



**National Education Society's
Ratnam College of Arts, Science & Commerce**

**Self-Study Report
For
Re-Accreditation
Cycle 3**

**Submitted to
National Assessment & Accreditation Council
Bangalore, India**

AWARDS & ACCOLADES



Best College Award (in Urban Area) from University of Mumbai - 2013-14



**Best College Award for
NSS (District Level) 2013-14
from University of Mumbai**



**Best NSS Programme Officer Award
(District Level) 2013-14
from University of Mumbai**



**Arogya World Healthy Workplace Award (Gold)-2016
from Arogya World India Trust**

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PREFACE

It gives me great pleasure to present the Self-Study Report (SSR) of our College for the third cycle of accreditation to the National Assessment and Accreditation Council (NAAC), Bangalore. Our College was assessed and accredited by National Assessment and Accreditation Council (NAAC) in 2004 and was awarded 'A' grade with 86% and was re-accredited in 2011 with 'A' grade (CGPA 3.10).

The Peer team recommendations during both the cycles have given us the direction to work towards continual improvement. The recently completed Academic Audit by University of Mumbai has further given us insights into the diverse quality enhancement measures that can be attempted to reach greater heights.

The IQAC of the College plays an active role in the process towards enhancement of quality in the College. The Management, faculty, non-teaching staff, students, alumni and parents also contribute effectively towards the functioning of the College and enable us to strive towards higher goals. It is a matter of honour for me to mention that the enhancement of quality in teaching-learning with ICT, efforts in research, students' achievements, innovative and eco-friendly initiatives and a stronger bond with alumni have supported us in our journey towards continual improvement.

Preparing the criteria wise evaluative reports and the evaluative reports of the departments helped us to classify, crystallize and present the numerous initiatives of the college in an organized manner. The report is a fair analysis of our Strengths, Weaknesses, Opportunities and Challenges. It has been an enriching experience for us as we reviewed, introspected, evaluated and prepared this Self Study Report

I extend my deep sense of gratitude to the Management, especially the Founder President and the Director who take keen interest in the development of the College and have been a constant source of inspiration. I also thank the efforts of all the members of the IQAC, Coordinators and members of Steering

Committee, Heads of the departments, the faculty, non-teaching staff and students for their whole hearted and sincere support in this journey towards our quest for excellence.

We have responded to the best of our ability to the queries in the SSRas per the format and hope that it satisfies the expectations of the quality enhancement process stipulated by NAAC. I welcome the NAAC Peer team members and look forward to a fruitful interaction during validation of the report.

EXECUTIVE SUMMARY

NES Ratnam College of Arts, Science & Commerce was established in 1983 and has since then progressively evolved to make a mark for itself as one of the premier institutes of higher learning in Mumbai. Its singularity lies in its unapologetic insistence on discipline as top priority; the key to academic excellence and character building that informs the tone and tenor of all areas of campus life.

Ratnam College occupies place of pride among the 62 institutions of the National Education Society (NES)& Saraswathi Vidya Bhavan (SVB) Group founded by Dr R. Varadarajan. The College is the result of the farsightedness of the Founder President who worked tirelessly to realize his mission of making higher education accessible even to the poor and under-privileged sections/strata of society. Today the college caters to students drawn from all sections of society and has accordingly grown in faculty and infrastructural amenities.

The College is permanently affiliated to the University of Mumbai and is included in the 2(f)&12 (B) sections of UGC Act, 1956. It now offers a range of Undergraduate and Postgraduate programmes in Arts, Science, Commerce, Management and also several short term add on courses in response to the diverse requirements of students with widely varying potentialities and needs in a technology driven world.

A number of awards and recognitions conferred on us over the years testify to our earnest endeavour to continually reassess our quality standards and evolve further as an institution in response to the changing demands of higher education.

ISO 9001:2000- Ours was the first educational institution in Maharashtra to receive this certification in 2002.

N.E.S Ratnam College Marg- The efforts of the college to bring about socio-economic upliftment of the neighborhood have brought us recognition by way of the Municipal Corporation of Greater Mumbai renaming the Bhattipada road (approach road to College) in 2006

IMC Ramakrishna Bajaj National Quality award for Excellence in Education - Our College received this award in 2007 as a constituent institution of the Parent Body, NES, which again was the first of its kind in the education category.

British Quality Mark—From the British Institute for Learning and Development, U.K, in 2010, a rare honour for an educational institute in India.

Best College Award (in urban area)— From the University of Mumbai for the academic year 2013-14

Best NSS Unit(at district level)-From the University of Mumbai for the academic year 2013-14

Best NSS Programme Officer(at the district level)- Mr. Ashok Poojari received this Award from the University of Mumbai in the year 2013-14

Arogya World Healthy Workplace Award –Gold- Our College is the first in Maharashtra to receive this award from Arogya World India Trust in 2016.

Though our College is located in a not so developed suburb of Mumbai and caters largely to a student community from the underprivileged section of the society, we are striving hard to give them a successful career and make them conscientious citizens thus contributing to nation building.

CRITERIA I – CURRICULAR ASPECTS

The institution offers conventional Undergraduate programmes in Arts, Science and Commerce with wide range of courses, as well as semi-professional self financed programmes; three in Commerce and two in Science. Postgraduate programmes are offered in Commerce, Physics and Chemistry; and Ph. D. programme in Botany. Curriculum is prescribed by the University of Mumbai for all these programmes. However some of our faculty members contribute in curriculum development as members of Board of Studies/ Syllabus Restructuring Committee of University of Mumbai. Towards enriching students' learning experience, the institution also offers skill development programmes through Certificate Courses. The College also offers a Skill Development Programme, PAR (Programming, Analytics & Research)

of TISS aiming at enabling students, to acquire skills and competencies that would enhance their employability. Post the second cycle of NAAC, the College has introduced 2 Undergraduate programs, 1 Postgraduate program, 1 Doctoral program and 5 Certificate courses.

Programmes of YCMOU (MBA, B. Com., B. A.& PEP) are offered in distance mode of education. Preparatory Programme of YCMOU gives an opportunity to students who are out of conventional school system to enter the degree programmes of YCMOU.

Teaching plans are meticulously prepared and implemented by faculty members. Effective implementation of the curriculum is ensured by conducting workshops on revised syllabus and by deputing teachers to attend workshops on revised curriculum. Institution provides Audiovisual aids, Smart Boards, well equipped Laboratories, Library Resources and Computers with internet to staff for effective teaching.

CRITERION II- TEACHING- LEARNING AND EVALUATION

The effective Teaching-learning process is the strength of the College which is well planned and executed. The admission to various programmes is processed by the Admission Committee abiding by the rules and guidelines laid down by the University of Mumbai and Government. Utmost transparency is maintained in declaring the merit list taking into consideration the government's policy of reservation of seats under various categories. Over the years the enrollment of students with higher percentage at the qualifying examinations is showing an upward trend.

The College has students from diverse socio-economic, cultural and academic backgrounds. Many of them are even first generation graduates. Teaching methods used are in line with differential learning abilities. Classroom teaching is supplemented with modern technology like Computers, Smart Boards, LCD, Internet, OHP and e-learning resources. Students centric teaching methods are adopted to ensure effective learning by students. Seminars/ workshops, guest lectures, group discussions, assignments, projects

and presentations are organized for students to ensure effective learning, confidence building and consequently develop global competencies to deal with challenges arising from the fast changing global scenario. Field visits and industrial tours to places of educational significance provide practical exposure to the students.

Teacher mentor (class in charge) and subject teachers monitor students' progress in academics and conduct remedial teaching for academically weak students. The Counsellor also provides Psycho- Social Support (PSS) to the students by addressing them in the class in groups and also through one-to one interactions. This has led to improvement in learning outcomes and very low dropout rate.

Advanced learners are identified in each class and are encouraged, guided and groomed to excel in various curricular and co-curricular academic activities conducted at collegiate and intercollegiate level.

Quality of the teaching learning process is ensured through lesson plans, log books, lesson observations and formal and informal feedback from students. Feedback from moderators also helps in this direction. Along with effective delivery of curriculum, the College endeavors to develop skills in students through skill based courses and various enrichment activities. The College makes continuous efforts to upgrade the faculty as educators by encouraging them to participate in workshops, conferences and research activities either in the College or outside. The three tier training for staff, students and parents, which is one of the Best Practices of the College, is contributing significantly in enhancing learning outcomes.

The use of ICT tools to enhance the quality of teaching-learning supplemented with students' enrichment activities contribute to holistic development of students and thus prepare them for global challenges.

CRITERIA III - RESEARCH, CONSULTANCY AND EXTENSION

The Research Committee constituted post the second cycle of NAAC is actively contributing towards promoting research culture amongst staff and students thereby enhancing the research environment/ activities in the College.

Research activities are encouraged by providing adequate infrastructure, laboratory facilities, library facilities, ICT tools and flexible working hours/timings.

Since its last accreditation the college has made significant progress in terms of its research activities. In the last five years, the number of research projects, faculty pursuing/having completed Ph.D and research papers published in journals and conference proceedings have seen a substantial increase. Currently 7 students are pursuing Ph.D under two research guides. A research centre has been set up in Botany, approved and recognized by University of Mumbai, since 2014-15.

The College library has a good number of books, journals, INFLIBNET package, digital section, reprographic facility and free internet facility for staff and students. The college also hosts at least one International/ National level Conference every year. The themes of two conferences organized were in line with UN declaration for the year. The institution encourages faculty members to utilize their expertise in providing consultancy services. Department of Botany has signed two consultancy agreements.

Extension activities are promoted by the institution through the dynamic and popular NSS and LLE units. The activities carried out by these units not only inculcate value systems among students but also contribute to national development. The efforts and activities of these units have been well appreciated by University of Mumbai and other stake holders.

CRITERIA IV - INFRASTRUCTURE AND LEARNING RESOURCES

The institution ensures continual improvement in the infrastructural facilities to enrich the teaching-learning process, though there are constraints related to physical infrastructural growth, being located in a metropolitan city.

The Collegewithin its campus has, apart from lecture rooms, a well equipped air-conditioned auditorium with a seating capacity of 600, audio-visual room, an air-conditioned staff room, office and examination room, a well stocked library, a garden having a section of medicinal plants, a botanical shade house,

playground, gymnasium, separate boys' and girls' common rooms, a canteen and a Nestle snacks corner.

To ensure safety and security of staff and students, College has placed fire extinguishers at all strategic locations, Fire alarm system for the entire building, collapsible gates at various locations and CCTV in class rooms, laboratories and all other strategic places.

Towards health and hygiene, college has water coolers fitted with water purifiers on each floor, first aid boxes at various locations and ramp and railing for the physically challenged and clean washrooms. The college has a sanitary napkin vending machine installed for girl students.

Annual Maintenance Contracts are given for the facilities needing regular maintenance including the overhead water tank. The building is insured against natural calamities, fire and theft.

As far as IT infrastructure is concerned, the college is equipped with adequate computers having internet connection, LCD, Smart Boards and mikes for classrooms. Uninterrupted electricity supply is ensured in the campus with the help of a generator connected with the entire building and also inverter in the computer/IT labs.

The amount spent on physical and IT infrastructure has grown over the years. The campus is wifi-enabled and has requisite software for its administrative and academic activities. The institution endeavors towards providing quality infrastructure and learning is in line with promoting the use of technology and quest for excellence.

CRITERIA V - STUDENT SUPPORT AND PROGRESSION

At Ratnam College, learning is a way of life. Students have always been the focus of all its activities. The College strives hard towards holistic development of students by providing a conducive and enriching learning environment with appropriate amenities of campus life. The College renders financial assistance to economically backward meritorious students through its

Students' Endowment Fund. The College also has a special cell to guide/assist the reserved category students to avail the benefits under GOI freeship/scholarship schemes. The library of the College through its Book Bank scheme provides text books to needy students. For differentlyabledstudents the college has facilities like special washrooms, ramps and railing at the side of staircase. Various committees like Grievance Redressal Cell, Anti-Ragging Committee, Internal Complaints Committee for Offence against Women in the Premises, Women's Development Cell have been constituted as per the guidelines of the University to address issues related to students' well being. A professional Counsellor is also available to attend to the personal, academic and psychological problems that the students face. The College also has the system of having a TeacherMentor class wise who takes care of the students in all possible manner. To provide emergency medical help, the college has signed an MOU with the nearby Central Hospital and also has an on-call doctor facility The College also bears the medical expenses of some needy students. The NSS and LLE Units of the College take up activities beneficial for the student's holistic development and also for the neighboring community.

Workshops and training programmes are organized for the students preparing for various competitive examinations equipping them with the career oriented skills. Seminars, workshops and interactive sessions with eminent academicians/ professionals of different industries are also organized for students. The theme based Monthly Drives instill human values in our students and make them socially responsible. The College also has a very active placement cell which invites companies with good reputation for placementsand also arranges for pre-placement training programmes.

DepartmentalClubs/ Associationshelp to develop skills and nurture talent amongst students through organising various events. Inter-collegiate events like MANTRA, MANZIL, ZERO GRAVITY, SCI-TREK, TALENTUEUX have become annual features and have grown in terms of number of events and participation over the years. The Class Day Celebrations including the Prize Distribution Function to a great extent not only motivate students but also develop co-ordinating, organizing and leadership skills amongst students.

College appoints coaches for various sports and games. The students are also encouraged to participate in various events conducted at the inter-collegiate level. The numerous student support and enrichment activities of the College have ensured consistently excellent results at the University Examinations and also holistic development of students. The College has a very proactive Alumni Association, ready to remain connected with the college in various capacities and render necessary assistance.

CRITERIA VIGOVERNANCE, LEADERSHIP AND MANAGEMENT

Both the vision and mission of our institution are in tune with the objectives of the Higher Education Policies of the Government. The College is committed to the cause of inclusive education by facilitating learning and holistic development of students by providing effective resources and environment. It aims to be a learning organization that uses measuring and monitoring mechanism to continually enhance the effectiveness of its processes and educators, and thereby to differentiate itself as an institution of repute. The Leadership is committed to achieving the vision and mission by not only providing the necessary support but by also being proactive in initiating the needed systems and procedures. The College has a duly constituted IQAC and internal committees like Academic and Administrative Committee (AAC) and College Development Cell (CDC) which enable the Management/ Head of the institution to get adequate information in order to review the activities of the College & make necessary modifications as needed. The Management follows a participative leadership style giving sufficient freedom to the Principal and other officials in operational areas.

Management is also committed towards community development through its CSR initiatives. It has a School for the underprivileged children at Dharavi, a School for Hearing Impaired at Bhandup and manages a school in Parel for the Municipal Corporation of Greater Mumbai.

There is a perspective plan prepared by the IQAC which provides guidelines for annual planning. The NAAC Peer Team recommendations also are incorporated/addressed while preparing the Perspective Plan/Annual Plan.

The College has very effective mechanism to monitor the use of financial resources which is based on the annual budget, and is audited both by internal and external auditor. Human resource management is also efficiently done resulting in dedicated work-force, with lesser attrition rate, which is ready to help the College to achieve its objectives.

The College seriously believes in carrying out its Institutional Social Responsibility with commitment. It has brought about social changes through its institutional processes and has also brought about considerable changes in the economic conditions of the families to which our students belong and progressive cultural changes in the neighborhood community.

CRITERIA VII - INNOVATIONS AND BEST PRACTICES

Keeping the Mission, Objectives and the students' background in mind, the College endeavors to introduce innovations in various processes of the College. The norms of discipline are one of the best practices which have helped the College to achieve high levels in academic performance by the students. The other Best Practices of the College are:

- Organize at least one International /National Conference or Workshop each year.
- Three Tier Training Programme-for Students, Staff & Parents
- It is one of the unique features of our college to organize activities based on the Annual Theme announced by the Management at the beginning of the academic year so that they reflect a specific outcome.
- Monthly drives, Class day celebrations & Prize distribution.

Some of the innovations introduced in the recent past are setting up of the E-Cell and conducting activities to promote entrepreneurial skill amongst the students. The NES National Students' Start-up Fest was one such event in this direction. The College takes pride in having a dedicated College Song composed by staff and students which is rendered on all important occasions.

The College, as part of its Institutional Social Responsibility, has adopted various environment friendly practices and taken necessary steps for energy

conservation. The NSS volunteers conduct energy audit to check the energy consumption. They also guide the community people to do it. The College lays lot of importance on Clean and Green environment and hence within the space available maintains a healthy flora and fauna which includes some medicinal plants. A number of other green initiatives have also been adopted by the College through Nature Club and the NSS Unit like solid waste management, e-waste management, promoting lesser use of plastic, installation of LED lights and Solar Panels.

Ratnam College is committed towards holistic development of students through inclusive practices by providing appropriate teaching-learning environment using progressively upgraded infrastructural facilities and digital technologies and thereby leading to quality enhancement. Despite the limitations within which we work, we at Ratnam College strive to contribute towards National Development by making our students academically sound, holistically groomed and socially responsible.

SWOC Analysis

Strengths:

- Effective Teaching Learning Process with emphasis on student enrichment activities and use of ICT tools leading to academic excellence.
- Committed, motivated & responsible faculty towards their duties with emphasis on holistic development of students.
- Disciplined staff & students.

Weakness:

- Limitations of infrastructure.
- Not adequate mobilization of resources from external agencies.
- Limited consultancy and college industry network.

Opportunities:

- To Introduce more need based courses (Masters & Ph.D. programmes).
- To undertake major Research Activities.
- To undertake more programmes towards women empowerment.

Threats/Challenges:

- To ensure full strength in the class in Arts & Science programmes.
- Motivating students to participate in sports/cultural activities and excel at state/national levels.
- To groom students' personality to suit the expectations of corporate sector in view of their social/economic background.

AWARDS & ACCOLADES



Best College Award (in Urban Area) from University of Mumbai -2013-14



**Best College Award for
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**Best NSS Programme Officer Award
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**Arogya World Healthy Workplace Award (Gold)-2016
from Arogya World India Trust**

1. Profile of the Affiliated College

1. Name and address of the College:

Name:	NES Ratnam College of Arts, Science & Commerce	
Address:	NES Complex, NHS Marg, Bhandup(West)	
City: Mumbai	Pin:400078	State: Maharashtra
Website:	www.ratnamcollege.org	email id: ratnam_college@rediffmail.com

2. For Communication:

Designation&Name	STD Code	Telephone number (Office)	Mobile	Email
Principal Mrs.RinaSaha	022	25951381 Extn: 211	9820300982	saharina55@gmail.com
Vice Principal Dr.NeelamDurani	022	25951381 Extn: 209	9819636426	ratnam_college@rediffmail.com
Steering Committee Co-ordinators Dr.Sunita Chahar	022	25951381 Extn:220	9969411124	sunitadchahar@gmail.com
Dr.LataSwaminathan		Extn: 230	9223392255	slata_p@nesism.in

3. Status of the Institution:

Affiliated College	<input checked="" type="checkbox"/>
Constituent College	<input type="checkbox"/>
Any other(specify)	<input type="checkbox"/>

4. Type of Institution:

a. By Gender

For Men	<input type="checkbox"/>
For Women	<input type="checkbox"/>
Co – education	<input checked="" type="checkbox"/>

b. By Shift

Regular	<input checked="" type="checkbox"/>
Day	<input type="checkbox"/>
Evening	<input type="checkbox"/>

5. It is a recognized minority institution?

Yes	<input checked="" type="checkbox"/>
No	<input type="checkbox"/>

If Yes specify the minority status (Religious / linguistic / any other) and provide documentary evidence

Linguistic Minority (Tamil)

6. Sources of funding:

Government	<input type="checkbox"/>
Grant-in-aid	<input checked="" type="checkbox"/>
Self-financing	<input checked="" type="checkbox"/>
Any other	<input type="checkbox"/>

7. a. Date of establishment of the college: 11.07.1983

b. University to which the college is affiliated / or which governs the college (If it is a constituent college)

University of Mumbai

c. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks (if any)
i. 2 (f)	28.12.1995	-
ii. 12(B)	16.05.2007	-

Certificates of recognition u/s 2 (f) and 12 (B) of the UGC Act enclosed

d. Details of recognition / approval by statutory / regulatory bodies other than UGC (AICTE/NCTE/MCI/DCI/PCI/RCI etc.)

N.A

8. Does the affiliating Act Provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

Yes No

If yes, has the College applied for availing the autonomous status?

Yes No

9. Is the college recognized?

a. by UGC as a College with Potential for Excellence (CPE)?

Yes No

b. for its performance by any other governmental agency?

Yes No

If yes, Name of the agency

University of Mumbai and date of recognition: 26.01.15

10. Location of the campus and area in sq. mts.

Location	Urban
Campus area in sq. mts.	3249 sq. mts.
Built up area in sq. mts.	864 sq. mts.

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

- Auditorium / seminar complex with infrastructural facilities

 ✓

- Sports facilities

Play ground	✓
Swimming pool	x
Gymnasium	✓

- Hostel

 x

- Residential facilities for teaching and non-teaching staff(give numbers available – cadre wise)

 x

- Cafeteria

 ✓

- Health centre

 ✓

First aid, Inpatient, Output, Emergency care facility, Ambulance:

College has First Aid Boxes placed at all strategic locations. Tie up with Hospital, Ambulance facility, On call doctor for emergency.

Health centre staff

Qualified Doctor Full Time Part Time ✓

Qualified Nurse Full Time Part Time

- Facilities like banking, post office, book shops

 ✓

(Indian Bank Branch inside the Complex)

- Transport facilities to cater to the needs of students and staff

 x

- Animal house

 NA

- Biological waste disposal

 NA

- Generator or other facility for management / regulation of electricity and voltage

 ✓

- Solid waste management facility

 ✓

- Waste water management

 x

- Water harvesting

 x

12. Details of programmes offered by the college (Give data for current academic year 2016-17.

S. No	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned student strength (FY Level)	No. of students admitted (FY Level)
1	Under Graduate	BA	3 yrs	H.S.C.	English	120	92
		B.Sc.	3 yrs	H.S.C	English	120	120
		B.Sc. (C.S.)	3 yrs	H.S.C	English	60	36
		B.Sc. (IT.)	3 yrs	H.S.C	English	60	30
		B.Com	3 yrs	H.S.C	English	240	261*
		BMS	3 yrs	H.S.C	English	60	68*
		B.Com (B & I)	3 yrs	H.S.C	English	60	58
2	Post Graduate	B.Com	2 yrs	B.Com/BM S/BBI	English	60	60
		M.Sc. (Physics)	2 yrs	BSc (Physics)	English	11	11
		M.Sc. (Analytical Chemistry)	2 yrs	BSc (Chemistry)	English	24	24
3	Ph.D.	Botany	4 yrs	M.Sc.	English	05	04
4	Certificate Courses	Conversational English	1 yr	H.S.C.	English	-	28
		Tourism & Travel Management	1 yr	H.S.C.	English	-	05
		Microprocessors & Microcontroller	1 yr	H.S.C.	English	-	14
		Nutrition & Dietetics	1 yr	H.S.C.	English	-	05
		Instrumental Analytical Technique	1 yr	H.S.C.	English	-	20
		Stock Market Operation Management	1 yr	H.S.C.	English	-	36
		Retail Management	1 yr	H.S.C.	English	-	25
5	Any Other	<u>YCMOU</u> 1.M.B.A	2 yrs	Grad.	English	- 30	10
		2. B.Com	3 yrs	H.S.C./		60	55
		3. B.A.	3yrs	P.E.P. (YCMOU)		60	32

* Permission obtained for additional seats from University of Mumbai

13. Does the college offer self-financed Programmes?

Yes No

If yes,how many?

14. New programmes introduced in the college during the last five years if any?

Yes	√	No		Number	4*
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*UG, PG& Ph.D. Programmes affiliated to University of Mumbai
Other than these programmes College has introduced 05 Certificate Courses affiliated to University of Mumbai and one UG programme affiliated to YCMOU

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty	Department	UG	PG	Ph.D.
Science	Zoology, Mathematics, Computer Science. & I.T.	✓	-	-
	Physics, Chemistry	✓	✓	-
	Botany	✓	-	✓
Arts	Economics, English, Political Science, History, Marathi and Sociology	✓	-	-
Commerce	Commerce	✓	✓	-
	Management Studies, Banking & Insurance, Accountancy	✓	-	-

16. Number of Programmes offered under (Programme means a degree course like BA, B.Sc., MA, M.Com)

a. annual system	-
b. semester system	11
c. trimester system	-

17. Number of Programmes with

a. Choice Based Credit System	11
b. Inter/Multidisciplinary Approach	-
c. Any other (specify and provide details)	-

18. Does the college offer UG and / or PG programmes in Teacher Education?

Yes No

19. Does the college offer UG or PG programme in physical Education?

Yes No

20. Number of teaching and non-teaching positions in the Institution

Positions	Professor		Associate Professor		Assistant Professor		Non-teaching staff		Technical Staff	
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC/ University/ state Government		01	19		19		13		19	
<i>Recruited</i>	-	01	01	18	2+1**	16	07	05	07	08
<i>yet to recruit</i>	-	-	-	-	-	-	01		04	
Sanctioned by the Management/ Society or other authorized bodies	-	-	-	-	14		08		02	
<i>Recruited</i>	-	-	-	-	02	09	02	06	01	01
<i>yet to recruit</i>	-	-	-	-	03***		-	-	-	-

*M-Male*F-Female**Ad-Hoc*** Managed by Visiting Faculty

21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent Teachers							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	-	-	-	10	01	03	14
M.Phil.	-	01	-	06	02	05	14
PG	-	-	01	02		09	12
Temporary Teachers							
Ph. D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	01	09	10
Part-time teachers							
Ph. D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-

22. Number of Visiting Faculty / Guest Faculty engaged with the College.

15 Visiting Faculty

23. Furnish the number of the students admitted to the college during the last four Academic years.

Categories	2012-13		2013-14		2014-15		2015-16	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	14	35	21	47	19	48	15	31
ST	01	02	-	1		2	-	01
OBC	25	57	22	39	36	35	39	52
Others (DT/NT/SBC)	03	09	01	03	03	06	04	20
General	542	942	558	968	632	1120	603	1081
Total	585	1045	602	1058	690	1211	661	1185
Total	1630		1660		1901		1846	

24. Details on student enrollment in the college during the current academic year:2016-17

Type of students	UG	PG	M.Phil.	Certificate Courses	Ph.D.	Total
Students from the same state where the college is located	1655	161	-	131	04	1951
Students from other states of India	26	01	-		-	27
NRI students	-	-	-		-	-
Foreign students	-	-	-		-	-
Total	1681	162	-	131	04	1978
				TOTAL		1978

25. Dropout rate in UG and PG (average of the last two batches)

UG PG

26. Unit Cost of Education

(a) including the salary component
 (b) excluding the salary component

27. Does the college offer any programme/s in distance education mode (DEP)?

Yes No

If yes,

a) Is it a registered centre for offering distance education programmes of another University

Yes No

b) Name of the University which has granted such registration.

c) Number of programmes offered

d) Programmes carry the recognition of the Distance Education Council.

Yes No

28. Provide Teacher-student ratio for each of the programme/course offered

S.No.	Programme	Teacher-Student ratio
1	B.A	1:24
2	B.Sc.	1:15
3	B.Sc(Comp. Science)	1:13
4	B.Sc. (IT)	1:15
5	B.Com.	1:77
6	B.Com.(B & I)	1:47
7	B.Com.(Accounts & Finance)	1:56
8	B.M.S	1:43
9	M.Sc (Physics)	1:11
10	M.Sc. (Chemistry)	1:24
11	M.Com	1:54

29. Is the college applying for

Accreditation: Cycle 1 Cycle 2 Cycle 3 Cycle 4

30. Date of accreditation

Cycle 1: 16th Feb 2004 **Accreditation Outcome/Result** A/86%

Cycle 2: 8th Jan 2011 **Accreditation Outcome/Result** A/ CGPA:3.10

Copy of accreditation certificate(s) and peer team report(s) enclosed

31. Number of working days during the last academic year.

241

32. Number of teaching days during the last academic year

189

33. Date of establishment of Internal Quality Assurance Cell (IQAC)

IQAC 14.6.2004

34. Details regarding submission of Annual Quality Assurance Reports

(AQAR) to NAAC.

AQAR (i) 08.11.2012

AQAR (ii) 19.12.2013

AQAR (iii) 30.12.2014

AQAR (iv) 01.03.2016

AQAR (v) 29.11.2016

35. Any other relevant data (not covered above) the college would like to include. (Do not Include explanatory / descriptive information)

Number of Students receiving Financial Assistance from College/ University/ Government/ other agencies.

1. Students' Endowment Fund

Year	No of Students benefitted	Amount (Rs)
2011-12	08	34650/-
2012-13	10	41,195/-
2013-14	05	24,005/-
2014-15	06	28,105/-
2015-16	01	2,450/-
Total	30	1,30,405/-

2. GOI Scholarship/Free ship

Year	Reserve Category(SC/OBC/VJNT) Number of Students benefitted	Amount (Rs)
2011-12	24	1,65,650/-
2012-13	30	1,83,035/-
2013-14	32	1,73,093/-
2014-15	29	1,67,565/-
2015-16	45	3,13,665/-
Total	117	10,02,963/-

3. Central Sector Scholarship (of Govt.)

Year	No of Students benefitted	Amount(Rs) (Rs.10,000 per student)
2012-13	41	4,10,000/-
2013-14	35	3,50,000/-
2014-15	66	6,60,000/-
2015-16	12	1,20,000/-
Total	154	15,40,000/-

30/12/95

UNIVERSITY GRANTS COMMISSION
BAHADUR SHAH ZAFAR MARG
NEW DELHI-2

F.No.F.8-27/93 (CPP-I)

Dated:

28 DEC 1995

The Registrar,
Bombay University,
Bombay-400032

Sub:- List of Colleges prepared under Section 2(f)
of the UGC Act, 1956-Inclusion of New Colleges.

.....

Sir,

I am directed to refer to your letter No.Aff/Recog./
5368 of 1995 dated 13rd October, 1995 on the above subject and
to say that the name of the following college has been included
in the above list under Non-Government college(s) teaching upto
Bachelor's Degree:

<u>Name of the College</u>	<u>Year of Actt.</u>	<u>Remarks</u>
N.E.S.'s Ratnam College of Arts, Science and Commerce, Bhandup, Bombay-400078 (Mrs. Kamla Balasubramania)	June, 1993	The College is not eligible to receive central assistance in terms of the rules framed under Section 12-B of the UGC Act, 1956.

The Indemnity Bond and other documents in respect of
the above College have been accepted by the Commission.

Yours faithfully,

B. Nahata
(B.S. NAHATA)
UNDER SECRETARY

Copy forwarded to:-

1. The Principal, N.E.S.'s Ratnam College of Arts, Science and Commerce, Bhandup, Bombay-400078.
2. The Secretary, Govt. of India, Ministry of Human Resource Development, Deptt. of Education, T-14 Section, N.Delhi.
3. Joint Secretary UGC Office, Industrial Chemical Laboratory Near Poona University, campus pune-411007.
4. All Officers/Sections in the UGC Office.
5. S.O., FD-III/CD-II Section, UGC New Delhi
6. Guard file.

D.D. Mehta
(D.D. MEHTA)
SECTION OFFICER

23236351, 23232701, 23237721, 23234116
23235733, 23232317, 23236735, 23239437

www.ugc.ac.in



विश्वविद्यालय अनुदान आयोग
बहादुरशाह जफर मार्ग
नई दिल्ली-110 002

UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110 002

F.8-88/2006 (CPP-I)

The Registrar,
University of Mumbai,
Mumbai-400 032 (M.S)

N. E. S. Ratnam College of Arts Science & Commerce Inward No. 13141 Dated 24-05-2007 Forwarded to... Initials of Clerk E

May, 2007

16 MAY 2007

Sub:- Declaring a College fit to receive Central assistance under Section 12-B of UGC Act, 1956- Ratnam College of Arts, Science & Commerce, National High School Marg, Bhandup (West), Mumbai-78 (M.S)

Sir,

I am directed to refer to the letter No. RC/7603/2007 dated 23.01.2007 received from the College on the above subject and to say that on the basis of information/documents now received from the Institution, "**Ratnam College of Arts, Science & Commerce, National High School Marg, Bhandup (West), Mumbai-78 (M.S)**" already included under Section 2 (f) of the UGC Act, 1956 under the head "Non-Government Colleges teaching upto Post Graduate Degree", is now declared fit to receive Central/UGC assistance in terms of Rules framed under Section 12 (B) of the UGC Act, 1956.

Yours faithfully,

(Mrs. Urmil Gulati)
Under Secretary

Copy to:-

1. The Principal, Ratnam College of Arts, Science & Commerce, National High School Marg, Bhandup (West), Mumbai-78 (M.S).
2. The Secretary, Government of India, Ministry of Human Resource Development, Department of Secondary Education & Higher Education, Shastri Bhavan, New Delhi-110 001.
3. The Secretary, Government of Maharashtra, Higher Education Department, Mumbai (M.S).
4. The Joint Secretary, UGC, Western Regional Office, Ganeshkhind, Poona University Campus, Pune (M.S)-411 007.
5. Publication Officer, UGC-Website, New Delhi.
6. Section Officer (F.D.-III Section) U.G.C., New Delhi.
7. All Sections, U.G.C, New Delhi.
8. Guard file.

Om Prakash
(Om Prakash)
Section Officer



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission

Certificate of Accreditation

*The Executive Committee of the
National Assessment and Accreditation Council
on the recommendation of the duly appointed
Peer Team is pleased to declare the*

*National Education Society's
Ratnam College of Arts, Science & Commerce*

Bhandup (W), Mumbai, affiliated to University of Mumbai, Maharashtra as

*Accredited
at the A level.*

Date : February 16, 2004



*K. S. Kulkarni
Director*

- This certification is valid for a period of Five years with effect from February 16, 2004
- An institutional score (%) in the range of 55-60 denotes C grade, 60-65 - C* grade, 65-70 - C** grade, 70-75 - B grade, 75-80 - B* grade, 80-85 - B** grade, 85-90 - A grade, 90-95 - A* grade, 95-100 - A** grade (upper limits exclusive).

Quality Profile

Name of the Institution : National Education Society's
 Ratnam College of Arts, Science & Commerce
 Place : Bhandup (W), Mumbai, Maharashtra.

Criterion	Criterion Score (C _i)	Weightage (W _i)	Criterion X Weightage (C _i X W _i)
I. Curricular Aspects	75	10	750
II. Teaching-learning and Evaluation	90	40	3600
III. Research, Consultancy and Extension	75	05	375
IV. Infrastructure and Learning Resources	87	15	1305
V. Student Support and Progression	85	10	850
VI. Organisation and Management	85	10	850
VII. Healthy Practices	87	10	870
		100	$\Sigma C_i W_i = 8600$

$$\text{Institutional Score} = \frac{\Sigma C_i W_i}{\Sigma W_i} = \frac{8600}{100} = 86.00$$

K. K. K.
 Director

**REPORT OF THE PEER TEAM ON INSTITUTIONAL
ASSESSMENT OF
NES RATNAM COLLEGE OF ARTS, SCIENCE AND
COMMERCE,
MUMBAI.**

Date: 28-29 Jan' 2004

SECTION: 1

INTRODUCTION

The Ratnam College of Arts, Science and Commerce opted to be assessed by the National Assessment and Accreditation Council, NAAC. Towards this end, it prepared a self study report and submitted the same to NAAC some times in October 2003. A peer team as indicated below was constituted by NAAC to validate the report after physical verification of the facilities and through interactions with faculties, students, guardians and alumni.

Composition of the Peer :-

1. Prof. C.K. Sharma (*Chairperson*)
Former Vice Chancellor,
A. P. S. University,
Rewa, Madhya Pradesh

2. Dr. M. Manickam (*Member*)
Dean – Faculty of Commerce
Professor & Head, Department of Commerce
Bharathiar University, Coimbatore

2. Maj. D. K. Nanda (*Member – Co-ordinator*)
Former Director,
College Development Council
Utkal University – Bhubaneswar, Orissa

Dr. Latha Pillai was the coordinator at NAAC

(Signature)
29-1-2004

The peer team visited the college on 28 – 29th January 2004 and its observations are as under:-

The Ratnam College of Arts, Science and Commerce and Management Studies/ came into existence during June 1983. The College was established by National Educational Society with a view to provide quality education to the children of the underdeveloped suburban area of Bhandup in Mumbai. The college is recognized under section 2f of the UGC ACT,1956 but yet to be covered under Section 12B of the said Act. Accordingly, it is deprived from any central government grant.

The Ratnam College is affiliated to Mumbai University. It is located in an urban area and the campus area measures 3249 sq.mts. It offers courses in Arts, Science, Commerce and Management Studies as well as two Diploma Management courses, 2 Post Graduation courses and a certificate course. It has a total student strength of about 1600 with permanent faculty strength of 33, temporary faculty of 6 and part time faculty of 6. The non teaching staff strength stands at 26. About 50% of the permanent faculty have M.Phil or Ph. D. degree.

It offers in house certificate course in Information technology and Maharashtra State –Certificate course in IT. It has collaboration with Indian Merchants Chamber, Mumbai.

It has a central library, computer center, Vehicle parking shed, Health center, sports facilities, canteen and offers various welfare schemes to students, teachers and non-teaching staff. The laboratories, boys and girls Common room are very well kept. The main office building has a modular structure and quite well organized. The Gymnasium is very well equipped and Air-conditioned. The staff common room is also Air-conditioned. There is a playground and a mini stadium. There appears to be no need of hostel facility since most of the students come from nearby locality.

We have carefully examined the self study report and visited all the departments. During visit we also glanced through additional information as supplied by various functionaries. We have interacted with the Management, Principal, Heads of all the departments, Faculty members, Librarian, guest faculties, alumnae, guardians and students. The programme options are generally in harmony with the goals of the college.

The budget analysis for the year 2002-2003 reveals that the college incurred an expenditure of Rs. 11.3 lakh of which salary component constituted 82.3 %,

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29-1-2004

maintenance and repair of buildings. The expenditure on purchase of books and that for laboratory have increased considerably during the last two years. The college has generated appx. Rs. 13 lakhs through self financing and other fund raising drives. The criterion wise analysis is stated as follows:

SECTION 2: CRITERION-WISE ANALYSIS

Criterion I: Curricular Aspects

Being an affiliated college of Mumbai University it has to follow the curricula as prescribed from time to time by the University. The range of program options are Bachelor in Arts, Bachelor in Science, Bachelor in Commerce, Bachelor in Business Management, Master of Science in Physics only with specialization in Electronics and Master of Commerce the specialization is in the area of Financial Accounting and Auditing. It also offers Diploma Courses in Business management and Export Import Management in collaboration with Indian Merchant's Chambers of Commerce. The Certificate courses offered are Basically in Information Technology. One such course is Maharashtra state Certificate in IT and the other is in-house certificate course in IT. At the Graduate level in Science and Humanities the subjects offered are generally conventional in nature with some flexibility in opting for combination of subjects as elective ones. The Graduate and Post Graduate Course in Commerce lays emphasis on Financial Accounting and Auditing and certainly can be considered as a skill oriented one. Bombay being a trade center, the Diploma Courses in Business management and Export Import Management are aptly chosen to equip the students to meet the market demand as well as self as for self employment.

With increasing penetration of Computers at offices as well as in homes the students passing out M.Sc. in Physics with specialization in Electronics – I (Micro processor and Micro Computer) can be gainfully employed. The certificate courses in IT are also geared towards generating employment opportunities.

The students at the Graduate level have the flexibility to complete the course in more than 3 years. Within the frame-work of the Bombay University Rules, there is no scope of horizontal mobility for the students to pursue courses across boundaries of disciplines. At present introduction of any new course by the university takes about a year. However, some faculty members of the college being members of Syllabus restructuring Committees of respective Board of Studies of Bombay University, have taken steps to introduce newer concepts in

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some subjects. As per curriculum of Bombay University certain courses of interdisciplinary approach are pursued.

At the graduate level in Humanities the First and second year students opt for three subjects as elective option. At the third year it narrows down to either one subject with 6 papers or two subjects with 3 papers in each of the subject. In B.Sc. at the first year, the students take 3 elective subjects and in the II yr. 2 in the final year they are required to take one subject only.

In non core options First year B.A provides for Hindi or Marathi Language and Second Year B. A. students are offered Elementary Quantitative Techniques or Travel and tourism. In third year, B. Com. and B. Sc students pursue many applied component papers.

The mission of the college being social upliftment of the student belonging to socially deprived section of the society, it has strived to impart quality education and skill oriented education so that the learners can be gainfully employed or can be self reliant.

There is appropriate mechanism to obtain feedback from academic peers on the teaching program. The employer also gets the feedback through well founded mechanism.

The college industry interaction is rather at a low key, it centers round visits of students to some industries and organization or workshop.

Criterion II : Teaching learning and evaluation

The admission policy is very transparent. Students are admitted on the basis of marks secured at the +2 level. However, considering the socio-economic background of the feeder area, the cut off mark is kept at a lower level. Weight age is given to students who have excelled in NCC, Sports and cultural activities. Tamil minority students, children of ex-servicemen, physically handicapped students are given preference. It also follows the reservation policy.

One of the notable feature of the college is that it help the students to select a suitable combination of subjects as well as to change from one stream to other through counselling by the Admission committee. The aptitude of students is tested during first and second year. Accordingly, they are guided for suitable course combination in the third year.

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Though the college does not offer bridge or remedial courses *per se* to the educationally disadvantaged students, to some extent this is addressed through tutorials and practical classes. Intensive training is given in communication skill by a variety of methods and extra classes are organized for the third year students who are academically weak as well as periodic examinations are conducted to assess their shortcomings. Adequate attention is given to advanced learners. There are number of schemes to encourage advanced learners. As special attention is given to advanced learners, some of the students have secured good rank at the final examination.

Lesson plan for the teachers is mandatory which is reviewed by the HOD and seen by the Principal every week. The courses have been unitized. The college supplements the lecture method with field visits, Elocution and debate, Seminar and Group discussion etc. The college does not have a central media facility to prepare teaching aids, but uses some audio-visual equipment which are in an air conditioned room.

While the number of working days for the college for the year 2002- stood at 230, that for teaching was about 180 on the average which is inclusive of extra classes. This has to be taken care off. Of the total teachers only 15.4 % are part time ones at the Graduate level. BMS course is offered by visiting faculties and no permanent teacher is in the rolls of the college.

The evaluation method is informed to the students at the time of admission. Care is taken to monitor the overall performance of the students and meritorious students are offered special coaching. Even the senior students take care of individual coaching to junior weak siblings.

Teachers are recruited as per the UGC norms keeping in view the University and State Governments directives. Inbreeding is not much. The college has freedom as well as resources to pay part time teachers. The teachers fill up self appraisal form as approved by the University and the students also provide their feed back. The college has organized seminars and workshops periodically in different areas. It encourages the teachers to attend orientation and refresher courses and seminars etc.. Four teachers of the college bagged award for imparting good quality teaching or for outstanding extension activities. Three teachers have participated in National level and 5 in international level seminars. 23 faculty members have attended refresher and orientation courses during the last 2 years.

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Criterion III :- Research , Consultancy and Extension.

The College does not take students for pursuing research. It has a provision to give project work to students and some teachers guide the students for M.Sc. project. However, teachers are encouraged to register themselves for Ph. D. degree and seven of the existing teachers are pursuing for Ph. D. degree. It is encouraging to note that two teachers of the college have been granted Rs. 25,000/- each for two minor research projects by the University of Mumbai.

In so far as consultancy is concerned, it's a good trend that some of the faculty members are appointed as auditors for the sister organizations of the Society and two teachers have opted to develop software for use by the college.

The college takes active part in NCC and a large number of extension activities. For student performing outstanding extension work, there are incentives. Bombay university has a scheme to award teachers who have done outstanding extension work. It actively participate in adult literacy programme through it Population Education Club. It has collaborated with GO and NGOs for extension activities. **The College bagged Best Extension award for the year 2002-03 and the Mumbai University honoured a teacher with best Extension Teacher Award. The college has a continuous record of outstanding performance in Extension work and community education. The Principal of the college has been awarded Dronacharya teacheraward by a Private organization recently.**

Criterion IV :- Infrastructure and learning Resources.

Over the years the college has constructed four floors having 37 rooms. It has a reasonably good ambience in terms of cleanliness and garden.. It utilizes three playgrounds. It has plans to build two more floors to meet the future academic growth. The infrastructure is maintained through AMC and day to day repair is done by in-house skilled employees. There are plans to connect all the computers through LAN. Steps are underway to strengthen the audio visual facilities to supplement class room teaching. The library has acquired National Geographic CD ROM's and Britannica CD's.

The infrastructure is optimally used and when idle, the same is utilized by outside agencies for conducting examinations / seminars. One good feature is that the library is kept open for ex-students of the college who prepare for various competitive examinations or pursuing higher studies. There are about 8014 books in the library and 906 Text books in book bank and each year about

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29-1-2004

200 text books and 280 reference books are added. The library remains open on all working days from 8 AM to 6 PM. The library is connected to other 2 libraries (British Council and USIS). There is a computer in the library but computerization of the library is not yet complete in all respect. The librarian has undergone 4 refresher courses out of which one is in TIFR. The college has a central reprographic facility. Teachers have access to Internet but for students the same is being attempted. Average issue is 100 per day and approx. 50-60 students use during the day time.

The college has a computer center and also a computer laboratory. In addition there are 17 computers in different departments. The total number of computers stand at 54. Most of the computers are P-IV or P - III with 124/ 64 MB of RAM. The Computer center remains open from 9 AM to 6 PM. With so many computers the college should go ahead to LAN these for optimal utilization. The teachers can also use these computers to develop teaching aids which has not been attempted. There is an extension counter of South Indian Co-operative Bank.

The students and staff are provided with various health services. The college has Air-Conditioned Gym and other facilities for indoor and outdoor games and sports. During last two years some students participated in the University sports. An air conditioned auditorium is in the process of completion.

CRITERION V :- Student Support and Progression

The percentage of students passing the final examinations after minimum period of study varies between 95 -100%

The drop out rate in Science stream is more compared to Arts and Commerce Progression to higher studies does not follow any steady pattern. Progression to Higher Studies remain at 50% on an average. Progression to employment appears to be better for Science students compared to Arts. During last 5 years only one student cleared the UGC -SET test, 5 have cleared GRE and TOEFL. Three students have passed CA Exam and one in CS. Though the college does not have an employment cell, the faculty members help the students in career counseling as well as personal counseling. The college keeps informed the students about various job opportunities/openings.

It appears that some firms approached the college authorities and have taken some students from the college for placement in these firms. But records in this regard are not maintained. The students in the college develop adequate skill to

*Reshama
29-1-2004*

be self-employed. There are reported cases about students graduating from the college have started their own business venture in diversified areas.

The college does not provide any financial aid to students. On the average annually about 10 students pursue their studies either through GOI scholarship or free ship

The college has an alumni association and its first get together was held only in August 2002. It has several proposals on hand but so far nothing seems to have been translated into action. The alumni are fairly well placed which was revealed by the departments. There is an academic calendar

The college publishes its prospectus annually which among other things spells out the admission policy and procedure.

It offers a variety of recreational opportunities to the students. Notable among these are the indoor and out door games, Nature club, Gymnasium and participation in various cultural activities. It has a well equipped audio-visual room.

CRITERION :- VI Organization and Management

The College has a well defined organizational mechanism for administration and monitoring of various activities. **It is Participatory in nature and is transparent.** The college collects feed back from the students and parents and the academic progress is closely monitored. It organizes periodic meetings of the parent-teacher to communicate the academic performance of the students. It has constituted a discipline committee to check the attendance of teaching and non-teaching staff. The Unfair Means Inquiry committee looks into any unfair means adopted by the students either in examination or otherwise.

All decisions of the managing committee have been implemented. The college is having deficit budget for the last two years.

The Accounts of the college is audited internally as well as through external agency. **One of the notable feature of the college it has appointed International Certification Service for auditing the college during the year 2001-2 and it has got ISO 9001:2000 certification, which is first of its kind for colleges in Maharashtra.**

It has a well built system to check the work efficiency of the non-teaching staff and the management takes adequate care to upgrade the professional skill of its non teaching employees.

The library fees and Gymkhana fees has been revised upward as prescribed by the University. The tuition fees of M.Sc students has been increased

The College has a formal grievance redressal mechanism.

The staffs of the College get loan from their GPF account and Bank loan with the certification from the college authorities. There are several committees for efficient functioning and the documents presented are very well displayed.

CRITERION VII:- Healthy Practices.

The college has a well-conceived mechanism for internal quality checks. The academic aspect is taken care through rigid adherence to Lesson Plans, Periodic Tests, Departmental meetings and monthly progress reports of the faculty. The college has made a mark in maintaining discipline. It maintains record of students attendance, and defaulters list is posted in the notice board as well as informed to their guardians.

It has attempted to restructure its courses keeping in view the market force as well as the aspirations of the learners. Accordingly it has planned its growth and equipped the infrastructure.

The college is well sensitized in the area of strategic planning, teamwork and participatory decision-making. Even in some cases the decisions of students, if prudent, are implemented.

The College has computerized some of its major activities like Admission, Examination work, Library and college accounts. However centralized computation is yet to be institutionalized. One good feature is that the college provides free internet browsing facility to its faculty. **This is a healthy attitude towards quest for knowledge.**

Healthy practices are followed to imbibe the basic values like Honesty, Punctuality, Cleanliness, Indian Culture and heritage among the students through a variety of programmes and activities. A sense of Compassion and Empathy is inculcated among students through organizing fund raising and donating the same to the needy people. Varieties of schemes are there to imbibe civic sense among students. It encompasses exposure of students to their voting right, duty to prevent environmental pollution, conservation of water and energy.

The students are exposed to seminars, personality development course, Olympiads and Talent search tests etc towards all round personality development.

The college takes adequate measures to fulfill its goals by introducing appropriate courses and towards this end has its short term plans to augment facilities and long term plans to develop the college, its infrastructure and State of the Art laboratory facilities. It strives to impart skill component so that the learners can forge ahead with self-employment.

It helps the community by way of sensitizing them with a variety of nationally Sponsored programmes like AIDS awareness, Polio Vaccination, Early detection of Cancer through participation with Tata Memorial Hospital to name a few.

P. T. O.

SECTION: 3

OVERALL ANALYSIS

The Peer Team after going through the Self-study report and after visit to various academic and physical facilities is of the opinion that the college has earned a reputation for the sense of Discipline to younger generation.

The Peer Team would like to commend the institution in the following areas:

- Encourage and support given by the management to the institutions
- Dedication and commitment of the faculty and non-teaching staff
- Effective leadership and good human relationship resulting in efficient team work.
- Facilitating and promoting student participation in co-curricular activities, social work, community oriented work, personality development programme and cultural activities.
- Facilitating the students to be placed in part time jobs after study hours in case of needy and meritorious students after liaising with different organization.
- The college has got ISO 9001:2000 certifications from the international certification services.
- The college management has been successful in raising finance for future development through donations. This has been of great strength to the programs of the college. The college offers a no. of programme at UG and PG levels in areas of contemporary interest like Computer Science, Management Studies and Diploma in Export & Import Management and Business Management.
- The teaching faculty of the college are generally devoted and committed in undertaking many useful activities like field visits, educational tours, exhibitions, seminars, intercollegiate contest etc, other than their normal work and also arrange conferences and workshops to bring eminent academia from other famous institutions in Mumbai like IIT, TIFR, BARC etc.

The Peer Team would like to suggest the institution to consider :

- The college may explore the possibility of developing skills through OJT (On the Job Training) with GO and private sector firms so that the learning becomes more intensive and enjoyable
- Placements needs to be strengthened through campus selection.
- Formal mechanism of collecting feedback from students about self appraisal of teachers be activated at regular intervals

- More teachers may be encouraged towards research work or minor projects be undertaken in order to extend for newer knowledge.
- The college may vigorously pursue grant of permanent affiliation from University of Mumbai in order to be eligible under 12-B of UGC act as early as possible and seek autonomous status.
- The alumni may play a proactive role in the overall development of this institution.
- Sports activities may be geared up further specially with reference to participation by girls.
- The linkages with industries need to be processed.

The Peer Team is impressed by the progress made by the college so far and the ambience of this institution. The Peer Team wishes the college all the best in its forward march to achieve quality in all sorts of activities. It records its deep appreciation for the whole hearted co-operation, support and goodwill extended to it by the management, the Principal and all the constituents of the college.

(Prof. C. K. Sharma)
Chairperson

C. K. Sharma
29-1-2004

(Prof. M. Manickam)
Member

M. Manickam

(Major D. K. Nanda)
Member Co-ordinator

D. K. Nanda
29.1.2004

I agree with the observations and recommendations made by the Peer Team in this report.

Mumbai
January 29, 2004



Rina Saha
(Mrs. Rina Saha)
Principal

NES Ratnam College of Arts, Science & Commerce
Bhandup, Bombay-400 078



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission

Certificate of Accreditation

*The Executive Committee of the
National Assessment and Accreditation Council
on the recommendation of the duly appointed
Peer Team is pleased to declare the
National Education Society's
Ratnam College of Arts, Science and Commerce
Bhandup (W), Mumbai, affiliated to University of Mumbai, Maharashtra as
Accredited
with CGPA of 3.10 on four point scale
at A grade
valid up to January 07, 2016*

Date: January 08, 2012.1



Director
Director

EC/SA/RAR/001-05



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NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

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Quality Profile

Name of the Institution : National Education Society's
Ratnam College of Arts, Science and Commerce
Place : Bhandup (W), Mumbai, Maharashtra

Criteria	Weightage (W _i)	Criterion-Wise Grade Point Averages (C _i GPA)	W _i X C _i GPA
I. Curricular Aspects	050	3.00	150
II. Teaching-Learning and Evaluation	450	3.00	1350
III. Research, Consultancy and Extension	100	2.70	270
IV. Infrastructure and Learning Resources	100	2.95	295
V. Student Support and Progression	100	3.60	360
VI. Governance and Leadership	150	3.36	504
VII. Innovative Practices	050	3.40	170
Total	$\sum_{i=1}^7 W_i = 1000$		$\sum_{i=1}^7 W_i \times C_i \text{ GPA} = 3099$

$$\text{Institutional Score} = \frac{\sum_{i=1}^7 (W_i \times C_i \text{ GPA})}{\sum_{i=1}^7 W_i} = \frac{3099}{1000} = \boxed{3.10}$$

Grade =

Descriptor =

Date : January 08, 2011



H. H. H. H.
Director

- This certification is valid for a period of Five years with effect from January 08th 2011
- An institutional CGPA on four point scale in the range of 3.01 - 4.00 denotes A grade (Very Good), 2.01 - 3.00 denotes B grade (Good), 1.51 - 2.00 denotes C grade (Satisfactory)
- Scores rounded off to the nearest integer

EC/54/3.A.3/126

**PEER TEAM REPORT ON INSTITUTIONAL
RE-ACCREDITATION**

OF

**NES RATNAM COLLEGE OF ARTS, SCIENCE AND
COMMERCE
MUMBAI, MAHARASHTRA**

06 – 08 September, 2010

**National Assessment and Accreditation Council
Bangalore**

**PEER TEAM REPORT ON INSTITUTIONAL RE-ACCREDITATION
OF NES RATNAM COLLEGE OF ARTS, SCIENCE AND
COMMERCE, MUMBAI, MAHARASHTRA**

SECTION 1. GENERAL INFORMATION	
1.1. Name & Address of the Institution	NES Ratnam College of Arts, Science and Commerce NES Complex, NHS Marg, Bhandup(West), Mumbai-400078
1.2. Year of Establishment:	11.07.1983
1.3 Current Academic Activities at the Institution (Numbers):	
➤ Faculties/Schools:	Arts, Science and Commerce
➤ Dept. / Centres:	7 6 6
➤ Programmes / Courses offered	PG 2 UG 6
➤ Permanent Faculty Members:	37
➤ Permanent Support Staff:	Technical 11 Administrative 12
➤ Students	1557
1.4. Three major features in the institutional Context	<ul style="list-style-type: none"> • Linguistic minority Institution • Serving the under developed area of Mumbai • Large number of female students outnumbering boys.



1.5. Dates of visit of the Peer Team	06-08 September, 2010
1.6. Composition of the Peer Team which undertook the on-site visit: Chairperson: Member: Member Co-ordinator: NAAC Coordinating Officer:	<p>Prof. B. L. Chaudhary (Former Vice-Chancellor, Mohanlal Sukhadia University) Professor, Department of Botany University College of Science Udaipur-313001, Rajasthan</p> <p>Dr. Chitralekha Chouhan Principal Govt. M.H. College of Home Science and Science for Women(Autonomous) Nepier Town, Jabalpur-482008</p> <p>Prof. D. Shrijay Devaraj Urs Professor, Institute of Development Studies University of Mysore Leela Vihar, Manasagangotri Mysore-570006, Karnataka</p> <p>Dr. Sujata P. Shanbagh Assistant Advisor, NAAC Bangalore</p>



SECTION II: CRITERION WISE ANALYSIS	
<p>2.1. Curricular Aspects:</p> <p>2.1.1. Curriculum Design & Development:</p>	<ul style="list-style-type: none"> • Being an affiliated college of Mumbai University, the curriculum designed by the university is followed. • Six teachers contribute towards designing syllabi as members of BOS. • Motto is to learn, live and lead. The institution is working to achieve this motto.
<p>2.1.2 Academic flexibility:</p>	<ul style="list-style-type: none"> • A range of options available in all three faculties. • Horizontal mobility is allowed for BMS and B.Com (B&I) students. • Five self financing courses.
<p>2.1.3 Feed Back on curriculum</p>	<ul style="list-style-type: none"> • Appropriate mechanism for feedback from students available. • Feedback from alumni, parents and academic peers is also sought.
<p>2.1.4 Curriculum update</p>	<ul style="list-style-type: none"> • The syllabus is revised by the Mumbai University from time to time. • Adequate care is taken to inform the students about emerging trends and contemporary issues.



<p>2.1.5. Best practices in Curricular Aspects :</p> <p>2.2 Teaching learning and Evaluation:</p> <p>2.2.1 Admission process and student profile:</p> <p>2.2.2. Catering to the diverse needs:</p> <p>2.2.3. Teaching learning process:</p>	<ul style="list-style-type: none"> • Organizing workshops for implementing revised syllabus. • Quest for excellence through voluntary internal and external audits. • Admission is made on merit basis. • Publicity is through prospectus and website. • Linguistic minority (Tamil) is given reservation as per rules. • Slow and advanced learners are identified and extra support is provided through seminars to advanced learners to excel better. • Mentoring of students by teachers. • Students have the option for selecting subjects in TY based on their past performance in the earlier years. • Annual academic calendar is prepared and followed meticulously. • Lecture method is predominantly followed with the use of OHP. 5 LCDs available is utilized by the faculty regularly for teaching. • Periodical tests are conducted for all classes on regular basis.
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Criteria-wise Inputs

Criteria I – Curricular Aspects



International Conference - Department of Physics (2015-16)



**International Conference -
Departments of Humanities and Commerce (2012-13)**



**Workshop on Revised Syllabus
Department of Chemistry (2014-15)**

**Workshop on Revised Syllabus
Department of Mathematics (2015-16)**

CRITERION-I: CURRICULAR ASPECTS

1.1 CURRICULUM PLANNING AND IMPLEMENTATION

1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

Vision: To become an autonomous institution which will be a trend setter in higher education having strong national and international linkages.

Mission: The College aims at inclusive education with emphasis on holistic development of the students by providing quality education and preparing them to contribute to social development.

The Vision and Mission of the Institution are communicated to all its Stakeholders through:

- Prospectus
- Institution website (www.ratnamcollege.org)
- Orientation Programmes for First Year students
- Parental Workshops
- Induction Training of the newly recruited faculty
- Displays inside the class rooms & at prominent places in the Institution premises.

The Institution works with a Motto '**Learn, Live and Lead**'

The objectives of the Institution are:

- To emphasise Inclusive education focusing on academic and socio-cultural upliftment.
- To bring about holistic development of the students through a number of students enrichment activities.
- To turn out disciplined and conscientious students through inculcating values
- To involve all stakeholders in the quality assurance process
- To keep pace with time and technology
- To build a strong Ratnam brand

1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).

- Teachers give Semester wise Plans for implementation of curriculum wherein periods allotted, teaching methods and revision methods are also incorporated.
- Log Book keep, record of everyday teaching details.
- Teachers confirm the completion of syllabus and extent of the revision taken through syllabus completion form submitted at the end of each semester.
- Teachers are deputed to attend workshops organized by Board of

Studies (University of Mumbai) on revised curriculum. In last five years, 30 faculty members have attended workshops based on revised syllabi. This helps them to get acquainted with the revised curriculum, get some resource material and guidelines for the effective implementation of the curriculum.

- College also organizes workshops on revised curriculum. In last four years three departments conducted workshops on revised syllabi.
 - *The Department of History in 2014-15*
 - *The Department of Chemistry in 2014-15*
 - *The Department of Mathematics in 2015-16*
- Remedial teaching for slow learners.

1.1.3 What type of support (procedural and practical) do the teachers receive (from the University and/ or institution) for effectively translating the curriculum and improving teaching practices?

- **Procedural**
 - Annual Plan outlining the time frame for completing the syllabus/ revision and the schedule of internal tests, semester end /preliminary examinations, prepared by the IQAC along with Examination Committee is made available at the beginning of the academic year.
 - Circulars/ Notices are brought out at regular intervals offering guidelines for implementing various tasks

Practical

Institution provides following facilities to staff for effective teaching:

- Audiovisual aids(OHP, LCD, Computer with internet, Wi-Fi at selected places)
- Smart Boards
- Well equipped laboratories.
- Teacher Resource Centre with PC having internet facility, printer & other materials for preparing teaching material.
- Library Resources (Reference books, INFLIBNET, Journals, CDs, Internet etc.) are upgraded from time to time as per the demands of revised syllabi.

University provides support in following ways:

- Orientation Programmes/ Refresher Courses are organized by Academic Staff College
- Short term skill specific courses are organized by the University.
- Workshops on revised syllabus are organized by the BOS appointed by the University in respective courses. Clear guidelines, including sample question papers, with respect to

the syllabus, are provided to the teachers attending the workshop. The BOS members are available for any further suggestions, doubts regarding the implementation of the syllabus.

1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.

- College organizes workshops on revised curriculum, for the benefit of the staff of colleges of affiliating University. In last four years three departments organised workshops on revised syllabi.
- Resource material based on the curriculum is developed and published by faculty members:
 - Mr Rajiv Mishra has co-authored 40 books for BBI, BMS and M Com programmes.
 - Ms Jia Makhija has authored 3 books for SYBCom (B&I), 2 books for SYBMS and 2 books for TYBMS.
 - Ms Jia Makhija has co-authored a book with Mr. Rajiv Mishra for FYBCom(B&I)
 - Ms Riya Rupani has authored 6 books for BBI,BMS and M.Com. programmes and co-authored 1 book on Ethical Science for Nagpur University.
 - MsNutanLokhande has co-authored, with Mr. Rajiv Mishra, 4 books for SYBCom and 3 books for FYBCom in Financial Accounting.
 - DrNithya S. has co-authored 6 books on the revised syllabus of SYBSc(Mathematics) and 2 books for TYBSc (Mathematics)
 - Dr. SunitaChahar has co-authored 2 books for FYBSc(Botany).
- Practical Handbooks are prepared by faculty members of Science departments.
- Discussions take place at department level meetings regarding delivery and division of curriculum among staff members based on the expertise of the concerned staff for effective implementation of the curriculum.

1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalisation of the curriculum?

The Institution ensures networking with industry, research bodies and the University related to the effective implementation of the curriculum through the following:

- Industrial visits/Study tours/ Library visits
- Faculty as members of Research Bodies/Academic Associations
- Guest lectures by Experts from the Industry/Academia

- NES National Student Start up Fest was organized in 2015-16 to facilitate direct interaction between students and the industry and thereby motivate self employment.
- Placement Cell organizes Workshops/ Seminars by recruiting agencies which expose the students to the requirements of the industry and also offer opportunities for campus recruitment.

1.1.6 What are the contributions of the institution and/or its staffmembers to the development of the curriculum by the University?(number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.)

The Institution is affiliated to the University of Mumbai, hence follows the syllabi prescribed by it and does not have the freedom to design and develop the same. The curriculum design and development are done at the University level by involving teachers of the various Institutions.

The following teachers have directly contributed towards syllabi restructuring:

- ✓ *Dr. Jayshree S. was Co-Convener of M.Sc. Zoology Part I Syllabus Revision Committee(2011-12) – MSc Paper III Semester II*
- ✓ *Ms. R. Vijaylakshmi was Member of Syllabus restructuring Committee in TYBA & MA History papers (2012-2013)*
- ✓ *Ms NirmalaKannan was appointed as the Convener of Syllabus Revision Committee for TYBA paper VI - Industrial and Labour Economics. (2013-14).*
- ✓ *Dr. LataSwaminathan was member of Syllabus Revision Committee for MHRM Paper of TYBCom in 2013-14*
- ✓ *Dr. Nithya S. was member of FYBSc, Mathematics, Paper I Syllabus Revision Committee in 2012-13; was member of SYBSc, Mathematics Paper III, Syllabus Revision Committee in 2013-14; was member, TYBSc, Mathematics, Paper IV, Syllabus Revision Committee in 2014-15*
- ✓ *Ms. Phebe K. has been on the Syllabus Revision Committee for Analytical Chemistry for the past three years:2013-14-FYBSc, Chemistry, Paper-I; 2014-15-SYBSc,Chemistry, Paper-I & 2015-16-TYBSc, Chemistry, Paper IV*
- ✓ *Ms. V. Lakshmi Prasuna was on the Syllabus Revision Committee, TYBSc, Chemistry Paper- II, 2015-16*
- ✓ *Ms Veena B. Kamat was Convener of Syllabus Revision Committee, TYBSc Paper I, 2015-16 and member, Syllabus Revision Committee, SYBSc Paper I, 2014-15*
- ✓ *Dr. AakankshaGawde is appointed member of the ad-hoc Board of Studies in Extension Work in May 2016 for three years.*

The teachers of the Institution are also invited for meetings held by Board of Studies for suggestions on Draft Syllabus before finalization. Feedback obtained by stakeholders (ref. 1.4.1) is communicated to the members of the Board of Studies and the Syllabus Restructuring Committees during meetings/ workshops/ one-to-one meetings.

1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating University) by it? If 'yes', give details on the process ('Needs Assessment', design, development and planning) and the courses for which the curriculum has been developed.

The Institution implements the curriculum developed by the University. Each department takes initiative to enrich the curriculum as per the requirements of the students and in response to changing trends in the respective subject.

However, for Certificate Courses, in addition to the prescribed syllabi faculty incorporates some more relevant recent topics to impart the much needed skill.

In addition to this Ms. Sangeeta Roy is involved in the curriculum development of St. Xavier's College, Mumbai (Autonomous) in the subject of Political Science.

1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?

- **Methods used in class room to ensure learning are** – group discussion, Powerpoint presentation, query/ problem solving sessions after teaching.
- **Extra coaching beyond college hours and during vacation.**
- **Remedial coaching for under performers.**
Under performers in each department are identified and special coaching is given through a carefully planned schedule
- **Revision**
To ensure learning by students, delivery of curriculum is supplemented by revision.
- **Internal Tests/assignments**
Periodical tests and assignments determine the extent of knowledge transfer, extent of revision and extra coaching to be undertaken.
- **Meritorious students** are given extra support in terms of further reading material, extra library cards, and opportunities for seminar presentations research projects.
- **Departmental co-curricular activities** are conducted on a regular basis to enrich the given syllabus and hone the varied skills and abilities of the students

1.2 ACADEMIC FLEXIBILITY

1.2.1 Specifying the goals and objectives give details of the certificate/diploma/ skill development courses etc., offered by the institution

Skill development Certificate Courses

<u>COURSE</u>	<u>OBJECTIVES</u>
Conversational English	To help the students develop effective communication skills in English and speak with a fair degree of fluency and confidence, thereby improving their prospects in the job market.
Tourism and Travel Management	The course provides in depth knowledge of national and international tourism and practical knowledge of various sectors of the travel industry. It aims to develop skills in travel and tourism to equip students for employment and self-employment in this sector.
Microprocessors and Microcontrollers:	The course enables students develop the skills required to handle advanced microprocessors and microcontrollers and enhance their job prospects.
Instrumental Analytical Technique	The course imparts knowledge about instrumental techniques. A hands on experience on instruments through visits to Industry/ Instrumentation Centres and Project work. It enhances their job prospects in industry.
Nutrition and Dietetics	The course helps students to get in depth knowledge about the importance of nutritional diet and nutritional disorders. Visits to Hospitals and Food Bazaars are organised to give practical exposure.
Stock Market Operation Management	The course gives students good hands-on experience of trading on the stock exchange. The Curriculum is well balanced to includes the theory and practice of trading.
Retail Management	The Course provides a conceptual foundation and insight on retail operations. It aims to acquaint the students with trends and technology in retail and to create awareness about Retail Management as a career option.

Skill Development ‘Programming, Analytics & Research’

(PAR) Programme of TISS

Objectives

- To enable students to gain employable skills while undertaking community work that brings about sustainable social change.
- Capacity building of the Youth to be responsible citizens.
- Position the Youth as Agents of Social and Economic Transformation.

- To help the youth gain Sustainable and Relevant Employable Skills along with their degree to find work after graduation.

1.2.2 Does the institution offer programmes that facilitate twinning/dual degree? If ‘yes’, give details.

No, our college does not offer such programmes. However college offers Certificate Courses for which students can enroll along with their Degree Programme.

1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability. Issues may cover the following and beyond:

- **Range of Core/Elective options offered by the University and those opted by the college**
- **Choice Based Credit System and range of subject options**
- **Courses offered in modular form**
- **Credit transfer and accumulation facility**
- **Lateral and vertical mobility within and across programmes and courses**
- **Enrichment courses**
- College offers range of core and elective options for undergraduate programmes (Ref. College Profile). This allows students academic flexibility in terms of selecting courses of their choice.

Core & Elective Options:

Foundation Course is a compulsory component of the curricula in the First and Second Years of Undergraduate Programmes.

Bachelor of Arts

Subject Combinations at First and Second Year	Options at Third Year B.A.
Any three courses from following options: 1. Sociology/ Marathi Literature 2. Economics / History 3. English Literature/ Political Science	1. Economics (6 courses) 2. Political Science (6 courses) 3. History and English Literature (3 courses each) 4. History and Marathi Literature (3 courses each) 5. History and Sociology (3 courses each) 6. Political Science and Marathi Literature (3 courses each) 7. Political Science and Sociology (3 courses each)

Elective courses offered at SY and TY levels

1. Elementary Quantitative Techniques and Travel & Tourism (Applied Component) in Second Year B.A.
2. ‘International Relations and Understanding Politics through Films’ in Third Year B.A. (Political Science)

3. 'Industrial & Labour Economics', 'Entrepreneurship and Small Industries Management' and 'Research Methodology' in Third Year B.A. (Economics)
4. 'Archaeology, Museology & Library Science' in Third Year B.A. (History)
5. 'Gender & Society' in Third Year B.A. (Sociology)
6. 'Grammar & the Art of Writing' in Third Year B.A. (English Literature)

Bachelor of Science: The Institution offers five subjects with the following combination

First Year B.Sc.	Second Year B.Sc.	Options at Third Year B.Sc.
Physics, Mathematics & Chemistry	1. Physics & Mathematics 2. Physics & Chemistry	1. Physics (6 courses) 2. Mathematics (6 courses) 3. Chemistry (6 courses)
Physics, Chemistry & Botany	1. Physics & Chemistry 2. Chemistry & Botany	1. Physics (6 courses) 2. Chemistry (6 courses) 3. Chemistry & Botany (3 courses each)
Physics, Chemistry & Zoology	1. Physics & Chemistry 2. Chemistry & Zoology	1. Physics (6 courses) 2. Chemistry (6 courses) 3. Chemistry & Zoology (3 courses each)
Chemistry, Botany & Zoology	1. Chemistry & Botany 2. Chemistry & Zoology	1. Chemistry (6 courses) 2. Chemistry & Botany (3 courses each) 3. Chemistry & Zoology (3 courses each)

Elective courses offered at TY levels

1. Drugs and Dyes in Third Year B. Sc. Chemistry (6 courses)
2. Environment Science in Third Year B. Sc. Chemistry/Botany, Chemistry/Zoology (3 courses each)
3. Electronic Instrumentation in Third Year B. Sc. Physics (6 courses)
4. Computer Programming and Systems Analysis in Third Year B. Sc. Mathematics (6 courses)

Bachelor of Commerce: (Financial Accounting and Auditing)

First Year B.Com.	Second Year B.Com	Third Year B.Com
<u>Core courses</u> 1. Accounting and Financial Management 2. Business Economics 3. Commerce	<u>Core courses</u> 1. Accounting and Financial Management 2. Business Economics 3. Commerce	<u>Core courses</u> 1. Business Economics 2. Commerce
<u>Allied courses</u> 1. Mathematics & Statistics 2. Environment Studies 3. Business Communication	<u>Allied courses</u> Business Law	<u>Special Course</u> Financial Accounting and Auditing

Elective courses offered at SY and TY levels

1. 'Direct and Indirect Taxation', 'Export Marketing', 'Marketing Research' and 'Computer System and Applications' in Third Year B. Com.
2. 'Advertising' in Second Year B. Com.

Bachelor in Management Studies

Core courses: Seven courses in first year, six in second year and seven in third year.

Elective courses offered at SY and TY levels

1. 'Consumer Behaviour' and 'Strategic Management' in BMS (III-Semester); 'Integrated Marketing Communication & Advertising' and 'Rural Marketing' in BMS (IV-Semester) for Marketing Group
2. 'Recruitment & Selection' and 'Motivation and Leadership' in BMS (III-Semester); 'Training and Development in HRM' and 'Change Management' in BMS (IV-Semester) for Human Resource Group
3. 'Service Marketing', 'E-Commerce & Digital Marketing', 'Sales & Distribution Management' and 'Custom Relationship Management' in BMS (V-Semester); 'Brand Management', 'Retail Management', 'International Marketing' and 'Media Planning & Management' in BMS (VI-Semester) for Marketing Group.
4. 'Finance for HR Resources & Compensation Management', 'Strategic Human Resource Management & HR Policies', 'Performance Management & Career Planning' and 'Industrial Relations' in BMS (V-Semester); 'HRM in Global Perspective', 'Organization Development', 'HRM in Service Sector Management' and 'Human Resource Planning and Information Systems' in BMS (VI-Semester) for Human Resource Group.

