnson and Johnson, Fermenta to name few of them.

*3.3.5 Provide details on the library/ information resource centre or any other facilities available*

*specifically for the researchers?*

The departmental library is available mainly for the research students. Free internet service and computer, scanner, printers are available for researchers. Thus they have access to online material which includes journals and books. The key to the research laboratories are made available to the doctoral students on all days for extended period of time, this gives the students the freedom to come and work and carry out experiments uninterrupted. Faculty involved in research has access to the lab 24/7, free internet services.

*3.3.6 What are the collaborative research facilities developed / created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.*

Sophisticated instruments like HPLC, thermal cyclor, clean room facility, animal house, facility for plant tissue culture, animal cell culture, nanotechnology center, computers for bioinformatics etc. are used by all departments. These facilities have been set up from funds received from various funding agencies and industries.

3.4

### Research Publications and Awards

*3.4.1 Highlight the major research achievements of the staff and students in terms of*

- *Patents obtained and filed (process and product)*
- *Original research contributing to product improvement*
- *Research studies or surveys benefiting the community or improving the services*
- *Research inputs contributing to new initiatives and social development*

- Our institution being mainly an undergraduate institution is more involved with teaching undergraduate students.
- However, over a period of time we have realized that research and teaching cannot be de linked.
- To implement innovative ideas in teaching, teachers are involving in research work in spite of time, space and facilities being limiting factors.
- Some of the departments have conducted surveys in association with NGO's to access the status of health and living conditions of slum areas near the college.
- We now have a lead in using our research inputs to tackle some of the environmental issues like biodegradable waste management. In view of the demography of the college the focus is more on community based research. One major achievement of the research being done in our Institution has



been incorporation of the practicals which have been standardized by our researchers into the curriculum. These practical are in emerging areas.

### 3.4.2 Does the Institute publish or partner in publication of research journal(s)? If 'Yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?

To encourage staff to publish their work and also interact with their academic peers by inviting manuscripts from them we have launched a research journal called 'RJ Pragya' for which we have applied for an ISSN number.

### 3.4.3 Give details of publications by the faculty and students:

Year	Number of papers published by faculty in peer reviewed journals	Book Chapters	Books with ISBN/ISNN number
2012- 2013	44	11	08
2011-2012	25	07	02
2010-2011	19	07	-
2009-2010	37	05	02

### 3.4.4 Provide details (if any) of

- \* Research awards received by the faculty
- \* Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally

- Dr. Anagha Kamble felicitated by SEEPCO India Pvt. Ltd. for outstanding academic excellence of a female among the Buddhist community in Mumbai 2012.
- Dr. Meher Mistry received Young Researcher Award at the Dr. Mani Kamerkar Memorial Seminar 2012.
- Dr. P.G. Kale was selected as a leader of Indian delegation and member of International Jury at the 10th International Biology Olympiad held at Tsukuba, Japan 12-19 July 2009.
- Dr. Sneha Deuskar received an award for achieving a Ph.D. in Marathi by Pasaaydaan Saahitya Manch, Borivali on 26 August 2012.
- Dr. P.G. Kale received the "Paryavaran Mitra" award instituted by the Thane Janata Sahakari Bank in association with 6 NGO's on 21 May, 2010.
- Capt. Pravin Nayak was selected as a leader of Indian delegation and member of International Jury at the International Biology Olympiad held at Bonn, Switzerland 12-19 July 2009
- Dr. Usha Mukundan was honoured with the Best Teacher Award by Government of Maharashtra, 2011.

### Best Paper award

- Dr. Meher Mistry was awarded the Best Paper award for the paper presented for the paper titled 'The devi movement in Gujarat' presented at the Dr. Mani Kamerkar Memorial Seminar 2012.
- Dr. R.S. Dubey awarded the Best paper award at the International conference in central university of Gujarat on 14-15 March 2013.
- Ms. Rashmi Wagle and Ms. Nandini Jagnarayan were awarded third prize for paper presentation at Bhavan's Hazarimal Somani College.

