



RUIA COLLEGE

Explore • Experience • Excel

**S.P. Mandali's
Ramnarain Ruia College**

'DDU KAUSHAL Kendra' by UGC, Govt. of India - 2015

'Star College Status' by DBT, Govt. of India - 2016

'College of Excellence' by UGC, Govt. of India - 2014

**Re-accredited (Third Cycle 2012) with 'A' Grade
by NAAC (3.65 CGPA)**

'FIST' by DST, Govt. of India - 2009

'Best College Award' (2007-08) by University of Mumbai

'Best College Magazine Award' (2005 - 10)

Intercollegiate Competitions -

University of Mumbai: 1st Position in Sports (2001-09)

Overall Championship in Cultural Activities (2005-12)

**ACCREDITATION
REPORT
FOURTH CYCLE
2017**





RUIA COLLEGE

Explore • Experience • Excel

Shikshana Prasarak Mandali's

RAMNARAIN RUIA COLLEGE

L.N. Road, Matunga, Mumbai - 400 019.

**ACCREDITATION REPORT
FOURTH CYCLE
(2017)**

ACCREDITATION REPORT – FOURTH CYCLE (2017)

CONTENTS

A. Preface	1
B. Executive Summary	3
C. Profile of the Institution	12
D. Criteria wise Analytical Reports	
Criterion I: Curricular Aspects	26
Criterion II: Teaching, Learning and Evaluation.....	49
Criterion III: Research, Consultancy and Extension	111
Criterion IV: Infrastructure and Learning Resources	164
Criterion V: Student Support and Progression.....	187
Criterion VI: Governance, Leadership and Management.....	214
Criterion VII: Innovation and Best Practices.....	241
E. Evaluative Report of the Departments	256
F. Post-Accreditation Initiatives	398
G. Declaration by the Head of the Institution	404
H. Annexures	
i.Statement of Compliance	405
ii.Income and Expenditure Statement.....	406
iii. 2(f) / 12(B) certificate from UGC.....	412
iv. NAAC Certificates of all 3 previous cycles.....	413
v.Peer Team Report (Third Cycle - 2012)	416
vi. UGC_CE sanction letter	426
vii. UGC_DDUKK sanction letter.....	427



PREFACE

It gives me immense pleasure to present the Executive Summary of the activities and achievements of Ramnarain Ruia College for NAAC - Fourth Cycle (2012 to 2017). Thanks to the dedicated efforts of my entire team and the goodwill of all our supporters and well-wishers, the College has managed to take a quantum leap, as it were, in its ceaseless quest for excellence.

A College is a great centre of learning and it plays a pivotal role in ensuring the holistic development of students, thereby contributing to the progress, peace and well-being of individuals and society at large. Ramnarain Ruia College, established in 1937 by the Shikshana Prasarak Mandali, Pune, was the first institution in Mumbai to be started by an indigenous private organization. With its emphasis on holistic, value-based education and its inclusive motto 'Education for All', the College has been striving for character-building and the all-round growth of learners through various innovative academic, co-curricular and extra-curricular programs. We believe that success of any educational institution depends not just upon what the talented students could achieve but more upon how the average students could be transformed. In the context of the local and global needs of higher education, Ruia College continually strives to meet its twin goals of 'Equity and Excellence'.

I am happy to affirm that Ruia is the **first** College in **India** to be accorded the highest National status of '**College of Excellence**' by the UGC (2014). Ruia is also the **first** college in **Maharashtra** State to be accorded the status of '**Star College**' by the DBT (2014). Furthermore, it is the **only** college from Mumbai to establish the '**Deen Dayal Upadhyay KAUSHAL Kendra**' with support from the UGC (2015). Apart from this, Ruia was the **highest scorer in Maharashtra State** in NAAC Re-accreditation (Third Cycle) with '**CGPA 3.65 & A Grade**' in 2012. The College also received the '**Best College**' Award from **University of Mumbai** (2007-08).

I have been singularly fortunate as a member of the NAAC Peer Team, to be exposed to the Best Practices of many renowned educational institutes within the country. Moreover, having presented research papers in twenty top Universities all over the world and led my teams during our visits to the Universities in the U.S that we have collaborated with, I have had the privilege of absorbing and adapting to our Indian context, some of the most innovative teaching-learning and research practices.

This time, we at Ruia, have focussed on the following **two themes** which are also our Best Practices for the Fourth Cycle:

Integrated growth through diverse skills Enhanced Research Culture

You may agree, after going through the contents of the report presented here, that the College has made sincere efforts during the last five years to make quality education available in all domains of knowledge for all kinds of learners including socially and economically disadvantaged students as well as differently-able ones.



Considering the extremely high unemployment rate of Indian youth, the College has been taking special efforts to incorporate a skill component in as many disciplines as possible so as to equip our learners to serve competently in a variety of industries/organisations as also to become entrepreneurs. Alongside, we are sparing no efforts to foster a sound research culture both at the undergraduate and post graduate levels in our Science as well as Arts streams. Needless to add, we seek to foster a well-integrated personality and sound ethical base among all our learners.

Our parent body, S.P. Mandali, Pune, which is currently running 36 institutions in different parts of India, is very proactive and has been rendering notable support to Ruia College in its pursuit of quality and excellence in overall education and research to make it globally acceptable. I sincerely appreciate my parent body for the same.

Ruia College is blessed with a sincere, dedicated and committed staff. Further, the contribution of our IQAC in assuring quality in every respect is noteworthy. I thank all of them for their invaluable services. I sincerely place on record my appreciation of all the Members of the Steering Committee for their herculean efforts in the preparation of this report. All of us at Ruia College are committed to our students and strive to create the right environment for them to - **Explore, Experience and Excel**. We will be implementing **Autonomous** status very soon and eventually wish to become a **Deemed University** in the years to come.

Prof. (Dr) Suhas Pednekar
Principal



Executive Summary

Ramnarain Ruia College which was established in 1937, is currently celebrating its 80th academic year. The College has managed to take long strides in a short span of 5 years (2012-17) and aspires to reach even greater heights in the years to come.

“Integrated Growth through diverse skills and Enhanced Research culture”

In keeping with our expansive vision of A3 L3 (Anyone, Anytime, Anywhere & Lifelong Learning) and an inclusive approach with our motto, Education for All’, the College has espoused the twin themes of **Integrated growth through diverse skills** and **Enhanced Research Culture** for the fourth cycle of NAAC. The focus of our themes has been on the **holistic growth** of our learners and the fostering of a spirit of entrepreneurship through skill based learning as well as a thorough research culture. Our objective has been to equip learners not only with **sound theoretical knowledge** and **technical skills** pertaining to their subject of specialisation but also **life skills** that draw on **Emotional and Spiritual Intelligence**, both of which are keenly needed in today’s competitive, globalised society. We trust that such all-round grooming will foster good moral values and a scientific, creative and adventurous spirit among our learners who, in turn, will contribute significantly to the peace, prosperity and well-being of the self, the nation and the world at large.

We are happy to report that we have been able to **put into practice** almost **all the suggestions** made by the last NAAC Peer Team (Third Cycle) in their report. Indeed, we have been able to achieve **a great deal more**.

The Arts faculty have substantially stepped up their contribution to research as well as their participation in National and International Conferences. We have seen an unprecedented growth in grants for both Arts and Science such as **CE, Star College Scheme, DST, DBT, DBT-Twinning, UGC, DAE-BARC, National Archives and Asiatic Society of Mumbai** received for Academic and Research Development. The **Remedial and Mentoring System** has been structured and made more systematic. The **infrastructural resources** for both Arts and Science have been **enhanced** substantially and there have been considerable **structural upgradations** as well. There has been a total **revamping** and **renovation** of our **Library**. Furthermore, **Digitization of rare books in the Library** has been carried out with the grant obtained from **National Archives, New Delhi**. The college has also majorly stepped up its activities related to **environment consciousness and conservation**, faculty empowerment, innovative teaching-learning methods, **collaborations at International, National and local levels**, research and most importantly **contribution to social welfare** as a whole, by way of **Extension Work**.

The sustained efforts of the college to achieve excellence can be adjudged from the following achievements: We were the **first college** in the country to get the ‘**College of Excellence**’ status, from the UGC. We were also the **first college** in **Maharashtra** to get ‘**Star College**’ status for **6 departments** and **Star College Scheme** for **6 more departments** from the **DBT**. Additionally, we have the **unique distinction** of being the only college in Mumbai to get permission from UGC to start the **DDU-KAUSHAL Kendra**.



Given below is a brief summary of our major achievements in the last five years in keeping with the **5 core values** advocated by NAAC. Simultaneously, we have also taken efforts to fulfil with greater achievement, the **7 criteria** laid down by NAAC (viz. Criterion I- Curricular Aspects, Criterion II- Teaching–learning and Evaluation, Criterion III- Research, Consultancy and Extension, Criterion IV- Infrastructure and Learning Resources, Criterion V- Student support and Progression, Criterion VI- Governance, Leadership and Management and Criterion VII- Innovations and Best Practices)

1. CONTRIBUTION TO NATIONAL DEVELOPMENT

The College strove to conserve **natural** resources and enhance **human resources** of the nation by raising the all-round capacity of its young learners and faculty through various academic and cultural activities.

The Principal served as a part of the working group on Higher Education (XIIth plan) constituted by the Planning Commission, New Delhi. He was also a member of Expert Committees for various schemes such as **Star college, Peer Team, NAAC**, the Committee for **Revision of Maharashtra Public Universities' Acts, Govt. of Maharashtra**, Committee on '**Higher Education Leadership Forum**' organized by Rashtriya Uchchatar Shiksha Abhiyan (**RUSA**), **Govt. of India** in association with Govt. of Maharashtra, Committee for **Implementation of National Higher Education Mission** and **Scrutiny Committee for Self-Financed Universities**. He has also made a significant contribution to **Green Chemistry**. The DBT, GOI has selected our Principal to prepare **e-resources in Physical Sciences** for the benefit of **UG Colleges** in the **country**.

As an indicator of innovation in research, the College already has **an existing Patent** and has **filed 04 patents** in the past five years. One of our faculty members is selected as an **Officer on Special Duty** to the Hon'ble Vice- Chancellor, University of Mumbai. Similarly, our faculty has worked on **content writing** for the **Open Education Resources (OER)** Project of the University of Mumbai with support from the **Commonwealth of Learning**. One of our faculty members has received **IAS (Indian Institute of Advanced Study, Rashtrapati Nivas, Shimla) Fellowship** for 3 years and is also Associated with University Grants Commission's **Inter-University Centre for Humanities and Social Sciences**. Further, one of our faculty members also does **content writing** for **Balbharati** (a Government prescribed School Text book). Another faculty member has been the principal and **sole Resource person** for a unique course on a brevity-oriented genre of creative writing called '**Flash Fiction**', conceptualized and supported by **Stanford University, USA**. The course is conducted on **Whatsapp** - a new learning tool.

In order to address the significant skill-gap that exists between the 'demands' of the industry and the 'supply' by the educational institutions, the Government of India through its **Deen Dayal Upadhyay Centres for Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood**, established **KAUSHAL Kendras** with specific focus only on vocational education. The DDU-KK aims to strengthen the economic backbone of the region by preparing a steady source of self-reliant Human Resources with an emphasis on Education 'by which one can stand on his/her own feet'. In keeping with the above concept, the UGC has introduced a new degree program called Bachelor of Vocation (BVoc) wherein emphasis is laid on practical training, vocational and skill development. S.P Mandali's Ramnarain Ruia



College is the **only College** in **Mumbai** that enjoys the privilege of being **recognized as a DDU KAUSHAL Kendra**. The college is running **three programs** under this centre, namely **BVoc in Green House Management**, **BVoc in Pharma Analytical Sciences** and **BVoc in Tourism and Travel Management**. Instead of classroom-centred formal education, the students under the KAUSHAL Kendra learn through **hands-on experience** and **internships in industry**.

Our faculty regularly attend seminars, publishes papers and are in the forefront of the academic activities of the University of Mumbai and other institutes of higher learning both **nationally and internationally**. It is noteworthy that our **students, too**, are presenting papers at the **National and International level**. Departmental festivals, departmental magazines, co-curricular and extracurricular activities organised through 27 Departmental Associations and 42 Non-Departmental Associations of the College, together strengthen the academic/research culture, adding value to the overall growth of the students and contributing to national development by imparting holistic education (Criterion VI). Our strong research culture and collaborations have resulted in development of effective **lab-on-paper technology**, **Molecular Biology kits** and also a **Solar Distillation Unit** for disinfection of drinking water and development of **Algae Resource Bank** which is one of its kinds in the western part of the country.

In order to enhance the curriculum and to bridge the gap between the curricula and the needs of Industry as well as other domains of national development, many departments are conducting **Value Added Certificate Courses** of varying durations. As a part of social commitment departments have **Departmental Extension or Outreach activity**.

In the Arts stream, the Department of Marathi organized the annual **public lecture** series, **Vishnushastri Chiplunkar Vyakhyanmala**, on many socially relevant themes such as '**Critical analysis of the caste system**', '**Human Rights and Women's rights**', '**100 years of Indian Movies**', etc.

Several Arts departments organized cultural events and also attended a number of seminars based on **social issues** such as 'Tongues & Taboos'- 'Gender Violence & Human Rights', 'Consciousness Raising through Folk Art', 'Regional or Local Contribution in Reforms of Maharashtra and in the Freedom Movement', 'Understanding Politics through Films', 'Ancient Indian Sciences through Sanskrit', 'Importance of media in religion and culture' and 'Vibrant India in the 21st century'.

Various Associations and Departments collaborated with **NGOs** like **Vigyan Bharati**, **Envirovigil**, **Jidnyasa**, **Blue Ribbon Movement**, **Prayas** and **Stree Mukti Sanghatana**.

Our NSS students presented street plays and organized protest marches against anti-social activities such as **Violence against Women** and **Child Labor** etc. Our '**Earn While You Learn**' scheme, '**Each One Adopt One**' scheme, '**Center for Slum Studies**' and '**Cell for Students with Special Needs**', together, furthered the cause of **social equity and justice** by catering to **socially, economically and physically disadvantaged sections** of our student population as well as society at large.



The Gymkhana has been instrumental in identifying, training and shaping several **up-coming sports persons** who have been selected to represent at the **University, Inter University and National level** (Criterion-V).

2. FOSTERING GLOBAL COMPETENCIES

The college has devised new ways of nurturing the global competency of its students as well as staff, both in the Science and Arts streams.

The Principal visited some prominent universities like **Oxford University**, UK and **Harvard University**, USA and participated in programs on '**Academic Leadership**'. He also visited Shanghai, **People's Republic of China** as a part of a delegation formed by **Indian Merchants Chamber** and also received orientation on '**Holocaust Education**' in Yad Vashem, **Israel**; he participated in an **International Educational Conference 'EDUCON'** organised by 'Sakal' newspaper in Istanbul, **Turkey** and in **Indo-US Educators' summit** organised by Brihan Maharashtra Mandal (USA) in **Rhode Island, USA**.

Ruia College has entered a '**Higher Education Academic Partnership**' with the **Commonwealth of Pennsylvania** by signing an MoU on Dec. 4, 2014. The Honourable Ambassador of Philadelphia, along with the Chancellor and Vice Chancellor of the Pennsylvania State of Higher Education signed the MoU. From 18th October to 26th October 2015, 6 of our faculty, headed by the Principal, visited 5 universities in Pennsylvania and **40 students** and **2 faculty** members led by the Vice Principal also availed of this collaboration. Similarly, from 21st to 28th October 2016, **5 faculty** and **20 students** headed by the Principal visited 5 universities in Pennsylvania. **10 students** and 2 faculty members went to **France** as a part of the **Student Exchange Program**. **French students** from **Lille** spent two weeks in **Ruia** as a part of the **Exchange Program** (Criterion – I, II). One faculty member from our French Department was awarded the prestigious **Fulbright Scholarship in USA** (She was engaged in teaching, research and cultural activities, including various collaborative tasks during her tenure of one semester in the USA.). **Numerous Ruia students** also took courses in overseas Universities for **Masters Programs or Research**.

A Language Lab was set up in 2013-14 with the aim to enhance the language skills of the students in the form of effective speech, comprehension, listening and writing skills (Criterion IV, V).

The Centre for Slum studies, only such centre in India, has signed an **MoU** with the **International Company, Suez Environment India Private Limited**, on Mumbai Water Distribution Improvement Programme (MWDIP) in which the students got Internship for 6 months (Criterion –I, II).

Our **Foreign Language Centre** offers various courses that serve as a '**Career Supplement**' to students of all disciplines and prepare our students for the global market in order to meet the challenges of Internationalization (Criterion – II, V).

The IQAC held a **National Seminar** on 'Quality Sustenance: Aspects and Initiatives'. The Department of Philosophy organised an **International Seminar** on 'Indian Political Thought'. Department of Chemistry organized a seminar on 'Sustainability & Environment'.



Department of Botany also organized a **National Seminar** on 'Fungi and Human welfare', Department of Economics on 'Emerging Market Economics', Department of History on 'Emergence and Growth of Indian cities - A Historical perspective'.

Several faculty members, including the Principal, **presented papers** at various **International Conferences** and published papers in **internationally acclaimed Journals**.

3. INCULCATING VALUE SYSTEMS

In keeping with our goal of inculcating the right moral values among our students, the College engaged in several healthy practices in the last five years (Criterion -V). Seminars on '**Ramayan**' and '**Mahabharata**' helped promote intuitive wisdom and human values. Students and faculty alike participated in a workshop on **Yoga and Meditation**. The Departments of Philosophy and English jointly organized a **National Seminar** on 'Sustaining Values: Ideas into Actuality'.

In our attempt to sensitize students to basic issues of social inequity, the **Centre for Slum Studies** not only introduced innovative programs but also conducted several courses on betterment of slum life. NSS, Gender Sensitization Committee and some departments organized **seminars and awareness lectures** on social issues.

The **Centre for Mindfulness and Well-being** catered to the holistic development of the learners' **emotion management skills** in order to improve their **inter-personal** and **intra-personal** relationships thereby contributing to the emotional well-being of students (Criterion -VII).

After the 3rd cycle of accreditation, **IQAC** initiated environmental consciousness activities in the form of **Green Audits** (Energy audit and Waste audits) segregation of dry and wet waste, managing e-waste and keeping a record of trees in the college premises. Several useful environmental activities were also initiated including **composting, recycling of dry waste, installing a small biogas plant and also a water harvesting unit** (Criterion -VII).

Heeding the PM's call, **Yoga Day** was celebrated by our Faculty (including the Principal) as well as students on 21st June in the College premises as well as various public places. **Swacha Bharat Abhyaan** has also been practiced by our students. In addition to cleaning the College premises, our NSS students also cleaned up **Dadar Railway Station**. On Tree Plantation day, our NCC, NSS students and other students **planted trees** in the premises and also in public places The College has also **adopted S.K College in Malvan** and plans to extend academic support and expertise (Criterion -III).

In order to fulfil various community needs, the College also carried out a number of extension programs. These included **adoption of a village**, study of **tribal people**, visit to **slums, blood donation, save the tree campaign**, cleaning of a beach and railway stations, health check-ups, **Anti-Tobacco and Anti-Smoking** Signature Campaign and promotion of **Gender Equality**.

The **NSS** and **NCC** Units were also engaged in several useful activities aimed at **consciousness raising and social upliftment**. Various Departmental and Non-Departmental



Associations organized many curricular and extracurricular events promoting themes such as **non-violence, mutual understanding, fellow-feeling and conservation of the environment** (Criterion -III).

4. PROMOTING USE OF TECHNOLOGY

Technology can “revolutionize” the learning process. For greater efficacy in imparting knowledge, the use of ICT was strengthened in Teaching, Learning, Research and Administration. The College initiated innovative teaching–learning methods which facilitated critical thinking, ‘deep’ learning, blended learning and peer discussions. Accordingly, the college provided new facilities like **installation of smart labs** and initiated novel teaching–learning techniques like **FLIP your class room, photo journal** and **video journal** besides **training 40 faculty in e-content development** and **use of Moodle**. The use of ICT enabled us to respond better to specific needs of different learners. In addition, the **CCMS Integrated System** was introduced to take care of **Admissions, Attendance, Examination and Results**. **Internet** access is available to all our UG and PG students in the Reading Hall as well as anywhere else on the college campus through **Wi-Fi** network (Criterion-II, IV).

5. QUEST FOR EXCELLENCE

The Quest for Excellence goes hand in hand with the internal quality improvement process of an individual and/or an institution in terms of standardization, relevance, satisfaction and transformation. In view of the changing scenario in higher education, both nationally and globally, we at Ruia have been continually laying emphasis on Excellence in the form of **Capacity Building, enhanced Infrastructure and Innovative Teaching**, bearing in mind the **A3** and **L3** models.

Our faculty have devised **online courses** using **ICT (Moodle, e-content, modules for languages)** thereby making a modest contribution to **A3** and **L3**. Short term Courses in Applied Economics, **Hypnotherapy, Child Psychology, Marital and Family Therapy, Neuropsychiatric Disorders, Heritage of Mumbai, Archaeology, Food History and Culture, Philosophy of good life**, etc. have also been introduced, once again following the new **A3-L3** models (Criterion I, II).

The College fosters a **strong research culture** among the faculty and students as is evident from the growth in our faculty’s publications as well as by the rise in students projects under **project-based learning** carried out under Star College scheme and CE grant. Moreover, our students presented well researched papers and have won prizes in International and National level Seminars and Conferences. “**THE RUIAITE**”, the annual College Magazine is now theme-based. **Ruia e-bulletin** is monthly published online and it is uploaded on the website.

Renovation and Automation of library facilities was carried out and **Digitization** of rare books was carried out with aid from the **National Archives** (Criterion IV). Several training programs were organized by IQAC for the Capacity Building of our Teaching and Non-teaching staff.

CGC (Career Guidance Cell) organized a number of events to facilitate the **placement** of our deserving students in the job market. With the objective of promoting the inter-



disciplinary approach, all Departments came together to host ‘**Samanvay**’, an **Intra as well as Inter-collegiate festival** of academic and extra-curricular activities.

As mentioned earlier, it is due to our concerted efforts to attain Excellence that we have received the **College of Excellence**’ (CE) status conferred by the UGC, New Delhi and ‘**Star College**’ status by Department of Biotechnology, Government of India (2014).

We are steadily progressing towards our goal of establishing a **Knowledge Resource Centre** with easy dissemination through the use of **ICT** in order to meet our ultimate aim of creating an A3-L3 Connected Society. We hope to succeed in our earnest endeavour with support from the establishment.

Further, we are eagerly waiting the autonomous status to be implemented from 2017-18. We have already received the sanction from the UGC and are awaiting for the notification from the State Government. This will give us more academic freedom to make our education more globally acceptable.

All in all, we hope this summary gives you a good glimpse of our major achievements. We eagerly await your comments and suggestions for our further betterment and growth.