Bachelor in Commerce (Banking and Insurance)

Core courses: Seven courses each in first year, second year and third year.

No Elective course offered at FY, SY and TY levels

Bachelor in Commerce (Accounting and Finance)

Core courses: Two courses each in first year & third year and three courses in second year.

Elective course: Five elective courses in First year and four elective courses each in second and third year.

Bachelor in Science (Information Technology)

Core courses: Five courses each in first year, second year and third year.

No Elective course offered at FY, SY and TY levels

Bachelor in Science (Computer Science)

Core courses: Seven courses each in first year & second year and five courses in third year.

Elective Courses

Course on 'Principles of Web Designing & Technology' is offered at Third Year B.Sc

- Courses are either modular or unitized.
- As per the provisions of the course structure of the University of Mumbai, there is not much scope for horizontal mobility in the courses offered. However the University allows such mobility to BMS, B. Com. (Accounting and Finance) and B Com. (Banking and Insurance) students, whereby students can shift from one programme to another of the above programmes after completing First Year of the three year degree programme.
- College offers Masters Programmes to facilitate the progression to higher studies. Many B. Com. students seek admission to the M. Com. Programme of our college and are able to acquire Post Graduate Degree while pursuing their jobs. College has recently started Ph.D. programme in Botany.
- Teachers also guide/ coach students for competitive entrance exams for higher studies.
- The CBSGS has been implemented since 2011-12.
- Credit transfer and accumulation facility is allowed for students from other colleges taking admission to Second Year and Third.
- Students who are allowed to keep terms ('A.T.K.T.' system of promotion) appear for examinations for only those courses where they

were unsuccessful and are allowed to accumulate credits of courses which they have passed in earlier examinations.

- Elective options are carefully chosen and are aimed towards skill development. Other than the various Certificate Courses offered which help in skill development, College also offers a Skill Development Programme, PAR (Programming, Analytics & Research) conducted by TISS, Mumbai aimed at enabling students, through various projects, to acquire skills and competencies that would significantly enhance their employability.

- **YCMOU Programmes**

These programmes are conducted in distance mode of education and provide opportunities for completing higher education to those who have missed an opportunity to do so. It also allows the students to study while attending to service / business and household duties. Following programmes are offered at study centre in our college:

1. MBA
2. B. Com.
3. B. A.
4. Preparatory Education Programme

Preparatory Education Programme gives an opportunity to students who are out of conventional school system to enter the degree programmes of YCMOU.

1.2.4 Does the institution offer self-financed programmes? If 'yes', list them and indicate how they differ from other programmes, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.

The following self-financed degree programmes are offered in the institution.

- **B.Sc. (Computer Science)**
- **B.M.S.**
- **B.Com. (Banking and Insurance)**
- **B.Sc. (Information Technology)**
- **B.Com. (Accounting and Finance)**
- **M.Sc. (Physics)**
- **M.Com. (Financial Accounting and Auditing)**
- **M.Sc. (Analytical Chemistry)**

These programmes differ from others in following ways:

- **Admission:** The number of seats available is less compared to the aided programmes and seats are allotted on the basis of norms prescribed by University for admission. In case of B.M.S./B.B.I./ B.A.F./ B.Sc.(IT) Programmes, there is requirement of minimum passing percentage which is 45% for open category and 40% for reserve category at HSC level for admission. There is no such requirement of minimum pass percentage for conventional B.A., B.Sc. and B.Com. Programmes.

- Curriculum: The curriculum for all the programmes is prescribed by the University. Curriculum for B.M.S./ B.A.F./ B.Com.(Banking & Insurance)/ B.Sc.(CS)/ B.Sc. (IT) programmes is different in the following respects:
 - Semi-professional course structure
 - Greater emphasis on Project Work
 - Internal Assessment Scheme for evaluation of performance
- Fee Structure: Fee prescribed by the University is higher as compared to that for aided programmes.
- Teacher Qualification:
 - ✓ The minimum qualification for teachers appointed for U.G. programmes is Master's degree in their respective area of specialization. Experienced professionals from other academic institutions and industry experts are invited as visiting faculty.
 - ✓ Teachers appointed for P.G. courses should be preferably recognized P.G. teachers of University of Mumbai.
 - ✓ Teacher registering students for Doctoral Studies should be recognized Ph.D. Guide of University of Mumbai/ other University.
- Salary: Salary paid to the teachers is commensurate with their qualification and professional experience.

1.2.5 Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If 'yes' provide details of such programme and the beneficiaries.

Yes

- Skill based Certificate Courses affiliated to University of Mumbai are conducted.
- College conducts workshops for guiding students to crack competitive examinations.
- Skill Development programme, PAR (Programming, Analytics & Research) is conducted in college by TISS.
- Training programmes are conducted for students by the college under 3-tier training programme, inviting external resource persons or by internal resource persons on topics like Communication Skills, Personality Development, Interview skills etc.

Students from undergraduate programmes are the beneficiaries of the above mentioned programmes.

- Students are also encouraged to develop and consolidate their skills by enrolling in programmes/courses offered by other institutions.
- Four students are involved in a Skill development programme by NIUS (National Initiative on Undergraduate Science), a major initiative of **HBCSE(TIFR)** concerning tertiary science education in India.

- Two students from Commerce were recommended and completed the BAP – EXEC, an online course by National Skill Development Corporation implementation through ArthaVidya Programme in September 2015.
- A team of eight students of B.Sc. were given hands-on training in compact Biogas Technology (setting up of a biogas plant) at Appropriate Rural Technology Institute (ARTI), a Rural Entrepreneurship Development Centre at Phaltan, Dist. Satara, Maharashtra on April 27, 2016.
- Students and Teachers of the Mathematics Department participate in Enrichment Programmes organised by National Board for Higher Mathematics (NBHM), Department of Science and Technology (DST) and HBCSE (Homi Bhaba Centre for Science Education).
- **Mathematics Talent and Training Search Programme:** This training programme is funded by the National Board for Higher Mathematics-NBHM. Following are the programmes students regularly participate in:
 1. Mini MTTS, Mumbai.
 2. MTTS-Level O and 1(National Level)
 3. NPDE-TCA- a student training for Mathematics & Applications: This is organized by IIT Bombay and sponsored by NBHM & DST
 4. Madhava Competition at HBSCE, Mumbai, funded by NBHM.
- Eight students of FYBA (English Literature) were sent to participate in ‘Knowledge USA Quiz’ organised by The American Library U.S. Consulate General, Mumbai on August 7, 2015
- Ninety one students participated in APTIS: Forward Thinking English Testing conducted by British Council on 23rd, 24th and 25th September 2015.
- Department of Physics regularly conducts the NGPE (National Graduate Physics Examination), Indian Association of Physics Teachers.
- Department of Chemistry regularly deputed UG students for:
 - Aptitude Test conducted by Indian Chemical Society.
 - CONTECH (Concept Test in Chemistry) conducted by ACT (Association of Chemistry Teachers)

1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice” If ‘yes’, how does the institution take advantage of such provision for the benefit of students?

- Though there is no such provision of combining the conventional face-to-face and Distance Mode of Education in terms of choice of courses, University allows student to shift from face-to-face to

Distance Mode of Education and vice a versa during the Three Year UG Programme after completing the academic year of First Year or Second Year of the Programme.

- College offers Distance Education Programmes of YCMOU.

1.3 CURRICULUM ENRICHMENT

1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programmes and Institution's goals and objectives are integrated?

The institution offers academic programmes in line with its goals and objectives. A wide range of Undergraduate, Post Graduate and Certificate Courses are offered to suit the needs of different sections of the society irrespective of their gender, caste, creed and religion which ensures access and equity. The following efforts are made to ensure that the academic programmes and Institution's goals and objectives are integrated:

- delivery of the curriculum by teachers in learner centric ways, involving students in curriculum related group discussions, debates, seminar presentations, etc.
- organizing Guest Lectures by academic/industry experts on topics related to the curriculum for students to enhance the learning.
- organizing Workshops/Seminars/Conferences on relevant themes for teachers.
- introducing Skill based Certificate Courses.
- organizing Student Training Programmes
- organizing various student enrichment activities bringing out holistic development of students and also leadership qualities.
- blending values like discipline, commitment towards the task with curriculum delivery using learner centric approaches contributes towards turning out conscientious citizen.
- Intra and Inter-collegiate competitions on curriculum based themes.
- involving student in activities based on socially relevant issues under NSS and LLE programmes making them socially responsible.

1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?

Following efforts are made by the institution to enrich and organize the Curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment:

- Curriculum based Guest Lectures, intra and intercollegiate competitions/ workshops /seminars are organized by various departments as enrichment activity
- field visits / industrial visits/ study tours/ visits to libraries by different departments for experiential learning.
- use of technology in delivery of curriculum (OHP, LCD, Computers, Internet, etc) to move with time and technology.
- PAR programme by TISS.
- to give exposure in the field of research, students are involved in subject based research projects and are encouraged to participate in Avishkar Research Convention, University of Mumbai.
- College organized NES National Student Startup Fest to give exposure to the students in the field of entrepreneurship.
- Theme based/ innovative intra/ inter collegiate competitions organized also add to students' learning experience.
- Event management by students in inter-collegiate and intra collegiate competitions help in developing organizational skills / leadership qualities.
- As representatives of Cultural Forum, Gymkhana Committee, Department Clubs and Forums and of respective class, students acquire managerial skills
- As editors of College Newsletters/ Magazine etc students develop writing skills.

1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?

- Gender issues and Human Rights are important curricular components of Foundation Courses for FY/SY, & also Sociology and Political Science students.
- Environment Studies course for FYBCom students deals extensively with climate change and other major environmental issues. The Elective option of Environment Science Paper in TYBSc (Botany/ Zoology) covers environmental issues.
- The Institution chooses appropriate specializations and applied component subjects from the choice offered by the University of Mumbai to ensure that the curriculum caters to inclusion/ integration of Information and Communication Technology (ICT). It also prepares the students for employment opportunities/ higher studies and exposes them to new frontiers of knowledge
 - M. Sc. (Physics) with specialization in Microprocessors and Microcomputers

- B.Sc. with specialization in Computer
- B.Sc. with specialization in Information Technology
- In addition a number of programmes initiated by NSS, Women Development Cell and Nature Club sensitize students to environment and gender related issues and concerns.
- To create awareness about individual rights and sense of responsibility towards fellow citizens, the department of Political Science observes Constitution Day and Human Rights Day.
- Some of the activities conducted to sensitize students to environment problems and concerns are:
 - Indoor Gardening by Nature Club
 - Solid Waste Management by NSS
 - Energy audit by NSS
 - e-waste management
 - Organic gardening by Nature Club
 - ‘Avoid use of plastic bag’ campaign
 - NSS students make paper bags and distribute them to the nearby shops

1.3.4 What are the various value-added courses/enrichment programmes offered to ensure holistic development of students?

- **moral and ethical values**
- **employable and life skills**
- **better career options**
- **community orientation**

Following efforts are made towards holistic development of students

- **Moral and ethical values**
- ✓ Inculcating sound, moral and ethical principles in students is an ongoing process. Discipline is top priority and informs the tone and tenor of all activities in the college campus and beyond. Punctuality, regularity in attendance, self-control, accountability for one’s actions, basic courtesies in interaction with elders and peers are insisted upon as integral to both character development and academic progress.
- ✓ Starting the session with prayer/ National Anthem.
- ✓ Celebrating the days of national importance with huge participation of students.
- ✓ NSS students participate in picking up paper flags from the neighborhood on 15th August and 26th January.
- ✓ The class-in-charges/mentors of first year, second year and third year classes monitor the development of the desired values in students. They supervise monthly drives undertaken by students

who prepare and participate in debates, discussions, skits, photo feature, and posters focusing on patriotism, health and hygiene, time management, co-operation and so on.

- ✓ Class day celebrations at the end of each semester involve programmes that sensitize students to the needs of marginalized groups including elderly citizens and orphans.
- ✓ The screening of carefully selected and edited films by the departments of Arts and the movie club MUSE of Commerce department are intended to shape the character of the students and enable them to evolve into sensitive human beings and responsible citizens.
- ✓ Research projects based on Environment Studies and Foundation Courses not only groom the students to respond constructively to environment and social problems but also train them in the merits of team management, leadership, tolerance and collaboration.

- **Employable and Life Skills**

The employability potential in students is nurtured through different skill based workshops including workshop on communication skills, personality development, theatre, film making, cake baking, and cyber crime organized by different departments. In addition research based projects under Foundation Course and Environment Science and for University Research Convention Avishkar; mock interviews and group discussion sessions under Business Communication and student research training by BARC groom the students in organizational skills, collaborative research and team work.

- **Better career options:**

The Placement Cell/ Students' Council organize career exhibitions and workshops on career options at regular intervals to acquaint the students with the needs and requirements of the industry and to facilitate campus interviews by recruiting agencies.

- **Community Orientation**

The various programmes conducted by NSS, LLE and the Disaster Management Cell throughout the year sensitise the students to needs of the community and train them to adopt a constructive, responsible and proactive approach towards making the community a better place to live in.

1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stake holders in enriching the curriculum?

Following are a few examples of use of the feedback from stakeholders in enriching the curriculum:

- ✓ Inclusion of latest acts/ laws and issues in industrial economics and also incorporation of impact of industrial proliferation on

environment in Third Year Economics paper (Industrial & Labour Economics)

- ✓ Inclusion of Alderfer's theory of motivation in MHRM paper V and realigning of modules in MHRM paper VI to give a better flow to the contents of the curriculum was done for Third Year Commerce.
- ✓ Project work for Third Year B. Sc.(Mathematics) curriculum of Computer Programming & System Analysis paper was merged with the practical component of the paper in new semester system introduced in 2012 -13.
- ✓ For First Year and Second Year B. Sc. Mathematics curriculum was revised to align with international standards and to match the requirements of students choosing to do post graduate studies abroad.

1.3.6 How does the institution monitor and evaluate the quality of its enrichment programmes?

The Institution monitors and evaluates the quality of its enrichment programmes through written/ oral feedback collected from the participants at the end of each programme.

1.4 FEEDBACKSYSTEM

1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?

Staff members are involved in syllabus restructuring/design as members of the syllabus restructuring committee/ member of BOS. (Ref. Q. 1.1.6).

1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programmes?

- The Institution obtains feedback from students through a structured questionnaire on delivery and implementation of curriculum and informally during field visits, excursions etc.
- Alumni give an informal feedback on different occasions.
- Parents give their feedback during the open-day/parental workshops.
- The Institution obtains feedback from employers/ industries during placement interviews.

The teachers obtain feedback from academic peers during:

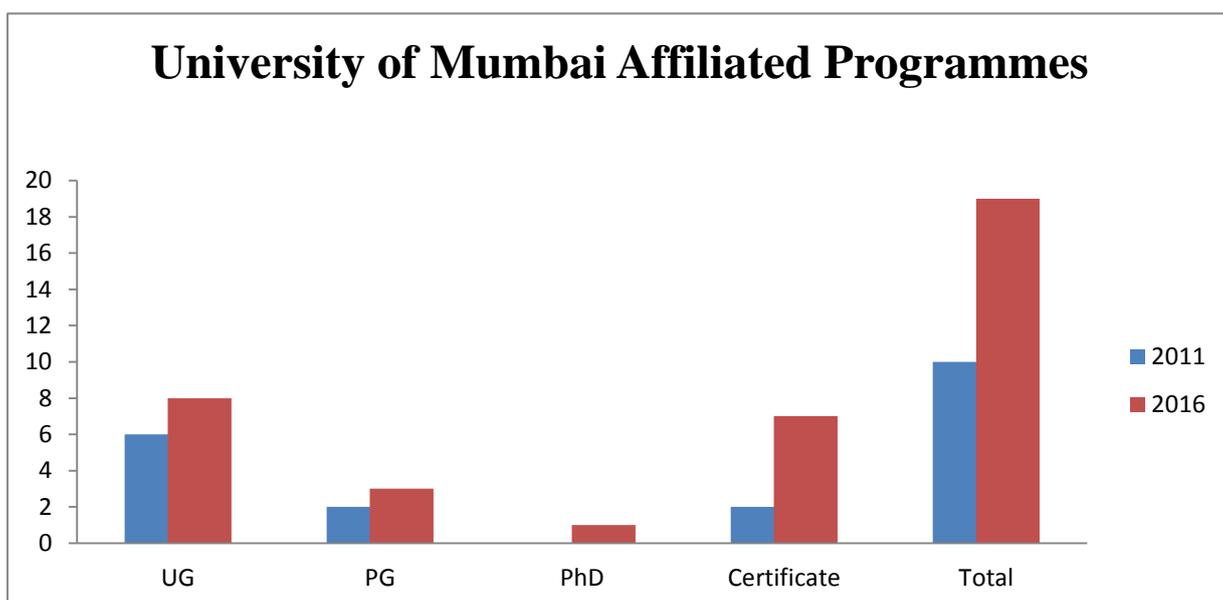
- Meetings with resource persons/participation at Refresher/ Orientation courses and National/State/University level workshops/seminars

- interaction with moderators and examiners at Centralized Assessment Programmes in the University
- visit to other institutions as moderators
- feedback from moderators invited to the college regarding question papers and assessment carried out by teachers.
- Feedback thus obtained is communicated to the members of the Board of Studies and the Syllabus Restructuring Committee during meetings/ workshops/ one-to-one meetings.
- The feedback is used internally for curriculum enrichment by conducting student centric activities/programmes and introducing new programmes. New courses like B.Sc. (IT) and B.Com. (Accounting & Finance) were introduced in response to the demands of students and other stakeholders.
- Introduction of M.Sc. (Analytical Chemistry) was in response to the initiative taken by the faculty and the feedback received from students to fully utilize the expertise of the faculty and enhance the employability potential of students graduating in Chemistry.

1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes?

- College has introduced following programmes/ courses during the last four years:
 - **Ph. D. in:**
 - ❖ Botany
 - **Master of Science in:**
 - ❖ Chemistry (Analytical)
 - **Bachelor of Science in:**
 - ❖ Information Technology
 - **Bachelor of Commerce in:**
 - ❖ Accounting and Finance
 - **Certificate Courses**
 - ❖ Microprocessors and Microcontrollers
 - ❖ Instrumental Analytical Technique
 - ❖ Nutrition and Dietetics
 - ❖ Stock Market Operation Management
 - ❖ Retail Management
 - Skill Development programme, **PAR** (Programming, Analytics & Research) conducted by **TISS**
 - **BA Programme of YCMOU**
- The rationale for introducing the new programmes/ courses was the demand for the programme by the stakeholders especially students and parents and for employability. [B.Sc.(IT) and B.Com. (Accounting & Finance)]

- Introduction of M.Sc. (Analytical Chemistry) was in response to the initiative taken by the faculty and the feedback received from students to enhance the employability potential of students graduating in Chemistry.
- The Ph.D. Programme in Botany was started to utilize the specialization and expertise of the staff in the allied area and motivate the staff towards further research.
Certificate courses/ skill based programmes were introduced to provide additional skill based learning for students.



Criteria II – Teaching – Learning and Evaluation



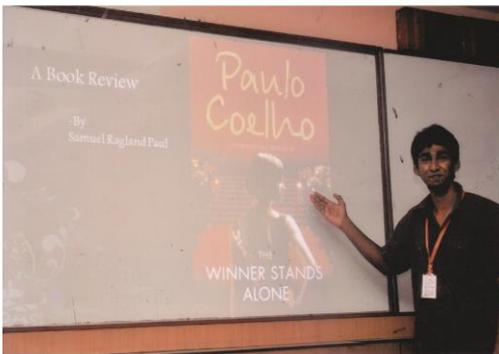
Study Tour



Experiential Learning



An Interactive Session on U.S. Presidential Elections (2016)



Book Review



Sci-Trek Science Fest



Talenteux- Arts Fest



Zero Gravity- Commerce Fest

CRITERION II: TEACHING - LEARNING AND EVALUATION

2.1 Student Enrollment and Profile

2.1.1 How does the college ensure publicity and transparency in the admission process?

N.E.S Ratnam College of Arts, Science and Commerce is one of the reputed institutions of higher learning in the city of Mumbai especially in the suburban area of Bhandup. Ratnam's uniqueness as an institution lies in its uncompromising enforcement of discipline in every aspect of campus life, which attracts students / parents for seeking admission.

The College makes sure that adequate and wide publicity for its various courses/programmes is provided through the following strategies related to the admission process:

- College website
- College prospectus
- Display of notices
- Communication/correspondence with neighbouring colleges

Apart from the above, the College uses other promotional tools for enhancing students' admission like word of mouth and through flyers. Teachers from the Arts faculty go to nearby junior colleges to publicise the programmes and courses offered by the college in Humanities and Social Sciences. Reputation built over the years also contributes towards getting admission. Alumni also play an important role in admission by sharing their experience with their acquaintances.

With regard to transparency in the admission process the College strictly follows the norms and guidelines prescribed by the University of Mumbai, to which it is affiliated. Information regarding admission process, procedures and the merit list are displayed prominently in College, apart from notifying the same in college prospectus. The Admission Committee helps the students to select the course/programme by counseling during the admission process.

2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.

The Admission Committee every year takes care of the admission process and follows the rules and guidelines as prescribed by the University of Mumbai.

As a minority institution, 50 per cent seats are reserved for minority students (Tamil Linguistic) and the remaining 50 per cent is distributed among students belonging to other categories (in house, open, and reserved).

The institution adopts the following criteria during the process of admission to various programmes:

- Admissions are given on the basis of merit, taking into account reservation quota prescribed for various categories of students.
- Counseling the students and guidance to the accompanying parents for selecting course / programme by Admission Committee members.

2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.

Name of the Programme	2011-12		2012-13		2013-14		2014-15		2015-16	
	Max	Min								
BA	78	44	80.5	39.5	81.83	35	82.15	38	81.23	35
BSc	69.8	41.3	87.0	50	83.1	53.6	81.0	45.0	78.0	45.0
BCom	84.8	45	82.3	47	85.3	45.5	90.46	50	88.9	51
BMS	85.0	45	82.7	48	76.5	55	81.85	56.6	82.9	56.9
BBI	82.83	51	79.33	52	83	51	80.46	54	86.3	50.62

Admission at the entry level for each of the programmes in the College is in parity with the other institutions in and around Bhandup.

2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If ‘yes’ what is the outcome of such an effort and how has it contributed to the improvement of the process?

Yes, there is a mechanism to review the admission process and student profiles annually. The Admission Committee comprises senior staff members from each faculty. This Committee monitors the entire admission process in the college and decides the strategies to be used within the norms to attract meritorious students keeping in mind the strength of the class, students opting for different courses/programmes, etc.

Mechanism: Once the process of admission is completed, the Admission Committee and administrative office prepare profile of admitted students. The Admission Committee of various faculties reviews the stream wise admission process. Wherever necessary the Heads of the Departments are involved to analyse the students’ profile which helps to decide the strategy to be adopted the following year while giving admission.

Outcomes: The purpose of the above mechanism is to make the admission process fair and transparent. This helps the institution to take policy decisions to attract more students with higher percentage at the entry level over the years. This mechanism also reflects an increasing percentage of socially and

economically underprivileged students enrolling in the institution, in conformity with the mission of inclusive education.

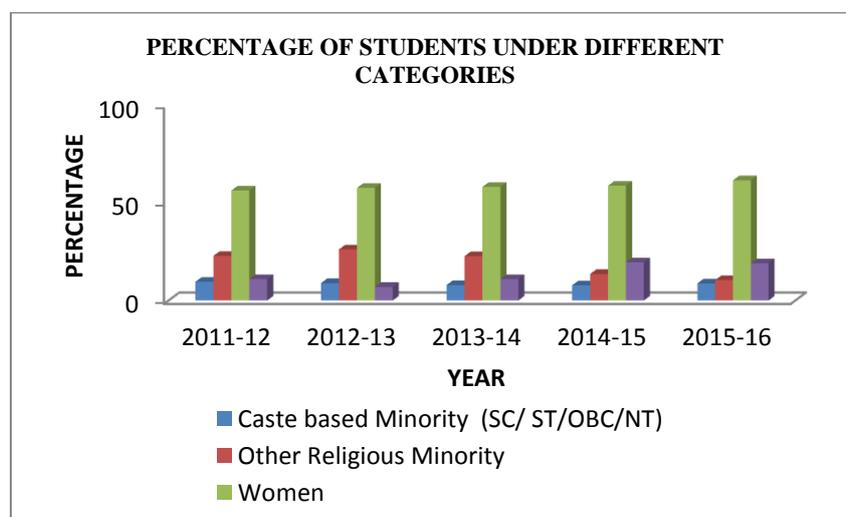
It also ensures that every department has sufficient number of students as required to support the workload. Taking note of students' profile enables the departments to decide whether additional guidance needs be provided related to academic and non academic matters.

2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion of SC/ST, OBC, Women, Differentlyabled, Economically weaker sections, Minority community and anyOther.

The College adheres to the National Policy of Diversity and Inclusion of all sections of the society. The reservation policy prescribed by the Government of Maharashtra with regard to disadvantaged students of various types and women is adhered to because of which, there is diversity and inclusion in students' enrollment. Moreover, the policy of the institution is in line with the policy of the Parent Body, National Education Society, which has set up the college with this mission of making quality education accessible to all sections of the society.

The following table represents the percentage of students under different categories:

Category	2011-12	2012-13	2013-14	2014-15	2015-16
Caste based Minority(SC/ST/OBC/NT)	9.63	8.96	7.95	7.84	8.78
Other Religious Minority	22.91	26.26	22.77	13.62	10.46
Women	56.48	57.79	58.31	58.92	61.65
Others	10.98	6.99	10.96	19.62	19.12



2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e. Reasons for increase / decrease and actions initiated for improve

Programme	Details	2011-12	2012-13	2013-14	2014-15	2015-16
BA	No of Application Received	75	78	80	132	130
	No of students admitted	50	74	63	97	93
	Demand Ratio	1:1	1:1	1:1	1:1	1:1
B Com	No of Application Received	578	584	618	692	715
	No of students admitted	229	218	245	276	264
	Demand Ratio	1:3	1:3	1:3	1:3	1:3
BSc	No of Application Received	287	282	218	265	295
	No of students admitted	120	113	100	116	120
	Demand Ratio	1:2	1:2	1:2	1:2	1:2
BSc(CS)	No of Application Received	68	55	113	153	91
	No of students admitted	24	23	31	24	30
	Demand Ratio	1:3	1:2	1:4	1:6	1:3
BMS	No of Application Received	243	189	194	288	293
	No of students admitted	60	60	61	71	72
	Demand Ratio	1:4	1:3	1:3	1:4	1:4
BBI	No of Application Received	105	100	132	162	148
	No of students admitted	52	60	55	65	71
	Demand Ratio	1:2	1:2	1:2	1:2	1:2
M. Com	No of Application Received	90	125	125	128	130
	No of students admitted	46	60	59	54	59
	Demand Ratio	1:2	1:2	1:2	1:2	1:2
M. Sc (Physics)	No of Application Received	42	30	33	40	54
	No of students admitted	11	11	10	12	11
	Demand Ratio	1:4	1:3	1:3	1:3	1:5

The trend is in line with demand pattern for various programmes in the city, programmes available in nearby colleges and reputation of the institution built over the years.

2.2 Catering to Student Diversity

2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard

The differently-abled students are admitted as per the University/Government guidelines.

The College ensures that the needs of differently-abled students are fulfilled by providing the following facilities:

- Special care is taken during lectures and practicals by the teachers, as per their needs like giving them first row seating arrangement inside class room/seating provision inside the lab.
- Special facilities such as ramps, railing at the side of the staircase and wheel chairs are made available
- During examinations, they are provided with separate seating arrangements, if needed
- Extra time is given as prescribed by University of Mumbai.
- Scribes are arranged, if required
- Enlarged photocopy of question papers are issued to visually impaired students
- Professional counsellor services are made available to support the psychological and emotional needs.

2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.

Yes, in order to assess the students' needs in terms of knowledge and skills, the College has adopted the following process before the commencement of the programme:

- The members of the Admission Committee help the students in selecting appropriate subject combination in accordance with their HSC score/ aptitude through one-to-one interaction.
- The institution conducts an Orientation Programme for students and parents at the beginning of their three year programme in which, they are provided with information about the minimum level of knowledge /skill governed by their HSC curriculum required, beside other information related to the College and its functioning. All necessary support as per their need is provided to enable students to complete the programme.
- The institution creates awareness about various value based activities and skill oriented certificate courses conducted by different departments and outside agencies, as per their need.

- Students' needs are also assessed during the few introductory lectures when students' basic knowledge is tested. Delivery of curriculum is planned accordingly.
- Some of the students admitted have completed their school education in vernacular medium. Class in charge who also function as mentors acquaint the students with academic and non-academic programmes in the college.
- Within a few weeks of commencement of lectures if some students express their wish to change their subject/course combination they are allowed to do so.

2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/ Add-on/ Enrichment Courses, etc.) to enable them to cope with the programme of their choice?

The following strategies are adopted by the institution to bridge the knowledge gap and enable them to perform well:

- Bridge course in Chemistry/Physics is conducted for FYBSc students.
- Other departments conduct a few sessions to refresh some basic concepts.
- Students with inadequate language skills are asked to join Certificate Course in Conversational English.
- Students' progress is monitored through the mentoring system, which comprises class in charge (teacher mentor) and subject teachers.
- Remedial coaching sessions for underperformers, especially among final year students are carried out regularly.
- Guest speakers from the industry and reputed institutions like IITB and BARC are invited to provide practical and in-depth knowledge about scientific advancement and current subject related issues to help them to improve their comprehension of the subjects.
- Industrial visits and field trips are organized for the students by various departments, even if it is not mandatory in some cases, to give practical knowledge of the subject.
- Practical sessions in Science subjects are used to identify students lacking experimental skills. Additional assistance is rendered to such students.
- In Arts Faculty, teachers resort to teaching in vernacular medium during remedial lectures to help students whose basic education was in vernacular medium, to understand the subject, even as they learn slowly to improve the speaking and writing skills in English.

2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?

Issues related to gender, inclusion and environment are dealt with as per the guidelines of University of Mumbai

Gender sensitization:

- Faculty members create awareness among students, of all classes, particularly girl students about the procedure for lodging complaints, if any, against sexual harassment and ragging at the Women Development Cell (WDC)/ Anti Ragging Cell / Grievance Redressal Cell.
- Provision of a drop-box for inviting suggestions, or complaints about any kind of abuse in the campus.
- Organizing interactive sessions on gender sensitization and issues relating to female health, hygiene, reproductive issues and related matters.
- NSS organises area based programmes such as publicity on Gender Justice, Women Empowerment and Importance of Girl Child.
- Students of Lifelong Learning and Extension(LLE) perform street play on gender equality at work place and undertake SWS project- Survey of Women`s Status in the nearby areas.
- MUSE (The Movie Club) screens films which deal with gender issues.

Inclusion:

- The Admission Committee members are made aware of the policy of reservation for different categories of students as per the University guidelines and college strictly follows the same during admission process.
- Sensitization of peer groups by the class in charges (teacher mentor) for treating them equally without any discrimination and rendering necessary assistance to them.
- Encouraging such students to participate in the curricular, extracurricular and co curricular activities, without bias.

Environment:

The Nature Club, Department of Environment Studies and NSS unit conduct several programmes to sensitize the students to environmental related issues:

- Area based activities like Cleanliness Drive, Malaria Awareness, Save Energy, Clean Water and Save Water are conducted by NSS units.
- Students are encouraged to use rakhis and colours, made of eco friendly material. Workshops on eco friendly Ganesh Idol making are also conducted.

- Towards promoting lesser use of plastic, NSS students make paper bags and distribute to shopkeepers nearby.
- Solid Waste management project for making biodegradable fertilizer has been undertaken. An MOU has been signed with the NGO Stree Mukti Sanghatana to convert organic waste into compost. Under this the organization has provided a Composting Unit, partly funded by United Nations Development Programme (UNDP) & Ministry of Environment & Forests (MOEF) and rest is borne by the College.
- NSS volunteers clean the adopted areas as well as vegetable market place at Bhattipada Road and spread awareness about the importance of cleanliness.
- NSS volunteers are made ‘Energy Auditors’ to control wastage of electricity in the College campus.
- Documentary on Ecosystem is screened.
- ‘Save Environment’ is the monthly drive theme for the month of July every year. Students take up activities like tree plantation, poster displays with slogans dealing with environmental issues.
- Awareness about how to reduce electricity consumption is also carried out in the community.
- As a step towards energy conservation measure, the College is replacing Fluorescent tube lights and bulbs by LED lights in a phased manner.

2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?

The advanced learners are identified from the merit list of the students admitted to each programme and also through the interaction of Teacher mentors (Class in charges) and other faculty members with students during lectures, tutorials and practicals. Various methods of evaluation are also used for the purpose: viz. question-answer/problem solving, home assignments, group discussions and seminars (Power Point Presentations).

Advanced learners’ needs are fulfilled through the following initiatives:

- Recommending reference books and journals as per their needs from departmental libraries/central library.
- Access to various web resources provided by INFLIBNET and similar sources.
- Allowing them to spend more time in laboratories and making additional infrastructure available.

- Providing scholar cards to foster reading and self learning habits and best user certificate to those students who make maximum use of library resources.
- Rigorous coaching to the advanced learners by each department.
- Encouraging students to attend workshops and seminars for their overall development.
- Offering opportunities to participate in various intercollegiate events and compete with students of other institutions to build self esteem, improve communication skills and perform better in the Institution/ University examinations.
- Providing guidance to appear for various competitive and entrance examinations.
- Encouraging enrollment in skill oriented certificate courses
- University of Mumbai organizes an Intercollegiate Research Convention ‘Avishkar’ for students from undergraduate to doctoral level to develop research culture and scientific temper among students. Many students across faculties participate in it.

Some achievements of advanced learners

- Mr. Ayappan V. of T.Y.B.Sc was selected for the four weeks MTTS Programme Level ‘O’ held at SSN College of Engineering, Chennai from 18.05.2015 to 13.05.2015 and attended the same. This Programme is sponsored by NBHM
- Ms. Shabnam Panjekar of T.Y.B.Sc selected for NPDE-TCA 2015 a student training for Mathematics & Applications at the LNM Institute of Information and Technology, Jaipur held from 18.05.2015 to 06.06.2015 and attended the same. This is organized by IIT-B, Mumbai and sponsored by NBHM & DST.
- Mr. Neetesh Yadav and Ms. Komal Chauhan of F.Y.B.Sc class attended 10 days residential camp in National Initiative on Under Graduate Science (NIUS-Chemistry) organised by Homi Bhabha Centre for Science Education, Mumbai (HBCSE) from 23.12.2015 to 02.01.2016.
- Ms. Komal Chauhan of F.Y.B.Sc attended a second level training from 16.04.2016 to 14.06.2016 conducted by NIUS and was selected among 47 students from 18 States.
- Mr. Parab Chinmay and Mr. Khan Abdul Talim of F.Y.B.Sc class attended 5 days residential camp in National Initiative on Under Graduate Science (NIUS-Biology) organised by Homi Bhabha Centre for Science Education, Mumbai (HBCSE) from 07.11.2016 to 11.11.2016.

- Two students of T.Y.B.Com Ms. Usha Konar and Ms. Ramalakshmi completed BAP-EXEC course by National Skill Development Corporation implemented by Artha Vidya on 14.09.2015

2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. Who may discontinue their studies if some sort of support is not provided)?

- Every class has a designated teacher mentor and she/he maintains the profile of students in the Information Register.
- In case they come across any student who may become a dropout, maximum effort is taken through counseling, financial assistance and other kinds of help to ensure that the student at least completes the academic year and even the programme.
- At the institutional level, scholarships are offered to help the needy students. Students can pay fees in installments which help them to bridge their financial crisis.
- Book Bank facility is offered.
- The College Counsellor, along with the class in charge (teacher mentor), mentors such students and provides the necessary help and support.
- College helps the students to avail some benefit from various scholarships and free ship schemes of the government.
- Placement Cell helps some students to get part time jobs while studying and exemptions in terms of attending lectures are granted to such students, if needed.

2.3 Teaching-Learning Process

2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)

At present educational institutions are facing challenges due to rapid changes of various types and increased competition and have to adopt various strategies to perform better. This calls for modification and improvement in the teaching- learning system and for productive functioning in the continually changing and highly demanding environment. Teaching and learning go hand in hand, and good academic plan should be learner centric so that a good teacher makes a good learner. To ensure this, various strategies for student centric

learning are adopted by the teachers to cater to the diverse needs of students in the classroom.

Academic Calendar

The College adopts the academic schedule (term duration) brought out by University of Mumbai. Based on this, the College prepares its own academic calendar for the year (semester-wise). Every department submits detailed plan of activities of the department to the IQAC.

A complete academic calendar is prepared by the IQAC with the help of Heads of various departments, Vice-Principal and the Principal. The academic calendar has details of distribution of teaching/examination/internal assessment days (wherever applicable), list of holidays, co-curricular and extra-curricular activities in each Semester. While preparing the plan, care is taken to ensure that the minimum number of instructional days, as prescribed by the University of Mumbai is adhered to. This academic calendar is made available to all the departments at the beginning of the academic year.

Teaching Plan

Faculty wise timetables for all classes are prepared by the Time Table Committee for theory/tutorial classes and practical sessions at the beginning of every academic year (semester-wise). The departmental time table for theory/ tutorial classes and practical sessions is finalized by the Head of the respective departments and is made available to the faculty members. Teaching plan is prepared by individual teacher and submitted to the Principal semester wise which includes teaching, evaluation methods and revision methods. Heads of the departments monitor the execution of the teaching plan.

The academic year comprises two semesters: one from June to October and the other from November to April. The number of instructional days is 90 per semester as per the University norms, which is ensured while preparing the plan.

Teacher's Log Book

Every teacher maintains a log book to ensure the compliance of academic teaching plan which includes the following aspects:

- Lectures, Tutorials and Practicals engaged
- Topics covered in each lecture
- Innovative Teaching methods used
- Methods of Revision
- Activities conducted for the students
- Administrative, Committee and Research work carried out

These log books are checked by the Head of the Institution on weekly basis and audited at the end of the term by AAC/CDC

Evaluation Blue Print

Evaluation helps to analyse the effectiveness of teaching methods adopted for the course or curriculum. Being affiliated to University of Mumbai, evaluation is done as per their guidelines. With effect from 2016-17, the Examination system is based on Choice Based Credit System and this is applicable to FY/BA/BSc/BCom. The Credit Based Semester Grading System is applicable to SY/TY students. The performance of the learners of SY/TY is assessed based on two components: Internal assessment (25%) and Semester End examination (75%).

Guidelines for Internal Assessment and Semester End Examination for SY/TY students are:

- Internal Assessment: 25 marks comprising one periodical class test (20 marks) and active participation in class and overall conduct (5 marks)
- Semester end Examination: 75 marks
The evaluation system is most effectively dealt with by the Examination Committee by conducting the Semester End examination for both aided and unaided programmes and also Preliminary examination for all T.Y. students. From the academic year 2016-17, the syllabus is revised for FY/BA/BCom/BSc with Choice Based Credit System. The external examination is for 100 marks and the internal assessment is scrapped (except for Foundation Course). Examination Committee ensures the following:
 - The schedule for all internal assessment is prepared by IQAC with the help of HOD / class in charge well in advance and displayed on notice boards. Marks obtained in Internal Assessment are handed over in a format to the Examination Committee.
 - Schedule for Semester End Examination, Central Assessment Programme, moderation work, preparation of mark lists, announcement of results, and revaluation of papers are decided by the Examination Committee for all FY/SY examinations and communicated to the concerned stakeholders through notices, open days, display of results on notice boards and handing over mark sheets by class in charges (teacher mentors)
 - Question papers are set by the faculty as per the guidelines laid by the BOS of each course of the University, circulars regarding which are brought out by Examination Committee
 - Examination related circulars which are received from the University are circulated to faculty members and students are informed as and when required.
 - Parents and students are informed about the examination system and the working system of the College through a common Orientation Programme organised at the beginning of the academic

year and reiterated once again by the members of Examination Committee class wise.

- Frequent visits by the Vigilance Squad during the conduct of examinations are to ensure its smooth and fair conduct.
- Moderation of assessed answer books of the courses are done as per the norms of University of Mumbai.

2.3.2 How does IQAC contribute to improve the teaching –learning process?

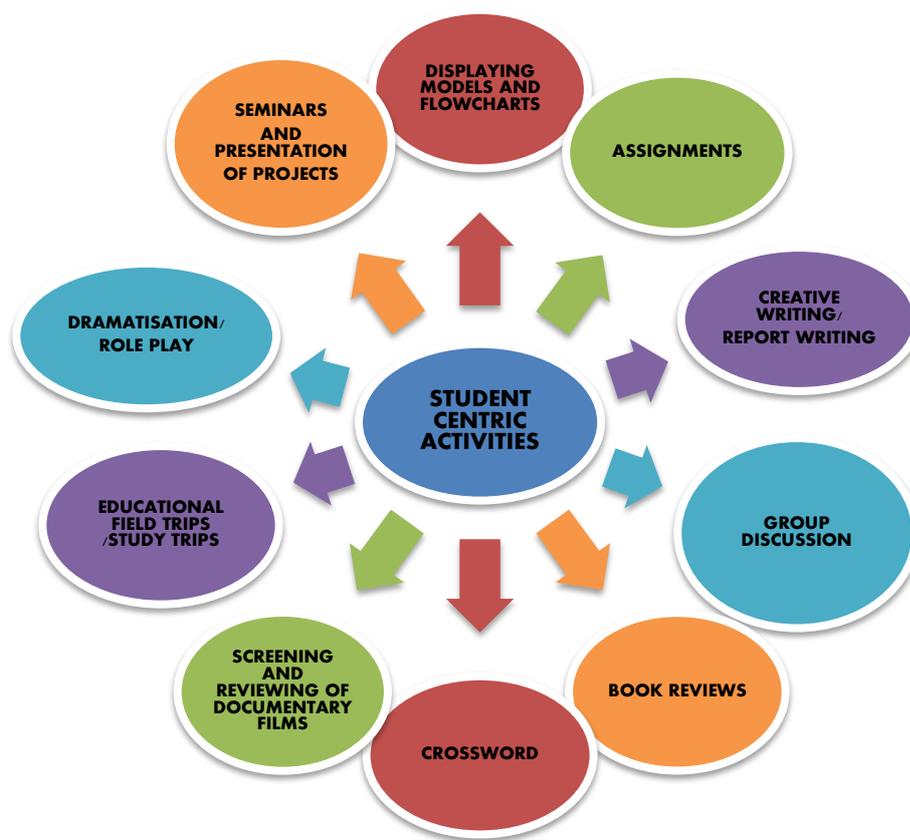
IQAC of the College has been actively involved in maintaining quality within the institution. The IQAC, by adhering to the UGC policy, tries to ensure adoption of innovative methods in teaching and learning for UG/PG programmes. The IQAC contributes in the following ways to improve the teaching learning process:

- Organizing workshops and seminars for students / teachers to bring about qualitative improvements in the teaching learning practices
- Monitoring academic and co curricular activities organized by the various departments which are in line with quality sustenance and enhancement processes.
- Giving suggestions for improving the infrastructure facilities in the College which supplements /impacts the teaching learning process.
- Encouraging the faculty to pursue research.
- Encouraging the use of ICT tools.
- Inputs for upgradation of ICT tools and learning resources.
- Analysis of feedback from students on teachers, and from students and parents on infrastructural support.
- Deputing staff to attend teaching-learning based workshops and seminars organised by other institutions to enhance their knowledge/skill.
- Carrying out academic audit of each department at regular intervals by AAC.
- AAC takes up lesson observation especially of newly appointed teachers and feed back is given.

2.3.3. How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

- Learning is made student centric by teachers who enlighten them about the prescribed syllabus and give them wider perspective about the

subjects through a series of lectures. This is followed by student centric activities like:



The following support structure and systems are available for teachers towards:

(i) Interactive Learning:

- Use of models, experiments, power point presentations
- Use of OHP, LCD and Internet facility
- Use of Smart Boards

ii) Collaborative Learning:

- Revision of topics
- Learning in collaboration with peer groups
- Problem solving sessions
- Group projects
- Framing questions based on syllabus
- Advanced learners helping the underperformers

(iii) Independent Learning:

- Network resource centres are available for PG students.
- Departmental libraries to supplement the resources available in central library.
- Special hands-on sessions in advanced laboratory techniques has generated interest amongst students in learning basic sciences and developed their problem solving abilities.

- e-publications as learning resources are provided through INFLIBNET and DOAJ, DOAB websites.
 - Teachers have also prepared study materials as an e-resource.
 - Chemistry Departments uses POGIL (Process Oriented Guided Inquiry Learning) for students.
- Books and journals are recommended for further reading to enhance learning and application skills of the students
 - To develop writing skills among students, contributions to the College magazine are encouraged. In addition, newsletters are published by Departments of Commerce, Chemistry, Management Studies, Banking and Insurance and Marathi, wherein students contribute subject based articles.
 - Annual departmental fests also provide scope for honing academic and other skills among students, such as leadership qualities, team work, independent thinking and quest for acquiring knowledge.
 - Departments also conduct activities like debate, essay writing, elocution competition, crosswords, quiz and seminar contests to inculcate learning habits and competitive spirit for better performance.
 - Guest lectures are organized at the department level by inviting experts and students are encouraged to interact with them to enhance their knowledge/competency.

2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?

In today's competitive world, transformation of students as lifelong learners and innovators has become inevitable. We strongly believe that classroom teaching needs to be supplemented by other activities to nurture critical thinking, creativity and scientific temper.

- Students are encouraged to submit articles for the Annual College Magazine 'Ratnamite' comprising different sections enhancing creative writing in different literary forms like thought-provoking articles, poems by students in Hindi, English, Marathi & Tamil.
- To ensure more opportunity for the development of writing and creative skills, many departments have in-house publications such as Ignite (Chemistry), Pathfinders (Commerce), Dossier (BMS), B&I-Buzz (B&I) and Spandan (Marathi) which are completely designed/compiled by students. In addition the College brings out an annual inter disciplinary academic journal for teachers and students (Epignosis)
- Literary Forum (Events by English Literary Association) and Marathi Vangmaya Mandal activities.

- MANTRA-an intercollegiate cultural fest hosted by cultural forum of the college in performing/literary/fine arts which provides a platform to the students to showcase their creativity and talents.
- ZERO-GRAVITY an annual inter/intra collegiate fest organised by Masterminds (Commerce Association) is entirely planned by students which conducts theme based activities.
- SCI-TREK an Inter/Intra collegiate competition organised by Faculty of Science encourages development of scientific temper and critical thinking through conducting Quiz, Aptitude test, Science Exhibition on working models and projects, Sudoku, Photographic competitions and Scientific Rangoli.
- TALENTUEUX -an Inter /Intra collegiate competition organised by various departments in Faculty of Arts hones creativity and skills through crossword (Economics), Elocution (Political Science), Patriotic Singing (History), Socio Pix (Sociology), Monoacting (Marathi) and Fun with Words (English). Workshops are also organised for students.

The above activities conducted by the institution not only develop critical thinking, innovative thinking, creativity and scientific temper but also help the students to acquire time management skills, leadership qualities and entrepreneurial skills.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning -resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

Over the years, the College has acquired increasing number of hardware and software to equip computer laboratories sufficiently. The College has also got a collection of ICT tools. Faculty members make use of various teaching aids including ICT tools and e-learning resources.

The following learning resources are used to make teaching effective:

- LCD Projectors
- Overhead Projectors
- Internet access available in the Teachers' Resource Center, Laboratories and in Library for staff.
- The library subscription to e-learning resources through INFLIBNET Journals and Periodicals
- Linkages with other institutions including TISS, British Council, and American Information and Resource Centre to enable the faculty and students to access their resources

- Screening of movies and documentaries

2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?

Effective learning is the outcome of the teaching – learning process. The following methods are adopted to expose them to advanced level of knowledge:

Blended Learning

Though there is not much scope for blended learning, the ICT tools are used by teachers to improve students' knowledge about their subject, create interest to acquire deeper insight and help the students to prepare quality assignments, seminars and class projects.

Expert Lectures

Lectures by prominent experts are organized by various departments.

Seminars and Workshops

Training Programmes on various topics are arranged by experts to help the students to gain skills required for developing self-esteem.

Following Training Programmes have been organized on topics like:

- Self Motivation
- Verbal Communication
- Academic & Professional Success
- NCFM Certification
- Professional Growth for Banking & Insurance Sector
- Personality Development
- Need to pursue Higher Studies
- Contribution of Research to Future Economic and Social Development

Certificate Courses in:

- Nutrition and Dietetics
- Conversational English
- Tourism and Travel Management
- Microprocessors and Microcontrollers
- Instrumental Analytical Techniques
- Stock Market Operation Management
- Retail Management

Programming, Analytics and Research (PAR) course by TISS is conducted with a view to enhance employability, to build capacity, to respond to major challenges, to create opportunities for sustained employment and well-being among students.

NES National Student Startup Fest, the first of its kind was held on February 5-6, 2016 with the following objectives:

- To provide national platform where student innovators could showcase their business acumen, ideas and products to a wider and illustrious audience in India's Financial Capital.
- To offer mentoring, marketing and media support to budding entrepreneurs, all under one roof.
- To inspire and ignite the entrepreneurial spirit amongst the youth and strive to harness their latent potential.

2.3.7 Detail (process and the number of students \benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/mentoring/academic advise) provided to students?

The College has a few committees in place to deal with academic, personal, psycho-social problems of students and provides support services. Each class has a Class in charge (Teacher mentor) to mentor and

- Monitor academic performance of the students
- Identify students having academic and personal problems and provide the needed guidance
- Guide and counsel students on academics and individual psycho social problems, whenever needed
- Identify students having problems which need attention and direct them to the Professional Counsellor in the College.

Counsellor: Teacher mentors facilitate the meeting of students having problems with the Counselor either in groups or individually by allotting specific timings. Counselor provides socio-psycho counseling to the needy students in order to help them deal with their academic and personal problems. Even career counseling is provided.

Students' Council organizes Career Guidance Seminars and Exhibitions like Career Seminars by ICA, Pearl Academy, LIC, and Career Exhibition in collaboration with Energia Wellbeing Mumbai. Around 500 students benefit from these.

Placement Cell of the College helps the students to understand their career prospects by exploring their career options through career guidance workshop. The Cell organises interviews to help the students to find placements in companies of repute.

The following are the prominent organizations which conducted placement interviews in the past five years:

- Wipro
- Godrej & Boyce Mfg. Co. Ltd.,
- Zenta
- L & T Infotech
- TCS

On an average 200 students benefit through training and awareness programmes and aptitude tests.

2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?

The following teaching methods are adopted by the faculty members:

- Assignments
- Seminars and presentations using PPT
- Report writing
- Group discussion
- Dramatization/ Role Play
- Field Trips/Study Trips
- Screening and reviewing of documentary films
- Displaying models and flowcharts
- Book reviews
- Creative writing, Pratishabda writing and slogan writing
- Crosswords

The College takes the following initiatives to encourage faculty members to adopt new and innovative approaches:

- Induction Training Programme is conducted regularly for newly appointed teachers wherein staff is informed about the need for using appropriate innovative teaching methods rather than only conventional methods.
- A Training program on ‘Teacher Sensitivity’- towards learning abilities of students’ was organized on 26th March 2013. The resource persons were Ms. Snehal Subramanian and Ms. Charmi Saliya, professional counselors.
- Workshop on ‘Effective Teaching using Innovative Teaching Methods’ was organized on 13th August 2013. The resource person for the workshop was Mr. Shreepad Parkhe, a Motivational Trainer.
- Workshop on ‘Innovative Teaching Methods’ was organized on 19th April 2014 by IQAC. Teachers shared and discussed the teaching methods adopted by them and their department through Power Point Presentations.
- Staff training programme was conducted on 30th September, 2015, by Mr. Pradeep Moon on Interpersonal Relationship which was oriented towards professionalism.
- Teaching aids are also provided as per requirements to promote adoption of innovative teaching methods.

Such training encourages the teachers to use teaching methods that effectively engage the interest of students having diverse proficiency levels, promote better class participation and more creative involvement in projects and assignments. This has helped the College to get good results at the University examinations. It has also resulted in an increased and meaningful participation on part of the students in Seminars/Workshops organised by other institutions and various intercollegiate events.

2.3.9 How are library resources used to augment the teaching- learning process?

- The College has a central library and some departments also have departmental libraries that cater to the needs of the teachers and students
- The central library has more than 24000 books and 90 journals and periodicals. There has been an addition of more than 8000 books/ reference books during the past five years. There are separate sections for reference books, textbooks, books for competitive examinations, and periodicals.
- During the orientation programme, the first year students are briefed regarding the library facilities and resources. Apart from this, separate library orientation sessions are also arranged by the librarian.
- Faculty members take students to the library to familiarise them with the relevant reference books.
- Books from the library are taken to the classrooms for students to give them an exposure.
- Book Bank Scheme provides text books to the underprivileged students for one year (two semesters) with nominal charges.
- The Librarian, along with the library committee members, looks after the purchase of books and journals every year. Library resources are acquired as per the recommendations made by staff.
- At the beginning of every academic year, Librarian collects the requisitions for the purchase of books from the Heads/In charges of Departments as per the changes like whenever there is a revision of the syllabus / introduction of a new course / any new publication which augment the resources for teaching-learning process.
- Library subscribes to various academic journals and periodicals.
- Library issues library cards to students to have an access to these journals, periodicals, reference books, textbooks, books

for competitive examinations, new arrivals and periodicals. Faculty can borrow whenever they want.

- Newspaper articles are filed and made available to students in the library.
- College library has a collection of educational CDs/DVDs.
- INFLIBNET is made available for PG students, and for UG students academic websites like Google scholar and others are made available as and when required/requested.
- Books are also made available to staff and students from other libraries like American Information and Resource Centre and British Council Library through institutional membership.
- Inter-library loan facility is available to get access to resources from other libraries (Khalsa College, R.J College)
- Reprography facility is available in the library.
- Access to N-list is given with login id and password to teaching staff.

All library resources are effectively used to enhance the quality of teaching-learning process.

2.3.10. Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.

Following measures facilitate and ensure the timely completion of the syllabus by the staff:

- The Academic Calendar, at the beginning of the academic year offers a clear picture of the number of teaching days available in each semester / term and the lesson plan is so made keeping in mind the number of lectures/practicals available within the term prescribed by the University.
- Preparation of the teaching plan by each staff stating the topics to be taught, number of lectures needed, teaching methods to be adopted and the revision period including extra lectures, if needed.
- Weekly Log book maintained by each staff keeps a check on their plan and its implementation.
- Extra lectures are arranged for underperformers after the lecture hours

Though it is a challenge to complete the curriculum within the prescribed time frame, various timely measures are taken to complete the syllabus with additional lectures as and when required.

2.3.11. How does the institute monitor and evaluate the quality of teaching

The institution monitors and evaluates the quality of teaching-learning in the following ways:

1) Feedback from Stakeholders

The IQAC & AAC facilitate an annual academic review / evaluation of the teachers by students on the quality of teaching-learning process at the end of the academic year.

- Final year students fill up feedback questionnaire on the performance of teachers. Feedback is given on different parameters such as communication skills, quality of teaching, content, method of delivery, resourcefulness and readiness and accessibility to students. The analysis of the feedback is made by an external agency.
- Consolidated evaluation remark is handed over to the concerned faculty by the Principal which includes appreciation as well as suggestions for improvement.
- Feedback about library services are collected from the final year students which contribute significantly towards enhancing the quality teaching-learning process through betterment of library service.
- Analysis of feedback collected from parents also helps in evaluating the teaching -learning process.

2) Analysis of the results

- Analysis of the results of the University examinations as well as of college examinations helps in identifying the areas requiring improvement and strategies to be adopted to handle them.
- Implementation (wherever needed) of the corrective measures like remedial coaching for underperformers is supplemented with study material.

3) Lesson Observation

- Lesson observation is done by the AAC members especially for the newly recruited teachers/not so experienced teachers.
- Report of the observation is communicated to the teachers by the Principal with necessary recommendations.

4) Monthly and Annual reports

- Monthly and Annual reports provide information on various academic activities, computer aided teaching and innovative ideas used by the staff members in classroom teaching.

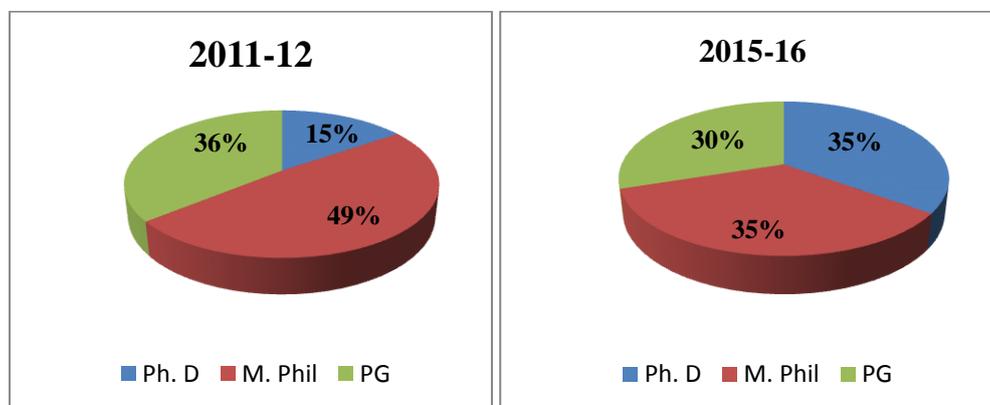
5) In house workshops on teaching methods

- The staff members of all the faculties present their teaching methods in specially arranged workshops for teachers by IQAC. The same is followed by a discussion. Good practices adopted by some departments are shared with other departments.
- Workshops are also arranged to improve professionalism which also contribute towards effective teaching.

2.4 Teacher Quality

2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum

Highest Qualification	Permanent Teachers			Temporary Teachers		
	Male	Female	Total	Male	Female	Total
Ph.D	1	13	14	-	-	-
M.Phil	2	12	14	-	-	-
PG	1	11	12	1	9	10
Total	04	36	40	1	9	10



The percentage of faculty members with highest qualification Doctorate degree has significantly increased from 15% in 2011-12 to 35% in 2015-16

All the recruitments in the College are carried out as per the UGC / University guidelines by the parent organization, National Education Society (NES). At the College level, all possible efforts are made to bridge the gap between sanctioned and filled up teaching posts in adherence to UGC/State Government policies.

The human resource recruitment strategies adopted by the College are as follows:

- The College appoints competent and qualified teachers, after assessing the need for human resources from various Departments of the College, subject to compliance of Government norms / University guidelines.
- Vacancies are communicated to the Management by the Principal.
- NOC is obtained from the government for filling up vacant posts in grants-in-aid divisions. The sanctioned posts are filled up using the process recommended by the University and the Government.

At times, demonstration lectures are given by the candidates to ascertain their level of confidence/ communication skill. The same is done after the Selection Committee (duly constituted) shortlists the candidate.

Policies adopted by the College to retain adequate and well qualified faculty are:

- Guidance and support from Principal/ HOD to acquire skills related to class management especially if the size of the class is large.
- Encouraging faculty to participate in conferences, seminars and workshops.
- Support from the Principal and other colleagues to the teacher for the teaching-learning process as well as other college level responsibilities.
- Accessibility to ICT tools and library resources.
- Research Committee encourages teachers to take up research projects and publish their work in national and international journals
- Sanction of FIP leave to faculty, seniority wise, as per the request made by the staff to complete Ph.D.
- The Local Managing Committee of the College grants and sanctions leave / time concession to the teachers to acquire additional qualifications.
- Leave on duty granted to attend workshops/ seminars
- Depute teachers to attend Orientation Programme / Refresher Courses / Short term Skill Development courses to equip them to adapt to the changing curriculum requirements
- The Management encourages the teachers to enhance their abilities by organising various academic and administrative training programmes.

2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the

institution in this direction and the outcome during the last three years.

- From the academic year 2016-17, the College has introduced BSc (IT) and B.Com (A&F), M. Sc (Analytical Chemistry) to meet the growing demand of the students. For all new programmes, faculties with prescribed qualifications are appointed as per the requirement and work load. Apart from this, the teaching-learning process of the above mentioned programmes are supplemented by taking help from industry experts / seniors and experienced visiting faculties. Guest lectures are arranged on specialised topics.

The outcome of the above is enhancement of knowledge, skills and competency building of students through the qualified and skilled teachers.

2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.

a) Nomination to staff development programmes

Faculty / Staff Development Programmes	2011-12	2012-13	2013-14	2014-15	2015-16
Refresher courses	05	03	03	03	02
Orientation programmes	01	02	3	02	02
Staff training conducted by the University	18	10	15	11	10
Staff training conducted by other institutions	NIL	3	2	6	08
Summer / Winter schools, Workshops, etc.	NIL	NIL	NIL	NIL	02
Others	04	01	03	03	08

b) Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning Teaching learning methods/approaches: Handling new curriculum, Content/knowledge management, Selection, development and use of enrichment materials, Assessment, Cross cutting issues, Audio Visual Aids/multimedia, OER's, teaching learning material development, selection and

Sr. No	Training Programme	Distinct Features
1	My Teaching and Administrative methods	Teachers shared their Innovative Teaching and Administrative Methodology followed for effective teaching in the class room and contribution towards smooth functioning of the College
2	Avishkar Zonal Level Workshops	Preparation of Project Reports in various Research areas
3	Research Awareness Workshops	Guidance about Research Report writing and analysis of data using Statistical Methods
4	Workshops on Syllabus Restructuring	Revision and restructuring of syllabi in History, Mathematics, Chemistry were organised in our College by BOS, University of Mumbai

c) Percentage of faculty

***invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies**

***participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies**

***presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies**

Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
Attended Seminars and Conferences	19%	20%	26%	21%	21%
Presented Papers	30%	15%	39%	49%	49%
Resource Persons	19%	10%	8%	23%	18%

2.4.4 What policies/systems are in place to recharge teachers? (e.g. providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)

- Encouraging Departments to set up PG and Ph.D centres.
- Appreciation of staff for additional contribution on Foundation Day / Teachers' Day.
- Encouraging teachers for PG teaching.
- Providing infrastructure for carrying out research.
- Giving time concession to do field work related to research.

- Sanctioning leave to carry out research activities.
- Granting duty leave to attend seminars and conferences related to the area of research.

2.4.5 Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.

Following staff have been invited as resource person for the expertise in their field:

- Dr. Lata Swaminathan delivered a guest lecture on ‘Organizational Culture’ at the University of Bahrain on 16.05.2016.
- Dr. Lata Swaminathan conducted a motivational workshop for ‘Prime Outsourcing’ in Dubai on 11.07.2015 & 12.07.2015
- Dr. Lata Swaminathan gave a lecture on ‘Financial Inclusion and Women Empowerment’ St. Xavier’s College, Cochin on 28.11.2014
- Dr. Mary Vimochana conducted training on ‘Entrepreneurship Development’ to Women in Badlapur organised by Ministry of Micro, Small and Medium Enterprises on 23.01.2014 & 24.01.2014.
- Mrs. Veena B. Kamat gave a talk on ‘Life and Works of Mathematician Sonya Kowalaskya’ at IWM-13, jointly organized by NBHM and DAE at the Department of Mathematics, University of Mumbai on 28.12.2013
- Dr. Nithya S, a resource person at IWM –13, delivered a lecture on ‘Kuratowski’s Theorem’ jointly organized by NBHM and DAE at the Department of Mathematics, University of Mumbai on 25.12.2013
- Mr. Sanjay Deshpande conducted training programme on ‘Statistical Data Analysis’ for the staff of Praras Biosciences Pvt. Ltd., Bangalore on 23.07.2011
- Dr. Rupali Patel gave a lecture on ‘Development of Solar Sensitive Thin Films for Water Splitting’ at Department of Physics, University of Mumbai on 17.08.2011 & 18.08.2011

The College and Management support the teachers in their research work and also provide a conducive environment for the development of their skills through various workshops. Exemplary efforts made by the faculty are also appreciated by the management.

2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?

Yes, the College has established a mechanism for taking feedback on teaching-learning from final year students. The IQAC monitors the feedback process for all programmes at the end of each year. Students fill up feedback forms about teachers.

- Evaluation of the feedback is communicated by the Principal to the staff which serves as a guide to enhance their performance.
- Lesson observation by the IQAC members.
- Submission of syllabus completion form by the staff members for each semester which is verified by Heads/ in-charges of Departments.
- Evaluation of the FY/SY question papers by Heads of the Departments/ External peers during moderation of answer books.

2.5 Evaluation Process and Reforms

2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?

The evaluation process and changes in the evaluation system, if any, are laid down by the University of Mumbai and the stakeholders of the college are informed about the same.

Students are informed through

- Notices displayed on designated boards and Orientation Programme
- Intimation of syllabus and format of question paper by the subject teachers
- Reforms in the evaluation system are informed by the class in charges, subject teachers and by Examination Committee members and by notices to students.

Parents are informed

- During Parental Workshops and Orientation Programme

Staff are informed through

- University circulars regarding Examination pattern directed to the staff by the Principal. The faculty members attend Board of Studies (BOS) meetings and workshops where they are made aware of the syllabus content, paper pattern, mode of evaluation and credit for each course.

- About the schedule for internal examinations in advance through the Academic Calendar and in turn the class in-charges (teacher mentor) intimate the same to students through notices.

2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

a) University Reforms:

- The University had introduced the semester pattern i.e. Credit Based Semester Grading System instead of annual examinations from 2011-2012 and with effect from 2016-17, the University has introduced Choice-Based Credit System (CBCS), which has been adopted in toto by the College.
- The Credit Based Semester Grading System initially had 60:40 pattern. From 2014-15 was changed to 75:25 pattern. The evaluation introduced from 2016-17 has no internals and 100 marks theory paper at the end of each semester except Foundation Course paper which has project work of 25 marks effective for First Year level.
- The evaluation has internal assessment and semester end examinations as per University regulations.
- The semester end examinations of first year (Semester I and Semester II), second year (semester III and Semester IV) of all the streams and also the applied component examinations (Semester V and Semester VI) of Science stream are conducted by the College on behalf of the University. The answer books are evaluated at the college level by the faculty members of the College in the 'CAP cell'. Three sets of question papers are set by the faculty members of the College. Principal/Convener of Examination Committee selects one set out of the three for a particular course. However with effect from 2016-17, question papers for Semester I & II are sent by the University.
- The semester end examinations for the third year students of all streams (Semester V and Semester VI) are conducted by University of Mumbai. The answer books are evaluated at the University designated CAP centres.
- Science stream has semester end practical examinations. Semester I to Semester IV and applied component of semester V and Semester VI are conducted by the College with the help of internal practical examiners. For Semester V and Semester VI, external practical examiners are appointed by the University and internal examiners by the Departments.

- The internal assessment conducted for semester II/IV/V/VI is for 25 marks. It comprises a test for 20 marks and 5 marks for attendance, discipline and active participation in class. Dates specified for the internal assessment in the Annual calendar are strictly adhered to. The internal assessment for the First year courses with the exception of Foundation Course has been scrapped by the University of Mumbai with effect from 2016-2017.
- Internal assessment marks of all the courses and marks of applied component (Science practical and theory) of Semester V and VI are communicated to the University

B) Institutional Reforms:

- Though there is no scope for institutional reforms, efforts are made by the College in the form of surprise tests, seminars, quiz and project work, for students to learn the syllabi on a regular basis and to evaluate students for active participation in class which carries 20% weightage in internal assessment marks.
- Preliminary examination for TY students before their semester end exam.
- Internal Vigilance Squad constituted to ensure fair conduct of examinations.

2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?

The Examination Committee is responsible for effective implementation of the evaluation reforms of the University along with the Heads and In charges of the departments.

- College follows the university norms and guidelines for conducting examinations and evaluation and this is communicated to all concerned including marking scheme and question paper pattern.
- The detailed schedule of the examination is intimated through circulars/notices.
- A systematic plan for the conduct of the exam including issue of hall ticket is done
- The Examination Committee strictly ensures that the evaluation work is completed within the stipulated time and the statements of marks (internal assessment and semester end exams) are submitted to the Committee by the Examiners and the results are declared within the stipulated time period.
- Necessary changes in the computer programs are done in line with the evaluation reforms of the University of Mumbai.

- Queries and grievances, if any, regarding marks by the students are sorted out and attended to by the Examination Committee as per the University norms.

2.5.4 Provide details on the formative and summative assessment approaches adapted to measure student achievement. Cite a few examples which have positively impacted the system.

The aim of formative assessment is to continuously monitor students' performance and to identify their strengths and weaknesses. The following formative assessment tools are used by the teachers:

- Group Discussions
- Assignments
- Report writing
- Subject Quiz
- Role Play/ Dramatization

Summative Assessment aims to evaluate student learning at the end of an instructional unit or course.

- Revision Tests
- Semester End Examinations
- Practical Examinations
- Viva Voce
- Project work.

The above approaches helped the students to achieve higher grades in the examination and resulted in increasing percentage of students graduating with O/A grades (First Class)

Case Studies

- In 2015-16, Mr. Chetan Dighe secured 70% at T.Y.B.Sc (Chemistry) having secured only 47.83% in HSC and was also awarded the Best outgoing student.
- In 2015-16, Ms. Sarala Subramani secured 79.5% at T.Y.B.A (Economics) having joined with only 50% in HSC
- In 2015-16, Ms. Sriya Varadarajan secured 83.25% at T.Y.B.Sc (Botany) having joined with only 52.3% in HSC
- In 2015-16, Ms. Jebamani Esther secured 62% at T.Y.B.A (English Literature) having joined with only 42% in HSC
- In 2014-15, Ms. Khan Rumana secured 72 % at T.Y.B.Sc (Botany) having secured only 48.27% in HSC.
- In 2014-15, Ms. Kote Priya Kashinath secured 72% at T.Y.B.A (Political Science) having secured only 52 % in HSC.
- In 2013-14, Mr. Raviraj Sutar secured 78.75% at T.Y.B.Sc (Chemistry) having secured only 51.2% in HSC.
- In 2013-14, Ms. Nadar Chandra secured 72.33% at T.Y.B.A (Sociology) having secured only 47% in HSC.

- In 2013-14, Ms. Valluvan Ponni Marimuthu secured 61% at T.Y.B.Com against 41% in HSC
- In 2012-13, Mr. Praveen Kumar secured 74.25% at T.Y.B.Sc (Botany) against 52.17% in HSC
- In 2012-13, Mr. Chandan Mishra secured 60% at T.Y.B.Com against 48% in HSC
- In 2011-12, Ms. Seema Nadar secured 89% at T.Y.B.Com against 66.8 % in HSC
- In 2011-12, Mr. Ashwin Kamble secured 71.67% at T.Y.B.A (Sociology) having secured only 53% in HSC.
- In 2011-12, Ms. Ansari Shaireen Bano secured 63.16% at T.Y.B.A (English Literature) having secured only 49.58% in HSC

2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.

- In internal marking, University has prescribed 20% weightage for attendance, class participation and overall behaviour and to ensure transparency in the internal assessment, the students are informed well in advance.
- Subject teachers/teacher mentors maintain records of attendance, tests, submission of assignments and minor defaults to ensure fair marking.
- Though no weightage is assigned specifically to different aspects of student development, aspects such as communication skills get tested through Book Review, Linguistic and Extempore Competition, Dramatization and Power Point Presentations.

2.5.6 What are the graduates attributes specified by the college/ affiliating university? How does the college ensure the attainment of these by the students?

Though the University has not specified any graduate attributes, the College aims to inculcate the following attributes in students graduating such as:

- Sound knowledge of the subject
- Practical skills
- Effective communication skills
- Problem solving skills
- Creative and critical thinking abilities
- Discipline
- Overall personality development including responsible behaviour
- Responsible citizen respecting value system

The College ensures that the students attain these attributes not only through teaching learning process, but also through the different enrichment activities including co-curricular and extra-curricular activities organised by the College. Emphasis on values in the functioning of the institution also contributes towards making students conscientious citizens.

As a result of holistic development, our students have entered careers of their choice, not necessarily the field of their academic degree, and are doing exceedingly well.

Case studies:

- Mrs. Sunita Sunil Godbole (Vijaya Deshmukh) -Managing Trustee Unique Global Foundation and President, Women's Legal Forum for Co-operative Housing and Public Interest
- Mr. Kaushik Mahadevan, Managing Director, Levtech IT Solutions, Bangalore
- Mr. Gerald Silva, Managing Director-Travelers Stop, (Travel Agency)
- Mr. Delicious Sahadevan, Managing Director, Delicious Dance Academy , Sultanate of Oman
- Mr. Ajay Khumbhar, CEO, Sinchan Sanskar, Yoga Academy, Mumbai
- Ms. Sayed Mariam, a young Women Entrepreneur (Mariam Cakery) currently in SYBA
- Mr. Anil Singh a Co-project Manager, Kamal Insulation and is also pursuing his passion in acting, modeling and dancing.

2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?

The College and University have a well defined process for addressing the grievances with reference to evaluation.

- **Process at the University level**
The University redresses the grievances by permitting students to apply for photocopies of answer books and revaluation of results.
- **Process at the College level**
Since College is affiliated to the University of Mumbai, it also follows the same procedure regarding grievances as is followed by the University.

2.6. Student performance and Learning Outcomes

2.6.1 Does the college have clearly stated learning outcomes? If 'yes' give details on how the students and staff are made aware of these?

Yes, the college has clearly stated learning outcomes for all the programmes such as:

- Quality results in examination
- Graduate attributes
- Progress to higher studies
- Employability
- Holistic development

Students /staff are made aware of the learning outcomes by

- Orientation programmes organised at the beginning of the academic year where the Principal addresses all the students and stress the importance of possessing graduate attributes for their overall development.
- Teacher mentors the graduating students about the importance of higher education. This is reflected in the large percentage of students pursuing post graduate studies (46% in Arts, 38% in Science, 38% in Commerce, 21% in BMS and 24% in BBI)
- Pre-placement workshops conducted by the Placement Cell
- The College, through its value imparting culture, has instilled in its students the attributes needed for their holistic development and becoming responsible citizens of the future.