*Incentives given to faculty for receiving state, national and international recognitions for research contributions.*

The individuals who receive awards are felicitated at the staff meeting held on the last working day. They are applauded during the academic prize distribution program of the college. Their name is mentioned in the quarterly newsletter of the college "RJ Herald" and also in the college magazine and annual report of the Hindi Vidya Prachar Samiti.

## 3.5 Consultancy

### 3.5.1 Give details of the systems and strategies for establishing institute-industry interface?

Our College encourages faculty to undertake consultancy work. The money generated is given as an incentive to the faculty/student. We also partner with industry to use computing facility in which our staff is involved. For example, we have signed MOUs with TCS and Navteq (Nokia) for our computing facility which generates revenue at the same time providing a linkage with industry.

### 3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

Institution allows its faculty to use the facilities in the college to promote consultancy. The expertise is advertised through personal contact, alumni, college website and faculty links.

### 3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?

All facilities in the college are available to the faculty for consultancy work. College also extends cooperation in terms of making available human resources for technical and administrative work.

### 3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.

- Identification of trees and proper labeling at the Naval Park and Material Organization, Vidyavihar: Free
- Consultancy provided in establishing an orchid farm in Karjat to Vidyasagar Pvt. Ltd., in turn they gave us a thermal cycler (PCR machine)
- Yoga Institute Santacruz: Rs 6000/-
- Rose Garden Co-op Society: Rs 5000/-
- Offered consultancy to Valuable Ag-Bio Pvt. Ltd. for ecological impact analysis for developing forest land: Rs 36,000/-
- Data analysis using SPSS software from Shreya Life Sciences: Rs. 19,990/-
- Testing of essential oil for antimicrobial activity for Marico
- Animal testing for Unique Diagnostics: Rs. 20,000/-
- Dye decolorisation from industrial waste water for Neelikon Pvt. Ltd.: Initial amount Rs. 12,000/- (ongoing)
- Cotton waste degradation pilot work is being carried out for feasibility testing.

### 3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?

The college management has been very magnanimous in allowing teachers to retain the revenue generated by them. In case the revenue is in excess it is utilized to strengthen the facilities of the department which is involved in the consultancy work.

## 3.6 Extension Activities and Institutional Social Responsibility (ISR)

Our vision is to provide extension services to serve self and the society. We believe in nurturing socially responsible youth. We have two units of NSS, NCC and the Extension activity unit of University of Mumbai. Our student has been awarded the BEST NSS Volunteer of the year at the Zonal level, Our efforts in making the premises gender friendly and ensuring safety of our women students has been recognized by the Government of Maharashtra and they have awarded the first prize at the district level for their program of empowering women under the aegis of "Jaagar Jaanivancha" in 2013.

### 3.6.1 How does the institution promote institution-neighborhood-community network and student engagement, contributing to good citizenship, service

### orientation and holistic development of students?

- RJ College Rotaract club carries out various need-based programs like energy conservation, help to Mumbai bomb blast victims, anti-narcotics drive, COLORS a fine Arts competition for school children, awareness about hepatitis, cleanliness drive, visiting orphanage and spending time with children who are disadvantaged.
- Students carried out extensive survey on energy consumption in adopted area. This was a door to door campaign. A workshop was held with the Reliance head as a chief guest and resource person. It also included an exhibition on energy conservation. A follow up study was done in the area to see the change in attitude and efforts taken by the local community to save energy which was very positive. Tata Power also conducted a workshop on energy saving and how we as conscious citizen should conserve energy.
- Solid waste management with BMC to separate wet and dry garbage along with Vermi-composting.
- Forum for free enterprise organizes an elocution competition for our students annually.
- Civil Defense unit of Maharashtra government trained our volunteers of NSS and NCC cadets along with First Aid training as a part of the certificate course.
- Fund collection for National Association for blind
- NSS unit organized a tree plantation at Godrej Mangrove park coupled with Mangrove awareness and conservation.
- Disaster management workshop is conducted every year with the help of BMC. We now have a disaster preparedness unit to take care of disasters.
- Students of BMS and BBO conducted a survey for dental health of residents of the area near the college.