SWOC analysis of Ramnarain Ruia College

Strengths:

Proactive and progressive management with wide experience of managing many institutions of different kinds for a long span of time

A long eighty years of existence of the institution, with high academic reputation nationally

Many academic and research collaborations with institutions of repute within and outside country

The institution received top academic national recognitions such as College of Excellence (UGC), Star College Status (DBT), and *DDU – Kaushal Kendra* (UGC)

A very long standing, high level research culture with very good research facilities (13 well equipped research labs, common instrumentation centre, Animal Testing centre and a unique facility in the form of Institute for Advanced Training and Research in Interdisciplinary Sciences) and strong industry linkages

Recipient of many research grants

31 Ph. D Guides and Ph. D. offered in 12 subjects

Highest NAAC grading in the 3rd Cycle of accreditation with CGPA 3.65 (A grade) in Maharashtra in 2012

Strong student support facilities for overall development of students which is evident by high ranking in University merit list, sports and cultural activities

Highly qualified and versatile faculty with research background

A high cut-off percentage for admissions, thereby ensuring intake of academically advanced students

Large number of subject combinations offered to students in Arts and Science

Greater inclusive approach – Cell for Students with Special Needs for the differently abled, Centre for Slum Studies for the socially deprived, etc

A strong ‘Ruia College Alumni Association’ supporting the alma mater

Centrally located (in Mumbai City), clean and well maintained college campus convenient to reach by all modes of transport

Weaknesses:

Very limited scope for expansion of the campus in Mumbai. Also being a load bearing building, no scope for vertical expansion

Restriction/ ban on recruitment of teaching and support staff by the state government

Certain limitations due to affiliation system such as no freedom of revision of syllabi, syllabi are not changed for five years. Syllabi are generally diluted and not challenging academically advanced students. Also, no scope for implementing innovative methods of evaluation of students



Low fee structure of aided as well as unaided courses and no non-salary grant available from the government

Opportunities:

As the college is about to implement autonomous status, the opportunities are as under-

Academic freedom in designing curricula, evaluation of students and incorporating internships for students

More industry participation in curricular designing and offering internships to students

Scope for dual/ twinning programs with highly reputed national and international Universities

More collaborations in research with concept of co-guide

Additional sub-campus and introducing new degree programs with greater emphasis on post graduate departments in Arts faculty

Exploring more interdisciplinary and multidisciplinary academic activities

Introducing more online certificate/ diploma courses independently or in collaboration with other universities

Further strengthening of Alumni Association for its support to its alma mater

Challenges:

Making available intellectual and physical infrastructure in keeping pace with fast changing local as well as global scenario

Financial self-sufficiency to make all activities sustainable

To attract students towards basic sciences with increasing inclination of students towards professional courses

To increase the employability and entrepreneurship prospects of students with the rising competition and demand in the outside world



SECTION B: PREPARATION OF SELF-STUDY REPORT

Profile of the Affiliated / Constituent College

1. Name of Address of the College:

Name :	S.P. Mandali's Ramnarain Ruia College		
Address :	L. N. Road, Matunga East, Mumbai		
City :	Pin : 400 019	State : Maharashtra	
Website :	www.ruiacollege.edu		

2. For communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Prof. Suhas Pednekar	O: 022-24141335/ 24143119 R: 022-25773315	09820023919	022-24142480	principal@ruiacollege.edu
Vice Principal	Ms. Urmi Palan	O: 022-24143098/ 24143119 R: 022-25226340	09820753076	022-24142480	urmipalan@ruiacollege.edu
Steering Committee Co-ordinator	Ms. Anushree Lokur	O: 022-24143098/ 24143119 R: 022-24462245	09821331914	022-24142480	aslokur@ruiacollege.edu

3. Status of the Institution:

Affiliated College

✓

Constituent College

any other (specify)

4. Type of the Institution:

a. By Gender

i. For Men

ii. For Women

iii. Co-education

✓



b. By Shift

i. Regular

ii. Day

iii. Evening

5. It is a recognized minority Institution?

Yes

No

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

NA

6. Sources of funding:

Government

Grant-in-aid

Self-financing

Any other

7. a. Date of establishment of the college: 21st June 1937

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)	01/04/1975	Established in 1937 and included in the list available on the UGC Website
ii. 12 (B)	01/04/1975	

(Enclose the Certificate of recognition u/s 2 (f) and 12 (B) of the UGC Act)

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

Under Section/ clause	Recognition/Approval details Institution / Department Programme	Day, Month and Year (dd-mm-yyyy)	Validity	Remarks
i.				
ii.				
iii.				
iv.				

(Enclose the recognition/approval letter)



8. Does the affiliating university 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

If yes, date of recognition: (19-06-2014)

b. for its performance by any other government agency?

Yes No

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

Location *	Urban
Campus area in sq. mts.	12,296.00 sq.mt
Built up area in sq. mts.	10410.9 sq.mt
(* Urban, Semi-Urban, Rural, Tribal, Hilly Area Any Others Specify)	

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	<input checked="" type="checkbox"/>
Sports facilities	<input checked="" type="checkbox"/>
* play ground	<input checked="" type="checkbox"/>
* swimming pool	<input type="checkbox"/>
* gymnasium	<input checked="" type="checkbox"/>
Hostel	<input type="checkbox"/>
* Boys' hostel	<input type="checkbox"/>
i. Number of hostels	<input type="checkbox"/>
ii. Number of inmates	<input type="checkbox"/>
iii. Facilities (mention available facilities)	<input type="checkbox"/>
* Girls' hostel	<input type="checkbox"/>
i. Number of hostels	<input type="checkbox"/>
ii. Number of inmates	<input type="checkbox"/>
iii. Facilities (mention available facilities)	<input type="checkbox"/>



* Working women's hostel			
i. Number of inmates			
ii. Facilities (mention available facilities)			
Residential facilities for teaching and non-teaching staff (give numbers available — cadre wise)			
Cafeteria —			✓
Health centre -			✓
First aid, Inpatient, Outpatient, Emergency care facility, Ambulance.....			
Health centre staff -			
Qualified Full time doctor	<input type="text"/>	Part time	✓
Qualified Full time Nurse	<input type="text"/>	Part time	
Facilities like banking, post office, book shops			
Transport facilities to cater to the needs of students and staff			
Animal house			✓
Biological waste disposal			✓
Generator or other facility for management/regulation of electricity and voltage			✓
Solid waste management facility			✓
Waste water management			
Water harvesting			✓



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

Sl. No	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student strength	No. of students admitted	
	Under-Graduate	BA(Aided)	3yrs	HSC (Arts)	English	480	457	
		BSc(Aided)	3yrs	HSC (Science)	English	360	342	
		Self-financed						
		Biochemistry	3yrs	HSC (Science)	English	45	33	
		Biotechnology	3yrs	HSC (Science)	English	35	29	
		Computer Science	3yrs	HSC (Science)	English	60	55	
		BMM(English Medium)	3yrs	HSC	Marathi	72	63	
		BMM(English Medium)	3yrs	HSC	English	72	69	
		B Voc Tourism & Travel Management	3yrs	HSC	English	50	48	
		Green House management	3yrs	HSC	English	50	31	
	Pharma Analytical Sciences	3yrs	HSC	English	50	25		
		MSc by Paper (Aided)						
		Botany	2yrs	TYBSc	English	12	12	



		Chemistry	2yrs	TYBSc	English	24	24
		Life Science	2yrs	TYBSc	English	12	10
		Physics	2yrs	TYBSc	English	10	10
		Zoology	2yrs	TYBSc	English	12	12
		Self-financed					
		BioAnalytical Science	2yrs	TYBSc	English	20	19
		Biochemistry	2yrs	TYBSc	English	20	10
		Biotechnology	2yrs	TYBSc	English	30	27
		Computer Science	2yrs	TYBSc	English	40	40
		Analytical Chemistry	2yrs	TYBSc	English	18	17
		Organic Chemistry	2yrs	TYBSc	English	18	17
		Information Technology	2yrs	TYBSc	English	20	20
		Microbiology	2yrs	TYBSc	English	20	19
	Integrated Programmes PG	Bio Analytical Science	5yrs	HSC (Science)	English	60	42
	MSc by Res & Ph.D	BioAnalytical Science	NA	MSc	English	10	07



		Biotechnology	NA	MSc	English	05	03
		Botany	NA	MSc	English	10	07
		Chemistry	NA	MSc	English	60	34
		Life Science	NA	MSc	English	06	02
		Microbiology	NA	MSc	English	10	05
		Physics	NA	MSc	English	02	02
		Zoology	NA	MSc	English	15	10
	Ph D	English	NA	MA	English	05	01
		History	NA	MA	English	05	05
		Sanskrit	NA	MA	English	05	03
	M. Phil.	-	-	-	-	-	-
	Certificate courses	-	-	-	-	-	-
	UG Diploma	-	-	-	-	-	-
	PG Diploma						
	Any Other (specify and provide details)						

13. Does the college offer self-financed programmes?

Yes

No

If yes, how many ?

15 (UG-6 & PG 9)

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

Yes	<input checked="" type="checkbox"/>	Number – 5 BVoc -3 PhD- English PhD- Applied Biology	
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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 (eg. Physics, Botany, History etc.)	UG	PG	Research
Science	Bioanalytical Science	-	✓ & Integrated	✓
	Biochemistry	✓	✓	-
	Biotechnology	✓	✓	✓
	Botany	✓	✓	✓
	Chemistry	✓	✓	✓
	Computer Science	✓	✓	-
	Information Technology	-	✓	-
	Life science	✓	✓	✓
	Mathematics	✓	-	-
	Microbiology	✓	✓	✓
	Physics	✓	✓	✓
	Statistics	✓	--	
	Zoology	✓	✓	✓
Arts	Commerce	✓		
	Economics	✓		
	English	✓		✓
	French	✓		
	History	✓		✓



	Hindi	✓		
	Marathi	✓		
	Philosophy	✓		
	Political Science	✓		
	Psychology	✓		
	Sanskrit	✓		✓
	BMM (English)	✓		
	BMM (Marathi)	✓	-	-
Commerce	NA	-	-	-
Any other (specify) BVoc	Greenhouse Management	✓	Permission sanctioned	-
	Tourism & Travel Management	✓	-	--
	Pharma Analytical Science	✓	Permission sanctioned	

16. Number of programmes offered under (programmes means a degree course like BA, BSc, MA, MCom.....)

- Annual system
- Semester system
- Trimester system

5

17. Number programmes with

- Choice based credit system
- Inter/ Multidisciplinary approach
- Any other (specify and provide details)

05
05 Bioanalytical Sciences (2) Biotechnology (2) Pharma Analytical Sciences



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

Yes No

If yes,

a. Year of Introduction of the programme(s) _____ NA _____ (dd/mm/yyyy) and number of batches that completed the programme

b. NCTE recognition details (if applicable)

Notification No. : _____ Date: _____

(dd/mm/yyyy) Validity : _____

c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?

Yes No

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

Yes No

If yes,

a. Year of Introduction of the programme(s) _____ (dd/mm/yyyy) and number of batches that completed the programme

b. NCTE recognition details (if applicable)

Notification No. : _____

Date: _____ (dd/mm/yyyy)

Validity : _____

c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?

Yes No



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

Positions	Teaching faculty						Nonteaching staff (Total)		Technical staff	
	Professor		Associate professor		Assistant professor		*M	*F	*M	*F
	*M	*F	*M	*F	*M	*F				
Sanctioned by the UGC/University/ State Government	1	0	91			107		NA	NA	
	1		8	26	14	11	75	10		
<i>Recruited</i>					9	22	22			
Ad Hoc appointment against vacancies										
<i>Yet to Recruited</i>	NIL						NIL			
Sanctioned by the Management/ society or other authorized bodies	Departments on Non-grant basis				11	28	17	-		
<i>Recruited</i>	Kaushal Kendra				03	05	07	--	01	
<i>Yet to Recruited</i>	NIL						NIL			
*M- Male *F- Female										

21. Qualification 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.	1	-	07	18	07	05	38
M. Phil	-	-	01	03	01	-	05
PG	-	-	-	05	06	06	17
Temporary teachers							
Ph.D.	-	-	-	1	02	07	10
M. Phil	-	-	-	-	-	-	-
PG	-	-	-	-	20	48	68
Part-time teachers							
Ph.D.	-	-	-	-	-	-	-
M. Phil	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-



22. Number of visiting faculty / guest faculty engaged with the college:	28
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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	145	241	120	252	137	306	160	277
ST	19	17	16	20	24	28	19	30
OBC	142	273	123	289	184	448	156	360
General	558	1459	532	1415	471	1430	629	1409
Others	125	222	128	313	87	242	111	215

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

Type of students	UG	PG	M. Phil	Ph.D.	Total
Students from the same state where the college is located	2875	531	--	64	3470
Students fro, other states of India	0	0	--	1	1
NRI students	--	--	--	--	--
Foreign students	--	--	--	--	--
Total	2875	531	-	65	3471

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

UG	NIL	PG
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26. Unit cost of Education

(Unit cost =total annual recurring expenditure (actual) divided by total number of students enrolled)

a) Including the salary component

Rs. 37512/-

b) Excluding the salary component

Rs. 8775/-



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

Yes		No	✓
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If yes,

a) is it a registered center for offering distance education programmes of another university

Yes		No	
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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
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28. Provide teacher-student ratio for each of the programme /course offered

Programme	Teacher – Student Ratio
BA	1:30
B Sc	1:16
B MM	1:25
B Voc	1:23
M Sc	1:11

29. Is the college applying for

Accreditation :	Cycle 1		Cycle 2		Cycle 3		Cycle 4	✓
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Re-Assessment :

(cycle1 refers to first accreditation and cycle2, cycle3,and cycle 4, refers to re-accreditation)

30. Date of accreditation* (applicable for cycle2, cycle3,and cycle 4, and re-assessment only)

Cycle 1 <u>09/10/1999</u>	Accreditation Outcome/Result	<u>4 Star Level</u>
Cycle 2 <u>31/03/2007</u>	Accreditation Outcome/Result	<u>‘A’Level</u>
Cycle 3 <u>15/09/2012</u>	Accreditation Outcome/Result	<u>‘A’ Grade (CGPA 3.65)</u>

**kindly enclose copy of accreditation certificates(s) and peer team report(s) as on annexure. Annexure all peer team reports.*

**31. Number of working days during the last academic year. (2015-16)**

210

32. Number of teaching days during the last academic year

(Teaching says means days on which lectures were engaged excluding the examination days)

180

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

06/07/1999(dd/mm/yyyy)

34. Details regarding submission of Annual Quality Assurance Report (AQAR) to NAAC.

AQAR 2012-13 (I) 30/09/2013 (dd/mm/yyyy)

AQAR 2013-14 (II) 20/11/2014 (dd/mm/yyyy)

AQAR 2014-15 (III) 05/12/2015 (dd/mm/yyyy)

AQAR 2015-16 (IV) 04/11/2016 (dd/mm/yyyy)

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

Our autonomy application has been processed. We have already received the sanction letter from the UGC and are awaiting notification from the State Government.

Criterion 1: Curricular Aspects

Curriculum, is a multi-dimensional concept which is the heart of a student's college experience that gives direction to the learning process. Despite the fact that the curriculum is designed by the University, Ruia College has been making sincere and continuous efforts to bridge the gaps with regards to the curriculum enrichment, its implementation and upgradation. Being an affiliated College, curriculum development has several constraints but the information provided below, delineates the sincere and constant efforts undertaken by Ramnarain Ruia College in this area. The College, takes into account, several finer aspects like academic flexibility, feedback systems, use of technology, etc. to ensure that the teaching and training at the College meets the contemporary needs of the Society and enhances the entrepreneurship prospects of the students.

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.

The Vision and Mission of the College:

Vision

To emerge as a Centre of higher learning and innovative research to meet the challenges of a global society.

Mission

Mainstreaming the practices that facilitate intellectual, emotional, physical and cultural growth of students.

Keeping in mind the vision and mission statements, the College has formulated its various goals and objectives which are as follows:

To provide high quality, affordable and inclusive education to all sections of society including various disadvantaged groups

To foster global competence and support career building of students through various courses, workshops, seminars, events, competitions and industrial visits

To motivate the students to excel in co-curricular and extra-curricular activities and encourage excellence in sports

To make the students aware of the various conventional and non-conventional career opportunities and professions

To educate and create awareness about social responsibility, citizenship values and environmental awareness

To introduce skill based programs to enhance their employability and inculcate the spirit of entrepreneurship.

To organize various academic research and capacity building activities.

To encourage participation of faculty in workshops, conferences and seminars.



Communicating Mission and Vision

The Vision and Mission statements of the College are displayed on an aesthetically designed plaque at the entrance of the College premises

They are clearly stated and disseminated to all the stakeholders through the College prospectus, information brochures and the College website.

Additionally, they are communicated effectively to the students through the orientation programs held at the commencement of each academic year

They are also exhibited on LCD screens and display boards in the College premises.

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).

The College ensures effective implementation of the curriculum by focusing on key factors, while planning various actions and processes as follows;

1. Strategic and professional Planning:

Time-tables are laid out well in advance allowing teachers to plan their classes, completing the syllabi on time and allowing time for revision and mock tests.

Teachers are encouraged to maintain lecture and lesson plans/schedules, which ensure planning and effective delivery of curriculum. The IQAC provides academic diary to every teacher at the beginning of the academic year. The diary contains the academic calendar, working days available for undergraduate and post graduate programs and a teaching planner. The diary helps the teachers to plan and record their teaching programs.

Care is taken to organize co-curricular and extra-curricular activities, meetings and events after the scheduled lecture timings, to ensure least disturbance to academic activities. This practice ensures that academic programs run smoothly and curricular plans are properly implemented.

The meetings of the Council of Heads of Department, IQAC Coordinator, Examination In-charge, Library In-charge, Registrar and Vice Principals are regularly convened by the Principal. Several aspects related to curricular planning, implementation and evaluation are brainstormed during these meetings. For example, setting question papers, making them error-free, innovative teaching techniques, student feedbacks, etc.

Heads of Departments effectively monitor academic progress and performance of their departmental teachers and students through regular intra-departmental meetings. Such meetings have helped in allotting subjects to teachers corresponding to their aptitudes and research interests, thereby improving quality.

The semester wise credit based system motivates teachers to innovate in the 'internal' component of evaluation. For example, teachers plan in advance, to use innovative methods in assignments, tests and projects. Some of the notable examples are listed below;



- Department of French integrated some innovative topics like imagined interviews with French authors, analysis and critical appreciation of films, photo- novel etc.
- Department of Microbiology - thought of posters and educational games or model making as tasks for assignment, thereby encouraging creative ideas in approaching the curriculum.
- The Departments of Life Sciences, Botany and Zoology conduct field studies after which the students submit a report of the activity.

The Internal Quality Assurance Cell (IQAC) of the College conducts quarterly meets and sets targets for curricular enrichment to ensure effective implementation of planned activities. Apart from the core committee members, an external expert is also invited to the meetings.

The Teacher's diaries are certified by the HODs at the end of every academic term. Teachers are required to submit the diary to the IQAC after filling in the relevant information. This helps the IQAC to monitor if the teaching plans have been successfully implemented, and this is further verified and substantiated through structured student's feedback on teachers.

ICT Facilities and Resource material support from Library (like E-journals, Audio Visual facility) are used by the faculty for effective implementation of the Curriculum.

2. Inter-departmental and inter-institutional events

A synergy between departments within the institution is a regular feature of the College's activities that also allows teachers to review teaching methods and respond meaningfully to student needs. For example,

The Departments of English and Sanskrit worked together on a talk highlighting Indian Knowledge systems.

The Department of Microbiology conducted experiments jointly with the Herbal Sciences laboratory on handling of laboratory animals and phagocytosis, as also with the Department of Botany on mushroom cultivation.

The Department of Microbiology also conducted a workshop on Microfluidics and its application for teachers and students of various institutions.

The Departments of English and Philosophy together organized an interdisciplinary National seminar on 'Sustaining values: Ideas into Actuality'.

The Department of History collaborated with the Department of Sanskrit in organizing a workshop on Verbal communication and Indology.

The Commerce department organized an Inter departmental workshop on 'Tally ERP Systems'

The Sanskrit department collaborated with the Indian Institute of Technology, Bombay (IIT-B) and organized a workshop entitled 'Spoken Tutorials in Sanskrit'. This was part of a project undertaken by IIT-Bon spoken tutorials and computer skills in different regional languages.

The Department of French works regularly in tandem with the French Consulate.



The Department of Chemistry organized inter-departmental and inter-collegiate workshops on 'Safe Laboratory Practices' for students, teachers and non-teaching staff.

3. Focus on students' needs

The College take a student-centric approach while implementing curriculum and supplements classroom teaching with activity based learning like;

Innovative teaching techniques to augment learning process

- Flip the classroom method by various departments of science and arts has been used for the effective implementation of the curriculum.
- IQAC organized workshop for teachers on Process Oriented Guided Inquiry Learning (POGIL) to initiate innovating teaching methods.
- The departments of Botany, Chemistry, Life science, Microbiology, Physics, Zoology and Mathematics and Statistics encourage students to undertake research projects.
- Workshops on Research Methodology, Molecular Biology, Application of Mathematics and Statistics were organised for the research students and teachers of various departments of Arts and Science.
- In the wake of the 2014 Lok Sabha Elections, the Department of Political Science introduced activities related to the phenomenon- formation of student parties and involvement in the electoral process.
- The Sanskrit department introduced drama as an activity for conversational Sanskrit.
- Role plays, use of songs, news clips have been integral part of the French department's pedagogy.

Connecting theory & practice

Various industrial visits, field visits and study tours are organized by various departments of Science and Arts. Such Visits / Group Activities allow students to draw a connection of their theoretical knowledge and the practical application.

Seminars/workshops/conferences

To provide wider perspective and better exposure to the knowledge domain, departments organise seminars and workshops for staff and students like;

- The Aantar bharatiya Sahitya Sanvad of the Marathi department helped students to relate literature with society.
- The Hindi Department organized a one day National conference on "Vartaman Katha Saahitya Aur media".
- The Chemistry department organized workshops on Spectroscopy and Stereochemistry for TYBSc students of Ruia college and other colleges in Mumbai university.
- BVoc Green House Management Department conducted a workshop on 'Soilless Farming' 'Hydroponics' and 'Aquaponics'.
- Herbal research Laboratory conducted AYUSH training workshop on preparation and standardization of traditional formulations.
- The Bio-Chemistry department conducted a workshop on Techniques in Biochemistry.
- The History department conducted workshops on Archival and Library Science.



- The Mathematics department conducted Mini - Mathematics Training and Talent Search Program.

Talks by experts

Various scholars and experts share their expertise during their visit and interaction with students. Several eminent experts visited the college, a representative list is provided below;

- Professors like Dr. Shirley Lawes, University of London, eminent speakers like Dr. Kumar Ketkar, Dr. Raghunath Mashelkar, Dr. Narendra Jadhav, Lord Meghnad Desai, Dr. CNR Rao, Dr. Kasturirangan, Dr. Anil Kakodkar, Dr. Spenta Wadia are some examples.
- The annual DD Kosambi Memorial lectures conducted by the History department and Vishnu Shastri Chiplunkar Lecture series organised by the Marathi Department invites eminent experts from socially relevant fields.

Internships

Students from various departments are provided internships with industries to enhance their technical and professional skills.

- History students interned with Godrej Archives, Yatra.com, Suez Environment Pvt. Ltd.
- The students of Bioanalytical Sciences interned with CIPLA, Eumark Pharmaceutical, Alkem Laboratory, BARC etc.
- BVoc TTM students did internship with Yatra Metro X and Veena World whereas BVoc Green House Management students carried out their internships and trainings with BLOOMS Horticulture Consultations and Solutions, Yeshwant Krishi Paryatak Kendra, Tech Excellence, Future Farms and Altifarms.
- The Microbiology students undertook summer research with National Institute of Pathology - ICMR (New Delhi), NCCS (Pune), MS University(Baroda) and Delhi University.

4. Effective use of technology

Technology allows an opportunity to extend the curriculum beyond the classroom and also bring nuances in classroom teaching.

Department of Microbiology and Computer Science has been a regularly using the Moodle platform for their course work.

Department of English and French uses social media, popular applications like WhatsApp, blogging, online press and extensive use of online resources to mobilize learning. These Departments also integrate mobile technology in the classroom like mobile dictionaries etc.

The Department of Biotechnology uses bioinformatics software to solve problems related to wet lab.

The students of the department of Computer Science and Information Technology participated in collaborative Reverse Outsourcing project with the Drexel University, USA.

Many departments use Google services like group mails with students for quick and effective exchange of teaching and learning materials.

The College library extends the INFLIBNET usage to the students and faculty.

5. Inclusive approach

The College is particularly committed to inclusive education. Attention and care is taken to see that students, especially, those less advantaged are within the learning purview.

Remedial courses are organized by departments for those requiring additional attention.

The College not only has one entire division for Marathi Medium students but also, most of the teachers are multi-lingual with competence in at least three languages- English, Hindi and Marathi.

Visually challenged students are catered to by the Cell for Students with Special Needs. Teachers and students of the College are ever ready to offer their services, additional help and explanations to such students.

Centre for Students with Special Needs have been set up to cater to the specific needs of students like slow learners, dyslectics, psychologically challenged etc.

Through student mentoring programs, slow learners, differently-abled learners are offered additional support and guidance.

Details of these practices are provided in 2.2.

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?

The University provides the syllabus that the College diligently follows. Eighteen teachers are part of the Board of studies while many faculty members are part of syllabus framing committees. Some teachers are part of contact groups that discuss syllabi. This acts as a support mechanism for effective translation of curriculum for efficient implementation.

Teachers attend workshops conducted by the University or colleges before or after syllabus revision to apprise teachers about the changes, to get their feedback and further inputs for effective implementation of the syllabus. The college also takes initiative in organizing such workshops.

The College provides extensive support in improving teaching practices through IQAC. To this effect, various courses and workshops were conducted in e-Content development, Moodle, POGIL, Team Building and Effective Presentation skills. (Refer 2.3).

Under CE scheme, a workshop was organized on 'Curriculum Design & Development' for the teachers by Dr. Mohanan.

The College under CE grant organised outbound program for teachers on Capacity building in September 2014 at Lonavala.

Seven teachers attended a workshop organized by the British Council & Indian Institute of Science Education and Research, Pune (IISER) on Research Based Pedagogical Tools (RBPT).

12 Teachers visited 10 Universities of Pennsylvania State, USA in last two years and attended workshops and classroom teaching.



One faculty member participated in training program organized by UGC along with UKIERI (UK-India Education and Research Initiative) for training in skill development area.