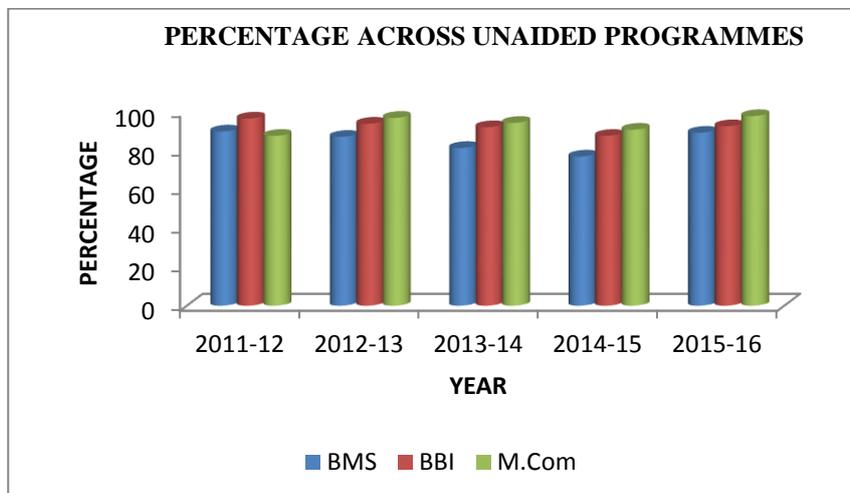
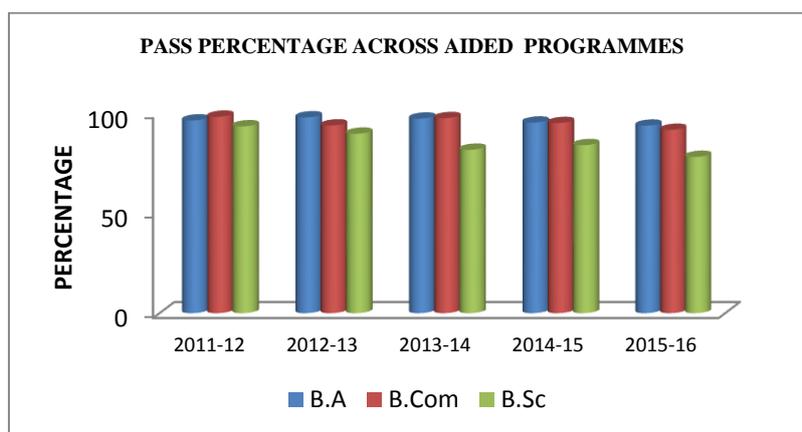
2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the student's results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.

The College monitors and communicates the performance of its students through the following mechanisms.

- The results are displayed on the notice board.
- Parents attend the Open Day.
- The Departments consolidate 'course wise' data after the results are declared by the College/ University and make a comparative study with the previous results.

Following is the result (in Percentage) of different programmes at Final year level during last 5 years

Course	2011-12	2012-13	2013-14	2014-15	2015-16
BA	96.36	97.91	97.29	95.31	93.75
B. Sc	93.42	89.71	81.69	84	78.15
B.Com	98.23	97.52	93.85	95.07	91.67
B.M.S	89.8	87.03	81.3	76.9	89.13
B.B.I	96.42	93.75	92	87.5	92.45
M.Com.	87.5	96.77	94.20	90.69	97.67



Across all the programmes, the high pass percentage has been maintained.

* The following students have secured Merit Ranks at Final Year University Examination in March 2011.

Ms. Mishra Archana - 3rd Rank in the subject of Mathematics.

Ms. P. Meghna Cyriac - 3rd Rank in the subject of Political Science.

2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

The teaching, learning and assessment strategies of the institution are structured in the following ways to facilitate the intended learning outcomes of the students:

- Completing syllabi in a planned manner as per the academic teaching plan.
- Monitoring the progress of teaching plan through Log Book.
- Carrying out revision by involving students with activities like Seminar, Presentations, Quiz, Group discussions, etc.
- Providing remedial teaching to underperformers
- Conducting continuous assessment (both mandatory and non mandatory)

2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?

The College has a Placement Cell which organises training programmes, awareness programmes and aptitude tests. Campus recruitment is conducted by inviting reputed companies TCS, Infosys, Godrej & Boyce Mfg. Co. Ltd. and the like.

To develop research aptitude students are encouraged to participate in Research Convention 'Avishkar' organised by University of Mumbai.

- Avishkar Zonal Level Workshop was conducted to give an orientation to students regarding preparation of research projects in different subjects.
- Students are also deputed to attend the pre convention workshop.
- To promote entrepreneurship amongst students, E-cell has been set up.
- On 03-09-2015, Mr. Vinay Kumar, Assistant Director, Ministry of Micro, Small and Medium Enterprises, Mumbai, gave a talk on 'Managing Small Businesses' for TYBCom students.
- On February 5-6, 2016, NES National Student Start-up Fest was organised to promote the new surge of entrepreneurship and it offered a platform for budding entrepreneurs, including interaction with captains of industry, sharing of experiences by successful young entrepreneurs, connecting with media and above all inspire students to follow their footsteps.

2.6.5 How does the institution collect and analyze data on student performance and learning outcomes and use it for planning and overcoming barriers of learning?

- Students' performance is recorded in the Information Register maintained by each Teacher Mentor who makes a comparative study to check the progress
- Guest lectures are organised by various Departments and feedback is collected from the students. This helps to know the level of knowledge imparted by the experts.
- Coursewise analysis of results and mark lists showing comparative performance of students in internal assessments/examinations are prepared. This data helps in understanding the areas of academic weakness of the student.
- In case of poor performance in a specific subject, the concerned teacher takes remedial measures.
- Teaching strategies/ methodologies are modified based on the performance of students in tests/examinations.

2.6.6 How does the institution monitor and ensure the achievement of learning outcomes?

Monitoring and ensuring the achievement of learning outcomes is done by undertaking the following measures:

- Effective implementation of the curriculum prescribed by University of Mumbai.
- The institution also follows some specific mechanism to monitor the curriculum implementation by the staff through academic plan, lesson plan, monthly and annual reports of the Departments, log book, syllabus completion form and academic audit by AAC.
- Lesson observation is done for newly recruited/not so experienced teaching staff by AAC.

2.6.7. Does the institution and individual teachers use assessment/evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes' provide details on the process and cite a few examples.

Yes, teachers use evaluation outcomes as an indicator for evaluating student performance and achievement of learning objectives and planning.

The Assessment outcomes indicate the students' academic performance which is an intrinsic part of graduate attributes (specified in 2.5.6). However the academic performance supplemented with student enrichment activities and value based initiatives lead to wholesome learning outcomes which the College strives to achieve. Extensive planning is not only done with respect to curriculum

delivery but also enrichment activities and value based programmes to ensure holistic development of students.

To cite a few examples:

- The unsatisfactory academic performance of TYBCom students in the subject of Financial Accounting and Auditing Paper I, led to the teacher taking steps to give more practice to students in solving University question papers and difficult problems. This has helped in improving the performance of the students in the consequent years.
- To enhance skill development and employability, the College carefully plans the introduction of skill based programmes depending on the needs of the students and motivates them to enroll for these courses. The number of courses and students enrolment in these courses has increased.
- The College, over the years has planned and introduced more enrichment activities for students. Each department hosts intra and inter collegiate events (Talentueux, Sci-Trek, Zero Gravity, Manzil) which has also led to increased student participation.

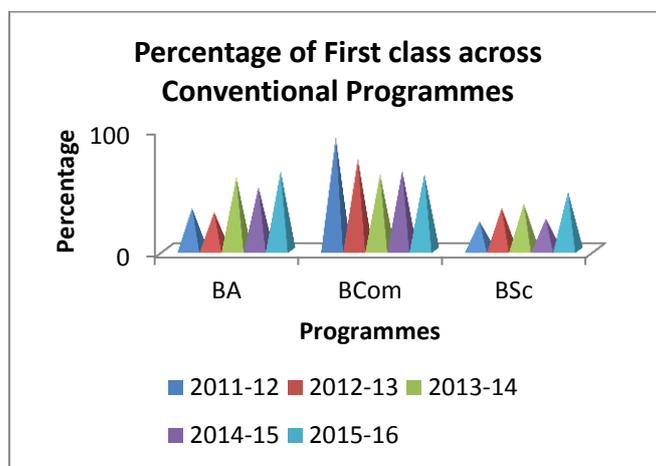
Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include.

Faculty Development:

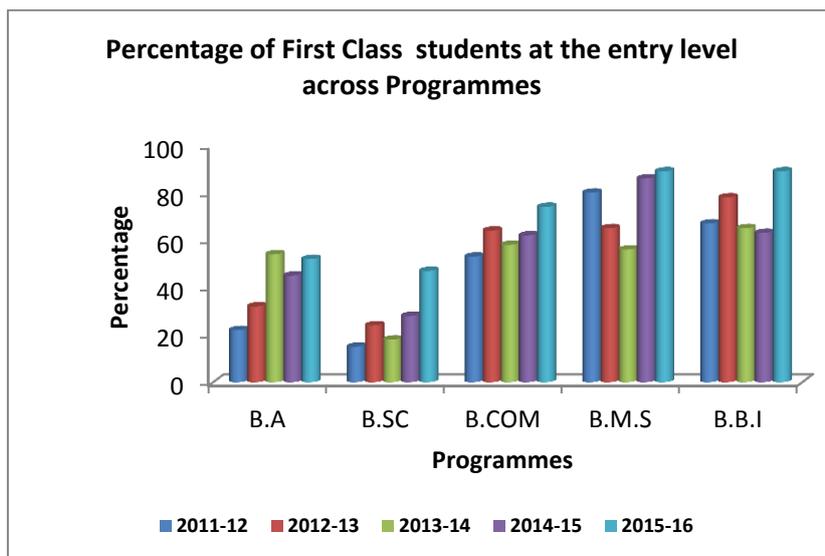
- The percentage of teachers with Doctorate degree has increased from 15% in 2011 to 35% in 2016.
- 9 completed Ph.D in service
- Number of teachers currently pursuing Ph.D is 11
- Number of faculty who have acquired additional qualification (other than Ph.D) is 12

Students' Performance:

- The percentage of students securing First class in University Examination is significantly high across all programmes



- The percentage of students admitted at the entry level with First class has significantly increased across the programmes during the last five years indicating the that the College is attracting meritorius students.



Criteria III – Research, Consultancy and Extension



Avishkar Research Convention of University of Mumbai



Milk Adulteration Workshop



Tree Plantation



Malaria Awareness Campaign



Road Safety Awareness



Blood Donation Camp



Street Play on Women Empowerment



Career Exhibition - LLE

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research

3.1.1 Does the institution have recognized research centre of the affiliating University or any other agency/ organization?

Yes, the institution has a Research Laboratory recognized by the University of Mumbai since the year 2014-15 for the Ph.D. Programme in Botany.

3.1. Does the Institution have 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.

Yes, the Institution has a Research Committee which promotes, facilitates and monitors the research initiatives and addresses the issues pertaining to research. The composition of the committee is as follows:

Dr. Sunita Chahar - Chairperson

Dr. Vinita Dhulia - Member

Dr. Lata Swaminathan - Member

Dr. Jayasree Gopalakrishnan - Member

The Committee plans, recommends and also motivates staff as well as students to undertake research activities. A few recommendations made by the committee:

• Recommendations for the Staff

1. To apply for minor research projects to UGC, University of Mumbai and other funding agencies.
2. To attend Seminars, Workshops and Conferences and update themselves with the latest findings in their respective subjects.
3. To organize Conferences/ Workshops and to promote research culture and understand the current trends and improve the quality of teaching learning.
4. To publish papers in reputed national and international journals.
5. To pursue doctoral studies and work towards recognition as Ph.D. guides by the University and register students for doctoral studies.
6. To share their research findings with the colleagues through various interactions.

• Recommendations for the Students

1. To motivate and encourage students to inculcate the temperament of research and to participate in Avishkar- Research Convention of University of Mumbai and Research competitions conducted by other institutions.
2. To depute students for training programs to the premier Research Institutes.

- **Impact of the recommendations (Staff)**

As a result of above recommendations, there has been considerable improvement in following areas:

- Thirty three Research Projects with funds amounting to Rs. 14,42,200/- have been undertaken in past 5 years.

Year	No. of Research projects	Funds Received (Rs.)	Source of Funding
2010-11	2	2,80,000/-	UGC & University of Mumbai
2011-12	6	1,45,000/-	University of Mumbai
2012-13	9	3,34,200/-	University of Mumbai
2013-14	10	2,33,000/-	University of Mumbai
2014-15	5	4,25,000/-	UGC & University of Mumbai
2015-16	1	25,000/-	University of Mumbai

- 180 papers have been published in national, international journals and conference proceedings. Details in the Annexure: 3.4.3
- Three National and two International Conferences have been organized in the past five years:
- ✓ National Conference on 'Forests for the Future of Man' was organised by the Department of Botany in collaboration with Association of Teachers in Biological Sciences (ATBS) on 16th & 17th September 2011 as the year 2011 was declared by UN the international year of forests
- ✓ International Conference on 'Information & Communication for Development-Reach, Impact, Opportunities and Challenges' was jointly organised by the Departments of Humanities & Commerce on 4th and 5th October 2012.
- ✓ National Conference on 'Fungi in Agriculture' was organised by the Department of Botany in collaboration with Mycological Society of India on 28th & 29th January 2014.
- ✓ National Conference on 'Recent Developments in Synthetic and Material Chemistry' was organised by the Department of Chemistry in collaboration with Association of Chemistry Teachers (ACT) on 16th & 17th January 2015.
- ✓ International Conference on 'Photon: Multiple and Creative Solution to Challenges' was organised by the Department of Physics on 5th & 6th December 2015 as the year was declared as International year of light by United Nations
- In the past few years four staff have received recognition as Ph.D. guides and two have started guiding students for Ph.D. degree.
- Six staff have obtained Ph.D degree in the last five years and eleven are pursuing Ph.D.

- **Impact of the recommendations (Students)**

- **Avishkar Research Convention of University of Mumbai:**

Student participation in the research convention has increased over the past five years and following students won prizes:

- ✓ Mr.Ashish Dubey and Ms.Rupa Gupta of F.Y.B.Sc won second prize for the project titled ‘Heat Detector’ at the District level under category of Pure Sciences (U.G level) in the year 2013.
- ✓ Mr.KiranGudigar,Ms.Roopa Gupta and Mr.Sunil Singh of S.Y.B.Sc won First place(Gold) at district level for the project on ‘Solar Water Distillator’ under the category of Pure Sciences(U.G level).The project was selected to represent the University of Mumbai at the state level competition held in Jalgaon on 15th,16th&17th January, 2014.
- ✓ Ms.Meera Krishnan and Ms.SweetlinNadar of S.YB.Sc presented a Project on ‘A Novel Diagnostic Indicator of pollution’ at Zonal level. This project was selected for district level competition held on 17th December 2015.

- **NIUS (National Initiative on Undergraduate Science) organised by HBCSE, Mumbai:**

- ✓ Mr. NeeteshYadav &Ms.Komal Chauhan were shortlisted for the selection round of NIUS Chemistry. They attended the ten day training camp from 23rd December’ 15 to 1st January’ 16.
- ✓ Ms.Komal Chauhan was selected out of 47 students from 18 states for the second level of training and is pursuing the two year project by NIUS.
- ✓ Mr.Khan Abdul Talim& Mr. ParabChinmayVishwanath were shortlisted for the selection round of NIUS Biology. They have attended the five days training camp from 6th November- 11th November2016.
- ✓ Mr Ashish Dey is shortlisted for the selection round of NIUS Chemistry. The student is attending the ten days training camp from 23rd December 2016- 1stJanuary 2017.

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

Autonomy to thePrincipalInvestigator:

The Principal Investigator is given full autonomy for selection of the topic, execution of the project and materials to be purchased under the scheme /project.

Timely Availability or Release of Resources

Funds sanctioned by the funding agency are made available for the timely execution of the project.

Adequate Infrastructure and Human Resources

- The institution has adequate infrastructure, like well stocked library, Internet facilities, well equipped laboratories.
- The human resources are made available in the form of Lab Assistants, Attendants, Clerical assistance, Peons etc as and when required.

Time-off, Reduced Teaching Load, Special Leave etc. to teachers

- Teachers participating in Seminars/Conferences are given duty leave.
- Teachers undertaking research projects and pursuing Ph.D. are given flexibility of working timings / concession in working hours.
- Faculty members are given study leave under Faculty Improvement Program (FIP) for pursuing doctoral studies. So far, five faculty have benefitted from FIP.

Support in terms of Technology and information needs

- Digital Library section in the Central Library which has e-books and journals
- Free internet access for teachers in the library, departments and Teachers Resource Centre.
- INFLIBNET – N-LIST membership facilitates ready access to around 3000 Research journals.
- Tie up with American Library and British Council Library Membership helps the staff to access the resources.
- Display of circulars regarding research schemes from the various funding agencies.

Facilitate timely auditing and submission of Utilization Certificate to the funding authorities

- The project coordinators are assisted by the Research committee in submission of project accounts and audit procedures. This has facilitated timely audit and submission of the utilization certificates.

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

Following steps are taken to develop scientific temper and promote research culture amongst the students:

- Students are involved in research based activities:
 - ✓ through collecting primary and secondary data.
 - ✓ by performing experiments.
 - ✓ by writing review articles
- Students are encouraged to participate in Avishkar Research Convention of University of Mumbai
- Guest lectures by eminent academicians/ researchers
- Visit to Industry and Research Institute

- Guidance for competitive exams
- Publishing departmental Newsletters by student Editors
 - ✓ Ignite Chemistry
 - ✓ Pathfinders Commerce
 - ✓ Dossier Management Studies
 - ✓ B & I Buzz Banking and Insurance
 - ✓ Spandan Marathi
- Organising Intercollegiate festivals
 - ✓ Talentueux Arts Faculty
 - ✓ Sci-trek Science Faculty
 - ✓ Zero Gravity Commerce Faculty
 - ✓ Manzil Departments of Management Studies and Banking & Insurance

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.)

- **Guidance given to Ph.D Students**
 - ✓ Dr.Sunita Chahar is guiding four Ph.D. students.
 - ✓ Dr.LataSwaminathan is guiding three Ph.D. students.
- **Research Projects**
 - ✓ Thirty three research projects (UGC & University of Mumbai) have been completed in the past five years.
- **Faculty pursuing Ph.D.**
 - ✓ Eleven faculty members are pursuing Ph.D.
- **Collaboration**
 - ✓ Dr.Meenakshi .K. has collaborative research project with National Institute of Immunohaematology at KEM Hospital, Mumbai.
 - ✓ Dr.Sunita Chahar has collaborative research project with Universal Speciality Chemicals Pvt. Ltd. Mumbai.

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.

- **Steps taken for Staff**
 - Eminent personalities are invited to create research awareness and interest among the staff.
 - ✓ Dr.GeetaBharadwaj, Quality Expert, Indian Merchants Chamber(IMC)
 - ✓ Dr. BinuThomas, Tata Institute of Social Sciences(TISS)

- ✓ Dr.Probodh Chobe,Ex-SeniorGeneral
Manager,BASF,Indiawere invited to give ideas about research projects and guidelines for research writing/ communication.
- The College also organizesConferences with
aviewtobuildtheresearch capacity amongthefaculty members.
- Apart from this college encourages Staff membersto undergo training towards capacity building in other institutions/
organisations.
- ✓ Dr.MedhaSunderRajanhas completed one week “Certificate course in Analytical Chemistry” from the School of Analytical Chemistry, BARC, Mumbai in 2011-12.
- ✓ Dr.Sunita Chahar has completed one week training Programmeon “Hands on Training Programme in the Molecular Biology and Introduction to Bioinformatics” from 13th-18th May 2013 at K.E.T.’s V.G.Vaze College, Mulund (E), Mumbai.
- ✓ Mrs.Bhakti Velankar attended a workshop on “Graph Theory” conducted by NBHM at Kozhikode, Kerala in 2014.

- **Steps taken for Students**

- The College hosted Workshop for Avishkar Research Convention, conducted by University of Mumbai to train students for “Presentation of the Project” in the year 2014-15.Students from the neighbouring colleges also attended the workshop.
- Faculty guides the students in their projects, which are sent for intercollegiate competitions.

3.1.7 Provide details of prioritized research areas and the expertise available within the institution.

Most of the departments have faculty with Ph.D. degree and developed expertise inrespective of the field of their research. The main areas in each department are as follows:

S.NO.	DEPARTMENT	EXPERTISE
1	Botany	Mycorrhizal Fungi, Mycorrhiza based Fertilizers
2	Chemistry	Bio-Synthesis of metal nanoparticles and their characterization, Synthetic organic chemistry, photochemical and electrochemical studies of light emitting polymers.
3	Physics	Condensed meta physics, Photo catalysts for the use in fuel cells, Acoustic parameters of biopolymers, finding band gap of materials using four probe method
4	Mathematics & Statistics	Functional Analysis, Combinatorics, Graph theory
5	Commerce	Women entrepreneur leadership styles, Micro finance, leadership, Urban Co-operative Banks
6	Economics	Environmental Accounting for Oil and Gas Resources in India
7	Political Science	Public policy with special reference to energy policy, Migration studies with special reference to Rohingya refugees of Burma
8	Marathi	Biography of Poets and their Litreture

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 institute takes lot of efforts in inviting eminent personalities to interact with teachers and students.

- **For Staff:**

- The College organizes workshops, seminars and conferences on a regular basis during which researchers of eminence visit the institution and interact with faculty.
- The college invites academicians with sound expertise in research to give them ideas for writing research projects.

- **For students:**

Guest Lectures by eminent personalities are organised. To name a few:

- ✓ Dr.A.P.Jayaraman, Retired Nuclear Scientist, BARC, Mumbai.
- ✓ Dr.N.S.Tekale, Director, Envirovigil, Kalwa, Thane.

- ✓ Dr. PranayGoel,AssistantProfessor,Mathematics and Biology,IISER, Pune.
- ✓ Dr. Assisi Collins,AssistantProfessor,Biology,IISER, Pune.
- ✓ Dr.B.Rodrigues, Botany Department, Goa University.
- ✓ Mr. Alok Singh, Scientist, ISRO
- ✓ Mr. Debjyoti Bardhan, Research Scholar,TIFR

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?

- Faculty has not used sabbatical leave.
- However Institution is supportive in granting leave to faculty members under the FIP of UGC for pursuing Ph.D. in accordance with UGC guidelines.
- Five teachers have been granted FIP for completing their Ph.D. work in last five years.
As a result of completingPh.D., the research activities in the departments have increased.

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).

Following initiatives are taken by the institution in creating awareness of findings of research of the Institution to students and community:

- Presentations at various seminars and conferences.
- Publishing their work in research journals.
- Participation in Science festivals.

The students are motivated to reach out to the community and investigate issues of social concern. Thus many of the research projects are action-oriented and have had practical applications in diverse fields. Some of the worth mentioning projects having practical applications are:

- Analysis and detection of adulteration in milk samples obtained from local dairies was done by Chemistry department in collaboration with Consumer Guidance Society of India.
- Environmental Management System (ISO 14001) Certification in Manufacturing Companies in Thane – Prospects and Challenges was done by Environmental Studies department.
- Green Marketing strategies followed by Indian companies was

done by Commerce and Environmental Studies departments.

- Biological and Chemical monitoring of road side plants exposed to vehicular pollution in Central belt of Mumbai was done by Chemistry department.
- The Ascendency of English as preferred medium of Instruction in the Educational Institutions of Mumbai suburbs: A case study of Bhandup was carried out by English department.
- Low cost Anemia detection for College students was done by Zoology department.

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.

- Majority of the funding needed for research is fulfilled through the amount sanctioned by various funding agencies like University of Mumbai and UGC for research projects.
- The College purchases Books and Journals, Chemicals/ Apparatus as needed.
- Infrastructural support is provided by the College.
- Funds are also made available to the students to complete projects.
- The College supports financially Conferences / Seminars organized by different departments.
- The College supports faculty members and research students to attend training programs, workshops or seminars.

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?

Although there is no such provision in the institution to provide seed money to faculty for research, the institution supports and encourages faculty for research by taking the following initiatives:

- The college provides necessary funds for creation of infrastructure, setting up of laboratories needed for research.
- Purchase of equipments, instruments and chemicals.
- Subscribing research journals and purchase of reference books.
- Human resources are made available as and when needed.

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

The College supports student research projects when they participate

in research Competitions by providing laboratory facilities and equipments. The cost of all consumables is borne by the College.

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.

- A number of Interdisciplinary minor research projects have been undertaken by staff of different departments. Some of them are:

S. No	Departments &Year	Investigators	Title of the Project
1.	Mathematics & Statistics - Botany 2011-12	Dr.Nithya S. Dr.Sunita.C	Biostatistical Analysis of Health Related Problems of School Children
2.	Physics- Mathematics & Statistics 2011-12	Mrs.Presentia A. Mrs.Karthiyaini S.	Spectral Characterization of Urban Buildings in the developing suburb of Bhandup, Mumbai, Maharashtra, using Remote Sensing Technology
3	Environment Studies Commerce 2011-12	Mrs.Deepa C Mrs.Rebecca T	Environmental Management System (ISO-14001) Certification in Manufacturing Companies in Thane – Prospects and Challenges
4	Commerce – Environmental Studies 2012-13	Mrs.Rebecca.T. Mrs.Deepa C	Green Marketing strategies followed by Indian companies
5	Chemistry - Environmental Studies Botany 2012-13	Mrs.Jayshree.G. Mrs.Deepa C Ms.Sweta Belose	Biological and chemical monitoring of road side plants exposed to vehicular pollution in Central belt of Mumbai
6	English- History and Sociology 2012-13	Mrs.Jyothi.S. Mrs.R. Vijaylakshmi Mrs. Jenifer.C	The ascendancy of English as preferred medium of instruction in the educational institutions of Mumbai suburbs : A case study of Bhandup
7.	Botany-Chemistry 2014-15	Ms.Shweta Belose Mrs.MamtaYadav Mrs.Jayashree G	Dyes reduction by Fungi mediated Silver Nano Particles

- Faculty members attend Seminars, workshops, conferences organised by other departments. This provides an opportunity to interact across the departments.

Challenges:

Identifying research areas where expertise from different departments can be utilized.

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

Following measures are taken to ensure optimal use of Equipments and facilities

- Sharing inter-departmental equipments /facilities.
- Computer and Internet facility is provided to staff and students in the library /departments.
- The College has a well-stocked library, which also has tie ups with other leading libraries. The staff and students are given easy access to it to ensure optimum use.
- Digital library section is available especially for staff, postgraduate and Ph.D students.

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.

Nil

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

The circulars sent from UGC and University of Mumbai are immediately brought into the notice of the staff. Research Committee motivate the staff by providing required informations to apply for Research grants. Infrastructural and Administrative support are also provided for the purpose.

The projects completed are as follows:

Minor Research Projects of UGC

S.No	Department & Duration	Name of the Researcher/s	Title of the Project	Amount sanctioned (Rs)
1.	Botany – Chemistry (2010-2012)	Dr.SunitaChahar Dr.Medha S	Response of VAM Fungi to Sewage Irrigation and Chemical Fertilizers on Napier Grass	1,50,000/

2.	Mathematics & Statistics (2010-2012)	Dr.Nithya S	Cayley Formula for Spanning Trees- Proofs and Applications	1,30,000/-
3.	Botany (2014-2016)	Dr.SunitaChahar	Study of Biodiversity of Arbuscular-Mycorrhizal Fungi in Medicinal plants present in Sanjay Gandhi National park, Borivali, Mumbai, by Morphological and Molecular characterization	3,20,000/-

Minor Research Projects of University of Mumbai 2011-12(1yr)

S.No	Departments	Name of the Researcher/s	Title of the Project	Amount Sanctioned (Rs)
1.	Mathematics & Statistics Botany	Dr.Nithya S. Dr.Sunita Chahar	Biostatistical Analysis of Health Related Problems of School Children	35,000/-
2.	Physics - Mathematics & Statistics	Mrs.Presentia A. Mrs.Karthiyaini S.	Spectral Characterization of Urban Buildings in the developing suburb of Bhandup,Mumbai, Maharashtra, using Remote Sensing Technology	25,000/-
3.	History	Mrs.R.Vijayalakshmi	Eco Tourism-Lesser Known Places From Konkan Region	25,000/-
4.	Chemistry	Dr.NeelamDurani Mrs.Lakshmi P. Mrs.Phebe K.	Assessment of Caffeine Contents in Some Indian Tea Brands	25,000/-
5.	EVS- Commerce	Mrs.Deepa C Mrs.Rebecca T	Environmental Management System Certification in Manufacturing Companies in Thane – Prospects and Challenges	25,000/-
6.	Political Science	Mrs.Sangeeta Roy Mrs.SaraswathiUnni	A Critical Analysis of the working of the ICDS(Integrated Child Development Scheme) in the S ward of B M C	10,000/-

Minor Research Projects of University of Mumbai 2012-13(1yr)

S.No	Departments	Name of the Researcher/s	Title of the Project	Amount sanctioned (Rs)
1.	Commerce	Mr.AshokPoojari Mrs.Nutan L.	Impact of non performing Assets in Public sector Banks on Education Loans	25,000/-
2	Mathematics & Statistics	Mrs. Bhakthi. V	Eigen values of a graph – survey of new results and applications	21,400/-

3.	Chemistry	Dr.Medha.S Mrs.Phebe.K Mrs.Jayshree. G	Comparative study of effectiveness of the solvent to extract Wax from Press cake – Sugarcane Byproduct	26,400/-
4.	Chemistry	Mrs Lakshmi P. Dr.Neelam.D Mrs.Jayshree. G	Comparative study of biosorption of certain heavy metals by Lingo cellulosic agricultural byproduct	21,400/-
5.	Commerce , EVS	Mrs.Rebecca.T. Mrs.Deepa. C	Strategic Green Marketing – A comparative study of two Industries in Mumbai.	30,000/-
6.	Chemistry EVS, Botany	Mrs.Jayshree G Mrs.Deepa C MsSwetaBelose	Biological and chemical monitoring of road side plants exposed to vehicular pollution in Central belt of Mumbai	21,400/-
7.	English, History and Sociology	Mrs. Jyothi.S Mrs.R.Vijaylakshmi Mrs. Jenifer C	The ascendancy of English as preferred medium of instruction in the educational institutions of Mumbai suburbs : A case study of Bhandup	25,000/-
8.	Sociology History	Mrs. Jenifer C Mrs. R.Vijaylakshmi	A study of Poverty indices in the two highest BPL areas of Mumbai viz. Bhandup and Govandi: A case study of slums.	40,000/-

Minor Research Projects of University of Mumbai 2013-14(1yr)

S.No	Departments	Name of the Researcher	Title of the Project	Amount sanctioned (Rs)
1.	Botany	Dr. SunitaChahar	Seasonal Variations in the Diversity of AM FungiAssociated with Foddergrasses	Rs.15,000/-
2	Botany	Mrs.Mamta Yadav	Green synthesis of Gold Nano particles using some Tuber extracts &theircharacterization	Rs.15,000/-

3.	Zoology Chemistry EVS	Mrs.Chetna Sharma Mrs.Jayasree G Mrs. Deepa C.	Study of bioremediation Ability of some bacterial species on azo direct dyes and effluent from textile dying industry	Rs.23,000/-
4.	Commerce	Mrs.Nutan L. Mr.Ashok Pujari	A study on different approach to valuation of Stock	Rs.25,000/-
5.	Physics	Dr. Rupali.N.Patel	Development of Ta ₃ N ₅ and TaONphotocatalyst for Efficient-visible lightAbsorption	Rs.30,000/-
6.	Physics	Mrs.Pratibha J. Singh	Investigation of acousticParameters of 'Biopolymer'	Rs.30,000/-

Minor Research Projects of University of Mumbai 2014-15(1yr)

Sr. No	Departments	Name of the Researcher	Title of The Project	Amount
1	Mathematics & Statistics	Dr.Nithya S	Tutte's Polynomials and its Applications	Rs. 25,000
2	Mathematics & Statistics	Mrs. S.Kartiyaini Mrs.Bhakti V.	Mathematical Modeling of Wage Inequality	Rs. 25,000
3	Botany- Chemistry	Ms. Shweta BeloseMrs.Jayashree .G Mrs.Mamta Yadav	Dyes reduction by Fungi mediated Silver Nano Particles	Rs. 30, 000

Minor Research Projects of University of Mumbai 2015-16 (1yr)

Sr.No	Department	Title Of The Project	Name of The Staff	Amount sanctioned (Rs)
1	Chemistry	Phytomediated Synthesis of Palladium nanoparticles, their characterization and investigation of its role as catalyst in reduction of Nitrophenol.	Mrs.Lakshmi Prasuna Dr.Jayasree G.	Rs. 25,000

3.3 Research Facilities

3.3.1 What are the research facilities available to the students and research scholars within the campus?

Following research facilities are available to the students and research scholars within the campus:

- Well equipped laboratories.
- The library is equipped with good number of reference books & Reprography facility.
- There is a separate reading room for staff.
- INFLIBNET – N LIST facilitates ready access to Research journals
- Free internet access
- Research projects/ publications by staff are available in the library for reference.
- Research Laboratory for Botany - has facility/infrastructure for Mycorrhiza based Fertilizer production and testing.
- A shade house facility for research in Botany.

3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of research especially in the new and emerging areas of research.

- The Research Committee ensures that existing research facilities are augmented from time to time as per the need.
- Free access to e-resources helps the faculty members to keep track of the latest developments in their fields
- Research Grants for projects from UGC and University of Mumbai also support in the upgradation of infrastructure and laboratories.

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.

Nil

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

- Research facilities of Institutions like BARC, IIT, Anachrome Lab, National Facility Lab of Khalsa College, Mumbai and University of Mumbai permit our staff and students to use their facilities.
- RBI, MSME, British Council Library, American Library, TISS, Consulates, National Federation of Urban Cooperative Banks are approached by staff and students of Humanities and Commerce faculty for their research work.

3.3.5 Provide details on the library/ information resource center or any other facilities available specifically for the researchers ?

- The library is well stocked with a number of reference books and research journals on varied topics, covering wide areas of subjects.
- Digital Library, access to e-journals and INFLIBNET encourage research work.
- Library has membership of British Council and American Library.
- The reprography facility in the college and in the library are used by students and faculty members.
- In addition to the above, each department has been provided with computers and internet facility.

3.3.6 What are the collaborative research facilities developed/ created by the Research institutes in the college. For example, Laboratories, Library, instruments, computers, new technology etc.

Though there is no such facility developed by research institutes, the collaborative research with industry has helped Botany department make significant progress towards development of Mycorrhiza based fertilizer as per FCO guidelines.

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):** Nil

***Original research contributing to product improvement**

Research is being carried out by Department of Botany for formulation of Mycorrhiza based Bio-fertilizer.

***Research studies or surveys benefiting the community or improving the services.**

Some of the departments have carried out studies which will benefit the community.

Chemistry Department:

A workshop on 'Milk Adulteration Testing', was organized jointly by the Department of Chemistry in collaboration with CGSI (Consumer Guidance Society Of India) for teachers and students on 21.10.11. The department has also organized the activity of 'testing the milk samples of different brands from different vendors across Thane to Vikhroli in Mumbai, in collaboration with CGSI on 07.01.12 .

Zoology Department:

- ✓ 'Low cost anemia detection at college level' The project was undertaken by SYBSc students of Zoology. Samples of 100 girl students from different streams were tested for anemia.

- ✓ A research project on Correlation of Anemia and Cognitive Impairment in Girl Students was done by TYBSc students where in they have investigated the incidence of anemia in girls and correlated its effect on cognitive impairment using a standard questionnaire, projected visuals to test concentration and memory power.

Commerce Department:

- ✓ Students were involved in minor research project on Environment Management System in 2011-12 & Green Marketing in 2012-13
- ✓ Students did a project on Energy Consumption of the Institution & put forward valuable suggestions to minimize energy consumption.
- ✓ Poster exhibition on 'Think, Eat and Save' by FY B.Com in the subject of EVS was organized in the 3rd and 4th week of August, 2013.
- ✓ Study on current scenario of primary health centres in and around Bhandup by SY B.Com students in the subject of Foundation Course in November 2013
- ✓ Projects taken up by students are published in newsletter of commerce department "Pathfinder". Some of the projects of Commerce students were : Teenage Suicide & Stand up for your rights, Battle of Detergents, Social networking amongst students, Spending habits of students, Perspective about the current Government, etc

***Research inputs contributing to new initiatives and social development.**

Nil

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?

- Thirteen research papers presented in the International conference on "Photon: Multiple and Creative solution to challenges" were published by the Physics department in partnership with the Editorial Board of the International Journal of Chemical and Physical Sciences.
- The Commerce and Humanities departments of our College publish a multidisciplinary journal, "Epignosis" with an ISBN number. The Editorial Board comprises of Dr. Mary Vimochana and Dr. Lata Swaminathan.

Publication Policies of Epignosis are as follows:

1. Copyrights for articles are retained by the authors, with first publication rights granted to the journal/publisher. Authors have rights to reuse, republish, archive, and distribute their own articles after publication.

2. Submission of an article implies that the work described has not been published previously.
 3. All submissions will be checked for plagiarism before being sent to reviewers.
 4. The authors shall make necessary modifications as suggested by the peer review committee.
 5. There will be a publication fee charged to each author and in case of more than one author, the publication fee has to be paid if multiple copies are required.
- Dr. Sunita Chahar, Head, Department of Botany is one of the Co-Editor of Bionanofrontier, a peer reviewed journal.
 - Departments organizing Conferences bring about the Proceedings of the Conference with an ISBN number.

S. No	Dates	Conference Title	ISBN Number
1	16 th & 17 th September 2011	National Conference on “Forests for the Future of Man”	ISBNno:978-81-922163-0-0
2	4 th & 5 th October 2012	International Conference on “Information & Communication for Development - Reach, Impact, Opportunities and Challenges”	ISBN no's 978-81-922163-2-4 978-81-922163-1-7 , 978-81-922163-3-1.
3	28 th & 29 th January 2014.	National Conference on “Fungi in Agriculture”	ISBN no:978-81-922163-4-8
4	16 th & 17 th January 2015	National Conference on “Recent Developments in Synthetic and Material Chemistry”	ISBN no:978-81-922163-5-5
5	5 th & 6 th Decem ber 2015	International Conference on “Photon: Multiple and Creative solution to challenges”	ISBN no:978-81-922163-6-2

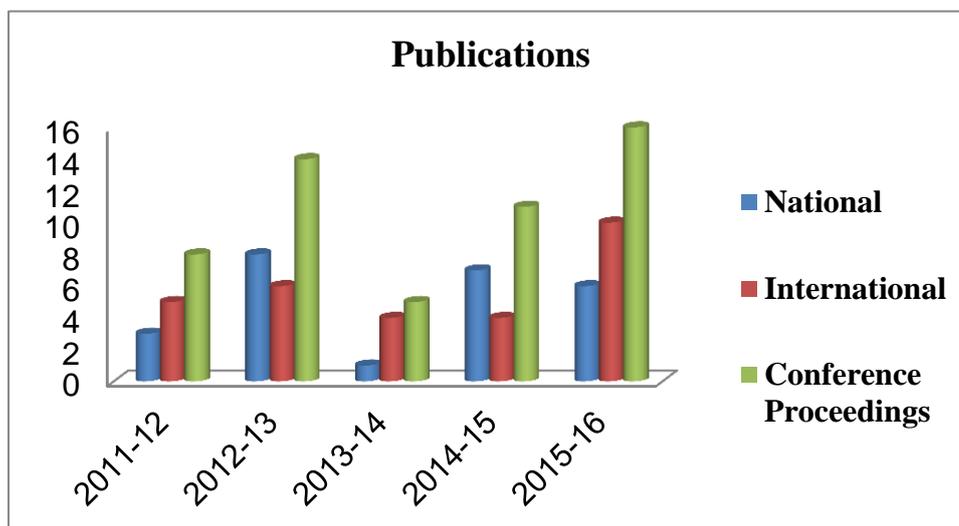
3.4.3 Give details of publications by the faculty and students:

Publications by the faculty from - 2011-12 to 2016

1. Number of papers published by faculty and students in peer reviewed journals (**National**) with Impact factor/ Citation/ SNIP/etc: **24**
2. Number of papers published by faculty and students in peer reviewed journals (**International**) with Impact factor/Citation/ SNIP/etc: **34**
3. Number of publications listed in International Database (for Eg: Web of Science, Scopus, Humanities International Database, International Social Sciences Directory, EBSCO host, etc.): **22**
4. Monographs: **01**

5. Chapter in Books: **09**
6. Books Edited: **06**
7. Books with ISBN/ISSN numbers with details of publishers: **68**
8. Conference Proceedings: **121**
9. Any other: **03** (Articles in Newspapers)

Details in the Annexure 3.4.3



3.4.4 Provide details (if any) of

Research awards received by the faculty

- ✓ **Dr. Jayasree .G.** secured second prize in the paper presentation in the National Conference on “Recent trends in Coordination Chemistry” held at Karmaveer Bhaurao Patil College, Vashi, Mumbai for her paper “**Biosynthesis of silver nano particles through reduction with *Amorphophallus paeonifolius* tuber extract and it’s characterization**” on 04/10/2013 & 05/10/2013.
- ✓ **Dr. Jayasree G** secured ‘Best Research Paper’ presentation award for her paper “**Bio. synthesis of silver nano particles using *Plectrathus rotunifolius* tuber extract and it’s antifungal activity against straw berry phytopathogens** in the National Conference on ‘Green Chemistry’ held at M.D.College, Parel, Mumbai on 03/12/2013.
- **Dr. Sunita Chahar** received first prize in oral presentation for her paper “**Study of AM fungi in *Tridax procumbens* by Trap culture**” at the “National Conference on “Fungi in Biotechnology” held in S.I.E.S College of Arts, Science & Commerce, Sion, Mumbai on 28/01/2014 & 29 /01/2014.
- **Mrs. R. Vijaylaxmi** received Best Senior Researcher Award from Mani Kamrekar Trust on 01/08/2015.

- **Dr. NithyaS** received second prize in paper presentation for her paper “**Application of Statistics in Commerce, Economics & Social Sciences**” organized by Rizvi College, Bandra, Mumbai on 08/01/2016 & 09/01/2016.
- ✓ **Mrs. K.RebeccaThomas** received the Best Paper award at the one day National Conference on “Contemporary Issues in Management- A Pathway for Vision 2020, organized by Department of Commerce of Ramanand Arya D.A.V.College,Mumbai on 12/03/2016.

Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally

- **Mrs. Deepa .C** - Received Joseph Lister Research Award in the field of **Ethno biology and traditional medicine** on 06/10/2015 by International Agency for Standards and Rating (IASR)

Incentives given to faculty for receiving state,nationaland International recognitions for research contributions.

The management acknowledges the contributions / achievements of faculty members in the areas of their research by felicitating them during the Foundation Day/ Teacher’s Day celebrations.

3.5 Consultancy

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

- In order to establish institute-industry interface, the College invites people from the industry to interact with the students. Students are also taken for industrial visits.
- NES National Students Startup Fest was organized on 4th & 5th February 2016 to establish Institute – Industry Interface for the benefit of staff and students.

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

Institution encourages staff to take up research and consultancy in their area of specialization. Following measures are taken to publicize the expertise:

- through publications in reputed journals.
- presentation of research work at national/ international conferences, seminars.
- during meetings with academic peers.

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

The Institution encourages the staff to undertake consultancy by offering its resources. This includes

- ✓ Laboratory facilities
- ✓ Computing facilities
- ✓ Library facilities
- ✓ Support services

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

Area of Consultancy:

Analysis of Mycorrhiza based fertilizers.

Dr.SunitaChahar:

- ✓ Completed a one year Consultancy Agreement with **Universal Specialty Chemicals,Pvt.Ltd., Mumbai** from 1.3.2015 to 29.2.2016.Income Generated: Rs.2,40,000/- (@ Rs20,000/ per month)
- ✓ Signed a Consultancy Agreement with **Indus Technical and Financial Consultants ltd., Raipur** from 1.5.16 to 30.12.16 .(@Rs 5500 per month.
- ✓ Dr.Medha SunderRajan of Chemistry department is providing honorary consultancy services to Shreyas Relay Systems.

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?

As per the institution's policy 10% of income generated by the staff goes to the institution, which is utilized for developing the infrastructural facility for research.

3.6 Extension Activities and Institutional Social Responsibility(ISR)

3.6.1How does the institution promote institution-neighbourhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

The College makes sincere efforts to promote institution – neighbourhood community network through its NSS unit, LLE unit, Disaster Management Cell, Students' Council and various departments.

- NSS activities:
 - Awareness programmes
 - Blood donation drives
 - Cleanliness drives

- Street Plays
- Tree Plantation
- Rural Camps
- LLE activities:
 - Awareness programme on NIOS
 - Survey on women empowerment
 - Industry Oriented Projects
- Workshop on First aid in emergency by Disaster Management Cell.
- Visit to hospitals and orphanages by the Students' Council.
- Students are sensitized to relevant social issues through various activities of Departmental Clubs / Associations.
- The Mentor teachers motivate their students to get proactively involved in community services like teaching the poor, visiting the orphanage and old age home etc.

The College has networked with the Municipal Corporation of Greater Mumbai (MCGM), Bhandup Police Station, NGOs like Haryali, Blood Banks (Bombay Hospital, Arpan, Blood Bank and Nair Hospital), Anganwadis / Balwadis in Bhandup.

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

- **Data base of Students:** The College maintains data base of students participating in various activities through various committees.
- **Monthly reports:** submitted by departments and committees like NSS, LLE and others mentioning therein details of students participation.
- **Class Teachers Reports** keep track of student's involvement in various social activities by preparing and submitting the reports on Monthly drives like Save Environment, Patriotism, Health and Hygiene
- **NSS Volunteers' Diary:** The NSS volunteers maintain a diary for recording the activities in which they participate and for how many hours.

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

The institute solicits the perception on the overall performance and quality of the institution from stakeholders through:

- Feedback from students, parents and other stake holders collected by IQAC/AAC.
- Alumni interactions
- Parent- Teacher meetings

- Suggestion Box kept at strategic locations in the College premises.
- Staff suggestions during staff meetings.

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.

Planning and Organizing Outreach Programmes

All the extension and outreach programmes are planned in the beginning of the year. The proposed major activities of Departments, Clubs, NSS, LLE, Students' Council, Disaster Management Cell are incorporated in the annual plan. The previous year's activities are reviewed and new activities are planned accordingly by involving more students and for better outreach activities. While doing this the University guidelines / programmes and the Government of India's mission/ policy announcement are kept in mind.

- **Details of Budget**

- **NSS Activities from 2011-12 to 2015-16**

Year	NSS Regular Activities(Rs.)	NSS Special Camp(Rs.)
2011-12	78900.00	67325.00
2012-13	64660.00	56420.00
2013-14	68281.00	66637.00
2014-15	63748.00	62937.00
2015-16	64065.00	58000.00

- **LLE Activities from 2011-12 to 2015-16**

Year	LLE Activities (Rs.)
2011-12	12,000
2012-13	12,400
2013-14	10,200
2014-15	9,600
2015-16	11,000

- **Major Extension and Outreach Programmes**

- **Activities by NSS Unit**

- ✓ **Consumer Guidance** through visit to the adopted areas and make the residents aware of the Consumer Protection Act, Consumer Rights and location of the Consumer Grievance Cell and how to file complaints.

- ✓ **Gender justice and women empowerment** through Street Plays on Gender Justice, female infanticide, Dowry deaths etc and guest lectures on women related issues.
- ✓ **AIDS awareness** through posters, street plays, slogan competitions, rally and guest lectures.
- ✓ **Disaster management** awareness through guest lectures by Swayam, an NGO and demonstrations by volunteers
- ✓ **Health & Hygiene** through awareness survey on Malaria, Typhoid, Diarrhea and Dengue and workshops in association with BMC health officers.
- ✓ **Road safety programme** through participation of volunteers in Road safety awareness program held in Mumbai suburb and by helping the RTO.
- ✓ **Blood donation & Thalesaemia detection camp** is conducted twice every year in association with Arpan Blood Bank, Bombay Hospital and Nair Hospital, Mumbai.
- ✓ **Swachh Bharat Abhiyan-** In response to the call made by the Prime Minister of the India, volunteers cleaned the adopted areas and also the neighbourhood vegetable market. Awareness campaign is regularly carried out by the volunteers.
- ✓ **Voter awareness programme** is conducted by volunteers to help the Election Commission.
- ✓ **Save Electricity** - NSS volunteers are appointed as energy auditors to check electricity consumption of College and reduce carbon footprints. They also guide the community to reduce electricity consumption.
- ✓ **Safety of senior citizens-** Volunteers support the Bhandup Police Station in their drive towards Safety of senior citizens.
- ✓ **Tree Plantation Drive** is carried out in association with the NGO Haryali and trees were planted.
- ✓ **Rural Camp-**NSS also organizes the Annual Rural Camp to serve the community. Every year the camp is conducted at Chikloli village, Thakurpada, Ambernath. The activities conducted in the camp area are:
 1. Cleaning
 2. Tree plantation
 3. Fire Brigade Training
 4. Teaching children
 5. Soakpit making
 6. Kitchen gardening.
- ✓ **Leadership Training Camp:** The College conducts LTP camp on behalf of NSS cell of University of Mumbai every year since past two years. Ten students have attended this five days residential camp. Prior to this our students have been attending the LTP camp.

- **Activities of Life Long Learning and Extension (LLE) Unit**
The LLE unit equips the students with skills required to encounter socio-economic challenges. To facilitate the sensitization of the students to the socio-cultural realities, the unit offers the students projects encompassing social issues.
- ✓ The unit does community work by creating awareness about National Institute of Open Schooling (NIOS) and various courses offered by NIOS and its working pattern through street plays and powada recitation.
- ✓ For Skill Development programme, students are given projects on industry orientation.
- ✓ Career Exhibitions are also organized by LLE volunteers.
- ✓ Towards Women Empowerment, volunteers take up Annapurna Yojna through which entrepreneurship skill is developed.

- **Students' Council organizes** visit to Orphanage and Old age home

- **Disaster Management Cell** conducts workshop to trains students to give first aid in case of emergency. Volunteers trained assist local civic authorities as and when needed.

- **Apart from the above activities the departments also take up social responsibilities**
- ✓ Department of Accountancy encourages the students to visit the small shops in the neighborhood and guide them to file the Tax returns.
- ✓ Students of Department of Political Science have done surveys on the functioning of balwadis and anganwadis in S ward of Municipal Corporation of Greater Mumbai. Students also prepared educational materials for children of anganwadi. The Department also observes Human Rights Day with the residents of Adivasi pada. Health related exhibitions were conducted at Jangal Mangal area of Bhandup.
- ✓ Students of Department of Sociology visit oldage homes and shelters for the abandoned.
- ✓ Students of Department of Botany conduct workshop on organic kitchen farming for neighbourhood women.
- ✓ MUSE the Movie Club of our college collects sanitary napkins and distributes them in their adopted village Nareshwadi in Dahanu and help the girls in their personal hygiene.

- **Impact on the overall development of students.**
 - Understand the socio-cultural realities & try to contribute towards improving the condition in the society.
 - Identify the needs of the society.

- Develop self confidence, moral values and become responsible citizens.
- Develop leadership qualities.
- Develop civic sense and social responsibility.
- Develop democratic attitude.
- Acquire skills to meet the emergencies and natural disasters.
- Develop sense of national integration and social harmony.

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?

The institution promotes participation of students and staff through

- Orientation programmes for students for all the classes.
- Creating awareness through website, notice boards, guest lectures.
- Faculty participates in committee's activities including training programs, workshops, seminars and field visits on related topics.
- By giving awards to best NSS and LLE volunteers.
- NSS & LLE Units of the College are well established, well recognized by the University. Students show lot of interest to join as volunteers out of their interest to get a platform to serve the community and also for self development.

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?

The Political Science Department conducted surveys of Anganwadis/Balwadis in the S Ward of Greater Mumbai with the objective to identify issue of malnutrition and to analyze the role of PPP(Public Private Partnership) in the development of better health care facilities in the area. The findings of the survey were communicated to the BMC for appropriate action.

The Zoology Department's project on "Low cost anemia detection in college girls" took a sample of 100 girl students from different streams and tested them for anemia and also studied the correlation of Anemia and cognitive impairment in girl students.

The Department of Chemistry's project on "Milk adulteration testing" was done in collaboration with CGSI (Consumer Guidance Society of India) to test milk samples of different brands and from different vendors.

Visit to orphanage and old-age home to interact with them by Students' Council is yet another effort towards social justice.

The extension activities by NSS related to Gender Justice and Women Empowerment, AIDS Awareness, Health and Hygiene Surveys and workshops in adopted areas, Blood Donation and Thalassaemia detection camp, Voter awareness program and rural camp are all initiatives in this direction.

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 objectives of the extension activities are

- To develop the life skills and wholesome personality of the students.
- To sensitize the students to social issues.

The motto of NSS is “Not me but You” and LLE is “Reach to Unreached”. Keeping in mind these objectives, several activities are conducted by NSS, LLE units and departments.

- Through these activities, students learn to take up responsibilities and they inculcate the value of empathy & sensitivity towards fellow beings. Lending a helping hand to needy, understanding and contributing towards importance of cleanliness, importance of environmental protection, etc, generating all these values help in producing good citizens and leaders .
- They develop life skills and wholesome personality.

S.No	Extension Activities/ Special days	Benefits/Beneficiaries (Last five years)	Values/ skills inculcated
1	Tree Plantation	Approx.8480 saplings were planted in the adopted areas & Mulund.	Environmental awareness Leadership
2	Paper bag making	Approx 7100 bags made and distributed in adopted area in Bhandup	Empathy Gender equality
3	Blood donation	850 units of Blood donated to Arpan Blood bank and Nair & Bombay hospital	Civic sense Patriotism
4	Save Electricity	Energy audit carried by students and CFL lights replaced with LED	Cleanliness
5	Malaria and	3200 families were	Empowerment

	Dengue awareness in association with BMC	benefitted	Decision Making Creative thinking
6	Gender sensitization	3500 beneficiaries	Effective Communication
7	Cleanliness drive-“Swachh Bharat Abhiyan”	Adopted area is cleaned by the students	Community involvement
8	Voters awareness	Students helped before the elections.	Entrepreneurship
9	Annapoorna Yojna	LLE students put up food stalls of other items	Organizational Skills
10	NES National Student Startup Fest “Make in India”	Students participated by putting up their stalls	Enthusiasm Industrious
11	Maharashtra day/ Independence day/Republic day/ Human right day/ Constitution day/ Yoga day	Students take part in the celebrations of these days	Knowledgeable Responsible
12	Road Safety Programme	Students help RTO	
13	Consumer guidance	People are made aware of the consumer protection Act, Consumer Rights and location of the Consumer Grievance Cell	

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 the initiatives of the institution that encourage community participation in its activities.

The Institution ensures the involvement of the community in its reach-out activities through participation of locals and contribute to the community development through Street plays, door to door

campaigns, surveys, canvassing for various projects and NSS camps in rural areas. Tie-up with local government bodies / NGO ensures the effective involvement of the community.

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

Name of the organization	Nature of work
Haryali (NGO), BMC	Tree plantation / Malaria and Dengue awareness Campaign
Akshra Foundation	Women empowerment
Regional Transport Office (RTO)	Road safety measures
Consumer Guidance Society of India (CGSI)	Milk Adulteration Testing
Local Police station	Help to senior citizens
Stree Mukti Sangathan	Solid waste management
Parisar Bhagini Vikas Sangha	e – waste management
Arpan Blood bank, Bombay Hospital, Nair Hospital	Blood donation
National council for Rural Institute (NCRI)- Hyderabad	Seminars and training programmes
Swayam (NGO)	Guest lectures on Disaster management
Mumbai District Aids control Society	AIDS awareness
Navnirmithi (NGO)	Helped in training students for ICDS (Integrated Child Development Service) for surveying Balwadis and Anganwadis

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

- **NSS**
 - The College received **Best NSS unit** award at District level from the Central NSS unit of Mumbai University for the year 2013-14.
 - Mr. Ashok Poojari was awarded the **Best NSS Programme Officer** at District Level for the year 2013-14.
 - **Road Safety Campaign Award** : The NSS unit of our College received a cash prize of Rs.5000/- from RTO, Mumbai.

- **LLE**
- Dr.Akanksha Gawde, LLE In Charge -received special appreciation certificate for her contribution in LLE from the year 2010 to 2016.

Students Achievements in LLE:

- The students of LLE participated in the Intercollegiate festival Udan and have won the following prizes:
 - ✓ 2011-12: First Prize in Poster making Competition.
 - ✓ 2012-13:Second and Third Prize for Poster Making Competition.
 - ✓ 2013-14:First & Third Prize in Poster making Competition.
 - ✓ 2014-15: First Prize for Poster & First Prize for Street Play Competition.
 - ✓ 2015-16:First Prize for Street Play Competition.

The various community development initiatives over the last five years have brought about higher awareness levels and sensitized the community to various social issues.

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 equipments, research scholarships etc.

The Institution supports its staff for availing facilities which are not available in the college. Being in a metro city and surrounded by a number of premier educational and research institutions,staff uses facilities of other institutions, which otherwise are not available in the college. Whenever a faculty needs to avail facilities, he / she applies through the Principal and seeks permission from the institutions. Some of the institutes where facilities have been used so far are:

- Bhabha Atomic Research Centre (BARC) , Mumbai.
- University of Mumbai – Departments and Library.
- RSIC (Regional Sophisticated Instrumentation Centre), IIT,Bombay.
- Saraswathi Vidya Bhavan’s College of Pharmacy, Dombivli, a sister institution.
- KEM Hospital, Mumbai.

The College also supports staff and students in undergoing training programmes, interaction with experts and participation in other institutions.

Examples:

- Ms Shweta Belose has undergone 15 days training programme at the Agharkar Research Institute, Pune on “Modern techniques used in Mycology”in May 2014.

- Dr. SunitaChahar and Ms.ShwetaBelose-“Techniques in Mycorrhizal identification” at Botany Department, Goa University in August 2011 & 2015 respectively.
- Ms.ShwetaBelose and Ms.ShwetaJain(Ph.D student) have undergone 15 days training at the IFGTB lab, Coimbatore on “Advanced techniques in Mycorrhiza” in May 2016.
- Mrs.Lakshmi Prasuna and Mrs. Phebe Kingsley attended a “Workshop on Process Oriented Guided Inquiry Learning”(POGIL) on 29.01.16, which focuses on Student Centered learning, critical thinking, problem solving which would help students to become more competitive.
- Training Programme at GNIRD centre of Khalsa College, Matunga, Mumbai was attended by twenty students of SYBSc on Analytical Instruments- HPLC and GC on 24th&25th October 2016.

Such interaction with renowned institutions has helped in enhancing the knowledge, better research and establishing network to carry out research.

3.7.2 Provide details on the MOU’s / 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.

Though there are no formal collaborations in that sense, the College informally collaborates with various institutes and organizations for the development of the College

Sr. No.	Name of the institute / University	Nature of Collaboration/ tie ups
1.	Tata Institute of Social Sciences (TISS)	Skill Development Programme 'PAR'-Programming Analytics & Research Date of Agreement: 04.03. 2015
2.	British Council Library	Availability of their Library resources in the College library
3.	TIFR, HBCSE, BARC	Using instrumentation facilities, Inviting Experts for Guest lectures Question Papers for Olympiads
4.	Association of Chemistry Teachers (ACT) ,Indian Association of Physics Teachers (IAPT), Bombay Mathematical Colloquium, (BMC) Mycological Society of India (MSI)	Staff are member of these bodies and also take part in various activities organized by them like Training Programmes, Olympiad etc.
5.	National Board of Higher Mathematics (NBHM)	Mathematics Training and Talent Search Training Programme(MTTS)
6.	Bombay Natural History Society BNHS,(NGO),Mumbai	Guest Lectures
7	Envirovigil, NGO,Kalwa	Guest Lectures, Sale of Eco friendly items, Natural Colours,Eco friendly Rakhis, Composting Techniques.
8	StreeMuktiSangathan, Mumbai	Solid Waste Management, Date of Agreement: 25.11.2014
9	Parisar Bhagini Vikas Sangha, Mumbai	Disposal of e-waste

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

Interactions and visits to renowned research institutes have helped the college in:

- Student enrichment activities/programmes through guest lecturers by researchers from institutions like IISER, BARC, IIT, TIFR etc.
- Hands on training for research students through visit to NCL, Pune, IFGTB Coimbatore, Agharkar Research Institute, Pune, and Department of Botany University of Goa.
- Getting access to library resources of research institutions.

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.

Conferences Organized

2011-12-Department of Botany celebrated 2011 as International Year of Forests by organizing National Conference on “**Forests for the Future of Man**”.

Some of the Eminent Personalities invited for the Conference were,

Name	Designation and Organization
Dr.S.B.Chaphekar	Hon. Director, Environmental Conservation(Water)IIEM
Dr. Shivaji Chavan	International Environmental Consultant& Director General and CEO, ‘Wildlife and We’
Mr.Prakash Gole	Founder Editor of ‘Journal of Ecological Society’
Ms.Ketaki Ghate	Oikos, working on environment
Mr.Jayant Kulkarni	Executive Director, Wildlife Research and Conservation Society
Mr.Milind Thatte	Environmental activist and journalist
Mr.Punam Singavi	Founder President of Hariyali.

2012-13 –International Conference on” Information & Communication for Development-Reach, Impact, Opportunities and Challenges” was organized on 4th and 5th Oct 2012.

Name	Designation and Organization
Dr. Eric Zimmerman	Academic Secretary, Director of Research, Interdisciplinary Centre, Israel
Dr. K. Narayanan	Head,Department of Humanities and Social Sciences, Indian Institute of Technology, Bombay
Dr. Sukumar Devotta	Ex-Director, NEERI
Dr. Preeta Nilesh	HOD,Research Guide and Associate Professor, K.E.T.’s Vaze College.
Dr.Sadhana Phadnis	Head, ICEL, Jhunjhunwala College, Vashi, Mumbai.
Dr.G.D. Bino Paul	TISS
Dr.Archana Patankar	Assistant Professor, Somaiya Institute of Management Studies, Mumbai
Dr.Atiya Anis	Department of Health, Govt . of India
Dr.Nimmi Rangaswamy	Senior Research Scientist, Xerox Research Centre, Hyderabad
Dr. Ramesh Gyawali	School of Management, Security and Conflict Management, Kathmandu University, Nepal.
Dr.A.F. Mathew	Associate Professor in Humanities and Liberal Arts in Management, IIM,Kozhikode, Kerala

Dr.Eric Saranovitz	Associate Dean Academics and research, 9.9 School of Communication, New Delhi
Dr.Bhagyashree Varma	Associate Professor, Creative writer, Translator and Research supervisor for Literature for University of Mumbai
Dr. Sonali Pednekar	Member, Board of Studies in Archaeology and History Department

2013-14-Department of Botany organized a National Conference in collaboration with Mycological Society of India on the topic “**Fungi in Agriculture**”.

Some of the Eminent Personalities invited for the Conference were,

Name	Designation and Organization
Dr. M. C. Shrinivasan	Retd. Scientist,National Chemical Laboratories
Dr M.V. Deshpande	Biochemical Sciences Division, National Chemical Laboratories, Pune,
Dr R.V. Gandhe	Retired scientist,Agharkar Research Institute, Pune.
Dr.S.K.Deshmukh	Vice President, Piramal Life Sciences Ltd
Dr. M.S. Reddy	Department of Biotechnology, Thapar University, Punjab
Dr. ShilpaVerekar	Scientist, Piramal Enterprises Ltd
Mr.PromodBorkar	Kokan Krishi Vidyapeeth, Dapoli
Dr.B.F.Rodrigues	Professor, Botany Department, Goa University.

2014-15 – Department of Chemistry organized a National Conference in collaboration with Association of Chemistry Teachers on “Recent Developments in Synthetic and Material Chemistry”.

Some of the Eminent Personalities invited for the Conference were

Name	Designation and Organization
Dr. Sourav Pal	Director, NCL, Pune.
Dr. A.K. Srivastava	Professor, Department of Chemistry, University of Mumbai.
Dr. Amitav Das	Professor,NCL, Pune.
Dr. G. Nageswara Rao	Professor,Andhra University, Vizag
Dr A. K. Tyagi	Scientist,BARC, Mumbai
Dr. Prabodh Chobe	Ex-Senior General Manager, BASF Group, India
Dr. B. M. Bhanage	Professor,ICT, Mumbai
Dr. S. Mazumdar	Professor,TIFR, Mumbai

2015-16 - Department of Physics celebrated 2015, which was declared as International year of light by United Nations , by organizing International Conference on “Photon: Multiple and Creative solution to challenges. Some of the Eminent Personalities invited for the Conference were,

Name	Designation and Organization
Dr. Sudhir Jain	Senior Scientist, BARC
Prof. Jean-Luc Adam	Director of Institute of Chemical Sciences, University of Rennes, France
Prof. Yogesh Joglekar	Indiana University, Purdue, University Indianapolis, USA
Dr. Arnab Bhattacharya	Scientist, TIFR, Mumbai
Dr. ShivanandChaurasia	Scientist, BARC, Mumbai
Dr. Vaibhav Agarwal	Senior Scientific Officer, German House for Research & Innovations

3.7.5 How many of the linkages/ collaborations have actually resulted in formal MOU’s 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:

- ✓ Enrichment Programme: The College has entered into the agreement with Tata Institute of Social Sciences for PAR(Programming Analytics &Research) Programme. Thirty five students have completed the programme during last academic year.

b) Internship/On-the-jobtraining:

Students of T.Y.B.M.S. class are sent for internship to the following sectors: **Service Sector** – Universal Homes, Vista Rooms, Mia Mia Company, 99 Yrs.Com **Manufacturing-**, R & T Instruments, Sara Enterprises Pvt Ltd, Jar Cellulose and Coating Pvt Ltd, Nirmal Life Style Ltd, PVN Fabrics Pvt. Ltd., Super Bond Adhesives Pvt. Ltd., Blue Bell Coolent,Arabian Petroleum, Life Line Services, Raptakos & Brettos Shubham Collection, Pci Analytics Pvt. Ltd, Indo Appliances, Ashish Doshi & Sons, Remcom Cables Pvt Ltd

NGO-Leo Club

Recruitment-Arcanines Recruitment Services Ltd

IT based -Corporate Infocom Pvt. Ltd

c) **Summer placement:**Not Applicable

d) **Faculty exchange and professional development:** Not Applicable

e) **Research:** Not Applicable

f) Consultancy:

Dr. Sunita Chahar, HOD, Botany has provided consultancy on Mycorrhiza based biofertilizers to Universal Speciality Chemicals, Mumbai and Indus Technical consultants,Raipur.

g) Extension:

The College has collaboration with:

- ✓ 'Stree Mukti Sangathan' an NGO for Solid Waste Management. The manure prepared through this is used for the College garden.
- ✓ 'Parisar Bhagini Vikas Sangha' for e-waste Management.

h) Publication:

Dr. Sunita Chahar is one of the co-editor of Bionanofrontier, a peer reviewed/ referred/ indexed journal of Science and Technology, Published from Mumbai (www.bionanofrontier.org).with NAAS rating 3.22 and Impact factor of 4.856

i) Student Placement :

One of our student Ms. Komal Chauhan has been placed for two years project based at HBSCE.

j)Twinningprogrammes:Not Applicable

k)Introduction of new courses:Not Applicable

l)Studentexchange:Not Applicable

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

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

The College makes systematic efforts to plan its activities:

- Based on UN declared themes of the year two conferences were planned

- ✓ International year of Forests (2011) - Botany Department, organized a National conference on “Forests for the Future of Man”.
- ✓ International year of light (2015) - Physics department organized an International conference on “Photon:Multiple and Creative solution to challenges”.
- LLE and NSS Unit organizes activities in line with the schedule of activities of University of Mumbai and drives announced by Government of India and teachers and students take active part in these activities.
- The College has enhanced its research activities especially during last five years.Many staff members have published research papers in peer reviewed journals and presented their papers at national and international conferences. Some of them have chaired technical sessions at these conferences and delivered invited talks which were appreciated by the audiences.

Annexure 3.4.3

PUBLICATIONS

Dr. Mary Vimochana

1. "An Input-Output Model for Energy Analysis: A Case Study of India." Published by an online *International Journal of Interdisciplinary Research Journal (Bi-monthly)*, ISSN-22499598, Vol.IV, July 2014, page no 184, Impact factor 3.816
2. "Green National Income Accounting for Oil and Gas Resources in India based on User Cost Approach" published by *BSP Publication Hyderabad*, ISBN 978-81-7800-286-6, Jan 2013, page no 333-341.
3. "Environment Management in Oil and Gas Resources" Published by *McGraw Hill Publication*, ISBN(13):879-93-85-880-11-7, Jan 2015, page no 162-165.
4. "Domestic Energy Consumption Pattern in Maharashtra with Special Reference to Thane District" Published by © *Springer India 2014 B. S. Reddy, S. Ulgiati (eds.), Energy Security and Development*, ISBN: 978-81-322-2065-7(International), Dec 2015, page no 183-195.
5. "Environmental Accounting for Forest Resources in India." Published in the proceedings of *National Conference by Department of Botany, N.E.S.Ratnam College, Mumbai* with ISBN 978-81-922163-0-0, Sept 2011, page no 56-61.
6. "Environmental Accounting for Oil and Gas Resources in Assam and Gujarat", Published in the proceedings of *Scienica Acta Xaveriana – An International Research Journal of St. Xavier's College, Tamil Nadu, Special Issue*, ISSN- 0976-1152, Dec 2012, page no 118-121.
7. "Accounting for the Depletion of Oil and Gas Resources in the National Accounts of India", Published in the proceedings of *Journal Bizz Ness-Wadia College of Commerce*, ISSN-2277-4823, Jan 2013, page no 162-165.
8. "Input-Output Model of Energy and Environment' was published in 'Society, Politics and Climate Change' Published in the proceedings of *National Conference by Nagindas Khadwala College of Commerce, Arts and Management Studies, Mumbai*, with ISBN 978-81-924836-2- 7, April 2014, page no 150-158.
9. "Regulatory Framework in Petroleum Industry regarding Environment sustainability " Published in the proceedings of *Cochin University of Science and Technology*, ISBN 978-93-80095-58-5, Dec 2014, page no 365-370.

Mrs. Nirmala kannan

1. "Domestic Energy Consumption Pattern in Maharashtra with Special Reference to Thane District" Published by © *Springer India 2014 B. S. Reddy, S. Ulgiati (eds.), Energy Security and Development*, ISBN: 978-81-322-2065-7(International), Dec 2015, page no 183-195.
2. "Corporate go green through use of PV" Published in the proceedings of *National Conference by Department of Botany, NES Ratnam College of Arts, Science and Commerce, Mumbai* with ISBN 978-81-922163-0-0, Sept 2011, page no 106-110.

3. "Mainstreaming the Marginalized through ICT" Published in the proceedings of *International Conference organized by NES Ratnam College of Arts, Science and Commerce*, Mumbai with ISBN 978-81-922-163-1-7, Oct 2012, page no 99-106.
4. "Population Dynamics and sustainable development of less developed countries", Published in the proceedings of *Journal Bizz Ness-Wadia College of Commerce* with ISSN-2277-4823, Jan 2013, page no 53-60.

Mrs. Manisha Navale

1. "Organizational Rebirth through webinar: An Analytical study", published by *Department of Botany, N.E.S.Ratnam College*, Mumbai, ISBN 978-81-922163-1-7
2. 'Barriers to 'Education for all', in the developing nations: An Analytical Study', ,published in proceeding *Academic Excellence – Current Challenges, in Sree Narayana Guru College of Commerce, Mumbai* ISBN 978-93-5149-198-9
3. 'Revitalising Organisational Change through Webinar: An Analytical Study', published in *Lingaya's Lalita Devi Journal of Professional Studies Volume 4, Issue 2* by Lingaya's Lalita Devi Institute of Management & Science, New Delhi ISSN 2230-987X
4. 'Economic impact of cloud computing on employment, business creation output', published in a proceeding *Cloud Computing & its future scope in Bharatratna Dr. Babasaheb Ambedkar College, Pune* ISBN 978-81-924177-4-5
5. 'Intelligent energy Management: Save Cost, Save Corporate Reputation, Save Environmental Impacts',published in a *Compendium of research papers 'Perspectives in current Business Scenario' of SIES College of Management Studies*, ISBN 978-81-925114-9-8

Mrs. Sumali Bose

1. "Organizational Rebirth Through Webinar: An Analytical Study"Published in *Epignosis Journal of Multidisciplinary Research i.e. Information & Communication for Development – Reach, Impact, Opportunities & Challenges* by *NES Ratnam College of Arts, Science & Commerce* , Vol 1 (1) with ISBN 978-81-922163-1-7, Jan 2013, , page no 214-218
2. "Creativity in Language Teaching and Learning"Published in a book titled '*Enhancing the Quality of Higher Education in India-A Holistic Approach*' with ISBN No 978-93-83241-85-9 , March 2014, page no 101-104
3. "Fungal diseases in the crops of Madhya Pradesh: Causes & Management" Published in the proceedings of *National Conference on 'Fungi in Agriculture'* by *NES Ratnam College of Arts, Science & Commerce*, Mumbai with ISBN 978-81-922163-4-8 , Jan 2014, page no 24-28.
4. "Understanding Environmental Behavioural Change through Communication among College students" Published in proceedings of *National Seminar by Sree Narayana Guru College of Commerce* with ISBN 978-93-5149-198-9, Feb 2014, page no 40-43.

5. Co-authored the book “Foundation Course I, Skill Enhancement Courses (SEC)” Published by *Himalaya Publishing House* with ISBN 978-93-5262-259-7, Aug 2016.

Mrs. Jyothi Sadasivan

1. “Cross –cultural Encounters in All About H. Hatterr” published in *Epignosis, Journal of Multidisciplinary Research i.e. Information & Communication for Development – Reach, Impact, Opportunities & Challenges* by *NES Ratnam College of Arts, Science & Commerce*, Vol 1(1) with ISBN 978-81-922163-1-7, Jan 2013
2. “Humour in Absurd Drama: A Study of Eugene Ionesco’s Rhinoceros” Published in the proceedings of ‘*Humour: Texts & Contexts*’ by *Patkar-Varde College*, Mumbai with ISBN 978.93.83871.55, Feb 2015, page no 124-130.