### 3.6.2 What is the Institutional mechanism to track students' involvement in various social movements / activities which promote citizenship roles?

The NSS, NCC, Extension activity unit, Rotaract club and Women Development Cell conduct various program throughout the year in which students participate enthusiastically. Highlights of some these for programs are listed below.

Our NCC unit is attached to the 6th Maharashtra Battalion and is led by Capt. Pravin Nayak the ANO of our unit. In 2013, Ms. Madhavi Shedage represented Maharashtra at the Republic Day Parade in New Delhi. Our NCC has initiated a unique way of spreading relevant social awareness message with adventure

by way of cycle expedition to various borders of the country. En route the cadets have experience of staying with the locals in village, sharing experiences with them and spreading message of save the girl child, save environment, awareness about diseases like AIDS, malaria, and dengue. The NCC cadets participate in the annual camps like ATC, NIC, TSC, SSB, PRE-CAT-1(IGC) TSC CAMP Queens Batallion. The NCC cadets participate in various adventure sports like rappelling, trekking, scuba diving, hiking, parasailing etc. They help the Mumbai Police and traffic department during festivals like Ganapati, Muharrum, Dasherra. They take part in community activities like tree plantations, waste management, cleanliness drives, awareness with regards to child labour, save the girl child anti-drug rally, blood donation etc.

Social Awareness Cycle Expeditions undertaken in the last four years

- Ghatkopar to Wagha Border (Amritsar) 16 December 2009 to 7 January 2010 (14 cadets participated)
- Ghatkopar to Kanyakumari, 10 December 2010 (18 cadets participated)
- Ghatkopar to Dwarka, 18 to 31 December 2011 (15 cadets participated)
- Ghatkopar to Shriharikota 15 to 31 December 2012 (15 cadets participated)

Between 2009-2013, 95 NCC cadets qualified with a B Certificate, while 60 qualified with a C Certificate.

NSS activities are conducted throughout the year. We have two NSS units. These community based activities are under the following categories:

- **Health issues:** These are awareness about epidemic diseases like Malaria (BMC). Thalessemia checkup (Rotary club) and counseling, AIDS awareness (MDACS), flash mob for diabetes awareness blue ribbon day (SANOFY), Blood donation drive (TATA Memorial hospital), Free medical checkup for members of teaching and non-teaching staff (ALMA MATER).
- **Social awareness drives:** Like save the girl child, female foeticide, AIDS awareness, anti-narcotics (Anti-narcotics unit of Police), Women Empowerment (WDC), eve teasing (AKSHARA), Patriotism (Independence day and Republic Day celebrations)
- **Environment awareness programs:** Tree plantation (Univ. of Mumbai, Yuvak Biradri), Kanya Bachao (Univ. of Mumbai), Beach cleaning (Indian Coast Guard, Maharashtra, International Coastal cleanup), Road beautification, Disaster management 9 BMC, Fire Brigade), Rallies (Sarvodaya Mandal), mock parliament, media club, paper bag making (for local

Year	Category of Activity	Number of Activities	Average Number of Student Participants (Total Students Involved)
2013	Social/ Environmental awareness programme	23	25 (575)
2013	Cultural	05	25 (125)
2013	Health	01	41 (41)
2013	Orientation and training	04	13 (52)
2012	Social/ Environmental awareness programme	35	25 ( 875)
2012	Cultural	15	25 (375)
2012	Health	10	70 (700)
2012	Orientation and training	36	19 (684)
2011	Social/ Environmental awareness programme	31	26 (806)
2011	Cultural	06	19 (114)
2011	Health	09	15 (135)
2011	Orientation and training	20	10 (200)

vendors), campus cleaning, Mritunjay club.

- **Spreading awareness through fine and performing arts:** Street play, singing, fest, film screening, Dandiya visit, slogan writing, elocution, bhajan sandhya, poster competition.
- **Orientation/Training:** Leadership training, Rural Camp (TARA Yusuf Meher Ali Centre Panvel), YUVA (Vivekanand Kendra)

The extension unit is part of the extension activities of the University of Mumbai Department of Life Long Learning and Extension education. We conduct programs under four main areas. There are 200 students enrolled every year under this activity.