College encourages its teachers to participate in conferences, seminars, training programs by sanctioning leaves and reimbursing cost of participation as applicable. From 2012 till date, 128 staff members participated in national conferences and 56 in the international conferences and 98 in state conferences. 5 teachers participated in UGC's Orientation program, 21 teachers in UGC organised Refresher Courses and 10 teachers participated in short term courses.

The institution provides the faculty and students with the necessary infrastructure and resources, such as helping them to procure the latest references on the subject, both in Print and e-book form. Facilities like INFLIBNET also offer access to the latest online literature.

Many departments organise seminars, workshops, conferences which are undoubtedly a huge platform for self-improvement for teachers and students. In all, 7 conferences, 9 seminars, 56 workshops and 12 training sessions have been organized since the academic year 2012.

The College has upgraded 40 classrooms and has equipped them with projectors and internet connectivity. All departments are provided adequate equipment to enable them to integrate ICT in their regular teaching.

The e-Learning Centre is equipped with 30 computers with internet connectivity which allows for web based group activities.

The teachers Google Group serves as a formal platform for academic discussions, sharing of resources, invitations for seminars/workshops, circulars, notices, meetings, all of which act as a catalyst for curricular progress and sustenance.

Extra and co-curricular activities are the hallmark of the College which provide effective platform for students to present knowledge and skill acquired through their learning. Samanvay is the flagship festival of the College that collectively showcases all departmental festivals.

Apart from the resources available at the central library, college departments have their own departmental libraries. Every year, new additions of latest books, reference books, periodicals and journals are made available including those which are recommended by students and faculty. Departmental libraries also have CDs, DVDs and other audio-visual study materials that aid in supplementing the curricular teaching.

College is registered with INFLIBNET and has institutional membership of Asiatic Library to support learning, academic and research pursuit of faculty and students.

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 agencies.

The College makes sincere efforts to effectively deliver the syllabi laid down by the University. While the syllabi prescribed by the University are unchangeable, supplementary efforts are taken by the College to ensure effective curriculum delivery. Some of the efforts of the College in this direction are listed below:



The College provides its teachers liberty to handle the classes and the courses in their own way inducting innovative approaches in teaching/learning.

The faculty members are encouraged to organize co-curricular activities like departmental festivals which allow students to blossom academically and imbibe organizational and inter-personnel skills.

The College supports several student-oriented activities of individual departments like the French department organizes the World Francophony Day where students work creatively around ten French words of the year. Department of Microbiology teaches microbial taxonomy to students by asking them to identify a novel organism from any environment of their choice.

The College celebrates the National Science Day, World Environment Day, Womens Day etc.

The College actively promotes research culture among students by encouraging them to participate in research projects, seminars, conferences, thereby motivating them to look beyond the syllabus. Collaborative research between departments is encouraged to widen the exposure of students, providing them knowledge on recent developments in the field and moving them towards scientific enquiry.

The College invites eminent Professors from world universities to help students to look positively towards research. For example, in 2012-13, the French department invited Dr. Shirley Lawes, University of London, who spoke about her research in using short films in teaching French.

Departments are encouraged to implement project based learning like the Biotechnology department introduced research- based learning through projects- for example, production of natural insecticides and checking their cytotoxicity, enzyme extraction and purification at lab scale. The History department involves students in research projects for example, Forts of Mumbai. Two undergraduate students from the Department worked on the collaborative project with Raksha Shakti University on Police in Gujarat: 'Continuity and Change'.

The College received grants from DBT-STAR program by which, in 12 Science Departments (Life science, Botany, Microbiology, Zoology, Mathematics, Chemistry, Statistics, Physics, Biochemistry, Bio-analytical, Computer Science, Bio-Technology) undergraduate students have been able to undertake research projects.

The College has encouraged the use of techniques like POGIL and platforms like Moodle, through the IQAC, for innovations in teaching practices.

The College has been able to obtain excellent academic results every year and could feature several rank-holding students at the University examinations every year. These are adequate evidences proving the effective delivery of curriculum at the College.

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

Though the curriculum is prescribed by the University, each department has devised unique ways of training their students to meet the stakeholders' requirement. Several departments network constantly with industry, academia, research institutions and the University in handling the curriculum.



Industry

The College regularly liaises with the industry in its activities. Almost all departments invite resource persons and experts from the industry including alumni, relating to their domain through activities of departmental associations / Memorial lectures/ Samanvay activity (collaborative departmental festivals).

Various departments of the College invite industry experts and alumni for talks and interactions with students.

Pre-placement and placement drives are conducted in partnership with professional organizations representing the industry.

Green House Management, Pharma Analytical Sciences and Tourism and Travel Management courses have representations from industries on their expert committee. Regular meeting with these experts help in continuously evolving the Skill Based syllabus as per current needs of the industry. The partner industries for these courses also provide internships to the students for effective training in the requisite skill area.

Industry experts are also invited as Visiting faculty for delivering lectures

Research bodies

The College ensures a constant network with research bodies for its own research culture and for encouraging inter-institutional research.

The Department of Physics collaborates with leading bodies like TIFR, ICT, CIRCOT and University Materials Laboratory of the University Department of Physics at various levels.

The Department of Bioanalytical sciences has industry linkages with pharmaceutical companies like Cipla and Shimadzu.

The Department of Microbiology regularly interacts with research institutions like IIT, ICT, IISER.

The Department of Chemistry collaborates with ICT, IIT, BARC routinely

The Department of History encourages students to participate in projects organized by research bodies of Heras Institute of Ancient Indian History and Culture, Asiatic Society of Mumbai, Godrej archives and Raksha Shakti University, Ahmedabad.

The Botany department collaborates with several research bodies like the National Medicinal Plant Board (NMPB), Department of AYUSH, Society of Ethnopharmacology and Indian Pharmaceutical Association, ICT, IIT and BARC that enhances quality in teaching the curriculum.

Under the DBT Star Status, given to the different department of sciences, teachers train the students for various research projects, which enriches curricular learning.

The Department of Life science have received grants from Ministry of Environment and Forest and have planted trees in collaboration with BAIF, along the hill slopes of Neral, Matheran. The department has also been granted a project by Reliance Biological Science on 'Alternative Fuels using Algae'.

1.1.6 What are the contributions of the institution and/or its staff members 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 College has significant representation on the Boards of Studies of several subjects, at the University of Mumbai. Eighteen teachers are members of Board of Studies at the University of Mumbai. Three of the teachers from the departments of History, French and Commerce are on the Board of Autonomous colleges. Feedback is regularly sent to the Board of Studies for modifications, changes and enhancement of the University curriculum.

Feedback from industries is very important for implementation of all skill based courses and there is formal MoU with these industries and the College has formal MoUs with thirteen industries. Feedbacks are obtained at meetings with the industry experts. Feedback is obtained from the stakeholders during regular meetings and feedback from students after industrial internships is incorporated in continuously evolving syllabus of these courses. Various challenges and problems in meeting industry requirements of employability are discussed by the teachers on a regular basis. Based on the feedback from experts, relevant modifications in syllabus, teaching methodologies, experimental work are incorporated in the curriculum.

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.

Within the syllabus prescribed by the University, the College hardly gets any scope for curriculum development. However, the College has developed curricula for three BVoc skill based courses in Green House Management, Tourism and Travel Management and Pharma Analytical Sciences. The curriculum for these courses was drawn by the respective departments of our college in consultation with the industry experts which were then passed by the University. The syllabi of these programs are maintained dynamic to match the current industry requirements of employability. Students' feedback on curriculum is obtained to provide a framework for necessary modifications while implementing the syllabus.

Other than the prescribed courses, the College conducts several add-on courses and enrichment courses. Bridge courses are additional means by which several departments aim to bridge the knowledge gap of the students required for further learning. These courses are arranged as per needs perceived by the respective department. The College also arranges several programs for developing overall life skills among the students.

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

Objectives of the curriculum are variegated and therefore, feedback from stakeholders- i.e. students, alumni, provides a perspective on the objectives of the curriculum. Thus, drawbacks can be overcome and strengths can be worked upon. Different feedback mechanisms have been outlined in detail in Section 1.4. The performance of students forms a clear marker to evaluate whether the learning objectives of the curriculum have been achieved. For this purpose, the performance of students in assignments, projects and examinations are evaluated by each department.



The curriculum is handled in such a way that experiential and explorative learning is integrated in the teaching/learning. For example, the Botany department's tree naming contest, model making workshop by department of Chemistry, Microbes by Microbiology department, the French department's short film activity, critical appreciation of films screened by the English, Political Science and History departments encourage students to experiment and explore. The Microbiology department has taken the study of microbial taxonomy to a level involving student research. The department encourages students to collect microbes from various sites in and around Mumbai (based on an annual theme), develop artificial conditions to grow these microbes in laboratories and study them.

The context and relevance of each prescribed syllabi are repositioned by the faculty of the College, depending on the changing realities and the level of competence achieved and demonstrated by each group of students., The French Department undertook learning of Rousseau's Confessions, by asking students to prepare small skits on confessions or write humorous poems in French on personal confessions

Each program offered by the College provides the opportunity to identify, plan and achieve learning goals in the context of historical, contemporary and individual needs. The course on Heritage of Mumbai (History Department) or the course on Neuropsychology (Psychology Department) are examples to illustrate this point. The Vishnu Shastri Chiplunkar lecture series of the Department of Marathi, attempts to blend the contemporary with the old.

Nonacademic dimensions of the curriculum such as citizenship values, skill development, leadership qualities, gender sensitivity etc are assured through various activities conducted by the departments to encourage lifelong learning. For example, the Department of Philosophy conducts debates and discussions on the role of ethics and values in life. Similarly, every department at its own level fosters these values through their day to day academic and extracurricular activities. Other College committees such as Gender Sensitization Cell, NSS, NCC and Centre for Mindfulness and Well-being(which adds more emphasis on holistic development), work untiringly towards these areas, through their seminars, rural camps, field programs etc., which are outlined in detail in Criterion II.

The Language Lab provides opportunities for training in phonetics, diction and expression with respect to English, Sanskrit and French which is in addition to the prescribed curricula.

1.2 Academic Flexibility

The Institution implements the syllabi prescribed by the University of Mumbai and follows a semester system of examinations laid down by the University. The Curriculum offers a limited number of elective options/choice based credit system (CBCS). Options are available to students for acquiring additional skills and supplementary/enrichment courses along with their regular curricula. Some of the details are listed in 1.2.3

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

Being an affiliated College, the Institution can only provide programs that would supplement the University curriculum. The supplementary courses offered are therefore designed as



“Add-on Courses” with a short-term goal of widening the students’ sphere of knowledge and life skills.

Sanskrit department conducts two courses one on ‘Rachana kaushalya’ and the other in literary appreciation to give exposure to students beyond the syllabus.

The Psychology department conducts five add-on courses; Neuropsychiatric disorders, Child psychology, Marital and family therapy, Hypnotherapy and Rational emotive behavioral therapy.

The History department conducts short duration add-on courses in Heritage of Mumbai, Introduction to UPSC, Introduction to Food History and Introduction to Archaeology.

The Foreign Languages Centre conducts Certificate courses at different levels of competency in German, Japanese, Spanish, French and Chinese.

The Centre for Slum Studies organizes three Certificate courses in slum studies, Slum & Urban Environment Management and Geographical Information System (GIS).

Under the DDU-KAUSHAL program of UGC, the College has started BVoc programs in Green House Management, Tourism and Travel Management and Pharma Analytical Sciences. The BVoc programs are completely skill based courses with emphasis on developing practical skills for better employability. The vocational courses have been implemented with a long-term goal of extending these programs to post graduation and doctoral degrees. The College has also identified a separate center for future expansion of these programs.

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

The College currently, does not offer dual/twinning degree programs. Efforts have been made for establishing collaborations in this direction in the event of academic autonomy being conferred on the College. Modalities for such collaborations have been explored and principally agreed with some universities in US.

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. Range of Core /Elective options offered by the University and those opted by the college

Skill Development:

The College is pro-active in developing skills in students specially to increase their employability and entrepreneurship. This includes improving skills like critical thinking, technical skills, communication skills, organizational skills, leadership skills and creative abilities. These efforts were mainly through supplementary activities and add-on programs which run parallel with the prescribed curricula.

With the establishment of DDU-KAUSHAL Kendra, the College now offers three BVoc programs Viz.; Green House Management, Pharma Analytical Sciences and Tourism and Travel Management. The students are offered academic flexibility to join the BVoc Programs in lieu of the conventional graduation courses.



Academic mobility

The College supports and encourages mobility of students from the College to other institutions. One student of the French Department went to France after graduation on an international teaching assistantship for one academic year. One student from Microbiology went on a research program to a University in Germany and successfully completed her research work. The French department organized students exchange program in 2014. Students of the History Department pursued their higher education in Developmental Studies in Tata Institute of Social Sciences (TISS) and Azim Premji Foundation, Bangalore after their graduation. Several students from various departments attached themselves to academic bodies of research, teaching, journalism and research assistants and other fields.

Progression to higher studies

A number of students pursue their higher studies in various reputed institutes both at the National and International levels. The innovative teaching learning programs, project based learning techniques and emphasis on undergraduate and post graduate research has enabled the College to inculcate a sense of continuing towards higher levels of learning among the students especially, the advanced learners. In this process of progression of students, the guidance of eminent alumni and experts who visit the institution plays a significant role. The alumni proactively guide the students in selection of appropriate institutions, courses and programs for higher studies. In addition, the Departments guide students for appearance at various competitive examinations and entrance tests. These measures have contributed to a large number of students opting for higher learning at reputed national and international institutions. For instance, students from Humanities have enrolled at reputed institutes like the JNU, Gokhale Institute, Pune, Azim Premji University, Bangalore, etc. Students from the Science faculty have secured admissions in various national institutes like IIT Kharagpur, IIT Bombay, TIFR, IISc, Bangalore, NCBS, Bangalore, M. S. University, Baroda, IISER, Pune and international universities like Indiana University, Wisconsin University, Cincinnati, Georgia Tech, Georgia State, Iowa Virginia Tech USA.

Improved potential for employability

The College has an active Career Guidance and Placement Cell which provides guidance to students and also coordinates with industries for organizing campus interviews and internships. It also conducts workshops on CV writing, presentation techniques and group discussions.

Several departments organises workshops and seminars that prepare students for competitive exams which open their potential towards the job market. Chemistry department conducts introductory course for hands on training on high end instruments. Department of Microbiology introduced workshops on new areas like Metagenomics & Microfluidics. French Department students found placements in multinational firms like Amazon and as French teachers in schools and other Institutions.

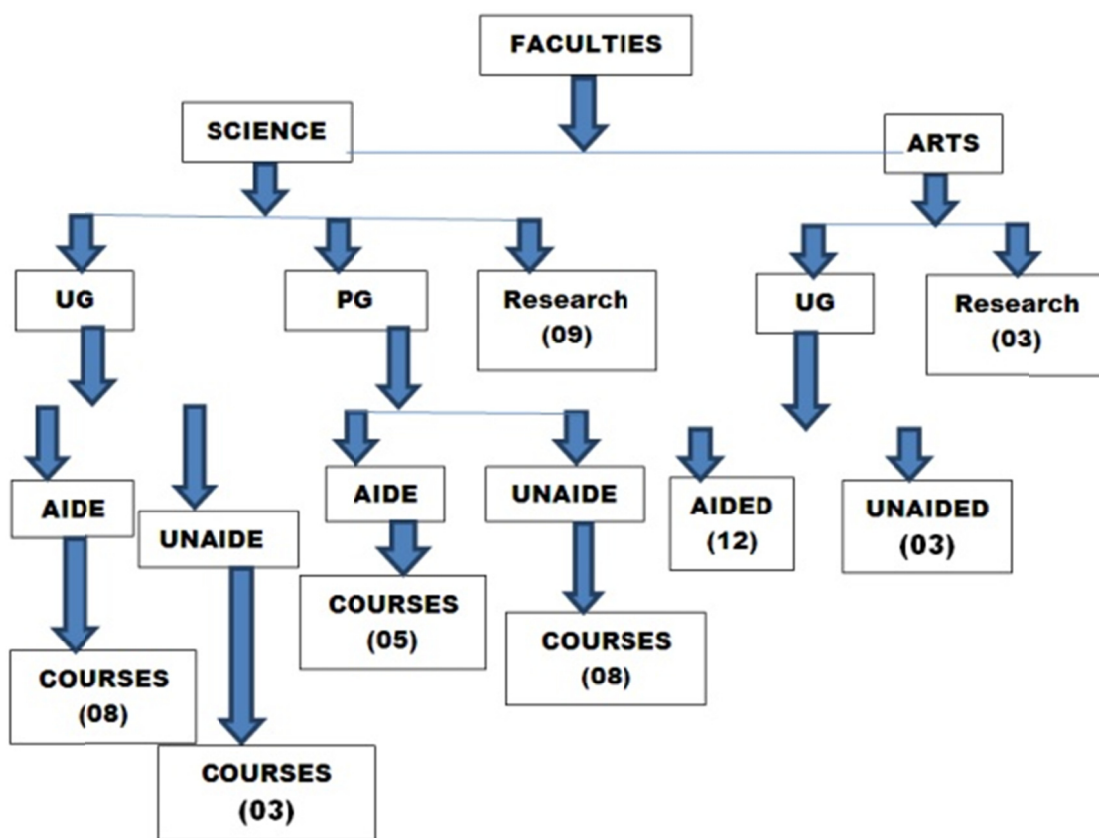
Certificate courses started by department of Psychology department in neuropsychiatric disorders improve skills of students in diagnosis of different disorders. Students developed skills in heritage understanding, conservation and marketing through the Conservation and Heritage course of the History department and Tourism and Travel Management.



One student from the History Department got placement at a company called Travelogue, in Mumbai, to conduct heritage walks. Research students of Life Science who were part of industry sponsored project were absorbed by the company, Reliance Biological Sciences, Navi Mumbai.

The BVoc courses initiated under the DDU-KAUSHAL program emphasizes skill based training of students with focus on specific needs of industrial sectors like Agriculture, Tourism and Pharmaceuticals. This approach not only improves the employability of these students but also inculcates a sense of self employment in them. Several students from the skill based B.Voc programs got placement / internship in reputed organizations over the period from 2015 to 2017.

Range of core courses and elective courses



The College offers core courses in Arts and Science as laid down by the University. In addition, in the electives, it offers a wide range of choice to the tune of 15 combination of subjects for Arts and 13 in Science. The College offers about 103 permutations in Arts Faculty and about 15 permutations in Science faculty. Additionally, the College provides three Courses under the skill development program.



Choice Based Credit System and range of subject options

The students can choose from 15 subjects in large number of combinations for Arts faculty and 13 subjects in several combinations of subjects under Science faculty.

Courses in modular form

The certificate courses offered by the College, are designed in modular form (a detailed list is provided in criterion II).

Credit Transfer and accumulation facility

As per the norms of University of Mumbai, the College allows students to move from one institution to another and also from non credit system to the credit system through the credit transfer system. As per University guidelines, the students are allowed to accumulate their credit (Credit Bank) and continue their education later (Life Long Learning).

Lateral & Vertical Mobility within and across programs and courses

Lateral mobility

Lateral Mobility is provided to the students as follows;

Students with XIIth Science, Arts and Commerce are admitted to BVoc Tourism and Travel Management.

Students with XIIth Arts, Science and Commerce are admitted to BVoc Green House Management.

Students with XIIth Science, Arts and Commerce are admitted to BMM courses.

Students with XIIth Arts, Science and Commerce are admitted to BA program.

Students with BSc from all Chemistry & Biological Sciences are admitted to M.Sc. Bioanalytical Sciences.

Students with BSc from all Biological Sciences are admitted to M.Sc. Lifescience.

Vertical mobility

Vertical mobility is not possible within the prescribed syllabus of the University. In BVoc programs vertical mobility has been envisaged for a student with BVoc to conventional post graduate courses.

Enrichment courses

The College offers several courses with an aim to enhance life skills of the students. Departments of Psychology and Sanskrit, the Language Lab. and the Centre for Mindfulness and Well-being conduct several such programs (a detailed list is provided in criterion II).

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



The institution offers 3 self- financed programs at the UG level for the Arts stream, 3 self financed programs at UG and 8 PG level in Science stream. The Curriculum of these courses though are prescribed by the University, the faculty of the College have been instrumental in their design and implementation. The syllabi of these courses are more skill based in teaching and training.

Admissions to these programs are purely based on merit depending on the marks scored at the previous qualifying examination i.e. minimum 50% at the XIIth level for the undergraduate courses and minimum 50% at TYBSc level for the post graduate courses.

The qualification of teachers teaching for these courses is according to the University norms and the salaries of teachers are paid through the fees collected from the students and from the contribution by the management.

Self-financed Programs	Fee structure (in Rupees)		
	FY	SY	TY
BMM (English medium)	17185/-	16145/-	14825/-
BMM (Marathi medium)	17185/-	16145/-	14825/-
Psychology(TYBA)	NA	NA	11795/-
Bioanalytical science (5 years integrated course)	14350/-	16180/-	17705/-
Biochemistry	14350/-	13180/-	13595/-
Biotechnology	14350/-	16180/-	17595/-
Computer science	13850/-	16180/-	17595/-

Postgraduate courses:

Self-financed Programs	Fee structure (in Rupees)	
	MSc I	MSc II
Bioanalytical science	42095/-	40270/-
Biochemistry	34070/-	33270/-
Biotechnology	40095/-	40270/-
Chemistry	37095/-	35270/-
Computer science	34595/-	34770/-
Information technology	34595/-	34770/-
Microbiology	35095/-	35270/-

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

Mumbai being the financial capital of India, it has many industrial belts and export promotion zones. Taking this into consideration, the College took the initiative to address the scarcity of skilled human resources in industrial sectors of Green House Cultivation, Tourism and Travel and Pharmaceuticals. Under the flagship DDU-KAUSHAL program of the government, the Institution (the only one in Mumbai) has established a KAUSHAL Kendra for skill based courses. Under the DDU-KAUSHAL Kendra, the College has implemented three Skill based programs leading to BVoc and MVoc degrees. These courses are designed with the

partnership of industry and reflect the regional employability and entrepreneurship requirements.

Degree	Subject	Skill & Employability
BVoc & MVoc	Green House Management	Operation of Green House, Hydroponics, Soil-less Cultivation etc
	Pharma Analytical Sciences	Analytical Instrumentation, Drug Testing and Quality Assurance
BVoc	Tourism & Travel Management	Tour Planning, Tour Guides, Travel management, Event Management
MSc & MSc Integrated	Bioanalytical Sciences	Bioanalysis, Instrumentation, Drug Testing & Quality Aspects
Bachelor's Degree	Mass Media	Audio & Visual Media, Scripting, Voice Over etc.

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?

The University does not currently offer the facility of combining traditional learning with distance learning within the same program. Our College offers all programs through conventional mode or full time degree programs as they are referred to. Several departments encourage students to take up online courses based on MOOCs.

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 programs and Institution's goals and objectives are integrated?

The College follows the curriculum laid out by the University. However, additionally, the College takes efforts to supplement the University curriculum through several add-on courses. The courses are designed to develop critical, analytical, speculative and reflective problem-solving skills.

Each department conducts a departmental festival annually. Under this, student seminars, talks by industrial experts, inter and intra collegiate competitions are conducted on the topics based on current and emerging issues. Many departments conduct annual memorial lectures for which professionals/industry experts are invited.

1.3.2 What are the efforts made by the institution to modify, enrich and organize the curriculum to explicitly reflect the experiences of the students and cater to needs of the dynamic employment market?

Inter departmental, intra departmental and collaborative activities between the College and other institutions serve to widen the scope of the curriculum. The College has implemented three skill based BVoc programs specifically designed to meet the skill requirements of the



industry. These courses emphasize the enhancement of entrepreneurship skills of the students. Add-on courses relevant to contemporary needs of students are introduced by various departments to meet the specific needs of their students.

Student feedback on curriculum plays a pivotal role in making the curriculum an integral resource for the institution and is used towards making improvements in the quality of course design and delivery and student learning experiences. The continuous interaction with industry and professional experts through research projects / guest lecture/visiting lectures provide valuable inputs to enhance future course offerings. Industrial visits organized by departments bridges the gap between classroom training and practical learning.

Training programs and workshops are held by departments to acquaint the students with the close matching of skills to meet the industry requirements. The Cell for Students with Special Needs conducts various workshops and training programs such as Computer Software training program, training in Mathematics and reasoning skills, training for Group Discussion and English Grammar Skills to enhance their level of competence.

Faculty makes efforts to deliver contents beyond syllabus in theory as well as in practical. Seminars, workshops and training programs are also conducted to deliver content beyond syllabus. Though internships are not a part of the curriculum, college encourages student internship practice to give them an industry exposure.