Mrs. R. Vijayalakshmi

1. “Indo-Sri Lanka Relations – The way forward through Economic relations” Published in a Journal *International Interdisciplinary Conference on Contemporary issues in Commerce, Management, Law and Social Sciences* with ISSN No 2277-9302, 2014
2. “Eco-tourism and Public-Govt. Participation in forestry – A case study of Pichavaram” Published in the proceedings of *National conference by Dept. of Botany of N.E.S. Ratnam College of Arts, Science and Commerce* with ISBN 978-81-922163-0-0, Sept 2011
3. “The Great Living Chola Temple” Published in proceedings of the *International Conference on Historical Memories : Impressions, Expressions, and Reflections, organized by N.E.S. Ratnam College of Arts, Science and Commerce* with ISBN 978-81-922163-3-1, Oct 2012
4. “Development & Environmental Crisis (A case study of Kundankulam Nuclear Power Plant in Tamil Nadu)” Published in the proceedings of the International Conference organized by *K.B. College* with ISBN 978-93-5142-130-6, Oct 2013
5. “Right to Education to the Children of Migrant Construction workers – A case study of Greater Chennai” Published in the proceedings of the *Multidisciplinary National Conference organized by K.E.T’s Vaze Collge* with ISSN 0976-8564, 2012
6. “ The Current Scenario of Public Transport in Mumbai and Challenges” Published in the proceedings of *National Conference organized by the Pragati College of Arts and Commerce* with ISBN 978-81-931391-2-7, Feb 2015
7. “Peasant Uprising : Telangana” Published in the proceedings of *National Conference organized by K.B. College* with ISBN – 978-93-83342-29-7, Nov 2015

Dr. Aakanksha Gawde.

1. "Swami Vivekanand Vichar" Published in *Vivekanand Sarvanksh Vyaktimatva*, ISBN 10 -93 -81791-21-X, Jan 2013
2. "Navi Disha" Published in *Epignosis- Journal of Multidisplinary Research of N.E.S.Ratnam College* with ISBN 978-81-922163-2, 2013

3. "Tridha Ek Mansik Spandhan" Published in a magazine *Shabdruchi Magazine*, 2015
4. "Sahjivanatil Sukh" Published an article in newspaper *Kirat* on 26 March 2015.
5. "Rassikhech Balmanachi" Published an article in newspaper *Kirat* on 25 June 2015.

Dr. Saraswathi Unni :

1. "Role of Ambedkar in India's Energy Policy", Published by *Gondwana University, Chandrapur, for the International Inter-disciplinary Conference on Role of Ambedkar in Nation building* with ISBN 978-81-930336-9-2, Feb 2016.
2. "Decentralisation in the Electricity Services with reference to Renewable Energy in India" Published in *Asian Journal of Humanities and Social Sciences* with ISSN 2321-2799, Vol 4(4), page no 318-323, Aug 2016, Impact Factor 0.981.
3. "Rural Electrification in India: A flawed Approach" Published in proceedings of *'Flag Ship Programmes - Impact, problems and Challenges Ahead' Academic Foundation, New Delhi* with ISBN 978-93-327-03711, page no 679-696, Sept 2016
4. "Media Image, Community Impact: Assessing the impact of media and political images of refugees and asylum seekers" Published in *Epignosis-Journal of Multidisciplinary Research of N.E.S.Ratnam College* with ISBN 978-81-922163-2, Jan 2013 (Along with Mrs. Sangeeta Roy)
5. "Development induced displacement A case study of Jaitapur, Maharashtra" Published in *the Journal by the All India Political Science Association, Benares Hindu University – with ISSN 0019-5510, VolLXXVI, No 3, Sept 2015*
6. "Unmasking Social Exclusion in Media" Presented paper at an *International Conference organized by NES Ratnam College, 2012.*
7. "Electrification and Rural Distress" Presented paper at the *International conference on Agrarian Distress in India, organized by the Department of Civics & Politics, University of Mumbai, Sept 2013.*
8. "ICDS and Urban Malnutrition: A case study of S-Ward, BMC" Published paper at the *National Seminar organized by the Department of Economics and Political Science, Ruia College , Jan 2014 .*
9. "Decentralisation in the Electricity Sector with reference to Renewables" Presented paper at the *Rajiv Gandhi Institute for Contemporary Studies, March 2014.*
10. "Dams, Democracy, & Resistance Movements in India: a case for Deliberative Democratic Discourse in India" Presented at *ESEE European Society of Ecological Economics at Leeds University , UK between 30th June to 3rd July 2015.*
11. "Impact of Electricity Services on Rural Livelihoods" Published paper at the *Annual Conference of the Indian Political Economy Association, Gurunanak Dev University, Amritsar, Nov 2016*

Mrs Sangeeta Roy:

1. "Media Image, Community Impact: Assessing the impact of media and political images of refugees and asylum seekers" Published in *Epignosis- Journal of Multidisciplinary Research of N.E.S.Ratnam College* with ISBN 978-81-922163-2, Jan 2013.
2. "Altering Paradigms of forest life using all inclusive strategies: Some success stories from Africa and America" Published in proceedings of *National Conference organised by the Dept of Botany, NES Ratnam College* with ISBN 978-81-922163-0-0, Sept 2011
3. "Unmasking Social Exclusion in Media" Published in proceedings of *International Conference organized by NES Ratnam College* with ISBN 978-81-922-163-1-7, Oct 2012
4. "From Pen to Lathi- P.Sainath Brand of Activism" Presented a paper in *International Conference on Agrarian Distress in India organised by the Dept of Civics and Politics, University of Mumbai* , Sept, 2013.
5. "ICDS and Urban Malnutrition: A case study of S-Ward, BMC" Presented paper at the National Seminar organized by the *Department of Economics and Political Science, Ruia College* , Jan 2014 . (Along with Dr. Saraswati Unni)
6. "Changing Paradigms in the world of Illegal Migration: A story of Burmese Refugee Women in India" Published in proceedings of National Conference organised by K G Joshi College of Arts, Science & N G Bedekar College of commerce with ISBN no 978-81-922741-4-0, Jan 2015

Mrs. Jennifer C

1. "Understanding urban poverty" Published in *International Journal of Research of Rizvi College* with ISSN 2231-6124 (2015-16)
2. "Contestations over urban lands shaped by displacement" Published in *International Journal of Research of Rizvi College* with ISSN 2231-6124 (2016-17)
3. "Inclusion & Exclusion in the context of globalization", Published in *H J College Journal of Futuristic Education* with ISSN 2349-8145 (2014 – 15)
4. "Digital activism: Mass mobilization in a virtual world", Published in *Epignosis Journal of Multidisciplinary Research of Ratnam College* with ISBN 978-81-922163-2-4, Jan 2013
5. "Sacred groves and their role in forest conservation" Published in the proceedings of *National Conference on "Forests for the Future of Man" conducted by N.E.S.Ratnam College* with ISBN 978-81-9221633-0-0, Sept 2011

Mrs. Lakshmi P.

1. "Eco friendly energy sources for the coming millenium" Published in proceedings a research paper at *National seminar on Energy Conservation, Energy Audit and Energy Efficiency at St Theresa's College, Eluru, Andhra Pradesh* , Feb 2013.

Mrs. Mal Phebe Kingsley

1. "Simultaneous electro-catalytic oxidative determination of ascorbic acid and folic acid using Fe₃O₄ nanoparticles modified carbon paste electrode" Published a research paper in *J. Electroanal. Chem.* with ISSN 1572-6657, 2015, 741, page no 71-79. Impact factor- 2.73, Citation 5.
2. "Simultaneous determination of ciprofloxacin and paracetamol by adsorptive stripping voltammetry using copper zinc ferrite nanoparticles modified carbon paste electrode", Published a research paper in *RSC Adv.* with ISSN 15101-15111, 2016, 6, 15101 Impact factor-3.84, Citation 2.
3. "Role of Women towards the renewable energy in rural sector of India". Published in proceedings paper in the *National Seminar on Energy Conservation, Energy Audit and Energy Efficiency at St Theresa's College, Eluru, Andhra Pradesh*, Feb 2013
4. "Metal Oxide nano materials as super conductors," Published in proceedings paper in the *National Seminar on Energy Conservation, Energy Audit and Energy Efficiency at St Theresa's College, Eluru, Andhra Pradesh*, Feb 2013(along with Jaysree G)
5. "Comparison of caffeine content in some Indian tea brands" Presented a paper in the *International Conference on Chemistry in Synergy with materials and Biology organized by Bishop Heber College, Trichy*, Jan 2014
6. "Simultaneous determination of ciprofloxacin and paracetamol at modified carbon paste electrode" Published in proceedings research paper at *51st Annual convention of Chemist 2014 at Kurukshetra University* Dec 2014
7. "Simultaneous determination of Ascorbic acid and folic acid at modified carbon paste electrode" Published in proceedings a research paper at *102nd Indian Science Congress held at University of Mumbai*, Jan 2015
8. "Voltammetric sensor for simultaneous determination of isoniazid and levofloxacin at Zinc oxide nano particles –multiwalled carbon nanotube modified carbon paste electrode" Published in proceedings a research paper at *National Conference on 'New horizons in Synthetic and Materials Chemistry' held at University of Mumbai*, Nov 2015
9. "Comparative study of effectiveness of different solvents to extract of wax from press cake – sugarcane byproduct" Published in proceedings a research paper in the *National Conference on 'Recent Developments in Synthetic & Materials Chemistry' held at N.E.S. Ratnam College, Mumbai* with ISBN no 978-81-922163-5-5 (Along with Dr. Medha Sundar Rajan)
10. "Electrocatalytic oxidative determination of Dextromethrophan hydrobromide using indium tin oxide nanoparticles modified carbon paste electrode" Published in proceedings research paper in the *National Conference on Recent Developments in Synthetic & Materials Chemistry' held at N.E.S. Ratnam College* with ISBN no 978-81-922163-5-5, Jan 2015
11. "Electrochemical sensor for tartrazine based on titanium oxide nanoparticles modified carbon paste electrode" Published in

proceedings research paper at *International Conference on Chemistry of renewable energy held at Bishop Heber College, Trichy, Feb 2016*

Dr. Medha Sundar Rajan

1. "Heavy metal contamination in selected vegetables of Mumbai market and their effects on protein levels" Published in proceedings research paper at the *National seminar on Environment, Health and safety' organized by St Theresa's College, Eluru, A.P , July 2011*(Along with Dr.Sunita Chahar)
2. "Eco friendly energy sources for the coming millennium" Published in proceedings research paper at the *National Seminar on Energy Conservation, Energy Audit and Energy Efficiency at St Theresa's College, Eluru, Andhra Pradesh , Feb 2013* (Along with Mrs., Lakshmi Prasuna)
3. "Bio synthesis of silver nano particles using *Plectrathus Rotundifolius* tuber extract and it's antifungal activity against straw berry phyto pathogens" Published in proceedings research paper in the proceedings of *National Conference on 'Green Chemistry' organized by M.D.College , Parel, with ISBN no 978-81-925005-2-2, Dec 2013*
4. "Synthesis of silver nano particles using *Amorpho-phallus Paeonifolius* tuber extract and evaluation of their fungicidal activities" Published in proceedings research paper in the proceedings of *National Conference on Fungi in Agriculture held at N.E.S. Ratnam College , ISBN no 978-81-922163-4-8 , Jan 2014* (Along with Dr. Jayshree. G)
5. "Modern methods of Mycotoxin analysis" Published in proceedings review paper in the proceedings of *National Conference on ' Fungi in Agriculture' held at N.E.S. Ratnam College with ISBN no 978-81-922163-5-5, Jan 2014*
6. "Comparative study of effectiveness of different solvents to extract of wax from press cake – sugarcane byproduct" Published in proceedings research paper in the proceedings of *National Conference on 'Recent Developments in Synthetic & Materials Chemistry' held at N.E.S. Ratnam College with ISBN no 978-81-922163-5-5, Jan 2015*

Dr. Jayasree Gopalakrishnan

1. "Metal Oxide nano materials as super conductors" Published in proceedings research paper at the *National seminar on Energy Conservation, Energy Audit and Energy Efficiency at St Theresa's College, Eluru, Andhra Pradesh , Feb 2013*
2. "Bio synthesis of silver nano particles using *Amorphophallus Paeonifolius* tuber extract and it's characterization" Published in proceedings research paper at the *National conference on 'Recent trends in Coordination Chemistry' at Karmaveer Bhaurao Patil College, Mumbai , Oct 2013*
3. "Bio synthesis of silver nano particles using *Plectrathus Rotundifolius* tuber extract and it's antifungal activity against straw berry phyto pathogens" Published in proceedings research paper in the proceedings of *National conference on 'Green Chemistry' organized by M.D.College with ISBN no 978-81-925005-2-2, Dec 2013*
4. "Chemical and Biological monitoring of vehicular pollution using roadside plants in the central belt of Mumbai" Published in proceedings of the

International Conference in Chemistry -Cutting Edge: Nano Green And Beyond Celebrating 80 Years Of Nadkarny Sacasa Research Laboratory
in St. Xaviers College, Mumbai , Jan 2014

5. "Phyto mediated synthesis of gold nanoparticles and their characterization"
Published in proceedings research paper at *the National Conference on 'Societal impact of chemistry –Vision-2020' at Ruparel College*, Sept 2014
6. "Toxicity of some important Mycotoxins" Published a review paper in the proceedings of *National Conference on 'Fungi in Agriculture' held at N.E.S. Ratnam College* with ISBN no 978-81-922163-5-5, Jan 2014
7. "Modern methods of Mycotoxin analysis" Published a review paper in the proceedings of *National Conference on 'Fungi in Agriculture' held at N.E.S. Ratnam College* with ISBN no 978-81-922163-5-5, Jan 2014(along with Dr Medha S)
8. "Synthesis of silver nano particles using *Amorphophallus Paeonifolius* tuber extract and evaluation of their fungicidal activities" Published a research paper in the proceedings of *National Conference on 'Fungi in Agriculture' held at N.E.S. Ratnam College* with ISBN no 978-81-922163-5-5, Jan 2014
9. "Biodegradable multifunctional polymeric nanoparticles for cytosolic delivery of drugs- a review" Published a review paper in the proceedings of *National Conference on Recent developments in Synthetic & Materials Chemistry – held at N.E.S. Ratnam College* with ISBN no 978-81-922163-5-5, Jan 2015
10. "Biosensors in mycotoxin analysis" - Published a review paper in the proceedings of *National Conference on "Recent developments in synthetic & materials Chemistry" held at N.E.S. Ratnam College* with ISBN no 978-81-922163-5-5, Jan 2015
11. "Comparative study of effectiveness of different solvents to extract of wax from press cake – sugarcane byproduct " Published a research paper in the proceedings *National Conference on 'Recent Developments in Synthetic & Materials Chemistry' held at N.E.S. Ratnam College* with ISBN no 978-81-922163-5-5, Jan 2015 (along with Dr Medha S)
12. "A Novel Diagnostic Indicator of pollution" Presented in the proceedings research paper at the *National Conference of 102nd Indian Science Congress , University of Mumbai* , Jan 2015
13. "Biosynthesis of of gold and silver nanoparticles, characterization and study of their antifungal activities." Presented a research paper at *the International Conference on 'Nanomaterials for sustainable Green Technology' at K.V.Pendharkar college*, Jan 2015(Along with Mamta Yadav)
14. "Synthesis and spectral studies of novel blue light emitting conjugated polymers from substituted Silafluorenes" Presented a in the proceedings research paper at *National Conference, University of Mumbai* , Feb 2015
15. "Synthesis and spectral studies of a new blue light emitting alternating co-polymers from alkyl substituted silafluorene and diphenyl acenes" Published a research paper in the proceedings at *International*

Conference on Photons : Multiple and Creative solutions and challenges held at N.E.S Ratnam College with ISBN no 978-81-922163-6-2, Dec 2015

16. "Synthesis and Photochemical analysis of co-polymers of aryl substituted silafluorene and biphenyl anthracenes" Published a research paper in the proceedings at *International Conference on Chemistry of renewable energy held at Bishop Heber College, Trichy, Feb 2016*

Dr .Kiran .U

1. "Study of some novel synthetic routes to rose ketones" - Published a review paper in the proceedings of *National Conference on 'Recent Developments in Synthetic & Materials Chemistry' held at N.E.S. Ratnam College with ISBN no 978-81-922163-5-5, Jan 2015*

Mrs S. Karthiyaini

1. " A stochastic calculus model for the analysis of solar energy conservation using dynamic programming" Published in the *scholarly research journal for interdisciplinary studies* with ISSN 2319-4766,Jan 2014, Impact factor 4
2. "Technologies in Forest Management" Published in the proceedings of *National Conference on "Forests for the Future of Man" held at N.E.S. Ratnam College of Arts, Science and Commerce, Mumbai with ISBN No. 978-81-922163-0-0, Sept 2011, Page no 127-135.*
3. "Applications of Mathematics and Computer Science" Published in the *National Conference organized by SDNB Vaishnav College, Chennai, Feb 2012*
4. Co-authored the book "Computer Programming" and "System Analysis" for TYBSc semester VI , *Vipul Prakashan, 2014-15, ISBN 978-93-5149-235-2*

Dr. Nithya S

1. "The Binomial k-clique" published in *Journal of combinational Design* volume 21 (1), ISSN 10638539, Jan2013, page no 36-45.
2. "Growth and Health Transition of school children in Mumbai suburb" Published in *International Journal of Research , Volume 5(2), Jan-Jun 2016,ISSN page no 154-157.*
3. "Recurrence relation on the number of spanning trees of generalized book graphs and related family of graphs", Published in the *International Journal of Mathematics and soft computing*, ISSN Print 2249-3328, ISSN Online 2319-5215, Vol. 6, No.2, 2016,page no75-85.
4. "Tutte Polynomial of Generalized Flower Graphs", Published in the *International Journal of Mathematical Combinatorics*, ISSN 1937-1055,Vol. 2, 2016, page no 29-42
5. "Change of tree population in Mumbai suburb" Published as the proceedings of the *National Conference , held at N.E.S. Ratnam College with ISBN 978-81-9221633-0-0, Sept 2011*
6. "Information Technology and Inclusive Economic Growth" Published as the proceedings of the *International Conference on Information and Communication for Development, Reach, Impact, Opportunities and Challenges" organized by NES Ratnam College, with ISBN 978-81-922163-3-1, Oct 2012*

7. “Knots of DNA” Published a paper at *National Seminar on “Mathematics and its aspects”* organized by Junjunwala College, Dec 2012.
8. “Tutte Polynomial for Star Flower Graph” Published as the proceedings of *National Conference on ‘Recent Research trends on Mathematics and Statistics’* conducted at MD College, ISBN No 978-81-925005-4-6, Sept 2015, page no 92-96
9. Co-authored the book “ Calculus” for SYBSc semester III, paper I , *Vipul Prakashan, 2015-16*, ISBN 978-93-86172-12-9
10. Co-Authored the book “ Algebra” for SYBSc semester III, paper II , *Vipul Prakashan, 2015-16*, ISBN 978-93-86172-12-9
11. Co-authored the book “ Discrete Mathematics” for SYBSc semester III, paper III , *Vipul Prakashan, 2015-16*, ISBN 978-93-86172-12-9
12. Co-Authored the book “ Calculus” for SYBSc semester IV, paper I , *Vipul Prakashan, 2015-16*, ISBN 978-93-86172-12-9
13. Co-authored the book “ Algebra” for SYBSc semester IV, paper II , *Vipul Prakashan, 2015-16*, ISBN 978-93-86172-12-9
14. Co-Authored the book “ Differential Equations” for SYBSc semester IV, paper III , *Vipul Prakashan, 2015-16*, ISBN 978-93-86172-12-9
15. Co-authored the book “ Linear algebra” for TYBSc semester V , *Vipul Prakashan, 2016-17*, ISBN 978-93-86172-12-9
16. Co-authored the book “Topology of Metric spaces” for TYBSc semester V, *Vipul Prakashan, 2016-17*, ISBN 978-93-86172-13-6

Mrs Bhakti V

1. “Strongly Regular Graph – A look through Algebra Methods” Presented a paper at *National Conference on “Aspects of Mathematics”* at R. J. College, Dec 2012

Dr. Vinita Dhulia

1. “Investigation of Parameters of Liquid Crystal Composite System” , Published in the proceedings of *2nd International Conference & Workshop on Emerging trends in Technology(ICWET)* published by *International Journal Of Computer Applications (IJCA)*, Number 11, Article 6, 2011, ISBN 978-1-4503-0449-8 , Impact Fcator 3.12
2. A monograph of the doctoral work of Vinita Dhulia titled ‘Parametric Investigations of Liquid Crystal Mixtures-Experiments with Liquid Crystal-Polymer Composite System ‘as published in November 2012 by *LAMBERT Academic Publishing ,Germany*. The e-book is also uploaded.
3. “Simulation Model for Energy Spectrum of Plasma in a Laser Matter Interaction Using Thomson Spectrometer as Diagnostic Tool” Published in the Proceedings of *International Conference on “Photons- Multiple and Creative Solutions to Challenges”* ISBN No.978-81-922163-6-2, Dec 2015, page no 70
4. “Simulation Model for Energy Spectrum of Plasma in a Laser Matter Interaction Using Thomson Spectrometer as Diagnostic Tool” Published in the proceedings of *International Conference on “Photons-*

Multiple and Creative Solutions to Challenges” with ISBN No.978-81-922163-6-2, Dec 2015, page no 7

Mrs. Presentia Aloysius

1. “Technologies in Forest Management”, Published in the proceedings of *National Conferences on ‘Forests for the Future of Man’ organised by NES Ratnam college*, Sept 2011 ISBN-978-81-922163-0-0, Page no 29-30

Dr. Rupali Patel

1. “Efficient H₂ production by water-splitting using indium–tin-oxide/V-doped TiO₂ multilayer thin film photocatalyst” Published in the *International Journal of Hydrogen Energy, Volume 36, Issue 11, June 2011*, Page no 6519-6528, Impact Factor 3.313
2. “Efficient H₂ production by water-splitting using indium–tin-oxide/V-doped TiO₂ multilayer thin film photocatalyst” Published in the *International Journal of Hydrogen Energy, Volume 36, Issue 11, June 2011, Pages 6519-6528* Impact Factor 3.313
3. “Efficient Copper Oxide (CuO) as Solar Absorber” Published in the proceedings of *International Conference on “Photons- Multiple and Creative Solutions to Challenges”*, 2015, ISBN 978-81-922163-6-2, Dec 2015, page no 58

Dr. Sunita Chahar

1. “Study of Gentianales members in Mumbai.” *Bionano-Frontier*, Vol.4 Issue 2, P.no. 322-324, July-Dec,2011. ISSN 0974-0678 Journal Published by International Society of Science & Technology, Mumbai. Peer Reviewed Impact Factor- 0.2334 Indexed in Google Scholar, Indian science Abstracts.
2. “Response of the two varieties of Napier grass to AM fungi and Sewage water irrigation,” p.no.146-149. Published in International Journal Publication *Bio-nanoFrontier Volume:Jan-June* 2014.ISSN:0974-0678 10 Peer Reviewed Impact Factor- 2014 4.06 Indexed in Google Scholar, Indian science Abstracts.
3. “Biodiversity of Arbuscular Mycorrhizal fungi in Kaas plateau”, Satara, Maharashtra, India. *Int. J. of Life Sciences, Special Issue, A5 / December 2015* P ISSN: 2320-7817 |e ISSN: 2320-964X Peer reviewed, Open Access ,Cosmos Impact Factor:4.369 SJIF Impact factor:4.23 Indexed in Google Scholar, Index Copernicus, Advanced Science Index, World cat
4. “ Effect of AM Fungi *Funnelliformis mosseae* on the growth of *Ocimum sanctum.*”. April 2016 issue, published in *International Journal of Current Microbiology and Applied Sciences* . 2016, 5(4) 64-67.ISSN:2319-7706 Peer reviewed, Open Access Impact Factor:2.937 Indexed in Google Scholar, Index Copernicus, Indian Science.
5. “Diversity of AM fungi in Sesamum indicumL. From Sanjay Gandhi National Park,” Borivali, Mumbai, Maharashtra . Published in *International Journal of Life Sciences*,pg no.47. Peer reviewed journal . Dec’2016 Special issue ISSN 2320-7817(P) ISSN 2320- 964X(O) Peer

reviewed, Open Access ,Cosmos Impact Factor:4.369 SJIF Impact factor:4.23 Indexed in Google Scholar, Index Copernicus, Advanced Science Index, World cat (Along with Mrs.Shweta Belose)

6. "A Screening Tool for Quality of Mycorrhizal Biofertilizer- MIP ". Published in *International Journal of Life Sciences*,pg no.47. Peer reviewed journal . Dec'2016 Special issue ISSN 2320-7817(P)ISSN 2320- 964X(O) Peer reviewed, Open Access ,Cosmos Impact Factor:4.369 SJIF Impact factor:4.23 Indexed in Google Scholar, Index Copernicus, Advanced Science Index, World cat
7. "Biodiversity of Panvel Villages near Karnala Bird Sanctuary", published in proceedings of the UGC sponsored *National Conference on "Forests for the Future of Man"*16th and 17th Sept. 2011 held at N.E.S. Ratnam College of Arts, Science and Commerce, Bhandup (west).Mumbai, In collaboration with ATBS (Association of Teachers in Biological Sciences) P.no.140-154 , ISBN No. 978-81-922163-00.(Full Paper).
8. "The Change in Tree Population in Mumbai"- published in proceedings of the UGC sponsored *National Conference on "Forests for the Future of Man"*16th and 17th Sept. 2011 held at N.E.S. Ratnam College of Arts, Science and Commerce, Bhandup(west) ,Mumbai.In collaboration with ATBS (Association of Teachers in Biological Sciences) P.no.127-135. ISBN No. 978-81-922163-0-0. (Full Paper).
9. "Heavy Metal Contamination and its effects on protein levels in the selected vegetables of Mumbai Markets.'published in proceedings of the *National Seminar on Environment-Health and Safety Management 22nd and 23rd July 2011 organized by St.Theresa's college ,Eluru, Andhra Pradesh*
10. "Effect of Sewage Water and AM Fungi on the growth of Napier grass". Published in Proceedings of the UGC sponsored "*State Level Seminar on –Recent Innovative Trends in Plant Sciences*" held at *Mahatma Phule Arts.Science.Commerce College, Panvel, Maharashtra* ,1st sept.2012, P. no. 153-159.ISBN No. 978-81-924995-1-2. (Full Paper).
11. "Sewage Pollution Tolerance by Arbuscular Mycorrhizal Fungi."published in,Proceedings the UGC sponsored "*National Seminar on Fungi and Human Welfare.*",8th and 9th February 2013 held at *RamNarain Ruia College, Matunga, Mumbai*, In association with Mycological society of India(Mumbai Unit).P.no.37-44. ISBN 978-81-920431-5-9. .(Full Paper).
12. Effect of Glomus intraradices and sewage water irrigation on the growth of two varieties of Napier grass". Published in Proceedings of the *International Conference on Mycorrhiza-7* from 6.1.13 to 11.1.13. organized by *The Energy and Resources Institute (TERI), New Delhi*
13. "The Descent of Ayurveda", Epignosis, Journal of Multidisciplinary Research . Vol.1.Issue-3 ,January 2013 P.no.129-134. ISBN No. 978-81-922163-3-1 (Full Paper) Presented in *the International Conference on "Information & Communication for Development – Reach, Impact, Opportunities & Challenges"* organized by *NES Ratnam College of*

Arts, Sc., & Com ,in January, 2013. Vol 1, Issue 1 ISBN: 978-81-922163-1-7

14. "AM Fungi associated with Fodder grasses" published in Proceedings of the UGC sponsored "National Conference on "Fungi in Agriculture" organized by department of Botany, NES Ratnam College of Arts, Science & Commerce on 28th and 29th Jan '2014. ISBN:978:81-922163-4-8
15. "Influence of Arbuscular Mycorrhizal Fungal Colonization on Phosphatase activity in the roots and rhizosphere of *Carthamus tinctorius* L. (Safflower)" , published in *Proceedings of the Indian Botanical Congress held at KET's Vaze College, Mulund on 7th and 8th November, 2014*
16. "Study of AM fungi in *Tridax procumbens* by Trap culture" published in, Proceedings of the UGC sponsored "National Conference on "Fungi in Biotechnology" held in S.I.E.S College of Arts, Science & Commerce on 28th and 29th Jan '2014.
17. "Identification Key to Arbuscular Mycorrhizal Fungal Genera", published in *National Conference on New and Emerging Trends in Bioinformatics and Taxonomy 'NETBT 2015' on January 14th and 15th 2015*, Organized by Department of Botany and Research Committee VPM's B.N.Bandodkar College of Science, In Collaboration with Association for Plant Taxonomy, Dehradun and Blatter Herbarium, St. Xavier's College, Mumbai
18. "Taxonomy Of Arbuscular Mycorrhizal Fungi - Past & Present," published *National Conference on New and Emerging Trends in Bioinformatics and Taxonomy 'NETBT 2015'* on January 14th and 15th 2015, Organized by Department of Botany and Research Committee VPM's B.N.Bandodkar College of Science, In Collaboration with Association for Plant Taxonomy, Dehradun and Blatter Herbarium, St. Xavier's College, Mumbai
19. "Mycorrhizal Fertilizer production using Forage Grasses", published in UGC sponsored National Conference organized by Chemistry department, " *Recent Developments in Synthetic and Material chemistry " NES Ratnam College of Arts, Science & Commerce on 16th and 17thth Jan '2015.*
20. "Status of AM Fungal Diversity in Successive Trap Cultures." Published in Proceedings of the *Asian Mycological Congress held at Goa University. 7.10.15 to 10.10.15*
21. "AM Fungal Diversity in selected medicinal plants of Sanjay Gandhi National Park," Borivali, Mumbai, India published in Proceedings of the *Asian Mycological Congress held at Goa University. 7.10.15 to 10.10.15.* (Along with Shweta Belose¹)
22. "Effect of Arbuscular Mycorrhizal Fungi *Funneliformis mosseae* on growth of *Ocimum sanctum*" published in Proceedings of the *Asian Mycological Congress held at Goa University. 7.10.15 to 10.10.15.*
23. Co-authored the book "Fundamentals of Botany" for F.Y. B.Sc. Shroff Publishers and Distributors Pvt. Ltd., ISBN- 13: 978-93- 5110-149-9. By Dr. Charuta Vaidya, Dr. Sunita Chahar, Dr. Sharadavaidya. First Indian Print July 2013

24. Co-authored the book VIPUL'S Fundamentals of Botany for F.Y. B.Sc. Vipul Prakashan., ISBN: 978-93-84537-15-9. By Dr. Sunita Chahar, Dr. Charuta Vaidya, Dr. Sharadavaidya. First Edition June 2015

Ms. Shweta Belose

1. "Diversity of AM fungi in Sesamum indicumL. From Sanjay Gandhi National Park, Borivali," Mumbai, Maharashtra . Published in *International Journal of Life Sciences*, pg no.47. Peer reviewed journal . Dec'2016 Special issue ISSN 2320-7817(P) ISSN 2320- 964X(O) Peer reviewed, Open Access ,Cosmos Impact Factor:4.369 SJIF Impact factor:4.23 Indexed in Google Scholar, Index Copernicus, Advanced Science Index, World cat
2. "AM Fungal Diversity in selected medicinal plants of Sanjay Gandhi National Park, Borivali, Mumbai, India. Published in proceedings of the *Asian Mycological Congress held at Goa University. 7.10.15 to 10.10.15.*

Ms. Mamta Yadav

1. "Biosynthesis of silver and gold Nanoparticles, their characterization and study of their antifungal activities." Presented research paper in the *International Conference on "Nano material for sustainable Green Technology " at K.V Pendharkar College, Jan 2015*
2. "Biosensors in mycotoxin analysis- a review – Presented research paper in the *National Conference on " Recent Developments in Synthetic & Material Chemistry" of NES Ratnam College, with ISBN no 978-81-922163-5-5 (Along with Jayshree.G)*

Dr. Jayasree Sasangan

1. "Divine Ecolegacy - Sacred Groves of God's Own Country – Their Present Status, Biodiversity and Conservational Efforts" Published in proceedings of *National Conference , held at N.E.S. Ratnam College, in Association of Teachers in Biological Science* Sept 2011 , ISBN 978-81-9221633-0-0

Dr. Meenakshi Kumaraguru

1. "Attenuation Of Oxidative Hemolysis Of Human Red Blood Cells By The Natural Phenolic Compound, Allylpyrocatechol" Published in *Free Radical Research*, Sept 2013, 47 (9);, ISSN 1071 – 5762, page no 710- 717 imp 3.89
2. "Low Cost Anemia Detection At College Level" - Published in proceedings of International Multidisciplinary Research Foundation ,*International Journal on Women Studies & Social Sciences* , ICWSS – Mar 2015, ISBN 978-93-84124-33-5
3. "Radio Protective Activity Of The Piper Betle Derived Phenolic, Allylpyrocatechol Against Gamma – Ray Induced Hemolysis Of Human Red Blood Cells" Published in SRR – 2016 - SOCIETY FOR RADIATION RESEARCH-*Journal of Radiation & Cancer Research- Jan – March- 2016* with ISSN 0973 – 0168 imp 2.7

4. "Comparative Study of Anemia & Cognitive Impairment among College Girls" - Published in *International Journal on Women Studies & Social Sciences*, ICWSS – 2016, ISBN – 978 – 93 - 84124 –67 –2, March- 2016
5. "The Natural Phenolics, Malabaricones As Preventing Agents Against Haemolytic Anemia" - Published in proceedings of *International Conference on "Recent Trends in Free Radical and Antioxidant Research and 13th International Annual Meeting of the Society for Free Radical, SFRR India 2014*, Jan 2014
6. "Gamma ray induced oxidative damage to human red blood cell proteins under hypotonic conditions and its prevention by natural phenolic malabaricone compounds" Published in proceedings of "*International Conference On Advances In Microbiology Of Food, Agriculture, Health And Environment*", DAE – BRNS – LSS – 2015 BARC, Anushakthi Nagar, Mumbai, Feb 2015
7. "Gamma ray induced oxidative damage to human red blood cell proteins under hypotonic conditions and its prevention by natural phenolic malabaricone compounds" Published in proceedings of *International Conference Of Mumbai Hematology Group*" MHG – 2015, Mar 2015
8. "Effects Of Oxidative Stress On Red Blood Cell In Sickle Cell Anemia And The Protective Effect Of Natural Antioxidant – Fermented Papaya Preparation: An In – Vitro Study", Published a research paper in *39TH Annual Conference Of Mumbai Hematology Group (MHG), Mumbai.*

Mr. Ashok V.Poojari

1. "Impact of Merger and Amalgamation with respect to Globalisation Presented a paper in *National Conference on "The Indian Business Scenerio: Challenges Ahead"* held at Ghanshyamdas Saraf College, Malad on 26-27th November, 2012
2. "Enhancing Organisational Effectiveness through Accessing and Sharing of Information" Presented a paper in conference on "*Information and Communication for Development-Reach, Impact, Opportunities and Challenges*" held conducted by NES Ratnam College, Bhandup on 5th and 6th October, 2012 with ISBN 978-81-922163-1-7
3. "Emerging trending in banking and insurance: opportunities and challenges" Presented a paper in in *National conference on "Impact of globalization in business"* held on 21st November 2014 at Dnyansadhna College of Arts, Science and Commerce, Thane with ISBN 81-89217-04-06
4. "-Real Estate development in India "Presented a paper in conference on "*Problem and prospect in real estate in India*" held at Adarsh college, Badlapur ISBN 81-89217-7-0
5. "A turbulent voyage of Rights of Humanity" Presented a paper in *International conference on "A critical Evaluation of human rights with respect to corporate world"* held on 5th October, 2013 Inter at K.B.College, Thane ISBN 978-93-5142-130-6

6. "Impact of Foreign Direct Investment" published in *National conference held at K.B.College,Thane on 24th January,2015* ,ISBN - 978-93-5202-546-6

Ms. Nutan Lokhande

1. 'Intelligent Energy Management' Published a research paper *Multi-Disciplinary International Journal of the National Conference on 'Sustainability , Society and Environment held on 14th March 2014 at Ratnagiri Sub-centre, University of Mumbai.* With ISSN 2231-2137, page no.109-110
2. 'Role of ICT Education for Women Empowerment' Published a research paper in *International Scholarly Research Journal on 'Scaling New Heights & Horizon in Higher Education' of the International Conference held on 18th February, 2016 at Thakur College of Science & Commerce, Mumbai* with ISSN-2319-4766, IMPACT FACTOR 4.889 page no.260-.263.
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4. 'Performance of Financial Institutions- An Evaluation' Published a research paper in conference proceedings of *the National Conference on 'Development of Capital Market in India in Current Scenario: Challenges & Opportunities' January ,2014 at Vikas College of Arts, Science & Commerce,Vikhroli (E), Mumbai-083,* page no.21
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8. 'Retail Sector in India:Present Scenario Emerging Opportunities & Challenges' Published a research paper in a Conference proceedings of the *National Seminar on 'Vision 2050: Future of Law and Judicial Reforms' held on 19th September, 2015 at Prahladrai Dalmia Lions College of Commerce & Economics, Malad, Mumbai.* With ISBN-978-81-926019-5-3, page no.246- 258

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10. Co-authored & Published book on Accountancy and Financial Management for F.Y.B.Com Ist Semester by Himalaya Publishing House Pvt.Ltd ISBN:978-93-5051-917-2. 2012-13
11. Co-authored & Published book on Accountancy and Financial Management for F.Y.B.Com IInd Semester by Himalaya Publishing House Pvt.Ltd ISBN: 978-93-5051-770-3, 2012-13
12. Co-authored & Published book on Accountancy and Financial Management for F.Y.B.Com Ist Semester by Himalaya Publishing House Pvt.Ltd ISBN: 978-93-5097-305-9, 2013-14
13. Co-authored & Published book on Accountancy and Financial Management for F.Y.B.Com IInd Semester by Himalaya Publishing House Pvt.Ltd ISBN: 978-93-5202-112-3, 2013-14
14. Co-authored & Published book on Accountancy and Financial Management for S.Y.B.Com Semester IIIrd & IVth by Himalaya Publishing House Pvt.Ltd ISBN: 978-93-5202-647-0, 2014-15
15. Co-authored & Published book on Accountancy and Financial Management SEM III for SYBcom for Mumbai University by Himalaya Publication (ISBN: 978-93-5202-647-0) 2015-16
16. Co-authored & Published book on Accountancy and Financial Management SEM IV for SYBcom for Mumbai University by Himalaya Publication (ISBN: 978-93-5202-112-3), 2015-16

Dr. Lata Swaminathan

1. Presented paper at the one day *International Conference on Skill Development: The Key to Economic Prosperity* organized by Ramanand Arya DAV College. 7th march 2015 The title of the paper was "Skill Development for Shared leadership- The Changing Paradigms" The paper is published in the journal "Tactful Management" ISSN No- 2319-7943(Online), 2319-7935 (Print) with Impact factor – 2.1632 (UIF)
2. "Integrated Marketing Communication: Satyamev Jayate- A Case study" published in *International Journal of Multidisciplinary Research, Vol 1, Issue 9(I), December 2012, Jai Hind Education Society, Pune* ISSN No- 2277-9302.
3. "Work Participation of Women- Challenges and Initiatives" was published in a book titled "*Women Empowerment in the 21st century*" ISBN 978-93-50-24-696-2, Himalaya Publications, Mumbai 2011. Editor- Dr. H.S. Cheema
4. "Tackling Urban Poverty through Micro credit" published in a book by *Association for Business Education and Entrepreneurship development* ISBN -13-978-81-922796-0-2, 2012
5. "*Work Participation of Women- Challenges and Initiatives*" published in Book titled *Alchemy in Social Science Research*" ISBN:9381361347, Excel India Publications, New Delhi, 2012.

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7. "Microcredit for Urban Poor" was published in *Journal of Commerce and Management Thought in 2012* ISBN 978-81-922796-0-2, Impact factor -0.501
8. "Male and Female Leadership Styles- A Comparative Analysis", (co authored by Dr. Lata S and Dr. Rebecca published in the *Epignosis- Journal of Multidisciplinary Research, ISBN 978-81-922163-1-7*
9. "Employees' Perception of Women Entrepreneurs' Leadership Styles and Organisational Commitment", published in the *international journal-Management Guru: Journal of Management Research , Vol IV, Issue No. 2, Thane, March, 2016*
10. "Motivation factors of Women Entrepreneurs- A study of the push and pull factors" co-authored by Dr. Lata S and Mrs. Rebecca T has been published in *International Journal of Business Intelligence and Innovations Vol 2 Issue 2, Special edition July, 2015, ISSN 2348 4705, Chennai*
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12. "Tackling Deforestation using Social Media- Green Peace Initiatives against NESTLE and Leo Mattel" published in *National Conference on "Forests for the future of Man"* organized by the *Botany department of NES Ratnam College* in collaboration with *Association of Teachers in Biological Sciences*. The paper was published (ISBN No. 978-81-922163-0-0) as a part of the proceedings of the conference ,September 2011

Mrs. Rebecca Thomas. K

1. "The Role Of ICT In Retail Sector". Published in *Epignosis- Journal of Multidisciplinary Research January 2013* ISBN 978-81-922163-1-7
2. "Challenges In Implementing Environment Management System In Small And Medium Scale Industries In Dombivili", January 2013, published in *BIZZ...Ness-The Research Journal of the Ness Wadia College of Commerce, ISSN 2277-4823*
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7. "Future of Education: The Influence of Technology on the Education Industry" Presented a paper at the *state level conference titled "Cloud computing & its future scope" conducted by Bharat Ratna Dr., Babasaheb Ambedkar College, Pune on 26th November 2014, ISBN-978-81-924177-4-5*
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Mrs. Deepa C

1. "Ethnobotanical Information on Entada species in India," Published in *The Journal of Ethnobiology and Traditional Medicine* ", ISjN NO. 6642-3194, Impact Index: 6.38
2. "E. Phaseoloids seed dormancy and germination: Implications for Conservation and Restoration," Published in *International Journal of Advanced Research (2016)*, Volume 4, Issue 5, 11-16, ISSN 2320-5407 Impact Factor: 5.336
3. "Pathrakadavu Hydro Electric Project- A Threat To Silent Valley And River Bharathapuzha," Presented a paper in the *National Seminar 'Forest for the future of man', organized by NES Ratnam College of Arts, Science and Commerce, Sept 2011*
4. "Induced displacements in Maharashtra – challenges in development", Published in proceedings of the *National Seminar on Inclusive Development : Strategies and challenges, held at S M Shetty College, Jan 2012*
5. "Conservation of Medicinal Plants –A Green Investment", Published in proceedings of *International Conference OAMII 2012 Nagndas Khandelwal College, Dec 2012*
6. "EMIS for Sustainable cities in Maharashtra State: Implementation Strategies" Published in proceedings of *International conference on "Information and Communication for development- Reach, Impact, Opportunities & Challenges"* , Jan 2013 ISBN:978-81 922163-1-7
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9. "Understanding Environmental Behavioural changes through communication among college students," Published in proceedings of *National seminar on Academic Excellence-Current challenges, Sri Narayana Guru College,Chembur*, page no 42-48, ISBN: 978-93-5149-198-9

Mrs. Riya Rupani

1. "Corporate Governance in selected Private banks- A Comparative Approach".Published in *Contemporary research in India-a Peer-reviewed Multi disciplinary International Journal – Mar 2013*
2. "CSR Initiatives of Indian companies" published in "*Global journal Management application*" Volume II no. 3 July- September 2012. ISSN2249.345x from the SVIMS research desk. In Volume-3 . Issue – 1: march, 2013 bearing ISSN 2231-2137.
- 3 "Thought on Job Interview skills and techniques- A practices set communication" Published in *Journal of Commerce & Management in volume IV July- September 2013 in Brakha (fall) no.3, Bearing ISSN print 0975/-623x.*
- 4 " Financial Inclusion Road to Success" Presented a paper in *National conference on 'Indian Economy in 21st century – Issues and Challenges'* hosted by Smt. Janakibai Rama Salvi College, Kalwa Thane, Sept 2013, ISBN 978-93-81-578-99-5.
- 5 Authored book on Corporate Governance (*T.Y.B.F.M. Sem. VI (Mumbai University)*) (First Edition) ISBN: 978-93-5051-792-5 2012
- 6 Co-authored & Published book on Ethical Science (*Nagpur University*) (*F.Y.B.E. Sem. II*) (First Edition) ISBN: 978-93-5097-370-7 2013
- 7 Authored book on Business Ethics & Corporate Social Responsibility. (*T.Y.B.M.S. Sem. V (Mumbai University)*) (4th Revised Edition) ISBN: 978-93-5097-870-2. 2013
- 8 Authored book on Business Ethics & Corporate Governance. (*T.Y.B.B.I. Sem. VI (Mumbai University)*) (4th Revised Edition) ISBN: 978-93-5202-248-9. 2015
- 9 Authored book on Business Ethics (*S.Y.B.F.M. Sem. III (Mumbai University)*) (Second Revised Edition) ISBN: 978-93-5202-738-5 2015
- 10 Authored & Published book on Value Education & Soft Skill (Foundation Course–II). (*S.Y.B.A.F. Sem. IV (Mumbai University)*) (Second Revised Edition) ISBN: 978-93-85800-28-3 2016
- 11 Authored book Ethics & Governance (*Mumbai University*) (*T.Y.B.M.S. Sem. V*) (First Edition) ISBN:978-93-85834-32-5

Mr. Rajiv Mishra

1. "Skill Development" published in *International conference held on 7th March 2015 at R.A.DAV College, Bhandup.* ISSN: 2319-7935(Print) 2319-7943(Online) with Impact factor 2.1632
2. "Human Resources Accounting" Presented paper in *National Conference at R.A.DAV College, Bhandup.* held on 25th February, 2016 ISSN: 2319-2429

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8. Co-authored the book Principles of Management & Finance for (S.Y.B.Com. Sem. III.) 2012 , ISBN 978-93-5051-975-2
9. Co-authored the book Principle of Finance for (S.Y.B.Com. Sem. IV) 2012 , ISBN 978-93-5097-304-2
10. Co-authored the book of Financial Accounting for (F.Y. B.B.I. Sem. II.) (2nd Edition) 2013 , ISBN 978-93-5142-254-9
11. Authored the book of Accounting Theory and Practice 2016 , ISBN 978-93-5202-832-0
12. Co-authored the book of Introduction to Financial Accounting for (B.M.S. Sem. I.) (2nd Revised Edition) 2015 ,ISBN 978-93-5051-743-7
13. Co-authored the book of Human Resources Management for (T.Y.B.B.I. Sem. VI.) (2Nd Revised Edition) 2012 ,ISBN 978-93-5142-285-3
14. Co-authored the book of Taxation of Financial Services for (S.Y.B.B.I. Sem. III) (Third Revised Edition) 2015 , ISBN 978-93-5051-178-7
15. Co-authored the book of Direct and Indirect Tax for (T.Y.B.A.F. Sem. V.) (2Nd Revised Edition) 2012 , ISBN 978-93-5051-177-0
16. Co-authored the book of Taxation for Investment for (S.Y.B.F.M. Sem. IV.) (Second Revised Edition) 2014 , ISBN 978-93-5097-845-0
17. Co-authored the book of Direct Tax for (T.Y.B.A.F. Sem. V.) 2014 , ISBN 978-93-5202-620-3
18. Co-authored the book of Financial Management Paper – 1 for (F.Y.B.A.F. Sem. II.) 2014 , ISBN 978-93-5142-281-5
19. Co-authored the book of Accountancy & Financial Management for (S.Y.B.Com. Sem. III.) 2015 , ISBN 978-93-5051-978-3
20. Co-authored the book of Accountancy & Financial Management – II for (F.Y.B.Com. Sem. II.) 2015 ,ISBN 978-93-5202-102-4
21. Co-authored the book of Accountancy & Financial Management for (F.Y.B.Com. Sem. I.) 2013 , ISBN 978-93-5051-917-2
22. Co-authored the book of Environment & Management of Financial Services for (F.Y.B.B.I. Sem. I.) 2013 , ISBN 978-93-82429-04-3
23. Co-authored the book of Entrepreneurship Management for (S.Y.B.B.I. Sem. IV.) 2014 , ISBN 978-93-5142-292-1

24. Co-authored the book of Security Analysis & Portfolio Management for (T.Y.B.B.I. Sem. V.) (2nd Revised Edition) 2014 , ISBN 978-93-5142-963-0
25. Co-authored the book of Accountancy & Financial Management Paper–IV for (S.Y.B.Com. Sem. IV.) 2016 , ISBN 978-93-5202-112-3
26. Co-authored the book of Cost Accounting for (F.Y.B.A.F. Sem I) 2015 , ISBN 978-93-5051-842-7
27. Co-authored the book of Accountancy & Financial Management – II for (F.Y.B.Com. Sem. II.) 2016 ,ISBN 978-93-5202-102-4
28. Co-authored the book of Human Resources Management for (T.Y.B.B.I. Sem. VI.) (3rd Revised Edition) 2014 , ISBN 978-93-5202-314-1
29. Co-authored the book of Accountancy & Financial Management for (S.Y.B.Com. Sem. III.) 2014 , ISBN 978-93-5097-844-3
30. Co-authored the book of Direct & Indirect Tax for B.M.S.) (2nd Edition) 2014 , ISBN 978-93-5051-316-3
31. Co-authored the book of Direct Tax for BMS 2016 , ISBN 978-93-5202-067-7
32. Co-authored the book of Financial Reporting Analysis for (B.B.I.) (2nd Edition) 2015 , ISBN 978-93-5142-962-3
33. Co-authored the book of Quantitative Method – I for (F.Y.B.B.I.) 2015 , ISBN 978-93—5142-870-1
34. Co-authored the book of Quantitative Method – II for (F.Y.B.B.I.) 2016 ,ISBN 978-93-5202-150—5
35. Co-authored the book of Advanced of Financial Accounting. (M.Com. Sem. I.) 2015 , ISBN 978-93-5202-899-3
36. Co-authored the book of Advanced of financial Accounting. (M.Com. Sem. II.) 2016 , ISBN 978-93—5262-028-9
37. Co-authored the book of Advanced Cost Accounting – I (M.Com. Sem. I.) 2015 ,ISBN 978-93-5202-900-6
38. Co-authored the book of Advance Financial Management for (M.Com. Sem. III.) 2016 , ISBN 978-93-5142-998-2
39. Co-authored the book of Advance Financial Management. for (M.Com. Sem. IV) 2015 , ISBN 978-93-5142-997-5
40. Co-authored the book of Direct Tax for (M.Com. Sem. III.) 2014 , ISBN 978-93-5202-434-6
41. Co-authored the book of *Direct Tax* for (T.Y.B.Com. Sem. V.) in 2015 with ISBN 978-93-5202-616-6
42. Co-authored the book of Service Sector Management for (B.M.S. Sem. V.) 2012 ,ISBN 978-93-5051-904-2
43. Co-authored the book of Financial Accounting for (F.Y.B.A.F. Sem. II) 2014, ISBN 978-93-5202-258-3
44. Co-authored the book of Financial Management for S.Y.B.B.I. Sem. IV. 2014, ISBN 978-93-5142-412-3
45. Co-authored the book of Advance Costing & Auditing for (S.Y.B.M.S. Sem. IV.) 2016 , ISBN 978-93-5202-123-9
46. Co-authored the book of Financial Management for (F.Y.B.A.F. Sem. I.) 2015, ISBN 978-93-5142-281-5
47. Co-authored the book of Cost and Management Accounting for M.COM(Sem I) 2016 , ISBN 978-93-5262-316-7

Criteria IV – Infrastructure and Learning Resources



Chemistry lab



Physics Lab



Audio Visual Room



NES Ratnam College



Library



Computer Lab



Research Lab

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1. What is the policy of the Institution for creation and enhancement to infrastructure that facilitate effective teaching and learning?

The College has a policy of identifying potential areas of development based on existing provision, possible upgradation and maintenance of the existing infrastructure that includes classrooms, laboratories, library and also ICT tools. Management is supportive in infrastructure development and provides financial and other kinds of support as and when the need arises. The policy is as follows:

- To ensure that the infrastructure is adequate to meet the needs that arises as a result of academic development in terms of student strength and introduction of new programmes.
- Up gradation of ICT tools is done in a phased manner according to the needs of the syllabi and also use of innovative teaching methods by faculty
- Optimum utilization of resources is ensured to carry out curricular, co-curricular, extra-curricular and research activities

4.1.2 a) Detail the facilities available for Curricular and co-curricular activities—classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.

Facilities	Existing
Campus area (Built Up)	3249sq.mt.
ICT enabled classrooms (Smart Board, OHP, LCD, Mikes)	16
Laboratories (UG)	7
Laboratories (PG)	2
Research Laboratory	1
Library including Reading Room/Issue Counter/Digital Library Corner	2

Departmental Library	16
Auditorium	1
Audio Visual Room	1
Garden	1
Shade House	1
Composting pits for solid waste management	1
Teacher Resource Center	1

b)Extra-curricular activities–sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc

College plays a proactive and supportive role in grooming students by earmarking specific spaces / facilities for extra-curricular activities.

- There are separate Gymkhana Rooms for boys and girls
- Playground is available for outdoor games
- AC auditorium with a capacity of 600 is used for organizing various activities.
- NSS and LLE units are provided with office spaces.
- The Audio-Visual room is available for conducting various programmes
- Yoga practice is carried out in the Gymkhana and International Yoga Day is also celebrated in the college with active participation of staff and students.
- First Aid Kits are kept at many strategic locations.(No. 7)
- Sanitary Napkin Vending Machine has been installed.
- Water coolers with purifiers are provided on all floors.
- Clean and well maintained washrooms, for boys and girls are provided.
- Well equipped Gymnasium is available.
- Coaches are appointed in Athletics, Cricket, Kabaddi, Karate and Tug of War as per students' suggestions/needs

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth than disoptimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution/campus and indicate the existing physical infrastructure and the future planned expansions if any).

- Taking into consideration the number of classrooms available with varied sizes, strength of the class and the subject combinations, the timetable is made and rooms are allotted accordingly.
- In view of the various academic programmes/courses running simultaneously, the infrastructure (classrooms and laboratories) are utilized throughout the day from 7.10 am to 8.00 pm.
- The laboratory facilities are adequately provided to all classes with proper time-table.
- Research Laboratory for Botany is designed taking into consideration the needs of research scholars and is well equipped.
- Add on certificate courses are also conducted with a proper plan.
- M.Com/YCMOU classes are held in the evenings and on Sundays.

There is optimum utilization of the existing infrastructure.

Master Plan and Future Plan is there in **Annexure 1**

Amount spent in the last five years (in Rupees)

Sr No	Heads of Expenditure	2011-12	2012-13	2013-14	2014-15	2015-16
1	Classroom Renovation	3,83,825	29,000	1,41,563	50,000	60,000
2	Teaching Aids	28,275	28,986	1,13,390	7,482	11,550
3	Computer and Accessories	5,99,860	3,71,195	3,23,080	2,27,977	2,69,741
4	Laboratories	96,813	1,86,423	1,01,246	5,92,660	1,06,300
5	CCTV	-	23,240	33,500	-	65,000
6	Fire Alarm	-	-	-	--	2,50,000

4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

- The institution has made the following infrastructural provision for students with physical disabilities
 - Ramp (between the ground floor and second floor)
 - Fixed railing alongside the steps
 - Washroom has a western type commode
 - Wheel Chair.

4.1.5 Give details on the residential facility and various provisions available with in them.

The College does not have provision for residential facilities.

4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

- First aid boxes are available in all the laboratories, Gymkhana, Girls'/Boys' Common Room, College office, Staff room and the Library which are regularly filled in by a staff who has been assigned with the task.
- The College has signed a MOU with the Central Hospital, Bhandup (W) Mumbai, for attending to any emergency requirement.
- On call doctor facility is available.
- There is a Medical Centre for the students and staff in the campus.
- Thalassaemia (Minor) detection camp and Blood Group detection camps are organized on the campus by the NSS unit in collaboration with Bombay Hospital and Nair Hospital.
- Free Health Check up camps are organized in collaboration with Lions Club and Fortis Hospital.
- Anemia Detection for girl students is conducted by the Department of Zoology in collaboration with National Institute of Immunohaematology.
- The Disaster Management Cell and the NSS unit of the college conduct Disaster Management Training for students
- Safe drinking water is available on the campus. Each water cooler is fitted with water purifier. AMC is given for the cleaning of the water cooler, water purifier and also overhead tanks.
- Staff and students are made aware of health and hygiene issues through talks organized by Women Development Cell, NSS and Students' Council. Monthly drives on health and hygiene also contribute in this direction.
- Sanitary Napkin Vending Machine has been installed for the staff and students of the college.

4.1.7 Give details of the Common Facilities available on the campus – spaces for special units like IQAC, Grievance Redressal unit, Women's Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

IQAC functions from a designated office space made available for its functioning

- Grievance Redressal Cell is functioning effectively.
- Suggestion Boxes are kept at different locations

- Women Development Cell is active
- Personal Counseling and Career Guidance are carried out by the Counselor who has an office space for functioning
- Placement Centre conducts its seminars/ recruitment drive in the A.V. Room
- Health Care facilities are available in the Health Center
- A Canteen and a Nestle Corner are there in the college campus.
- Recreational Space for Staff and Students is available in the Gymkhana, Girls'/ Boys' Common Rooms, Quadrangle, Playgrounds and Gymnasium
- Safe Drinking Water Facility is available on each floor
- Infirmary is in Girls' Common room/Staff room
- Auditorium has a capacity of 600
- Air-conditioned Audio-Visual Room has a capacity of 90

4.2 Library Learning Resource

4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

Yes, the Library has an Advisory Committee. The Principal, some senior teachers representing all the faculties and the Librarian, as the Convenor, are the members of the Committee.

Library Committee meets at least twice a year to plan library activities, budget allocation for each department, monitors the quality as well as quantity of services provided to students/staff, recommends the purchase of books etc. It also makes suggestions to improve the functioning of library. Scrutiny of applications received from students for Book Bank facility is also done by the committee.

Important decisions of the Library committee:

- Selecting students for Book Bank facility.
- Overseeing events and activities for motivating students to use library facilities like orientation, thematic display, new arrival display, celebrating important days (Rabindranath Tagore Week, Marathi Bhasha Diwas, Reading Day, Library Day) and Book exhibitions.
- Improvement in library administration in terms of record keeping and maintaining registers and files.
- For PG and Research students, one computer terminal with internet facility to browse e- resources and database is made available.
- Occasional visits to classes by the Librarian to popularize the use of e-resources and databases

4.2.2 Provide details of the following:

Facility	Details
Total area of the Library	231.14 sq mt
Seating capacity	85
Library working hours: On working days: (Monday to Saturday) (Circulation not on Saturday) Additional room (G6)for reading	7.30 am to 6.30 pm (Reading room) 9.00 am to 6.30 pm (Circulation) 5.30 pm to 8.00 pm
Layout of the Library	Circulation Counter Text Book Area Processing and Reprographic Service Area Teachers' Resource Center Journals and Magazines reading section Online Public Access Catalogue (OPAC) Browsing Area Computer with internet facility for PG and Research students Thematic Display Rack New Arrival Display Rack Notice Boards /Display Boards Newspaper Stand

4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

- Library resources have been built up over a period of time.
- Every department is provided with library budget. Books are purchased after approval of Department Heads and Principal.

- Budget at times is revised in view of the change in syllabi leading to requirement of more purchases.
- Demand from students and staff members are considered while ordering Reference/ Text books, e-journals and other reading materials. Expected student : book ratio(10:1) is maintained for text books while purchasing books in the library.
- Fees collected from students towards Library, Grants from UGC and aid from management are the main sources of funds for developing library resources.
- Some books are donated by staff/students/our sister organization and ICFAL. Of the total collection of books total number of books donated is 355.

Amount Spent on Books, Journals and e-resources (During last five years)

Library Holdings	2011-12		2012-13		2013-14		2014-15		2015-16	
	Number Purchased	Cost (Rs)								
Text Books	449	57,815	689	81,244	502	64,304	568	82,230	364	43,718
Reference Books	531	2,18,391	478	1,74,922	65	26,416	148	84,228	126	36,466
Journals/Periodicals	70	45,238	70	42,842	69	41,311	76	56,859	81	59,193
<u>E-resources</u>	Renewed	5000	Renewed	5,000	Renewed	5,000	Renewed	5,000	Renewed	5,000
CD & Video	1	429	1	499	-	-	11	1500	-	-
Library Membership:										
1)BCL Mumbai	Renewed	10,000	Renewed	5,400	Renewed	5,400	Renewed	3,600	Renewed	3,600
2)AIRC	Renewed	3,000								
3)BNHS	Renewed	2,500	Renewed	2,500	Renewed	2,500	Renewed	3,500	Renewed	3,500

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

- **On Line Public Access Catalogue (OPAC):**
Students can browse library catalogue through OPAC. Two computer terminals in the reading room section are available to search catalogue
- **Electronic Resource Management package fore-journals:**
PG and Research students are able to access Directory of Open Access

Journal (DOAJ), Directory of Open Access Books (DOAB), UGC N-List and other open access databases through dedicated computer terminal and internet access specially provided to them.

- **Federated searching to olstosear charticles in multiple databases:** Library uses global federated search engines such as Google Scholar.
- **Library Website**
A Library blog has been created. Information related to library is being updated on regular basis. Blog is attached to the college website.
- **In-house/remote access to e-publications**
Access to e-publications is provided through INFLIBNET and DOAJ, DOAB websites. Librarian assists the students for searching required information.
- **Library automation**
Library is automated for book processing, circulation process, stock checking reports and daily/monthly statistics of issue/return, book history and other reports.
- **Total number of computers for publicaccess**
Out of 8 computers in library, 3 computers are for user access.
- **Totalnumbersofprintersforpublicaccess**
1 printer is available for public access.
- **Internet band width/speed**
4mbps
- **Institutional Repository**
Collection of research publications, research reports and thesis/dissertations by staff
- **Content management system fore-learning**
UGC's Infonet's e-PGpathashala portal for e-content is used by PG and Research students
- **Participation in Resources haring networks / consortia (like In flib net)**
Library has subscribed to Inlibnet N-List

4.2.5 Provide details on the following

- Average number of walk-ins -- 109 per day
- Average number of books issued/returned -- 102 per day
- Ratio of library books to students enrolled -- 12:1
- Average number of books added during last three years -- 591
- Average number of login to OPAC -- 25 per day
- Average number of login to e-resources -- 15 per day
- Average number of e-resources downloaded/printed 8 per day
- Number of information literacy trainings organized -- 1 per class in a year

- Details of “weeding out” of books and other materials --
Library has weeded out 5595 books till date due to change in syllabi after following the proper procedure.

4.2.6 Give details of the specialized services provided by the library

Specialized Service	Details
Manuscripts	Not Available
Reference	Separate Reference Book section is maintained. Computer and internet facility is available for PG and Research students
Reprography	Available
ILL(Inter Library Loan Service)	British Council Library, American Library, Khalsa College Library
Information deployment and notification	Information deployment is done through new titles display, Bibliography of new titles, Current Awareness Service (CAS), Selective Dissemination of Information (SDI) and Thematic Display. Notices related to library timings/ rules, library cards, Book Bank Scheme and Career Guidance are displayed.
Download	On request, information is downloaded
Printing	On demand, printing facility is available
Reading List/Bibliographic compilation	On demand and according to user's needs, lists are prepared
In House/Remote Access to e-resources	Access to N-list is given with login id and password to the teaching staff
User Orientation and Awareness	At the beginning of every academic year, library orientation program is arranged class-wise. Book exhibitions and displays are

	periodically organized to create awareness.
Assistance in searching database	It is provided as per demand from users
Inflibnet/IUC facilities	Available through N-list-INFLIBNET
Ex Student Membership	The ex-students are given permission to use the library
Additional library Card	For meritorious students, the library allots an extra library card as an incentive to perform better with more use of library services.

4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college

Support rendered to the students and staff:

- To access library collection through OPAC search
- PG and Research students are assisted to access and browse database
- Intimation to staff on new arrivals
- Thematic displays are arranged
- Reprographic service is made available
- College and University question papers, University syllabi are made available for reference
- Open access to library collection is permitted to Final year, PG and Research students
- FY/SY students are assisted in accessing reference books with prior permission of the Librarian or if accompanied by teachers
- Information about Placements is made available
- Book Bank facility for the underprivileged students
- Information about Career Guidance and Competitive Examinations are displayed

4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.

- The percentage of physically challenged person is minimal and hence is dealt on a case to case basis.
- The college has not had any visually challenged person in the last five years.

4.2.9 Does the library get the feed back from its users? If yes, how is it analyzed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feed back analyzed and used for further improvement of the library services?)

At the end of every academic year, the Library gets feedback from the final year students.

Feedback forms are distributed to students of all the programmes. Feedback helps in understanding the number of library visits made and its purpose, the newspapers and journals/magazines that are mostly read by students and their awareness about services and facilities provided by the Library. These informations help the library to take policy decisions related to student and also provide guidance in the nature of purchases to be made, in the category of books and journals. Suggestions given by students regarding library administration are considered while framing policies for overall improvement of the Library.

4.3. IT Infrastructure

4.3.1. Give details on the computing facility available (hardware and software) at the institution.

The Institution has 108 computers, two fully equipped computer laboratories and computers in each department.

Other features are:

- Stand alone and LAN Facility
- Wi-Fi Facility
- Licensed Software Packages
- CPU's with mother board I3, Core2Duo, and Pentium

4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

- Free internet facility is made available to the faculty for preparing resource material, screening educational videos and for research activities
- Students use internet facility for browsing educational links and for their research projects
- Departmental computers are used by faculty members for teaching, information access, data storage, analysis, processing and administration.
- Internet and computer facility are used by the Examination Committee for systematic conduct of examination, compilation of results and mark lists

- The College office uses internet and computer facility for administrative work such as admissions, fee collection, correspondence, tax calculation, statutory payments and accounts writing.
- Staff attendance is monitored using the biometric system
- Student attendance is monitored using the MIS software
- Wi-Fi is available for staff and students at selected locations

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

- Under the supervision of the IQAC, a subcommittee decides on the need to upgrade and improve facilities related to IT infrastructure
- To ensure uninterrupted power supply generator/inverters are in place
- Printers, scanners etc. are made available as needed.
- Software is upgraded as and when there are changes in the syllabi.
- Licensed antivirus is installed in all the computers.
- Technical staff is hired to oversee proper installation and working of systems
- AMC are in place to keep servers and allied systems in optimal working condition and attend to problems, if any.
- Proper care is taken via registered NGO(Stree Mukti Sanghatana) that e-waste is appropriately disposed off without creating a health hazard

4.3.4 Provide details on the provision made in the annual budget for procurement, upgradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)

Provision in budget for Computers

Particulars	2011-12 (Rs)	2012-13 (Rs)	2013-14 (Rs)	2014-15 (Rs)	2015-16 (Rs)
Provision in annual budget for procurement, up gradation, deployment, repair and Maintenance	3,49,755	3,83,092	7,47,732	6,73,131	4,76,948

4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?

- ICT resources are made available for staff in their departments and in the Teacher Resource Centre.

- Data is shared using LAN and Google Drive.
 - ✓ Google drive is used to share information during seminar, conferences, workshops etc.
 - ✓ International Conference conducted by the Departments of Arts and Commerce, held in the year 2011-12 used web links to communicate with delegates and participants
- Laptops and LCDs are provided faculty wise
- Every class room is Smart Board enabled.
- Library provides e-resources and Inflibnet to staff and students.
- Students are encouraged to use online study materials (web links, educational videos)
- For research projects and to prepare presentations. Some Departments have on-line projects and assignments for students.
 - ✓ Department of Economics and Political Science assign on line projects to students
- For designing college magazine, departmental newsletters (Pathfinders, Dossier, The B&I Buzz)
- Collection and analysis of data for IQAC and NAAC work.

4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access-to-online-teaching – learning resources, independent learning, ICT enabled classrooms / learning spaces etc.) by the institution place the student at the centre of teaching – learning process and render the role of a facilitator for the teacher.

Faculty plays role as facilitators by using ICT tools to make class room environment student centric. Use of technology is made for the following purposes:

- PPT presentations
 - To improve knowledge and awareness on wide range of subjects
- Case studies
 - ✓ Representation of cases and subsequent group analysis is done in the subject of Marketing Research and Advertising
- Screening of educational videos and films
 - ✓ Screening of videos on manufacturing process, product design and factory layout (Six Sigma-Mumbai Dabbawalas) by Department of Management Studies
 - ✓ Short films, Documentaries are screened to clarify political concepts and also to teach the art of film criticism by Department of Political Science
 - ✓ Awareness on ecological issues is done using documentaries /short films by Department of Botany

- Revision sessions for lectures and practical
 - Presentations of model answers as a part of revision
- Conduct of training programmes for students
 - ✓ Preparation for competitive examination using on line mock test in Foundation Course
- e-notes and online assignments given to students by some departments
 - ✓ Department of Economics and Political Science assign on line projects and provide e-notes

4.3.7 Does the Institution avail of the National Knowledge Network Connectivity directly or through the affiliating university? If so, what are the services availed of?

At present the Institute does not avail the National Knowledge Network connectivity directly or through Mumbai University.

4.4 Maintenance of Campus Facilities

4.4.1 How does the institution ensure optimal allocation and Utilization of the available financial resources for maintenance and up keep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

The annual budget is prepared and presented before the LMC. With LMC approval budget is implemented. Provisions are made for any additional needs cropping up and unused funds of any other heads are channelized in an appropriate manner.

While preparing budget itself care is taken to make appropriate allocation of funds for all areas of campus facilities.

Budget Allocated During Last Five Years

		2011-12 (Rs)	2012-13 (Rs)	2013-14 (Rs)	2014-15 (Rs)	2015-16 (Rs)
a.	Building	25,21,769	11,14,537	6,69,760	13,45,135	25,36,772
b.	Furniture & Fixtures	1,50,000	7,28,318	2,12,867	2,47,826	1,87,428
c.	Equipments	1,64,801	3,02,316	3,15,866	4,40,546	2,19,631
d.	Computers	3,49,755	3,83,092	7,47,732	6,73,131	4,76,948
e.	AMCs	1,64,770	2,59,510	3,15,866	1,55,698	2,00,116

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipments of the college?

Under the supervision/guidance of the Head of the Institution, Committees (IQAC/AAC/CDC) play a major role in maintenance and upkeep of infrastructural facilities and equipment of the College. The quotations from suppliers and contractors are collected as per the required norms. After scrutiny of these quotations, equipments are purchased and maintenance and repair contracts are issued. The procedure is overseen by the Purchase Committee. At the department level, the respective heads take care of purchase and maintenance of equipments.

The institutional mechanism for the maintenance and upkeep of infrastructure, facilities and equipments are:

- AMCs are in place for computers and software(with resident engineer), high end equipment in departments, cleaning of overhead water tanks, water coolers, water purifier and air conditioners, firefighting equipment, rodent extermination, EPBAX system, cameras installed and the Public Address System.
- In-house skilled personnel (Electrician, Plumber, and Carpenter) are available.
- Library has adequate manpower to look after the functioning and maintenance of books and other materials
- Maintenance of garden is ensured by on campus gardener
- Thoughtful implementation of disposal of waste ensures a near zero waste campus of the College
- Solid waste management system is in place.
- Proper e-waste management is carried out
- Floor management to maintain cleanliness and orderliness of the floors is done by a team of staff members.

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment / instruments?

Basic laboratory instruments like oscilloscopes, colorimeters, pH meters, Potentiometers, spectrophotometers, conductometers are calibrated in-house before commencement of the academic year and practical examinations. Lab staff has been trained for calibrations. For calibrations of major equipments, professionals are called.

4.4.4 What are the major steps taken for location, up keep and Maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

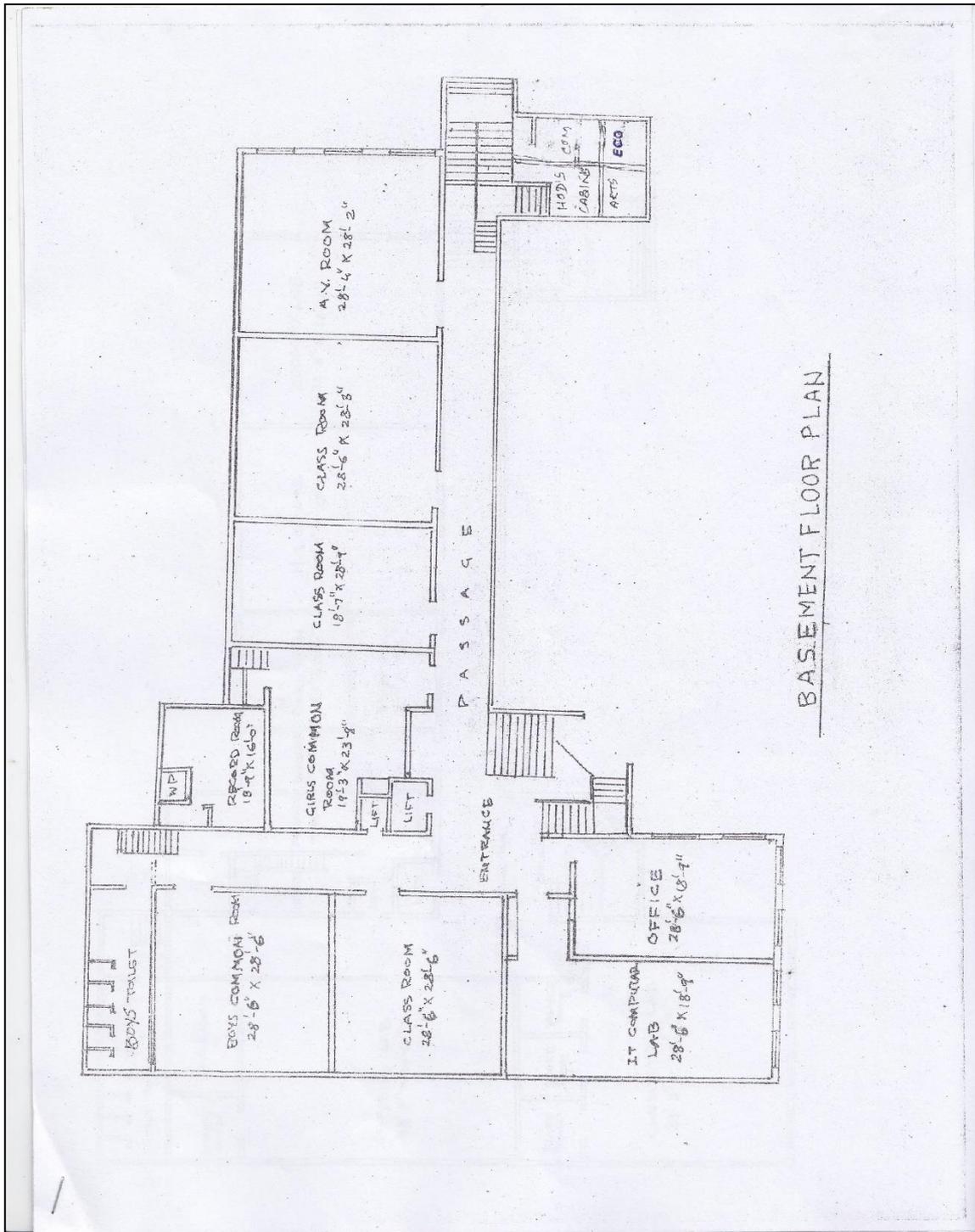
- Maintenance contracts and monitoring by trained staff ensures the maintenance of sensitive equipment and computers
- Voltage stabilizers are installed to prevent damage to equipments.
- Generator with auto switcher facility in case of power failure

Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.