- **Career Project (CP):** It helps students explore the various career opportunities in a particular field, gather information, compile date, meet people who are in that career, interview them about the skills required and learn from their success stories. Students have a career exhibition in which they share the information that they have gathered.

#### Extension activities through RJ College Rotaract Club:

Activities conducted (2009-13)	No. of participants
PUKAR (Peace rally to 'Save the Girl Child')	200
COLORS (Interschool fine arts competition)	510 children from 4 schools
TALAASH (Interschool performing arts competition)	300 children
Drug awareness campaign, skit performed	400
Sports competitions	100
Clean Mumbai travelling cleanup of railway stations	70
Gurupurnima celebrations	180
Visit to Anugrah orphanage at Ambarnath	50

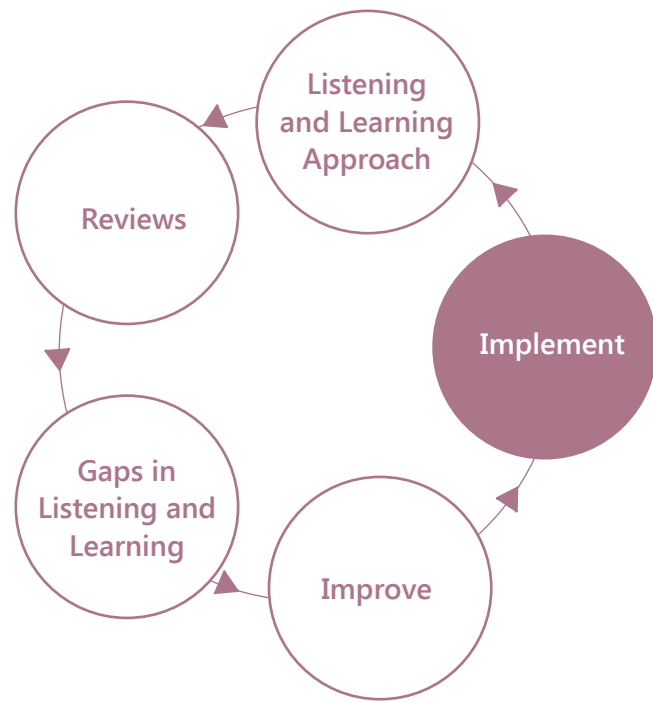
**Women Development Cell of RJ College:**

Name	Institute	Year and Topic	No. of students
Ms. Hasina Khan Ms. Yasneen	Awaj-a-niswa	Jan 2010 Women and violence	100
Ms. Madhushree Dutta	Majlis, a Legal Resource Centre	01 Sept 2010 Role of media in creating gender sensitization	120
Mr. Sanjiv Sane	Activist	09th Sept 2010 New airport and challenges	100
Mr. Sanjay Sanghavi	Medical Practitioner	14 June 2010 Health care and Hygiene	95
Mr. Prahladi Tipanya.	Akshara	19 Jan 2011 Kabir Festival, Kabirwani and His Preachings	160
Dr. Manjiri Dighe	Tata Memorial Hospital	July 2011 Need of Palative services and breast cancer awareness	120
Ms. Sunita Athale	Activist	July 2011 Importance of waste management	90
Dr. Kranti Jejurkar	UWDC	13 Jul 2012 Gender sensitization	180
Ms. Ujjwala Kadrekar Ms. Pooja Kute Ms. Snehal Welkar	Majlis and Mahila Balvikas Kendra	24 Jul 2012 Workshop on Women empowerment	200
Mr. Harish Sadani,	NGO 'Men Against Violence and Abuse' (MAVA)	14 Dec 2012. Violence on women (Physical, Mental and Sexual harassment)	150
Mr. Rupesh Parab	NGO Dignity Foundation,	27 Jan 2012, Role of NGO's in elderly care	150
Dr. Kranti Jejurkar Mr. Harish Sadani	UWDC, NSS and College WDC	Intercollegiate competition "Meri Beti Pyari Beti"	300

- **Annapoorna Yojna (APY):** With the changing life styles we are looking for sources of readymade food, catering services. This project helps the students understand the concept of starting a small scale business. This helps students to develop time management, decision making, public relations, planning and organization to complete the order in time, logistics, supply chain etc.
- **Status of women in the society (SWS):** Working in an adopted area/school/college survey the area to understand the status of women in that area. It helps students to be sensitive to women and be more humane. It also helps to communicate to the society the importance of gender equality, health of girls and women, promote anti dowry, save the girl

child, education for all.