Ruia College has signed MoUs for collaborations and student exchange - Higher Education Academic Partnership with the Commonwealth of Pennsylvania (2014), Westchester University (2016) and Harrisburg University (2017). It is a great opportunity for faculty and students to visit various institutions and interact on development in academic and research areas, teaching learning mechanisms and career opportunities available.

Interaction with alumni helps to accommodate innovative ideas as well as outstanding and accomplished alumni bring the benefit of their experience to the students and staff of the college.

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?

The College seizes every opportunity and remains in forefront to impart all round education with emphasis on life skills, professional skills and empowerment of students.

Through curriculum

Ruia, is the only college in University of Mumbai, which offers since last two decades an applied component paper to the TYBSc (Chemistry) students titled 'Waste recycling & Non-conventional Energy Sources'. This paper was introduced to sensitize the students towards the protection of the Environment.

Carbon credit calculation is a part of syllabus in Microbiology and Bioanalytical Sciences.

Foundation Course as a subject integrates topics on human rights, environment, gender, climate into the curriculum.



Syllabus of English, Commerce, Political science, Sanskrit, Biotechnology, Psychology, Philosophy, Botany, Bioanalytical Sciences, Microbiology, Zoology and Life science contains topics that are intimately related to environment and discussions are promoted in the class.

BVoc courses like Greenhouse Management, Tourism and Travel Management as well as B.M.M. include various topics on cross cutting issues in the curriculum.

Gender related issues are integral part of syllabus of the Political science, Commerce, BMM, Economics, History and French

Through Departmental Activities

Various departments organize activities to sensitize students to cross cutting issues which are relevant to the societal and local needs. A comprehensive enumeration of such activities is provided in Criterion II.

Through Committees/Administration

The College administrations make efforts to encourage energy saving, paper reduction wherever possible, cultivation of plants, reduction of plastic etc.

Understanding the impact of chemical effluent produced by the science laboratories, the College has made a conscious effort to adopt Green Chemistry, Micro-volume reactions, micro-fluidics and alike.

Environmental Awareness Committee organizes activities to sensitize the student community on issues related to environment like energy audit, Waste Audit, e -Waste management, recycling of Paper waste, organic farming and solar energy, biogas plant use etc.

Several other activities conducted by Committees like Green Ruia Club and Environment Awareness Club are detailed in Criterion II.

1.3.4 What are the various value-added courses/enrichment programs offered to ensure holistic development of students? Moral and ethical values, employable and life skills, better career options community orientation

Apart from academic courses, a variety of programs and add-on courses are implemented with an aim to provide technical skills, soft skills, life skills and encourage entrepreneurship among the students. Such courses are provided by the Department of Psychology, Centre for Mindfulness and Well-being and the Centre for Slum Studies. The Placement cell organized a Career fair and conducts seminars on emerging professions and careers. It also arranges for campus placements in the college.

The Cell for Students with Special Needs conducts various workshops and training programs such as Computer Software training program, training in Mathematics and reasoning skills, training for Group Discussion and English Grammar Skills to enhance the level of competence in visually challenged students. The Students council, VPM and volunteers of NSS and NCC, Ruia Rrotract Club, Gender Sensitization Cell additionally conducts programs to orient students for better moral and ethical values. Details of such courses, programs and activities are provided in criteria II.



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

Student Council, Parent-teacher meetings, Students' feedback on curriculum, interaction with visiting faculty, experts and alumni are used as platforms to gain inputs on curriculum, in bringing in knowhow, suggesting qualitative changes in teaching/learning and identifying significant research areas.

Department of Microbiology organized a discussion with alumnus who hails from Harvard Medical School, USA on designing low cost medical services. Ideas generated were used in form of research projects designed to supplement UG & PG courses.

Department of Political Science introduced "Politics through Cinema" as a topic in curriculum after feedback from students and faculty. The faculty from the department suggested the incorporation of 'Comparative Governments; UK & US' in the syllabus of TYBA. The incorporation will be made in the academic year 2018-19.

Department of Sanskrit Department organized, on the basis of students' feedback, a course on literary appreciation and grammar

The Language Lab was established in 2014 under CE grant. It is one of the best practices which aim at honing students' communication skills in English, particularly their speaking and writing skills. 10 computers have also been allotted to hone communication skill in Marathi, Hindi, Sanskrit and French.

To consolidate the efforts of the College in imparting Skill based education, the KAUSHAL Kendra has been established and three BVoc programs are being implemented. The curricula of these programs have been designed with feedback from various stakeholders like industry and alumni.

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

All courses offered as add-on or supplementary courses enrich the curriculum at a macro level. Every department monitors the courses individually for quality and for usefulness by way of structured feedback from the students. Teacher evaluation and course content evaluation is done at the end of the course which helps integrate qualitative changes. In these courses opinion of experts from the field are incorporated to design the curriculum and the program implementation. The enrichment Courses of the Department of Psychology for example is maintained as a dynamic one to suit the needs of the industry.

Feedback for workshops and training programs are obtained through formal questionnaire and informal interactions. Feedback also helps in introducing add-on courses and enrichment courses that contribute to the curriculum in a large way.

1.4 Feedback System

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

Eighteen faculty members are part of Boards of Studies and several faculty are in syllabi framing committees of their respective subject sat both undergraduate and postgraduate levels. These teachers offer valuable inputs and feedback to the respective Boards of Studies.



Teachers attend workshops organised by Board of Studies which serve as a platform for giving suggestions for syllabus framing. Faculty interacts with the students from various boards and institutions, industry and academic experts and these interactions provide useful inputs to the Board of Studies while making changes in the syllabus.

The Feedback collected from students is forwarded to the respective BoS through IQAC and Principal.

Special workshops like the one organized by the Microbiology department on 'Syllabus design' help acquaint faculty with fresh ideas and perspectives in drafting syllabi.

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 programs?

The College has integrated a multidimensional feedback mechanism into its functioning. This ranges from formal to informal methods of feedback, all of which contribute in multifarious ways to curricular enrichment.

Teachers who are members of Boards of studies and syllabi framing committees offer their feedback to the University which is then integrated into the syllabus.

Formative evaluations and summative evaluations are undertaken to measure and report on the outcomes of the curriculum. Feedback of the students is a regular practice by the IQAC at the end of every academic year.

Parents' feedback on the institution's functioning and infrastructure is taken at the end of every academic year and qualitative changes are inducted as far as possible. Parents of TYBSc and TYBA students are invited by the respective departments for feedback sessions.

Feedback from other collaborating institutions proves vital especially for introduction of new courses.

Departments are regularly in touch with their alumni and their suggestions are considered positively.

e-feedback

Online tools to gain feedback are used. Several students take this positively as it is in keeping with contemporary practices.

Oral feedback

Almost all departments of the College recognize oral feedback as is an indispensable element of teaching-learning to assess students' needs, faculty performance, reception to the syllabus by the students, changes proposed or hoped for.

Principal's feedback from students

The Principal takes surprise feedback sessions from students without prior intimation on a regular basis. He analyses the situation, the shortcomings and communicates the areas for improvement to respective teachers. Feedback is also obtained through suggestion box from



students, teachers and non-teaching staff. This strategy has proved to be beneficial in the institution's strive towards excellence.

IQAC feedback from students

Feedback on curriculum is collected by the Departments, analysed and submitted to IQAC. This report is submitted by IQAC to the Principal who then forwards it to the respective Board of Studies in University of Mumbai.

Initiatives by Departments

Department of French organised sessions on the international standard in learning/teaching approaches and the value based learning.

Department of Green House Management, based on the feedback by the students, went beyond the syllabus into the construction of cement pots and alternative planting materials and maintenance and sale of house plants by the students.

On the basis of students' feedback, Department of Sanskrit conducted a seminar on avenues in postgraduate studies

Department of Microbiology analyses expectations of students before a new activity and after its completion.

Department of Computer Science organized more practical sessions upon feedback to this effect from students.

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

The institution has introduced 3 new UG courses and 2 new PhD courses during the last four years to develop research and job skills and ensure employment in industries.

UG course: 03 Tourism and Travel Management, Green House Management, Pharma Analytical Sciences

PhD Course: English, Applied Biology

Any other relevant information regarding curricular aspects which the college would like to include.

The faculty members of the College have been proactive in designing courses with emphasis on needs of the society. Some of the course curricula designed by the faculty has been introduced as a new course by the University. The syllabus of Bioanalytical Sciences developed by the College was approved by the UGC under its innovative course program and was later implemented by the University as a post graduate program.

Ruia College is the only college affiliated to the University of Mumbai which offers Mathematics / Statistics as one of the subjects for TYBA

The College is one of the few colleges to offer BA and BMM degree programs in Marathi medium which benefits students who complete their secondary education in Marathi.



The grants received by the College under CPE, CE and DBT-STAR Programs, during the last four years, have significantly contributed to establishing an apparent and perceptible shift towards project based learning in various departments.

The College has a dynamic leader with vast experience in curriculum planning and designing since he was a member of the Working Group of Planning Commission (12th Plan) and the Committee to Revise the Maharashtra Public Universities Act. His experience positively influences the curricular planning and implementation not only in Ruia College but also in other institutions.



Criterion II

Teaching-Learning and Evaluation

Ruia College has a strong legacy of imparting education and disseminating knowledge which has been effectively institutionalized by the parent body, during its more than 129 years of existence. Over the years, the teaching learning process at Ruia College has evolved to meet the contemporary demands of society by integrating innovative ideas and ICT enabled methodologies in its teaching and learning practices. The College designs its various academic activities and programs to emphasize more on skill oriented training, enhancing entrepreneurship attitude and to inculcate research culture among students of both undergraduate and post graduate levels. The Institution consciously takes an inclusive approach for holistic education with student-centric practices to make the learning experience wholesome. Flip the classroom and POGIL techniques are employed to encourage interaction, inculcate critical and reflective thinking which enhances not only the learning experience of the students but also their skill sets. The College has introduced projects as a part of teaching strategies to encourage enquiry based learning. With various skill based programs that the College has initiated during the last four years, the students are provided with opportunities to develop technical and other soft skills that make them more oriented towards self-employment. This in turn helps the students to develop to their full capacities, to make informed decisions, to live and work in dignity, and to continue to be a life-long learner. The entire pedagogy is supplemented by a fair, unbiased and transparent evaluation process that emphasizes on continuous evaluation of the students' performance during each academic year. Furthermore, all curricular and co-curricular activities of the College are planned to inculcate in the minds of students, a love for sustained thinking and adherence to truth. The 'Centre for Mindfulness and Well-being' helps students to develop their personality by imbibing spirit of tolerance, readiness to cooperate, values of empathy and positivity. In order to ensure that the students become responsible future citizens, diligence and sensitivity to social issues is fostered through various extension and outreach activities that are conducted through the Extension and Outreach Committee, Centre for Slum Studies, NSS, NCC, VPM. In the last four years, Ruia College has made successful efforts in enriching curriculum by strengthening Industry-Academia linkages, encouraging internships, implementing skill based education courses and supplementing these programs with continuous evaluation systems. All these efforts have enabled the College to shape the students into an empowered generation of skilled human resource with a mindset of an entrepreneur.

2.1 Student Enrolment and Profile

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

The admission process takes place in accordance with the rules and guidelines laid down by the University of Mumbai. The schedule of the admission process is provided by the University and the College implements the admission process in compliance to the schedule and guidelines of the University. The College ensures publicity and transparency in the admission process is maintained by adhering to the following practices;



The Admission Committee (Vice Principals, Heads of Departments and Registrar) supervises and ensures smooth and unbiased admission process strictly adhering to the norms laid down by the University and the Government.

An up-dated prospectus is available along with the application forms for admission, which contains the details of programs offered, eligibility criteria and procedure for admission, learning resources, fee-structure and scholarships available to students.

Advertisement in the local newspapers is given only for 'permanently non-grant basis' courses, which have been newly started.

Flex boards and banners are displayed at the entrance of the College displaying the courses offered. The publicity in the admission process is ensured by notification hosted on College website, www.ruiacollege.edu to provide ready and relevant information to stakeholders regarding admission. Pre-admission forms (on-line submission), eligibility criteria, intake capacity, rules and regulations, fee structure, courses offered, list of candidates selected for admission according to merit and all other admission related information are in 'downloadable' format.

The admission notification which is already hosted on the website, is also displayed on the College notice boards, providing detailed and related information about the process of admission.

The undergraduate admissions begin with the applicants from institution(s) under the management of the parent body, S. P. Mandali being admitted in the first phase, according to merit and in accordance with the Government reservation policy. Admission is given to meritorious students from other institutions, subject to availability of seats. The admission procedure followed for the aided courses is replicated for the self-financing courses.

To ensure transparency, all admission related information and list of admitted students is displayed and is also provided to the University of Mumbai.

The admission process for the post graduate courses is based on merit as per the University guidelines with 70% of the seats being filled up via a subject-wise merit list declared by the University. The remaining 30% seats are filled up by the departments directly on merit basis.

Further merit lists are displayed subject to availability of vacancies.

Receipts are given for all payments made by the students

The process of admission is managed through a software, Computing Centre Management System which makes it efficient and more reliable.

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 programs of the Institution.

UG Courses:

Admission to all courses, except M.Sc. Bioanalytical Sciences, is given purely on the basis of marks obtained by a student in the previous qualifying examination.

Students from other Colleges and Universities are granted admission following the admissions of the in-house students.

Students from institutions managed by the parent body, S. P. Mandali, are given priority in admission as per guidelines of University.



Admissions to the M.Sc. Bioanalytical course is based on the marks secured in a common entrance test conducted by the College, duly monitored by a Committee.

The admissions for the FYBMM class are open to students from all streams and is based on merit at the previous qualifying (XIIth) examination. As per University norms, seats for FYBMM are offered as follows: 50% of the seats for students who have cleared their XIIth Arts, 25% for students who have cleared XIIth Science, and 25% seats for the students who have cleared HSC Commerce.

PG Courses:

Admissions to MSc courses (Botany, Chemistry, Life Science, Physics, Microbiology, Zoology, including the permanently non-grant basis course in Biochemistry) are done as per the norms laid down by the University.

70% of the seats to all these courses are allotted by the University (Centralized Admission), while 30% of the seats are College Seats and both these are allotted based on merit at the TYBSc examination.

PhD:

Admissions to the PhD program are completed after the students clear a common entrance test (PET) conducted by the University followed by an interview conducted by the College. The Interview panel comprises of the Principal, the Head of the respective Department, the guiding teachers and a subject expert from another college. The interviews are held only if seats are available for the subject.

BVoc:

Admissions to the Courses in Tourism and Travel Management and Green House Management are granted on merit basis according to the marks obtained at the XIIth Board examination. Students from all streams – Arts, Science and Commerce are eligible for admissions to both these courses.

Admission to the BVoc Pharma Analytical Sciences course is however granted only to the students from the Science stream on the basis of the marks secured at the XIIth Board examination.

Certificate/ UG Diploma/ PG Diploma:

All interested students are allowed to take admission to the following courses:

The Department of Biochemistry offers a three-year course in Food Science and Quality Control, wherein the student is awarded, on completion of each year, a certificate (one year), a diploma (two years) and an advanced diploma (three years).

The Department of Psychology conducts courses in Hypnotherapy, Child Psychology, Neuropsychology and Marital and Family Therapy.

The Department of Microbiology conducts a Certificate course in Molecular Biology and Bioinformatics.

Foreign language courses are conducted in German, Spanish, Chinese, Japanese and French.

Certificate Courses in Slum Studies, Waste Management, Energy Conservation and Diploma Course in Slum Studies and Development are conducted by the Centre for Slum Studies.



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

The XIIth board results generally determine the cut off percentage, which also varies from year to year depending upon the demand for various courses.

Sr. No.	Program	2012-13		2013-14		2014-15		2015-16	
		Max	Min	Max	Min	Max	Min	Max	Min
1	FYBA (English Medium)	96.16	89.33	95.16	78.00	96.6	87.00	94.50	90.92
2	FYBA (Marathi Medium)	78.66	52.83	77.00	54.66	81.38	68.62	83.54	63.85
3	FYBSc (Aided)	97.66	83.83	91.83	82.16	98.20	70.00	96.50	78.77
4	FYBSc (Computer Science)	91.53	75.69	91.83	83.66	89.54	78.15	95.80	77.80
5	FYBSc (Biochem)	95.16	70.00	94.16	80.24	95.00	65.00	95.60	82.15
6	FYBSc (Biotech)	97.66	87.00	94.33	86.66	93.4	86.00	95.80	89.60
7	FYBSc (Bioanalytical Science)	87.23	61.69	87.83	68.33	90.6	65.85	87.08	71.38
8	FYBMM Arts (English Medium)	91.33	82.36	88.33	81.50	93.80	85.69	95.40	87.23
9	FYBMM Science (English Medium)	94.66	88.16	93.66	89.00	89.60	86.80	95.00	90.92
10	FYBMM Commerce (English Medium)	91.83	86.16	92.66	84.16	96.20	90.15	96.00	90.77
11	FYBMM Arts (Marathi Medium)	62.50	51.23	79.50	47.00	57.25	43.50	74.31	51.08
12	FYBMM Science (Marathi Medium)	53.83	43.54	60.16	51.33	54.15	41.50	64.46	48.92
13	FYBMM Commerce (Marathi Medium)	76.0	45.85	71.83	47.00	72.30	52.00	75.38	56.00
14	FYBVoc Green House Management	-	-	-	-	72.0	40.0	72.0	47.08
15	FYBVoc Tourism and Travel Management	-	-	-	-	78.0	46.0	78.0	36.62
16	FYBVoc Pharma Analytical Sciences					60.0	40.0	60.0	40.0

The cut-off percentage of nearby colleges like Khalsa, Kirti, Ruparel, SIES and M.D.College in the Arts and Science stream is generally lower than the cut-off of Ruia College.

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?



Admission Committee is formed to ensure that all the guidelines and ordinances laid down by the University are strictly adhered to. Workshops or seminars or meetings, arranged by the University regarding admissions are regularly attended by the members of the Admission Committee and the new policies or changes directed are implemented. The details of the admission process are displayed on the College and University website.

Admission process:

A Pre-admission form is issued to the students for the purpose of simplifying the process. As the entire process at the entry level is online and the admissions are done on the basis of merit, the pre-admission form is a ready reckoner to the Admission Committee to resolve discrepancies if any later in the process.

The Merit List is displayed in the campus as well as on the College website.

An active Counselling Desk is functional before the admission and also during the admission process to handle the queries on various courses and subject combinations.

Each stage of the admission process is arranged at different convenient locations in the campus. Student volunteers are involved in the process for guidance and assistance.

A Help desk is set up at the Ground floor and outside the admission halls to guide and direct the young aspirants and their parents.

Announcements regarding the process are continuously made through the Public Announcement system.

Seating arrangement for parents is organized, for convenience, according to streams and merit lists of students.

The arrangements and the process-flow of the admission process at Ruia College is highly appreciated by the parents and students.

Improvement: Over the years, experience of the administration and feedback from students, parents, alumni are incorporated for further streamlining of the process like;

Guidance by involving more student volunteers.

Allotment of time slots on the basis of merit such that the students and parents have to surmount minimum queues and complete the admission process in less time.

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

SC/ST

OBC

Women

Differently-abled

Economically weaker sections

Minority community

Any other

Admission of the students to various courses is carried out in accordance with the rules laid down by the University of Mumbai. Reservation policy for various disadvantaged groups as stipulated by the government is meticulously followed. For all courses, admission is given purely on merit based on the marks obtained by a student in the previous qualifying examination.



SC/ST/ OBC / women / differently- abled / minority:

Rules laid down by the State Government and the University are meticulously followed to ensure proper distribution of seats amongst various categories.

Economically weaker sections:

Apart from Scholarships and Freeships from the Government, the College has made efforts in providing other options as follows;

- The Students Mutual Aid Fund (SMAF) is a body which caters to the needs of the economically disadvantaged students.
- There is a provision to allow economically weak students to pay their fees in installments.
- Under the unique ‘Each One Adopt One Scheme’ well-wishers contribute to pay the fees of needy students.
- ‘Earn and Learn Scheme’ helps economically disadvantaged students to earn for themselves and continue with their studies.
- Every year two or three students are employed by the management to assist the office staff in their free time.

Any other:

The non-teaching staff is encouraged to complete their graduation and their working hours are adjusted to help them to attend classes

Besides 2 percent of seats being reserved for **sports personnel** at the time of admissions, freeships up to Rs.1.00 lakh and scholarships up to Rs. 2.20 lakh are made available to these students by the College. Incentives to such students are provided in form of Sports kit, Uniforms, Match allowances.

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

	CLASS	2012-2013			2013-2014			2014-2015			2015-2016		
		AR	SA	DR	AR	SA	D R	AR	SA	DR	AR	SA	D R
UG	FYBSc	3693	392	9:1	2856	397	7:1	3170	453	7:1	3038	530	6:1
	FYBA	1065	417	3:1	924	453	2:1	1254	449	3:1	1029	426	2:1
	FYBMM	714	113	6:1	735	123	6:1	1481	143	10:1	940	142	6:1
	FYBVoc	-	-	-	-	-	-	40	38	1:1	115	99	1:1
PG	MSc (Papers)	1167	247	5:1	1153	250	5:1	1089	219	5:1	1130	248	5:1
	MSc (Research)	Admissions to MSc by Research is made as per vacancies with respective guides.											



M. Phil			NA			N A			NA			N A
PhD	Admissions to PhD is made as per vacancies with respective guides.											
Integrated PG/PhD			NA			N A			NA			N A

AR- Applications received, SA –Students admitted, DR- Demand ratio

Ratios have remained more or less similar over the years for most of the courses. Fluctuations are noticed which are reflections of the societal trends and choices. Significant increase is noticed in the number of students aspiring for BMM course.

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?

Reservation policy of the government is adhered to by the College. The Admission Committee has a representative from the Cell for Students with Special Needs so that needs of these students could be specifically addressed. Ruia College has constituted separate cells for the differently-abled and differently challenged students, like the Cell for Students with Special Needs. Admission process ensures compliance to the Government admission policies in this regard.

To enable these students to be actively involved in mainstream system, the College has taken special efforts to motivate and empower them. The efforts are mainly in form of setting up separate cells and additional efforts as listed below;

Visually Challenged Students

The Cell for Students with Special Needs of Ruia College caters to the educational needs of the visually challenged students of the College. Given below is the numerical data of such learners.

Academic Year	Number of visually challenged students admitted to the Arts stream
2012-13	75
2013-14	60
2014-15	62
2015-16	59
2016-17	65

Special Care:

The pre-admission counselling desk directs visually challenged students to the State of the Art Cell for Students with Special Needs, which is equipped with the NVDA software.



Case history is noted down for all the new visually challenged entrants to the College so as to understand the extent of the vision problems.

Regular counseling sessions for academic and psychological problems are undertaken. The Centre is equipped with a **Robotron machine text reader**. This enables the students to listen to the book of their choice being read by the machine. It makes the student independent, as they do not have to depend on another person to read the text. The Centre also has a '**Mountbatten Brailier**' and '**JAWS**' software that converts print to Braille and Braille to print.

Audio recordings of various books are made and Portable audio players are made available to visually challenged students.

Students are trained to use computer and internet facilities so as to make them independent in working on their projects and assignments at different levels.

Computer Hardware course is conducted regularly and around 12 students from different classes have completed the course.

Study material printed in Braille is provided to them. They are also assisted by NSS volunteers and other advanced learners, who provide them with tips to learn difficult topics.

Additional Help Rendered:

Different workshops like 'Anger Management', 'Effective Study Methods', 'Assertiveness training' as well as 'Anxiety and Stress Management' were arranged to help students for their overall personality development.

The Annual celebration of Louis Braille Day, special workshops, get-togethers, participation in various rallies and visits to centers established for these students (XRCVC, Mumbai) are amongst the other activities of the Cell for Students with Special Needs.

The students are highly talented and participate in a number of extra-curricular activities like music, dance, rope mallakhamb and yoga.

In order to enhance their all-round development, an intercollegiate chess competition is organized every year. Overall about 28 to 30 visually challenged individuals participate in the tournament.

In collaboration with the National Association for Blind, special classes are held to help the visually challenged students to prepare for banking recruitment entrance examinations.

The members of the teaching and support staff, students are always ready to help these students in explanation, guidance, filling forms, as writers and so on.

Other differently-abled learners:

Students with learning disabilities, hearing disability and mute students are regularly counselled and helped as per their learning requirements.

Dyslectic students are provided special combination of subjects which makes it easier for them to cope with the curriculum.

Students with dyscalculia are separately trained in order to overcome their limitations and fear with regard to mathematical calculations.

A ramp has been created in both the College buildings for the benefit of the physically challenged students, who are confined to the wheel chair.

**Additional measures**

All differently-abled students are given extra time during examinations as per University norms.