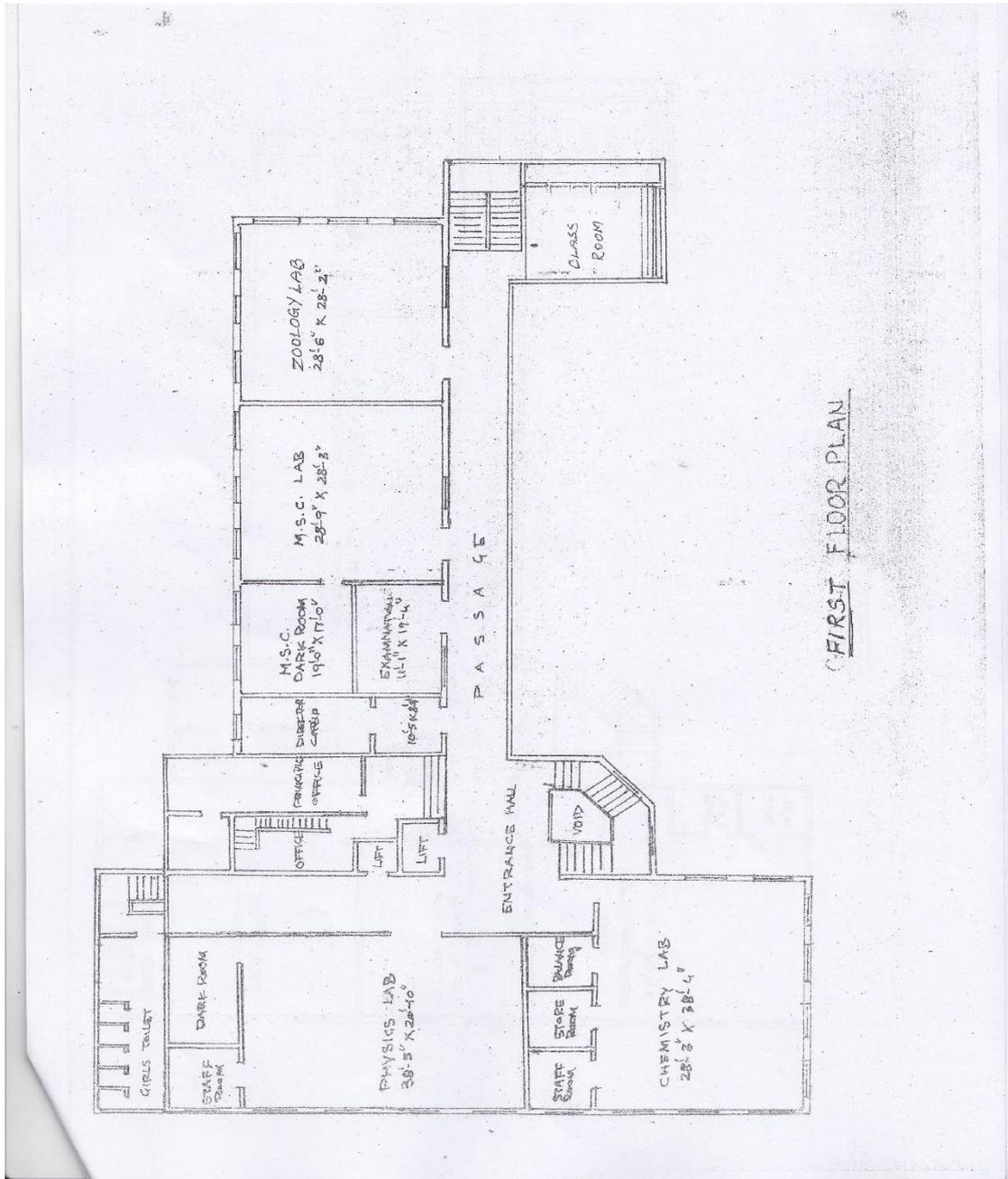
- Installation of LED light to save energy is in progress
- Solar panel work is in progress
- Fire fighting system is in place on all the floors.
- Medicinal plants in the garden.

ANNEXURE 1

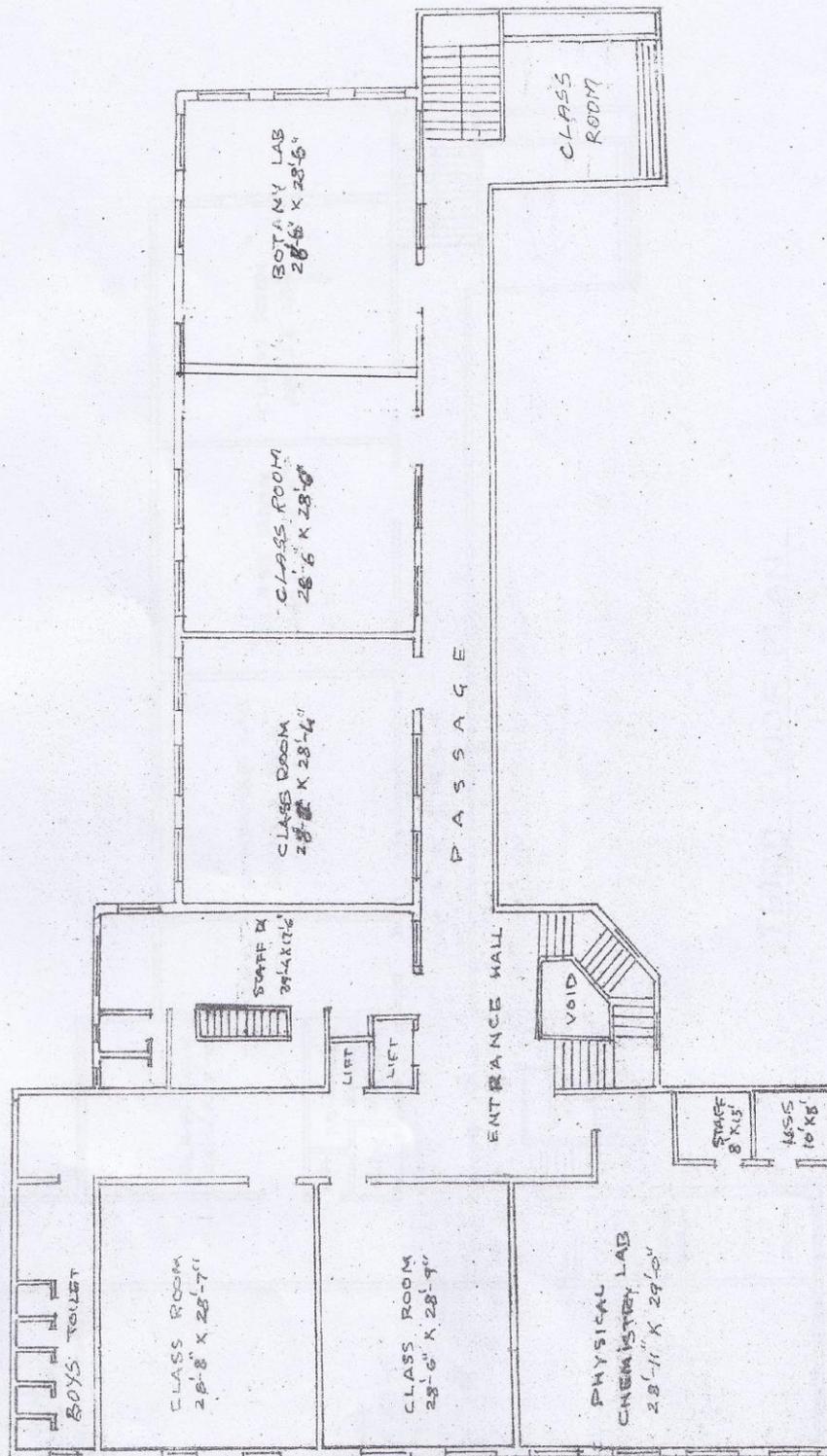
MASTER PLAN OF THE COLLEGE



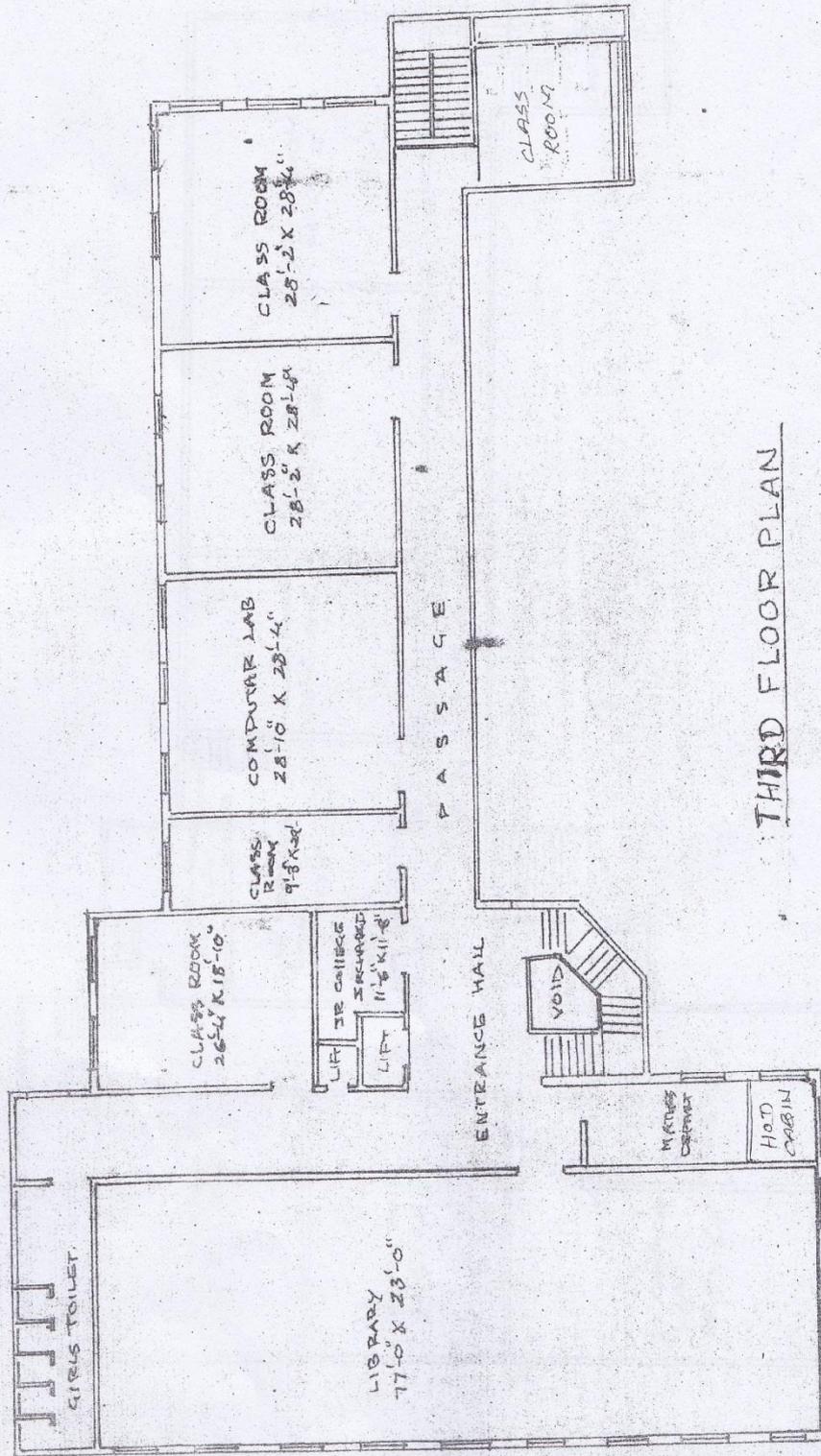
BASEMENT FLOOR PLAN



FIRST FLOOR PLAN



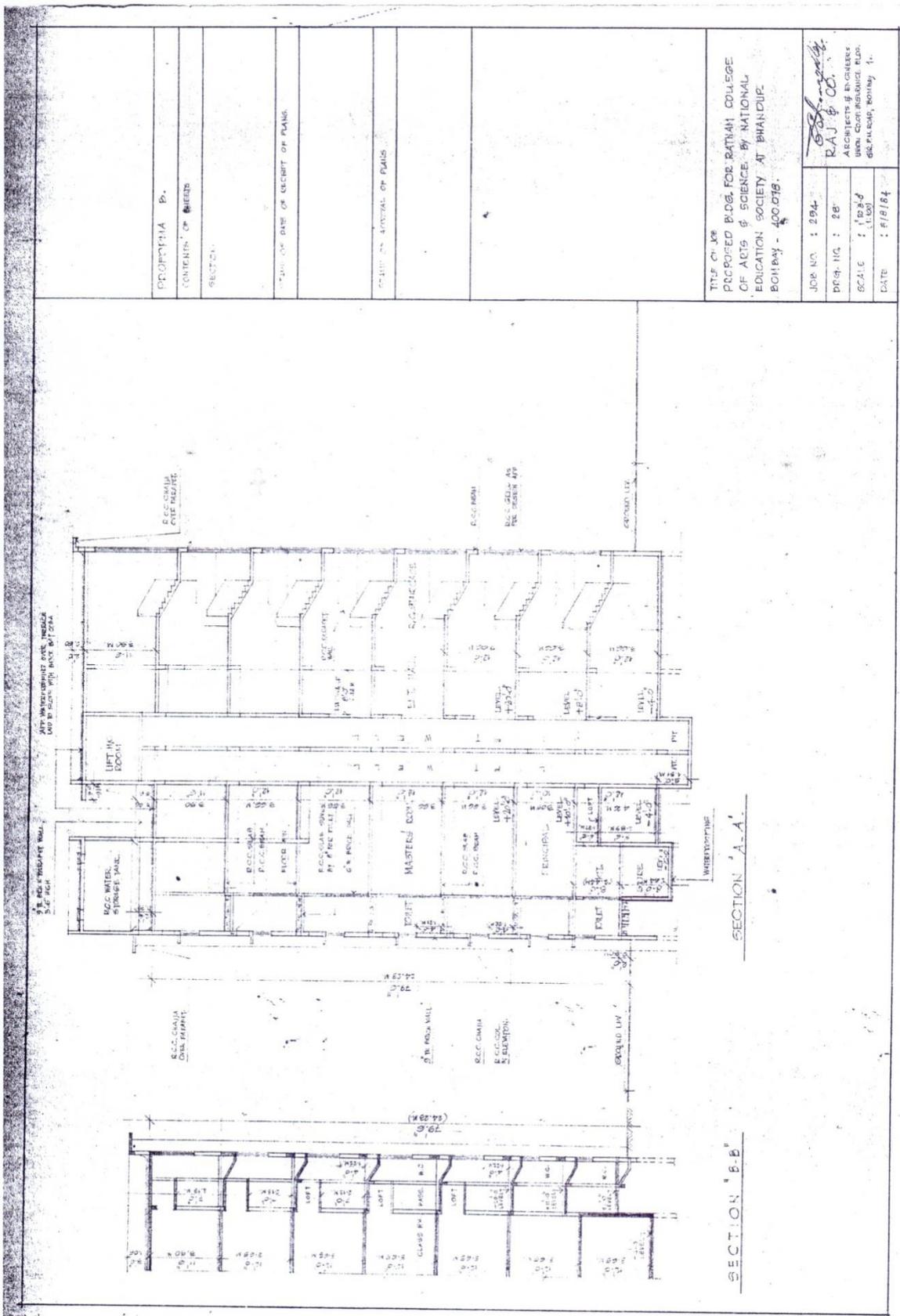
SECOND FLOOR PLAN



THIRD FLOOR PLAN

FLOORWISE PLAN

FUTURE EXPANSION PLAN



PROPTIA P.
CONTENTS OF SHEETS
SECTION
DATE OF DATE OF DEBIT OF PLANS
DATE OF APPROVAL OF PLANS

TITLE OF JOB
 PROPOSED BLDG. FOR RATNAI COLLEGE
 OF ARTS & SCIENCE BY NATIONAL
 EDUCATION SOCIETY AT BHANDUP
 BOM BAY - 400 078.

JOB NO. : 294
DRG. NO. : 2B
SCALE : 1/8" = 1'-0"
DATE : 1/1/64

Raj & Co.
RAJ & CO.
 ARCHITECTS & ENGINEERS
 208, CHANDRANATH ROAD,
 BOMBAY 1.

SECTION 'A-A'

SECTION 'B-B'

Criteria V – Student Support and Progression



Mantra- Cultural Fest



Manzil- Management Fest



Yoga Day Celebration



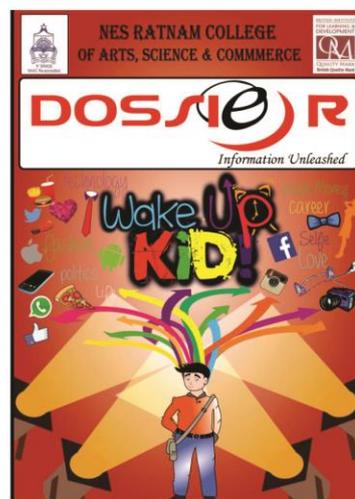
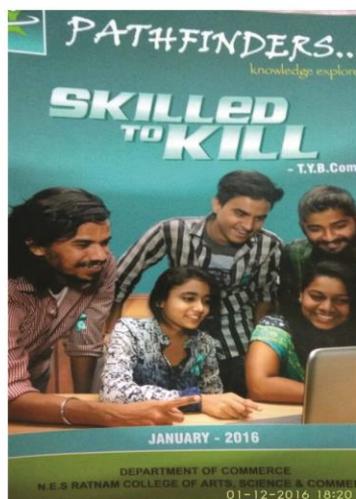
Volley Ball



Ratnam Band Troupe



Karate Display



Departmental Newsletters

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1 STUDENT MENTORING AND SUPPORT

5.5.1. Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?

Yes, the college publishes an informative prospectus for each academic year. The following information about the college are provided to the students through the prospectus:

- Vision , Mission & Motto of the college
- General Informations about the college
- Admission Guidelines and Courses/Programmes offered
- Fee Details
- Scheme of Evaluations
- Discipline and Code of Conduct
- Working Schedule of the College
- College Library
- Gymkhana
- Students' Council
- Extra - Curricular activities

The Institution has a well placed Quality Assurance System (Monitoring/ Plan Do Check Act process) which ensures commitment and accountability of all the informations given in the prospectus.

5.1.2 Specify the type, number and amount of institutional scholarships / free ships given to the students during the last five years and whether the financial aid was available and disbursed on time?

The Institution

- Provides financial assistance to meritorious and needy students out of its Students' Endowment Fund.

- ✓ An amount of Rs.1,28,855 was given to 30 students from Student Endowment Fund in the last five years.
- ✓ An amount of Rs.30,800 was given to 12 students by Alumni and well wishers.

5.1.3 What percentage of students receive financial assistance from state government, central government and other national agencies?

Financial assistance is provided by

- State government to students of reserved category through GOI Scholarship/Freeship.
- Central Government to meritorious students through Central Sector Scholarship

The details of the same are listed below:

Financial assistance provided to students in the last five years:

GOI Scholarship

Year	No: of Students Applied	No: of students received	Percentage (%)
2011-2012	42	32	76.19
2012-2013	52	23	44.23
2013-2014	49	32	65.30
2014-2015	47	39	82.97
2015-2016	56	45	80.35

Central Sector Scholarship

Year	No: of Students Applied	No. of students received	Percentage (%)
2012-13	51	41	80.39
2013-14	51	35	68.62
2014-15	77	66	85.71
2015-16	24	12	50

5.1.4 What are the specific support services/facilities available for students from

- **SC/ST, OBC and economically weaker sections...**
- **Students with physical disabilities**
- **Overseas students**
- **Students to participate in various competitions/National and International competitions**
- **Medical assistance to students: health centre, health insurance etc.**
- **Organizing coaching classes for competitive exams.**
- **Skill Development (spoken English, computer literacy, etc.,).**
- **Support for “slow learners”**

The College was established with the mission of imparting quality education primarily to not so privileged sections of the society. The College is now committed to inclusive education with emphasis on holistic development of the students by providing quality education and preparing them to contribute to social development. With this Mission in mind the College provides the following facilities/services to students.

- **Students from SC/ST, OBC and economically weaker sections...**
 - Admissions are given as per government’s reservation policy.
 - The State Government provides scholarships / free ships for SC/ST/OBC/VJNT/DT/NT/SBC. (Ref. data in 5.1.2 and 5.1.3)
 - To help/guide them to avail these facilities college has made 2 staff members work as liaison officers.
 - The economically weaker students are allowed to pay fees in easy installments and provided with Books through Book Bank Scheme and financial assistance through Students’ Endowment fund.
- **Students with physical disabilities**
 - Separate quota for admissions
 - Availability of ramp facility and provision of railing alongside staircases for support.
 - Provision of Wheelchair

- Special washroom facility
- Writer for exams, if needed
- Extra time during exams
- Enlarged print question papers for visually impaired
- First row seating arrangement inside Class Room
- Special support services in Library
- **Overseas students**
- College generally does not get overseas students.

- **Students to participate in various competitions / National and International competitions**

The College has special committees to take care of co-curricular activities such as NSS and LLE and extra-curricular activities such as Cultural Committee, Gymkhana Committee etc

- Students are encouraged to participate in various competitions organized by colleges/University. Mentor Teachers identify the talents of students and motivate them to participate in various competitions.
- The College provides all possible financial and infrastructural support to the participating students such as coaching by experts, conveyance for participation, place for practice etc.,
- The College also has a playground. Students interested in sports are trained through qualified coaches especially for Athletics, Cricket, Volley Ball, Tug-of-war, Karate and Kabaddi.

- **Medical assistance to students: health centre, health insurance etc.**

- The College has an MOU with Central Hospital, Bhandup to cater to the emergency health issues of students with a physician available on all working days.
- On-call Doctor facility is also available.
- Health check up, Thalesaemia (Minor) Detection, Anemia detection camps are also organized.
- The College has a Counsellor to attend to psychological needs of students.
- First-Aid Boxes are made available on each floor/at all strategic locations.
- Financial assistance is provided to the needy students on medical grounds.

- **Organizing coaching classes for competitive exams.**
 - Teachers mentor the students in preparing for various competitive Exams/Postgraduate Entrance test, etc. such as IIT JAM, MCA, MBA.
 - The library is well equipped with books pertaining to competitive exams.
 - The Institution conducts workshops by professionals for competitive exams like UPSC and MPSC examinations from the year 2012-13 .
- **Skill Development(spokenEnglish,computer literacy,etc.,).**
 - Following Certificate courses are conducted by various Departments :
 - Conversational English (Department of English)
 - Tourism & Travel Management (Department of History)
 - Stock Market Operations Management (Department of Accountancy)
 - Nutrition & Dietetics (Department of Botany & Zoology)
 - Instrumental Analytical Techniques (Department of Chemistry)
 - Micro Processors and Microcontrollers (Department of Physics)
 - Retail Management (Department of Commerce)
 - Placement Cell of the college organizes training sessions on job related skill development with the help of corporate trainers and also arranges pre placement workshop cum seminars
- **Research skills** are developed by training students to participate in AVISHKAR –Research Convention of Mumbai University
- Lifelong Learning & Extension unit exposes students to various **entrepreneurial skills through their AnnapoornaYojana Project.** E-cell of the College also promotes entrepreneurial skills among students.Further students are encouraged to put up stalls at various festivals to develop their entrepreneurial skills.
- **Creative Writing skills** are honed through involving students in the Editorial team of Magazines/Newsletters.
- Performing Art & Fine Art skills like singing, dancing, instrumental music, mono-acting, etc developed through the numerous programmes organized by the Cultural Forum
- **Leadership skills** are developed through participation in 7 day residential camp and LTP camp by NSS unit of the college. Students are also encouraged to exhibit their leadership skills by assigning them responsibilities in the

various intercollegiate festivals organized by the college.

On an average nearly 30% of the students are involved in organization of various activities conducted by the College.

Personality Development of students is done by organizing training programmes, by involving students into various enrichment activities.

- **Support for “slow learners”**

- Teacher Mentors identify the slow learners and with the support of other subject teachers conduct extra sessions to ensure better understanding & results.
- The Institution has an adoption system where slow learners are adopted by individual staff and guided on a continuous basis for better academic performance.
- Advanced learners help the slow learners - Student teaching student
- Remedial coaching sessions are conducted on a weekly basis.

- **5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.**

- An Entrepreneurial Cell (E-Cell) has been constituted in the college.
- **To support the Prime Minister’s Start-Up India Movement launched in January 2016, the E-Cell took the initiative to organize the NES National Students’ Startup Fest in Feb 2016 in association with its parent body, National Education Society with the objective of promoting Entrepreneurial skills amongst students through idea labs, mentor rooms, exhibitions, workshops and B2B meets. Many students from Mumbai and other States participated and put up stalls. Experts were also invited to share their experience, give ideas. guide students regarding the various government schemes available, financial planning, development of business plan, etc**
- Under the banner of Talentueux (Intercollegiate Festival organized by Arts Faculty) entrepreneurial skills are developed by encouraging students to put up stalls. Prizes are given on the basis of marketing skills, profits and sales exhibited by the teams to promote competitive spirit in ensuring quality.
- Intercollegiate Festivals are organized under the banner of Manzil (Department of Management Studies) and Zero Gravity (Department of Commerce) where various business games are conducted.

- LifeLong Learning & Extension Unit of the college undertakes projects to mould the entrepreneurial skills.
- Skill development workshops on baking, jewellery making, greeting cards etc. are also organized.

As a result nearly 12 students have started their own business and around 50 students are planning to have a Start-Up of their own in future.

Class	Name	Business
SY B A	Sayed Mariyam	Cakery
SY B A	Abhijit Salve	Events
SY BA	Pradnya Dnyaneshwar	Saree shop
TYBA	SeemaWankhede	Garments
TY BCom	Pranay &Vikas	Musical instruments.
TY BCom	Shikha Jain	Jewellery designing
SY B Com	Jainy Satra	Beauty Parlour
SY B Com	Pooja Shankar	Mehendi Art
SY B Com	Dhruvin Jain	Musical instruments.
SY B Com	Shamshuddin Khan	Garments
T.Y.B.Sc	Tejas Niranjana & Nanda Kumar	Medical shop
T.Y.B.Sc	KunalDubole	Landscape Designer

5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.

Additional academic support, flexibility in examinations special dietary requirements, sports uniform and materials, any other support

- There is a policy to conduct additional examinations for students missing their regular examinations due to participation in University/State level Competitions/Camps.
- The Teachers in-charge of Sports and Cultural activities go from class to class with volunteers to encourage students to participate in various events.
- Winners of various competitions are felicitated during Class Day Celebrations/Annual Prize Distribution Function.

- Teachers also train students participating in various inter-collegiate competitions.
- The College provides support by appointing coaches for sports and choreographers for cultural events to give professional training.
- Sports Uniforms are provided to students when they participate in intercollegiate tournaments.

5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR-NET, UGC-NET, SLET, GATE/CAT/GRE/TOFEL/GMAT/Central/State services, Defense, Civil Services, etc.

- The faculty of the college guides the students for appearing in various competitive exams by providing them with necessary information such as the name of the website, last date for application etc., and also related reference material.
- The library has a good collection of study materials required to prepare for these examinations.
- Students are also facilitated with expert guidance through workshops, career guidance exhibitions.
- ✓ In the last five years Nearly 30% of the students appeared for various competitive examinations such as CET,CAT etc.,
- ✓ About 36 students have taken transcripts from the college to pursue their higher studies abroad by qualifying in IELTS, GRE, TOEFL Examinations which has shown an increase of nearly 50%.
- ✓ As per the data available during last 5 years, 2 students from Arts and 2 from Commerce have qualified in the UGC-NET and one student from Commerce has qualified in the SLET Examinations. One student from Physics Department and 3 from Chemistry Department qualified the PET Examination for pursuing Doctoral Studies from University of Mumbai.
- ✓ 2 students qualified in the CMAT Examination and 09 students qualified in the MHCET Examination for pursuing their MBA. One student qualified in the CS Examination.

- ✓ On an average nearly 25 students participated in NGPE (National Graduate Physics Examination) and around 18% of students were in the top 10% .
- ✓ About 3 students from Mathematics Department qualified in the JAM Entrance Exam for pursuing their post graduation in IIT.

5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)

- The College has a Professional Counsellor.
- The Counsellor talks to the students on topics like Stress Management, Anger Management, Goal setting, Career planning etc., and also counsels the students on a one to one basis.
- On an average 50 students are counselled per month.
- The Discipline Committee of the College also directs the students to the Counsellor for personal counselling.
- Teacher mentor identify students with need for counselling and guide them on a personal basis.

5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If ‘yes’, detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).

- The Placement Cell and the Students’ Council of the college ensure that students participate in various career guidance workshops, pre placement preparation workshops, etc. and students are also informed about various career options through ongoing Career Fair.
- Members of the Placement Cell render guidance and support to the students both formally and informally.
- As a part of three tier training, in-house faculty conduct training sessions for the final year students on Writing CV, Communication Skills etc.,

- Every year companies such as TCS, WIPRO, INFOSYS, ICICI PRUDENTIAL visit the college for campus recruitments and on an average 40 students are placed through campus recruitment.

5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) of the grievances reported and redressed during the last four years.

- The Institution has a Grievance Redressal mechanism for students to address their grievances.
- The students also drop their grievances in the suggestion box which is attended to on a regular basis.
- Students are also allowed to share their grievances with the HODs, Mentor teachers and the Principal.

Grievances addressed in the last five years:

- Internet facility has been provided in the library.
- 24 hour back up of electricity facility made available in the labs.
- Extended canopy space for students to sit after their lectures if they want to spend some time in the college.
- Reading Space has been provided in the college up to 8.00 pm after library closes at 6.30 pm.

5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

- Constitution of Women Development Cell as per the circular issued by the University of Mumbai WDC/Gen Corp/35 of 2005 dated 11 August, 2005.
- Constitution of Internal Complaints Committee for offenses against women in the premises represented by Teaching Staff and Non Teaching Staff.
- Teacher mentors also resolve issues related to such matters if any.

5.1.12 Is there an anti ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

Yes, there is an anti-ragging committee. However, no instance has been reported till date.

5.1.13 Enumerate the welfare schemes made available to students by the institution.

The Institution has the following welfare schemes for financial, medical and academic assistance:

- Counseling support by the Campus Counselor.
- Financial and Medical Assistance to needy students through Students' Endowment Fund.
- MOU with Central Hospital.
- The campus has a medical Centre with a physician available on all working days.
- On-call Doctor facility is also available for attending to any medical emergency .
- Sanitary Napkin Vending Machine for girl students.
- On the job training provision under LLE.
- Organizing Campus Interviews through Placement Cell.
- Thalassaemia (Minor) and Anemia Detection for students and guide students for necessary follow up.
- Blood Group Check up during the Blood Donation camps organized by the NSS Unit of the college.
- Book Bank Scheme.
- Career Guidance through Career Fair and talk by professionals/experts.
- Training Programmes for Personality Development.
- Gymnasium facility with an Instructor .
- Free coaching for Sports and Yoga by Coaches hired by the College & on Campus Physical Instructors..

5.1.14 Does the institution have a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infra structure development?

The Institution has an Alumni Association. The Association is not registered. The Association contributes for college development in the following manner:

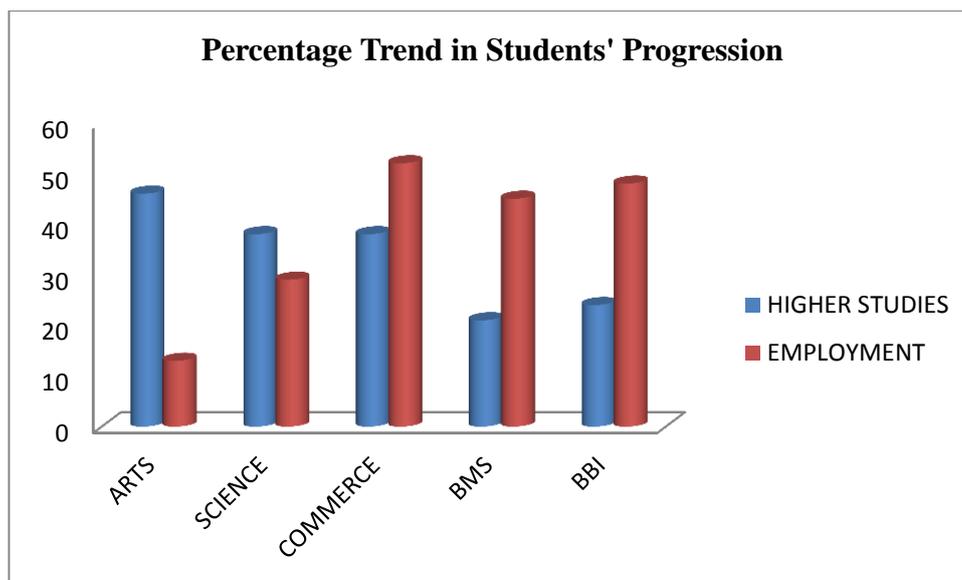
- Alumni participate in the department/college activities as guest speakers, judges and mentors. They are invited to share valuable knowledge based on their expertise with the current students.

- Assistance is rendered by Alumni in conducting programmes such as Star gazing, Annual Musical nite for current students and alumni so as to strengthen the bond between them.
- The ex-members of MUSE, the movie Club of Commerce faculty are actively involved in socially relevant projects in which the current members also participate.
- Help is also rendered in getting sponsorship to finance some major events organized by the college like Conferences, Workshops, etc
- Organize Health Check up camps.
- Sponsor fees for needy students and as well as prizes

5.2 Student Progression

5.2.1 Providing the percentage of students progressing to higher education or employment for the (last four batches) highlight the trends observed

Progressing to higher education(%)		Employment(%)
FACULTY	UG TO PG	
ARTS	46	13
SCIENCE	38	29
COMMERCE	38	52
BMS	21	45
BBI	24	48



The trend observed in Students' Progression is that in Arts Faculty, the percentage of students Pursuing Higher Studies is more compared to other Faculties and more students of Commerce Faculty take up a job after their Graduation.

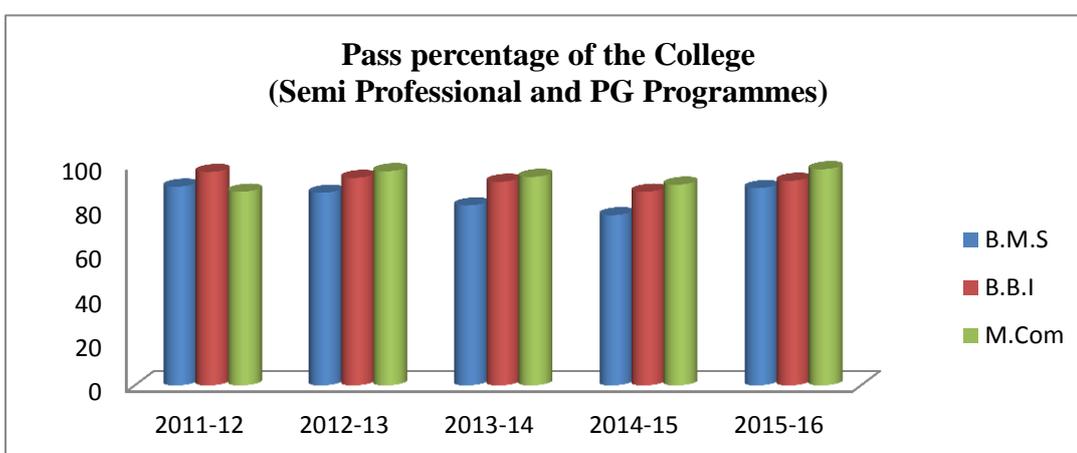
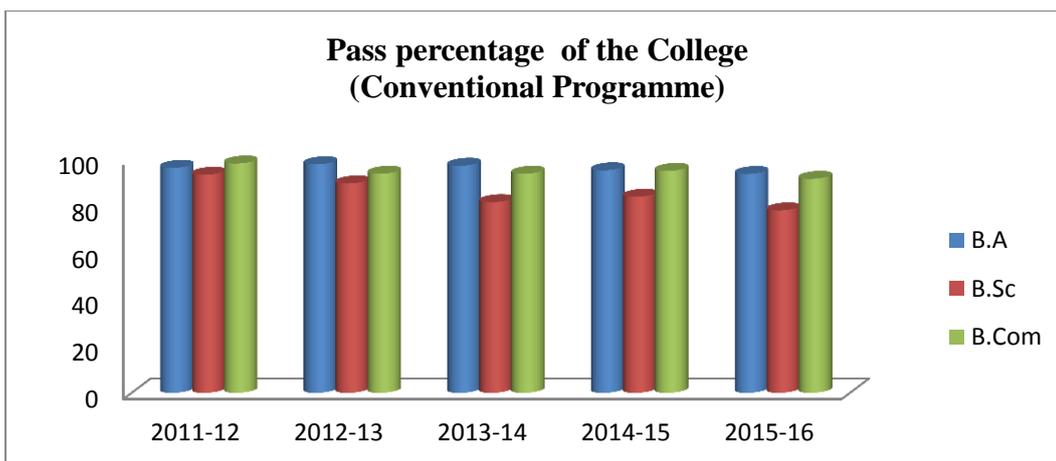
5.2.2 Provide details of the programmewise pass percentage and completion rate for the last four years (cohortwise/ batchwise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city / district.

The following tables give information about the pass percentage of students in different faculties in the college during last five years and in comparison with neighboring colleges within the city/district and affiliating University.

Pass Percentage of the College for the last five years:

Course	2011-12	2012-13	2013-14	2014-15	2015-16
B.A	96.36	97.91	97.29	95.31	93.75
B.Sc	93.42	89.71	81.69	84	78.15
B.Com	98.23	97.5	93.85	95.07	91.67
B.M.S	89.8	87.03	81.3	76.9	89.13
B.B.I	96.42	93.75	92	87.5	92.45
M.Com	87.5	96.77	94.2	90.69	97.67

The completion rate of the College is almost similar to the pass percentage.



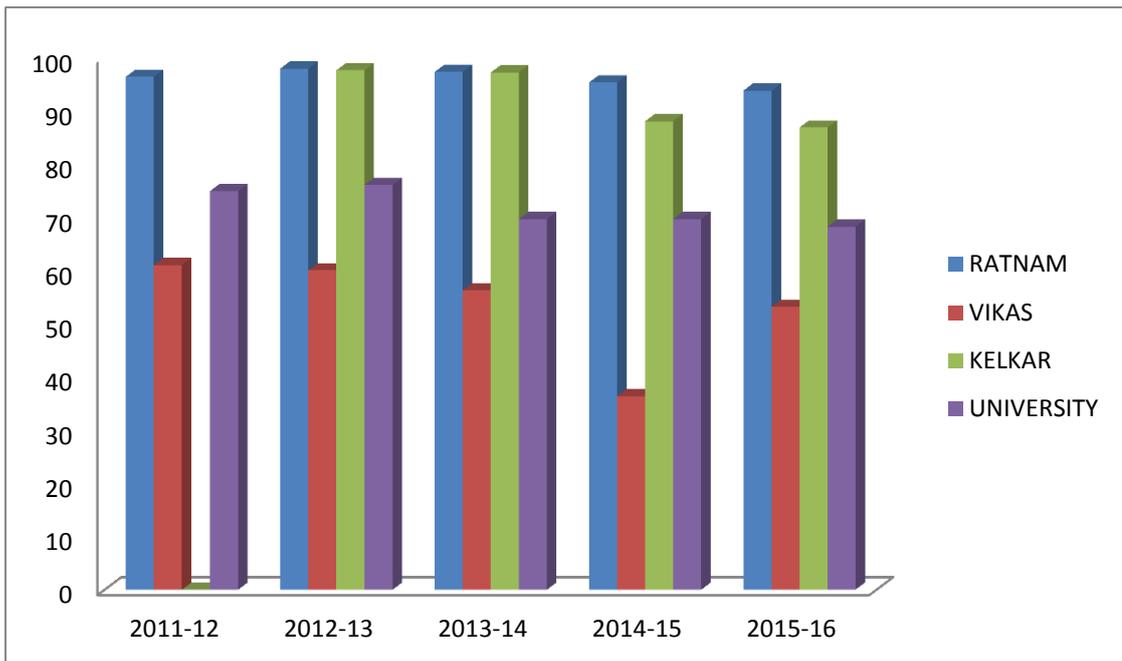
Facultywise comparison of the results of the college with the neighbouring colleges within the city/district and consolidated results of the University.

Comparative Results of ARTS FACULTY

YEAR	RATNAM	VIKAS	KELKAR *	UNIVERSITY
2011-12	96.36	61.01	-	74.90
2012-13	97.91	60	97.6	76.05
2013-14	97.29	56.25	97.2	69.64
2014-15	95.31	36.36	88.02	69.64
2015-16	93.75	53.13	86.82	68.20

* 'A' Grade Institution

- Data not available

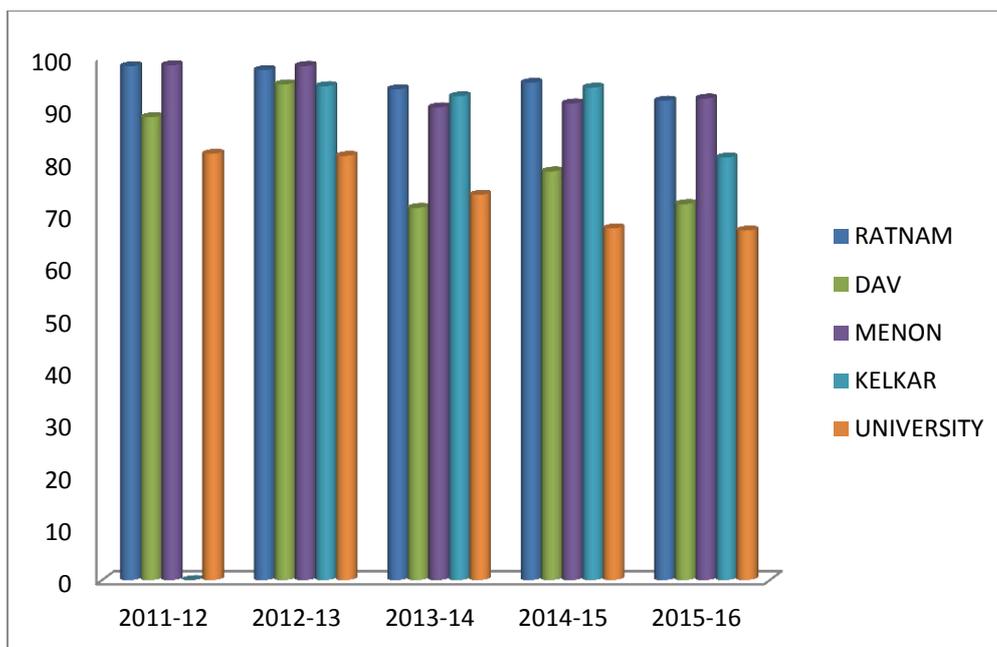


Comparative Results of COMMERCE FACULTY

YEAR	RATNAM	DAV*	MENON	KELKAR *	UNIVERSITY
2011-12	98.23	88.51	98.42	-	81.53
2012-13	97.5	94.78	98.29	94.43	81.13
2013-14	93.85	71.21	90.39	92.5	73.71
2014-15	95.07	78.17	91.14	94.14	67.30
2015-16	91.67	71.94	92.08	80.82	66.90

* 'A' Grade Institution

- Data not available

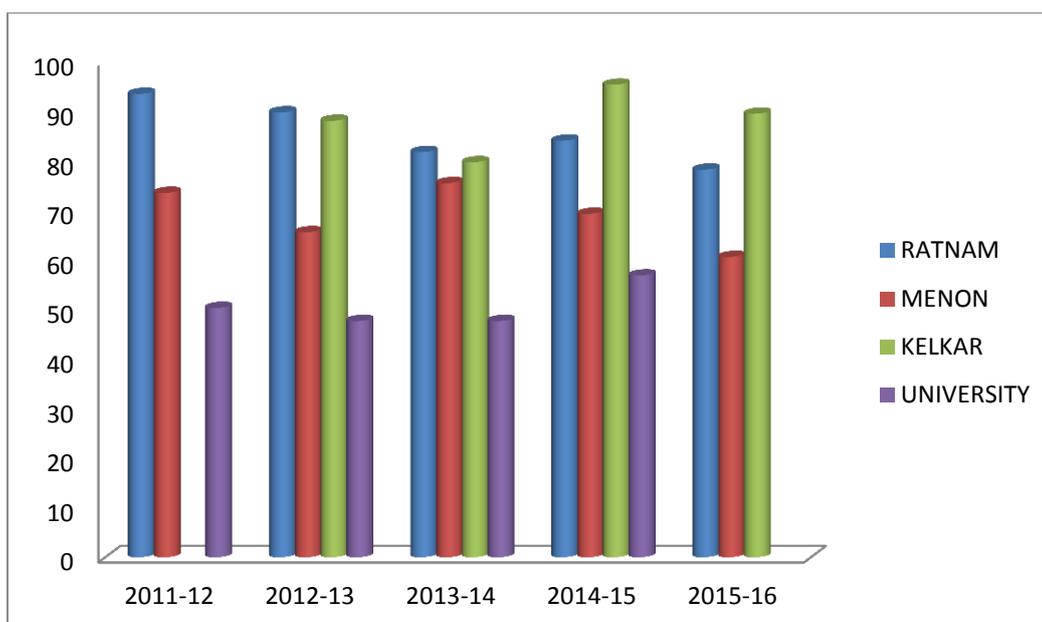


Comparative Results of SCIENCE FACULTY

YEAR	RATNAM	MENON	KELKAR*	UNIVERSITY
2011-12	93.42	73.46	-	50.25
2012-13	89.71	65.52	88	47.61
2013-14	81.69	75.42	79.64	47.61
2014-15	84	69.23	95.28	56.79
2015-16	78.15	60.53	89.43	45.7

* 'A' Grade Institution

- Data not available



5.2.3 How does the institution facilitate student progression to higher level of education and /or towards employment?

The Institution facilitates student progression to higher level of education through the following ways:

- Counseling students to go for higher studies.
- Encouraging and guiding students to undertake research based projects.
- By coaching for various entrance examinations.
- Guiding for higher education abroad and scholarship programmes.
- Organizing exposure visits and interactions with nationally acclaimed centres of higher learning. (IIT,TIFR,TISS, etc.,)
- Mentor teachers not only counsel students but also those parents who do not support higher education and employment for their wards especially girls.
- Starting new PG/Ph.D programmes.

Other initiatives towards employment:

- **Concurrent Fieldwork and Community Engagement:** Application of theory is achieved through concurrent field work and community services in the neighbourhood communities which enable greater networking, hands-on training and enhance placement prospects.
- **Industry/Alumni Interaction Initiative:** Interactive sessions are arranged by the Placement Cell by inviting HR Recruitment Incharges from corporates

to help the students to sense the pulse of the job market on a regular basis. Alumni also interact at times for the similar purpose.

- **Career Guidance Workshop and Placement Training** that cover Aptitude Testing, Group Discussions, Mock Interviews, Career Counselling and CV Preparation
- **Placement Cell:** Organisations such as Aptech, TCS, Wipro, Godrej are invited for Campus Recruitments. The students also get to interact with the placement officer to know about various openings and choose the right career.
- **Library Resource Centre & Career-Employment Information Services** through notices displayed on Notice Board in the Library and Career related notifications in the Placement Cell Notice Board

5.2.4 Enumerate the special support provided to students who are at risk of failure and dropout?

The College has relatively low dropouts or failures. There are rare occasions when the students discontinue on account of taking up employment. The special support provided to the students who are at risk of failure and dropout are the following:

- The close & systematic follow up and mentoring by teachers in each department.
- The Open Days to discuss performance of the students with their parents and parental workshops also help us to reduce the risk of dropouts.
 - The students who need special guidance are provided with remedial coaching / tutorials by the respective faculty.
- The students with considerable learning related problems are provided special attention by involving their parents also into the problem solving mechanism
- The Counsellor provides psycho-social support to the students who are referred by the mentors.
- Mentor teachers counsel students and parents to ensure that especially girls complete their education as there are chances of early marriage
- Academically weaker students are assisted through guided library work and assignments.

5.3 Student Participation and Activities

5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.

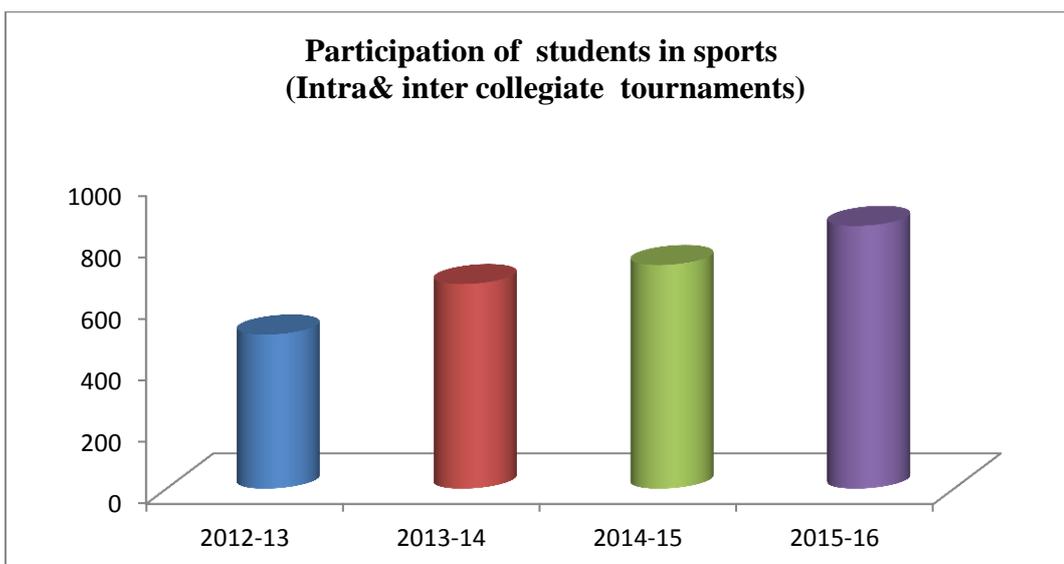
The College prepares an Annual Plan mentioning all relevant details related to academic schedule and schedule for major extra curricular activities.

The list of programmes included in the Annual Plan are:

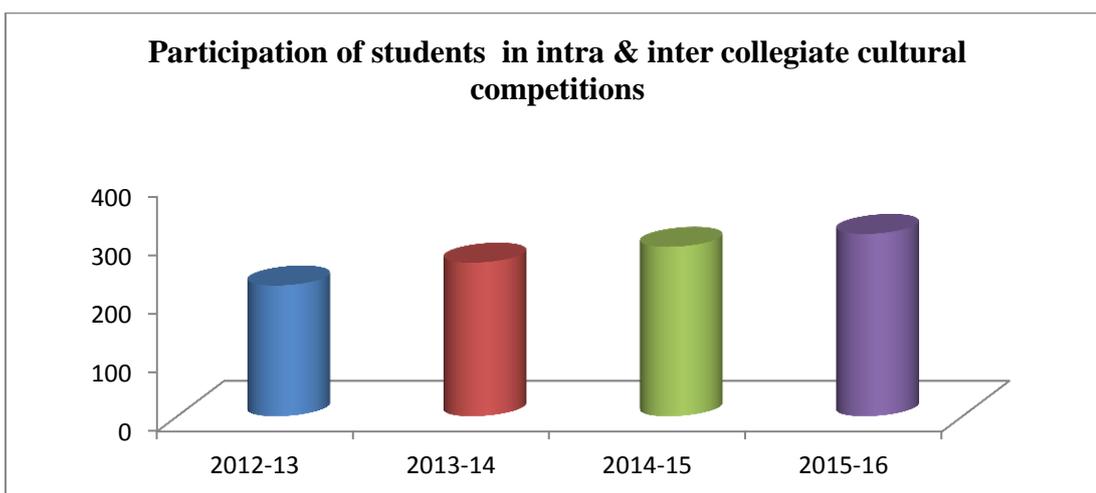
- Arts Festival (TALENTUEUX)
- Science Festival (SCI-TREK)
- Commerce Festival (ZERO GRAVITY)
- B.M.S & B.Com (B&I) Festival -MANZIL
- Cultural Programmes (Talent Search week, Talent Parade, Intercollegiate fest Mantra)
- Sports & Games Tournaments (Inter class indoor and outdoor competitions such as Chess, Carom, Table Tennis, Cricket, Tug of war, Volley ball etc.
- Celebrations of Special Days
- Celebrations of festivals
- NSS Residential camp

The most salient feature of our competitions and extracurricular activities is that these are organized by involving the students representatives. The competitions are planned well in advance. Winners are encouraged to attend the inter-collegiate and University level Competitions and required guidance and support are provided.

Details of participation in Sports in the last four years



Details of participation in Cultural activities in the last four years:



5.3.2 Furnish the details of major student achievements in co-curricular, extra curricular and cultural activities at different levels: University/ State/ Zonal/ National/ International, etc. for the previous four years.

Year: 2012-13

- Mr. Roneesh Paulose stood first in the Zonal level Clay Modeling competition in the cultural festival of Mumbai University.
- Mr. Roneesh Paulose got consolation prize in the Final level Clay Modelling competition in the cultural festival of Mumbai University
- The LLE Unit of our college received the second and third prize in the Intercollegiate Poster making competition in the Annual Festival organized

by DLLE, University of Mumbai..

Year:2013-14

- Mr.Kishore More got consolation prize in the Zonal level Mono Acting competition in the cultural festival of Mumbai University.
- The LLE Unit of our college received the first and third prize in the Intercollegiate Poster making competition in the in the Annual Festival organized by DLLE, University of Mumbai.

Year:2014-15

- Mr. George D'Souza & group won the IIIrd prize in Western Group singing, Mr. George D'Souza won the IIIrd prize in Western Solo singing , Ms. Shobana Iyer won the consolation prize in Indian Light Solo singing& Ms. Shobhana & Group won the consolation prize in the Indian Group singing competitions in the Zonal level cultural festival of Mumbai University.
- Mr.Mahmood A. Khan qualified for the Zonal level at the Intercollegiate Chess tournament organized by University of Mumbai.
- The LLE Unit of our college received the first prize in the Intercollegiate Poster making competition and first prize in the Street Play in the Annual Festival organized by DLLE, University of Mumbai.

Year:2015-16

- Ms.Bhagyalaxmi Chundavat won the first prize in the Final level Hindi Story Writing Competition in the cultural festival of Mumbai University.
- Mr.Patel Sharif Inayat won the fifth position out of 8 positions given in the Intercollegiate “Best Physique” competition organized by University of Mumbai.
- The LLE Unit of our college received the first prize in the Intercollegiate Street Play competition in the Annual Festival organized by DLLE, University of Mumbai.

5.3.3 How does the college seek and use data and feedback from its Graduates and employers, to improve the performance and quality of the institutional provisions?

The college has always been accessible to and encouraged feedback from students,parents, alumni, prospective employers and other stakeholders.

- A feedback questionnaire with questions pertaining to teaching quality, academic environment, facilities and infrastructure has been devised to be filled by students under strict anonymity to enable free and frank expression.
- Feedback so obtained is analyzed by the Internal Quality Assurance Cell of the college and appropriate recommendations are made to the Principal.
- Informal Feedback is also taken from employers during and after the on-campus placement. Companies like TCS, Godrej visiting every year for recruitment reveals that they are happy with the performance of our students at work place.

5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications/ materials brought out by the students during the previous four academic sessions.

The College involves and encourages students to publish material through:

Participation in cover page and layout designing of the college magazine/news letters of Departments

Writing Articles/poems and interview for those publications..

Design of web page, brochures and posters for the college activities.

Contributions to wall magazines/display boards of forums, clubs and departments.

The major publications brought out by students are:

The college magazine RATNAMITE and the news letters of departments :

- B.M.S Department: ‘Dossier’
- Commerce Department: ‘Pathfinder’
- B.Com. (B & I.): ‘B&I Buzz’
- Chemistry Department: ‘IGNITE’
- Marathi: ‘SPANDAN’

5.3.5 Does the college have a Students’ Council or any similar body? Give details on its selection, constitution, activities and funding.

Yes, the college does have a Students’ Council.

The Council is constituted as per the University of Mumbai ‘s guidelines

Major activities organized by the Council are:

Organising career fair, career related seminars, celebration of festivals and national days, visits to orphanages, old age home, farewell party to the final year students, monthly drives, recommendation for financial assistance to needy and deserving from the Students' Endowment Fund. Funding for the above activities is done by college, staff and students.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

Academic and administrative bodies other than Students' Council which have student representatives are WDC, the various Clubs and Forums of the departments

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution. Any other relevant information regarding Student Support and Progression which the college would like to include.

Former Faculty of the Institution are invited for the programmes and the Annual Alumni meet organized by the College.

The Institution does network and collaborate with the Alumni in the following manner:

Ratnam Website, Social Media, Word of Mouth, Through Current Students who are siblings/relatives of the Alumni.

Criteria VI – Governance, Leadership and Management



World Peace Congress organised by NES



Honouring Principal RinaSaha on Teacher's Day



Presentation of H. H. Jagadguru Shri Jayendra Saraswati National Award and National Eminence Award by Management of National Education Society



Health Checkup



Honouring Teacher for her special contribution on Foundation Day



Service to Community

Criterion VI Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

Vision: To become an autonomous institution which will be a trend setter in the field of higher education having strong national and international linkages.

Mission

The College aims at inclusive education with emphasis on holistic development of the students by providing quality education and prepares them to contribute to social development.

Motto: Learn, Live & Lead

Both the vision and mission of the institution are in tune with the objectives of the Higher Education policies of the Nation. The Institution has branched out to become a place wherein education imparted is all encompassing, covering basic as well as specialized knowledge. It has the status of linguistic minority. The Institution admits students from the disadvantaged sections as well as students on merit from the Open Category there by addressing inclusive education issues with a larger proportion of girl students.

Through its academic policy, extension activities and extra and co-curricular activities, it helps the students in acquiring knowledge, inculcating values, imbibing good citizenship, culture, developing life skills as well as training them for successful careers. It tries to sensitise the youth to the needs of the marginalized sections of society and constantly strives for community development. With the mission of inclusive education it tries to reach out and help socially and economically backward and differently-abled students, by adopting various measures in its operations.

Institution's Distinctive Characteristics

Established in the year 1983 in a relatively under developed suburb of Mumbai, the college has ensured a steady increase in the enrolment of students. It has carved a niche in the University of Mumbai for its exemplary academic results and emphasis on discipline. The College is a trendsetter of sorts by being the first institution to acquire many quality certifications (ISO 9001-2000, IMC Ramkrishna Bajaj National Quality Award, British Quality Mark and the Arogya World Healthy Workplace Award). The teaching faculty

and non-teaching staff are a dedicated group of people striving to provide quality education even to the underprivileged sections of the society. The College received the Best College Award from University of Mumbai (in urban area) in the year 2013-14

The Management of the institution is headed by Dr. R. Varadarajan who began his career as a teacher and has built up the education group which now houses institutions that impart education from KG to PG and Ph.D. levels.

Addressing Needs of Society

- By taking measures towards inclusive education
- By providing disciplined and conscientious citizens to the society.
- By bringing about social changes through its institutional processes and ISR which has brought about considerable changes in the socio-economic conditions of the family to which our students belong and also progressive changes in the neighbourhood community like business development and enhancing employment opportunities.
- By imparting quality education to the students making them competent to contribute towards nation building.
- By attracting more girl students even from conservative families because of its high standards of discipline, college is contributing towards women empowerment.
- Management has also undertaken various initiatives towards the community like setting up a school for the underprivileged children of the slums in Dharavi, a school for the hearing impaired and, as a private public collaboration, is managing a school of Municipal Corporation of Greater Mumbai in Parel. Further, for the empowerment of adivasi women in Dombivili, it has distributed free sewing machines and also conducted cancer detection camp for the local community.

Institution's Tradition and Values

- The Institution believes in academic excellence through an effective teaching learning process. It encourages adoption of new / innovative teaching methods resulting in excellent academic results. It has a tradition of producing 100 percentage or near about 100 percentage at the University level Examinations.
- The Institution greatly emphasises on discipline, developing value system and also strives hard to ensure quality in every possible way.

Future

It aims at becoming an autonomous institution offering more number of PG & Ph.D programmes.

6.1.2 What is the role of top Management, Principal and Faculty in design and implementation of its quality policy and plans?

Our Management is highly committed and dedicated to the cause of higher education by ensuring adequate provision of human resource and infrastructural support for ensuring quality in all its areas of functioning. It sets the tone of the quality processes each year through the prescription of an Annual theme. The Management gives sufficient freedom to the Principal and faculty to function in order to fulfil the vision and mission of the college. The responsibilities of each member are communicated through circulars and meetings. The Top Management, Principal, teaching and non-teaching staff of the college are committed to plan, implement, document and continually improve effectiveness through a Quality Management System which is guided by the Quality Policy. Relevant checks and audits are in place to ensure quality. Suggestions are always welcome from all concerned towards quality improvement.

6.1.3 What is the involvement of the leadership in ensuring?

- **The policy statements and action plans for fulfilment of the stated mission.**
- **Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan**
- **Interaction with stakeholders**
- **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders**
- **Reinforcing the culture of excellence**
- **Champion organizational change**

The policy statements and action plans for fulfilment of the stated mission

The leader follows a democratic and participative style of leadership, soliciting the total participation and active involvement of both teaching and non-teaching staff. The Top Management has long term vision for both academics and administration. The Principal initiates, guides, persuades and convinces the staff to actively involve themselves in realizing the goals and objectives of the Management of the College. In addition to this, she also co-

ordinates with outside agencies like University authorities, UGC, Joint Director's office and other government bodies to comply with necessary regulations. The Principal often allows the staff to come up with their constructive suggestions and grievances, if any, and addresses them effectively by involving all concerned. The policy statements and action plans are formulated after careful consideration of opinions and feasibility by the Principal.

Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan

The action plans for operations are prepared under the supervision and guidance of the Principal, IQAC members and Heads of the departments.

Teaching plans, time table arrangements, various committees, research activities, student support, infrastructure development, adding new courses/ programmes and administration related action plans are well devised with inputs from all and incorporated into the institutional strategic plan.

Interaction with stakeholders

- The leader ensures that stakeholders are involved in planning and implementation of its activities. Students, being the main stakeholders are treated as the centre of all activities and many curricular and co-curricular activities are conducted for their benefit. Other than the Heads/In charges, various committees and clubs also contribute towards conduct of enrichment activities.
- Staff Council meetings, department wise meetings and committee meetings are conducted for the teaching faculty.
- Meetings are also conducted with non-teaching staff on a regular basis.
- The College interacts with the parents of the students during PTA meetings, Parental Workshops, Open days and to discuss student related issues. Competitions are also organised for parents to encourage their involvement/ participation. Regular feedback is taken from parents and reviewed for improvement.
- The Alumni interactions have also been strengthened over the years. There is a much closer bond with ex students now due to increased involvement of the alumni in the functioning and development of the college.

The leadership places special focus on community in the vicinity of the College and maintains a cordial relationship with the local population for

ensuring support for its various social initiatives and also with the local Police Station to ensure the safety of the College and students.

The College also takes up projects as suggested/expected by local police/RTO for the benefit of the community. Communication with the local community is done mainly through NSS, LLE activities and through some activities carried out by some departments. The College maintains a continuous communication with all the stakeholders.

Proper support for policy and planning through need analysis research inputs and consultations with the stakeholders

The College leadership tries to understand the needs through its interactions with University, UGC and other academic authorities and also with other stakeholders. It extends support to all the new initiatives of these authorities. Also the top management motivates the teaching staff to carry out research for the purpose of understanding the needs.

It also takes regular feedback from students, parents, faculty members and vendors to frame plans/policies. The policies are framed according to the experiences of the past years and considering the present needs and also feasible suggestions received. The management fully supports new plan for the benefits of its stakeholders especially the student community.

Reinforcing the culture of excellence

The top management is highly proactive and strongly believes in moving with time and technology. The Leadership constantly reinforces the culture of excellence through its numerous initiatives which have been first of its kind.

ISO 9001-2000- Our College was the first educational institution in Maharashtra to receive the ISO 9001-2000 certification in the year 2002

IMC Ramkrishna Bajaj National Quality Award for Excellence in Education- Our College/parent body was the first educational institution to receive this award from Indian Merchants' Chamber in the year 2006.

The British Quality Mark - Recipient of Triple British Honour- First in India from British Institute for Learning and Development, UK- the British Fellowship- to the Founder of NES-SVB group, The British Quality Mark and the British Corporate Membership

Space Science- The parent body had initiated the study of Space Science in the year 2012-13, and today has set up a NES Space Exploration Centre in collaboration with the Government, NASA and ISRO, yet again a first of its kind in the country.

World Peace Congress- To commemorate the Golden Jubilee, the parent body had organised the World Peace Congress in 2012 which comprised of Peace Marathon, Peace March and Panel Discussion. Tom Oliver, the CEO the World Peace Foundation, Germany was the Chief Guest, Ms. Kia Scherr, Founder of One Life Alliance, USA and Lieutenant Satish Nambiar from United Nation were the Guests of Honour.

The College and Parent body's contribution to the cause of education has been acknowledged and honoured by MCGM by renaming the Bhattipada Road, the approach road to college as **NES Ratnam College Marg in 2006.**

The parent body promotes and appreciates outstanding contributions made by teachers across the country to the field of education by presenting the 'National Award for Best Teacher' and presents the 'National Eminence Award' to eminent personalities for their contributions to society, under the benign blessings of H.H. Jagadguru Shankaracharya Jayendra Saraswathi of Kanchi Mutt. This award ceremony is conducted annually.

NES National Students Start-up fest- The College along with its parent body organised NES National Students Start-Up fest in Feb 2016 to give an exposure to students across colleges of many states to hone their entrepreneurial skills by creating an interface between students and industry, entrepreneurs, mentors, media and funding agencies.

The College was the first College in Maharashtra to receive the **Arogya World Healthy Work Place Award- Gold** in November, 2016

Champion organizational change

The Management pioneers changes for improvement in organisational set up/ functioning by making the college an outward looking organisation with focus on benchmarking against the best. From being an organisation of growth and progress in the academic field, it is looking at a more proactive role towards social upliftment with encouragement on skill development through initiating need based courses, student enrichment activities, research and emphasis on sharing of knowledge and learning through seminars and conferences at national and international levels. The College strongly believes in going for changes in all its processes for better outcome.

6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

There are clear cut procedures in place in the College to monitor and evaluate policies and plans for effective implementation and improvement from time to time.

- Our College has a duly constituted Local Managing Committee (LMC), IQAC, College Development Cell (CDC) and Academic and Administrative Committee (AAC) which enable the Management/ Head of the Institution to get adequate information in order to review the activities of the College and make necessary changes/modifications as needed.
- Monthly reports are submitted by the Principal to the Management (based on reports submitted by Heads/In charges/Convenors) and the weekly/fortnightly meetings that Principal has with the Management gives adequate information to the Management to monitor and evaluate.
- Staff members have to fill in the Academic Performance Indicators (API)/D2, D3 forms annually according to UGC regulations which also help in evaluating the performance of the staff especially in the teaching-learning process and allied activities.
- Lesson observations done by the members of the IQAC also helps in monitoring the teaching-learning process. This helps in improving teaching methods/strategies and consequently learning outcomes.
- Formal feedback collected from various stakeholders aid in evaluating policies and plans for effective implementation and improvement from time to time.

6.1.5 Give details of the academic leadership provided to the faculty by the top management

The top management is always supportive towards academics and related activities in the College and reviews academic results minutely and suggests measures to ensure good performance by students. It supports by providing the required infrastructure facility and financial support as and when needed.

The staff is given the authority and responsibility to complete the desired academic task in the best possible manner within the stipulated time. Constant guidance/new/innovative ideas are given by the top management to the faculty to improve academic performance. Faculty contributing towards academic excellence are appreciated in a befitting manner.

The Principal is very vigilant about discipline, commitment and devotion towards the work allotted to the staff. This blend of control with active participation of the staff is the distinguishing feature of our College.

6.1.6 How does the college groom leadership at various levels?

- All the staff members are involved in various activities of the College. The senior staff members are appointed as Heads/ Convenors of

various departments/ committees and are given adequate freedom in decision making.

- The junior staff members of departments /committees get mentored by the senior staff during their functioning. Many of committees also have student members who are office bearers in the committee and whenever needed are also supported by the non-teaching staff.
- The non-teaching staff also organise events like the intercollegiate workshop for non-teaching under the guidance of the IQAC, which gives them the opportunity to develop leadership skills.
- Many intra and inter-collegiate events hosted by the college for students have student leaders taking up leadership roles.

In this way the College grooms leaders at higher levels, teaching staff, non-teaching staff and students.

6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?

The Management gives sufficient freedom to the Principal, who is the academic head of the institution to function in order to fulfil the vision and mission of the institution. Academic responsibilities are fairly divided among all the staff members.

Committees are formed for the various extra and co-curricular activities to be conducted in the course of the academic year. While forming these committees preference of the staff, if any, experience in carrying out the task are taken into account to ensure effective functioning. The list of committees is displayed and circulated in the beginning of the year. This ensures transparency in policy execution. The responsibilities are communicated to the faculty members through regular circulars, personal meetings with the Principal and in staff meetings. These committees have freedom in deciding the events to be conducted and the manner of execution.

There are mandatory committees like Attendance Committee, Examination Committee, Unfair Means Inquiry Committee, Students' Council, Women Development Cell, Grievance Redressal Cell, Internal Complaints Committee for offence against women in premises. These Committees work as per the broad guidelines/established norms within which they experiment with new/innovative systems/procedures for better functioning.

The Principal of the College holds regular meetings with the teaching and nonteaching staff. In these meetings, various issues are taken up for discussion before arriving at a final decision. She also discusses common issues in the Staff Council meetings to arrive at effective solutions. Suggestions/opinions are sought related to various issues in these meetings.

The Heads of Departments monitor the functioning of their respective departments. The Heads practise participative decision-making ensuring the total participation of all the members concerned.

The office administration of the College is headed by the Office Superintendent and has Head Clerk, Senior Clerk, Junior Clerks and other Class III and Class IV Staff. The Office Superintendent in consultation with the Principal co-ordinates the day-to-day activities of the office.

For Self Financed Programmes, there are coordinators who have operational autonomy like the Heads of the departments.

Thus, the decentralized style of functioning has helped in improving the quality of its processes and practices.

6.1.8 Does the college promote a culture of participative management? If “yes”, indicate the levels of participative management.

The Management is always open to discussion with the teaching and non-teaching staff which, in turn, encourages the involvement of the staff for the improvement of effectiveness and efficiency of the institutional processes. Management interacts with staff to know their requirements to ensure effective delivery of their jobs. There is a Local Managing Committee in the College.

The constitution of the Local Managing Committee is as per the statues of University Act. Strategic decisions are taken by Local Managing Committee by way of discussions and participation from all members. The function of the Local Managing Committee is to ensure improvement and up gradation of institutional processes and systems.

For regular functioning, decisions are taken by the Principal where the IQAC gives its inputs. Operational decisions at the department/committee level are taken by the Heads of the Departments, Convenors of various committees and forums in consultation with Principal, wherever necessary. College believes in and appreciates suggestions from stakeholders for betterment of its systems and processes.

6.2 Strategy Development and Deployment

6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Our College is committed to impart quality education to the students enabling them to develop the right attitude, professional competence and inculcate the right values, apart from acquiring qualifications. We have a formally stated Quality Policy.

Quality Policy

NES Ratnam College is committed to the cause of inclusive education by facilitating learning and holistic development of students through providing effective resources and environment. It aims to be a learning organization that will use measuring and monitoring mechanism to continually enhance the effectiveness of its processes and educators, and thereby to differentiate itself as an institution of repute.

This is achieved by

- Providing appropriate infrastructure and conducive learning environment
- Building a harmonious/stress free work culture/ environment with proper planning & communicated in advance and motivating everybody to contribute the best.
- Proactively responding to changing needs of students, parents, industry and the society by embracing latest technological trends in the field of education.
- Striving towards continual improvement

The Quality Policy is developed jointly by the Local Managing Committee (LMC) /IQAC /AAC/CDC of the College and guides the functioning of the college in all its aspects.

On the basis of the mission statement, peer team recommendations, recommendations made by the LMC and need as experienced/ expressed by the stakeholders, the IQAC sets the long and short term objectives governed by the Quality Policy. College level plans are made by the IQAC, AAC and CDC in consultation with the Principal, the Heads of Departments and teachers co-ordinate and plan their individual departmental activities and report to the Principal accordingly.

The College has very effective internal co-ordination and monitoring mechanisms. The Principal of the College takes initiative to ensure effective co-ordination between and among the functionaries of the College.

The non-teaching staff also works under the instructions of the Principal and the Office Superintendent, thereby coordinating the entire administration work. The IQAC, the AAC and the CDC help the Principal and Office Superintendent to coordinate and monitor the various activities to ensure efficiency in administration as well.