- **Information communication and technology skill development (ICT):** To take project which will enhance IT skills in students including hardware maintenance.



Year	Budget	Impact on the overall students development
		NSS
2013	145938	
2012	134752	Leadership qualities, team building concern for the society, concern for environment, Nation building self-realization.
2011	63862	
2010	52868	
		NCC
2013	125532	
2012	118470	Patriotism, courage and bravery, physical and mental fitness, Nation building survival in all circumstances
2011	110335	
2010	174774	

**3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?**

In view of the changing needs of the society a listening and learning approach is used to solicit stakeholder perception on the overall performance and quality of the institution. This helps us to review our performance and also to improve upon it continuously

**3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.**

In the beginning of the academic year the meetings

with the in charges of the various extension and outreach programs are held to priorities the activities for the year. Most of them are need based and also we take into consideration how these are going to impact our participating students and also other students who will be motivated to join them.

### 3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?

Our institution is very sensitive to societal needs. The students and faculty participate wholeheartedly in extension activities. The Institution promotes all such activities by sanctioning leave, flexible timings, money for travel and other organizational expenses. The institution extends all infrastructural support for all such activities. Special lectures and seminars are organized on socially relevant issues. Past students of NSS and NCC interact with the newcomers. The motto of NSS is "Not Me But You" which is widely conveyed. Best NSS volunteer is recognized every year and awarded a prize at annual prize distribution program. The NCC cadets motivate the fresher's to join NCC by their motto of "Unity and Discipline". They also kindle the spirit of Nationalism and of being a proud Indian. On Independence Day medals and prizes are awarded to NCC cadets for best cadet, best drill, best turn out, best runner, NCC cadet with academic excellence.

### 3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?

Social survey, research and extension work relating to social justice

Event	Target group
Status of women in the society annually	Women
Eating habits of girls in the age group of 17-19	Girl students
Blood hemoglobin content of girls and women in slum areas	Females
Thalassemia testing	College students
Safety of women in the society	Female students
Literacy levels among slum dwellers	Slum areas

### 3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.

The extension activities organized by the institution have been instrumental in establishing a bond between the community, students and our alumni who were

active in various community based activity. Some of these students have set up their own NGO and are extending the activities which they were involved in their college days. Example: GDC next is one such organization initiated by the batch of 1989. Students learn in real life situation and learn to be more humane and compassionate by the time they come to the final year. They develop leadership qualities, team work and enhanced self-esteem.

### 3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

Majority of the activities ensure the involvement and benefit of the community. Some of them are participation of our NCC cadets and NSS volunteers in traffic management during Ganesh festival (all immersion days), EID, Moharrum, Dasherra (Durga immersion). As an initiative of the Mumbai Police commissioner the local police station and our students formed an Mritunjay club in view of the youth being the eyes and ears of the community and help in curtailing any antinational activity including terrorism. This club organizes workshops to train students as how they help the police in crime prevention. The Women development cell organizes workshops with the help of Police personnel to build confidence in police to mitigate crime against women in the society and also train girl students in self-defense. The consumer guidance society trains students in identifying their rights as a consumer and also prevents adulteration. The disaster management cell of the college along with the Bombay Municipal Corporation organizes a yearly workshop in disaster management and this will help students in taking timely action within and outside the premises. NSS volunteer work on the field for polio vaccination and spread awareness regarding measures to be taken for control of epidemic diseases like malaria, dengue. In the hospital project our NSS volunteers visit the community cure center in Sarvodaya hospital and spend time with patients. They also perform street plays on "AIDS Awareness". The nearby slum area Nityanand Nagar is the adopted slum area of our unit and our student volunteers spend time teaching school children. They are also involved in the keeping the mental health of the elderly population of this locality and the elders look forward to the visit by these students. This is a sharing experience since the senior citizens share their stories of hard work, joint families, team work, and patience, community cooking, managing households in low budget, enjoying festivals and other occasions in absence of luxuries. One staff