A special Session on 'Dealing with Differently-abled Learners', in which constructive ways of dealing with Visually Challenged learners as well as those with Learning Disability, was conducted for the faculty, with the help of the CE grant.

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

The academic program at the College, tries to emphasize more on skill oriented training. Therefore, efforts are made to understand the needs of the student and their potential while helping them to select the relevant courses and subject combinations. Bridge courses are suggested to those who need special training and guidance.

Students, in general, select a subject combination on the basis of their fields of interest, which itself serves as a pointer towards their enthusiasm and passion for the subject.

During admissions, a counselling desk is arranged to aid the students to make an informed choice of the subject combination from the available permutations.

During progression to higher classes, review of student background and profile is done at the time of mentoring and interaction with the students, in classroom as well as during practical sessions. This practice helps the faculty to provide necessary guidance to the students. The students thus receive help for selecting the subject combinations for future classes according to their aptitude, field of interest and capability.

Students usually have basic subject knowledge for courses imparted in humanities and science, but for multidisciplinary courses like Bioanalytical Sciences, and Biotechnology, the students admitted need to enhance their basic knowledge in certain areas. These students are provided a bridge course covering the fundamentals of various topics. Basic laboratory skills of the students are enhanced by conducting special workshops in Chemistry and Microbiology.

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

In order to meet the varied needs of students to bridge their knowledge gap and to open up new vistas of learning, the College has designed several courses as enumerated below;

Bridge Courses:

The Mathematics Department conducts a specialised Bridge course in Mathematics for the students of FY Bioanalytical Science and FY Biotechnology.

Similarly a bridge course in Mathematics is also conducted for the Students enrolling for the Economics- Mathematics combination.

The Statistics Department conducts a course in Basic Mathematics for the FYBA and SYBA students to train students who did not opt for mathematics at XIIth, which is vital, prior to further higher learning in the subject.



Remedial Courses:

It seldom happens that students of the same level of understanding, knowledge base, and cognitive skills join a course in any particular year. In the present system, a class comprises of students with mixed abilities - advanced learners, slow learners, repeaters as well as students pursuing education after a long gap. Remedial coaching is given to slow learners and academically weak students. This enables the students to cope with the new curriculum, when the mainstream teaching commences.

Doubt solving lectures and remedial courses have been undertaken, thus enriching their knowledge base, sparking renewed interest and instilling confidence in the subject.

Several Departments are involved in the same, as shown in the table below:

Sr. No	Subject	Average number of remedial lectures conducted annually
1	Cell for Students with Special Needs	112
2	Chemistry	65
3	Economics	12
4	English	37
5	Hindi	30
6	History	4
7	Marathi	17
8	Microbiology	7
9	Mathematics	40
10	Life Science	20
11	Philosophy	7
12	Political Science	36
13	Sanskrit	46
14	Botany	10

Students' progress is monitored through the mentoring system. Special attention is given to needy and deserving students by the individual teachers.

Add-on Courses:

To enhance the skills of students, the College conducts several add-on courses to impart supplementary knowledge beyond the curriculum as listed below:

The Department of Psychology conducts courses in Child Psychology, Marital & Family Counselling.

The courses in Molecular Biology (Basic & Advanced) conducted by the College serves to bridge the gap between the curriculum and Industry requirements.

Chemistry Department conducts Certificate programs on Introduction to Analytical Chemistry and Spectroscopy.



The Department of Biochemistry conducts a course in Food Science and Quality Control for the students of First year (Certificate), Second Year (Diploma) and Third Year (Advanced Diploma).

English Department organizes tutorials for communication skills in English.

Computer Science and IT Department conducts a course on 'C' programming and ethical hacking.

The Department of Bioanalytical Sciences conducts a course on Bioanalysis: Industrial applications.

The Department of Economics conducts add-on courses in Applied Economics and Research as well as Accounts and Stock Market.

The Centre for Slum Studies conducts a Certificate course in Slum studies as well as Geographical Information System(GIS)

Enrichment courses:

The College offers several short duration courses which are made available to all students through respective departments like:

Rational Emotive Behavioral Therapy

Hypnotherapy and Neuropsychology.

Courses in Chinese, Japanese, German, French and Spanish.

Heritage of Mumbai, Introduction to Food History and Culture, Introduction to Archeology.

Rachana Kaushalya (literary appreciation)

Centre of Mindfulness and Well-being conducts short-term courses on anger and fear management, stress management, yoga and meditation, breathing and energizing exercises, Dance and music as a therapy,

Philosophy of Good Life by the Department of Philosophy,

Eat Smart (with renowned nutritionist, Rujuta Divekar)

Add-on courses and Enrichment courses are designed to provide training in technical skills and soft skills among the students. These address the needs for honing entrepreneurship skills of the students. Life skills are addressed through awareness programs to make the students sensitive to their social responsibilities. These courses are provided in addition to the normal syllabus followed by each Department.

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

GENDER ISSUES

The College has constituted the Gender Sensitization Committee along with the Internal Complaints Committee (ICC) in compliance with the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 and the additional ICC regulation passed by the Government in June 2016. This Committee works towards raising awareness on several sensitive issues related to sexual harassment of women, women empowerment and gender bias in the society. This Committee has raised awareness among the students regarding issues in maintaining relationships, the need to respect women, exercising tolerance and respect for others and abhorrence of every form of violence.



In February 2017, two awareness sessions were arranged for the students of the MSc and TYBSc classes in collaboration with 'POSH' at Work (Prevention of Sexual Harassment at Work) creating informed awareness among students about their rights as well as their duties. The session was conducted by experts in the field and threw light on the various aspects of the "The Sexual Harassment of women at workplace (Prevention, Prohibition and Redressal) Act, 2013", its legal aspects and behavioural caution to be adopted for the prevention of the same. A poster competition on issues related to women empowerment and female infanticide was held wherein seven teams comprising of the first year and second year students of both Arts and Science streams participated in the competition.

Short films were screened for the purpose of creating awareness and need for women empowerment. Two films, which highlight the plight of women in society- "The Colour Purple" and "Mrityudand" were screened where about hundred students attended the screening.

Talks were held by eminent people from the field. Dr. Geetha Bhalsarkar was invited to deliver a lecture on, "Lets grow healthy." The speaker emphasized on hygiene and health awareness for women. About 200 students along with staff members attended the program. This program was conducted jointly with the Ruia Alumni Association.

The College has also taken the initiative to promote the "Lek Vachva Abhiyan" as per the directives of the University of Mumbai and the State of Maharashtra. A talk by Mr. Harish Sadani was organized on female infanticide.

The NSS Unit works with MAVA NGO for awareness on Eve teasing and female foeticide.

An interactive session "NirbhayAvakashasathi" was organized jointly by WDC, NSS Unit, Science Association, Marathi Department and BMM Department on the subject of Women Empowerment and Weakening of Democracy where in Dr. Hemu Adhikari, Prof. Pushpa Bhawe and Poetess Neerja shared their views on the incidents involving Shakti Mill Rape Case, The Delhi Rape Case and the Narendra Dabholkar Murder case.

The Ruia Rotaract club in the year 2015-16, conducted programs to create awareness about transgender community.

A rally for gender awareness was organized from Ruia college to Five gardens, Matunga and back followed by an interactive session with Hum Safar trust, NGO from Vakola.

Self Defense Training was imparted to the NCC girl students' wing. Four NSS volunteers attended a camp mainly aimed at training male volunteers in leadership and sensitizing them about gender issues.

An interactive session on gender awareness was conducted by the trained students of Nirmala Niketan College of Social Work, where the girls shared their views and opinions regarding inequality in Society.

INCLUSIVENESS

The College ensures inclusiveness towards all faculty members and students of the College. The faculty represents the diversity that exists among the students and cater to the needs of all different minority groups.

In order to drive home the idea of equal opportunity and dignity for all individuals of the society, the VPM adopted the theme of LGBT on Rose Day 2015-16 as a mark of inclusiveness.



The NSS volunteers of the College assist the visually challenged students as writers during theory examinations.

The College also extends its facilities to neighboring schools in an attempt to bring the young minds into the thresholds of higher learning. Departments of Microbiology, Botany, Green House Management and Zoology organized workshops for students of Sadhana Vidyalaya, Sion to provide hands on experience in laboratory experimentation.

ENVIRONMENTAL AWARENESS:

In order to sensitize the students to environmental issues and sustainability of life on earth, the College conducts several lectures, talks, presentations and undertakes many programs, and extension activities. These activities mainly focus on the respect for all life forms and management of natural resources. Notable ones are listed below;

The Environment Awareness Committee comprising faculty members, sensitizes the students community on various measures to save the environment like Solid Waste Audit, E-waste management, Recycling of Paper waste, organic farming, solar energy and biogas. Efforts are being made to install the bio-gas generator and Rain water harvesting system at the College premises through Varshsookt consultants.

The college does Energy audit, Waste Audit and E-communication to gain carbon credits and to reduce on carbon foot prints. Energy audit for the College was conducted through Synergy Consultants Pvt. Ltd on 9th & 10th February 2015. Discussions were organized with Mr. Dipak Patil, Area Manager, Solar Division, Jain Irrigation Systems Ltd, Mumbai & also with Ms. Chitralekha Vaidya, Varshasookt Consultants for installation of solar equipment on Ruia College campus.

A total of 10 environment related under graduate research projects were carried out by 42 TYBSc students in academic year 2014-15.

A waste audit was conducted in collaboration with other institutes like Podar College, the Welingkar Institute of Management Research and Development, Mumbai and Stree Mukti Sanghatana. After the audit, composting of the canteen waste is carried out in collaboration with the NGO – Stree Mukti Sangathna. The resulting compost is sold at a nominal price. The NSS unit of Ruia and the Gymkhana are managing the packing & selling of compost from the year 2015.

In 2016, the Environment Awareness Committee along with Green Ruia Club also conducted workshop, through WWF, on paper recycling and paper bag making. Trained students then conducted workshops in their departments for their classmates.

The Environment Awareness Committee organized a visit to Asia's biggest water treatment plant at Khindipada, Bhandup.

A visit to bio gas generator plant at Air Defense Regiment, Military Camp, Kalina was organized for the students.

A series of lectures were organized by the Green Ruia club and Environment Awareness Committee on 'Threat to the Environment'.

A talk on practice of 'Running an Organic farm' by Ms. Tanuja Nadkarni, 'Cell phones & tower radiations: hazards & solutions' by Prof. Dr. Girish Kumar, Mumbai IIT, 'Human role in maintaining sustainability of environment' by Padmashri Dr. S. P. Kale, 'Requirement & feasibility of rain water harvesting' by Mr. Niranjana Bilgi were organized.



Students also participated in the 'Electronic waste collection' drive for recycling. The College was awarded Green certificate by Eco-friend industries for E-waste disposal.

A workshop on making eco-friendly Ganpati idols from cow dung was conducted by the NSS students. The students have made a tree Ganesha: clay idols of Lord Ganesha, with a seed planted inside. These idols were immersed in water and resulted in seed germination with healthy plantlets are available now.

Tree plantation drives were conducted by the NSS students in Raisal, Wada, Palghar district of Maharashtra.

NSS volunteers also participated in a State level Special Environment Camp at Sindhudurg district.

The Centre for Slum Studies organized a certificate course in Urban Environment Management.

In the year 2015-16, the Centre for Slum Studies organized visits to Orchid- Ecotel and Vikhroli mangroves.

Ruia Nature Club conducts nature trails to various places each academic year. A lecture series on conservation of species was arranged along with workshops on nature photography.

A group of students formed 'Green voyagers' club to create awareness about History, Environment and Heritage.

Department of Life Science undertook extensive tree plantation in denuded areas of Nerul- Matheran range in the Western Ghats. 3500 tree saplings were planted by teachers and students. 'Green group' initiative involves all students and faculty members to increase carbon credits by undertaking afforestation programs and wild life conservation.

The department of Life sciences conducts field studies to National park and Sanctuaries like Gir forest, Ranthambore, SGNP. This increases the awareness of students towards healthy ecosystem and sustainability.

The department of Chemistry organized a two-day national seminar on 'Chemistry, Sustainability and Environment'.

To sensitize the students towards the protection of the Environment, the Department of Chemistry, since last two decades, offers "Waste recycling and Non-conventional Energy Sources" as its Applied Component subject to the TYBSc students. This gives practical knowledge to the students of the ground reality on the management and recycling of waste in Mumbai city. To understand the efforts being taken to improve our sustainability and recycling of waste, visits are conducted to esteemed institutes like NEERI, ARTI and biogas plant at BARC.

Naming of trees in and around Hindu Colony and Parsi Colony in Dadar East was done by the students of the Botany Department. Posters were displayed in Dadar Hindu Colony in various places to highlight the importance of cleanliness, tree plantation and conservation and management of natural resources.

In the Botany department, poster presentation and exhibitions are annually conducted under 'Kingdom Plantae' festival. In the year 2012-13, students worked on the theme mangroves and depleting coastal line.

Students are encouraged to bring organic wastes from home to convert it into compost and grow vegetables. Many of them extended this activity to their residential complexes too.



Students of SYBSc Microbiology visited the “Nisargarun Biogas plant at BARC, Trombay.

Department of Microbiology arranged a workshop on ‘Microfluidics’ which makes students aware about micro scaling of reactions to make them more environment friendly.

The Department of Microbiology conducted project on solar disinfection of water and this method was taught by the students to slum dwellers and Adivasis. With another NGO ‘Jignyasa’ they worked on project on Air quality and health.

Department of Biotechnology conducts projects based on reutilization of domestic and laboratory waste, give theoretical background to novel aspects under Environmental Science (protection laws and bio-piracy). The Department’s teachers acquired training at the ‘Nature interpreter’ training course at Godrej Marine Ecology Centre.

Cleaning of the Dadar Chowpatty Beach after Ganesh festival is done every year by the students and faculty of the Zoology Department.

The Department of Bioanalytical Sciences integrates awareness leading to micro-scaling of experiments and projects pertaining to conservation measures, pollution management and use of green chemicals.

Physics department recovers parts like stepped motors from scrap of old computers for e-recycling.

The Department of Commerce, through syllabus, promotes green marketing and rural marketing in relation to environmental issues.

In the year 2012 – 2013, the History department undertook a pilot project on Forts of Mumbai to create environmental awareness about the neglected heritage of Mumbai.

In the year 2015- 16, the Department of BMM (English) organized field study to Gir forest to study neighboring Siddi tribe which has migrated from Africa.

Contemporary environmental issues like Carbon Credit and Carbon Footprints are part of syllabi in several subjects like Microbiology and Bioanalytical Sciences.

In syllabus of English, Commerce, Political science, Sanskrit, Biotechnology, Psychology, Philosophy, Botany and Life science contains topics which are intimately related to environment and discussions on these issues are promoted in the class.

The Vishnushastri Chiplunkar Vyakhanmala organized every year to discuss contemporary issues in a public platform. In January 2016 lectures were focused on issues related to non-renewable resource like water.

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

The College identifies advanced learners by evaluating performance at examinations, classroom interactions, practical skills and leadership initiative. Advanced learners are more amenable to participate in supplementary programs along with their regular curriculum. The College, through such supplementary programs, strives to enhance the technical and soft skills of such students. These students are also involved in research based training to inculcate research culture from their early years of higher education. Such advanced learners are provided with opportunities to vent their abilities of creative thinking and inquisitiveness by project-based learning, team activities, problem solving sessions and involvement in



various extra-curricular activities. These foster out-of-the-box thinking and help them to come up with fresh insights and novel solutions to problems.

These students are mentored differently by the faculty by providing special tips through one-on-one session, tutorials, feedback on written answers and oral presentations.

In order to motivate these students further, the College organizes various talks, seminars, workshops, wherein the learners are exposed to some of the best minds in diverse fields.

Learners are encouraged to express themselves not only through scholarly research papers and projects, but also through creative modes, using role play, mime, skits, posters, use of audiovisual/digi-media and, designing educational toys.

Instead of giving emphasis on the content / information, the College encourages such students to focus on advanced levels in the subject while emphasizing on the thought processes underlining the evolution of advanced concepts.

One of the ways of achieving this is by providing them more time in laboratories, access to advanced facilities and chance to undertake project work during holidays and vacation.

Following are some of the additional courses and activities conducted with special emphasis on the Advanced Learners;

SPECIALIZED COURSES:

Specialized Course / Activity	Department
Rachana kaushalya	Sanskrit
Applied Economics	Economics
Accounting Practices and Stock Market	Economics
Advanced course in Heritage of Mumbai	History
Introduction to Food History	History
Introduction to Archaeology	History
Skill based workshop on Archival Science and Management	History
Neuropsychiatric disorders	Psychology
Child psychology	Psychology
Marital and family therapy	Psychology
Hypnotherapy,	Psychology
Rational emotive behavioral therapy	Psychology
German, Japanese, Spanish, Chinese French	Language Centre
Slum studies	Centre for Slum Studies
Slum and Urban Environment Management	Centre for Slum Studies
Geographical Information System (GIS).	Centre for Slum Studies
Food Science and Quality Control	Biochemistry
Introduction to Analytical Chemistry.	Chemistry
Embedded system	Physics
Optics	Physics
Telescope making	Physics
Sun spot observation	Physics
Nanoscience	Physics
Molecular Biology	Microbiology
Skill based workshop on Bioinformatics	Microbiology

**RESEARCH PAPER PUBLICATIONS:**

The Institution has made conscious attempts to percolate the research culture to undergraduate students. The College with long standing tradition of research has kept this as a priority area in its endeavor in providing higher education.

Many students from the humanities departments such as Political Science, History, Philosophy, Sanskrit, and Economics, are actively involved in research paper competitions fetching laurels to the College. Research articles are published by the students of the Department of Economics in the departmental newsletter *Homoeconomicus*.

The College received grant under the CE program of UGC and has acquired Star Status from the Department of Biotechnology, New Delhi. Under the aegis of these grants, the Departments motivate the students to take up projects and work on them for a stipulated period. This activity is immensely beneficial to advanced learners as this motivates them to further delve into problem solving and logical thinking. This has finally culminated into research paper publications by undergraduate students and presentation of research papers at intercollegiate and state level competitions like Konark and Avishkar.

COLLABORATIONS:

The College extends the benefit of collaborations established with industries and other institutions to these advanced learners by involving them in projects and activities.

The Department of Physics collaborates with leading bodies like TIFR, ICT, CIRCOT and Materials Laboratory, University of Mumbai, at various levels.

Department of Chemistry has collaborative programs with institutes like ICT, IIT-B, BARS, TIFR, etc.

Department of Bioanalytical Sciences has industry linkages with pharmaceutical companies such as Shimadzu and Central Dogma.

The Department of Microbiology regularly interacts with research bodies of national (IIT-B and ICT) and International repute (MIT and Stanford University).

The Botany department collaborates with several research bodies like the National Medicinal Plant Board (NMPB), Department of AYUSH, Society of Ethnopharmacology and Indian Pharmaceutical Association, etc.

The Department of History encourages students to participate in projects organized by research bodies of Heras Institute of Ancient Indian History and Culture, Asiatic Society of Mumbai, Godrej archives and Raksha Shakti University, Ahmedabad.

In the BVoc programs, advanced learners are provided opportunities to get absorbed in the industry for summer placements. Advanced learners in BVoc Pharma Analytical Sciences are deputed as junior technical assistants in various industrial projects.

ORAL AND POSTER PRESENTATIONS:

Advanced learners who excel in the projects allotted to them are encouraged to present their work at various platforms. Some of the achievers are cited below:

Students of Microbiology received prizes at State level inter University Research Meet, Avishkar, State level Microbio Olympiad, Konark Research meet and several other inter collegiate competitions.



Students of Botany department belonging to SYBSc class won the first and second award for poster presentation at Picassa and Jigyasa inter-collegiate research meet. PhD scholars from the Botany Department won the P. D. Sethi award for three consecutive years.

Students of Biochemistry department have won the first as well as second prizes in inter-collegiate poster competitions like 'Bioluminescence', 'Health Fest' and 'Palindrome'.

One student of the Zoology department won a prize at the International Conference on 'Emerging trends and challenges in Science and Technology' for oral presentation.

SPECIALIZED TRAINING:

Advanced learners are recommended for intensive training at specialized laboratories in the College and other research institutions in the country in an effort to enhance their technical and other soft skills.

Twenty- one students and 5 teachers spent 4 days on the campus of Indian Statistical Institute, Kolkata and attended a nurture program, 'Applications of Mathematics and Statistics', specially designed for them. The program was partly funded by DBT and Indian Statistical Institute Kolkata. Students were given exposure to a variety of topics on use of Mathematics ranging from Biology to Geology.

The Department of Mathematics arranged training in software, Mathematica -11 for advanced learners. These students are now capable of pursuing studies in different aspects of computer algebra. They can write algorithms and create modules which will give them an opportunity to take up Internship in Scientific computing labs across the country.

The Dr. P. S Ramanathan Advanced Instrumentation Centre regularly offers training courses for handling various high-end instruments for HPLC, GC and Spectroscopy. This enhances their skill sets considerably.

The Animal Testing Centre is a specialized facility available to the students of Ruia and other colleges and trains them in animal experimentation.

Three undergraduate advanced learners from the Department of Bioanalytical Sciences were deputed to Central Dogma Pvt. Ltd., Pune for an advanced workshop in Molecular Biology.

Students of Biological Sciences would be visiting Indiana University of Pennsylvania for 3 weeks of training in the summer of 2017 for "The Biotechnology Exploration Program".

A workshop has been organized by the Harrisburg University for faculty members and UG students of Science faculty in July 2017 in the emerging applications of biotechnology and nanobiotechnology.

EXPERT LECTURES:

All Departments invite experts from industry as well as alumni for delivering expert lectures on topics beyond the curriculum.

Dr Santosh Noronha from Chemical Engineering Department, IIT-Bombay, Dr. Archana Krishnan, Director, Biogenomics Ltd and Dr. Anne Alexander, Scientist, ICT were invited for a brain storming session to generate fresh ideas for project based learning in Microbiology.



Faculty from reputed Institutes are invited to conduct special lectures for the Mathematics students to train them for Madhava Competition, in which undergraduate students from across the country participate.

Department of Mathematics has been assigned the responsibility to conduct Mini-MTTS program at National level for Mumbai region with financial from National Board for Higher Mathematics (NBHM).

12 Departments under the STAR program of DBT, arranged lectures by experts on various topics.(Refer Criterion III)

Nine Seminars, 56 workshops, 7 conferences, 12 training programs and 2 awareness lectures have been arranged for the benefit of knowledge and skill enhancement of the students. (Refer 2.3.6 and Criterion III).

Dr. Mrinalini Patterkine from Harrisburg University would be delivering lectures on “Nano & Biotechnology: Innovation and Revolution” at the College in July 2017.

INDUSTRIAL VISITS:

Visits to organizations of national repute, industries and other places of academic interest are arranged for the students.

INTERDEPARTMENTAL AND INTERDISCIPLINARY ACTIVITIES

Short duration collaborative projects on Nanotechnology were undertaken by the Departments of Botany and Physics.

The Life Science Department was granted a three-year project from Reliance Biological Science on ‘Alternative Fuels using Algae’.

Inter-departmental studies on a wide range of topics have been initiated by the collaboration between History and Sanskrit Departments as well as English and Philosophy Departments.

SUMMER SCHOOL:

These are arranged with special emphasis to augment the technical and other soft skills of the students.

Ruia students participated in the Summer School organized by University of Mumbai in collaboration with National Innovation Foundation, India in 2013-14. After twenty days training projects of three students of Ruia College were shortlisted (Botany, Physics and Zoology) for further research with funding from the University.

Students of Microbiology received Summer Research Fellowship sponsored by IASc (Bangalore), INSA (New Delhi), NASI (Allahabad) and NCCS, Pune.

The Herbal Research Laboratory organizes hands on training with HPTLC and other sophisticated instruments during term breaks and summer holidays.

During summer months and the mid-term and winter breaks, the advanced learners are encouraged to work on industry projects, which results in hands-on training and widens their exposure to new aspects of learning.

Twenty one students from the Department of Biotechnology accompanied by two teachers would be attending a Summer School at Indiana University of Pennsylvania in 2017.



LIBRARY INITIATIVE:

College has taken institutional membership of Asiatic Society of Mumbai and the students get access to this prestigious library. Many of the students are encouraged, by the faculty, to take individual membership of this library. Facility of INFLIBNET is extended to advanced learners by the Library on recommendation from the departments.

PARTICIPATION IN INTERCOLLEGIATE EVENTS:

The students are motivated to participate in various Inter-Collegiate competitions, where they also get opportunity to showcase their talents. Some of these are listed below;

Youth Festival conducted by the University of Mumbai, Malhar at St. Xavier's College

The Dr. D.V. Amonkar Memorial Elocution Competition at Jhunjhunwala College

Microbiology Department conducted initial rounds for state level Microbiology Olympiad. Students won first prize consecutively for three years at the final rounds held at Shirpur.