The different reports such as departmental reports, performance appraisal reports, feedback from various stakeholders, College Annual reports, Management guidelines, directives from government and above all

performance by students in academic and other areas become the base for analysing and evaluating the overall performance of the institution. This also forms the basis for reviewing and evaluating the implementation of the plans and becomes the basis for future plan of action

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

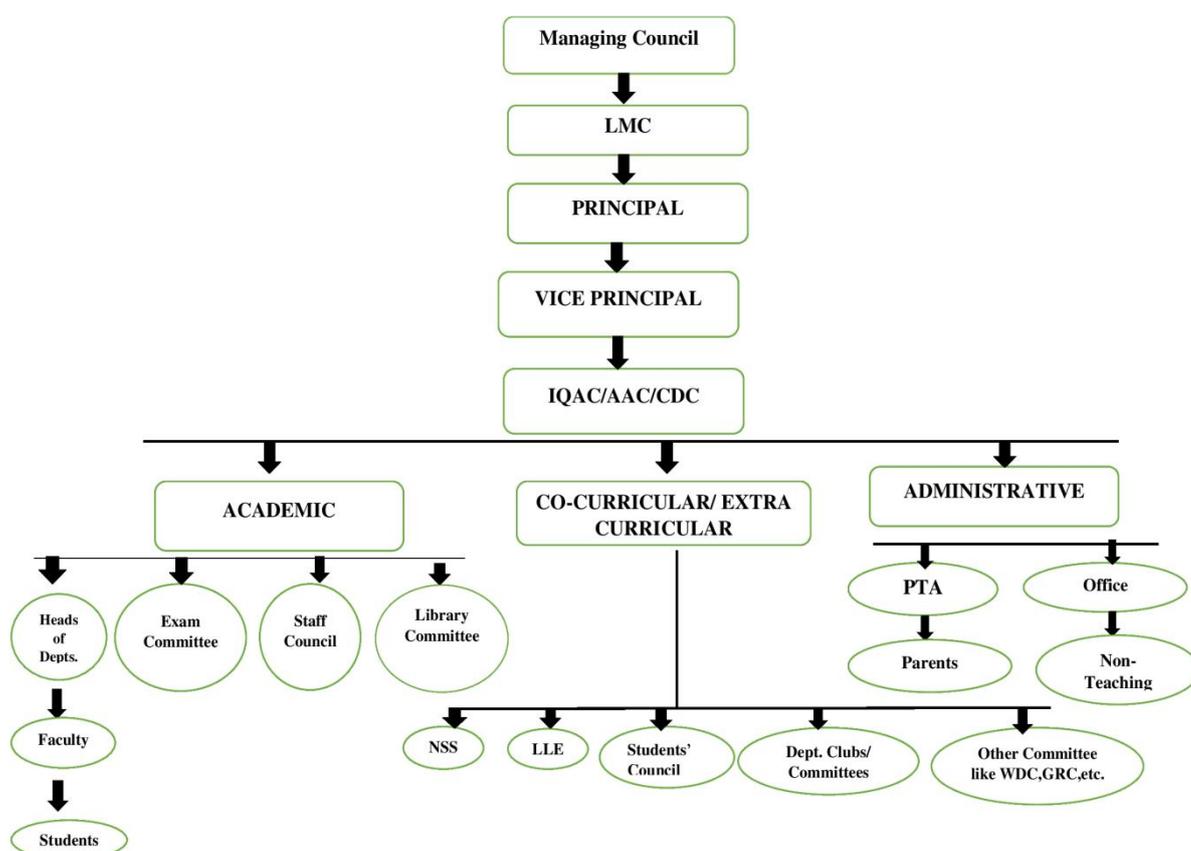
There is a perspective plan which the Principal in consultation with MC/ LMC and IQAC prepares and this in turn enables annual planning. The NAAC Peer Team recommendations also are incorporated/ addressed while preparing the Perspective Plan.

The IQAC on the basis of the admission schedule, the number of teaching days/ working days and examination schedule prepares the annual Calendar for the academic year. This calendar includes a list of the pre-planned programmes and activities to be conducted during the year. Inputs from the Principal, Heads of departments and Convenors of committees are taken into account in the preparation of the annual plan. Hence they are automatically involved in the planning process. These plans are reviewed and improved regularly to ensure not only the regular functioning but also development of the College.

6.2.3 Describe the internal organizational structure and decision making processes.

Organisational Structure

The organisational structure has the Managing Council on top followed by LMC and then Principal who is assisted by the Vice Principal, the Heads of Departments and Convenors of various Committees



Decision making process

The Top Management plays an important role in taking decisions related to college development which is taken during the Managing Council/ LMC meetings. Decisions related to day to day functioning of the College are taken by the Principal. Wherever needed Heads of Departments/ Committee Convenors are consulted by the Principal. As regards the functioning of the Departments, the Heads of the departments and Convenors have great autonomy in the operational decisions. However Principal is consulted in case of decisions which are beyond the routine operations.

6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following:

- **Teaching & Learning**
- **Research & Development**
- **Community Engagement**
- **Human Resource Management**
- **Industry Interaction**

Teaching- Learning

Towards improving quality in teaching-learning, following strategies are used

- The Principal and the Heads of the departments analyse the student feedback scores of faculty members and counsel them to improve the scores wherever necessary.
- Every department strives to come up with effective teaching strategies. These effective teaching approaches are shared between faculty members to bring about improvement in the teaching-learning process.
- IQAC also conducts in-house workshops on innovative teaching practices where faculty members share their best practices in teaching. This enables them to enhance the quality of the teaching learning process in general as every department adopts learner centric best practices.
- The College makes available adequate ICT tools to ensure that the quality of teaching/ learning improves.
- The staff is encouraged to attend conferences and workshops to benefit from interactions with their peers from other colleges and also eminent personalities/speakers. This has positive impact on the teaching-learning process.
- Staff are also sent to attend Orientation Programmes/ Refresher Courses and even short term skill development courses

Research and Development

Research is considered as an important and integral part of the academic endeavours in our College. Workshops are organized by the IQAC to provide expert information on research methodology. The Research Committee plays an important role in promoting research culture in the College. It regularly

informs the faculty members about the various research grants available from various agencies and encourages them to apply for it. Since last two years the Research Committee has made special endeavours to encourage research amongst students also. As a result entries in Avishkar Research Convention of University of Mumbai have improved in terms of quantity and quality.

The College promotes faculty participation in research by granting them time concessions in working hours, exemption from other duties, allowing them to participate in faculty improvement programmes, arranging for required books in the library and also by providing infrastructural support.

Community Engagement

The College seriously believes in carrying out its Institutional Social Responsibility with commitment. Towards this the Management and the Institution take the following measures:

- Over the years the NSS unit of the College has taken a lead role not only in the conduct of community related activities at the college level but also at the district and the University level for various activities like creating awareness about importance of cleanliness/hygiene, minimising electricity consumption, AIDS awareness, traffic control, importance of girl child, tree plantation etc. By doing this it has contributed to Government's initiatives like Swach Bharat Abhiyan and Beti Bachao etc.
- The LLE unit has been doing a commendable job for many years and it also is a designated lead college in Central Suburb of Mumbai
- The Management during its Golden Jubilee celebrations had taken the initiative to conduct the World Peace Congress, where our students played a significant role in the Peace March and Peace Marathon. This was a global event which saw participation from students and dignitaries from other countries. Mr. Tom Oliver, CEO and Founder of World Peace Foundation was the Chief Guest and Ms. Kia Sherr, Founder of One Life Alliance was the Guest of Honour.
- The Students' Council also has community related programs like celebration of Ganesh Utsav, visit to orphanage/ old age home, etc.
- Many departments like Political Science, Zoology, Botany, Sociology, and Environmental Study have also initiated community/environment related programs.
- MUSE the Movie Club of Commerce Department, screens socially relevant films periodically and sensitises the students towards social issues. It also has undertaken projects to benefit the community

through projects like “Period of sharing”, where sanitary napkins are distributed to poor girls in the village of Nareshwadi in Dahanu and caring for animals by taking care of stray animals.

- The Alumni Association also helps in conducting medical camps in the community
- The College also conducts medical camps for the community people with the help of the PTA

Human Resource Management

The Leadership endeavours to hire qualified and competent staff to ensure effective functioning of the college. The College also endeavours to retain talented teachers/non-teaching staff in the self-financing (unaided) courses given the fact that there are higher chances of attrition.

The College also has staff welfare measures in place to keep the morale of the staff high. Faculty is encouraged by the leadership to acquire higher qualifications, pursue research and attend mandatory courses like refresher and orientation required for placement. Achievements and significant contributions of staff are appreciated during meetings with management and Staff Council meetings.

The Management celebrates Teachers’ Day in a grand manner to acknowledge the contributions of every staff. In case of exemplary achievements, Management recognises and felicitates the staff members during Teachers’ Day Celebration and Foundation Day Celebrations. The Management identifies faculty members with potential and gives them tasks which hone their skills, enrich their experiences and give them a sense of satisfaction of performance.

Industry Interaction

To enhance industry interactions following measures are taken:

Experts are invited from various reputed organizations to deliver guest lectures and industrial visits are arranged for students.

Many students are placed every year in different organizations through campus interviews conducted in our college by many reputed companies.

In conferences and seminars industry experts are invited to deliver lectures and interact with the teaching staff.

The Botany department offers consultancy to Indus Technical Services Pvt. Ltd., Raipur and Universal Speciality Chemicals Private Ltd., Mumbai.

During the NES National Students' Start-Up fest organised in Feb 2016, the students got ample opportunities to interact with industry professionals.

Alumni also interact with the students to share their expertise and knowledge gained from their respective industries.

6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

The monthly reports of each department and committee are compiled and sent to the management regularly. The Top management also has regular meetings with the Principal and administrative staff during which adequate information is made available.

A formal students' feedback on various aspects of College facilities is annually taken and improvement plan as per the comments/score received are initiated. The Principal also acts upon informal feedback received by Heads of departments, Committee Convenors and Class Mentors. The students' feedback related to teaching learning process is communicated to faculty for improvement. Based on the feedback given by students, Office counter timings were extended, canteen facilities were improved and the Nestle Snacks Corner was set up and coaches for some games were appointed.

The Principal discusses relevant matters during her interactions with the Management. Relevant matters are also discussed during the PTA for review and taking appropriate actions.

The Principal also discusses whatever essential during Staff Council meetings, Students' Council meetings and IQAC meetings as well.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

The Management through the Principal involves the staff members in various activities related to the development of the college. On many occasions the Founder President of NES calls for meetings to have a direct communication with the staff. Further the AAC and the CDC are committees formed by the Management to enhance effectiveness and efficiency of the institutional processes. The members of the AAC and CDC have regular interactions with the Management which helps the Management in garnering support and involvement of the staff. The Management felicitates and appreciates staff for their special effort during Teachers' Day and Foundation Day.

6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

Resolution was passed last year related to the application to the University for introduction of BCom (Accounting and Finance), BSc (IT) & M.Sc (Analytical Chemistry). College has received permission to introduce these programmes w.e.f 2016-17

6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If “yes”, what are the efforts made by the institution in obtaining autonomy?

The affiliating University does accord status of autonomy to affiliated institutions. As a part of realising the Vision, the college does aspire to go for autonomous status in future.

6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyse the nature of grievances for promoting better stakeholder relationship?

The College has a Grievance Redressal Cell. Grievances can be communicated to mentor teachers by the students or to the Head of the department or Principal. The Grievance Redressal Cell swings to action once the grievance is received. The members of the Cell give opportunities to all the parties involved to speak and then make appropriate recommendations. This helps in promoting better stakeholder relationship.

In addition to this there are suggestion boxes placed at some locations and periodically the suggestions are reviewed and addressed depending on feasibility.

6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?

One case had been filed by a teaching staff challenging his termination from service. The case is pending in High Court.

6.2.11 Does the institution have a mechanism for analyzing student feedback on institutional performance? If “yes” what was the outcome and response of the institution to such an effort?

The College has introduced a system of formal feedback from 2002, from the students. The IQAC and the AAC take formal student feedback at the end of the academic year and gets the results of feedback quantified by an external agency. For institutional processes feedback from the first and second year students are taken and as regards the faculty, it is taken from the final year students.

Suggestion boxes are also placed in strategic places which have received considerable number of suggestions from students in the past years. The

outcome of this effort is that appropriate actions are being taken based on the feedback to improve institutional processes.

Outcome and response

- Books requested by students are stocked in the library
- More regional language newspapers are subscribed in the library
- More books on Sports
- More placement interviews are being conducted.

6.3 Faculty Empowerment Strategies

6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?

The College makes sincere efforts to enhance and enrich the professional development of its teaching and non-teaching staff. They are as follows:

- Staff members are deputed for Orientation and Refresher Courses.
- The IQAC conducts faculty training programs in various areas like communication, innovation in teaching, professionalism, etc. by inviting external professionals.
- The College regularly conducts seminars and conferences. At these seminars and conferences, the faculty gets an opportunity to interact with experts from different fields.
- Faculty attend syllabus related workshops conducted by the University regularly to familiarise them with any change in syllabus or new developments in the field.
- Staff also attend skill development courses and are encouraged to acquire additional qualifications which contribute towards their professional development.
- Faculty members are encouraged to attend seminar and conferences where they interact with experts from the industry and academia.
- Faculty members are encouraged to take up Research projects.
- The Top Management conducts various academic and administrative training programs to enhance proficiency of the staff.
- The non-teaching staff are deputed to attend workshops to enhance their proficiency.

- The IQAC conducts an annual festival UNMESH specially for the non-teaching staff across colleges in Mumbai. This festival has training workshops on specific topics related to the job profile of non-teaching staff and also competitions for them to hone their skills and promote a sense of camaraderie.

6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

- Training is considered most important at Ratnam. As a part of the Three-Tier Training Programme, staff training is handled by the IQAC. Training needs are identified based on suggestions given by faculty and Principal. The topics of staff training are generally soft-skill based.
- In addition teaching staff have to undergo training as stipulated by University at regular time intervals and also if new courses are introduced or there is change in syllabus.
- The committees and tasks are allocated to staff based on their aptitude and skills which give them a sense of satisfaction and motivation and ensures efficient performance.
- The staff members work as members of committees under a senior staff member. In due course of time the staff member may be made in charge of the committee. Once a staff member is made in charge of a committee, complete freedom is given to him/her to plan and execute programs.
- The Principal holds regular meetings with faculty to get feedback on the progress made on the planned programs. Monthly reviews of activities planned and executed by the committees are regularly conducted by the committee convenors to ensure achievement of objectives. This gives them a sense of empowerment and motivates them to function efficiently.

6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

- Performance appraisal system is implemented as per the guidelines from UGC/University/Government. API forms are given to faculty every year. D2/D3 (assessment proforma) forms are also filled which are verified by the Heads of the departments.
- Students' feedback is taken on an annual basis and staff members are given a summarized report of the feedback.

- Further, the Principal takes note of the performance and non-performance of duties by the staff to have a more comprehensive appraisal & necessary action is taken.

6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

In the past 5 years there have been no major decisions taken.

6.3.5 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

- The parent body has constituted a NES Staff Medical and Welfare Fund for supporting medical expenses of staff as and when needed. 2 staff have benefitted from this.
- Loan against salary is given to the non-teaching faculty based on their requests.
- Staff welfare fund is maintained to felicitate staff for their special achievements.

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty? Various measures taken by the College for attracting and retaining eminent faculty.

Most of the appointments are made at the entry level. However reputation built over the years is now attracting faculty. The College provides ample opportunities for their growth. Faculty is encouraged to take up Research projects and full support is extended by the College. Faculty is encouraged to attend seminars and conferences. The institutional work is divided into various committees and autonomous leadership is given to the faculty. Moreover, the talents of teachers are identified and tasks are given to them accordingly so that they derive a sense of satisfaction and motivation.

6.4 Financial Management and Resource Mobilization

6.4.1 What is institutional mechanism to monitor effective and efficient use of available financial resources?

The College has very effective mechanism to monitor the use of financial resources which is based on the annual budget.

- The budget for the following year is presented and approved by the LMC.
- The Principal of the College is guided by the approved budget for the purpose of implementing institutional plans.

- For any requirement of equipment or other major items, requisition is submitted to the internal purchase committee which is headed by the Principal. Purchase Committee invites quotations from various suppliers (minimum 3 in most cases). These quotations are evaluated, comparative statement is prepared, suppliers are called for personal discussion and after comparing all aspects from various suppliers, orders are placed after getting approved by the Central Purchase Committee of the Management. This ensures that quality item is purchased at the most competitive price.
- Further, accounts of the institution are subject to audit-internal and external. Internal audit is conducted by the AAC and any discrepancy is brought to the notice of the Principal. Further Budget prepared at the beginning of the year and actual expenses incurred during the year are compared and any major variation is discussed by the Principal with concerned person/Department Head

6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

The accounts of the College is audited regularly as per the statutory requirements. Mr. Subba Rao and Mr. Ashok R Melmane of Rao and Associate are the external auditors of the College. Internal audit is done by the members of AAC. For the financial year 2013-14, the external audit was completed in September 2015. For the financial year 2015-16, the audit was completed on 30th July, 2016. A.G.'s audit is completed till the year 2011-12.

No audit is pending to be complied with. There have been no audit objections in any of the years.

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and reserve fund/corpus available with institutions if any.

The College gets financial support from Government. Salary Grant is received from the Government for aided programmes only. The details of Grant received in last five years are as follows:

The audited statements for every year are given below:

The information regarding Financial Assistance from External Sources

Financial year 2011-12

University of Mumbai (for book bank scheme grant) Rs.11, 840.00

University of Mumbai (for minor research project) Rs.1, 12,000.00

Salary grant: Rs.3, 27, 07,988.00

Non salary grant: Nil

Financial year 2012-13

University Grants Commission (for seminar) Rs.90, 000.00

University Grants Commission (for merged scheme) Rs.1, 50, 00.00

University Grants Commission (for minor research project) Rs.30, 712.00

University Grants Commission (Contingency fund for teachers on FIP)
Rs.13, 500.00

University of Mumbai (for minor research project) Rs.1, 91,480.00

Salary grant: Rs.4, 25, 56,494.00

Non salary grant: Nil

Financial year 2013-14

University Grants Commission (Substitute teacher's [against FIP] salary):

Rs.4, 97,945.00

University Grants Commission (for establishment & monitoring of the IQAC)
Rs.3, 00,000.00

University of Mumbai (for book bank scheme grant) Rs.2, 618.00

University of Mumbai (for minor research project) Rs.1, 52,520.00

Salary grant: Rs.6, 48, 21,222.00

Non salary grant: Nil

Financial year 2014-15

University Grants Commission (for Adhoc grant XII plan): Rs.7, 20,000.00

University Grants Commission (for minor research): Rs.2, 85,000.00

University Grants Commission (Contingency fund for teachers on FIP) :
Rs.10, 000.00

University Grants Commission (Contingency fund for teachers on FIP):
Rs.1, 500.00

University Grants Commission (Substitute teacher's [against FIP] salary):

Rs.9, 79,355.00

University Grants Commission (for National Conference):1, 12,500.00

University Grants Commission (Contingency fund for teachers on FIP):

Rs.15, 000.00

NABARD (for national conference in Botany) Rs.50, 000.00

Salary grant: Rs.5, 18, 12,010.00

Non salary grant: Nil

Financial year 2015-16

Salary grant: Rs. 6, 19.98, 107.00

The College also runs some courses on self financed basis. For Self Financed programmes we do not receive grant from the Government. It is managed from the fees collected from the students.

There has been no deficit so far.

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

The College has made efforts to secure additional funding from private parties for its inter-collegiate festivals like MANTRA, MANZIL,TALENTUEUX ZERO GRAVITY and SCI TREK. Funds are also mobilised for the International/national conferences hosted by the College.

Name of Conference	Funding agency	Amount in Rs.
National Conference on 'Forests for the Future of Man'' by Botany Department on 16 th & 17 th of September, 2011	Private Sponsors	Rs. 1,15,000.00
International Conference on "Information and Communication for Development-Reach, Impact, Opportunities and Challenges on 5 th and 6 th of October, 2012 by the Departments of Commerce and Humanities	Private Sponsors	Rs. 3,00,000.00

National Conference on ‘Fungi in Agriculture’ by Botany Department on 28 th & 29 th of January, 2014	Private Sponsors	Rs. 1,11,000.00
National Conference on ‘Recent Developments in Synthetic and Materials Chemistry ‘ organized by the Chemistry department on 16 th and 17 th of January 2015 :	RCF	Rs. 1,00,000.00
International Conference on “Photons: Multiple and Creative Solutions to Challenges organised by the Physics Department on 5 th & 6 th December, 2015	German House for Research & Innovation	Rs. 70,000.00
	Indian Bank	Rs. 25,000.00
	Private Sponsors	Rs. 20,000.00

6.5 Internal Quality Assurance System (IQAS)

6.5.1 Internal Quality Assurance Cell (IQAC)

a. Has the institution established an Internal Quality Assurance Cell (IQAC)? If “yes”, what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?

Yes, the College is having its IQA Cell. This Cell was established in the academic year 2004 and functions on the basis of the guidelines set forth by NAAC. The policy with regard to quality assurance is:

- To follow the Plan, Do, Check and Act (PDCA) in all its processes
- To ensure continuous improvement in the following areas:
 - Quality of teaching –learning process
 - Introduction of need based courses/programmes
 - Increasing use of ICT in academic and administrative processes to move with time and need.
 - Promote Research activities by staff and students
 - Conduct of three tier training programme
 - To enhance efficiency in administration
 - Up gradation of infrastructure
 - Contribution towards socio-cultural development in the neighbourhood areas.
- To take timely preventive and corrective actions.

The IQAC functions as an effective and efficient internal coordinating and monitoring cell and it plays a vital role in maintaining and enhancing the quality of the institution and suggests steps to be adopted. The IQAC meets at

least two times in each term to plan, direct, implement and evaluate the quality systems and processes of the institution. The IQAC is supported by the Academic and Administrative Committee and the College Development Council. Duties are delineated to ensure there is no duplication of work and there is proper sharing of responsibilities. These two committees (AAC & CDC) have been constituted by the Management in order to involve more faculty members in the quality management process of the institution. Together the IQAC, AAC and CDC institutionalise the quality process.

College has prepared a Perspective Plan for the period of five years-commencing from the academic year 2011-2012 by taking into consideration the quality indicators of Seven Criteria as determined by NAAC. The Mission, the objectives of the College, Inputs from all stakeholders, their expectations, management policies and goals are considered as a base for formulation of the perspective plan. The annual plan is based on this and there is an effective monitoring mechanism in place to ensure its smooth implementation. Timely preventive and corrective measures are taken based on this monitoring. This ensures institutionalisation of the Quality assurance process since all stakeholders are made aware of the policies and accordingly they become effective functionaries in the process

b. How many decisions of the IQAC have been approved by the management/ authorities for implementation and how many of them were actually implemented?

Most of the decisions of the IQAC have been approved by the Management. like

- Implementation of need based course programmes/ periodically
- To set up the research lab
- To work towards an environment friendly campus.
- Activities with increasing involvement of Alumni.

Our College has become fully aware of the need for quality. To sustain and grow in this competitive world, it is of utmost importance to have benchmarked standards and compliance to the same in order to facilitate our efforts to provide the best possible education to our students. All of the above decisions have been implemented.

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

Yes, Dr. Geeta Bharadwaj, who is a quality expert is an external member of the IQAC. As a member of the IQAC she has been instrumental in guiding the

institution in initiating many quality practices. She has also shared her research skills with the staff and guided them on pursuing research. There is also a PTA member representing the parent community on the IQAC. Further suggestions as regards measures to improve discipline amongst students have been offered by PTA members.

d. How do students and alumni contribute to the effective functioning of the IQAC?

Students contribute to the efficient functioning of IQAC in the following ways:

- By providing feedback on the teaching learning and also about the administrative processes regularly.
- As Energy Auditors- to save electricity consumption
- By organising/ participating in various enrichment activities conducted
- By organising various activities that lead to the achievement of the mission of developing holistic personalities.
- By being part of various initiatives to make the campus eco-friendly.
- The alumni association organises get-togethers for students and teachers to strengthen the bonding.
- Alumni also get involved in arranging and getting sponsorship for departmental activities and college activities as well. They contribute as guest speakers bringing industry experience to the students. They also provide financial support to economically weak students when needed. The alumni members get involved as organisers and judges in the conduct of departmental/college activities/ competitions.

e. How does the IQAC communicate and engage staff from different constituents of the institution?

IQAC is supported in its functioning by the AAC and CDC. This enables it to involve more number of faculties in the quality maintenance and enhancement process. There are clearly defined responsibilities for IQAC, AAC and CDC. The members of these committees also have specifically defined duties. Those faculties who are not a part of IQAC, AAC and CDC become members of the sub committees which help in implementation of various activities. The communication of these activities happen through circulars, meetings with principal and Heads of the departments. In most of the activities, non- teaching staff is also given duties and they assist in the conduct of various academic, co-curricular and extra-curricular activities. Meetings with non-teaching staff are also regularly arranged.

6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If “yes”, give details on its operationalisation.

The University of Mumbai provides guidelines for the course syllabi, pattern of examination and passing criteria, apart from number of working days by announcing the term period. On the basis of these each faculty prepares the lesson plan for each semester and also the activities to support the academic learning.

The log books have the record of lecture/practicals engaged and portion completed by each faculty which is audited by the AAC/CDC in each term to ensure compliance.

Remedial coaching plans are also submitted by each department which is supervised by the IQAC.

The IQAC also looks into the requirements of ICT for teaching and makes it available.

Students’ feedback is collected by IQAC and AAC -suitable action is taken according to the analysis.

The AAC also conducts lesson observation of less experienced staff in each term to ensure effective teaching.

Academic results are discussed by the Principal with the Heads of Departments to take suitable actions.

The College administration is guided by the regulations prescribed by the Government, University and Management. The Principal has regular meetings with the administrative staff to supervise their functioning as well as to know their problems and requirements. Administrative audits are also done by the AAC in each term to ensure smooth and efficient functioning.

Maintaining Minor defaulter’s register, Late comer’s register, Floor management registers, Daily attendance register and Report of Absentees have been part of college functioning. These are in addition to the mandatory records maintained by the College.

In this way the College has an integrated framework for quality assurance of the academic and administrative activities.

6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If “yes”, give details enumerating its impact

The IQAC co-ordinator and a few selected members have been sent for quality related workshops conducted by the University and other colleges. This has helped the IQAC to be updated with the quality requirements for higher education. The information is then passed on through training to other staff. Further the Management has regular workshops on effective administration which is attended by the officials of the college.

6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If “yes”, how are the outcomes used to improve the institutional activities?

The CDC is responsible for internal academic audit. The non-compliances are informed to respective faculty/departments that have to show compliance and this is again checked by the auditor from the CDC. The outcome of this audit ensures that plans are executed effectively and objectives achieved. The audit also checks for improvements in the various academic activities with respect to skill development of students, use of ICT and value based teaching. This helps towards continuous improvement. The College very recently completed the external academic audit done by a Committee appointed by the University of Mumbai. Report is awaited. However preparing for the audit itself has ensured improvement in the institutional activities.

6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The internal quality assurance mechanism ensures that it brings alive the spirit of the NAAC core values. Internal quality assurance mechanism is also aligned with University of Mumbai’s expectations from the college. Further the Management had also initiated the alignment of College with the British Quality Mark for global competency.

6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

The mechanisms to continuously review the teaching learning process are:
The AAC monitors the delivery effectiveness of teaching methods through lesson observations and academic audit. The knowledge absorption / assimilation by students is also gauged suitably through formal and informal feedback from students and result analysis.

Teaching plans are prepared for each term. The teaching staff maintain log books to record daily lectures delivered, practicals conducted and other such activities performed which are also audited.

Short term responsibilities (Extra lecture, duties related to workshops/ seminar etc.) are properly recorded and informed to concerned authority.

The effectiveness of teaching – learning process is monitored on regular basis. The Heads of the departments take constant feedback from students as regards the teaching-learning process and communicate the same to concerned teacher. The concerned faculty then plans for improvements which are monitored on a regular basis for their effectiveness.

Student feedback is taken for all the courses. The questionnaires are distributed to all the final year students of all sections to avoid any bias. The results of the Feedback forms are compiled by external agency and the

Principal communicates the feedback to the respective faculty for appropriate actions. Heads of the departments are also informed about the feedback.

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders? Any other relevant information regarding Governance Leadership and Management which the college would like to include.

The quality assurance policies, mechanisms and outcomes are communicated to internal and external stakeholders through orientation programmes / parental workshops/open days/ circulars, through meetings, presentations, Prospectus, College Magazine, Annual Report of the College and website.

Other relevant information

Some of the quality assurance mechanisms that have helped the institution are:

- Arrival and dispersal team to ensure orderly arrival and dispersal of students in both the sessions. The system also ensures that students follow the norms of discipline.
- Late comer's register for staff and students
- Biometric attendance for staff
- Daily attendance register which records attendance in each lecture
- Information register of students
- Mentor teacher for each class with clear allotment of duties.
- Minor default register
- Floor Management staff

Criteria VII – Innovations and Best Practices



National Conference 2011- Department of Botany



National Conference 2014- Department of Botany



National Conference 2015-Department of Chemistry



Workshop on Effective Parenting Student's Training



Parent Teacher Association

Class Day Celebration

CRITERIA VII: INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

Though conduct of Green Audit of Campus and facilities has not yet been done formally, the college lays lot of emphasis on clean and green environment. It has a well maintained garden with large number of trees and floral plants. There is a separate section in the garden for medicinal plants.

- The college has collaborated with an NGO, Stree Mukti Sanghatana and installed an organic waste management system on campus to take care of the waste generated by the college canteen and garden. The project is partially funded by United Nations Development Programme (UNDP) and Ministry of Environment and Forests (MOEF).
- The month of July is earmarked each year with 'Save Environment' as the theme for monthly drive. Students take up activities like tree plantation, poster displays with slogans dealing with environmental issues.
- Botany Department participates in Van Mahostav celebration by MCGM (Municipal Cooperation Greater Mumbai)
- Towards promoting lesser use of plastic, students are encouraged to use eco friendly rakhis and colours during Rakshabandhan and Holi festivals.
- To promote clean and green environment, the College conducted a competition on 'Clean and Green Campus' for the colleges in Mumbai and suburbs. This was the part of Golden Jubilee Celebration of the parent body National Education Society (NES).

7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

The Institution has taken various initiatives to conserve energy.

***Energy conservation**

- Bright airy rooms with glass window ensure the use of natural light and air as far as possible.
- Lights and fans are switched off when not in use. Notices to this effect are put up at relevant places which work as reminders. Floor management team also ensures that there is no wastage of power.
- Tube lights are being replaced by energy saving LED bulbs in a phased manner. LED lights have been already fixed in the corridor

and classrooms of basement. About 50 tube lights have already been replaced with LED lights.

- Student volunteers are designated as Energy Auditors to monitor wastage of electricity in the college campus and to spread awareness about the responsibilities towards conservation of energy and also reducing carbon footprints.
- Nature Club along with Tata Power Energy organized training programme for students on “Tips to save Electricity”.
- Regular maintenance of electrical equipments and electronic gadgets like computers, ACs, Water Coolers etc is done for efficient energy management.
- Short documentary on Ecosystem is also shown to students.

*** Use of renewable energy**

Working on installing Solar panel of 10KW on the roof top.

***Water harvesting**

There is no water harvesting system, however,

- Awareness about water saving practices is being created through notices/ messages at relevant places.
- Leakages of taps/pipes are checked regularly and water wastage is avoided. College has a plumber on campus for this purpose.
- Water pumps are fitted with auto closure valves which ensures that pumping stops once the water tanks are full and there is no wastage of water due to overflow.

***Check dam construction**

- Not applicable as the Institution is situated in a metropolitan city. However, during the NSS residential camp students build check dam in the adopted village.
- In the adopted village the students also run awareness program regarding water conservation.

***Efforts for Carbon neutrality**

Efforts are taken to minimize the carbon footprints by adopting achievable measures such as:

- Dead leaves and waste papers are not burnt to restrict Carbon emission and ensure carbon neutrality. Leaves are buried in the designated pit and are treated as biodegradable waste to convert into fertilizer.
- NSS Volunteers prepare paper bags and distribute to the shopkeepers of neighbouring areas spreading awareness against the use of plastic bags.

- Minimum usage of mobile phones is allowed in the College premises. Notifications are displayed in college premises to switch off the mobile while in campus.
- Use of tobacco products are strictly banned in the campus as well as in the adjoining neighbouring areas.
- Measures to reduce usage of paper have been adopted by replacing the use of papers with e-communications wherever feasible.

***Plantation**

- The college campus has green environment with well maintained and groomed trees in the garden. New trees are also planted on regular basis by the experienced gardeners .Ornamental plants add beauty to the campus. Medicinal plants, both in lawn and in pots add to the quality of air and also have educational impact on students.
- Students plant saplings during the monthly drive on ‘Save Environment’.
- NSS take up tree plantation project along with an NGO “HARIYALI” every year.

***Hazardous waste management**

- Hazardous chemicals are not used by any of the laboratories. However strong solutions from Chemical laboratories are neutralized before being disposed off from Laboratory.

***e-waste management**

- The College has a tie up with the NGO Parisar Bhagini Vikas Sangha for collecting the e-waste from the College for recycling. The facility is also extended to staff and students thus sensitizing them towards e-waste management. The College has received a certificate from the NGO appreciating its efforts towards reducing the carbon footprints.

7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

- **Decision was taken by IQAC that at least one National or International Conference/ Workshop has to be organized every year so that knowledge and expertise acquired by some get shared with others.**

This provides an opportunity for Staff and Students to interact with experts from premier institutes of India, abroad and also with peers.

Following are the National/International Conferences and Workshops held in the last four years.

2015-16: Two day International Conference on ‘Photons: Multiple and Creative Solutions to Challenges’ organized by Department of Physics to observe the International Year of Light and Light-based Technologies as 2015 was proclaimed by the 68th Session of the UN General Assembly. The Conference was included in the Calendar of Events of the IYL 2015 organized by UNESCO.

2014-15: National Conference on ‘Recent Development in Synthetic And Material Chemistry’ organized by the Department of Chemistry.

2013-14: National Conference on ‘Fungi in Agriculture’ was organized by the Department of Botany

2012-13: Two Day International Conference on ‘Information and Communication for Development - Reach, Impact, Opportunities and Challenges’ was organized by Departments from Arts and Commerce faculties.

- The College made an effort to ignite entrepreneurial skill amongst students by starting E-cell in the college and organized NES National Student Startup fest in association with the parent body on 5th and 6th February 2016. It gave an opportunity to students to be entrepreneurs by showcasing their business proposals in front of Business Experts and Venture Capitalists.
- Structured guidance to students belonging to reserved categories has facilitated increasing number of students in availing various free ship / scholarship of the Government.
- College Song has been written and composed by Students and Staff. The College Song is now rendered at various functions. This exercise has resulted into lot of positive feelings amongst all stakeholders.
- Sanitary Napkin-Vending machine was installed for the female staff and students in 2014. Our college was the first in Mumbai region to take up this initiative.
- Concentrated efforts put by Research Committee have resulted in substantial increase in research activities post second cycle of NAAC accreditation. Students enthusiastically participate in ‘Avishkar’ Research festival organized by the University of Mumbai. The quality of research is endorsed by the fact that the project on ‘Solar Distillator’ won first prize at District level and represented University of Mumbai at State level.
- Safety and Security Committee has been constituted to take necessary steps towards safety and security of students and staff. Fire Alarm system has been installed in the entire campus and height of railings is raised wherever required. Collapsible gates have been

fixed on first floor and second floor to avoid unwanted entry on Sundays / Holidays and at night. The entry to terrace is also restricted through locked doors. The Committee also takes regular rounds of the premise especially at the end of the day to confirm that all have dispersed before the rooms are locked.

7.3 Best Practices (As per the format)

7.3.1 BEST PRACTICE I

1. Title of the Practice

3-Tier Training Programme- for Students, Staff and Parents

2. Objective and underlying principles or concepts of this practice:

- To aim for quality enhancement and sustenance in all our endeavours through continual Training Programmes organized for all primary stakeholders namely Students, Staff and Parents leading to a conducive environment for achieving academic excellence.
- To conduct Students' Training Programmes to develop soft skills like communication skill, analytical skill, presentation skill etc and to prepare them adequately to face the global challenges.
- To conduct Staff Training to deal with personal and professional growth of staff.
- To conduct Parents' Training which will help parents to understand the working system of the College and also deal with the issues of parenting adolescent children. Parental support is believed to be very essential for their ward to do well both academically and socially.

3. The context-Challenging issues that needed to be addressed in designing and Implementing this practice

- While designing Students' Training, it must be ensured that the Resource Person is sensitive to the fact that the target audience is from varied background - social set up, medium of schooling and mental ability. Training needs to be methodically planned for effectiveness.
- Resource persons need to be drawn keeping in mind their competence towards capacity building, especially for the diversified group.
- For arranging Staff Training Programmes, it is challenging to fix a schedule to accommodate all staff from various programmes, with minimum adjustments of lecture timings. Topics need to be carefully chosen to address the intellectual and professional quotient of the target audience.
- Parental workshops need to be arranged taking into account the convenience of the working parents. Delivery of the topic too requires to

be in bilingual-especially English and Hindi to effectively reach the audience.

4. The Practice-its uniqueness in the context of Indian Higher Education And Constraints/ limitations faced.

- It is a unique feature of our College to provide training to all the primary stakeholders including parents on a regular basis. The College also involves parents in its regular functioning through meetings of Parent Teacher Association, though it is not mandatory in higher education system. Interaction with parents happens during open days (for declaring results) and also during various meetings.
- It is unique practice of our College to regularly conduct training programmes for teaching staff which are in addition to the mandatory subject related workshops which need to be attended as per the norms of higher education system. These training programs aim at equipping them better with qualities required for effective teaching, apart from subject knowledge.
- The College also recognizes the important role played by non-teaching staff for smooth functioning of the College. Organizing intercollegiate workshop 'UNMESH' for non-teaching staff is a regular feature of the College. Non- teaching staff are also deputed for the skill development training programmes organized by other institutions.
- Some of the Training Programmes organized are as follows.

Students' Training

- Following training programmes were organized with the help of
 - ❖ In-house Resource Persons on :
 - ✓ 'Verbal Communication Skills'
 - ✓ 'Academic and Professional growth for Banking and Insurance sector'
 - ✓ 'Self Motivation'
 - ✓ 'Personality Development'
 - ✓ 'NCFM Certification'
 - ✓ 'Interview Skills and Techniques'
 - ✓ 'Need for pursuing higher studies'
 - ✓ 'Contribution of research to future economic and social development'
 - ❖ External Resource Persons:
 - ✓ Training Programme was organized on the topic 'How to achieve Academic and Professional success by Mr. Abhishek Shetty, Global Youth Empowerment Speaker.
 - ✓ A workshop was organized on 'Careers in Civil Services'. The Resource Person was Mrs. Neela Satyanarayan, Retd IAS Officer and State Election Commissioner of Maharashtra.

- ✓ A Training programme on ‘Management of Small Business’ was conducted by Mr. Vinay Kumar from Micro Small and Medium Enterprises (MSME).
 - ✓ Training Programme was organized on the topic ‘Self Management and Responsibility of students towards Society’. Mr. Sachin Khatri, Motivational speaker, was the resource person.
- **Staff Training**
 - **Teaching**
 - A Workshop was organized on ‘My Teaching Methods and My Administrative Methods’.
 - Workshop was organized on “Effective Teaching”. Resource person for the workshop was Mr. Shreepad Parkhe, Motivational Trainer.
 - Workshop on “Research Prospects with UG Curriculum” by Dr. Geeta Bharadwaj, Quality Expert was arranged.
- **Workshops for Non-Teaching**
 - ‘Impacting Stake Holders- Effective Communication, Team Working and Attitude’. Mr. Shripad Parkhe, Professional Trainer was the Resource Person
 - ‘Effective Library Management’ - Mrs. Sushma Poudwal, Librarian (Retd.) of SNDT University was the Resource Person
 - ‘Effective Office Administration’ –Mr. Sagar Patil, Coordinator, Digital University, University of Mumbai and Mr. Satish Salian, Professional Trainer were the Resource Persons.
- **Parent’s Training**
 - Parental workshop on “Effective Parenting” was organized for the parents of Second Year students. Mr. Sunil Raiker, Motivational Speaker was the Resource Person.
 - Parental workshop on ‘Creative Parenting-Addressing Adolescent Concerns’ was organized for the parents of First Year students. Ms. Ambereen Pradhan, Professional Trainer, Energia Espresso Workshop was the Resource Person.
 - Parental Workshop for the parents of First Year students on ‘Modern Age Parenting, Challenges & Solutions’ was held. Dr. N.S Neelakantan, Transformational Trainer and Zen Reiki Healer was the Resource Person.
 - A Parental Workshop for the parents of SYBA / BSc / BCom / BMS and BBI students on ‘Effective Parenting’ was held. Ms. Niru M. Chheda, Professional Counselor was the Resource Person.

5. Evidence of Success

- Premier companies like TCS, Wipro and Godrej visit the college every year for recruitment drive. It reflects on the trust these companies have in the quality of students, which is the result of our approach towards holistic development of the students.
- Students excel and win prizes when they compete with their peers at intercollegiate competitions.
- Teachers' Training Programme by Dr. Geeta Bharadwaj on "Research Prospects with UG Curriculum" had a tremendous impact resulting in manifold increase in the number of research publications and research projects.
- Teachers' Workshop on 'My Teaching Methods and My Administrative Methods' gave an opportunity to each staff of the college to present and also learn about the innovative methods used by others in teaching and administrative process.
- Feedback from parents after the Parental Workshop reflect the utility and success of these programmes.

6. Problems encountered and resources required

- Problems encountered generally are to fix a time schedule taking into account various factors like availability of Resource Person, convenience of participants since the training need to be arranged outside their primary working timings and organizing the training programmes with expected quality.
- Resources required for arranging the Training Programmes are venue with ICT Tools, funds towards honorarium to the Resource Person which the College is able to arrange.

7. Notes

3 Tier Training Programme provides a successful measure to realize the Mission of the college making students global citizens which is in line with the NAAC core value of 'Quest for Excellence'

BEST PRACTICE II

1. Title of the Practice

Value Addition through Monthly Drives, Class Day Celebrations and Prize Distribution Functions at regular intervals

2. Objective and underlying principles or concepts of this practice:

- **To add value to the process of learning by providing a platform to students to nurture the leadership qualities, spirit of team work along with sensitizing them towards their social and civic responsibilities and to be conscientious citizens.**

The objective is given direction by announcing the themes for the Monthly Drives at the beginning of the academic year and chalking out the schedule for the Class Day Celebrations and Prize Distribution Functions. Monthly Drives orient students towards their social responsibilities. The entire programme of Class Day Celebrations is planned and executed by students giving them an opportunity to hone their organizational skills, capacity building and team work. In most cases such Celebrations are theme based which add value to the celebrations. Prize Distribution Functions organized twice a year by each class serves as a motivating factor for all to work towards excellence and win accolades.

3. The context-Challenging issues that needed to be addressed in designing and Implementing this practice

The designing and implementation of the programme requires clarity about the objectives. Utmost care needs to be taken to interweave the activities with a busy Academic Calendar. The themes for the Monthly Drives are chosen based on the relevance to the current need and social scenario. For example: The monthly drive for the month of June is 'Save Environment' as 6th June is celebrated as World Environment Day. Similarly the month of August is earmarked for 'Patriotism'. Prize Distribution Functions are to be so campaigned such that it serves as a motivating factor for more students to be involved in extracurricular and co curricular activities and that too with adequate preparation and also to aim for the betterment of their academic performance. Class Day Celebrations mark the culmination of the semester or an academic year. Students use this opportunity to acknowledge the efforts put in by staff members towards their academic journey adding value to their learning outcome. Socially relevant issues are addressed at these celebrations since students generally select a theme for such celebrations which make them socially responsible.

4. The Practice-its uniqueness in the context of Indian Higher Education and Constraints / limitations faced.

This Best Practice is a unique feature of our College designed to realize one of the objectives of the College which is in line with the core value of NAAC- Inculcating a Value System among Students. These activities are amalgamated with the academic programme in a very structured manner with due emphasis though it is not a mandatory requirement. However, time management is a major constraint witnessed in organizing more than a limited number of such activities.

5. Evidence of Success

- Following are the themes generally announced for Monthly Drives :

June	Save Environment
July	Health and Hygiene

August	Patriotism
September	Small Kindness Act
October	Academic Excellence
November / December	Personality/Skill Development
January	Peace and Harmony
February	Organize Yourself for Examination
March	Academic Excellence

- ✓ Students participate with great zeal and enthusiasm in celebrating the National Days.
- ✓ Students participate in Tree Plantation Drive in the college and in the neighbourhood, contributing towards clean and green environment.
- ✓ Students conduct Cleanliness Drive in the neighbourhood and adopted areas.
- ✓ Students spread awareness about socially relevant issues through display of slogans and posters, rallies, interactions with people.
- ✓ Students visit old age homes and orphanages.
- Students organize Prize Distribution functions generally with a structured Agenda. The function is organized by group of student volunteers under the guidance of the class incharges teacher mentor. Such programmes help students in developing managerial skills and other soft skills, especially their organizational and team building skills thus contributing towards Human Resource Development. Students make extensive use of ICT tools to present their programme.
- Some of the socially relevant issues addressed during Class Day Celebrations are:
 - ✓ Female foeticide
 - ✓ Women Empowerment
 - ✓ Peace and Harmony
 - ✓ Green Environment-Students present saplings to the guest.
 - ✓ Conservation of Energy-Students made presentations on use of LED tubelights for saving power.
 - ✓ Success stories of celebrated personalities.
 - ✓ Life in orphanage/ old age homes.

6. Problems encountered and resources required

Since limited Resources are required, these activities in general are well organized with the available infrastructure and facilities like Audio-Visual aids and other ICT tools.

7. Note

These activities help students to channelize their thoughts in a constructive and creative manner which makes them responsible citizens.

8. Contact Details

Name of the Principal: Mrs. Rina Saha

Name of the Institution: N.E.S. Ratnam College of Arts, Science and Commerce

City: Mumbai

Pin Code: -400 078

Accredited Status: Re Accredited with 'A' Grade in 2011

Work Phone: 022 25951381 / 022 25951383

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Evaluative Report of Departments

ARTS FACULTY

Department of Economics

1. **Name of the Department**–Economics
2. **Year of Establishment** -1983
3. **Names of Programmes/ Courses offered**– U.G. (B.A.)
4. **Names of Interdisciplinary courses and the departments/units involved**-Foundation Course
5. **Annual/ semester/ choice based credit system (programmewise) –**
 - B. A (Economics) –**Credit Based Semester and Grading System**
 - B.Com (Business Economics) –**Credit Based Semester and Grading System**

6. **Participation of the department in the courses offered by other Departments**

Taken lectures for students who had enrolled for certificate course in Conversational English by the Department of English and Tourism & Travel Management by the Department of History

7. **Courses in collaboration with other universities, industries, foreign institutions etc.**

Programme, Analytics and Research (PAR) programme for Skill Development of TISS, Mumbai

8. **Details of courses/ programmes discontinued (if any) with reasons:**

Nil

9. **Number of teaching posts**

	Sanctioned	Filled
Professors/Principal	1	1
Associate Professors	2	2
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	Years of experience	Ph.D./M.Phil students guided last 4 years
Ms. Rina Saha	M.A., M. Phil.	Principal	Planning and Public Finance	32	Nil
Dr. Mary Vimochana	M.A., M. Phil., Ph.D	H.O.D., Associate Professor	Development & Environmental Economics	28	02
Ms. Nirmala Kannan	M.A., M. Phil.	Associate Professor	Mathematical Economics	20	Nil
Ms. Manisha Navale	M.A. SET	Assistant Professor	Industrial and Financial Economics	4	Nil

11. **List of senior visiting faculty:** Nil

12. **Percentage of lectures delivered and practical classes handled**

(programmewise) by temporary faculty: Nil

13. **Student-Teacher Ratio (programmewise):** BA- 27: 1 B. Com- 223:1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:**
Administrative and technical staff of the college provide required assistance and support to the department.
15. **Qualifications of teaching faculty with DSc/D. Lit /Ph.D/M.Phil/PG.**
Ph.D. – 01 M.Phil. – 02 P.G. – 01
16. **Number of faculty with on going projects from a) National b) International funding agencies and grants received - Nil**
17. **Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received-Nil**
18. **Research Centre/ facility recognized by the University – Nil**
19. **Publications:**

Publication per faculty

a. Number of papers published by faculty and students in peer reviewed national journals.

b. Number of papers published by faculty and students in peer reviewed International journals.

c. Chapter in Books

d. Books with ISBN/ISSN numbers with details of publishers

e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Dr. Mary V.	-	01	03	-	05	09
2	Ms. Nirmala K.	-	-	01	-	03	04
3	Ms. Manisha N.	-	-	-	-	05	05

f. Number of publications listed in International Database Nil

g. Monographs Nil

h. Books Edited

Dr. Mary Vimochana	04
Ms. Nirmala Kannan	01
Ms . Manisha Navale	01

i. Citation index/ SNIP/ SJR/ impact factor/ h-index

Details in Annexure – 3.4.3

20. **Areas of consultancy and income generated: Nil**

21. **Faculty as members**

International Committees:

Dr. Mary Vimochana is member, South Asian Network for Development and Environmental Economics (SANDEE), Kathmandu, Nepal.

National Committees:

Dr. Mary Vimochana is member of:

- Input-Output Research Association, India
- Economics Teachers Association, -Mumbai

Ms. Nirmala Kannan is Member, Economics Teachers' Association, Mumbai

Editorial Board:

- **Dr. Mary Vimochana**
 - Editor, Epignosis, Interdisciplinary Journal, published by the Departments of Humanities and Commerce of the College. 2012 onwards.
 - Member, Journal Review Department, International Journal of Biodiversity and Conservation, www.academicjournals.org
- **Ms. Nirmala Kannan**-Member, Editorial Board, Epignosis, Interdisciplinary Journal (2012) published by the Departments of Humanities and Commerce of the College. No of issue: 01
- **Ms. Manisha Navale**-Member, Editorial Board, Epignosis, Interdisciplinary Journal (2012) published by the Departments of Humanities and Commerce of the College. No of issue: 01

22. Student projects:

a) Percentage of students who have done in-house project including inter departmental/programme: Nil

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/

other agencies:

T.Y.B.A (Economics) students undertake project work in Collaboration with Micro, Small and Medium Enterprises Development Institute, Ministry of M. S. M. E, Sakinaka, Mumbai, on an annual basis.

23. Awards / Recognitions received by faculty and students:

Recognitions(Faculty)

Principal Ms. Rina Saha

- Appointed as a member of LIC by VC to visit Laxmichand Golwala College of Commerce & Economics, Ghatkopar for their application for extension of affiliation for B.Com.(Investment Analysis) Programme, March 2014.
- Appointed as a member of LIC by VC to visit the SIA College of Higher Education for their application for starting additional division in B.Com, February 2015.
- Appointed as a member of LIC by VC to visit Sree Narayana Guru College of Commerce for their application for starting New Programme in B.A./B.Sc.(Human Science) & B.Sc. Psychology, March 2015.
- Appointed as V.C's Nominee(Subject Expert) on the Selection, Committee of R.A.D.A.V. College for appointing Asst. Professor during 2015-2016.
- Appointed as Convenor, LIC, to visit Sheila Reheja Hotel & Catering School for extension of affiliation for starting a new programme in

B.A. (Culinary Arts), Associate Degree in Culinary Arts, B.Sc.(Associate Degree in Hospitality Studies) & B.Sc. (Hospitality Studies add div) March 2016.

- Appointed as VC's Nominee on the Panel of Selection Committee for Career Advancement from the post of Associate Prof. from Stage 4 to Professor in Stage 5 in different subjects in Bhavan's College, Andheri March 2016.
- Appointed as Convenor, LIC to visit JMF Vande Mataram Degree College of Arts, Commerce & Science for extension of affiliation for M.Com.(Advanced Accountancy), April 2016.
- Appointed as Convenor, LIC to visit JSS Arts, Commerce & Science College, Poi vide letter No. PG/2/ICD/2016-17/14 dated 01.04.2016 for extension of affiliation for M.Com. (Advanced Accountancy) add division & M.A. in Sociology & Economics.
- Appointed as VC's nominee (Subject Expert) on the Selection Committee of JNF's Vande Mataram Degree College of Arts, Commerce & Science, Dombivli (W) for appointment of Principal & Asst. Professors, May 2016.

Dr. Mary Vimochana

- Chaired the Oral Paper presentation session on 14th December 2012, at St. Xavier's College, Tamil Nadu.
- From 23rd January, 2014 to 24th January, 2014, Dr Mary Vimochana was invited as a Guest Lecturer for Entrepreneurship Development Program for Women in Badlapur conducted by MSME, Sakinaka.
- Chairperson for Paper setting (Grade II) for Reserve Bank of India.
- Examiner for NABARD Officer's Exam

Ms. Nirmala Kannan

- Convener, Syllabus Committee, Department of Economics, University of Mumbai
- Examiner for NABARD Officer's Examination

Ms. Manisha Navale

- Examiner for NABARD Officer's Examination

Awards by students:

Following prizes were won by F.Y.B.Com students in 'Arth Manthan' intercollegiate festival, organized by Acharya Marathe College, Chembur, Mumbai on 6th and 7th December, 2012:

- Ms Sangeetha Londhe, Ms. Ritika Jain, Ms. Jinal Jain and Mr.Muthu Ganesh Thevar - Second Prize in the event Global Leaders Meet.
- Ms. Ritika Jain and Ms. Jinal Jain - Second Prize in the event Budding Economist.

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

- Dr. K. Narayanan, Professor and Head, Department of Humanities and Social Sciences, Indian Institute of Technology, Bombay.
- Dr. Sukumar Devotta- Ex-Director, NEERI
- Dr. Eric Zimmerman, Academic Secretary, Director of Research, Interdisciplinary Centre, Israel
- Dr. Sadhana Phadnis, Head, ICL Motilal Jhunjhunwala College, Vashi, Mumbai.
- Dr. G D Bino Paul, Tata Institute of Social Science, Mumbai.
- Dr. Archana Patankar, Assistant Professor, Somaiya Institute of Management, Mumbai.

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

- International Conference on “Information and Communication for Development- Reach, Impact, Opportunities and Challenges” held on 4th & 5th of October 2012 was organized by Departments of Humanities and Commerce of the College. Sources of funding – Management and Private.

26. Student profile programme/course wise

	Name of the Course/programme	Applications received	Selected	Enrolled		Pass % at TYBA TYBCom (Economics)
				*M	*F	
2011-12	F.Y.B.A	75	25	4	21	92
2012-13	F.Y.B.A	78	27	1	26	100
2013-14	F.Y.B.A	80	28	4	24	81.2
2014-15	F.Y.B.A	132	48	5	43	88
2015-16	F.Y.B.A	130	36	10	26	81.2
2011-12	F.Y.B. Com	578	229	94	135	98.23
2012-13	F.Y.B. Com	584	218	86	132	97.5
2013-14	F.Y.B. Com	618	245	108	137	93.80
2014-15	F.Y.B. Com	692	276	110	166	95.07
2015-16	F.Y.B. Com	715	264	91	173	91.67

27. Diversity of Students: 2015-2016

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
F.Y.B.A	96	4	Nil
F.Y.B.Com	97.35	2.27	0.37

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

services, etc.?

SLET: 01 (June, 2016)

29. Student progression (Last Five years)

Student progression	Against % enrolled
UG to PG	20% MA 30% M.Com
PG to M. Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	20% B. A.
• Campus selection • Other than campus recruitment	10% B.Com
Entrepreneurship/Self-employment	5% BA

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books: 2181
- Journals/Magazines: 10
- Department Library: 55 Reference books.

b) Internet facilities for Staff & Students:

- Department has a PC with internet facility which can be used by staff and students.
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision for OHP, LCD Projector and is Smart Board enabled.

d) Laboratories: Computer laboratories are used by staff and students as and when required.

31. Number of students receiving financial assistance from college, university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- The Department organizes guest lectures, workshops, crosswords, study trips, power point presentations, screening of documentaries, poster competitions and aptitude tests as enrichment activities for the students.
- The Department participates in organizing TALENTUEUX – an Intra & Intercollegiate Arts Fest every year where competitions like Eco Crossword, Poster making, PPT presentations are conducted.

33. Teaching methods adopted to improve student learning

- Lecture method is supported by Power Point Presentations, Screening

of Documentaries/Videos.

- Interactive approach – discussions
- Economics Dashboard displays information related to:
 - a) Trends in Aviation sector
 - b) Power sector industries
 - c) Budget

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

- Dr. Mary Vimochana helped in organizing activities and competitions (Essay and Poetry in Tamil) on the occasion of Women's Day for the members of various SHGs through St. Antony's Church, Bhandup (W), Mumbai. She also sponsored prizes for the winners.
- Staff were also appointed as PRO/ PO by Election Commission for Parliamentary and Assembly elections.

35. SWOC analysis of the department and future plans

Strengths:

- Number of students opting for Economics is increasing.
- Number of Publications of the faculty members has increased.
- Good rapport with students and alumni.

Weaknesses:

- Not many meritorious students (at entry level) opting for the subject.
- Most students are first generation U.G. students with not so good economic background.
- Limited access to technology at home.

Opportunities:

- To undertake major and minor research projects.
- Field visits and Guest lectures to give practical knowledge to students.

Challenges:

- To motivate more students to go for higher studies.
- Inculcate reading and research habits among students.

Future plans:

- Encourage Multidisciplinary research in collaboration with other departments as well as with other institutions and academic alliances.
- Introduce employment oriented/skill development short-term courses for students

1. **Name of the Department**– English
2. **Year of Establishment** -1983
3. **Names of Programmes/ Courses offered**– U.G. (B.A.)
Certificate Course in Conversational English (approved by University Of Mumbai)
4. **Names of Interdisciplinary courses and the departments/units involved**-Business Communication for B.Com
5. **Annual/ semester/ choice based credit system (programmewise) –**
 - U.G. –Credit Based Semester and Grading System
 - Certificate Course –Annual
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**

	Sanctioned	Filled
Professors	-	-
Associate Professors	-	-
Asst. Professors	2	2

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Ms. Sumali Bose	M.A., M.Phil., B.Ed	Assistant Professor	-	12	NA
Ms. Jyothi Sadasivam	M.A, M.Phil., SET	Assistant Professor	-	07	NA

11. **List of senior visiting faculty:** Nil
12. **Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:**
Ms. Shabana Sayyed handled 33% of the lectures in the year 2011-12
13. **Student-Teacher Ratio(programmewise):** BA- 82:1 B.Com- 132:1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:**
Administrative and technical staff of the college provide required assistance and support to the department.
15. **Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG.**
M. Phil. – 02
16. **Number of faculty with ongoing projects from a) National b)**

International funding agencies and grants received - Nil

17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received–

Ms. Jyothi Sadasivam - Principal Investigator for a Minor Research Project “Ascendancy of English as the Preferred Medium of Instruction in the Educational Institutions of Mumbai Suburbs - A Case Study of Bhandup” sanctioned by the University of Mumbai. Amount sanctioned was Rs. 25,000/- (2013-14)

18. Research Centre/ facility recognized by the University – Nil

19. Publications:

Publication per faculty

a. Number of papers published by faculty and students in peer reviewed national journals.

b. Number of papers published by faculty and students in peer reviewed International journals.

c. Chapter in Books

d. Books with ISBN/ISSN numbers with details of publishers

e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Mrs. Sumali Bose	02	-	01	-	02	05
2	Mrs. JyothiSadasivam	01	-	-	-	01	02

f. Number of publications listed in International Database Nil

g. Monographs Nil

h. Books Edited Nil

i. Citation index/ SNIP/ SJR/ impact factor/ h-index -

Details in Annexure – 3.4.3

20. Areas of consultancy and income generated: Nil

21. Faculty as members

International Committees: Nil

National Committees: Nil

Editorial Board:

Ms. Jyothi Sadasivam is Member of Editorial Board of College Magazine and ‘Epignosis’ an Interdisciplinary Journal (2012) published by the Departments of Humanities & Commerce. (No. of issue 01)

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental / programme: Nil

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies: Nil

23. Awards / Recognitions received by faculty and students:

Recognitions(Faculty)

Ms. Sumali Bose

- Subject Expert for revaluation of BC at MCC, Mumbai. Sep 2011 & Feb 2012
- Moderator for FC in S.M.Shetty College, Mumbai & in Dnyasadhana College, Thane. March 2012
- Moderator for CS under IDOL, Mumbai. May 2012
- Paper Setter for FYBSc(CS) & SYBSc (CS) Examination in the subject of FC, IDOL, Mumbai. 2012-2016
- Judged an event 'Crazy Words' an Intercollegiate Event – Vibration at DAV College, Mumbai. Jan 2016

Ms. Jyothi Sadasivam

- Resource Person for a Workshop on "Non-violent Communication" at Gandhi Studies Centre, CHM College, Thane - Oct 2014.
- Member, Organizing Committee, International Conference on 'Fourth World Literature' by Higher Education & Research Society (Pune).
- Member, Organizing Committee, International Conference on 'Comparative Literature & Culture' by Higher Education & Research Society, Nagpur.

Prizes won by students at Inter Collegiate Competitions

- Ms. Rodrigues Antoinette of TYBA won Third prize in 'Pick and Talk' and 'Phrase and Caption' competitions at Ramniranjan Jhunjhunwala College, Mumbai, Sep 2012.
- Ms. Sinimol Salimon of SYBA won Second Prize and received cash award of Rs. 500 in 'Poetry Translation Competition' at Maharshi Dayanand College of Arts, Sc. & Com, Mumbai, Sep 2013.
- Five students of the department won First prize in Quiz contest organized by American library. They also were awarded membership card for American library.
- Three students of the department participated in 'Black History Month Poetry Writing Competition' organized by American library. Their poems were anthologized in a booklet and were given free membership card of American library.

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

- Dr. A. F. Mathew, Associate Professor in Social Science from Indian Institute of Management (IIM), Kozhikode.
- Dr. Nila N, Assistant Professor in English from Mercy College, Palakkad, Kerala.

- Ms. Amrita Lal, a freelancer, for Workshop on ‘Interpersonal Communication Skills in English’

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

International Conference on “Information and Communication for Development- Reach, Impact, Opportunities and Challenges” held on 4th& 5th of October 2012 was organized by departments of Humanities and Commerce of the College. Sources of funding – Management and Private.

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYBA
				*M	*F	
2011-12	F.Y.B.A	75	23	03	20	100
2012-13	F.Y.B.A	78	28	05	23	100
2013-14	F.Y.B.A	80	24	-	24	100
2014-15	F.Y.B.A	132	35	03	32	100
2015-16	F.Y.B.A	130	28	02	26	100

27. Diversity of Students: 2015-2016

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	BA	89%	10%	Nil
2012-13	BA	88%	12%	Nil
2013-14	BA	96%	4%	Nil
2014-15	BA	100%	Nil	Nil
2015-16	BA	96%	4%	Nil

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

Authentic data is not available.

29. Students progression (2010-2015)

Student progression	Against % enrolled
UG to M.A, B. Ed, & Diploma	96%
PG to M. Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed • Campus selection • Other than campus recruitment	20%
Entrepreneurship/Self-employment	06%

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books: 1707
- Journals/Magazines: 04
- Department Library: 130 Reference books.

b) Internet facilities for Staff & Students:

- Internet facility in the staff room and in Teachers' Resource Centre for Staff. Students can access internet in library and computer labs

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories: Computer labs are used by staff and students as and when required.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- Ms. Mukadam Eram and Ms. Vinita Vijay Kumar Pal of SYBA attended UGC sponsored two-day National Seminar on 'From Script to Screen- Literature in Convergence' on 9th and 10th September 2011 at St. Andrews College of Arts, Sc. & Com, Mumbai.
- Ms. Lavanya Yadhav of FYBA & Ms. Antoinette Rodrigues of SYBA attended UGC Sponsored two day National Seminar on 'India in Contemporary Indian English Fiction' on 16th and 17th September, 2011 at SIES College of Arts, Sc. & Com. Sion.
- Ms. Jasmine Prakash, Ms. Malar Charles & Ms. Anshu Pandey attended a talk delivered by renowned bilingual poet Dr. Jaydeep Sarangi on 'Post Colonial Literature' on 29th November in Acharya Maratha College, Chembur.
- The Department participates in organizing TALENTUEUX – an Intra & Intercollegiate Arts Fest every year where events like 'What's the Good Word', Debates, 'Fun With Words', Calligraphy, Extempore, Elocution, Poetry writing, One Act Play, Book Reviews, Interaction with Authors, Preparing Advertisements, Group Discussions, Presentations, Seminars and Workshops are conducted.
- Mr. Ramesh Mishra from Times Institutes Pvt. Ltd., Campus Recruitment Training Head conducted a workshop on "Corporate Entry Mantra" on 3rd August 2016.

33. Teaching methods adopted to improve student learning

- Dramatization.
- Poetry Writing and Recitation.
- Developing critical thinking through article reading from prominent dailies and international and national magazines.

- Role play.
- Book-review.
- Seminars.
- Mock-interview.
- Screening of relevant documentaries and films.
- Presentations.
- Visits to libraries.

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

- The staff and students of the department are actively involved in the community oriented programmes organized by NSS and LLE units.
- Some of the students of SY & TYBA are engaged in coaching the underprivileged children in their respective localities.
- Staff were also appointed as PRO/ PO by Election Commission for Parliamentary and Assembly elections

35. SWOC analysis of the department and Future plans Strengths:

- Strengths**
- The department has consistently produced 100% passing results in TYBA University Examinations.
 - Several students are pursuing/ higher studies and are employed in academic institutions and in the media because of training/ guidance received during their UG studies.

Weaknesses

- A large number of the students are from vernacular medium with a very low proficiency in English language
- Students do not engage in sustained reading to gain knowledge and proficiency at individual level.

Opportunities

- Given the students' mediocre background, the English department through its Literary Society provides ample opportunities to the students to test and hone their potential through debates, elocution, creative writing, book reviews, and dramatization. Students need to be motivated enough to be part of these activities.
- Since department is consistently producing good results at University Examination an opportunity exists to produce Merit Rankers at University Examinations.

Challenges.

- To provide appropriate guidance to clear NET/SET exams
- To enable students to develop and consolidate proficiency in spoken and written English

Future plans

- To strive for increased enrolment and introduction of six units in English literature by following Governments norms.
- To organize intercollegiate workshops in Literature and Communication Skills for teachers/students.

1. **Name of the Department**– History
2. **Year of Establishment** -1983
3. **Names of Programmes/ Courses offered**– U.G. (B.A.)
Certificate Course in Tourism & Travel Management (approved by University Of Mumbai)
4. **Names of Interdisciplinary courses and the departments/units involved**-Nil
5. **Annual/ semester/ choice based credit system (programmewise) –**
 - U.G. –**Credit Based Semester and Grading System**
 - Certificate Course –**Annual**
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**

	Sanctioned	Filled
Professors	--	--
Associate Professor	01	01
Assistant Professor	--	--
CHB	01	01

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Ms.R.Vijaya lakshmi	M.A. M.Phil, LLM	Associate Professor	History	27	NA
Mr. Kunal Tambe	M.A.	CHB	History	02	NA

11. **List of senior visiting faculty** : Nil
12. **Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty:** 7 lectures - 28%
13. **Student -Teacher Ratio (Programme wise):**58: 01
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:**
Administrative and technical staff of the college provide required assistance and support to the department.
15. **Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG.**
M. Phil. – 01 M.A - 01

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received - Nil
17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received:

Research Projects sanctioned by University of Mumbai

Faculty	Title of the Project and Year	Grant Received
Ms. R. Vijayalakshmi P. I. (2011-12)	“Ecotourism- Lesser known places from Konkan Region”	Rs.25000/-
Ms. R. Vijayalakshmi Co. I. (2012-13)	“Ascendency of English as Preferred Medium of Instruction in the Educational Institutions of Mumbai Suburbs- A Case Study of Bhandup”	Interdepartmental (English)
Ms. R. Vijayalakshmi Co. I. (2012-13)	‘A Study of Poverty Indices in the Two Highest BPL Areas of Mumbai viz., Bhandup and Govandi	Interdepartmental (Sociology)

18. Research Centre/ facility recognized by the University – Nil

19. Publications:

Publication per faculty

a. Number of papers published by faculty and students in peer reviewed national journals.

b. Number of papers published by faculty and students in peer reviewed International journals.

c. Chapter in Books

d. Books with ISBN/ISSN numbers with details of publishers

e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Ms. R. Vijayalakshmi	-	01	-	-	06	07

f. Number of publications listed in International Database Nil

g. Monographs Nil

h. Books Edited Nil

i. Citation index/ SNIP/ SJR/ impact factor/ h-index

Details in Annexure – 3.4.3

20. Areas of consultancy and income generated: Nil

21. Faculty as members in National Committee /International Committees/Editorial Board

- Life Member, Tamil Nadu History Congress,
- Member, Indian History Congress,
- Member, Konkan Ithihas Parishad,
- Member, Mumbai History Teachers’ Association.

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/program :

As a part of the Certificate Course on Tourism and Travel Management all enrolled students have done projects. A few titles of the projects are: Discover Maharashtra, Eco Tourism, Adventure Tourism, Cuisines of India, Forts of Maharashtra, Famous Pilgrimage Places in India, The Impact of Tourism Development in India, Role of Communication in Tourism, etc.

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies : Nil

23. Awards/Recognitions received by faculty and students.

Mrs. R. Vijayalakshmi

- Recipient of the Best Senior Research Award from Mani Kamrekar Trust, 2015

Recognition

- Invited as Resource person to deliver a special lecture for T.Y.BA History students by V.P.M College of Arts and Commerce, Mulund, Mumbai 02/04/2013
- Appointed as Management Nominee – Subject Expert for Foundation Course by SIA College for Higher Education, Dombivili Thane 27/10/2013
- Appointed by the BOS (History) as Member in syllabus framing committee to prepare the TYBA syllabus implemented from 2013-14 onwards. .
- Recorded Lecture on Wiz IQ for Distance Education Students of M.A. Sem – I and II in the Subject of History of Contemporary India (1947-1984), SNDT Women’s University. 2013 -2014
- Visiting faculty for M.A. Programme at Mumbai University, from 2012 to 2014.
- Paper Setter and Moderator at TYBA (History –paper VI) University exams.
- Nominated as Subject Expert (VC’s Nominee) in History for the interview of Assistant Professor under Career Advancement Scheme (Stage I to II) at K.B.College of Arts and Commerce for Women, Thane. 12/04/2014
- Appointed as Paper-Setter, Examiner and Moderator in History Paper – IX – (Option – A) Archaeology and Heritage Tourism, University of Mumbai. -2014-2016
- Moderator for History Paper of S.Y.BA at K.G. Vaze College, Mulund – (E). 25/07/2015

- Moderator for History Paper of S.Y.BA – II & III at R.J. College of Arts, Commerce and Science, Ghatkopar – (W). -19/10/2015
- Resource Person on the topic “The Traditional Healing Modality of Ayurveda” for the Certificate Course in Indian Cultural Heritage Lecture (ICH), Jai Hind College, Mumbai.-18/12/2015

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

- **Dr. Preeta Nilesh**, Associate Professor, K.G. Vaze College of Arts, Science and Commerce, Mulund, Mumbai.
- **Dr. V. George** – Member, Board of Studies, History and Archaeology, University of Mumbai.
- **Dr. B. Khade** – Member, Board of Studies, History and Archaeology, University of Mumbai.
- **Dr. V. Mishra** – Member, Board of Studies, History and Archaeology University of Mumbai.
- **Dr. Sonali Pednekar** – Member, Board of Studies, History and Archaeology University of Mumbai.

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

- International Conference on ‘Information and Communication for Development- Reach, Impact, Opportunities and Challenges’ held on 4th & 5th of October 2012 was organized by Departments of Humanities and Commerce of the College. Sources of funding – Management and Private.
- Workshop on - Revised Syllabi of TYBA History papers – IV, V and VI” in association with the Board of Studies in History and Archaeology, University of Mumbai on 13th July 2013. Sources of funding – Management

26. Student Profile Programme / Course wise: Demand Ratio

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYBA
				*M	*F	
2011-12	F.Y.B.A	75	27	02	25	100
2012-13	F.Y.B.A	78	39	14	25	100
2013-14	F.Y.B.A	80	35	04	31	100
2014-15	F.Y.B.A	132	35	05	30	100
2015-16	F.Y.B.A	130	60	10	50	100

27. Diversity of Students: 2015-2016

Year	Name of	% of students	% of	% of
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	the Course	from the same state	students from other States	students from abroad
2011-12	BA	89%	11%	NIL
2012-13	BA	88%	12%	NIL
2013-14	BA	96%	04%	NIL
2014-15	BA	96%	04%	NIL
2015-16	BA	96%	04%	NIL

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

Authentic Data Not Available.

29. Students progression (2010-2015)

Student progression	Against % enrolled
UG to M.A, B. Ed, & Diploma	60%
PG to M. Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	
• Campus selection	--
• Other than campus recruitment	60
Entrepreneurship/Self-employment	40

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books:767
- Journals/Magazines: 05
- Department Library: 35 Reference books.

b) Internet facilities for Staff & Students:

- Internet facility in the Staff Room and in Teachers' Resource Centre for staff. Students can access internet in library and computer lab

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories: Computer labs are used by staff and students as and when required.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile..

32. Details on student enrichment programmes (special lectures / workshops /Seminar) with external experts:

- The Department participates in organizing TALENTUEUX – an Intra & Intercollegiate Arts Fest every year where competitions like Quiz,

Drama on Historical events, Patriotic song competition and Models related to Tourist and Heritage places etc. are conducted.

- Study tour to “Cultural Capital of Maharashtra –Pune” and Karla and Bhaja Caves at Lonavala.
- Visit to Chhatrapati Shivaji Sangrayala, Mumbai

33. Teaching methods adopted to improve student learning

- Use of ICT - OHP, Video Clippings, Documentary, Historical Films, Internet etc.
- Preparing the essential toolkit (Coins and Artifact pieces like ornaments etc) related to various topics.
- Use of Maps - India, Regional, World, Atlas.
- Showing photographs and pictures – Coins, Historical Personalities, Archaeological sites, Museums, Antiques etc.
- Visit to Museums in and around Mumbai and Pune.
- Visit to Heritage Sites, Historical Forts, Caves and Religious places in Maharashtra.
- Visit to Asiatic Society and Mumbai University Libraries.
- Role Play
- Dramatization
- Illustrating the topic with anecdotes, stories, folklore, etc.