member is the director of non-formal educational institution "VISHNUGUPTA". This effort which began as a rural reconstruction program at Kashedi Khed has helped in afforestation and regeneration of the forest ecosystem.

### 3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

Institution Name	Program
Police department	Mritunjay club for crime prevention
BMC Disaster Management Cell and Mumbai Fire Brigade	Disaster Management workshop to train students and staff
Akshara	Women related issues
MAWA	Sensitizing youth about gender issues
Rotary Club	Thalassemia detection and counseling
YMCA, TISS	Care of the elderly and young children in Nityanand slum area
MDACS Red Ribbon Club	AIDS awareness drive
Antinarcotics Department, Govt. of Maharashtra	Drive against drug abuse
Sarvodaya Mandal	Peace rally, Hiroshima Nagasaki day, August Kranti Divas
Indian Coast Guard	Beach cleaning
Yuvak Biradari	Tree plantation and leadership training program
Yusuf Meharauli centre	Rural development residential camp
Vivekanand Centre	Youth Leadership

### 3.6.10 Give details of awards received by the institution for extension activities and/ contributions to the social/ community development during the last four years.

Year	Name of the student/ activity	Activity
2013	Mr. Ravi Jaiswal	Best NSS Volunteer award at district level
2013	Mr. Sankalop Naikwadi	Appointed as University representative for Yuvak Biradari
2013	Recognition to the College for active participation by The Commander Coast Guard District	For beach cleaning, International coastal clean-up 2013
2012	Ms. Madhavi Shedage	Represented Maharashtra in Republic day Parade
2009	First prize Special appreciation award to the college for extension activities	Poster competition UDAAN annual festival

## 3.7 Collaboration

3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives - collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

- International : International Institute for Population studies for awareness on population-statistical data, diversity, demography, urbanization, seminar on migration
- Industry: MARICO, Hindustan Unilever, Johnson and Johnson, Bharat serum and vaccines, Fermenta, Jasraj Biotech, CIPLA, Metropolis laboratories, student internship and research projects.
- Research organizations: Faculty from Physics department mentor Post graduate students from University department for M.Sc research work in collaboration with TIFR. Student projects are done in collaborations with research institutes like CCMB, National center for cell culture Pune, NIRRH, Parel, KEM Hematology section, Ranbaxy research center, Jaslok research centre, Hinduja research center, ACTREC, BARC, TIFR, IIT-Bombay.
- Service sector: BPO, Banks, Insurance companies, BSE
- Agriculture sector: Cultivation of farm crops, studies on changing life styles of tribal in Mumbai and Thane. Loss of Agriculture related employment including fishery.
- Administrative agencies like Institute of Cost and Works Accounts, Chartered Accountants.
- The department of Economics collaborates with Forum for Free Enterprises and organizes theme based Elocution competition.
- The department of management studies collaborates with the Bombay Management Association and P.N. Singh Foundation. The department of B.Com. Banking and Insurance collaborates with various banks, Insurance agencies and BSE. They have signed an MOU with the ICICI for online courses in banking under the aegis of ICICI Learning Matrix.

3.7.2 Provide details on the MoUs/ collaborative arrangements (if any) with institutions of national importance/ other universities/ industries/ corporate (corporate entities) etc. and how they have contributed to the development of the institution.

and

3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment/ creation/ upgradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories/ library/ new technology/ placement services etc.