OTHER INITIATIVES:

The Centre for Mindfulness and Well-being provides several sessions in the year, to help students to channelize their energies, concentrate better and nurture emotional and spiritual intelligence. These programs help them to cope with fear, anger and other negative emotions and express themselves freely and imaginatively.

2.2.6. How does the institute collect, analyze and use the data and information on the academic performance (through the program duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc.)?

The drop-out rate at Ruia College is less than 1% across different courses.

All the members of the teaching staff have a good rapport with the students. The students are able to approach them freely and speak to them to seek guidance and help for curricular as well as non-curricular aspects.

If specialized attention is needed for the student, he / she is sent to an official counsellor.

Group counseling is carried out in some cases for the students to gain peer support if needed.

The performance of the students during the internal tests, aids as a pointer to the teacher in-charge to identify the slow learners or students weak in the subject.

Counseling sessions prior to and post examinations help the students to analyse inadequacies in their performance and gain clarity on the measures to be taken to overcome learning barriers.

To eliminate the risk of drop out, adequate remedial coaching is provided.

During the parent-teacher meetings, the parents are appraised of the situation and the appropriate measures are suggested for subsequent follow-up and improvement.

Students from the economically disadvantaged sections of the society are guided to avail the facility of departmental book bank as well as e- Learning Centre and library resources to mitigate their difficulties in obtaining adequate learning aids.

The Each One Adopt One scheme provides a significant support for those unable to continue education for economic reasons.



Economically weaker students are also offered the facility of payment of fees in installments, to avoid discontinuity in their educational career.

2.3 Teaching-Learning Process

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

Teaching – Learning Schedules:

Academic Calendar

The University declares the arrangement of terms for the year at the beginning of the academic year. The academic calendar for the year is planned in accordance with the University guidelines.

On the basis of the University guideline, an institutional plan for teaching activities and examination calendar is prepared by the Principal together with Heads of Departments and Examination Committee at the beginning of the year.

Considering the number of lectures prescribed as per syllabus and the availability of class-rooms and laboratories, a time-table is drawn up for all the classes and courses by the Vice Principal.

Teaching Plan

Before the end of every academic year, the Head of each Department prepares the time table of the department for the ensuing academic year. The faculty of the department is provided with the individual work load and the topics to be taught during the ensuing academic year.

Accordingly, each teacher utilizes the period in the vacation to make his/her own academic program and schedule for the ensuing academic year.

Time-tables are laid out well in advance allowing teachers to plan their respective teaching plans, to complete the syllabus on time and allowing time for revision and mock tests. The teaching plan is submitted to the Head of the Department by every faculty member.

Time tables are displayed on the notice boards and also on the website of the College. Various curricular and extra-curricular activities which help students develop an all-round personality are then woven into the academic plan.

In the BVoc programs the teaching-learning schedules are adjusted to accommodate the industry visits, internships and trainings.

The meetings of the Council of Heads of Department, IQAC Coordinator, examination In-charge, Library In-charge, Registrar and Vice Principals are regularly convened by the Principal. Several aspects related to curricular planning, implementation, suggestions, changes are brainstormed and evaluated during these meetings.

Evaluation Schedules

Evaluation blue print for both internal and external components in each paper are clearly spelt out by the University, and the College follows a pattern of evaluation as prescribed by the University.

The University conducts the examinations for TY and MSc classes, while the examinations for FY and SY classes are conducted by the College on behalf of the



University. The FYBSc question papers are set in a centralised manner at the University and sent to Colleges at the time of examination.

Tests, assignments and project report submission are carried out according to University guidelines.

The Examination In-charge declares a tentative time table for various examinations.

The detailed and final time table is displayed at least a month in advance on notice boards and the College website.

The College follows a CAP (Centralised Assessment Program) for evaluation. The CAP-in-charge draws the schedule for the CAP and displays the same on the notice board. The schedule is also shared electronically with the faculty.

Assessment is followed by moderation, as per university guidelines. Results are declared within 45 days from the conduct of examination.

The examination schedules of BVoc programs are adjusted to comply with the varied academic schedule of these courses which integrate industrial trainings and internships.

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

The Internal Quality Assurance Cell (IQAC) of the College is a dynamic, vigilant and proactive body persistently striving for internalization of quality culture and institutionalization of best practices. The IQAC outlines objectives and sets targets for curricular enrichment. It plans activities for curricular development and ensures effective implementation of the planned activities. The IQAC undertakes following responsibilities to improve the teaching learning process:

- Prepares the academic diary

- Provides guidance for preparation of Lesson Plans and collects them for perusal and planning of academic and co-curricular activities.

- Plans for the organization of inter and intra institutional workshops, seminars and conferences on themes related to quality in teaching learning and use of ICT in education and enhancement of innovative teaching methods.

- Proactively suggests and coordinates the conduct of special workshops and seminars for teachers in newer and innovative teaching-learning techniques like POGIL, iSpring etc.

- Documents and evaluates the Effectiveness Index of the various programs and activities.

- Orients the IQAC members and faculty to the feedback mechanism.

- Arranges for feedback response from students, parents and alumni on the institution and curriculum

- Analyses the feedback and sends it to the authorities for suggestive and corrective actions

- Sends outcome of the feedback on curriculum to respective BoS through faculty members who are on the respective BoS.

- Suggests skill-based courses to be organized based on the feedback from stakeholders.

- Conducts Space Audits in order to effectively manage the available space so as to create/modify new classrooms and laboratories to accommodate and meet the requirements of various courses.



Suggests new infrastructure to be added/reorganized for augmenting the teaching learning process.

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?

The College has made successful efforts to make the education imparted within its campus holistic and student-centric. The educational programs implemented involve all categories of students like differently-abled, differently challenged, advanced learners with focus on specific needs of each category. Support systems are extended to the faculty in the areas of knowledge enhancement, capacity building, innovations in teaching and leadership. Teachers are provided adjustments in regular academic work, special leaves and opportunities for career advancement which enable them to enrich their knowledge, technical skills and teaching abilities.

The College provides mainly two types of support structures to meet these goals namely; infrastructural facilities and supportive training. The support structures available to the faculty are as follows:

A. Infrastructural facilities:

Smart classrooms and smart laboratories are available to the Faculty, which is a major support for blended learning.

A Language Laboratory for the enhanced language communication has been established in February 2015. The Language Lab. has ODLL (ORELL Digital Language Lab), a software with extensive and absorbing language teaching material.

A state of the art Dr P.S Ramanathan Advanced Instrumentation Centre with sophisticated instruments is available for training is Spectroscopy and Chromatography for faculty and students. The facility was recently upgraded with additional instruments and accessories.

The College has an Herbal Research Laboratory which is ICMR recognized and an Animal House which is approved by CPCSEA. Both these facilities have been upgraded to meet the contemporary needs of research and industry services.

From the Star Status and CE grants, the science laboratories have procured advanced instruments like PCR machine, gel documentation system, advanced microscope with photographic filters, rotary vacuum evaporator and statistical software.

With the Collaboration of Reliance Industries, a new facility for algal cultivation has been developed.

An Audio-Visual Recording Studio and a Sound Recording Studio have been set up to enable multi-media based teaching.

The library is well equipped with recent as well as rare reference material, books, journals and periodicals, with an open access to all students and huge reading halls supplemented with an e-learning Centre for Internet access. Departments individually have their own book banks which serve as an additional source of referencing to the students.

More details on infrastructure are provided in Criterion IV.



B. Supportive Training:

The College fosters professional development of faculty by facilitating participation at refresher courses, short term training programs, interactions with eminent experts and encouraging research projects.

The College has many curricular and extra-curricular forums which provide platforms for teachers to initiate supplementary activities and programs to make learning process more enjoyable and enriching.

The College organizes several programs and encourages faculty's participation at special programs to enhance their knowledge and professional skills like;

- Teachers training at Flip the classroom, POGIL, e-Content development
- Effective presentation skills
- Sessions on how to deal with differently-abled children
- Effective use of library for information retrieval
- Refresher courses, short term courses for advancement of technical skills, knowledge and professional skills.

Academic Workshops for syllabus creation, modification and enhancement are regularly attended by faculty to bring forth the latest developments in the field.

Several workshops have been conducted by various Departments for the benefit of the students on various topics like: Research Methodology, Creative Writing, Scientific Writing, Molecular Biology and Bioinformatics.

The Departments organise seminars, workshops, conferences which are undoubtedly a huge platform for self-improvement for teachers and students, encompass recent happenings moving way beyond the rigid framework of prescribed syllabus. Nine Seminars, 56 workshops, 7 conferences, 12 training programs and 2 awareness lectures have been organized since the academic year 2012.

Departments invite Industry Experts to feed in their valuable inputs regarding student training activities to bridge the gap between the curriculum and industry requirements. The Bioanalytical Science Department invites Scientists from Shimadzu and Central Dogma Pvt. Ltd. for lectures as well as project and practical evaluation.

Several Memorial lectures and public lecture series are arranged on a regular basis on topics of social relevance, sensitization towards environmental issues and current happenings in various fields. The public lecture series such as the prestigious Vishnushastry Chiplunkar Vyakhyanmala is being regularly conducted for the past 43 years.

Seven teachers attended a special training in Research based pedagogy at IISER,

Senior faculty members from various departments like Microbiology, Statistics and Pharma Analytical Sciences attended leadership programs.

The College organized an off-campus workshop on capacity building where 52 teachers participated.

Benefits of above programs for the faculty are passed on to the students providing them with cutting edge so that **they fare well in competitive exams** & secure admission in prime research institutes

The College takes pride in the fact that significant number of the College students progress towards further education and specialization in various fields. To cite an example, very recently Ms. Aditi Shenvi, who graduated in TYBA Mathematics in



2015, was conferred the Chancellor's Scholarship from University of Warwick, UK for doctoral studies in Mathematics of Systems.

TYBSc Mathematics student, Anand Chitrao, secured **16th** Rank at **JAM 2017** and was also shortlisted for the integrated PhD program at TIFR Mumbai and TIFR Bangalore. Chinmay Kamale from Microbiology secured 76th rank at the JAM 2017.

TYBA Economics student, Ms. Pooja Parmar secured admission to the prestigious Gokhale Institute Politics and Economics for post-graduation. She was amongst the top rankers at the All Indian Entrance Test in 2016.

Department of Microbiology organized workshops on emerging fields like Metagenomics & Microfluidics which are not a part of syllabus. This has empowered the students to secure admission in research Institutes in India like IISER, Pune, IISc and NCBS.

C. Interactive learning:

The conventional lecture method used in the classroom teaching, emphasis is supplemented with seminars, presentations, projects, practical training, field visits to promote interactive and independent learning among the students. Strong emphasis is given to learning by problem solving and case studies that help students analyze and apply their conceptual knowledge that they have learnt in classroom lectures.

Use of Process Oriented Guided Inquiry Learning– **POGIL**, involves making groups of 5-6 students and giving material in the form of a series of guided questions for a topic in the course. Self-preparation with guidance from teacher and presentation thereafter helps them to not only develop confidence, presentation skills but also team work. In **Flip the class room** method, the students are provided an idea of the basic outline of the topic before coming to the classroom. In this technique students learn concepts themselves by using various learning resources such as reference books, textbooks and online resources. On their learnings, the class-room takes a flipped role of discussions and question-answer sessions to enhance the learning. The discussion in the classroom helps them to think and sharpen their communication, social skills and build confidence. Engaging students by asking questions on the given topic helps them to explore and understand the concepts better.

Discussion forums on the Internet help in augmenting interactive learning. Students are encouraged to participate in group discussion to promote peer interaction and team spirit.

The preparation of a photo-journal and video-journal during the practical has made learning fun for the students, also aiding them in learning the basics of document representation using different tools. To add an example from the Biological Sciences, a trinocular microscope fitted with a camera was used in FYBSc practical for studying microscopical observations on flora and fauna.

The College provides seed money to the Departments to conduct Departmental festivals under the umbrella of '**Samanvay**'. Such festivals provide a huge platform to the students to showcase their talent and creatively present novel ideas in a way that promotes independent as well as team learning and event management skills.

On Jan 19th 2016, as a part of 30 years celebration of DBT, Science departments under the STAR scheme arranged student performances wherein concepts of HPTLC, Light reaction of photosynthesis, glycolytic pathway were presented in form of a dance, mime and poetry.



D. Collaborative Learning:

Activities aimed at strengthening skills of students and faculty members in research that promote interaction and collaboration of students and faculty with other institutions and Universities have been a hallmark of collaborative learning at the College.

The Department of French has a collaborative research project with University of Lille, France. It also collaborated with the French Embassy for a Training program that aimed at creating trained teachers for French.

The Department of Marathi in collaboration with professional drama troops, arranges special performances of plays in the College and the students are involved in critical evaluation of the play after its enactment.

The Department of History collaborated with the Observer Research Foundation, for a research project “A comparative study of Coastal Forts in Mumbai” A newsletter was prepared on this work. You Tube and media coverage was given by Indian Express for the same. As an outcome of the project one student was granted internship. The Department also collaborated with Exeter, Centre for Gulf Studies, U.K for ‘Qatar Unified Imaging Project’ that helped the staff in arranging on-job training and consultancy.

Students from various departments did internships with industries such as Godrej Archives, Yatra.com, Suez Environment Pvt. Ltd. (History), CIPLA, Eumark Pharmaceutical, Alkem Laboratory, BARC (Bioanalytical Sciences), Yatra Metro X (Tourism and Travel Management), TechExcellance , Future Farma and Altifarms (Green House Management), BARC and IIT-B (Computer Science)..

Postgraduate students are encouraged to carry out collaborative projects with a faculty member as mentor. The College encourages the students to present their research outcomes by participating in national and international events.

The College has established the ‘**Centre for Slum Studies**’ in 2002 – which has tie-ups with Government and other institutions. The Courses offered by the centre are: Urban Environment Management, Energy Conservation and Solid Waste Management, Family Health Education and HIV/Aids awareness, Geographical Information System (GIS) training program, Diploma in Slum Studies and Development (UGC Sponsored)

E. Independent Learning:

As against the less-engaging method of direct instruction, project based learning enables the students to guide their own learning, add their own meaning and experiences and actively engage with the content, significantly improving the quality of their work across multiple dimensions. Language labs, as mentioned earlier, aid in independent learning. For example the students of departments like Chemistry, Microbiology, Political Science, English and French engage themselves in experiential learning, research paper study and present a book review.

F. Additional Efforts to Make Learning Student–centric:

Skill based courses:

With a view to meet the diverse and context-specific learning needs of all age groups and to give major thrust to entrepreneurship, Ruia College, has introduced for the first time in



the Mumbai University, BVoc Courses in three vital areas viz. Green House Management, Tourism and Travel Management and Pharma Analytical Sciences. Additionally, Skill based courses like GIS are conducted by Centre for Slum Studies.

Visit to Foreign Universities:

Ramnarain Ruia College has collaborated with the Commonwealth of Pennsylvania for the benefit of students and teachers for enhancing the quality and methodology in education with a global perspective.

In 2015-16, 40 Students and 2 teachers visited universities and colleges in the state of Pennsylvania under this collaboration. They visited Millersville University, Villanova University, York College, Indiana University of Pennsylvania, California University of Pennsylvania, Chatham University and West Chester University. Also, 6 faculty members including the Principal visited 6 other universities namely Rosemont College, Temple University, Chatham University, University of Pittsburgh, Juniata University and Penn State University.

In 2016-17, Special Envoy, Commonwealth of Pennsylvania Ms. Kanika Choudhari took great efforts for a successful educational exposure for 20 students and 6 teachers including Principal for the educational tour to 5 universities which included Rosemont College, Villanova University, West Chester University, Harrisburg University and Ursinus College in the State of Pennsylvania.

The team members from the College had very fruitful interactions with the faculty and students of these Universities. These interactions regarding research, training and course work would be pursued further for establishing collaboration as permitted under governmental guidelines.

To further global linkages, the College has signed MoUs with two Universities of the Commonwealth of Pennsylvania; Westchester University and Harrisburg University. These MoUs will foster student and faculty exchanges and training.

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?

The College with long years of experience in advanced areas of research, has made it a priority to inculcate research culture among its students, even at the undergraduate level. This approach has significantly enabled the College to make a sizeable student population to become lifelong learners. The concept of lifelong learning requires a paradigm shift from the ideas of conventional teaching and training towards those of learnings skills for personal development, acquisition of special skills to broaden discovery and harness creative potential. The college takes special efforts to enhance the critical thinking skills of students such that they are able to understand the logical connections between ideas and evaluate arguments.

Critical thinking is nurtured through projects given to the students, preparations for seminar presentations, participation in competitions and publication of research work.

Creativity is nurtured by providing scope for their talent to be exhibited in various events organized by the College and individually by the Departments.

Scientific temper is nurtured by organizing workshops, seminars, conferences for students to present their work. Students learn by way of not only experiential methods (assignments and



project based activities), but also through different co-curricular and extra-curricular activities.

To nurture critical thinking, creativity and scientific temper the College, various departments and departmental associations organize events and activities for students in the college, some of which are listed below:

Avishkar, an inter-collegiate research paper competition was organized for students to exhibit their research talent on a university platform.

Samanvay, a co-curricular festival is an effective platform for students to showcase their creativity and talent in exhibiting projects.

Through NSS and Centre for Slum Studies students get opportunities to carry out research projects on various issues related to the slums to provide novel solutions to problems faced by slums dwellers.

Industrial visits organized by various departments help students to get firsthand information on the functioning of industries, also, helps to understand the do's and don'ts of the industrial practices.

Among the language Departments, the English and French Departments nurture critical thinking and creativity by organizing debates, discussions and giving challenging assignments, while Department of Hindi and Marathi organized programs for students by famous writers, poets and provided a platform to the students to express their views via essay writing competitions. The Literary Society of various Departments such as The Marathi Vangmaya Mandal and Sanskrit Departmental Association, inculcate literary tastes, to improve oratorical, communication and sublime skills.

The Marathi Department organizes annually Vishnushashtri Chiplunkar Vyakhyanmala lecture series and Prof. G. D. Parikh Inter Collegiate state level Elocution competition. In addition, the Department also organized Prof. N. R. Phatak Memorial program, Prof. S. P. Bhagwat Memorial Program, Library orientation and interactions with alumni. Eminent speakers who were invited by the department includes Jitendra Joshi Prajakta Bhide, Anushree Phadnis, Aparna Padgaonkar, Harshad Jadhav, Surekha Sabnis, Jaiprakash Labdhe, Achala Joshi, Raja Dixit, Arun Tikekar, Nandu Madhav, Ganesh Matkari and Arun Khopkar.

The English Department conducted an annual inter-collegiate literary festival, 'Mad Hatters' and arranged talks by eminent writers, poets, faculty and alumini on various literary topics. Some of the illustrious speakers were the Indian poet Menka Shivdasani, Mr. Alok Oak and Department's illustrious alumni like Mr. Prasad Bhide, Mr. Ajinkya Lele, and Ms. Priti Nair

The Sanskrit Department celebrated the Sanskrit Day by arranging a talk by Dhanashri Lele on Bhrtruhari's Nitishataka and Bhasa Mahotsava, Ramayan Mahotsava and Mahabharat Mahotsava.

The Hindi Department conducted Sahityik Srujanaur Samvedana and a One day National conference on Vartaman Katha Saahitya aur Media

The Philosophy Department conducts its Annual Festival – Reconquista and the prestigious Dr. N.V. Joshi Memorial Lecture.

Political Science Department organized Model UN, mock elections, Youth Parliament and Quiz Competition under their annual event 'We The People'. The Department also organized visits to Ralegaon Siddhi, Hivre bazaar and the Parliament.



The Economics Department conducted National Conferences and a National Festival Elixir. It encourages students to publish a magazine annually: *Homoeconomicus*.

The Psychology department encourages students to take up projects to understand the psychological processes such as stress and EQ. Case studies are discussed to enable them to develop a scientific temper and learn to diagnose cases objectively and systematically.

The History Department conducted the D.D. Kosambi Memorial lecture on “Women’s writing in late 19th Century Maharashtra: Engendering the Nation”, and the Mani Kamerkar Memorial National seminar with Paper presentation by scholars and professors to develop the right community orientation.

The Commerce Department conducted its Inter-collegiate festival ‘COMMERCIMUM’ with events like Sensou; Salesman of the Year; Supa Logo Quest; Click; T-Shirt Painting; Who Wants to Be a Millionaire and Free Style Football.

The Computer Science Department conducted a Seminar by Dr. P G Darang CEO ABCOM, a workshop at IIT-B and a seminar on game development.

The Chemistry Department organized visits to various industries / laboratories for post-graduate students to provide them with a panoramic view of Industry requirements and facilities. Principal AP Rao Memorial lectures are arranged for both UG and PG students. The Chemistry Association conducts its annual Intercollegiate festival “Chemfest” in which the students arrange poster competitions, Chem-karaoke, Chemical rangoli, Ad-making, Movie-making and educational games.

The Lifescience Department collaborated with the Chemistry department and undertook phytochemical profiling of medicinal plants, with a view to generate standard for marking and easily identifying genuine varieties of important plants. Both UG as well as PG students participated in this activity.

Microbiology Department developed its microfluidics facilities to support Lab on Paper and Lab on Chip technology. In 2016-17 undergraduate students of SYBSc and TYBSc have completed projects that enriched their learning in several areas like diagnostics, microbial biofilms and environmental microbiology. Students of Microbiology designed educational games and models that could be used in teaching. The Department also conducts its annual biodiversity exhibition of novel bacteria that are isolated and identified by the students every year.

Botany Department has been working in the field of biogenic synthesis of nanoparticles using plant extracts and exploring synthesis and applications of Bionanoparticles. Students involved in the project successfully synthesized and characterized silver nanoparticles using plant extracts.

The Lifescience Department, under the CE scheme undertook project based learning and concept enhancing studies. Various projects like studies on sclereides, starch grains, and anti-cancer properties of plants were undertaken, The Department of Life Sciences collaborated with Reliance Industries for characterization of algal species in which students participated.

The Department of Biochemistry organizes every year its signature festival ‘Appetizers’ to showcase talent of students. The Department also organizes number of talks by eminent experts.

The Department of Biotechnology organizes ‘Chimera’ which combines poster competitions along with fun activities kindling interest towards the subject.

Various collaborative activities in research were carried out by the Physics Department. The Department collaborated with Alcon, and with Department of



Physics, Nandgaon College, Nasik to undertake collaborative projects. In addition, the students of the department fabricated Reflecting Telescope.-The Department also conducted telescope handling workshops and Sky observation sessions. The Departmental festival Infinity, showcases many projects, by the students, that kindle interest in Physics.

The Statistics Department organized 'ESSQUE' an Intercollegiate Quiz Festival.

The Zoology Department conducts its Annual festival Ecozoo which showcases: Information on animal life, Fisheries, Wildlife conservation and wildlife photography.

The multifarious talent of students at the College has been responsible for the College being recipient of several prestigious honors like the Maharashtra Utsav Trophy (two consecutive years) and at research paper competitions like Avishkar, and Konark.

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 Program on Technology Enhanced Learning (NPTEL) and open educational resources, mobile education, etc.

ICT has the potential to offer synchronous as well as asynchronous learning opportunities. But, above all, if well prepared, it can pack a wealth of expertise and experience in efficient packages that can be modified and updated constantly in response to feedback, new demands, and varied contexts. Possibilities fall in a wide range of technologies, including videos, correspondence, Internet, and e-learning superstructure.

Ruia College views ICT as a tool for empowering & capacity boosting. The College integrates ICT for enhanced and deeper learning by providing students with additional resources in the form of :

Open Educational Resources such as MOOC offered by various Universities / Agencies, Topic related discussion groups, Use of open learning resources, Creation of google platforms for interchange of information, On line courses uploaded on LMS

Mobile education: Most of the teachers use WhatsApp and Facebook to encourage students to become members of national academic and purpose oriented groups involved in environment education, Flora Fauna studies and so on

Others:

- Approach international faculty / faculty from other Indian institutes for solving specialized problems, possible collaborations at individual level or institutional level.
- Approach past students of department in various national / international institutes for help and guidance.
- Access to subject specific resources –open access databases, forums, websites of professional bodies like ASM, Google platform, blogs.
- Others like the Departments use creative assignments like those based on songs and films, documentaries.
- Department of Mass media encouraged students to prepare Advertising Campaigns on the spot and to prepare reports on current Events as a initiative of quality enhancement.



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

One of the major objectives of modern approach in teaching is to make learning a pleasurable experience that transforms students to active learners. By blending conventional teaching with ICT based online resources, teachers are able to encourage students to self-learning and effective sourcing of resources. This further enhances the student’s abilities of critical thinking and analytical approach to problem solving. Students find learning a participatory experience with the teacher taking up the role of a facilitator in role plays, debates and discussions. It is important for the faculty to be exposed to the emerging areas of knowledge and the recent developments in their own fields of expertise. This is ensured by encouraging teachers to attend seminars, workshops and interact with eminent experts to widen their horizons of knowledge.