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

- The students of the department are actively involved in the community oriented programmes organized by NSS and LLE units.
- Students have been trained in disaster management and participate as volunteers during Ganesh Utsav Celebrations in and around Bhandup.
- Students of the department actively participate in Students’ Council activities like visit to Orphanage and Old Age Home etc.
- Staff was also appointed as PRO/ PO by Election Commission for Parliamentary and Assembly elections.

35. SWOC analysis of the department and Future plans

Strength

- A good collection of teaching aids to create an interest in the subject.
- Field trips to various historical, heritage sites, museums, etc. are arranged to induce a better understanding of the subject.
- The department has consistently produced 100% results in TYBA (University examinations).

Weaknesses

- Many students are from vernacular medium and weak in English language.
- Lack of access to the Internet at home due to socio economic background of the students.

Opportunities

- To motivate students enough to do research with interdisciplinary approach.
- Scope for personality development by participating in Intra-class and Intercollegiate Events/competitions like – Seminars, Workshops to understand Ancient culture, studying Modi script, etc.

Challenges

- To keep pace with the process of globalization in the field of higher education.
- To encourage the students to do B.Ed, and pursue Courses in Archaeology, Museology and Library Science which will help them to make their career.

Future Plans

- Planning to start MPSC and UPSC training centre
- Coaching for B.Ed and TET (Teachers' Entrance Test).

1. **Name of the Department**– Marathi
2. **Year of Establishment**– 1983
3. **Names of Programmes/ Courses offered**– U.G. (B.A.)
4. **Names of Interdisciplinary courses and the departments/units involved**-Nil
5. **Annual/ semester/ choice based credit system (programmewise) – Credit Based Semester and Grading System**
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**

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

10.

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Dr. Aakanksha Gawde	MA., M.Phil, SET, NET & Ph. D	Associate Professor	Marathi Lit	24	Nil

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):**50: 1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:**
Administrative and technical staff of the college provide required assistance and support to the department.
15. **Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG.**
Ph.D- 01
16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received** - Nil.
17. **Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received**-Nil
18. **Research Centre/ facility recognized by the University**– Nil

19. Publications:

Publication per faculty

- a. Number of papers published by faculty and students in peer reviewed national journals.
- b. Number of papers published by faculty and students in peer reviewed International journals.
- c. Chapter in Books
- d. Books with ISBN/ISSN numbers with details of publishers
- e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Dr.Akanksha Gawde	01	-	01	-	-	02

f. Number of publications listed in International Database Nil

g. Monographs Nil

h. Books Edited Nil

i. Citation index/ SNIP/ SJR/ impact factor/ h-index

Details in Annexure – 3.4.3

Dr. Akanksha Gawde has published 05 articles in News papers and 04 articles in Magazines.

20. Areas of consultancy and income generated: Nil

21. Faculty as members in National Committee /International Committees/Editorial Board Nil

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental/program :

- 80% of students of Marathi department are involved in Life Long Learning & Extension project
- Two students of TYBA class participated in Avishkar Research Convention project 'Marathi Sahityatil Bakal Vasti Aani Aajcha Samaj'.

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies : Nil

23. Awards / Recognitions received by faculty and students:

Dr. Akanksha Gawde:

Awards

- Participated in National Level Sahitya Abhivachan Competition organized by Konkan Sahitya Parishad in 2011-2012 and received the following prizes
 - 1st Prize of Rs. 2000 & Trophy for script writing
 - 4th Prize for group presentation

- Received Special Appreciation Certificate for LLE work during the years 2010 to 2016 from Department of Life long Learning and Extension, University of Mumbai.

Recognitions:

- Appointed as Field –Coordinator of LLE unit by DLLE, University of Mumbai from 2002-03 till date.
- Appointed as member of the Ad-hoc Board of Studies in Extension work from 2016-17 to 2018-19 by University of Mumbai.

Students:

- Mr. Mahendra Chavan of FYBA bagged 1st prize in Marathi Slogan Writing competition organized by Marathi Aabhyas Kendra, University of Mumbai in 2010-2011.
- Mr. Jayesh Londhe of SYBA bagged 2nd prize for Marathi Natya Vachan competition organized by Department of Marathi, University of Mumbai under ZAPURZA – Utsav May Marathi cha on 26th February 2015.
- Ms. Akshata Shinde of TYBA bagged 3rd Prize for Singing competition organized by Department of Marathi, University of Mumbai under ZAPURZA – Utsav May Marathi Cha on 26th February 2016.

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

- Mr. Ram Joshi, Director & Actor of commercial Marathi Drama
- Mr. Kishor More, Actor in Marathi Drama
- Ms. Sharada Gangurde, Professor of Marathi in Ruia College

25. Seminars / conferences / workshops organized & the source of funding

International Conference on “Information and Communication for Development- Reach, Impact, Opportunities and Challenges” on 4th & 5th of October 2012 was organized by Departments of Humanities and Commerce of the college. Sources of funding – Management and Private.

26. Student Profile Programme / Course wise: Demand Ratio

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYBA
				*M	*F	
2011-12	F.Y.B.A	75	5	1	4	100
2012-13	F.Y.B.A	78	18	7	11	100
2013-14	F.Y.B.A	80	13	3	10	100
2014-15	F.Y.B.A	132	21	7	14	100
2015-16	F.Y.B.A	130	26	14	12	80

27. Diversity of Students: 2015-2016

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	BA	100%	Nil	Nil
2012-13	BA	100%	Nil	Nil
2013-14	BA	100%	Nil	Nil
2014-15	BA	100%	Nil	Nil
2015-16	BA	96%	4%	Nil

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

Authentic data not available

29. Students progression (2010-2015)

Student progression	Against % enrolled
UG to M.A, B. Ed, & Diploma	55%
PG to M. Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed • Campus selection • Other than campus recruitment	Nil 60%
Entrepreneurship/Self-employment	10%

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books:758
- Journals/Magazines: 02
- Department Library: 30 Reference books.

b) Internet facilities for Staff & Students:

Internet facility in the Staff Room and in Teachers' Resource Centre for Staff. Students can access internet in library and computer lab

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories: Computer labs are used by staff and students as and when required.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / Seminar) with external experts:

- Organized workshop on preparation for competitive Examinations in the year 2012-13.
- Marathi Vangmaya Mandal celebrates ‘Aashadhi – Ekadashi’ & ‘Marathi Bhasha Din’ with various Literary activities like Abhang Gayan , Creative writing , Slogan writing , Critical Analysis of books, Exhibition etc. as annual feature of the department.
- Since 2014-15, the Department of Marathi has been bringing out annually a Hastalikhit Magazine –named ‘SPANDAN’ with various creative & literary articles by Marathi Students.
- Every year students are taken for commercial drama in ‘GADKARI-RANGAYATAN’ Thane (West). The same drama is critically analysed to understand the nuances and develop a positive attitude towards ‘Marathi Drama’
- The Department participates in organizing TALENTUEUX – an Intra & Intercollegiate Arts Fest every year where events like ‘Natya Abhiwahan’, Quiz, & Mono Acting, etc. are organized.

33. Teaching methods adopted to improve student learning

Dramatization, Open discussion and use of ICT.

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

- Through the watching of plays in theatres, students have been able to create interest for art in their families and neighborhood and thus promote art and literature.
- The students also perform street plays in Marathi on social issues in the neighborhood.
- As members of LLE, students participate in creating awareness about the National Institute of Open Schooling (NIOS) in the community
- Staff was also appointed as PRO/ PO by Election Commission for Parliamentary and Assembly election.

35. SWOC analysis of the department and Future plans

Strengths:

- Positive attitude of students towards the activities conducted by the Department which gives them adequate learning experience.
- Consistently good results at University Examinations

Weaknesses: - Enrolment of students is decreasing over the years.
Not too much scope to use ICT tools because of the nature of subject.

Opportunities: - Marathi Literature Studies provide job opportunities in Teaching, Journalism & Media and State Government Service. Students need to be adequately motivated.

Challenges:- Globalization and popularity of English language is reducing the preference for Marathi language and hence it’s a huge challenge to motivate students to learn a regional language like Marathi.

Future Plans:-

- To create adequate awareness about importance of Marathi Literature.
- To inspire maximum students to opt for Marathi Literature as their main subject in academic career.

Department of Political Science

1. **Name of the Department**– Political Science
2. **Year of Establishment** -1983
3. **Names of Programmes/ Courses offered**– U.G. (B.A.)
4. **Names of Interdisciplinary courses and the departments/units involved** Foundation Course
5. **Annual/ semester/ choice based credit system (programmewise) – Credit Based Semester and Grading System**
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**

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

10.

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Dr. Saraswathi Unni	M.A., M.Phil, Ph.D.	Associate Professor &HOD	Public Policy	29	NA
Ms.Sangeeta Roy	M.A(P.S.) M.A. (Eng Lit), SET,NET, PGDJMC	Associate Professor	Migration Studies	22	NA

11. **List of senior visiting faculty:** Nil
12. **Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:** Nil
13. **Student-Teacher Ratio(programmewise):** 41:1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:**
Administrative and technical staff of the college provide required assistance and support to the department.
15. **Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG.**
Ph.D. – 01 P.G. – 01

16. Number of faculty with on going projects from a) National b) International funding agencies and grants received - Nil

17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received

Minor Research Project on ‘Functioning of Balwadis and Anganwadis in S Ward of Mumbai Municipal Corporation’, funded by Mumbai University (Rs 10,000/- in the year 2011-12.)

18. Research Centre/ facility recognized by the University – Nil

19. Publications:

Publication per faculty

a. Number of papers published by faculty and students in peer reviewed national journals.

b. Number of papers published by faculty and students in peer reviewed International journals.

c. Chapter in Books

d. Books with ISBN/ISSN numbers with details of publishers

e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Dr.Saraswathi Unni	02	02	01	-	06	11
2	Ms.Sangeeta Roy	01	-	-	-	05	06

f.Number of publications listed in International Database Nil

g.Monographs Nil

h.Books Edited Nil

i.Citation index/ SNIP/ SJR/ impact factor/ h-index -

Details in Annexure – 3.4.3

20. Areas of consultancy and income generated:Nil

a) Publication per faculty

21. Faculty as members

International Committees:

Dr. Saraswathi Unni:

- Member,European Society for Ecological Economics (ESEE)
- Member, International Political Science Association (IPSA)

National Committees:

Dr. Saraswathi Unni:

- Member, Indian Political Science Association(IPSA)
- Member, Indian Institute of Public Administration.
- Member, Indian Political Economy Association.

Ms.Sangeeta Roy

- Vice President, MST (Mumbai School of Thoughts), Mumbai.

Editorial Board:Nil

22. Student projects:

- a) **Percentage of students who had one in-house projects including interdepartmental/ programme:** Nil

Avishkar Research Convention Projects

Ms. Bushra Kunain of TYBA participated in the Avishkar Research Convention 2015-16 and presented her project titled “An assessment on the working of the Post-Matric Scholarship programme of the Government of Maharashtra” (Period 2012-13 to 2014-15) .

- b) **Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories / Industry / other agencies:**
Nil

23. Awards /Recognitions received by faculty and students:

Recognitions(Faculty)

Dr. Saraswathi Unni

- Appointed Member of the Syllabus Review Committee for SYBA Paper III and TYBA Paper-VIII - November 2011, by University of Mumbai
- Invited as Subject Expert for placement interview at Bandodkar College, Mumbai- 2014.
- Chairperson at the Technical Session on Environment and Development at the Annual Conference of Indian Political Science Association, Banaras Hindu University - October 2016.
- Chairperson for Paper VI at TYBA University Examinations, Sem V&VI from 2015-16 onwards

Ms. Sangeeta Roy

- Appointed as Subject Expert at St Xavier’s College, Mumbai as the Management Nominee - 16/7/14

Prizes won by students at Inter Collegiate Competitions

- Mr. Anish Nair won I prize as well cash award of Rs.3000/-at Homejee Cursetjee Dady Prize Essay Competition(Nov. 2011) and also qualified at the Zonal level for the project ‘United States of the World’ at Avishkar Research Convention organized by University of Mumbai.(Dec 2011)
- Ms. Bushra Kunain won II prize in the intercollegiate student seminar organized by R.J College, Mumbai on Feb. 2014.

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

- Mr Prakash Shrivastava, Co-ordinator, India against Corruption Mumbai, delivered lecture on Jan Lok Pal Bill –July 2011
- Dr. Ramesh Gyawali, Kathmandu University School of Management delivered lecture on ‘Information and Communication for Development: Country Experience-Nepal’ – Oct. 2012.

- Dr. Maneesha Tikekar, Head, Department of Political Science, SIES College Mumbai, delivered lecture on Indo-Pak relations Jan- 2012.
- Mr. Azad Singh, Documentary Film Maker and alumnus of the Department organized workshop on Mini Theatre- Aug 2015.
- Mrs. Sunita Godbole, Founder and President, Women’s Legal Forum for Cooperative Housing Societies and an alumnus of the Department delivered lecture on Careers in Administrative Services- Feb. 2016.
- Mrs. Karuna Shripad, Class I Officer, Ministry of Labour, Govt. of India and an alumnus of the Department delivered lecture on The Need For Sincere and Motivated Candidates in the Civil Services – Jan. 2015
- Mr. Pablo J. Tutilo and Ms. Britney Stewart, Asst. Cultural Affairs Officers in the U.S. Consulate, Mumbai delivered lecture on Presidential Elections in America – July 2016.

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

International Conference on “Information and Communication for Development- Reach, Impact, Opportunities and Challenges” held on 4th& 5th October 2012 was organized by Departments of Humanities and Commerce of the College. Sources of funding – Management and Private.

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYBA
				*M	*F	
2011-12	F.Y.B.A	75	26	02	24	100
2012-13	F.Y.B.A	78	45	11	34	100
2013-14	F.Y.B.A	80	39	10	29	100
2014-15	F.Y.B.A	132	63	12	51	100
2015-16	F.Y.B.A	130	69	20	49	100

Ms.P.Meghana Cyriac secured 3rd Rank at the Final Year University Examination in March 2011.

27. Diversity of Students: 2015-2016

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	BA	92.3	8	Nil
2012-13	BA	89	11	Nil
2013-14	BA	98	2	Nil
2014-15	BA	94	6	Nil
2015-16	BA	96	4	Nil

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

Mr. Anish Nair cleared the NET examinations in the subject of Political Science, 2016.

29. Student progression (Last Five years)

Student progression	Against % enrolled
UG to PG	21
PG to M. Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	NA
• Campus selection • Other than campus recruitment	
Entrepreneurship/Self-employment	5

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books:753
- Journals/Magazines: 05
- Department Library: 26 Reference books.

b) Internet facilities for Staff & Students:

- Department has a PC with internet facility-can be used by staff and students.
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories: Computer labs are used by staff and students as and when required.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- Students of TYBA attended a National Seminar on the Disputes of South China Sea at the Department of Civics and Politics, University of Mumbai on 3rd and 4th February, 2014
- Ms Bushra Kunain from TYBA, Mr. Abhijeet Salve, Mr. Hari Iyer from FYBA attended the Youth Parliament organized by St Xavier's College on 8th and 9th February, 2016.

- SY and TYBA students from the Department of Political Science attended an International Seminar on West Asia organized by the Dept. of Civics and Politics, University of Mumbai on 1st, 2nd and 3rd February, 2016

In the Annual Arts Intercollegiate Festival TALENTUEUX, following were the activities conducted:

- 2013-14 Mock Election Campaign (16 colleges participated)
- 2014-15 Elocution Competition on the topic 'Presidential vs Parliamentary Form of Government' (21 colleges participated)
- 2015-16 Poster making on the topic "Youth & Environment" (20 colleges participated)
- 2016-17 Elocution Competition on the topics :
 - ✓ Swachh Bharat Abhiyan
 - ✓ Role of Regional Organisations in International Relations (24 colleges participated)

33. Teaching methods adopted to improve student learning

News Reviews, Film Screening and Reviews, Survey techniques to enhance community level activities.

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

- A comprehensive study of the functioning of the Integrated Child Development Services (ICDS) programme through the Balwadis and Anganwadis in S-ward of MCGM has been made by the staff and students. In this context students and staff conducted bi-annual survey of the 32 Balwadis and 04 Anganwadis in "S" ward. They were assessed on criteria like Number of Students per Balwadi/Anganwadi, Dropout rate per year, Daily educational programme, Monthly health programme and facilities, Level of satisfaction of parents and Problems faced by staff. The report was submitted to the Ward Officer of the MCGM.
- Human Rights Day is observed every year with Street Play and Community Awareness Campaign on Right to Education in Adivasipada, Bhandup (W). Pamphlets and educational kits are also distributed to the children in the area.
- Health related exhibitions were also conducted by the SYBA students at Jungal Mangal area of Bhandup, Mumbai.
- Students are involved in preparing educational materials/Aids for the children of Anganwadi. They also celebrate special days like Children's Day, Independence Day, Diwali, Holi etc with the children. Students are thus exposed to the weaker sections of society and the values of social and community responsibility are inculcated in them.
- The Department launched the Voter Awareness Campaign in

collaboration with the Government of Maharashtra. The campaign was conducted in the areas of Jangal Mangal Road, Bhattipada, Tembhipada, Khindipada and Drakshabaug of Bhandup

- The Department has been observing the Constitution Day on 26th November for the last two years by preparing slogans and exhibits on the importance of the day. The Department also awarded 3 prizes for the best slogans.

35. SWOC analysis of the department and future plans

Strength:

- Student teacher ratio is conducive for close mentoring of students resulting in visible indicators of development.
- Consistently good result at the TYBA University Examinations.

Weaknesses:

- Not many students with potential for excellence are opting for the subject.
- Most of the students are not proactive in participating in various co-curricular/ extracurricular activities.

Opportunities:

- Department can apply for Training Centre for Civil Services
- Department can liaise with local and state governments to appoint students as apprentices

Challenges:

- To motivate students to go for higher studies.
- To generate enough interest among students in appearing for competitive examinations.

Future Plans:

- Setting up of Training Centre for Civil Service Examinations, both for our students as well as the community.
- To introduce Film Appreciation Course for budding journalists
- To strengthen collaboration with S ward in providing better inputs for Balwadis.

Department of Sociology

1. **Name of the Department**– Sociology
2. **Year of Establishment** -1983
3. **Names of Programmes/ Courses offered**– U.G. (B.A.)
4. **Names of Interdisciplinary courses and the departments/units involved**-Nil
5. **Annual/ semester/ choice based credit system (programmewise) – Credit Based Semester and Grading System**
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**

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

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Ms. Jennifer Coutinho	M.A.,SET, PGDJMC	Assistant Professor	-	16	NA

11. **List of senior visiting faculty:** Nil
12. **Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:** Nil
13. **Student-Teacher Ratio(programmewise):** BA- 135:1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:**
Administrative and technical staff of the college provide required assistance and support to the department.
15. **Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG. P.G. – 01**
16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received - Nil**
17. **Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received**

Ms. Jennifer Coutinho – Principal Investigator for a Minor Research Project titled “A Study of Poverty Indices in the Two Highest BPL Areas of Mumbai viz., Bhandup and Govandi : Case Study of Chamunda Nagar and Shivaji Nagar Slums’, sanctioned by the University of Mumbai. Amount sanctioned – Rs 40000/-.

18. Research Centre/ facility recognized by the University – Nil

19. Publications:

Publication per faculty

a. Number of papers published by faculty and students in peer reviewed national journals.

b. Number of papers published by faculty and students in peer reviewed International journals.

c. Chapter in Books

d. Books with ISBN/ISSN numbers with details of publishers

e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Ms. Jennifer C.	02	02	-	-	01	05

f. Number of publications listed in International Database Nil

g. Monographs Nil

h. Books Edited Nil

i. Citation index/ SNIP/ SJR/ impact factor/ h-index -

Details in Annexure – 3.4.3

20. Areas of consultancy and income generated: Nil

21. Faculty as members International Committees National Committees/ Editorial Board.

Ms. Jennifer Coutinho, Member, Editorial Board, Epignosis, Interdisciplinary Journal published by the College, Vol.1, January 2013

22. Student projects:

a) Percentage of students who have done in-house project including inter departmental/programme:

TYBA Sociology students have done projects as part of their Internal Assessment evaluation

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies: Nil

23. Recognitions received by faculty and students:

Recognitions (Faculty)

- Appointed by the BOS (Sociology) as Member of Syllabus Framing Committee to prepare the new SYBA syllabus implemented from 2012-13 onwards, by University of Mumbai
- Appointed by BOS (Sociology) as Convener of Syllabus Committee to prepare the new syllabus of TYBA V-Agrarian

Sociology, implemented from 2013-14 onwards, by University of Mumbai.

- Resource Person at ‘Bandh-Anubandh’- a short film festival on relationships organized by Departments of Psychology and Sociology, K. G Vaze College, Mulund, Mumbai on 4th Feb. 2014.
- Resource Person at the workshop on “Motivating Youth for Rural Re-construction” organized by NSS unit, Ratnam College and National Council of Rural Institutes on 8th March 2014.
- Resource person for ICOR (Institute for Community Resource Organization), an NGO on voluntary basis. Resource person for guiding MA students in their internship programme.
- Paper Setter and Examiner at TYBA University examinations.

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

- Dr. P. S. Vivek, Head of Department of Sociology, University of Mumbai on “Relevance of Sociology Today”.
- Adv. Shweta Shalini of the Documentation, Research and Training Centre (DRTC), Goregaon, on ‘The Law and You’-to familiarize students with constitutional rights and how to exercise them in everyday life.
- Dr. A F Mathew, Associate Professor, IIM, Kozikode, Kerala.
- Dr. Eric Saranowitz, Associate Dean, Academics and Research, 9.9 School of Communication, New Delhi.

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

- International Conference on “Information and Communication for Development- Reach, Impact, Opportunities and Challenges” held on 4th & 5th October 2012 was organized by Departments of Humanities and Commerce of the College. Sources of funding – Management and Private.

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYBA
				*M	*F	
2011-12	F.Y.B.A	75	42	04	38	100
2012-13	F.Y.B.A	78	55	09	44	100
2013-14	F.Y.B.A	80	65	08	57	100
2014-15	F.Y.B.A	132	77	08	69	93.1
2015-16	F.Y.B.A	130	68	57	11	90.9

27. Diversity of Students: 2015-2016

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
F.Y.B.A	96	4	NIL

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

29. Student progression (Last Five years)

Student progression	Against % enrolled
UG to PG	43
PG to M. Phil.	--
PG to Ph.D.	--
Ph.D. to Post-Doctoral	--
Employed • Campus selection • Other than campus recruitment	--
Entrepreneurship/Self-employment	--

30. Details of Infrastructural facilities**a) Library**

- In Central Library: No. of Text books/Reference books:861
- Journals/Magazines: 04
- Department Library: 55 Reference books.

b) Internet facilities for Staff & Students:

- Department has a PC with internet facility-can be used by staff and students.
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories: Computer labs are used by staff and students as and when required.

31. Number of students receiving financial assistance from college, university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- Regular screening of films on topics related to syllabus and social issues followed by discussions
- Field visits
- Visit to orphanages, oldage homes and shelters for abandoned.
- Guest lectures

- Seminars and competitions.
- The Department participates in organizing TALENTUEUX – an Intra & Intercollegiate Arts Fest every year where many competitions like debates, short film and photography, etc. are organized.

33. Teaching methods adopted to improve student learning

- Structured lecture presentation (paraphrasing, coding, etc.)
- Computerized database for study material, e-references, etc. are provided to students.
- Social outreach activities for further Social consciousness.
- Seminars & presentations by students
- Field visits & study tours for experiential learning
- Learning through Screening of films and documentaries related to syllabi.
- Sharing life experiences & use of humour in lecture delivery.

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

- As the WDC convener/member Mrs. Jennifer C has worked for social issues like gender sensitization, health and hygiene of girl students etc.
- The students of the Department regularly visit homes for the elderly, orphanages and shelters for the abandoned.
- Staff was appointed as PRO/PO by Election Commission for Parliamentary and Assembly elections.

35. SWOC analysis of the department and Future plans Strengths:

Strengths

- Producing 100% passing result with increasing numbers of students securing O & A grades at TYBA University Examinations.
- Increased community outreach activities – visits to homes for the elderly /Senior Citizen homes, orphanages and shelters for the abandoned.
- Computerized database of all lecture points, notes and references.

Weaknesses

- Majority of the students are from a weak academic background, lack communication skills and the ability to think and make independent decisions.
- Basic academic foundation is weak and hence inability to cope under pressure

Opportunities

- To make students think sociologically more field visits, academic tours, film screenings and reviews, presentations, social outreach activities can be organized which will help in the grooming of personality and develop consciousness of the world around.

Challenges

- To inculcate a reading, application and research mindset among students
- To make Sociology popular among students by highlighting its employability.

Future plans

- Student level: To improve the quality of student performance, encourage research activities and enhance quality of student enrichment programmes.
- Staff level: To improve academic qualifications, organize syllabus related programmes.
- Department level: To strengthen linkages of alumni with college/dept., increase co-ordination with NGOs, increase use of technology and provide subject-related career guidance.

SCIENCE FACULTY

Department of Chemistry

1. **Name of the Department**– Chemistry
2. **Year of Establishment**– 1983
3. **Names of Programmes/ Courses offered**–
 - **U.G. (B.Sc.)**
 - **P.G. (M.Sc.)** w.e.f. 2016-17
 - Certificate Course in Instrumental Analytical Techniques (approved by University of Mumbai)
4. **Names of Interdisciplinary courses and the departments/units involved**-Nil
5. **Annual/ semester/ choice based credit system (programmewise)**
 - U.G.& P.G. –**Credit Based Semester and Grading System**
 - Certificate Course –**Annual**
6. **Participation of the department in the courses offered by other Departments**Nil
7. **Courses in collaboration with other universities, industries, foreign institutions etc.**NA
8. **Details of courses/ programmes discontinued (if any) with reasons:**
Nil
9. **Number of teaching posts**

	Sanctioned	Filled
Professors	-	-
Associate Professors	03	03
Asst. Professors	03	03

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Ms. V. Lakshmi Prasuna	M.Sc.	Associate Professor & Head	Inorganic Chemistry	33	NA
Dr. Neelam Durani	M.Sc., Ph.D.	Associate Professor & Vice Principal	Organic Chemistry	25	Nil
Ms. Phebe Kingsley	M.Sc, M.Phil, M.Ed, NET	Associate Professor	General Chemistry	19	NA
Dr. Medha Sunder Rajan	M.Sc, Ph.D.	Assistant Professor	Analytical Chemistry	12	Nil
Dr. Jayasree G.	M.Sc, NET Ph.D	Assistant Professor	General Chemistry	16	NA
Dr. Kiran Upar	M.Sc. Ph.D	Assistant Professor	Organic Chemistry	04	NA

11. List of senior visiting faculty : Nil
12. Percentage of lectures delivered and practical classes handled (Programme wise) by temporary faculty: NA
13. Student -Teacher Ratio (Programme wise):UG- 34:1,PG- 24:1
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:
Department has two lab assistants and two lab attendants. Technical staff of college help in maintaining ICT tools. Administrative staff of the college provide required assistance and support to the department.
15. Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG.
PG –01 M.Phil – 01 Ph.D –04
16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received–Nil
17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received.
 - Department has undertaken **eight minor research projects** funded by **University of Mumbai** in the last five years.

Faculty	Title of the Project and Year	Grant Sanctioned
Dr.Neelam.D. (P.I.) Ms.V. Lakshmi P. (Co. I) Ms.Phebe K. (Co. I)	Assessment of Caffeine content in some Indian tea brands (2011-12)	Rs 25,000/-
MsV.Lakshmi P. (P.I.) Dr.Neelam.D (Co. I) Dr.Jayasree.G (Co. I)	A comparative study of bio- sorption of certain heavy metals by lignocellulosic agricultural by products (2012-13)	Rs 21,400/-
Dr. Jayasree.G (P.I.)	Biological and Chemical monitoring of road side plants exposed to vehicular pollution in central belt of Mumbai (2012-13)	Rs 21,400/-
Dr. Medha.S (P.I.) Dr. Jayasree.G(Co. I) Ms. Phebe.K (Co. I)	A comparative study of effectiveness of different solvents to extract wax from press cake-a byproduct of sugar industry (2012-13)	Rs 26,400/-
Dr. Jayasree.G(Co-I)	Green synthesis of gold nano particles using some tuber extracts and it's characterization. (2013-14)	Interdepartmental (with Botany)
Dr.Jayasree.G(Co-I)	Study of bioremediation ability of some bacterial species on azo / direct dyes and effluent from textile industry.(2013-14)	Interdepartmental (with Zoology)
Dr.Jayasree.G(Co-I)	Dyes reduction by Fungi mediated silver nano particles.(2014-15)	Interdepartmental (with Botany)
Ms. V. Lakshmi P. (P.I.) Dr.Jayasree.G (Co. I)	Phyto-mediated synthesis of palladium nanoparticles, their characterization and investigation of its role as catalyst in reduction of 4-nitrophenol(2015-16)	Rs 25,000/

- **Dr. Medha SundarRajan** was Co- investigator for the UGC sponsored project “Response of VAM Fungi to Sewage Irrigation and Chemical Fertilizers on Napier Grass” – 2010-12(Interdepartmental – Botany)
(P.I. Principal Investigator Co. I Co Investigator)

18. Research Centre/ facility recognized by the University – Nil

19. Publications:

Publication per faculty

a. Number of papers published by faculty and students in peer reviewed national journals.

b. Number of papers published by faculty and students in peer reviewed International journals.

c. Chapter in Books

d. Books with ISBN/ISSN numbers with details of publishers

e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Ms. Lakshmi P.	-	-	-	-	01	01
1	Ms. Phebe.K	-	02	-	-	09	11
2	Dr. Medha S.	-	-	-	-	06	06
3	Dr. Jayasree. G.	-	-	-	-	16	16
4	Dr. Kiran U.	-	-	-	-	01	01

f. Number of publications listed in International Database Nil

g. Monographs Nil

h. Books Edited Nil

i. Citation index/ SNIP/ SJR/ impact factor/ h-index

Details in Annexure – 3.4.3

20. Areas of consultancy and income generated: Nil

21. Faculty as members in National Committee/International Committees/Editorial Board

- **Members of Association of Chemistry Teachers (ACT –Mumbai)**
Ms.V. Lakshmi Prasuna, Dr. Neelam Durani, Ms. Phebe Kingsley,
Dr. Medha Sunder Rajan and Dr. Jayasree. G
- **Member of School of Analytical Chemistry (BARC)– Dr. Medha .S**

22. Student projects

c) Percentage of students who have done in-house projects including inter departmental/program :

As part of the Certificate Course on Instrumental Analytical Techniques all enrolled students undertake project work.

Following students have participated in Avishkar Research Convention of Mumbai University:

- Ms. Nikita.F and Ms.Yadav Upama presented a project on Milk Adulteration and Testing on 10.12.13 at Zonal level.
- Ms. Meera Krishnan and Ms. Sweetlin Nadar presented a Project on ‘A Novel Diagnostic Indicator of Pollution’ on 8.12.

2015 at Zonal level. This project was selected for district level which was presented at Ruparel College on 17.12. 2015

d) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies :

- **NIUS (National Initiative of Undergraduate Studies):**
Mr. NeeteshYadav and Ms. Komal Chauhan were selected for and completed the first level a 10 day residential camp from December 23, 2015 to January, 2, 2016, at HBCSE, Anushakti Nagar, Mumbai.
Ms.Komal Chauhan was selected for a two year project based activity under NIUS Chemistry (Batch XII -2015-17) organized by HBCSE, Mumbai.
- A team of eight students of B.Sc. were given hands on training in compact Biogas Technology (setting up of a biogas plant) at Appropriate Rural Technology Institute (ARTI), a Rural Entrepreneurship Development Centre at Phaltan, Dist. Satara, Maharashtra on April 27, 2016.

23. Awards/Recognitions received by faculty and students.

Faculty (Awards)

Dr. Jayasree .G

- Second Prize in the paper presentation at the National Conference on ‘Recent trends in Coordination Chemistry’ at Karmaveer Bhaurao Patil College, Vashi, Mumbai.
- ‘Best Research Paper’ presentation award at the National Conference on ‘Green Chemistry’ at M.D.College, Parel, Mumbai.

Faculty (Recognition)

- Ms. Phebe K. has been on the Syllabus Revision Committee for Analytical Chemistry for the past three years:2013-14-FYBSc, Chemistry, Paper-I; 2014-15-SYBSc, Chemistry, Paper-I & 2015-16-TYBSc, Chemistry, Paper IV
- Ms V. Lakshmi Prasuna was on the Syllabus Revision Committee, TYBSc, Chemistry Paper- II, 2015-16
- MsV. Lakshmi P is appointed as Paper Setter and Moderator for paper II of T.Y.B.Sc. at the University examination from 2011-12 to 2015-16
- Dr. Neelam.D - appointed as Paper Setter and Moderator for AC-I of T.Y.B.Sc. at the University examinations from 2011-12 to2015-16
- MsPhebe. K - Moderator for Paper I- T.Y.B.Sc Sem VI 2015-16
- Dr.Jayasree G - Moderator for P III of T.Y.B.Sc Sem V and Moderator for AC paper of T.Y.B.Sc Sem VI at Vaze College 2015-16
- Dr. Neelam D. was invited as Subject Expert – CAS Interviews at R. Junjunwala College, Ghatkopar, Mumbai on 26.09.13

Recognitions received by students

- Ms. Komal Chauhan was selected among 47 students from 18 states for the second level of training by NIUS organized by HBCSE.
- Ms. Abhilasha Shinde & Ms. Gauri Mandhare of F.Y.B.Sc won Second prize in Gignosco–2012-Poster Presentation at Guru Nanak College, Mumbai.
- Ms. Sujata Malunekar & Ms. Anita Mishra of S.Y.B.Sc won First Prize in Chem Fest AL-KIMIYA – Poster Making at Patkar College, Mumbai.
- Ms. Shradha Shelar of T.Y.B.Sc was selected as Best Outgoing student for the year 2013-2014 by the College
- Mr Prince Mishra and Mr Mohit Upadhyay won Second Prize Chem Fiesta-2016 at Guru Nanak College, GTB Nagar, Mumbai.
- Ms Vishal Shahani (S. Y. B.Sc.), Ms Premlata Bind (F.Y. B.Sc) won Second Prize in 3D Model Making Dodgeball quiz - RASAYAN 2015' at K.J. Somaiya College, Mumbai.
- Seven students of F.Y. B.Sc won Prizes in Chem Housie – AlChemia 2016 Competition and a Rolling Trophy for maximum participation in all the events at Xavier's College, Mumbai

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

- Ms Deepti Deshpande, Forensic Science Department, Kalina, Mumbai.
- Dr. Sandip Kar & Dr.G.Rajaraman, Assistant Professors, Department of Chemistry, IIT Bombay
- Dr. Sitaram Dixit, Mr. Israney Naren, Mr. Gajanan Patil Chair person of Consumer Guidance Society of India (CGSI), Secretary of CGSI & Programme Officer of CGS respectively.
- Dr. Sourav Pal, Director, NCL, Pune.
- Dr. A.K. Srivastava, Professor, Department of Chemistry, University of Mumbai
- Dr. Amitav Das, Professor, NCL, Pune.
- Dr. G. Nageswara Rao, Professor, Andhra University, Vizag
- Dr. A. K. Tyagi, Scientist, BARC, Mumbai.
- Dr. Prabodh Chobe, Ex-Senior General Manager, BASF Group, India
- Dr. B. M. Bhanage, Professor, ICT, Mumbai
- Dr. S. Mazumdar, Professor, TIFR, Mumbai
- Dr. Lakshmi Ravi Shankar, Associate Professor, Department of Chemistry, Kelkar Vaze College, Mumbai

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

- National Conference on ‘Recent Developments in Synthetic and Materials Chemistry on 16th & 17th January, 2015 in collaboration with ACT (Association of Chemistry Teachers) funded by UGC & RCF.
- Workshop on revised syllabus of S.Y.B.Sc. in collaboration with Board of Studies in Chemistry, University of Mumbai on 23rd April 2015.

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYB.Sc. (Chemistry)
				*M	*F	
2011-12	F.Y.B.Sc.	287	115	69	46	94.1
2012-13	F.Y.B.Sc.	282	108	53	55	89.0
2013-14	F.Y.B.Sc.	218	100	40	60	95.0
2014-15	F.Y.B.Sc.	265	116	52	64	100
2015-16	F.Y.B.Sc.	295	105	43	62	78.3

27. Diversity of Students: 2015-2016

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	B.Sc.	93.91	6.08	Nil
2012-13	B.Sc.	88.8	11.11	Nil
2013-14	B.Sc.	94.0	6	Nil
2014-15	B.Sc.	93.96	6.03	Nil
2015-16	B.Sc.	91.42	8.57	Nil

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

As per the data available following examinations are cleared by the students:

- PET (Ph.D. Entrance Test) - 03
- CAT - 01
- IELTS - 02

29. Students progression (last four years)

Student progression	Against % enrolled
UG to P.G	42.26%
PG to M. Phil.	NA
PG to Ph.D.	4.12 %
Ph.D. to Post-Doctoral	NA
Employed • Campus selection • Other than campus recruitment	data not available 36.08%
Entrepreneurship/Self-employment	1.01%

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books: 1752
- Journals / Magazines: 16
- Department Library: 154 Reference books.

b) Internet facilities for Staff & Students:

- Department has a PC with internet facility-can be used by staff and students.
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories: 2 U.G & 1 P.G.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- As part of SCI-Trek– an Intra & Intercollegiate Science Fest competitions like Chem Housie, Chem Aptitude, Chem Parody, Chem Periodic tables, Crosswords and Poster making are organized.
- As part of study tour students are taken to research organizations and industries.
- Guest lectures are arranged for the students.
- Students are encouraged to participate in the National Programme on Technology Enhanced Learning (NPTEL). As part of the programme final year students participated in an online course on Nuclear Magnetic Resonance(NMR).

33. Teaching methods adopted to improve student learning

To make class room teaching effective and to encourage student's participation, different teaching methods are followed.

- Lecture method aided by
 - ✓ PowerPoint presentation of the topic
 - ✓ Projection of diagram
 - ✓ Models
 - ✓ Summarizing the main points
 - ✓ Questioning and short test.
- Demonstration by experiments
- Self-assisted learning - POGIL method
- Timetable prepared with a study slot (Extra Lecture) for third year students. They are encouraged to use library materials and internet facility to upgrade their knowledge
- Problem solving session - students are divided into groups and asked to solve problems as a team.

- Personal tutors: - Teachers coach/ guide students based on their aptitude in the subject.

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

Students participate in the following activities which sensitize them to their social responsibilities:

- Donation of old text books / small gifts to children in orphanage.
- E-Waste disposal and ‘Save Electricity’ drives
- Teaching Grammar and Mathematics to underprivileged students in Orphanage at Vikhroli, Mumbai.
- Cleanliness campaign, blood donation camps and various awareness programmes organized by N.S.S/ L.L.E units of the college
- Theme based monthly drives like ‘Save Environment’
- Department also organized the following activities on socially relevant themes/ issues.
 - Workshop for teachers and students of different colleges in collaboration with ‘Consumer Guidance Society of India’ (CGSI) on Testing Milk Adulteration – 21.10.11.
 - Testing of milk samples of different brands from different vendors across places from Thane to Vikhroli for milk adulteration was carried out by college students on – 07.01.12.
 - Staff were also appointed as PRO/ PO by Election Commission for Parliamentary and Assembly elections.

35. SWOC analysis of the department and future plans

Strengths:

- Staff are committed and dedicated to ensure outstanding performance in all subjects and higher % of distinctions in University Examinations.
- Students are motivated to participate in - Intra and Intercollegiate competitions and encouraged to take up research projects.
- 83% of staff possess Ph.D. degree and one staff is on the verge of completing Ph.D.
- Staff are actively involved in research activities.

Weaknesses

- Time constraint limits organization of more subject related activities
- No major research projects undertaken till date

Opportunities:

- To enhance linkages with premier academic institutions for training students
- To collaborate with industries so that students can go for short term training / take up small projects

Challenges:

- To produce Merit Rankers at University level.
- To encourage meritorious students to opt for the subject
- To improve networking with industries and to develop consultancy activities

Future Plans

- Involvement of staff in more Research projects including major ones
- Involvement of more and more students in small research projects.
- Giving expertise to students on Instrumental Techniques through workshops which provide hands on training.
- Recognition of staff as Ph.D. guides

Department Mathematics and Statistics

1. **Name of the Department**– Mathematics and Statistics
2. **Year of Establishment** -1983
3. **Names of Programmes/ Courses offered**–
U.G. (B.Sc. in Mathematics.)
4. **Names of Interdisciplinary courses and the departments/units involved**
S. Y. B. A. Quantitative Techniques
T. Y. B. Com. Computer Systems and Applications
5. **Annual/ semester/ choice based credit system (programmewise) –
Credit Based Semester and Grading System**
6. **Participation of the department in the courses offered by other departments** B.Sc. (Computer Science)
7. **Courses in collaboration with other universities, industries, foreign institutions etc.**
Students and Teachers of the Department regularly participate in following programmes:
 - Mathematics Talent and Training Search Programme (MTTS):organised by the National Board of Higher Mathematics (NBHM)
 - National Programme for Differential Equations Training Computation and Applications (NPDE-TCA)- A student training for Mathematics & Applications. This is organized by IIT Bombay, Mumbai and sponsored by NBHM & Department of Science and Technology (DST)
 - Madhava Mathematics Competition at HomiBhaba Centre for Science Education (HBCSE), Mumbai and S.P. College, Pune, under the aegis of National Board for Higher Mathematics
8. **Details of courses/ programmes discontinued (if any) with reasons:**Nil
9. **Number of teaching posts**

	Sanctioned	Filled
Professors	-	-
Associate Professors	04	04
Asst. Professors	01	01

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M. Phil students guided last 4 years
Ms. Veena B. Kamat	M.Sc. M.Phil	Head, Associate Professor	Mathematics	27	NA

Ms. Karthiyaini S	M.Sc, M.Phil MPS	Associate Professor	Mathematics	25	NA
Mr. Sanjay Deshpande	MSc. SET	Associate Professor	Statistics	24	NA
Dr.Nithya S	M.Sc. M.Phil, Ph.D,ACS	Associate Professor	Mathematics	24	NA
Ms. Bhakti Velankar	M.Sc. SET	Assistant Professor	Mathematics	12	NA

11. **List of senior visiting faculty:** Nil

12. **Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:** Nil

13. **Student-Teacher Ratio(programmewise):**

B.Sc. 17:1 BA- 14: 1 B. Com- 72:1

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

Department has two lab attendants. Administrative staff of the college provide required assistance and support to the department.

15. **Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG.**

Ph.D. – 01 M. Phil. – 02 P.G. – 02

16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received–Nil**

17. **Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received**

Details of the projects undertaken are as follows:

Name	Topic &Year	Funding Agency	Grants Received
Dr. Nithya S	“Bio Statistical Analysis of Health related issues of school Children” 2011-12	Mumbai University	Rs.35000/-
	“Cayley Formula-Proofs and Applications” 2010-12	UGC	Rs. 1,30,000/-
	“Tutte’s Polynomial and its Applications” 2014-15	Mumbai University	Rs.25,000/-
Ms S.Karthiyaini (CoInvestigator)	“Spectral Characterisation of Surfaces in the Suburbs of Bhandup” 2011-12	Mumbai University	Interdepartmental (Physics)
Ms S.Karthiyaini & Ms.Bhakti V	“Mathematical Modelling of Wage Inequality through Functional Equations”2014-15	Mumbai University	Rs. 25,000/-
Ms. Bhakti V.	“Eigen Values of a Graph- Survey of New Results & Applications’ 2012-13	Mumbai University	Rs.21,400/-

18. **Research Centre/ facility recognized by the University – Nil**

19. **Publications:**

Publication per faculty

a. Number of papers published by faculty and students in peer reviewed national journals.

b. Number of papers published by faculty and students in peer reviewed International journals.

c. Chapter in Books

d. Books with ISBN/ISSN numbers with details of publishers

e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Dr. Nithya S	-	04	-	08	04	16
2	Ms. S. Karthiyaini		01	-	01	02	04
3	Ms Bhakti Velankar		-	-	-	01	01

f. Number of publications listed in International Database: Nil

g. Monographs: Nil

h. Books Edited: Nil

i. Citation index/ SNIP/ SJR/ impact factor/ h-index

Details in Annexure – 3.4.3

20. **Areas of consultancy and income generated: Nil**

21. **Faculty as members of International Committees/ National Committees/ Editorial Boards.**

All the teachers of the Department are members of the Bombay Mathematical Colloquium

22. **Student projects:**

a) Percentage of students who have done in-house project including inter departmental/programme:

- T.Y.B.Sc. students had undertaken projects in C-programming, Java and SQL as part of curriculum. (2014-2015)
- T.Y.B.Com. had undertaken project in Computer Systems and Applications. (2012-13)

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories / Industry / other agencies: Nil

23. **Recognitions received by faculty and students:**

Faculty

✓ **Awards**

Dr. Nithya S was awarded **Second Best Paper in Statistics** for her paper titled “Growth and Health Transition of School Children in Mumbai suburb” presented at the two day Conference on – “Application of Statistics in Commerce, Economics and Social

Sciences'organised by Rizvi College, Bandra, Mumbai held on 8/01/16 & 9/01/16

✓ **Recognitions**

Mrs. Veena B. Kamat

- Subject Expert (VC nominee) for Selection and CAS interview at VES College, Chembur, K.J Somaiya College, Vidyavihar, CHM College, Ulhasnagar and V.K Menon College, Bhandup(E).
- Member of Scientific Committee of MATHEMIGHT at VES College, Chembur, Mumbai in association with National Academy of Science and Industrial Math Group, IITB, Mumbai.
- Resource Person at
 - “Indian Women and Mathematics IWM-2013” at Department of Mathematics, University of Mumbai.
 - “Mini MTTs” at Ruia College, Dadar, Mumbai.
 - Workshop on “Complex Analysis” at K.J Somaiya College, Vidyavihar, Mumbai.
 - Workshop on “Revised Syllabus of SYBA/B.Sc Mathematics” at NES Ratnam College, Bhandup (W), Mumbai..
 - Workshop on “Basic Course in Algebra and Analysis” (One of the Coordinators) at Department of Mathematics, University of Mumbai.
- Member of the Syllabus Committee constituted by the BOS in Mathematics of University of Mumbai
- Convener of the Committee for Practicals of T.Y.B.A/B.Sc constituted by BOS in Mathematics of University of Mumbai.
- Chairperson of University Examinations B.A/B.Sc Mathematics

Ms. S. Karthiyaini

- Subject Expert (V C Nominee) for Selection and CAS interview at CHM College, Ulhasnagar.

Mr Sanjay Deshpande

- Subject Expert (Management Nominee) for Selection and CAS at MCC College, Mulund, J.V Mehta College, Airoli.
- Resource Person for Staff Training in Statistical Data Analysis at Praras Biosciences Pvt .Ltd ,Banglore.

Dr. Nithya S

- Subject Expert (Management Nominee) for Selection and CAS interview at K.J Somaiya College, Vidyavihar, Mumbai.
- Member of the Syllabus Committee constituted by the BOS in Mathematics , University of Mumbai
- Resource Person at
 - “Professional Development and Technology Orientation” workshop for Uttarakhand Teachers organized by IITB.

- ‘Workshop for SET aspirants in Computer Science’ at Department of Computer Science, University of Mumbai.
- One day Seminar on ‘Recent Research trends in Mathematics’ at Bandodkar College, Thane.
- ‘Workshop on Revised Syllabus of FYBA/B.Sc Mathematics’ at SIES College, Sion, Mumbai.
- ‘Workshop on Revised Syllabus of SYBA/B.Sc Mathematics’ at NES Ratnam College, Bhandup (W).
- ‘Indian Women and Mathematics IWM-2013’ at Department of Mathematics, University of Mumbai.
- ‘Mathematics Teachers Training Workshop’ at NES International School, Mumbai.
- Judge for ‘Avishkar Research Convention, University of Mumbai for projects in Pure Science.
- Faculty for post graduate programme in Mathematics at the Institute of Science, Mumbai.

Awards by students

- Ms. Archana Mishra stood Third at the TYBSC University Examinations, March -2011
- Ms. Khushboo Singh stood Fourth at the TYBSC University Examinations, March -2011

Recognitions by students

- Ms. Aruna Sudha & Ms. Spania Nadar won Second Prize in Paper Presentation at ‘Surprises in Mathematics’, at VES College, Chembur, Mumbai on 18/1/12
- Ms. Sonali Chavan & Ms. Nayantara Gupta won Second Prize in Seminar Contest at Ramanujan Festival, Khalsa College, Matunga, Mumbai on 12/9/13
- Ms. Shabnam Panjelea & Ms. Devyani Tiwari won First Prize in Paper Presentation at ‘Surprises in Mathematics’, VES College, Chembur, Mumbai on 18/1/14.
- Ms. Roopa Gupta & Ms. Shaziya Siddique won First Prize in Seminar Contest at KB College, Vashi, Navi Mumbai on 9/2/15
- Ms. Priyanka Mishra & Ms. Anish George won First Prize in Paper Presentation at ‘Surprises in Mathematics’, VES College, Chembur, Mumbai on 16/1/16

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

- Mr. Sachin Gadkar, Software Developer, GE, Mumbai (Alumnus of the Dept.)
- Mr. Abhimanyu Nambisian, IKEN, Head, Content Developer & R&D Department, Mumbai. (Alumnus of the Dept.)
- Dr. Jyotsna Prajapat, Department of Mathematics, University of Mumbai.

- Ms. Minal Wankhede (HOD, Department of Mathematics, B.N. Bandodkar College, Thane)
- Mr. Mathew Samuel, Department of Mathematics, Kirti College, Dadar, Mumbai.

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

The Department, in collaboration with BOS in Mathematics, University of Mumbai, organized a one day workshop on “Guidelines for Revised Syllabi of SYBA/ B.Sc” implemented from 2014-15.

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYBSc
				*M	*F	
2011-12	F.Y.B.Sc.	287	77	48	29	78.57
2012-13	F.Y.B.Sc.	282	78	42	36	86.36
2013-14	F.Y.B.Sc.	218	83	51	32	76.47
2014-15	F.Y.B.Sc.	265	87	46	41	72.54
2015-16	F.Y.B.Sc.	295	69	37	32	64.44

Ms. Mishra Archana secured 3rd Rank at the Final Year University Examination in March 2011.

27. Diversity of Students: 2015-2016

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	B.Sc.	100	Nil	Nil
2012-13	B.Sc.	100	Nil	Nil
2013-14	B.Sc.	94	6	Nil
2014-15	B.Sc.	93.96	6.03	Nil
2015-16	B.Sc.	91.42	8.57	Nil

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

Entrance Exam/ Course	Course	2011 to 2016
IIT JAM	M.Sc.	03
CAT	MBA	01
Others	MCA	02
ICT-M.Sc.	M.Sc. in Engineering Maths	08

29. Student progression (Last Five years)

Student progression	Against % enrolled
UG to PG	30
PG to M. Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	
• Campus selection	13
• Other than campus recruitment	35
Entrepreneurship/Self-employment	5

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books:2083
- Journals/Magazines: 04
- Apart from the facility available in the central library the department has its own library with a collection of reference books, periodicals, text books and Hand book in Mathematics , Statistics and Computer Science
 - Reference Books- 108
 - Periodicals/ Journals- 56
 - Bulletins- 40
 - Handbooks/Manuals 28
 - Text books 75

b) Internet facilities for Staff & Students:

- Internet facilities for Staff & Students are available both in the Department and in the Laboratory.
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories:

A fully equipped Computer Laboratory is available for the conduct of Practicals in Computer Programming and Systems Analysis.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Students recommended by the faculty are selected for the prestigious MTTs, NPDE-TCA and Winter Schools–training programme in Mathematics at the National level.

- Workshops attended by students in Mathematics: mini MTTs

Year	Name of the Participants	Venue	Duration
2011-12	Ms. Shabnam Panjekar Mr. Vikas Varma	Ruia College , Matunga, Mumbai	2 nd April '12 to 7 th April '12
2013-14	Ms. Roopa Gupta Mr. Sunil Gupta	Ruia College , Matunga, Mumbai	7 th April '14 to 12 th April '14.
2014-15	Ms Shabnam Panjekar Mr. Ayyapan V	Khalsa College, Wadala, Mumbai	5 th Jan '15 to 10 th Jan '15
2015-16	Mr. Rohit Upadhyay Ms. Neha Pal	Ruia College, Matunga, Mumbai	10 th April '16 to 16 th April '16

- Workshops attended by students in Mathematics MTTs-Level O and Level 1 (National Level)

Year	Name of the Participants	Venue	Duration
2014-15	Mr. Ayyapan -Level O	SSN College of Engineering, Chennai	18 th May '15 to 13 th June '15.
2015-16	Mr. Ayyapan V -Level 1	IIT Madras , Chennai	23 rd May '16 to 18 th June '16.
2015-16	Mr. Mahamood Khan - Level O	RIE, Mysore	23 rd May '16 to 18 th June '16

- Workshops attended by students in Mathematics NPDE-TCA a student training for Mathematics & Applications

Year	Name of the Participants	Venue	Duration
2013-14	Ms. Roopa Gupta	NIT, Bhopal	21 st May 14 to 14 th June '14
2014-15	Ms. Shabnam Panjekar	LNM Institute of Information and Technology –Jaipur	18 th May 15 to 8 th June '15.
2015-16	Mr. Rohit Upadhyay	Indian Institute of Space Science , Thiruvananthapuram	18 th May 16 to 7 th June '16

- The Department also organizes SCI- π as part of Intra & Intercollegiate Science Fest, SCI-TRECK every year where competitions such as Sudoku, Olympiad, Cross word puzzle are conducted
- Students of the Department are trained for seminar contests, paper presentations in Mathematics, Mathematics Olympiads conducted by the Department as well as for Intercollegiate competitions. They consistently bring laurels to the college by winning prizes in these contests.

33. Teaching methods adopted to improve student learning

- Traditional Chalk and Board method is supplemented with –
 - Powerpoint presentations both by student and faculty
 - Assignments and problem solving session
 - Data oriented approach for solving problem in statistics based on real data so as to enable the students to interpret the information and predict its implication for society
- Computer based teaching – use of Mathematical software as tool for computation.
- Interactive method – Teachers design lessons on smart board to teach Geometric problems.
- Peer Group teaching/learning – Posting problem for solving and addressing students' queries.
- Relational approach method – for better progression of understanding of mathematical fundamentals, problems related to current events are discussed.
- Online teaching in Java, Oracle and C programming

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

- Students of the Department are involved in many social responsibilities through NSS-National Service Scheme and LLE-Lifelong Learning and Extension, units of the college.
- Ms S. Karthiyaini, jointly with Cancer Care NGO, Indian Cancer Society and Oncology Department of Hiranandani Hospital, created awareness of cancer among the general population in the slum area of Dharavi, in the suburbs of Dombivili and Bhandup in the years 2013-2014. Cancer Detection camps also have been organized in these areas.
- Staff were also appointed as PRO/ PO by Election Commission for Parliamentary and Assembly elections.

35. SWOC analysis of the department and future plans

Strengths:

- Experienced and competent faculty.

- Students are selected for various training programmes and Summer/Winter School in Mathematics at the National level organized by academic bodies.
- Students win many prizes at the Intercollegiate competitions in Mathematics.
- The Department has a supportive Alumni.

Weaknesses:

- Students who are from lower socio economic background especially girls do not opt for higher studies in spite of having a good academic record.
- Not many students choose mathematics as a subject at the entry level.

Opportunities:

- Incorporating technology in teaching to make learning more intrinsic.
- Use of Mathematical softwares to illustrate and visualize abstract concepts will provide a learning ground for both faculty and students.
- Ample facility to undertake major and minor projects

Challenges:

- To induce meritorious students to choose Mathematics as a major subject.
- To motivate students to carry out some research & participate in research oriented events.

Future Plans:

- The Department plans to organize National level Conference /Symposium for the teaching community and training programmes for students.
- To start some skill- based, certificate courses.

Department of Physics

1. **Name of the Department**– Physics
2. **Year of Establishment** -1983
3. **Names of Programmes/ Courses offered**–
U.G.(B.Sc.);
P.G.(M.Sc.)
Certificate Course in Microprocessors & Microcontrollers (approved by University Of Mumbai)
4. **Names of Interdisciplinary courses and the departments/units involved**-Nil
5. **Annual/ semester/ choice based credit system (programmewise) –**
 - U.G.& P.G. – **Credit Based Semester and Grading System**
 - Certificate Course –**Annual**
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**

	Sanctioned	Filled
Professors	-	-
Associate Professors	02	02
Asst. Professors	03	02
Lecturer (ADHOC)	-	01

10.

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Dr. Vinita Dhulia	M.Sc., Ph.D	Associate Professor &HOD	Electronics	UG: 25 yrs PG: 18yrs	---
Ms. Presentia Aloysious	M.Sc., M.Phil	Associate Professor	Electronics	UG: 25 yrs PG: 15 yrs	---
Dr. Rupali Patel	M.Sc., Ph.D	Assistant Professor	Material Science	UG: 5 yrs	---
Ms. Pratibha Singh	M.Sc., NET	Assistant Professor	Condense Matter Physics	UG: 5yrs	---
Mr. Shivam. Yadav	M.Sc.	Lecturer-Adhoc	Electronics	UG: 1 yr	---

- 11. List of senior visiting faculty:** Nil
- 12. Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:** 20% of the UG lectures and practicals are handled by temporary faculty.
- 13. Student-Teacher Ratio(programmewise):** UG - 25: 1 PG - 11:1
- 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:**
Department has two lab attendants and one lab assistant. In addition the technical and Administrative staff of the college provide the required assistance and support to the Department.
- 15. Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG**
Ph.D. – 02 M. Phil. – 01 P.G. – 02
- 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received–Nil**
- 17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received**
Department has completed **three minor research projects funded by University of Mumbai.**

Name	Details	Grant received
Ms. Presentia Aloysius (P. I)	Spectral Characterization of Urban Buildings in the City of Bhandup, Mumbai- 2011-12	Rs.25,000/-
Dr. Rupali Patel (P.I)	Development of Ta ₃ N ₅ and TaON photocatalyst for Efficient-visible light. Absorption- 2013-14	Rs.30,000/-
Ms. Pratibha Singh (P.I)	Investigation of Acoustic Parameters of 'Biopolymer' -2013-14	Rs.30,000/-

- 18. Research Centre/ facility recognized by the University**
Department has a PG lab recognized by University of Mumbai.
- 19. Publications:**
- Publication per faculty**
- a. Number of papers published by faculty and students in peer reviewed national journals.**
- b. Number of papers published by faculty and students in peer reviewed International journals.**
- c. Chapter in Books**
- d. Books with ISBN/ISSN numbers with details of publishers**

e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Dr. Vinita Dhulia	-	01	-	-	02	03
2	Ms. Presentia Aloysius	-	-	-	-	01	01
3	Dr. Rupali Patel	-	02	-	-	01	03

f. Number of publications listed in International Database 02

g. Monographs: 01 (Dr. Vinita Dhulia)

h. Books Edited: Nil

i. Citation index/ SNIP/ SJR/ impact factor/ h-index

Details in Annexure – 3.4.3

20. Areas of consultancy and income generated: Nil

21. Faculty as members

International Committees: Nil

National Committees:

Dr. Vinita Dhulia is member of Liquid Crystal Society of India (LCI) and Indian Association of Physics Teachers (IAPT)

Mrs. Presentia Aloysius, Dr. Rupali Patel, Mrs. Pratibha Singh are the members of IAPT.

Editorial Board: Nil

22. Student projects:

a) Percentage of students who have done in-house project including inter departmental/programme:

50% of PG students (M.Sc.II) have done In-house projects.

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies: Nil

23. Awards/ Recognitions received by faculty and students:

Students' Awards/ Recognitions

- Project titled 'HEAT DETECTOR' was sent for Avishkar Research Convention, University of Mumbai under the category of Pure Sciences (U.G level). It was ranked II at the zonal level and was presented at the district Level. Mr. Ashish Dubey and Ms. Roopa Gupta of F.Y.B.Sc were the student participants.
- Mr. Kiran Gudigar, Ms. Roopa Gupta and Mr. Sunil Singh of S.Y.B. Sc won First place (Gold) at district level for the project on 'Solar Water Distillator' in the 'Avishkar Research Convention, organized by the University of Mumbai, under category of Pure Sciences (U.G level) and were selected to represent the University of Mumbai at the state level Avishkar Research Convention held in Jalgaon on 15th, 16th & 17th January, 2014

Faculty Recognitions:

Dr. Vinita Dhulia

- Received an Appreciation Certificate from Optical Society of India (OSI) for the contribution towards the compendium of International Year of Light (IYL) activities in India, 2015, published by OSI.
- Recognized Ph.D Guide since 2015-16, University of Mumbai.
- Appointed Subject Expert as VC's Nominee in the Selection Committee in appointment of Assistant Professor in Physics at SIES College of Arts, Science & Commerce, Sion, Mumbai, on 8th December, 2015.
- Subject Expert in the Selection Committee at VES College, Mumbai on 17th September, 2015.
- Subject Expert (VC's Nominee) in the Selection Panel for the recruitment of Assistant Professor in Physics at Dandekar College, Palghar on 29.2.16.
- Paper Setter & Moderator for Paper II in Sem VI examinations of University of Mumbai, March 2016.
- Resource Person, on 27th July 2011 & 18th September 2012 at K.B College of Arts, Science & Commerce for Women, Thane (E) (to guide the staff for the preparation for NAAC accreditation).
- Resources person to guide the staff for the preparation for NAAC accreditation at LB College of Arts, Science & Commerce on 27th July & 18th Sept. 2012.

Dr. Rupali Patel gave an Invited talk on 'Development of Solar Sensitive Thin Films for Water Splitting' at the workshop on Nano materials organized by the Department of Physics, University of Mumbai on 17th & 18th August 2011.

Dr. Vinita Dhulia & Mrs. Presentia Aloysius are recognized PG teachers in Physics

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

- Prof. Mahesh Shetty, Department of Physics, Wilson College, Mumbai
- Mr. Alok Singh, Scientist, (ISRO), Indian Space Research Organisation.
- Mr. Debjyoti Bardhan, Research Scholar, TIFR
- Dr. Sudhir Jain, Senior Scientist, BARC
- Prof. Jean-Luc Adam, Director of Institute of Chemical Sciences, University of Rennes, France
- Prof. Yogesh Joglekar, Indiana University – Purdue University Indianapolis, USA
- Dr. Arnab Bhattacharya, Scientist, TIFR, Mumbai
- Dr. Shivanand Chaurasia, Scientist, BARC, Mumbai
- Dr. Vaibhav Agarwal, Senior Scientific Officer, German House for Research & Innovations

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

a) **National:** Nil

b) **International :**

Department organized International Conference on ‘Photons: Multiple & Creative Solutions to Challenges’, on 4th& 5th December 2015, to observe the International Year of Light & Light-based Technologies 2015(IYL2015) as proclaimed by the United Nations. The Conference was included in the Calendar of Events of the IYL 2015 being organized by UNESCO.

Source of funding:

- 1) German House for Research and Innovation- New Delhi
- 2) Indian Bank
- 3) College Management
- 4) Other Private Sponsors

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at T.Y.B.Sc. M.Sc. II
				*M	*F	
U.G.						
2011-12	F.Y.B.Sc.	287	107	50	57	66.67
2012-13	F.Y.B.Sc.	282	85	48	37	92.59
2013-14	F.Y.B.Sc.	218	92	50	42	76.92
2014-15	F.Y.B.Sc.	265	97	49	48	83.33
2015-16	F.Y.B.Sc.	295	93	49	44	73.91
P.G.						
2011-12	M.Sc. I	55	11	03	08	70
2012-13	M.Sc. I	40	06	05	06	72.72
2013-14	M.Sc. I	30	10	05	05	66.66
2014-15	M.Sc. I	30	12	05	07	50
2015-16	M.Sc. I	56	11	04	07	63.63

27. Diversity of Students: 2015-2016

Year	Name of the Course	% of students from the same state	%of students from other States	% of students from abroad
2011-12	B.Sc.	96.26	3.73	Nil
2012-13	B.Sc.	92.24	7.05	Nil
2013-14	B.Sc.	94.56	5.43	Nil
2014-15	B.Sc.	89.69	10.30	Nil
2015-16	B.Sc.	93.47	6.52	Nil
2011-12	M.Sc.	100	Nil	Nil

2012-13	M.Sc.	100	Nil	Nil
2013-14	M.Sc.	100	Nil	Nil
2014-15	M.Sc.	100	Nil	Nil
2015-16	M.Sc.	100	Nil	Nil

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

- One student cleared PET (Ph.D. Entrance Test) in 2013-2014.
- In the last 4 years, on an average around 25 students participated in NGPE (National Graduate Physics Examination) and around 18% of students appeared in top 10% at the center.
- 2 students have cleared the entrance test for Advanced Diploma in Radiotherapy Technology and were selected for the course.

29. Student progression (Last Five years)

Student progression	Against % enrolled
UG to PG	52%
PG to M. Phil.	-
PG to Ph.D.	1 student
Ph.D. to Post-Doctoral	NA
Employed • Campus selection • Other than campus recruitment	- UG: 21% PG: 67.44%
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books: 1406
- Journals/Magazines: 10
- Department Library: 150 (Reference books& Text books).

b) Internet facilities for Staff & Students:

- Internet facility is available for staff in the Department and also for students under the supervision of staff.
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories:

Department has two well-equipped laboratories for UG & PG Programmes respectively.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures /

workshops / seminar) with external experts

- **Intra & Intercollegiate Events:**
The Department organizes SCI-HARMONICS as part of Intra & Intercollegiate Science Fest SCI-TREK every year where events like Poster Making Competition, Crack-d-Code, Exhibitions etc, based on the concepts of Physics are organized .The competitions are judged by the experts.
- Students are trained to participate in the Intercollegiate Competitions organised by other Colleges.
- Department is centre for National Graduate Physics Examination (NGPE) conducted by Indian Association of Physics Teachers (IAPT).College is the Centre for the same.
- Department organized an International Conference on ‘Photons: Multiple & Creative Solutions to Challenges’ whereby students got an opportunity to interact with scientists from premier insitutes of India & abroad.
- Study Trips and guest lectures are organised.

33. Teaching methods adopted to improve student learning

Along with the lecture method, following methods are adopted to improve student learning:

- Conceptual Learning through simulations and power point presentations.
- Students’ Seminar on topics from the syllabus.
- Guest Lectures-Resource persons are invited from premier organizations like BARC, TIFR, ISRO etc.
- Study Trips to National Science Park, IUCAA, TIFR etc.

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

- U.G. students contribute towards Institutional Social Responsibility (ISR) through following activities:
 - Popularising Science through display & explanation of working models during National Science Day celebrated by the parent body NES-SVB group. The exhibition is attended by students from schools & colleges. Solar Water Distillator, Visitors’ Counter, Efficient Transport System were some of the working models displayed by our students.
 - Students of First Year B. Sc. & Third Year B. Sc. participated as volunteers in the outreach programme organized by TIFR, Mumbai for the school students.
- M.Sc-II students take up socially relevant topics for their project work. Following are some of the projects taken up:
 - ✓ GSM/GPS based women security system using Microcontroller
 - ✓ Solar and Wind Power Battery charger

- ✓ Traffic and Vehicle Control and Safety using RF Communication
- ✓ Water Saving Automatic Irrigation with Reminder Bell Timer and Water Level Detector.
- ✓ Microcontroller Based Solar Charger Using Solar Tracker
- ✓ Microcontroller Based Voice Controlled Vehicle (Car)
- Students participate in the activities organized by National Service Scheme (NSS) & Life Long Learning and Extension (LLE) units of our college like Blood Donation Camps, Tree Plantation, Awareness programmes.etc.
- Staff were also appointed as PRO/ PO by Election Commission for Parliamentary and Assembly elections.

35. SWOC analysis of the department and future plans

Strengths:

- Well equipped laboratories(UG & PG)
- Collaborative efforts of faculty members and technical staff members towards Students' better learning experience.
- Constant encouragement given to faculty members for pursuing research.

Weaknesses:

- Few students opting for the subject.
- Few students clearing competitive exams like GATE/NET/ PET etc
- No University Ranks for a long time.

Opportunities:

- To arrange more students' enrichment activities through collaboration with premier institutes.
- To get minor/major projects funded by UGC, DIST& other funding agencies.

Challenges

- To attract meritorious students in view of the students opting for professional courses.
- Placement of students in core sector.
- To produce good academic results, given the fact that not so good quality of students are opting for the subject.

Future Plan:

- To start Ph.D. Programme

Department of Botany

- Name of the Department**– Botany
- Year of Establishment** -1990
- Names of Programmes/ Courses offered**– U.G. (B.Sc.) & Ph.D.
- Names of Interdisciplinary courses and the departments/units involved**- Certificate Course in Nutrition and Dietetics (jointly with Zoology Department)
- Annual/ semester/ choice based credit system (programmewise) –**
 - B.Sc – **Credit Based Semester and Grading System**
 - Certificate Course – **Annual**
- Participation of the department in the courses offered by other departments**NA
- Courses in collaboration with other universities, industries, foreign institutions etc.**NA
- Details of courses/ programmes discontinued (if any) with reasons:**Nil
- Number of teaching posts**

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

10.

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Dr. Sunita Chahar	M.Sc., Ph.D, SET	Associate Professor & Head	Genetics and Mycology	24	M.Phil 02 (completed) Ph.D. 03 (registered)
Ms. Shweta Belose	M.Sc, M.Phil	Assistant Professor	Mycology and Plant Pathology	17	NA
Mrs. Mamta Yadav	M.Sc, NET	Assistant Professor	Ecology	11	NA

- List of senior visiting faculty:** Nil
- Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:** NA
- Student-Teacher Ratio(programmewise): B.Sc. (Botany) 36:1**
- Number of academic support staff (technical) and administrative staff; sanctioned and filled:**

The Department has one lab attendant. Technical staff of college help in maintaining ICT tools. Administrative staff of the College provide required assistance and support the Department.

15. Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG.

Ph.D. – 01 M. Phil. – 01* P.G. – 01*

* Pursuing Ph. D.

**16. Number of faculty with ongoing projects from a) National
b) International funding agencies and grants received**

Nil

**17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR,
etc. and total grants received.**

Investigator	Title of the Project	Funding agency	Amount in Rs.
Dr. SunitaChahar	Response of VAM Fungi to Sewage Irrigation and Chemical Fertilizers on Napier Grass (2010-12)	UGC	1,50,000/-
Dr. SunitaChahar	Study of Biodiversity of Arbuscular-Mycorrhizal Fungi in Medical plants present in Sanjay Gandhi National Park, Borivali, Mumbai, by Morphological and Molecular characterization (2014-16)	UGC	3, 20,000/-
Dr. SunitaChahar (Co-I)	Bio Statistical Analysis of Health Related Issues of School Children (2011-12)	University of Mumbai	Interdepartmental (Mathematics & Statistics)
Dr. SunitaChahar	Seasonal Variations in the Diversity of AM Fungi Associated with Fodder Grasses (2013-14)	University of Mumbai	15,000/-
Ms. Shweta B. (PI) Mrs.Mamta Y. (Co-I)	Dyes Reduction by Fungi Mediated Silver Nano Particles (2014-15)	University of Mumbai	30,000/-
Mrs. Mamta Y.	Green Synthesis of Gold Nano Particles using some Tuber Extracts & their Characterization (2013-14)	University of Mumbai	15,000/-
Ms.ShwetaBelose (Co-I)	Biological and Chemical Monitoring of Roadside Plants Exposed to Vehicular Pollution in Central Belt of Mumbai (2012-13)	University of Mumbai	Interdepartmental (Chemistry)

18. Research Centre/ facility recognized by the University

Ph.D Research Lab is recognized by University of Mumbai (Affiliation letter no. Th./ICD/204-15/7284dated 13.3.15).

19. Publications:

Publication per faculty

a. Number of papers published by faculty and students in peer reviewed national journals.

b. Number of papers published by faculty and students in peer reviewed International journals.

c. Chapter in Books

d. Books with ISBN/ISSN numbers with details of publishers

e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Dr. SunitaChahar	-	06	-	02	16	24
2	Ms.ShwetaBelose	-	01	-	-	01	02
3	Ms. MamtaYadav	-	-	-	-	02	02

f. Number of publications listed in International Database Nil

g. Monographs Nil

h. Books Edited Dr. Sunita Chahar 02

i. Citation index/ SNIP/ SJR/ impact factor/ h-index

Details in Annexure – 3.4.3

20. Areas of consultancy and income generated:

Dr. Sunita Chahar is offering consultancy in the area of **Mycorrhizal Biofertilizers.**

S. No.	Company	Period	Income generated
1	Universal Speciality Chemicals Ltd, Mumbai.	1.03.15 to 29.02.16	Rs.2,40,000/-
2	Indus Technical and Financial Consultants ltd., Raipur	1.05.16 to 30.12.16	Rs.44,000/-

21. Faculty as members

International Committees:

Dr. Sunita Chahar

- International Mycological Society-Member
- Bionanofrontier- Life member

National Committees:

Dr. Sunita Chahar

- ATBS-Association of Teachers in Biological Sciences-Life Member
- Mycological Society of India- Life Member
- Mycological Society of India (Mumbai Unit)-Executive Member

Ms. Shweta Belose

- ATBS-Association of Teachers in Biological Sciences-Life Member
- Mycological Society of India- Life Member

Ms. Mamta Yadav

- ATBS-Association of Teachers in Biological Sciences-Life Member

- National Science Congress-Member

Editorial Board:

Dr. Sunita Chahar is on the editorial board of Bionanofrontier, a peer reviewed International Journal.

22. Student projects:

a) Percentage of students who have done in-house project including interdepartmental/programme:

- As part of the Certificate Course on Nutrition and Dietetics all enrolled students have done projects.
- Students of the Department participate in Avishkar Research Convention of University of Mumbai.