- We have signed an MOU with ICICI learning Matrix for online courses in Banking. This has resulted in faculty and student enrichment
- Mou with TCS for using our infrastructure and computer facility in weekends and holidays for online examinations. It provides opportunity for our

technical staff to learn about the details of online examinations and trouble shooting. The incentives as remuneration for technical help. It also provided revenue for utilization of our resources which would have remained idle in non-working days. TCS has also recognized our contribution and awarded a plaque for excellence for last two consecutive years.

- MOU with Navteq for using our technical support and computer facility for placements. This has provided opportunity to interact with IT companies and also helped in student placements along with revenue generation.
- Collaboration with Institute of Cost and Works Accounts a Nationally recognized body to conduct classes in ICWA in our premises in the evening has given an opportunity to our student to enroll in their program after graduation.
- MOU with Vinatge Point for conducting Postgraduate Diploma in Regulatory Affairs for providing education to students in emerging areas
- MOU with Hindustan Unilever Ltd for research and development on identified problems.
- Faculty Exchange Programme with Fleming College, Ontario, Canada. Three faculties visited our college in 2011 and three faculty from our college visited Fleming College in 2012.

### 3.7.4 Highlighting the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.

Resource Persons	Department	Event
<i>2013</i>		
Mr. Ujjwal Nikam, Public Prosecutor Mr. Ram, Director IIPS, Mr. Bhagat, IIPS	Statistics, Economics and Sociology	"Migration Issues and Challenges" 5-6 January, 2013
Dr. Mayashankar Pandey, Head, Dept. of English, BHU Mr. Kancha Ilaiyah, Hyderabad	English, Political Science and History	UGC-sponsored "Voices of the Marginalized" January 2013
Mr. Atul Dodiya (Painter), Dr. Ramesh Kamble, Dept. of Sociology, Dr. Kanchan Mahadevan, Dept. of Philosophy, University of Mumbai, Mr. Anand Gandhi (Director), Mr. Naushil Mehta (Writer), Mr. Manoj Shah, Mr. Sandip Kulkarni (Actors), Mr. Santosh Pathare (General Secretary) Prabhat Chitra Mandal	Philosophy and Sociology	ICSSR-sponsored "100 Years of Indian Cinema: Issues and Challenges in Retrospection - Socio- Philosophical Perspectives" 5-6 July, 2013.
Dr. Snehalata Deshmukh, Former Vice Chancellor, University of Mumbai Dr. Rupa Shah, Former Vice Chancellor, SNTD University Ms. Manju Nichani, Principal, K.C. College and Hon. Secretary, HSNCB Dr. Shanthi Director, UGC Academic Staff College, Univ. of Mumbai, Dr. Uma Shankar, Chairperson, BOS in Philosophy Mr. Khalid Khaizer, Additional Commissioner of Police, IPS	IQAC	NAAC-sponsored State-level IQAC seminar on "Promoting Women Leadership for Quality Academia, Quality Entrepreneurship, Quality Administration, Quality Professionalism and Administration" 8-9 February, 2013
<i>2012</i>		
Justice Sujata Manohar Ms. Asha Bajpai (TISS) Dr. Kranti Jejurkar, Chairperson, WDC, Univ. of Mumbai	College Women Development Cell	National seminar on "Sexual Harassment in Higher Educational Institutions" in collaboration with WDC, Univ. of Mumbai
Dr. D. Datta, Scientist, BARC Ms. M.S. Raghunath, IIT Mumbai Dr. Subhash Bhusnoormath, Dharvad University, Dr. Shraddha Ingale, Univ. of Pune	Mathematics	National seminar on "Aspects of Mathematics" funded by Mathematical Colloquim 14-15th December, 2012
Dr. Kathiresan, Advanced Centre for Botany, Annamalai Univ. Dr. Asad Rehmani, Director, BNHS Dr. S. Balachandran, Asst. Director, BNHS Dr. Wenresti Gallardo, Dr. Janalezza Esteban, IUCN, Phillipines Dr. A.C. Anil, NIO, Goa	Biosciences	National seminar on "Biodiversity and Conservation of Coastal and Marine Ecosystems of India" in collaboration with BNHS, ATBS, IUCN and MFF 13-14 September, 2012
Mr. Anurag Chaturvedi, Maharashtra Rajya Sahitya Academy Dr. Shivkumar Mishra, Marxist and Critic, Gujrat Dr. Ajay Tiwari, Critic, New Delhi Dr. ShriBhagwan Singh, Bhagalpur Dr. Devendra Chaube, JNU, Delhi Dr. Amrendra Sharma, Wardha Dr. Shriprakash Mishra, Story Writer, Allahabad	Hindi	UGC-sponsored and Maharashtra Sahitya Academy-sponsored National seminar on "Ramvilas Sharma Ki Sahitya Sadhana" 7-8 December, 2012