During the period 2012 to 2017, the College has been able to ensure significant participation by the faculty and the students at several Seminars, Conferences and Workshops;

Category	International	National	State /Local
Faculty	56	128	94
Students	99	217	159

Many students and faculty members presented papers at seminars /Conferences/Workshops during the period, 2012-2017

Category	International	National	State/ Local
Faculty	36	57	12
Students	39	68	135

The College proactively encourages its faculty to pursue research leading to their doctoral degrees. This is another opportunity for the faculty to be exposed to the emerging and current areas of research in their own fields of interest. In the last five years, several faculty members and students successfully completed their doctoral research.

Number of teachers who acquired PhD	15
Number of students who acquired PhD	63

In the present scenario, teaching has advanced and needs maximum use of ICT and other current technologies. The college has provided necessary facilities for this purpose viz smart class rooms, smart laboratories, interactive live internet and intranet connectivity. Faculty members are encouraged to regularly integrate these ICT platforms for their teaching. The College uses various blended learning methods like Flip-the-Classroom, Online learning materials and innovative class assignments. These are aimed at participatory learning to transform students to active learners. The progression of active learners to advanced learners is further enabled by project based learning, participation in research projects and internships, Some of the techniques that are used by the College for exposing students and faculty to advanced level of knowledge are enumerated below;

Blended Learning:

The College encourages blending of information technology with conventional teaching at every level. ICT enabled classrooms, smart classrooms, smart labs and a resourceful library



provide the adequate support to achieve this blending. In addition, the College has initiated the use various platforms to meet the information requirements of faculty and students;

LMS Moodle (new teaching learning initiative)

The workshop activity module: collection, review and peer assessment of students' work.

Database - A collaborative collection of web links, books, book reviews, journal references

Display platforms for student creativity like photos, posters, websites and poems for peer comment and review

ICT is used to help to collect the available literature in the form of pdf books and journals published online. All departments encourage participatory learning by conducting discussions and debates on current issues, topics and quiz in regular classroom teaching. Multipronged Teaching Learning initiatives are employed at different levels.

- **Process Oriented Guided Inquiry Learning (POGIL)** for group discovery.
- **Flip the Classroom** for guided problem solving
- **PreLab, PostLab** sessions to get more out of practical class
- **Project based open ended practical classes** to provide research exposure and to encourage critical thinking
- **E-content** development
- **Internship** – interfacing with the ‘real’ world

The College ensures a constant network with research bodies for its own research culture and for encouraging inter-institutional research. Under the DBT and Star status, New Delhi given to the different department of sciences, the teachers train the students for various research projects, which enriches the curriculum.

Several departments organise seminars and workshops for staff and students. This gives them an across-the-table perspective to their respective subjects. Eminent experts from industry and other professional institutions are invited for these programs which provide immense opportunities for intellectual interactions and knowledge sharing. This helps not only the students by exposing them to a wider field of knowledge but also the faculty by giving pragmatic perspectives to their knowledge base. The following table comprehensively provides a representative list of seminars and conferences organized by the College during the last five years.

Sr. No.	Title of the seminar/ conference/ training	Date	List of Speakers
1	Mini MTTS Programs	10 th to 15 th Apr 2017	Prof. Kumaresan, Dean, Science Faculty, Central University, Hyderabad.
2	Workshop on ‘Hydroponics and Aquaponics’.	4 th Mar 2017	Mr. Vijay Yelmalle, Dr. Shama Zaidi
3	Workshop on Mindfulness & Well- Being	31 st Jan 2017	Rajiv Kapur, Gangadharan Menon, Marie Fernandes, Brian Lobo, Harish Nambiar, Swami Atmokranthi, Dr.Chinmay Pande



4	Seminar on 'Smart farming technologies-Need of the hour'	14 th Jan 2017	Lt. Cdr C.V. Prakash, Dr. Rajendra Deshmukh, Mr. K.V. Bhaskar Rao, Mr. Vijay Yelmalle, Mr. Atul Jadhav
5	Workshop on 'Principles and Applications of Mass Spectrometry'	14 th Jan 2017	Dr. V. Nattaraju, Dr. S.C. Gadkari, Dr. R.K. Bhatia
6	Workshop on 'Chemical handling and laboratory safety'	7 th Jan 2017	Dr. Rajeev Jukar, Dr. Sunil Divekar, Dr. Raj Deshpande
7	Workshop on 'Waste recycling and Paper bag making'	16 th Dec 2016	Mr. Kamal Vats, Mr. A. K. Mishra
8	Workshop on 'First Aid and Cardiac Resuscitation'	7 th Dec 2016	Dr. Nandini Dave (Prof. Anesthesiology Seth G.S. Medical College & K.E.M Hospital)
9	Workshop on 'Effective workplace relationship'	9 th Nov 2016	Dr. Savithri Mani and Dr. Susan Eapen
10	Workshop on 'Life Skills'	26 th Sept 2016	Ms. Coomi Vevaina, Smt. Shamal Durve, Mrs. Ranjana Gaur, Mr. Rajeev Chawla, Swami Veerabhadri
11	Workshop on 'Molecular Biology Techniques in Diagnostics for PG teachers and Mid-career Scientists'	19 th to 30 th Sept 2016	Dr. Savita Kulkarni, Dr. Anjali Deshpande, Dr. Archana Krishnan, Dr. Ajit Datar, Dr. B. B. Sharma, Dr. S. S. Barve, Dr. Renuka Thergaonkar, Dr. Hemalatha Ramachandran, Ms. Varsha Malwade. Dr. Ravi Phadke, Dr. Sashikumar Memon, Ms. Anushree Lokur, Dr. Sunita Shailajan
12	Workshop on Art of writing	26 th & 27 th Aug 2016	Ms. Savithri Mani and Ms. Susas Eapen
13	Workshop on Dialogue with elephants	13 th Aug 2016	Mr. Anand Shinde, Ms. Chitrlekha Vaidya
14	Half day Seminar on Microbiology	25 th Jun 2016	Dr. Tanuja Teni and Dr. Manisha Premnath
15	Workshop on 'Safety in chemical handling & laboratory working'	16 th Jan 2016	Dr. Sunil Divekar, Dr. Rajiv Jukas and Dr. Madhavi Badole
16	Seminar on 'Hi-Tech Agri-Horticulture solution for sustainable Farming'	10 th Jan 2016	Dr. Rajendra Deshmukh, Dr. Nagesh Tekale
17	Workshop- 'Safe laboratory practices'	15 th Nov 2015	Dr. Rajiv Jukar, Dr. Divekar
18	Workshop on 'Kitchen Gardening and Composting'	20 th Oct 2015	Smita Shirodkar
19	Workshop on 'Stress Management' & 'Team Building' (Non-teaching)	23 rd Nov 2015 & 5 th Dec 2015	Mr. S. Pevekar



20	Workshop on 'Stress Management' & 'Team Building' (Teaching staff)	8 th Sep 2015 & 29 th Sep 2015	Mr. S. Pevekar
21	Workshop on 'Curriculum Design and Development'	29 th Sept 2015	Dr. Mohanan
22	Seminar on Gastro- Tourism	28 th Sept 2015	Dr. Mohsina Mukadam
23	Training for Awajachijopasana	14 th Aug 2015	Ms.Rashmi Warang and Mr.Mayuresh Shirke
24	Workshop on 'Bonsai'	16 th July 2015	Mr. Shree Krishna Gadgil
25	Workshop on 'Molecular Biology'	1 st -5 th Jun 2015	Dr. Anjali Apte- Deshpande
26	Moodle Training	28 th Apr 2015	Mr. Kevin De'Cruz
27	Workshop on 'POGIL as a tool for teaching'	2 nd to 5 th Feb 2016	Dr. Kelly Butler
28	AYUSH training (Preparation and standardization of traditional formulations)	15 th - 23 rd Feb2016	Dr. D G Naik, Dr. Ajit Datar, Dr. Sasikumar Menon, Dr. Sunita Shailajan
29	Training on Soilless Cultivation	13 th Dec2015	Mr. Vijay Yelmalle, Founder, CRAFT
30	Workshop on 'Searching and Managing Information'	28 th Feb 2015	Dr.Shamprasad Pujari
31	Workshop on 'Free Reference Manager -Zotero'	28 th Feb 2015	Savita Ladge, Dr. Shamprasad Pujari
32	Decentralized national training program	27 th & 28 th Feb2015	Dr. V Badrinathan, Christophe Legris
33	Workshop on 'Sciences in Sanskrit'	24 th Feb. 2015	Dr. Ashwin Sawant, Dr. Asawari Bapat
34	Seminar on Freedom of Expression: Perspectives and contexts	23 rd Feb 2015	Prof. Fabienne Leconte, Mr. Christophe Legris, Prof. K. Deb, Ms. V. Sharma, Mr. Kumar Ketkar, Mr.Manjul, Mr.Tushar Gandhi, Ms.Nandini Menon, Dr. P.A.Sathe,
35	Conference- 'Chemistry, sustainability & environment'	20 th & 21 st Feb 2015	Dr. B N Jagtap, Dr. A B Pandit, Dr. Amul Kulkarni, Dr. Rajneesh Kumar, Dr. Chitrlekha Vaidya, Dr. Ramani Narayan.
36	Workshop on "Talking History"	9 th Feb 2015	Ms. Indira Chowdhary
37	Conference- Ramayan Mahotsav (Sanskrit)	31 st Jan – 1 st Feb. 2015	Dr. Ashok Modak, Dr. Anjali Parvate, Dr. Parinita Deshpande, Dr. Varada Godbole, Dr. Suraj Pandit, Dr. Madhavi Narsery, Dr. Manjusha Gokhale, Mr. Dajishatri Panashikar, Dr. Cecelia



			Karvalow, Mrs. Dhanashree Lele, Mrs. Sonali Parchure, Dr. Prakash Khandge.
38	AYUSH training (Preparation and standardization of traditional formulations)	15 th - 24 th Jan 2015	Dr. Ajit Datar, Dr. D.G.Naik, Dr. Sasikumar Menon, Dr. Sunita Shailajan
39	National Seminar on 'Quality Sustenance: Aspects and Initiatives'	10 th Jan 2015.	Dr.Shivani Patel, Dr.Hemalata Reddy, Fr. Frazer Mascarhenes, Dr.R.H.G Rau, Dr. Sara Mathew.
40	Seminar- Drama: An Enduring Art	12 th - 13 th Dec 2014	Hemoo Adhikari, Pushpa Bhave, Waman Kendre, Madhav Vaze, Shafaat Khan, Samik Bandopadhyay, Ramu Ramnathan, Madhuri Dixit, Shanta Gokhale, Sanjay Pawar, Satish Alekar, Makarand Sathe, Rekha Inamdar-Sane
41	Seminar-Sustaining Values: Ideas into Actuality	9 th & 10 th Dec. 2014	Prof Dr. Bhuvan Chandel
42	Capacity Building workshop	22 nd & 23 rd Sep 2014	Smt. Ranjana Gaur
43	Workshop on 'Indology'	22 nd Sep 2014	Dr. Suraj Pandit, Dr.Prachi Moghe
44	Workshop on 'Unicode Training'	6 th Sep 2014	Ms. Anagha Pendse
45	Workshop- Inter departmental workshop on 'Tally ERP Systems'	8 th Aug 2014	Prof Bhanudas Panmand,
46	Workshop: Research Methodology Workshop		Dr.RatneshJain, Dr.Ajit Kumar, Dr.Santosh Noronha
47	Workshop on 'Importance & Voice culture for effective teaching'	29 th Apr 2014	Mr.Chetan Shashital
48	Mini MTTs Program	11 th to 16 th Apr2014	Prof. Kumaresan, Dean, Science Faculty, Central University, Hyderabad.
49	Workshop on "Chemoprofiling of some therapeutically important plants using sophisticated instruments - HPTLC and HPLC",	4 th and 5 th Feb 2014.	Dr.Ajit Datar, Dr. D.G. Naik,
50	Workshop on 'Creative Writing'	24 th Jan 2014	Ms Tsippy Levine Byron
51	Conference on the 'Concept of Rasa through Arts and Literature'- students and public	19 th & 20 th Jan. 2014	Dr. D.B. Kulkarni, Dr. Pushpa Rajapure-Tapas, Pdt. Satyashil Deshapande, Dr. ArunaDhere, Dr. Sucheta Chapekar, Dr. Deepak Kannal



52	Interdisciplinary National Conference on 'Public Finance and Public Policy'	3 rd -4 th Jan 2014	Mr. Niranjan Rajadhyaksha, D. Chinmay Thumbe
53	Workshop on 'Logic'	6 th Mar 2013	Dr. Uma Shankar
54	Workshop on 'Introduction to Analytical Chemistry'	Chemistry Dept.	Prof. Padmakar Sathe
55	Workshop on 'Linguistics'		Dr. Avinash Pande, ArchanaAmberkar
56	e-Content Development training	6 th Feb to 6 th Apr 2013	Dr. Uday Deshpande and Mr. Makarand
57	Workshop on "Strategies for Creative Writing"		Mr. Christian Rodier
58	Workshop on 'Syllabus design'	23 rd Feb 2013	Prof. K P Mohanan
59	Workshop on 'Basic of Computers'	22 nd , 23 rd & 26 th Feb 2013	Mr. Mahavir Advaya
60	Seminar on "Fungi and Human Welfare"	8 th & 9 th Feb 2013	Dr. S. Raghukumar, Dr. M.C. Srinivasan, Dr. M.V. Deshpande, Dr. N S Atri, Dr. Sunil Deshmukh, Dr. Shilpa Verekar, Dr. Sunita Deshpande, Dr. Rahul Sharma, Dr. S K Singh, Dr. R.L. Mishra.
61	Workshop on Microfluidics	5 th Feb 2013	Dr R. Phadke, Ms Charmi Chande
62	Workshop on HTML5	19 th Jan 2013	Mr. Abhishek Shah
63	Workshop on PHP Spoken Tutorials in Collaboration with IIT Mumbai	16 th Jan 2013	An Open Source Tutorial under the National initiative for Computer Literacy of Ministry of HRD, Government of India
64	Seminar on Vivekananda's Concept of Education'	9 th Jan 2013	Ms. Nivedita Bhide
65	National Conference on Emerging Market Economies	2012-13 03 days	Dr Narendra Jadhav, Dr Dilip Nachane
66	Workshop on "Effective Presentation Skills"	8 th Dec 2012	Mr. Saif Herekarial.
67	Intercollegiate students literary meet - Department of Marathi and Mumbai Marathi Sahitya Sangha, Girgaon	30 th Nov 2012	Pradnya Pawar, Shailesh Datar, Prakash Holkar, Vasanti Vartak, Sampada Jogalekar,
68	National Literary event 'Aantarbharatiya Sahitya Sanvad'	Nov 2012	Mangalesh Dabaral, Ramdas Bhatkal, Niraja,
69	Emergence and Growth Of	15 th Sep	Dr. Mohsina Mukadam and Dr. Louisa



	Indian Cities: A Historical Perspective	2012	Rodrigues
70	Creative Writing in Marathi	Aug 2012	Aparna Padgaonkar, Harshad Jadhav
71	National Conference on “Emerging Market Economies”	27 th to 29 th Aug 2012	Lord Meghnad Desai, Dr. Narendra Jadhav, Dr. Dilip Nachane, Dr. Abhay Pethe, Dr. Deepak Mohanty, Mr. Sajid Chenoy, Dr. Errol D’Souza, Dr. Rajas Parchure, Dr. Ashima Goya, Dr. V Aditya Srinivas, Ms Shital Mehta, Dr. Bhandare, Dr. Chandrahas Deshpande, Prof. Avadhoot Nadkarni, Mr. Mangesh Soman, Mr. Niranjan Rajadhyaksh, Dr. Pushpa Trivedi, Mr. Girish Kuber, Dr. Dinesh Hegde, Dr. Vikas Chitre and Dr. Ajit Ranade

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?

Professional Counselling:

The faculty members of the Psychology Department are competent professional counsellors with specialization in areas like Clinical Psychology and Sports Psychology. The Counselling cell offers different type of counselling services to the students of the college. The number of students who approached the Counselling cell for various issues is as follows:

Year	Number of students
2012-13	324
2013-14	346
2014-15	246
2015-16	312

Most of the students benefited by one or two sessions, about 20-25 students were followed up for about 8 – 10 sessions.

Parents of 8 students with challenged mental abilities were called for parental counseling so as increase their compliance with the treatment and to enable the parents to react appropriately to the behavior of the students.

Some of the commonly experienced problems for which they approached the cell services were poor confidence, feelings of inferiority, low self esteem, anxiety, stress during exams, difficulties in concentration and career indecisiveness. Different psychotherapeutic measures were undertaken to help the students to deal with these problems.

The Counselling Cell also conducted different workshops such as ‘Improving self-esteem’, ‘Effective study habits’, ‘Team building’, ‘Leadership skills’ and ‘Stress management’. Workshops were also conducted on Assertiveness training and Effective Study Habits for those with learning disabilities. Mental Health screening



was undertaken for the M.Sc. students of different department and need based counselling was offered to them. Different workshops were conducted to help them to know the careers in their field after M.Sc. and Stress Management.

As a result of counselling, those students who availed the facility showed an improvement in the GAF (Global assessment of functioning) scores by an average of 10 points. There was an improvement in their social and emotional behaviour.

The ratings by the teachers showed an average increase by 2 points on a 10 point rating scale for adaptive behaviour. Comparison of academic performance pre and post the intervention showed an improvement by an average of 5%.

Students who needed medical attention were referred to psychiatrists and were asked to meet the counsellors regularly.

Mentoring:

The institute also lays emphasis on the all round well-being of the students and hence gives a lot of importance to mentoring. The mentoring process has been developed with the guidance from certified counsellors from the Department of Psychology. A mentoring form has been designed for this purpose. Students and faculty members collectively fill the mentoring form and use it for further mentoring sessions. The number of mentoring sessions are need based.

Every teacher is allotted a group of 20 students and the teacher fills in the required information regarding the students allotted to him/her in the mentoring forms.

If a particular student needs professional intervention in regards to counselling he/she is referred to the certified professional available in College who takes the necessary action.

Because of the informal atmosphere and good student-teacher rapport in the classes, students feel free to approach the teacher if they need help.

The teacher is in a position to find out the strengths and weaknesses of the students, their likes and dislikes and guides them in the choice of their future career.

Academic Advice:

The main objective of the founding members of this institute was 'Education for All', hence under this principle, the college has initiated a separate division in Humanities and Mass media in the state language Marathi for the benefit of students who come from vernacular medium. Many of the students in this section are first generation learners and hence special efforts are taken by the faculty to get them at par with the other students.

Most students seeking admissions to a particular course are unaware of the future prospects and sometimes are not even clear regarding the combinations to opt for as per their aptitude and interest. To help the student decide the subject combination most suitable to him/her, a Counselling desk is kept open for three days before the start of admissions.

For the traditional courses, students are usually familiar with the subject knowledge imparted. However, for multidisciplinary courses like Bioanalytical Sciences and Biotechnology, the students admitted often need to enhance their knowledge in certain topics. These students are given a bridge course covering the fundamentals of various topics. Remedial Coaching is also provided to the academically weak students.

Under the UGC XIth Plan Scheme of remedial coaching to Reserved Category students, multiple sets of text books have been purchased and are made available to the needy students.



Additional knowledge-enhancing courses and research projects are recommended to students to encourage them to delve further in the subject and widen their knowledge base. This also helps them to understand their attitude towards research.

They are further encouraged to participate in various inter-collegiate festivals for debates, group discussions, presentations, seminars. These help in exposing students to higher learning.

They are also involved in organisation of departmental activities, participation in seminars, present projects and share them with their peers.

The college has an active Career Guidance and Placement Cell under which campus interviews are held. This activity is also carried out by the departments for their students specific to that subject.

For overall social development, students are also encouraged to participate in various intra and intercollegiate cultural programs and sports competitions to foster a spirit of competitiveness, responsibility and sportsmanship.

Large number of associations provide multi-fold opportunities for growth. Thus, many of our students have excelled in various fields like music, dramatics, dance and allied arts.

Through extension and outreach activity, the students are sensitized to various social issues. Such activities are conducted through the College NSS and NCC. (Refer Criterion III).

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?

Innovation in teaching methods is vital for generating interest in the subject as well as unraveling concepts in novel ways, thus exposing new dimensions of the same curriculum. There is an institutional initiative, through academic programs, to prioritize skill based training and promoting research culture among the students. This also helps in cross linking various interdisciplinary angles of the topics taught. Two approaches have enhanced the blended teaching learning process:

Implementation of Innovative teaching methods like POGIL, Moodle, Flip the classroom, pre-lab and post-lab, photo journal and video journal.

Enhancement in ICT enabled teaching- google platform, blogs, facebook page, Mobile education, I-translator, e-content development.

The College has been proactive in encouraging faculty to adopt these initiatives in teaching sessions.

Teachers selected from various departments of the college completed a e-Content development course conducted by Techno writes Pvt. Ltd., Pune and all of them have designed Modules for online learning using i-Spring software.

Faculty have now adopted the **Flip the classroom** technique, wherein the faculty essentially plays the role of a facilitator and not just a direct instructor.



Pre-delivery of study material to students with classroom time dedicated for discussions and in-depth understanding is central to this process.

A greater clarity in the topic leads to increased interest among the students.

Engaging students by asking questions on the topic helps them to explore and understand the concepts in a significant manner.

This ensures the complete involvement and participation of the students in the learning process.

Pre-Lab and Post-Lab is again an approach to pre-orient and sensitize the students towards the practical sessions, so that they are familiar with the practical to be conducted. Science departments developed pre-lab and post-lab modules and interactive material for uniform instructional material in practical classes.

Microbiology Department created a consolidated repository of references/ videos and quizzes from the internet for all TYBSC practical in the curriculum. This was used extensively for interpretation and analysis of results obtained for experiments conducted.

Undergraduate Students of the Botany department prepared all the chemicals for various experiments as a Pre-Lab exercise and as a Post-Lab exercise they prepared a Standard Operating Procedure (SOP) for the use of instruments such as spectrophotometer.

Use of **Process Oriented Guided Inquiry Learning** is another innovative teaching method adopted by faculty. A four days workshop on POGIL was conducted by Dr. Kelly Butler. Thirty-five teachers from both Arts and Science faculty participated in it.

Seven departments have created google platforms, 7 departments use open learning resources, Department of Economics created Blogs, Facebook pages, Department of French and Marathi use mobile education and Department of Sanskrit uses tools like I-Translator in teaching.

Department of Marathi uses Virtual laboratories and e-Learning resources from National Program on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT).

Department of Mass media conducted Computer based Training on Unicode for First & Second year students and an Advance Computer Training for Third year students specializing in Advertising and News paper publication.

Project Based Learning is encouraged both in Science and Humanities for topics covered in syllabus. This augmented conventional teaching methods and encouraged more and more students to think originally and critically. It encouraged students to explore their capabilities in research, work in groups and improved their written and verbal communication skills. Students learned experimental planning and learned from their mistakes and learned to be organized and methodical. Their reasoning ability also improved.

Students of SYBSc and TYBSc Microbiology carried out projects that enhanced their learning in several areas such as Microfluidics, biofilm studies, microbial diversity, fabrication of solar distillation units and SODIS. This made the FY students to refer research papers and they learned to understand scientific language. SY students learned to refer to microbiology taxonomy volumes. All the students learned to reason out, read and think beyond their curriculum.



TYBSc Botany students completed a project on various methods of drying the flowers and used them in artistic arrangements with dried flowers and leaves. The students were exposed to an emerging area of entrepreneurship in dried flowers, seeds, pods and fruits which was not part of their syllabus.

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

The facilities of the well-equipped library are made available to the faculty to augment the teaching-learning process. The library makes special efforts to obtain recommendations / suggestions from the faculty to add to the existing collection. On recommendation of faculty, multiple copies of specific reference material are made available for wider accessibility of the students. Faculty members are preferentially allowed to retain books / reference material for the entire academic year. Specialized reference material on innovative teaching tools and techniques and supplementary teaching aids like audio, video resources are separately archived. Most departments through the proactive efforts of their faculty maintain a book bank at the department which supplements the resources archived at the main Library.

The library has taken following efforts for the resources of the library to be utilized by the teachers;

There is a separate reading area for teachers that can accommodate 6 teachers

There is a separate reference section for teachers that can seat 12 teachers.

Currently 85 teachers are enrolled into the library.

The library has added 90918 reference materials and 86 journals in 2012, 91444 reference materials in 2013-14 and 93402 reference materials in 2015-16, on recommendation of faculty. Multiple copies of necessary reference material is also made available on a regular basis.