S.No	Names of Students	Topic	Date
1	Ms. Anita Mishra Ms. PriyankaJundare	“Preservation of Vegetables using Brine”	10.12.12
2	Mr. Mayur Talreja Ms. Alka Shukla	“Carbon Foot Print calculation”	4.01.14
3	Mr. Vishal Shahani Ms. Ankita Lokhande	“The safety of reusing Water Bottles”	7.12.15

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:

Ph.D. students are deputed for training programmes:

Ms. Shweta Belose:

- Agharkar Research Institute, Pune : 25th May – 8th June, 2012.
- Botany Dept, Goa University: 8th – 12th May, 2015
- IFGTB Institute of Forest Genetic And Tree Breeding, Coimbatore:15th – 22nd May, 2016

Ms. Shweta Jain:

- IFGTB Institute of Forest Genetics And Tree Breeding, Coimbatore:9th –22ndMay, 2016
- National Chemical Laboratories, Pune: 1st – 6th August, 2016

23. Awards/ Recognitions received by faculty and students:

Faculty

Dr. Sunita Chahar

Awards

- Foundation Day Award by Management of NES on 14th April, 2013 for conducting Clean and Green Environment competition among Mumbai Colleges.
- First prize in the oral presentation category in the National Conference on “Fungi in Biotechnology”, Sion, Mumbai held in S.I.E.S College of Arts, Science & Commerce, Sion, Mumbai on 28th and 29th Nov’2014.

- Foundation Day Award by Management of NES on 14th April, 2015 for setting up Ph.D. Research Laboratory in the college and getting due recognition from University of Mumbai.

Recognitions

- Recognized Ph.D guide w.e.f.16.8.2012 of University of Mumbai.
- Paper Setter and Moderator at TYBSC University Examination for Botany Paper- II.
- Resource Person for Pre-Conference workshop for National Conference on 'New and Emerging Trends in Bio informatics and Taxonomy - NETBT 2015' at B. N. Bandodkar College, Thane on 12.8.14 .
- Appointed as VC's Nominee (Subject Expert) in the Selection Panel for the recruitment of Assistant Professor in Botany at Menon College, Bhandup, Mumbai on 24.4.2015.
- Appointed as V.C's nominee for CAS interviews on 13.4.16 at SIES College, Sion, Mumbai.

Student's Awards

- Ms. Anita Mishra & Ms. Sujata Malunekar of F.Y.B.Sc. bagged First Prize in Poster Making in Patkar College in 2012-13.
- Mr. Vishal Shahani of SYBSc received First Prize in Photography Competition held at R. J. College, Mumbai in 2015.
- Mr. Arun Arumuga & Mr. David Alex of SYBSc received First Prize in Poster Making Competition held at R. J. College, Mumbai in 2015.
- Mr. Vishal Shahani – received 2nd Prize in Best out of Waste Competition at S.K. Somaiya College, Mumbai in 'Convergence' in 2016.

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

- Mr. B.P. Singh, Chief Conservator of Forest and Deputy Director General, Social Forestry, Thane, Mumbai.
- Dr. S.B. Chaphekar, Hon. Director, Environmental Conservation (Water) IEM.
- Dr. Shivaji Chavan, International Environmental Consultant & Director General and CEO, 'Wildlife and We'.
- Mr. Prakash Gole, Founder Editor of Journal of Ecological Society.
- Ms. Ketaki Ghate, OIKOS - an organization working on environment.
- Mr. Jayant Kulkarni, Executive Director, Wildlife Research and Conservation Society.
- Mr. Milind Thatte, Environmental activist and journalist.
- Mr. Mohan Hirabai Hiralal, Social activist and environmentalist.
- Mr. Punam Singavi, Founder President of Hariyali, NGO.

- Dr. B.F. Rodrigues, Department of Botany, University of Goa.
- Dr. M. C. Shrinivasan, Retired Scientist, NCL, Pune.
- Dr. R.G. Bagool, Founder Chairman of MSI, Mumbai.
- Dr. M.V. Deshpande, Biochemical Sciences Division, NCL, Pune.
- Dr. R.V. Gandhe, Retired Scientist, Agharkar Research Institute, Pune.
- Dr. ShilpaVerekar, Scientist, Piramal Enterprises Ltd, Mumbai.
- Mr. Promod Borkar, Kokan Krishi Vidyapeeth, Dapoli.
- Dr. S. K. Deshmukh, Vice President, Piramal Life Sciences Ltd, Mumbai.
- Dr. M. S. Reddy, Department of Biotechnology, Thapar University, Punjab.
- Dr. M.S. Joshi, Kokan Krishi Vidyapeeth, Dapoli.

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

- National Conference on “Forests for the Future of Man” on 16th and 17th September 2011 in association with ATBS (Association of Teachers in Biological Sciences) funded by UGC and other sponsors:
UGC Rs.90, 000/- Others: Rs.1,15,000/-
- National Conference on “Fungi in Agriculture” on 28th and 29th January, 2014 in association with Mycological Society of India, Mumbai Unit funded by UGC, NABARD and others:
UGC Rs.1, 50,000/- NABARD: Rs.50, 000/-
Others: Rs.1, 11,000/-

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYR Sc. (C.B.)
				*M	*F	
2011-12	F.Y.B.Sc.	287	61	32	29	80
2012-13	F.Y.B.Sc.	282	54	18	36	91.67
2013-14	F.Y.B.Sc.	218	44	13	31	85.71
2014-15	F.Y.B.Sc.	265	51	20	31	100
2015-16	F.Y.B.Sc.	295	64	13	51	94.11

27. Diversity of Students: 2015-2016

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	B.Sc.	98.36	1.63	Nil
2012-13	B.Sc.	96.30	3.7	Nil
2013-14	B.Sc.	95.46	4.54	Nil
2014-15	B.Sc.	98.08	1.92	Nil
2015-16	B.Sc.	96.87	3.13	Nil

28. How many students have cleared national and state competitive

examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

PET (Ph.D. Entrance Test) -01

MH-CET - 03

ATMA - 01

29. Students progression (last four years)

Student progression	Against % enrolled
UG to PG	46%
PG to M. Phil.	N.A
PG to Ph.D.	N.A
Ph.D. to Post-Doctoral	N.A
Employed • Campus selection • Other than campus recruitment	NIL 58%
Entrepreneurship/Self-employment	02 Students

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/ Reference books:688
- Journals/Magazines: 05
- Department Library: 57 Reference books.

b) Internet facilities for Staff & Students:

Internet facility is available in the Department and in the Research Laboratory.

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories:Two well-equipped laboratories, one each for UG and Ph.D. programmes.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- Apart from guest lectures and study tours, the Department conducts various activities as part of Nature Club. It organizes competitions and also sensitizes students towards environmental issues through various activities like tree plantation, seed collection, sapling preparation and awareness programmes.
- The Department organizes intra and intercollegiate competitions under SCI-Flora as part of intercollegiate Science Fest SCI-TREK, where events like quiz, collage, bio-pictionary, bio-jewellery and flower arrangement are conducted.

33. Teaching methods adopted to improve student learning

- Conventional lecture method is enhanced by the use of charts, fresh specimens and projections.
- Digital Collaborative method – use of self-paced animations, videos and e-learning.
- Peer Group Method – Seminars and Group discussions.
- Laboratory demonstration.
- Field based learning.
- Ecological Conservation – Planting and maintenance of garden and improving generic skills of students.
- Case Studies – Environment based Projects and Surveys.

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

- Students help in tree plantation by preparing saplings in the college from the seeds collected.
- Department has started seed bank and sapling preparation is taught to the students.
- Organic farming is taught to interested staff and students.
- Department conducted “Clean and Green Environment” competition for colleges across Mumbai in 2013.
- Students participate in the activities organized by National Service Scheme (NSS) & Life Long Learning & Education (LLE) units of our college.
- Staff were also appointed as PRO/ PO by Election Commission for Parliamentary and Assembly elections.

35. SWOC analysis of the department and Future plans Strengths:

Strengths:

- Strong Student Teacher rapport.
- Consistently producing good results at the University Examinations.
- Recognized Ph.D guide and well equipped Research lab.

Weakness:

- The Department has no industry linkages.
- No major research projects undertaken till date

Opportunities:

- More students can be guided to participate in intercollegiate and University level competitions and research festivals.
- Active Nature Club through which students have opportunities to learn Indoor Gardening, Landscaping, Nursery development and so on.

Challenges:

- To encourage students to pursue P.G programme and appear in various competitive exams.
- To attract meritorious students.

Future Plans:

- To plan more academic enrichment programmes for students.
- To apply for major research grants from UGC,DST, DBT, etc.

Department of Zoology

1. **Name of the Department**– Zoology
2. **Year of Establishment** -1990
3. **Names of Programmes/ Courses offered**– U.G. (B.Sc.)
4. **Names of Interdisciplinary courses and the departments/units involved**-Certificate Course in Nutrition and Dietetics (jointly with Botany Department)
5. **Annual/ semester/ choice based credit system (programmewise) –**
 - B.Sc. – **Credit Based Semester and Grading System**
 - Certificate Course – **Annual**
6. **Participation of the department in the courses offered by other Departments.** NA
7. **Courses in collaboration with other universities, industries, foreign institutions etc.** Nil
8. **Details of courses/ programmes discontinued (if any) with reasons:** Nil
9. **Number of teaching posts**

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

10.

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./ M.Phil students guided last 4 years
Dr. Jayasree Sasangan	M.Sc, D.H.E, Ph.D, PGDEM	Associate Professor and Head	Marine Biology	27	Nil
Dr. Meenakshi Kumaraguru	M.Sc; M.Phil; Ph.D	Associate Professor	Marine Biology	20	Nil
Ms. Chetna Sharma	M.Sc; NET	Assistant Professor	Entomology	06	Nil

11. **List of senior visiting faculty:** Nil
12. **Percentage of lectures delivered and practical classes handled**

(programmewise) by temporary faculty: Nil

13. **Student-Teacher Ratio(programmewise):** B.Sc. - 30: 1

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

The Department has one lab attendant. Technical staff of college helps in maintaining ICT tools. Administrative staff of the College provide required assistance and support to the department.

15. **Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG.**

Ph.D. – 02 P.G. – 01

16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received**

Dr. Meenakshi. K. is collaborating on an Intramural Research Project on “Oxidative stress in hereditary chronic hemolytic anemia and the protective effect of natural antioxidants –fermented papaya preparation, strawberry extract and potato peel: An in-vitro study” with National Institute of Immunohaematology (ICMR, Ministry of Health and Family Welfare) at K.E.M. Hospital, Mumbai.

17. **Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received**

2013-14- Ms. Chetna Sharma completed a Minor Research Project titled “Study of bioremediation of some bacteria species on azo/direct dyes and effluent from textile dyeing industry.” The research grant of Rs 23,000/- funded by University of Mumbai.

18. **Research Centre/ facility recognized by the University – Nil**

19. **Publications:**

Publication per faculty

a. Number of papers published by faculty and students in peer reviewed national journals.

b. Number of papers published by faculty and students in peer reviewed International journals.

c. Chapter in Books

d. Books with ISBN/ISSN numbers with details of publishers

e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Dr. Jayasree Sasangan	-	-	-	-	01	01
2	Dr. Meenakshi Kumaraguru	-	04	-	-	04	08
3	Mrs. Chetna Sharma	-	-	-	-	-	-

f. Number of publications listed in International Database Nil

g. Monographs Nil

h. Books Edited Nil

i. Citation index/ SNIP/ SJR/ impact factor/ h-index

Details in Annexure – 3.4.3

20. **Areas of consultancy and income generated:** Nil

21. **Faculty as members in National Committees/ International Committees/ Editorial Board:**

Dr. Jayasree Sasangan

- Life Member of Association of Teachers in Biological Sciences (ATBS) since 2012, Membership No. LM / 124.
- Life Member of the “Society for Science and Environment” since February 2004.
- Member of the team of MoU between CSIR-NIO and University of Mumbai June 2013.

Dr. Meenakshi Kumaraguru

- Life Member of Society for Free Radical Research (SFRR).

22. **Student projects:**

a) **Percentage of students who have done in-house project including inter departmental/programme:**

- Dr. Meenakshi Kumaraguru designed and guided a research project for S.Y.B.Sc students, during the year 2013-14 on low cost anemia detection at college level where blood samples of 100 girl students from different streams were tested for Anemia.
- 12 students of TYBSc (2014-15) extended the research work on “Case Studies of Anemia in College Girls”, for further investigation of causative factors by using advanced laboratory techniques. The testing was done in KEM Hospital, Mumbai.
- Following projects were undertaken during the academic year 2015-16:
 - Conservation of Sparrow Population: TYBSc students set up shelters for sparrows around the Zoology laboratory.
 - Aquaculture Unit - FYBSc students set up an Aquaculture Unit to learn about Breeding and Parental Care using the fish species – Black Molly.
 - *Paramoecium* culture was set up to standardize the culture method to use the animal as a model for drug interaction studies.
 - A research project on “Comparative study of anemia and cognitive impairment among college girls” was undertaken by 10 students of T.Y.B.Sc.

b) **Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies:** Nil

23. **Awards/ Recognitions received by faculty and students:**

Recognitions –Faculty

Dr. Jayasree Sasangan was appointed as Paper setter & Moderator for Zoology paper –I at TYB.Sc. University Examination till 2014.

Dr. Meenakshi Kumaraguru was appointed as Paper setter for T.Y.B.Sc. – Marine Science in 2011 and T.Y.B.Sc. – Zoology paper – II at TYB.Sc University Examinations in 2014 – 2015.

Awards - students:

- 08 students participated in the Intercollegiate event “Health Fair

2011” organized by the Department of Biochemistry, K. J. Somaiya College and won the following prizes:

- I Prize in Poster Competition
- II Prize in Poster Competition
- S.Y.B.Sc students participated in Intercollegiate Quiz competition at K.J. Somaiya College, Mumbai and won II prize in Quiz. (September 2013)
- Mr. Siddhant Dinakaran of FYBSc won II Prize in “Animal Photography 2013-14” organized by the Dept. of Zoology. CKT College, Panvel from 100 chosen photographs. He was awarded a trophy, certificate and cash prize of Rs.1500.

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

- Dr. Prashant Warang, Technical Assistant, National Institute of Immunohaematology, ICMR, KEM Hospital Campus, Parel, Mumbai.
- Dr. Anita Jadhav, Research Guide and Associate Professor, ICL College, Vashi, Mumbai.

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

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYBSC (CZ)
				*M	*F	
2011-12	F.Y.B.Sc.	287	50	25	25	75
2012-13	F.Y.B.Sc.	282	52	25	27	90.9
2013-14	F.Y.B.Sc.	218	50	16	34	100
2014-15	F.Y.B.Sc.	265	51	17	34	91.66
2015-16	F.Y.B.Sc.	295	66	22	44	100

27. Diversity of Students: 2015-2016

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	B.Sc.	100	Nil	Nil
2012-13	B.Sc.	96	4	Nil
2013-14	B.Sc.	98	2	Nil
2014-15	B.Sc.	98	2	Nil
2015-16	B.Sc.	95	5	Nil

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

No accurate information available as on date.

29. Student progression (Last Five years)

Student progression	Against % enrolled
UG to PG	35
PG to M. Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed	-
• Campus selection	50
• Other than campus recruitment	
Entrepreneurship/Self-employment	2

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books:539
- Journals/Magazines: 05
- Department Library: 93 Reference books.

b) Internet facilities for Staff & Students:

- Department has a PC with internet facility-can be used by staff and students.
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories:

Department has a well equipped laboratory for the conduct of practicals for the undergraduate programme.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- Study trips to various research institutions, institutions involved in environment conservation activities, trekking in forests and beach combing to explore nature and enable deeper insight into nature related issues so that an environmentally aware generation is built, are carried out regularly.
- The Department organizes SCI-FAUNA as part of Intra & Intercollegiate Science Fest SCI-TREK every year where Competition

like poster making, scientific rangoli, quiz, photography & collage are organized.

33. Teaching methods adopted to improve student learning

- Lectures augmented by the use of chalk and board especially in courses involving plenty of diagrams. This helps to impart drawing skills with a sense of time management.
- Demonstration based teaching in practical sessions involving dissections and skill based experiments in haematology. Expert in the field is invited to give a professional edge to teaching of the topic.
- Problem solving approach to teach concepts in genetics.
- Survey – based learning and analysis of genetic concepts and local biodiversity.
- Seminars by students to assess the depth of their knowledge and to hone their communication skills.
- Images and animations from the internet converted to PPT help to improve the comprehension of molecular biology concepts.
- Field trips to various ecological niches to understand biodiversity status on importance of conservation.

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

- Students are assigned projects and activities related to health awareness and environment consciousness to inculcate in them empathy towards fellow human beings and nature.
- The girls who were found to be severely anemic were sent to KEM for detailed investigation and consultation as a follow up of the continuous anemia detection projects.
- T.Y.B.Sc students participated in National Science Festival – 2016 held at N.E.S. International School, Mumbai. They presented projects and conducted awareness program on Bioremediation, Hemophilia and Human Helminth Parasites for the public who visited the festival.
- Staff were also appointed as PRO/ PO by Election Commission for parliamentary and assembly elections.

35. SWOC analysis of the department and future plans

Strengths:

- Well qualified, experienced and committed faculty.
- Consistently high success rate at University examination as compared to the overall pass percentage in the Science Faculty of the University.
- Best possible use of resources/infrastructure available.

Weaknesses:

- Major research project yet to be undertaken due to less enrolment of students at third year level.

Opportunities:

- Feasibility of setting up collaborations with research institutions like Homi Bhabha Centre for Science Education by involving students in small projects under CUBE (Collaborative Undergraduate Biology

Education) program.

- Scope for small intradepartmental research projects focussing on issues related to students' life as part of the Department's social responsibility, to create more awareness in the young generation.

Challenges:

- To take up major research projects.
- To keep pace with new techniques in higher education.

Future Plans:

- To set up a research laboratory.
- To increase interdepartmental collaboration at Institution level.

Department of Computer Science & Information Technology

1. **Name of the Department**– Computer Science & Information Technology
2. **Year of Establishment** -2001
3. **Names of Programmes/ Courses offered**–
U.G. B.Sc. (Computer Science)
U.G. B.Sc. (Information Technology) w.e.f 2016-17 onwards.
4. **Names of Interdisciplinary courses and the departments/units involved**-Nil
5. **Annual/ semester/ choice based credit system (programmewise) – Credit Based Semester and Grading System**
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**

	Sanctioned	Filled
Lecturers	04	04

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Ms. Arti Debnath	M.Sc	Lecturer	NA	01	NA
Ms. Ekta Mishra	M.Sc	Lecturer	NA	01	NA
Mr.Sandeep Pathak	MCA	Lecturer	NA	01	NA
Ms.Rajani Tripathi	MCA	Lecturer	NA	01	NA

11. **List of senior visiting faculty:** 05
12. **Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:** 100%
13. **Student-Teacher Ratio (programmewise):** B.Sc. (CS) 13: 1
B.Sc. (IT) 15:1
14. **Number of academic support staff (technical) and administrative**

staff; sanctioned and filled:

The Department has one lab attendant. Technical staff of college helps in maintaining ICT tools. Administrative staff of the college provide the required assistance and support to the Department.

15. **Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG.**
M.Sc.-02 MCA – 02
16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received–Nil**
17. **Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received–Nil**
18. **Research Centre/ facility recognized by the University – Nil**
19. **Publications: Nil**
20. **Areas of consultancy and income generated:Nil**
21. **Faculty as members International Committees/ National Committees / Editorial Board: Nil**
22. **Student projects:**
 - a) **Percentage of students who have done in-house project including interdepartmental/programme:**
All Third Year students undertake projects as part of their curriculum.
 - b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:Nil**
23. **Recognitions received by faculty and students:**

Students Awards (2013-2016)

 - Mr. Ansari S. Hussain won 1st prize in ‘Error Debugging’ at M.S. Thakur College, Mumbai.
 - Mr. Thakur Deepak Chandrakant won 2nd prize in ‘Error Debugging’ at M.S. Thakur College, Mumbai
 - Mr. Tejaswee Ramesh won 1st prize in ‘Tech Quiz’ at M.S. Thakur College, Mumbai
 - Mr. Monesh N. Mhatre won 2nd prize in ‘Tech Quiz’ at M.S. Thakur College Mumbai
 - Ms. Bhagyashri Bhosale won 1st prize in ‘Creative Designing’ at N.E.S. Ratnam College, Mumbai.
24. **List of eminent academicians and scientists / visitors to the department:**
 - Mr. Sachin Gadkar, Software Developer, GE, Mumbai (Alumnus of the Dept.)
 - Mr. Abhimanyu Nambisian, IKEN, Head, Content Developer & R & D Department, Mumbai. (Alumnus of the Dept.)
25. **Seminars/ Conferences/Workshops organized & the source of funding.**
Nil

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYBSc
				*M	*F	
2011-12	F.Y.B.Sc.	68	24	15	9	75
2012-13	F.Y.B.Sc.	55	24	17	6	83.33
2013-14	F.Y.B.Sc.	113	31	20	11	75
2014-15	F.Y.B.Sc.	153	29	15	14	67
2015-16	F.Y.B.Sc.	91	24	11	13	75

27. Diversity of Students: 2015-2016

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	B.Sc.	91.66	8.33	Nil
2012-13	B.Sc.	87.5	12.5	Nil
2013-14	B.Sc.	96.77	3.22	Nil
2014-15	B.Sc.	100	0	Nil
2015-16	B.Sc.	100	0	Nil

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

29. Student progression (Last Five years)

Student progression	Against % enrolled
UG to PG	32
PG to M. Phil.	Not Applicable
PG to Ph.D.	Not Applicable
Ph.D. to Post-Doctoral	Not Applicable
Employed • Campus selection • Other than campus recruitment	3 -
Entrepreneurship/Self-employment	Nil

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books:754
- Journals/Magazines: 03
- Department Library: 34 Reference books& Textbook.

b) Internet facilities for Staff & Students:

- Department has a PC with internet facility used by staff and students.
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories: The two Laboratories have 45 computers, 2 server computers and 3 printers.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

The Department organizes computer based activities as part of intercollegiate Science Festival ‘SCI-TREK’.

The events are

- Creative Designing: Here students can represent their creative and innovative ideas.
- Tech Quiz. Error Debugging, Sci-Byte Quiz: Here students can show their quick thinking & intellectual capabilities.

33. Teaching methods adopted to improve student learning

- Interactive teaching – learning, remedial teaching.
- Enhanced conceptual learning through the use of various softwares for the execution of codes
- Powerpoint presentation to explain the theoretical topics and important points.
- Use of smart board for computer aided teaching
- Teaching method involving chalk and board.

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

- All final year students undertake projects as a part of their academic curriculum.
- Some of the projects such as “Hospital Management”, “Blood Bank Management”, “Library Management”, “Institute Management” etc. can be beneficial to society.

35. SWOC analysis of the department and future plans

Strengths

- Well-equipped laboratory facilities.
- Favorable student-teacher ratio

Weaknesses

- Entry level competence of students is average and at times below average.
- Difficulties in motivating students to excel in academics.

Opportunities

- Students have ample opportunities to participate in intercollegiate competitions and develop their skills.
- To develop Academic - Industry collaboration.

Challenges

- Difficulty in retaining faculty in self-financing course.
- Encouraging students to pursue P.G courses and appear for various competitive exams.
- Guiding students to go through the campus recruitment process successfully.

Future Plan

- To introduce Certificate Course in Computer Science.

COMMERCE FACULTY

Department of Commerce

1. **Name of the department:**Commerce
2. **Year of Establishment:**1984
3. **Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D.,etc.):**
UG (B.Com) and P G (M.Com)
Certificate Course in “Retail Management”
4. **Names of Interdisciplinary courses and the departments/ units involved:**Nil
5. **Annual/ semester/ choice based credit system (programme wise)-**
UG & PG- Credit Based Semester and Grading System,
Annual system for Certificate Course
6. **Participation of the department in the Courses offered by other Departments:**
Taken lectures for students who had enrolled for Certificate Course in Conversational English conducted by the Department of English.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.**
Programme, Analytics and Research (PAR) programme for Skill Development of TISS, Mumbai
8. **Details of courses/ programmes discontinued (if any)with reasons:**Nil
9. **Number of teaching posts**

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

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Dr. LataSwamina than	M.Com. SET, Ph.D.	Associate Professor	Commerce	22	03
Ms. Rebecca Thomas	M.Com. M.Phil	Assistant Professor	Commerce	12	NA

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 (programmewise):**
 - U.G. -345:1
 - M.Com – 54 : 1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled-**
Administrative and technical staff of the College provide required assistance and support to the Department
15. **Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/ PG.**
PhD-01, M.Phil-01
16. **Number of facultywith ongoing projectsfrom a) National
b) International funding agencies and grants received:** Nil
17. **Departmental project funded by DST-FIST;UGC, DBT, ICSSR, etc. andtotal grants received:**

Department has undertaken two minor research projects funded by University of Mumbai in last five years.

Faculty	Title of the Project and Year	Grant Received
Ms. Rebecca T Co-I	Environmental Management System Certification in Manufacturing Companies in Thane – Prospects and Challenges – 2011-12	Interdepartmental (Environment Studies)
Ms. Rebecca T P.I	Strategic Green Marketing – A Comparative Study of Two Industries in Mumbai – 2012-13	Rs. 30,000/-

18. **Research Centre/ facility recognized by the University:**Nil

19. Publications:

Publication per faculty

- a. **Number of papers published by faculty and students in peer reviewed national journals.**
- b. **Number of papers published by faculty and students in peer reviewed International journals.**
- c. **Chapter in Books**
- d. **Books with ISBN/ISSN numbers with details of publishers**
- e. **Conference Proceedings with ISBN/ISSN numbers**

S. No.	Name of Staff	a	b	c	d	e	Total
1	Dr. Lata Swaminathan	04	02	04	-	02	12
2	Ms. Rebecca Thomas	05	-	01	-	02	08

- f. **Number of publications listed in International Database** Nil

- g. Monographs** Nil
- h. Books Edited** Nil
- i. Citation index/ SNIP/ SJR/ Impact factor/ h-index**

Details in Annexure - 3.4.3

20. Areas of consultancy and income generated: Nil

21. Faculty as members of International Committees/ National Committees/ Editorial Board:

Dr.LataSwaminathan

National Committees

- Member, Commerce Teachers' Association, Mumbai
- Member, Indo-Canadian Studies

International Committee:

- Member, International Association of Academicians and Researchers.

Editorial Board

Co-editor of Epignosis – Multi disciplinary Research Journal
published by NES Ratnam College.

22. Student projects:

a) Percentage of students who have done in-house project including inter departmental/programme:

- Two groups of students from the Department represented College at the Avishkar Research Convention, University of Mumbai in the year 2013-14.
- Two students from S.Y.B.Com participated at the Avishkar Research Convention, University of Mumbai during the year 2015-16 and were selected for the second round at district level.
- Students were involved in minor research project based activities on Environment Management System in 2011-12 & Green Marketing in 2012-13
- Projects taken up by students are published in newsletter of Commerce Department 'Pathfinders'. These topics are related to current events/students' interest:
 - ✓ Battle of Detergents in 2011
 - ✓ Social networking amongst students in 2012
 - ✓ Spending habits of students in 2014
 - ✓ Perspective on the current Government in 2016

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry other agencies: Nil

23. Awards and Recognitions received by faculty and students:

- Ms. K. Rebecca Thomas got the Best Paper Presentation Award for the research paper titled 'Employees' Perception of Women Entrepreneurs' Leadership Styles and Organisational Commitment' at one day National Conference on 'Contemporary Issues in Management - A Pathway for Vision 2020', organized by

Department of Commerce, Ramanand Arya D.A.V. College, Mumbai.

- **Dr. Lata Swaminathan**

- Governing Body's nominee as Subject Expert for the interview of Asst.Professor at Laxmi Chand Golwala College of Commerce & Economics, Mumbai.
- Member of the Syllabus Revision Committee for the subject of Marketing and Human Resource Management for the academic year 2014-15, University of Mumbai and Paper Setter for the same paper since 2014-15.
- Member, Advisory Board of the International Conference titled "Emerging Trends in Commerce & Management" (UGC & TANSCHÉ sponsored), Queen Mary's College, Chennai on 29th and 30th July, 2015.
- Referee for the research papers submitted by participants at the UGC Sponsored International Conference on "Sustainable Development: Challenges and Prospects" held on 17th, 18th and 19th January 2013 at Ness Wadia College of Commerce, Pune. Reviewed 99 research papers.
- Recognized Ph.D. Guide with Bharathiyar University, Coimbatore since August, 2012 and University of Mumbai since August 2015.

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

- **Prof. Mandar Arun & Prof. Umesh M. Chauhan** - Faculty members, Media Studies, University of Mumbai.
- **Mr. Kane Lew**- Wild life photographer & free lancer
- **Mr. Abhishek Shetty** -Young international motivational speaker
- **Mr. SureshRajamani** -Art Director of the film "AAMAKARA"
- **Mr. Manoj Joshi**-Art Director, Lintas
- **Ms. Karen Dias**- Freelance photographer
- **Mr. Deepak Punjabi**- Motivational Speaker and Trainer

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

The Department had co-organised an International Conference on 'Information and Communication for Development-Reach, Impact, Opportunities and Challenges' on 5th and 6th of October, 2012. The funding was done through private sponsorship and by Management.

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYB.Com/ M.Com. - II
				*M	*F	
2011-12	F.Y.B. Com	578	229	94	135	98.23
2012-13	F.Y.B. Com	584	218	86	132	97.50
2013-14	F.Y.B. Com	618	245	108	137	93.80
2014-15	F.Y.B. Com	692	276	110	166	95.07
2015-16	F.Y.B. Com	715	264	91	173	91.67
2011-12	M. Com - I	90	46	18	34	87.50
2012-13	M. Com - I	125	60	17	42	96.77
2013-14	M. Com - I	125	59	21	38	94.23
2014-15	M. Com - I	128	54	12	42	90.40
2015-16	M. Com - I	130	59	19	40	97.67

27. Diversity of Students:

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	B.Com.	99.12	0.88	Nil
2012-13	B.Com.	96.34	3.66	Nil
2013-14	B.Com.	98.77	1.22	Nil
2014-15	B.Com.	98.19	1.44	0.36
2015-16	B.Com.	97.35	2.27	0.37
2011-12	M. Com	100	Nil	Nil
2012-13	M. Com	100	Nil	Nil
2013-14	M. Com	100	Nil	Nil
2014-15	M. Com	100	Nil	Nil
2015-16	M. Com	98.38	1.61	Nil

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

As per the data available following examinations are cleared by the students:

NET 03 students

CAT 05 students

29. Students progression (2010-2015)

Student progression	Against % enrolled
UG to PG	38
PG to M. Phil.	-
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	
• Campus selection	5
• Other than campus recruitment	47
Entrepreneurship/Self-employment	10

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books:1723
- Journals/Magazines: 27
- Department Library: 70 Reference books.

b) Internet facilities for Staff & Students:

- Department has a PC with internet facility-can be used by staff and students.
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories: Computer lab is used for conduct of practicals of TYB.Com for ‘Computer Systems and Applications’ course.

31. Number of students receiving financial assistance from college University, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- The Department conducts seminars, workshops, guest lectures for soft-skill development, visits to public lectures/Management Institutes, participation in programmes on TV channels, skill development courses (PAR of TISS and BAP – Executive course by National Skill Development Corporation’s Artha Vidya programme)
- In addition to the above, ‘Masterminds’ of the Commerce Association organizes an annual intercollegiate fest titled ‘Zero Gravity’ inviting students from other colleges. This festival is entirely planned and organized by students and all activities conducted are theme based.
- The Department also releases an annual newsletter titled ‘Pathfinders’.
- Orion Awards was hosted by Masterminds on 10th January, 2015, to felicitate and recognize those alumni and current members of Masterminds who contributed a lot to the intercollegiate event

‘Zerogravity’ and newsletter ‘Pathfinders’ in the past 5 years. There were 21 categories of awards.

33. Teaching methods adopted to improve student learning

- The Department strives to make teaching-learning process concept based to ensure that students have clarity on terms and concepts.
- The faculty members use the inquiry mode of learning which focusses on questioning and research. Lot of emphasis is given to skill development which is achieved through various strategies like application of classroom knowledge in events organized by students and their contributions to the annual newsletter ‘Pathfinders’.
- To bring about concept clarity, Z to A method is used.
- In order to make learning effective, students are encouraged to make presentations which also enhance their communication skills.
- To aid the process of teaching-learning, the Department uses audio visual aids like OHP/LCD, group discussions, role plays, case studies, quiz, etc

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

- Students participate in blood donation camps and other activities organized by NSS & LLE units of the college.
- As part of empathizing with the not so fortunate sections of the society, students visit orphanages, old age homes, rescue homes, cancer patients, etc. & they render essential help for them through the Students’ Council.
- In one of the class days, students of TY (2014-15) hosted the children from Bhandup Orphanage and interacted with them and also gave them gifts.
- ‘MUSE’- the movie club of the students, screens movies of social relevance to sensitise the student community to burning issues in the society. The ex-members of the MUSE Club have also adopted a village Nareshwadi in Dahanu where free sanitary napkins are given to girls every month. The current members of MUSE also participate in this programme.
- During MANTRA- the Cultural Fest, MUSE conducts a short film competition based on social themes, which has also received international entries
- Staff were also appointed as PRO/ PO by Election Commission for Parliamentary and Assembly elections.

35. SWOC analysis of the department and future plans

Strength

- Research mindedness of the faculty
- Willingness to apply new trends in teaching

- Excellent staff - student relationship
- A good number of students are proactive to learning.

Weakness

- Majority of the students have low proficiency in English and also many are first generation graduates.
- The environment at home not very conducive for studying hence it is difficult to get them motivated to excel in academics.

Opportunity

- As many students are from socio-economically weaker sections, plenty of opportunity exists to mentor them for taking up higher studies & job related courses.
- Keeness to learn gives ample opportunities in teaching

Challenges

- To develop new/innovative teaching methods to capture the attention of learners
- To guide them as regards the negative influence of social media and to motivate students to acquire minimum P.G qualification before taking up jobs.

Future plans

- To collaborate with national and international institutions for faculty research and students enrichment activities.

Department of Accountancy

1. **Name of the Department**–Accountancy
2. **Year of Establishment** -1984
3. **Names of Programmes/ Courses offered**–
U.G. - B.Com. (Financial Accounting and Auditing)
B.Com. (Accounting & Finance) w.e.f. 2016-17
Certificate course in ‘Stock Market Operation Management’
4. **Names of Interdisciplinary courses and the departments/units involved**-Nil
5. **Annual/ semester/ choice based credit system (programmewise) –**
 - U.G–Credit Based Semester and Grading System
 - Certificate Course –Annual
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**

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

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Mr. Ashok V.Poojari	M.Com, SET M.Phil,	Assistant Professor	Accountancy	12	NA
Ms. NutanLokhande	M.Com, NET M.Phil,	Assistant Professor	Accountancy	11	NA

11. **List of senior visiting faculty:** Nil
12. **Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:** Nil
13. **Student-Teacher Ratio(programmewise):** B. Com- 345:1
14. **Number of academic support staff (technical) and administrative**

staff; sanctioned and filled:

Administrative and technical staff of the College provide required assistance and support to the Department.

15. Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG.

M. Phil. – 02

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received–Nil

17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received

Department has undertaken **two minor research projects** funded by **University of Mumbai** in last four years.

Faculty	Title of the Project and Year	Grant Received
Mr. Ashok P. Ms. Nutan L.	Impact of Non Performing Assets in Public Sector Banks on Education Loans (2012-13)	Rs. 25,000/-
Ms. Nutan L. Mr. Ashok P.	A study on Different Approaches to Valuation of Stock (2013-14)	Rs. 25,000/-

18. Research Centre/ facility recognized by the University – Nil

19. Publications:

Publication per faculty

- Number of papers published by faculty and students in peer reviewed national journals.**
- Number of papers published by faculty and students in peer reviewed International journals.**
- Chapter in Books**
- Books with ISBN/ISSN numbers with details of publishers**
- Conference Proceedings with ISBN/ISSN numbers**

S. No.	Name of Staff	a	b	c	d	e	Total
1	Mr. Ashok V.Poojari	-	-		-	06	06
2	Ms. NutanLokhande	-	03		07	06	16

f. Number of publications listed in International Database Nil

g. Monographs Nil

h. Books Edited Nil

i. Citation index/ SNIP/ SJR/ h-index -

20. Areas of consultancy and income generated: Nil

21. Faculty as members of International Committees/ National Committees/ Editorial Board:Nil

22. Student projects:

a) Percentage of students who have done in-house project including inter departmental/programme:

Same as Commerce Department.

b) Percentage of students placed for projects in organizations

outside the institution i.e.in Research laboratories/Industry/
other agencies: Nil

23. Recognitions received by faculty and students:

Mr Ashok V. Poojari

- Best NSS Program Officer Award at District Level for the year 2013-14, University of Mumbai
- Appointed as District Coordinator, NSS, University of Mumbai in 2016-17.

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

Same as Commerce Department

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

The Department had co-organised an International Conference on 'Information and Communication for Development-Reach, Impact, Opportunities and Challenges' on 5th and 6th October, 2012. The funding was done through private sponsorship and by Management.

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYB.Com
				*M	*F	
2011-12	F.Y.B. Com	578	229	94	135	98.23
2012-13	F.Y.B. Com	584	218	86	132	97.50
2013-14	F.Y.B. Com	618	245	108	137	93.80
2014-15	F.Y.B. Com	692	276	110	166	95.07
2015-16	F.Y.B. Com	715	264	91	173	91.67

27. Diversity of Students:

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	B.Com.	99.12	0.88	Nil
2012-13	B.Com.	96.34	3.66	Nil
2013-14	B.Com.	98.77	1.22	Nil
2014-15	B.Com.	98.19	1.44	0.36
2015-16	B.Com.	97.35	2.27	0.37

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	BA	89%	10%	Nil
2012-13	BA	88%	12%	Nil
2013-14	BA	96%	4%	Nil
2014-15	BA	100%	Nil	Nil
2015-16	BA	100%	Nil	Nil

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

Authentic data is not available.

29. Students progression (2010-2015)

Student progression	Against % enrolled
UG to P.G.	38
PG to M. Phil.	-
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	
• Campus selection	5
• Other than campus recruitment	47
Entrepreneurship/Self-employment	10

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books:1484
- Journals/Magazines: 04
- Department Library: 49 Reference books.

b) Internet facilities for Staff & Students:

- Internet facility in the Staff Room and in Teachers' Resource Centre for Staff. Students can access internet in library and computer lab
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories: Computer labs are used by staff and students as and when required.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- Workshops, Seminars, Guest Lectures are organized in the college.
- Visit to Management Institutes, neighborhood business

establishments,

- Public lectures attended by the students of the department:
 - ✓ Seminar by Mr. Ramesh Iyer, CFO, Mahindra Financial Services LTD on 'Career Options for Students' at Kalidas Auditorium, Mulund, Mumbai on 20th January, 2015.
 - ✓ Interactive session with Honourable External Affairs Minister Ms. Sushma Swaraj on 'International Policies' at Kalidas Auditorium, Mulund, Mumbai on 30 January, 2016.
- 28 students visited the exhibition 'Make in India' organized by Government of Maharashtra at BKC, Mumbai on 18th Feb 2016

33. Teaching methods adopted to improve student learning

Apart from the lecture method the Department uses the following methods:

- Fundamental Analysis Method: Annual reports of some companies are taken and analysed through Fundamental Analysis method where students easily learn comparative balance sheets, different ratios & formats of different financial statements.
- Apprenticeship: Students opting for Direct and Indirect Tax in TY B.Com are encouraged to take up apprenticeship with tax consultants which gives them hands on experience. Every year there are at least 10 students who take up apprenticeship.
- Combing Method is used in subjects which have a wider scope. Here the topics are divided into simpler units and allocated to each student who makes an in-depth study of the topic and presents it before the class.
- Learning through ICT: OHP and LCD is used in the class not only to put across accounting concepts and accounting problems but also to demonstrate the practical application of accounting in the corporate world.

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

- Students participate in blood donation camps, and attend other community oriented activities organized by NSS & LLE units of the College
- Students visit neighbourhood shops & guide shopkeepers in filing Income Tax Returns.
- 'MUSE'- the movie club of the students screen movies of social relevance to sensitise the student community to burning issues in the society. The ex-members of the MUSE Club have also adopted a village where free sanitary napkins are given to girls every month. The current members of the Muse also participate in this programme.
- Staff were also appointed as PRO/ PO by Election Commission for parliamentary and assembly elections

35. SWOC analysis of the department and Future plans Strengths:

Strength

- Adequately experienced staff having more than 10 years of teaching experience
- Excellent student-teacher rapport
- Students actively participate in various college events

Weakness

- Majority of the students are from vernacular medium and also many are first generation graduates.
- Students who are compelled to take up part time employment are unable to devote sufficient time for academics.

Opportunity

- The students are hard working and cooperative and so there is a great chance to mentor them for taking up higher studies & job related courses.
- Collaboration with BSE, NSE and some Chartered Accountants for training students with professional skills.

Challenges

- In today's world, media has great influence on students and getting their focus on academics is very challenging.
- Imparting skills is very difficult in a marks driven system.

Future Plans

- To introduce more skill based add on courses.

Department of Environment Studies

1. **Name of the Department**–Environment Studies
2. **Year of Establishment**- 1984
3. **Names of Programmes/ Courses offered**–
Environment Studies Course at UG level.
4. **Names of Interdisciplinary courses and the departments/units involved**-
Foundation Course for Arts, Science and Commerce students
5. **Annual/ semester/ choice based credit system (programmewise) –**
U.G.-**Credit Based Semester and Grading System**
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**

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

10.

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Ms. Deepa C	M.Sc, NET	Assistant Professor	Environmental Sciences	08	Nil

11. **List of senior visiting faculty:** Nil
12. **Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:** NA

13. Student-Teacher Ratio(programmewise): 246: 1

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

Administrative and technical staff of the College provide required assistance and support to the Department.

15. Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG.
P.G.– 01

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received - Nil

17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received:

Department has undertaken four minor research projects funded by University of Mumbai in last four years.

Faculty	Title of the Project and Year	Grant Received
Ms. Deepa C P.I. (2011-12)	Environmental Management System Certification in Manufacturing Companies in Thane – Prospects and Challenges 2011-12	Rs. 20000/-
Ms. Deepa C Co. I. (2012-13)	Strategic Green Marketing- A Comparative Study of Two Industries in Mumbai (2012-13)	Interdepartmental (Commerce)
Ms. Deepa C Co. I. (2012-13)	Biological and Chemical Monitoring of Roadside Plants Exposed to Vehicular Pollution in Central Belt of Mumbai	Interdepartmental (Chemistry)
Ms. Deepa C Co. I. (2013-14)	Study of Bioremediation Ability of Some Bacterial Species on Azo/Direct Dyes and Effluent from Textile Dyeing Industries	Interdepartmental (Zoology)

18. Research Centre/ facility recognized by the University – Nil

19. Publications: Nil

Publication per faculty

a. Number of papers published by faculty and students in peer reviewed national journals.

b. Number of papers published by faculty and students in peer reviewed International journals.

c. Chapter in Books

d. Books with ISBN/ISSN numbers with details of publishers

e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Ms. Deepa C	-	02	-	-	07	09

f. Number of publications listed in International Database Nil

g. Monographs Nil

h. Books Edited Nil

i. Citation index/ SNIP/ SJR/ h-index -

20. Areas of consultancy and income generated: Nil

21. Faculty as members of International Committees/ National Committees/ Editorial Board: Nil

22. Student projects:

a) Percentage of students who have done in-house project including inter departmental/programme:

- 5% of students of the Department have undertaken inhouse projects on issues related to Environment
- Students were involved in minor research project on 'Environment Management System' in 2011-12 & 'Green Marketing' in 2012-13
- Students undertook a project on Energy Consumption of the Institution and made recommendations to minimize wastage of energy.
- Poster exhibition on 'Think, Eat and Save' by FY B.Com students in 2013-14
- Study on current scenario of waste segregation in primary health centre in and around Bhandup by SY B.Com students as part of Foundation Course curriculum.
- Projects taken up by students are published in newsletter of Commerce Department 'Pathfinders'
- Students did survey on alternatives to the plastic vessels used in the 'Nestle Outlet' at the campus and tried to sensitize the staff working there to the health issues arising from serving hot foodstuffs in plastic vessels.
- Students were asked to check the effectiveness of 'child line number' as a live project

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies: Nil

23. Recognitions received by faculty and students:

Ms. Deepa C received Joseph Lister Award from Photon Foundation USA in Ethnobotany

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

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

The Department had co-organised an International Conference on 'Information and Communication for Development-Reach, Impact, Opportunities and Challenges' on 5th and 6th October, 2012. The funding was done through private sponsorship and by Management.

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at F.Y.B.Com
				*M	*F	
2011-12	F.Y.B. Com	578	229	94	135	87.33
2012-13	F.Y.B. Com	584	218	86	132	94.03
2013-14	F.Y.B. Com	618	245	108	137	90.20
2014-15	F.Y.B. Com	692	276	110	166	80.07
2015-16	F.Y.B. Com	715	264	91	173	70.07

27. Diversity of Students:

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	B.Com.	99.12%	0.88%	Nil
2012-13	B.Com.	96.34%	3.66%	Nil
2013-14	B.Com.	98.77%	1.22%	Nil
2014-15	B.Com.	98.19%	1.44%	0.36%
2015-16	B.Com.	97.35%	2.27%	0.37%

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

29. Students progression: NA

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books:890
- Journals/Magazines: 04
- Department Library: Text books :36

b) Internet facilities for Staff & Students:

- Internet facility in the Staff Rroom and in Teachers' Resource Centre for Staff. Students can access internet in library and computer lab
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories:Computer labs are used by staff and students as and when required.

31. Number of students receiving financial assistance from college University, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Student enrichment programmes include:

- Students of S.Y.B.Com take up awareness programme on 'Save Environment' every year in the month of June to celebrate World Environment Day.
- Students make presentations on current UN theme.
- Visits to welfare centers are arranged to sensitize the youngsters to less privileged people of society.
- Students are encouraged to go to the library in groups to read/collect latest informations on environmental issues.

33. Teaching methods adopted to improve student learning

Along with the lecture method, interactive methods like group discussion/ debates related to current topics & poster exhibitions are also used. In order to bring about a shift in their mindsets with regard to social issues, provoking questions are posed & students are encouraged to think about practical solutions to existing environmental issues & the way they would contribute to solving them. LCD & OHP are used as teaching aids.

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

- Students participate in community oriented activities organized by NSS & LLE units of the College
- Students visit old age homes and orphanages to get sensitized to the condition of inmates.
- Staff is also appointed as PRO/ PO by Election Commission for Parliamentary and Assembly elections.

35. SWOC analysis of the department and Future plans Strengths:

Strength

- Positive feedback from students
- Students' involvement in curriculum based activities
- Students are sensitized to social issues

Weakness

- Restricted field activities because of large size of the class.
- Less opportunities to go into the depth of the subject as it is a paper for commerce students.

Opportunities

- Immense opportunities to sensitize students to environmental concerns.
- Create interest in learning by giving real life examples.

Challenges

- To engage the interest of the students as this course is not taught to

commerce students at final year.

Future plans

- To introduce field visits in Foundation Course and Environment Studies course.
- To take up research projects involving students that can benefit society.

Department of Business Law

1. **Name of the department:**Business Law
2. **Year of Establishment:**1985
3. **Names of Programmes/ Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D. etc.):**
Business Law Course at UG level
4. **Names of Interdisciplinary courses and the departments/ units involved:**Nil
5. **Annual/ semester/ choice based credit system (programe wise)-**
UG Credit Based Semester and Grading System
6. **Participation of the department in the courses offered by other departments :** Have taken lectures for students of the Department of Management Studies, and Banking & Insurance.
7. **Courses in collaboration with other universities, industries, foreign institutions, etc :**Nil
8. **Details of courses/ programmes discontinued (if any)with reasons:**Nil
9. **Number of Teaching posts**

	Sanctioned	Filled
VisitingLecturer	01	01

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Mr. Rahul V.Gokhale	M.Com, L.L.M	Lecturer	Business Law	4 years	...

11. **List of senior visiting faculty:** Nil
12. **Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty:** Nil

13. Student-Teacher Ratio(programmewise):

B.Com	200: 1
B.M.S	60: 1
B.B.I	60: 1

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

Administrative and technical staff of the College provides required assistance and support to the Department.

15. Qualifications of teaching faculty with D Sc/D. Lit/Ph.D/M.Phil/PG.

P.G. – 01

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received - Nil**17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received-Nil****18. Research Centre/ facility recognized by the University – Nil****19. Publications: Nil****20. Areas of consultancy and income generated:Nil****21. Faculty as members of International Committees/ National Committees/ Editorial Board:Nil****22. Student projects:****a) Percentage of students who have done in-house project including inter departmental/programme:Nil****b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:Nil****23. Recognitions received by faculty and students: Nil****24. List of eminent academicians and scientists/ visitors to the department:Nil****25. Seminars/ Conferences/Workshops organized & the source of funding: Nil****26. Student profile programme/course wise**

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at SYB.Com
				*M	*F	
2011-12	F.Y.B. Com	578	229	94	135	-
2012-13	F.Y.B. Com	584	218	86	132	90.40
2013-14	F.Y.B. Com	618	245	108	137	87.19
2014-15	F.Y.B. Com	692	276	110	166	98.62
2015-16	F.Y.B. Com	715	264	91	173	97.28

27. Diversity of Students:

Year	Name of the Course	% of students from the same state	% of students from other	% of students from abroad

			States	
2011-12	B.Com.	96.68	3.31	Nil
2012-13	B.Com.	99.12	0.88	Nil
2013-14	B.Com.	96.34	3.66	Nil
2014-15	B.Com.	98.77	1.22	Nil
2015-16	B.Com.	98.19	1.44	0.36%

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

29. Students progression (2010-2015)

Student progression	Against % enrolled
UG to P.G.	38
PG to M. Phil.	
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	
• Campus selection	5
•Other than campus recruitment	70
Entrepreneurship/Self-employment	10

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books:260

b) Internet facilities for Staff & Students:

- Internet facility in the Staff Room and in Teachers' Resource Centre for Staff. Students can access internet in library and computer lab
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories:Computer labs are used by staff and students asand when required.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts: Nil

33. Teaching methods adopted to improve student learning

To enable students to understand the concepts in Law, following

methods are used:

- Psycho- analysis method: Students are given situations and they have to analyse them and express their opinions and identify applications of law.
- Moot Courts: Topics are given to students so that they represent themselves for or against the case and resolve it by applying relevant case laws.
- Case study: Real life cases from print and electronic media are discussed and analysed.

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

35. SWOC analysis of the department and Future plans Strengths:

Strength

- Faculty is qualified and has rich experience in practice
- Good rapport with students despite being a visiting faculty

Weakness

- Majority of the students are from vernacular medium and also many are first generation graduates.
- Students find it difficult to express themselves in legal language because of their background.

Opportunity

- Law as a subject interests the students and so there are ample opportunities to guide and mentor them

Challenges

- To develop innovative teaching methods to capture the attention of learners
- To enable students to express themselves and be successful professionally.

Department of Management Studies

1. **Name of the Department**–Management Studies
2. **Year of Establishment**–2001
3. **Names of Programmes/ Courses offered**–U.G.
4. **Names of Interdisciplinary courses and the departments/units involved**-Nil
5. **Annual/ semester/ choice based credit system (programmewise) –**
 - U.G–Credit Based Semester and Grading System
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 (ifany) with reasons:**
Nil
9. **Number of teaching posts**

	Sanctioned	Filled
Associate Professors	-	-
Asst. Professors	-	-
Lecturer	04	04

10.

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided last 4 years
Ms. Jisha Alwin	M.B.A.	Lecturer	Finance	05	Nil
Ms. Ranjini Iyengar	M.M.S.	Lecturer	Finance	01	Nil
Ms. Ranjana Mishra	B.Sc. (Computer Science)	Lecturer	Marketing	-	-

	MBA				
Ms. Deepika Gawde	M.Com PGDHRM		Management HRM		

11. List of senior visiting faculty:

Name Of Faculty	Subject	Semester
1.Ms. Sumathi Gopal	Business Law, Industrial Law	Sem I Sem II
2.Mr. Rahul Gokahle	Business Law, Industrial Law	Sem I Sem II
3. Mr. Ajit Karandikar	International Finance	Sem VI

12. Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty: 50%

13. Student-Teacher Ratio (programmewise): B.M.S – 43:1

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

Administrative and technical staff of the college provide required assistance and support to the department.

15. Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG. P.G. - 04

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received - Nil

17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received-Nil

18. Research Centre/ facility recognized by the University – Nil

19. Publications: Nil

20. Areas of consultancy and income generated:Nil

21. Faculty as members of International Committees/ National Committees/ Editorial Board:

Nil

22. Student projects:

a) Percentage of students who have done in-house project including inter departmental/programme:

100% of Third Year Semester V students, as partial fulfilment of the requirement for the award of the Degree of Bachelor of Management Studies, prepare detailed project on their respective specialization (Finance, HR & Marketing) arena which gives them an opportunity to get deeper insight into the selected topic.

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:

20% of students are provided with a letter on demand to visit industry for their project topic.

23. Recognitions received by faculty and students: Nil

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

Mr. Arun Chitlangia, Facilitator & trainer was invited to speak on Presentation Skills & Public Speaking.

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

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYBMS
				*M	*F	
2011-12	F.Y.B. M.S	243	60	29	32	89.8
2012-13	F.Y.B. M.S	189	60	28	31	87.03
2013-14	F.Y.B. M.S	194	61	26	35	81.3
2014-15	F.Y.B. M.S	288	71	35	36	76.9
2015-16	F.Y.B. M.S	293	72	33	39	89.13

27. Diversity of Students:

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	B.M.S	100	Nil	Nil
2012-13	B.M.S	100	Nil	Nil
2013-14	B.M.S	100	Nil	Nil
2014-15	B.M.S	97.18	2.82	Nil
2015-16	B.M.S	97.22	2.78	Nil

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

As per the data available following examinations are cleared by the students:

MH-CET (For MBA) = 09

C-MAT = 01

29. Students progression (2010-2015)

Student progression	Against % enrolled
UG to P.G.	21
PG to M. Phil.	NA
PG to Ph.D.	NA

Ph.D. to Post-Doctoral	NA
Employed	
• Campus selection	15
• Other than campus recruitment	30
Entrepreneurship/Self-employment	6

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books:1990
- Journals/Magazines: 15
- Department Library: 210 Text books.

b) Internet facilities for Staff & Students:

- Internet facility in the Staff Room and in Teachers' Resource Centre for Staff. Students can access internet in library and in computer lab
- Wi-Fi at selective places for staff and students

c) Classrooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories: Computer laboratories are used by staff and students as and when required.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- BMS Department has formed its own Management Club "RENDEZVOUS", under which faculty members assist the organizing committee of students to conduct various activities. Activities conducted focus on honing management skills. This helps students to enhance their creative skills and add to the theoretical knowledge imparted by teachers in the classroom.
- The Department of Management Studies, along with Banking & Insurance Department, hosts MANZIL, an inter-collegiate fest MANZIL comes out with an innovative theme every year which revolves around the basics of management. The festival aims at giving the students a platform to showcase their creative/management skills & to improve their personality.
- Through Industrial visits attempt is made to collaborate with the industries to get a practical view of how industries function. The following Industrial visits were organized for the students.
 - ✓ Sudarshan Shipping Mills, Silvasa
 - ✓ Valvinox S.R.L. India Pvt. Ltd., Lonavala

- ✓ Voltas Ltd., Silvasa
- ✓ Gowardhan Cheese Factory, Pune.
- The departmental Magazine, “Dossier” is a reflection of today’s management world. The objective is to create awareness about management and its different aspects. Dossier contains articles focusing on management, crosswords, puzzles, quiz, short management stories, etc.

33. Teaching methods adopted to improve student’s learning

Enhanced Lecture Method:

Lectures are supported by case studies, quiz, discussion, debates and power point presentations, documentaries and videos.

Role play and scenario analysis based teaching: Role profiles of specific characters or organizations

Case Method: The students are presented a case and are asked to decide on a solution to the problem. Cases are used as a base for interactive classroom discussions.

Experiential Learning through Industries Visits: Industrial visits are organized to get students acquainted with the actual functioning of factories & departments.

Active learning through Games: This method is used to demonstrate some management theories, accounting concepts and importance of proper communication.

Mind map method: is used to review topics after the lesson is taught.

Guided learning: Students are grouped and provided materials to learn independently on a particular topic

Projects: Academic projects give students an opportunity to do research work.

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

Students participate in social activities through NSS, LLE and Students’ Council

35. SWOC analysis of the department and Future plans:

Strength:

- Excellent student teacher rapport
- Students are groomed to confidently face challenges in the future.

Weakness:

- Not many students aim for higher studies.
- Lack of scope for providing adequate practical knowledge because of various constraints.

Opportunities:

- To start some skill based short term courses.
- To motivate students to go for higher education.

Challenges:

- To motivate students to carry out research.

- To help willing students to get summer placements..

Future Plans:

- To collaborate with industry and institutions of repute to start skill development programs for students.
- To establish tie-up with industries and management institutes of repute for undertaking various students' enrichment activities.

Department of Banking and Insurance

- Name of the Department**–Banking and Insurance
- Year of Establishment** -2006
- Names of Programmes/ Courses offered**–
U.G.: B.Com (Banking and insurance.),
- Names of Interdisciplinary courses and the departments/units involved**-Nil
- Annual/ semester/ choice based credit system (programmewise) –**
U.G –**Credit Based Semester and Grading System**
- Participation of the department in the courses offered by other departments**

Mr. Rajiv Mishra has participated in interdepartmental Courses:

- **Department of Management Studies:** Three Courses - Management Accounting, Financial Management, and Direct & Indirect Tax
- **Department of Commerce:** Four Courses: Advanced Financial Accounting, Advanced Financial Management, Direct Tax & Indirect Tax, and Cost & Management Accounting for M.Com.students.

- Courses in collaboration with other universities, industries, foreign institutions etc.**Nil

8.Details of courses/ programmes discontinued (ifany) with reasons:

Nil

9. Number of teaching posts

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

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

Name	Qualification	Designation	Specialization	Years of experience	Ph.D./M.Phil students guided

					last 4 years
Ms.Riya Rupani	M.Com M.H.R.D.M. NET, SET	Assistant Professor	Cost Accounting, HR	13	Nil
Mr.Rajiv Mishra	M.Com M.B.A., M. Phil,NET	Assistant Professor	Accountancy Finance	13	Nil
Ms. Khushboo Tripathi	M.Com B.ED	Lecturer	Accounting	-	-

11. List of senior visiting faculty:

Name of Faculty	Subject	Semester
Ms. Sumathi Gopal	• Laws Governing Banking & Insurance,	Sem III
	• Corporate Law & Laws Governing Capital Market	Sem IV
Ms. Bhakti V.	• Quantitative Methods I	Sem I
	• Quantitative Methods II	Sem II
Ms. Karthiyani S.	• Quantitative Methods I	Sem I
Mr. Nitin Agarwal	• Auditing	Sem V
Ms. Shilpa Hatewar	• Quantitative Methods II	Sem II
Ms.Booma Halpeth	• Strategic Management	Sem VI
	• Environmental & Management of Financial Services	
Mr. Rahul Gokhale	• Bussiness Law	Sem II
	• Laws Governing Banking & Insurance,	Sem III
	• Corporate Law & Laws Governing Capital Market	Sem IV
Ms. Jayshree Sen	• Economics (Macro)	Sem II
Mr. Ajit Karandikar	• Environment & Management of Financial Services	Sem I
Ms. Shikha Srivastava	• Auditing	Sem V
Mr. Asif Baig	• Auditing	Sem V

12. Percentage of lectures delivered and practical classes handled (programmewise) by temporary faculty: 25%

13. Student-Teacher Ratio(programmewise): U.G. 47: 1

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

Administrative and technical staff of the college provide required assistance and support to the department.

15. **Qualifications of teaching faculty with D Sc/D. Lit /Ph.D/M.Phil/PG. P.G. – 03**
16. **Number of faculty with on going projects from a) National b) International funding agencies and grants received - Nil**
17. **Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received- Nil**
18. **Research Centre/ facility recognized by the University – Nil**
19. **Publications:**

Publication per faculty

a. Number of papers published by faculty and students in peer reviewed national journals.

b. Number of papers published by faculty and students in peer reviewed International journals.

c. Chapter in Books

d. Books with ISBN/ISSN numbers with details of publishers

e. Conference Proceedings with ISBN/ISSN numbers

S. No.	Name of Staff	a	b	c	d	e	Total
1	Ms. Riya Rupani	02	01	-	07	01	11
2	Mr. Rajiv Mishra	04	-	-	40	03	47

f. Number of publications listed in International Database Nil

g. Monographs Nil

h. Books Edited Nil

i. Citation index/ SNIP/ SJR/ h-index -

20. **Areas of consultancy and income generated: Nil**
21. **Faculty as members International Committees/National Committees/Editorial Board: Nil**
22. **Student projects:**
 - a) **Percentage of students who have done in-house project including inter departmental/programme:**
100% of Third Year (Semester V & VI) students prepare projects on Banking and Insurance as part of their curriculum. This gives them an opportunity to get an insight into selected topics.
 - b) **Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies:**
Around 20% of students are provided with a letter on demand to visit banks & insurance companies related to their selected project topics.
23. **Awards/ Recognitions received by faculty and students:**
Ms. Riya Rupani:
 - Appointed as Paper Setter for T.Y.B.Com (B&I) Semester – VI from the Academic year 2010-11 to 2011-12.
 - Appointed as Paper Setter for F.Y.B.Com (B&I) Semester – I for

Academic year 2016-17.

Mr. Rajiv Mishra:

- Appointed as Paper Setter for T.Y.B.Com (B&I) Semester – V from the Academic year 2010-11 to 2016-17

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

- Mr. M. P. Sadekar, ProspectorAmbika Consultancy Services,
- Mr. Swapnil Bhoite, Head of Mulund Branch ,TIME,
- Prof .Shilpi Gupta, Department of Marketing, IBS, Business School
- Mr. ArunChitlangia, Facilitator & Trainer

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

26. Student profile programme/course wise

	Name of the Course/ programme	Applications received	Selected	Enrolled		Pass % at TYBCom (B&I)
				*M	*F	
2011-12	F.Y.B. Com (B&I)	105	52	11	41	96.42%
2012-13	F.Y.B. Com (B&I)	100	60	17	43	93.75%
2013-14	F.Y.B. Com (B&I)	132	55	12	43	92%
2014-15	F.Y.B. Com (B&I)	162	65	20	45	87.5%
2015-16	F.Y.B. Com (B&I)	148	71	24	47	92.45%

27. Diversity of Students: 2015-2016

Year	Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
2011-12	B.Com(B&I)	99.12%	0.88%	Nil
2012-13	B.Com(B&I)	96.34%	3.66%	Nil
2013-14	B.Com(B&I)	98.77%	1.22%	Nil
2014-15	B.Com(B&I)	98.19%	1.44%	0.36%
2015-16	B.Com(B&I)	97.35%	2.27%	0.37%

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

As per the data available following examinations are cleared by the students:

CAT - 04

CMAT - 01

CS - 01

29. Student progression (Last Five years)

Student progression	Against % enrolled
UG to PG	24%

PG to M. Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	
• Campus selection	15%
• Other than campus recruitment	33%
Entrepreneurship/Self-employment	4%

30. Details of Infrastructural facilities

a) Library

- In Central Library: No. of Text books/Reference books:1113
- Journals/Magazines: 15
- Department Library: 54 Reference books.

b) Internet facilities for Staff & Students:

- Department has a PC with internet facility-can be used by staff and students.
- Wi-Fi at selective places for staff and students

c) Class rooms with ICT facility:

Every classroom has provision of OHP, LCD Projector and is Smart Board enabled.

d) Laboratories:

Computer laboratories are used for conduct of practicals in ‘Introduction to Computer Systems’. Labs are also used by staff and students for ICT related work as and when required.

31. Number of students receiving financial assistance from college university, government or other agencies

Data is available in the College Profile.

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

- The Department has its activity Club “AMITY” under which faculty members assist the organizing committee of students to conduct activities focusing on Banking & Insurance Sectors. This helps students to hone their leadership skills & other soft skills.
- The Department, along with Management Studies Department, hosts Manzil, an annual inter-collegiate fest. Manzil comes out with an innovative theme every year which revolves around the basics of management. The festival aims at giving the students a platform to showcase their creative skills & to improve their personality.

- Through Industrial visits attempt is made to connect with the Industries & Banks. Students get first hand information through these visits which benefit them immensely. Some of industries visited are:
 - ✓ Parle G, Mumbai
 - ✓ RBI Monetary Museum, Mumbai
 - ✓ Sudarshan Shipping Mills, Silvasa
 - ✓ Valvinox S.R.L. India Pvt. Ltd., Lonavala
 - ✓ Voltas Ltd., Silvasa
 - ✓ Bombay Stock Exchange, Mumbai
 - ✓ Gowardhan Cheese Factory, Pune
- The department has its own Magazine titled “The B&I Buzz...” .The objective is to upgrade students’ knowledge about different sectors of Banking & Insurance through appropriate articles. The magazine also publishes crosswords, puzzles, quiz, etc.

33. Teaching methods adopted to improve student learning

Classroom lecture method: is enriched with use of videos, documentaries and power point presentations

Practical Approach Method: Students are provided with annual reports of companies to make them acquainted with accounting terminology and also to explain various types of reports.

Problem based teaching Method: Students are trained to analyze the insurance problems.

Field visit: Visits to BSE, RBI and monetary museum gives hands-on learning experience, enhances information and creates awareness of their functioning.

Role play based teaching: Role of a decision maker regarding a policy, resource allocation, dispersal of loans, etc.

Projects: Academic projects enable students to acquire research experience.

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

Students as members of NSS, LLE and Students’ Council are involved in various social activities.

35. SWOC analysis of the department and future plans

Strength:

- Excellent student teacher rapport.
- Academic excellence-By & large 100% result in Third Year University Exam every year.

Weakness:

- Not many students go for higher studies.
- Lack of scope for providing adequate practical knowledge because of various constraints.

Opportunities:

- To produce rank holders at University examinations.

- To start some skill –based short term courses.

Challenges:

- To motivate students to carry out research.
- To groom students adequately to suit industry's expectations.

Future Plans:

- To prepare students for government examination related to Banking & Insurance sector.
- To motivate students to go for higher education i.e. post-graduate and professional courses like CA, CS, ICWA, MBA, LLB.
- To collaborate with industry and national institutions to provide training program to enhance the employability of students.

Post NAAC Initiatives

The College as a part of its quality sustenance and enhancement initiatives has taken the following steps post its last accreditation in 2011(second cycle).

Criteria I- Curricular Aspects

- The College over the last five years has introduced relevant Programs/Courses to increase the options for the student community and also develop skills needed to enhance global competencies. As a result 2 Undergraduate Programs [B.Com (Accounting & Finance), B.Sc (IT)], 1 Post Graduate (M.Sc in Analytical Chemistry) , 1 Doctoral (Ph.D in Botany) and 5 skill based Certificate Courses have been introduced.
- More number of teachers have become members of the Syllabus Restructuring Committee of the University and thus contributing to Curriculum Development.
- The College has continued with its Best Practices of organizing syllabus related workshops , deputing staff to attend such workshops and also its quest for excellence through a well designed PDCA (Plan, Do, Check and Act) process.

Criteria II- Teaching, Learning and Evaluation

The teaching-learning process continues to be the strength of the College. The faculty believes in using learner centric teaching methods which not only ensure effective curriculum delivery but also contribute towards achieving the desired learning outcomes and graduate attributes.

- Over the years the enrolment of students with higher percentage at the qualifying examinations has increased.
- The use of ICT tools in teaching-learning has substantially increased.
- Results at the University examinations continue to be better than the University results/results of few neighbouring colleges/ few colleges

with 'A' grade accreditation. The number of first classes in these examinations has shown a considerable increase in most of the departments.

- The Best Practices of preparing lesson plans, maintaining log books, obtaining formal and informal feedback from students, remedial teaching, guiding advanced learners and the conduct of preliminary examinations (which is non-mandatory) are continued with. The College has a continuous evaluation and monitoring mechanism for effective teaching and learning.

Criteria III- Research, Consultancy and Extension

- The Research Committee set up post second cycle of NAAC is contributing significantly to promote research culture amongst staff and students.
- More faculty are now participating and presenting papers in workshops and conferences especially at International/ National level.
- The faculty having completed and pursuing Ph.D has increased.
- The number of publications in referred journals has shown good increase and also the number of minor research projects.
- Some faculty have also won prizes for their Research papers at national and international level.
- Inter disciplinary research projects have increased and 3 projects totalling to Rs. 6 lakhs have been funded by UGC.
- As compared to the last NAAC cycle when there were no Ph.D guides, now there are 3 guides with 7 students pursuing research.
- Post NAAC, the College has been hosting International/ National Conference every year.
- 4 staff have received the benefit of FIP in the last five years to complete their Ph.D.
- Research work by students has also increased and three projects by students have qualified to reach the district level and one to the State level at the Avishkar Research Convention of University of Mumbai.
- Number of community outreach activities under NSS has increased substantially and the College has become a lead college in this zone. The NSS volunteers' participation at the University programmes has increased and Mr. Ashok Poojari has become the District level Programme Co-ordinator.
- The LLE unit of the College continues to enjoy the status of Lead College for the last many years. Dr. Akanksha Gawde, in-charge of the LLE unit is the Co-ordinator guiding the functioning of LLE units of 8 other colleges.

- Post NAAC, consultancy projects have been taken up. The network with external research agencies/ academic institutions like TISS, AIRC, BC, TIFR, NBHM, HBCSE, IACT, IAPT, BNHS, MSI, ATBS has become stronger.
- The practice of receiving awards for its extension activities has been sustained. The NSS and LLE units of the college have received awards/prizes at the University level.

Criteria IV- Infrastructure and Learning Resources

- The infrastructure facilities have increased in the last five years.
- ICT tools for teaching have increased and now every department has become self sufficient.
- The number of books in the library has increased by approximately 50 percent and so have the journals. A digital section has been created in the library.
- The new additions to the infrastructure are Fire alarm system, more number of fire extinguishers on all floors, CCTV, up gradation of laboratories, wi-fi enabled campus, greenhouse in the garden, mikes for teachers, smart boards enabled classrooms, sanitary napkin vending machine, ramp and railing-facilities for the physically challenged, renovated AV room and class rooms.
- There is a significant increase in the spending on developing infrastructure facilities in the past five years.
- The College continues with its best practice of the book bank scheme, annual maintenance of all its equipments and facilities, having a clean and green campus and optimally using its infrastructure.
- The College is working towards making its infrastructure eco-friendly.

Criteria V- Student Support and Progression

- Post NAAC there has been increase in students' participation in cultural and sports activities. The number of prizes won in the intercollegiate competitions has gone up and there are some prizes won at the University level also.
- There is an increase in the quality and quantity of students' enrichment activities. Each department has its own intra and inter collegiate events. Many departments have their own newsletters.
- There is an increased number of students pursuing higher studies in India and abroad.
- Alumni interaction with the College has significantly increased.
- Mathematics, Physics, Marathi and Political Science departments guide students to prepare for competitive exams.

- Number of students showing inclination towards becoming an entrepreneur has also increased.
- The College continues its best practice of having a strong rapport between the students and teachers.

Criteria VI- Governance, Leadership and Management

- The Mission of the College has been revised to bring in more accountability towards social development.
- The IQAC has been very active and has been adequately supported by the Academic and Administrative Committee and the College Development Council. Both these Committees support the IQAC in its functioning and have enabled the involvement of more faculty in the quality sustenance and enhancement process.
- The Management with its completion of 50 years in the field of education in 2012 has become more robust in its functioning. It believes in participatory style of functioning giving sufficient freedom to the Principal and staff to work towards quality sustenance and enhancement initiatives thus leading to a well engaged human resource which strives hard to contribute its best to the College.
- The Community development initiatives of the Management have increased.

Criteria VII- Innovations and Best Practices

- Most of the innovative practices of the College have been aligned with national objectives as set by the Government of India.
- Post second cycle of NAAC, College has taken following initiatives
- An E- Cell has been set up. To strengthen the Start-up India Movement initiated by the Prime Minister, the NES National Students' Start Up Fest was conducted which gave a platform to budding entrepreneurs across the city of Mumbai and different states of India not only to showcase their business ideas but also to interact with successful entrepreneurs and investors.
- The NSS and LLE units of our college have conducted many activities to promote the girl child's well being thus contributing to the Government's mission of 'Beti Bachao, Beti Padhao' and leading to women empowerment. The NSS unit has also supported the Prime Minister's Swachh Bharat Abhiyan through the cleanliness drive activities in the adopted areas, neighbouring areas and Bhandup railway station.
- Towards eco friendly practices and energy conservation, the College has initiated solid and e-waste management, working on setting up of solar panels, installation of LED lights, campaigning against use of

plastic, energy audit and maintaining a section of medicinal plants in its garden.

- The College continues with its Best Practice of 3 tier training (for staff, students and parents), activities based on annual theme, monthly drives, theme based Class Day Celebrations & Prize Distribution Function.

Future Plan

- To add to physical infrastructure
- To introduce more need based programmes/courses
- To promote extensive use of ICT tools in teaching –learning.
- To take up major research projects
- To enhance consultancy, collaborations and linkages.



NES Ratnam College

OF ARTS, SCIENCE & COMMERCE

BEST COLLEGE (2013-14) - University of Mumbai



Certificate of Compliance

(Affiliated/Constituent/Autonomous Colleges and Recognized Institutions)

This is to certify that **National Education Society's Ratnam College of Arts, Science & Commerce** fulfils all norms

1. Stipulated by the affiliating University- University of Mumbai
2. Regulatory Council/Body - UGC
3. The affiliation and recognition is valid as on date.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date: 23.12.16
Place: Mumbai, Maharashtra

Rishi Saw
Principal



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Website : www.ratnamcollege.org

NES & SVB COMPLEX - BHANDUP - DHARAVI - MULUND - DOMBIVLI - DAWDI



Declaration by the Head of the Institution

I certify that the data included in this Self- Study Report (SSR) is true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Date: 23.12.16

Place: Mumbai, Maharashtra


Head of the Institution



MEMORABLE EVENTS



Degree Distribution Ceremony



Students participating in Talk Show on Doordarshan



A Unique Event to promote Peace and Harmony

Unmesh-Inter collegiate Fest for Non teaching Staff



Celebration of National Day

Express yourself on a Post-Card Library Day Celebration

NES National Student Startup Fest- Feb, 2016
First of its kind in India
(Mentoring, Marketing, Media Support and Display- all under one roof)



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