Resource Persons	Department	Event
<i>2011</i>		
Dr. Sandhya Kamat, Dean, LTM College and Sion Hospital Dr. Jahangir Sorabjee, Physician, Bombay Hospital Dr. Anil Kamath, Former MD, Wockhardt Hospital	Economics, Philosophy and Sociology	UGC-sponsored National seminar on "Health Care in India - Issues and Challenges" 4-5 February, 2011
Dr. Ramakant Srivastava, Senior Story Writer and Critic, Raipur Mr. Kumardutt Vinaye Goodary, M.G. Institute, Mauratius Dr. Bajrang Tewari, Deshbandhu College, New Delhi, Dr. Anjan Sudhir, Professor, Columbia University, USA Dr. Rekha Maitra, USA	Hindi	International seminar on "Samkalin Hindi Kahaniyon Mein Vimarsh on Stories From 1990-2010" 18 July, 2011
<i>2010</i>		
Mr. Shishir Shinde, MLA, MNS Mr. Ram Kadam, MLA Mr. Anurag Tripathi, Chief Editor, Navbharat Times	Hindi	One-day seminar "Dum Todta Shahar Mumbai" in collaboration with Wagdhara 3 January, 2010
Ms. Sylvie Schindler, Bonn, Germany Dr. Markus Gabriel, Dr. Jenn Rometsch, Dr Stefan Zimmerman, Mr. Sebastain Ostrich, Dept. of Philosophy, Bonn University, Germany	Philosophy	Indo-German colloquium "Between East-West: A Cross Cultural Encounter" in collaboration with Dept. of Philosophy, SIES College, and Bonn University, Germany 22-23 November, 2010
Mr. Viren Sanghavi Trainer, Mr. Rao National, Centre for Quality Management	IQAC	National seminar on "Sharing of Best Practices Among Institutions of Higher Education" December 2010

**3.7.5 How many of the linkages/ collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated -**

- a) Curriculum development/enrichment
- b) Internship/ On-the-job training
- c) Summer placement
- d) Faculty exchange and professional development
- e) Research
- f) Consultancy
- g) Extension
- h) Publication
- i) Student Placement
- j) Twinning programs
- k) Introduction of new courses
- l) Student exchange
- m) Any other

**3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/ collaborations.**

The members of the IQAC, Career and Placement Cell make systematic effort in planning, establishing and implementing linkages and collaborations with research institutions, corporates, industries trainers, IT sectors. Wherever the faculty feels that the linkage and collaboration would benefit our students it is formalized.

**Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.**

Areas	Institution/ Industries	Activities	Beneficiaries
Curriculum development/ enrichment/ introduction of new courses	Wockhardt Pharmaceuticals, Hiranandani Garden, Vintage Point	Introduction of new courses	100
Internship/ on-the-job training	Mahendra and Mahendra, Bajaj Finance, Club Mahendra	Summer training	240
Faculty Exchange	Fleming College, Ontario, Canada	Human resource development	3
Research	Hindustan Unilever Ltd.	Research resulting in new knowledge, human resource development	Institution, 3 Ph.D. students
Extension	Akshara, MAWA, WDC, Univ. of Mumbai	Gender sensitization activities	300
Student placement	Navteq, TCS, L&T	Student placements	100
Student placement	Aspiring Minds	Aptitude test	300
E-learning	ICICI Learning Matrix	e-Learning modules for banking and insurance	100
Self defense	Mumbai Police, Taekwondo Academy, Boxing Academy	Self-defense training for girl students	120