Audio-video resources in the form 217 CDs and 217 DVDs have been added in the last 5 years

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.

The Institution has always been able to achieve completion of the curriculum within the planned timeframe and calendar as stated by the University. The number of teaching days is in confirmation with UGC guidelines.

2.3.11 How does the Institute monitor and evaluate the quality of teaching learning?

The institution annually administers teacher performance evaluation by students through a structured feedback system.

The questionnaire has both implicit and explicit components on the curricular competencies of teachers and records information to evaluate the quality of teaching.

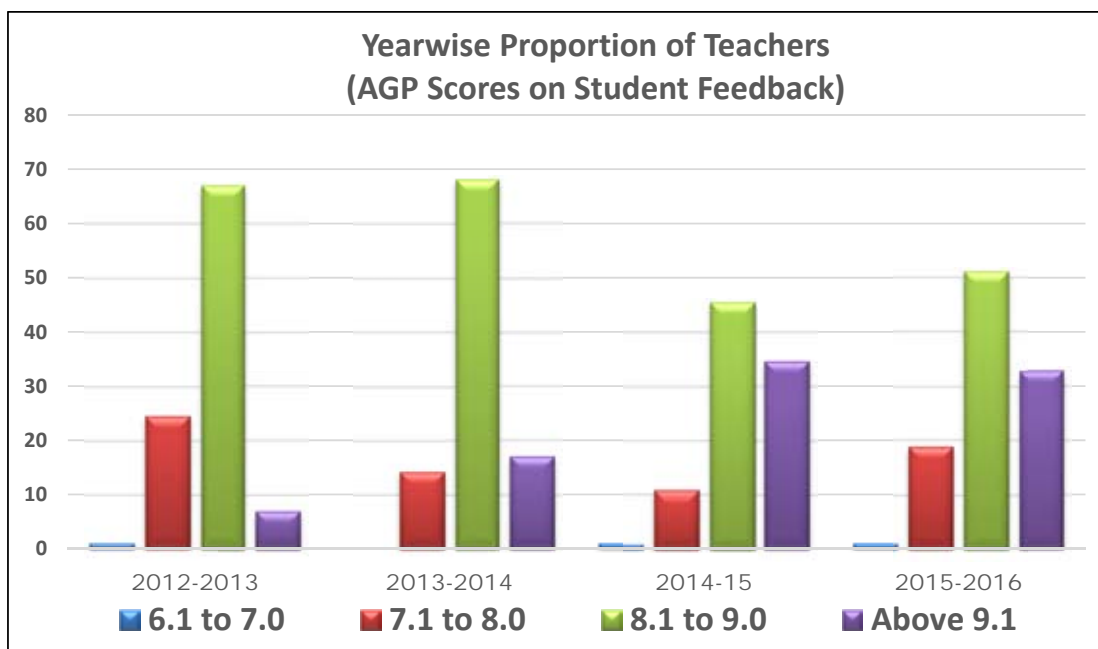
The students are given a questionnaire, which they have to answer separately for each teacher, regarding the conduction of lectures, completion of the syllabus, punctuality and the measures taken by the teacher to go beyond the syllabus, both in theory as well as in practical.



The data from the feedback is analyzed via a software and each teacher receives a score on a scale of 10.

Confidentiality is maintained throughout the process and the Faculty with performance gaps are counseled and asked to improvise in the required area.

The feedback from the students received in the last five years has been summarized in the graph below:



As a result of this exercise, the number of teachers with scores higher than 9 have increased in the last four years.

The Principal also meets the students at regular intervals and receives an informal feedback from them. A suggestion box is made available in various places in the College premises. Any grievance or suggestion given by the students regarding the teaching learning process is addressed immediately. Feedback is also sought from the parents. The data is documented and the necessary action is taken as follow-up.

Academic Audit conducted by the University gives the teacher an opportunity not only for self-analysis and evaluation but also for system evaluation through the suggestions given by the visiting auditors. Academic Audit is an exercise, conducted by the University, which monitors the following:

- The syllabus covered
- The stipulated number lectures and practical conducted as per the action plan
- The suitability of question papers set to evaluate the knowledge, analytical and cognitive abilities of students.



The Self appraisal form filled up by the teachers annually, aids the teachers to monitor their own progress in a subtle way through self-introspection.

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	Professor		Associate Professor		Assistant Professor		Total	
	Male	Female	Male	Female	Male	Female		
Permanent teachers								
D.Sc./D.Litt.	-	-	-	-	-	-	-	-
Ph.D.	1	0	07	18	7	5	38	
M. Phil	-	-	1	03	1	0	05	
PG	-	-	-	05	06	06	17	
Temporary Teachers (Lecturer)								
Ph.D.	-	-	-	1	2	7	10	
M. Phil	-	-	--	-	--	--	--	
PG	-	-	-	-	20	48	68	
Part-time teachers								
Ph.D.	-	-	-	-	--	1	1	
M. Phil	-	-	-	-	--	--	--	
PG	-	-	-	-	--	2	2	

The recruitment of the faculty members is as per the guidelines given by the UGC, the State Government and the University statutes. The staffing pattern and the reservations mandated by these bodies are strictly adhered to.

The College procures the sanction from the University and Department of Education, Government of Maharashtra for approval of the vacant posts.

Roster for the reservation of posts as laid down by the government is strictly followed.

The post is advertised in leading local and national news papers, a selection panel for the interviews is constituted as per the University norms and the panel selects the appropriate candidate after interviewing them.

The college again follows the procedure of getting the appointments of these candidates approved by the University.

At present, there are 60 permanent teaching staff, who are fully qualified. Among the faculty, 63.33% teachers are with PhD as the highest qualification and 6% are with MPhil as the highest qualification. All permanent teachers are either exempted from NET/SLET or are NET/SLET qualified (37.33%)



If candidates from reserved category are not available for some subjects, the management appoints temporary teachers (as per the University and Government guidelines) to fill the vacant posts.

Though the salaries of the permanent staff are in accordance with the current guidelines of the State Government, the College makes conscious efforts to provide conducive working environment for the staff enhancing the opportunities for self-growth and development. Progression to higher levels of expertise is encouraged by providing support for collaborative work, extension activities and going beyond the scopes of their duties.

The salaries of temporary teachers are partly borne out of the fees collected and from the contributions by the management. The College tries to retain its human resource, especially the temporary staff, by offering competitive payment structures and offering other incentives like opportunities for self-growth, progression to higher levels of knowledge by research and proactive involvement in various levels of Institutional administration.

2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programs/ 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.

The selection and recruitment of qualified teaching staff for self-financed courses is done as per the guidelines laid by the University and Government. The College supplements the expertise of its faculty by the following initiatives;

The college invites visiting faculty from esteemed institutions and industries to deliver lectures. Through Star College and CE grants, expert lectures by eminent scientists are arranged to supplement the regular teaching. More than 80 lectures of invited speakers were arranged in the last five years.

The College has augmented the expertise of its faculty by utilizing grants received under the CPE, CE, and DBT-STAR. Several new centers of expertise have been established in the College in areas like Microfluidics, Bioanalysis, Phytochemicals, Tissue culture, Soil-less Cultivation, Statistical evaluation and Language proficiency.

Retired Faculty are invited to share their expertise and deliver lectures in their areas of specialization. For example, Prof. Padmakar Sathe has been invited to take lectures in Chemistry, after retirement.

The faculty, appointed on temporary basis, are encouraged to enhance their skills and competencies by;

- deputing them to workshops, training programs, seminars and conferences
- encouraging them to undertake research work and publish papers
- allowing them to make use of all infrastructural facilities to expand their knowledge and subject skills like You Tube demonstrations and IT Video-conferencing.

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

a) Nomination to staff development programs



Academic Staff Development Programs	Number of faculty Nominated
Refresher courses	21
HRD programs	82 (at College level)
Orientation programs	05
Staff training conducted by the university	10 (short term courses)
Staff training conducted by other institutions	09
Summer / winter schools, workshops, etc.	03
Faculty Development Program	08

b) Faculty Training programs organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning

1 Teaching learning methods/approaches

2 Handling new curriculum

3 Content/knowledge management

4 Selection, development and use of enrichment materials

5 Assessment

6 Cross cutting issues

7 Audio Visual Aids/multimedia

8 OER's

9 Teaching learning material development, selection and use

Sr. No.	Target Activity	Title of the seminar/ conference/ training With Date
1	1,2,4,9	Seminar on 'Smart farming technologies-Need of the hour' 14 th Jan 2017
2	1,2,4,9	Workshop Principles and Applications of Mass Spectrometry, 14 th January 2017
3	2,4,6,9	Workshop on Chemical handling and laboratory safety for FYBSc FY, SY & MSc students, BVOC .students
4	1,2,4,9	Seminar on 'Hi-Tech Agri-Horticulture solution for sustainable Farming' 10 th January 2016,
5	4,6,9	Workshop on waste recycling and Paper bag making for FY, SY & TYBSc 16 th December 2016
6	1,2,4,9	'Molecular Biology Techniques in diagnostics', 19 th to 30 th September 2016
7	1,7,9	Teachers for POGIL Training, 2 nd -6 th February 2016
8	6	First Aid and Cardiac Resuscitation, 7 th Dec 2016
9	1, 2, 4,9	Workshop for Molecular Biology techniques, 8 th & 10 th July 2015
10	1,6	Kitchen Gardening and Composting, 20 th October 2015
11	2,3	Curriculum Design and Development, 29 th Sept 2015.
12	2,3	'Searching and Managing Information', 28 th February 2015
13	6	'Teacher training on Stress Management and Capacity Building', 25 th February 2015
14	1,6	'Teacher training on Dealing with Differently-abled Learners', 28 th February 2015



15	1,4	AYUSH training (Preparation and standardization of traditional formulations)15 th - 24 th January, 2015.
16	1,5, 7,9,	Moodle Training, 27 th April 2015
17	1,9	Workshop on “Talking History”, 9 th February 2015
18	1,5, 9	Training- French Teacher training Evaluation and learning, February 2015
19	1,2,4,6,9	Conference- ‘Chemistry , sustainability & environment’, 20 th & 21 st Feb. 2015
20	1,2,4,6,9	Conference- Ramayan Mahotsav (Sanskrit), 31 st Jan – 1 st Feb. 2015
21	1,3,4,5,9	Quality Sustenance: Aspects and Initiatives, 10 th Jan 2015.
22	6	Art Furniture and Household Decoration: Trading Art across the globe4 th August 2015
23	1,2,4,6,9	Conference- Ramayan Mahotsav (Sanskrit)31 st Jan – 1 st Feb. 2015
24	1,2,4,6,9	Seminar on Freedom of Expression: Perspectives and contexts
25	1, 3, 5	‘Searching and Managing Information’, 28 th February 2015
26	1,2,4,6,9	Workshop on “Talking History”9 th February 2015
27	1,2,4,6,9	Seminar- Drama An Enduring Art, 12 th - 13 th December, 2014
28	1,2,4,9	Interdisciplinary National Conference on Public Finance and Public Policy, 3 rd -4 th Jan 2014
29	1,2,4,6,9	Seminar-Sustaining Values: Ideas into Actuality, 9 th & 10 th Dec. 2014
30	1,8	Workshop for teachers on Soft skill development and Leadership, 3 rd October 2014
31	1,9	French Teachers’ Training workshop, September 2014
32		Indology, 22 nd September 2014
33	1,2,4,6,9	Conference on the ‘Concept of Rasa through Arts and Literature’. students and public, 19 th & 20 th Jan. 2014
34	1,2,4,6,9	Workshop- Inter departmental workshop on ‘Tally ERP Systems’8 th August 2014,
35	6	Capacity Building workshop, 22 nd & 23 rd Sep 2014
36	1,4,9	Chemoprofiling of some therapeutically important plants using sophisticated instruments - HPTLC and HPLC, 4 th -5 th February 2014.
37	1	Importance & Voice culture for effective teaching, 29 th April 2014
38	1,2,4,9	Mini MTTTS Programs, 11 th to 16 th April 2014
39	1, 2, 4, 9	Unicode Training, 6 th Sep 2014
40	3,8	e-Content Development training6 th Feb to 6 th April 2013
41	1,4,9	“Fungi and Human Welfare”, 8 th - 9 th February 2013
42	1,2,4,6,9	Workshop on Microfluidics (as organizer)5 th Feb 2013
43	1,2,4,6,9	Workshop on PHP Spoken Tutorials in Collaboration with IIT Mumbai , 16 th January, 2013
44	1,4,6,9	National Conference on Emerging Market Economies2012
45	1	CAS workshop26 th June 2013
46	1,4,9	Research methodology workshop, 29 th & 30 th Sep 2014



47	1	Project based Learning
48	1	“Strategies for Creative Writing”
49	1,6,9	Emergence And Growth Of Indian Cities : A Historical Perspective 15 th September 2012
50	1,8	Effective Presentation Skills”, 8 th December 2012
51	1,2,4,9	Creative Writing in Marathi
52	1,2,4,9	Aantarbharatiya Sahitya Sanvad, Nov 2012
53	2,3	A workshop on Educational Design: syllabi, textbooks & exams. 23 rd February 2013
54	1,2,4,9	Workshop on HTML5, 19 th Jan 2013
55	1,2,4,9	Intercollegiate students literary meet 30 Nov., 2012

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

Category mentioned	PERCENTAGE OF FACULTY			
	2012-13	2013-14	2014-15	2015-16
Invited as Resource persons in Workshops / Seminars / Conferences organized by external professional agencies	22.72%	13.63%	27.27%	27.27%
Participation in external Workshops / Seminars / Conferences recognized by national/ international professional bodies	39.37%	39.58%	45.18%	33.33%
Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies	28.12%	37.5%	27.4%	17.03%

Strategies adopted by the institution in enhancing the teacher quality:

Apart from the above initiatives, the College also encourages the Faculty to avail of the FDP facility. The authorities grant leave to attend Conferences, Seminars, Workshops not only in India but also abroad. Special leave was granted to a teacher who was awarded The Prestigious Fulbright Scholarship in USA.

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



The management at Ruia College encourages teachers to get actively involved in research and apply for various research grants from funding agencies like UGC, DBT, FIST, DST, UOM, Asiatic Society of Mumbai and K. R. Cama Oriental Institute, Mumbai.

Study leave is granted to a teacher pursuing his/her PhD under the FDP scheme. Eight teachers have availed the Faculty Development Program of the UGC in the last five years.

Teachers who wish to participate in seminars, conferences, training programs are granted duty leaves for the same.

The College also provides the seed money for initial arrangement of conferences, seminars, research projects and training programs.

The College facilities are conducive to research culture due to availability of grants, collaborative work, enhanced infrastructure and extensive use of ICT.

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.

Ruia College has a rich legacy of excellent teachers. Research has also been an integral part of the Ruia culture. Teachers are able to excel because they are given complete freedom to broaden their work and study horizons. ICT Facilities and Resource material support from Library (like E-journals, AV facility) are readily made available. The institution provides them with the necessary infrastructure and resources, such as helping them to procure the latest references on the subject, both in Print and e-book form.

Ruia College takes pride in the fact that a number of faculty members are the recipients of prestigious awards and prizes. Three faculty members are recipients of International awards and 5 at the National level.

Prof. Suhas Pednekar :-

State Level 'Best Teacher Award' by the Govt. of Maharashtra (2012)

'Vocational Excellence Award' by Rotary International District 3140 (2012)

National Level 'Best Chemistry Teacher Award' (2013)

Ms. Himani Sameer Chaukar:-

Recipient of the Prestigious Asiatic Society's research fellowship for Social Science & Dr. Mani Kamerkar prize for Junior Research Scholar.

Dr. Ravi Phadke :-

Felicitated at "Integrating Basic and Translational Research in Modern Biology" conference, M S University of Baroda, as illustrious alumni and felicitated with the Principal's Appreciation award at the Annual Day function.

Dr. P.A. Sathe:-

Delegation Leader (Head Mentor) for International Olympiad in Chemistry during July 20-29, 2014, Place : Hanoi, Vietnam

Dr. Sasikumar Menon:-

Has been nominated as the member of the National Steering Committee for Olympiads by the DAE, Government of India.



Dr. M. D. Gokhale :-

Recipient of Thane Nagara Ratna Puraskar Award for valuable contribution in the field of education by Thane Nagar Vikas Manch.

Dr. Vasumati Badrinathan:-

Awarded the Prestigious Fulbright Scholarship under the aegis of which she was engaged in teaching, research and cultural activities for one semester in USA

Additionally, many staff members present their research papers at various conference and seminars. Their outcome of research is published as research papers in reputed research journals. A comprehensive list is included in criterion III.

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?

The College has implemented a structured feedback system to evaluate the performance of its faculty. The College conducts (formally and informally) the exercise of evaluation of the faculty members by students. The formal feedback of each teacher is collected online on the basis of NAAC guidelines. Students grade teachers under different aspects, such as

- i) Punctuality,
- ii) Subject knowledge,
- iii) Innovations in teaching (aids used),
- iv) Interactive sessions conducted,
- v) Additional information beyond syllabus, availability and accessibility, counseling etc.

The feedback system is managed online to ensure timely processing and evaluation of data. The collected data is analyzed and processed by a qualified statistician. Each teacher is given a report (in confidence), containing the average grade point (AGP) obtained by him/her under each of the aspects. This evaluation report helps to bring out the strengths and weaknesses of a teacher with a fair degree of accuracy. Each teacher is then asked to write a response report with an action plan in the light of this feedback. If the reports of some teachers point out some major lacunae, the Principal counsels these teachers.

The Head of the departments as well as Principal collect regular oral feedback informally by interacting with the students which is then communicated to the individual teachers by the Principal or the head.

In addition, the exercise of internal academic audit and external audit carried out by the University of Mumbai also provides identifiable pointers to improve the overall performance of the College.

The College was one of the first Colleges affiliated to University of Mumbai to take initiatives for evaluation under the NAAC accreditation guidelines in 2002 which reflects the progressive outlook of the College Management for achieving excellence in quality of education. The College is now gearing up for the fourth round of NAAC Peer Committee review.

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 scheme of examination and the tentative dates of the commencement of examinations are provided in the academic calendar of the college and are made available on the college website at the beginning of the academic year. Notices regarding the internal and external examinations are also regularly displayed on the College Notice Boards (common as well as departmental.) The examination dates are also circulated on the google groups as well as WhatsApp groups of the students.

The Faculty are made aware of the evaluation methods by the Heads of the Department as per the directive of the Board of Studies of the respective subjects.

The credit system has been introduced at the graduate and post graduate level. The pattern of examination for all the courses affiliated to the University of Mumbai is laid down by the University. As per the new Credit Based Semester and Grading System (CBSGS), examinations are conducted semester wise. The examinations of the first year and second year degree students are conducted by the college on behalf of the University.

The Semester V and Semester VI examination of all the graduation courses (Arts and Science) and all fourth semester (I, II, III and IV, Science) of the post graduation courses are conducted by the University.

Revaluation rules are also displayed on the notice board and the students are guided as per their requirement.

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 reform in the evaluation system involves the elimination of excessive element of chance and subjectivity; the de-emphasis of memorization; continuous and comprehensive evaluation that incorporates both scholastic and non-scholastic aspects of education, ensuring continuous evaluation spread over the total span of instructional time.

As per the CBSGS followed by the university, 25 %marks are allotted for internal assessment which could be in the form of multiple choice questions and/or project reports at the graduation level.

The post-graduation students are assessed on the basis of presentations in a classroom seminar. Marks are allotted not only for the term end examination, but also for internals, / tutorials / projects and class participation as the case may be.

At the post graduate level in Science, an entire practical paper is based on industry/internship/ projects. The students are evaluated on the basis of the dissertation submitted.

Revaluation procedures are followed as per the guidelines issued by the University.

To make the evaluation systems more objective and make continuous evaluations possible, the College has implemented new evaluation reforms. Some of the reforms implemented by departments. are listed below:

Online class tests and assessments are initiated by the Departments of Computer Science and Microbiology.

Wider choice of evaluation tools are made available for teachers like use of e-Resources, Audio-Visual aids and simulation exercises.

Group discussions and presentations (based on research papers) are used to test the student's understanding of application of key concepts.



Use of case studies to test understanding of concepts and their applications (diagnostics in Psychology).

Open book tests for evaluating critical thinking, like skills of using the pharmacopeia are conducted for the students of BVoc Pharma Analytical Sciences.

Students are provided immediate feedback on evaluation for enabling timely corrective action for improvement.

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 entire year's schedule including dates for assignment submission, online /class tests and the semester- end examination, filling examination form are prepared in the beginning of the year in consultation with the Vice Principals to facilitate planning of teaching and evaluation. This streamlines the process of online tests, submission of projects for additional examination for internal assessment. Notices for submission of internal assignments and the schedule showing tentative dates are also displayed on the college notice boards. Examinations are held as per the schedule. The results are declared within 45 days from the conduct of examination as per University norms. The day of the results is displayed on the college web site.

The university has revised rules for evaluation of performance of special populations like students having learning disability. In this respect, all requisite guidelines are followed with regard to conduct and assessment of examinations for these students. All question papers are checked by the HODs to see that they comply with the syllabus recommendations of the BOS.

The assessment of the answer books is centralized and carried out as per the University guidelines. Timings and Schedule of CAP is conveyed to the faculty via mail as well as displayed on the notice board. The Centralized Assessment Program is open for faculty on public holidays and Sundays also, in order to complete the assessment and moderation on time.

All notifications regarding submission of marks for of internal assignments is communicated in advance on the teachers google group. Preparation of results is a responsibility of the Examination Committee, in order to ensure complete confidentiality.

Systematic records are maintained for complete transparency in the evaluation system and to enable resolution of any redress. Additional examinations are conducted after 20 days of result declaration and before 40 days of the results as per the university rules. Answer books are moderated by external peers if the number of students exceeds 100. Software consultants have been appointed, who develop the software for compilation of marks, calculation of grades and preparation of marksheets as per the current rules. Revaluation of marks is conducted according to the guidelines of the University.

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



The introduction of the credit based semester system by the University has made continuous evaluation (formative and summative) of students possible from the academic year 2013-14. Both evaluation methods are used to provide an ongoing feedback regarding student progress. Formative and Summative evaluation methods are in accordance with the guidelines of the University.

Formative evaluation: This includes projects, assignments, online tests and internal class tests based on multiple choice questions, presentations on core topics, research paper presentations and is held in every semester. Suggestions and valuable inputs from industry experts are considered while giving projects in the relevant area to the students. Nonetheless, continuous process of presentations in the research competition prepares students as a confident candidate for evaluation. Discussion on student performance provides insights on planning future teaching methodologies.

Summative evaluation: This is conducted in the form of theory papers and practical examination which is held at the end of the semester. The results provide a measurable way of determining the success of the students. The rules of grading of marks are as per the guidelines of the University.

Collaborative Evaluation with National Skill Development Council:

The College collaborates with various Sector Skill Councils under NSDC to conduct evaluation of students enrolled under the various BVoc programs of KAUSHAL Kendra. These include both formative and summative evaluation methods.

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.

During internal examinations, 20% marks are allotted for active class participation, attendance, Power point presentation, paper presentations.

Rigor: Prior to Internal class test, the students are given practice and interactive discussion sessions are conducted for difficult and challenging questions that can test their in-depth knowledge and understanding of the subject. Questions of varying difficulty levels are also included to cater to all types of students.

In the present semester system, marks are allotted for class participation, wherein the students are assessed for their regularity, behavioral aspects and communication skills in the laboratory as well as lecture classes.

Transparency: From 2017 onwards arrangements have been made to provide photocopy of answer sheets of internal examinations to students who want to get their papers re-evaluated.

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

Graduate Attributes are the qualities and skills that Ruia College values and endeavors to support the development of our students. These qualities and skills have been specifically chosen to give our graduates the strategic edge in the workplace as well as enhancing their



capacities to be leaders in the community to develop global competencies. These skills will leverage on their ethical values, sustained focus and the extend of understanding issues of societal importance.

The graduate attributes specified by the College are as follows:

I) Concept mapping:

- i) Ability to develop conceptual frameworks.
- ii) In-depth knowledge in their chosen discipline.
- iii) Applying knowledge building disciplinary and interdisciplinary concepts through a research culture and scholarly approach incorporating global and regional perspectives.

II) Imaginative, Diagnostic and Innovative:

- i) Development of higher order cognitive skills, skills to research a topic and understanding it from a range of perspectives.
- ii) Ability to generate original ideas and developing the capacity to think independently.
- iii) Capacity to apply and adopt knowledge and skills in various real world situations.

III) Commitment to continuous learning:

- i) Commitment to an academically rigorous approach to learning.
- ii) Capacity to sustain intellectual curiosity over time leading to life-long learning.

IV) Awareness of ethical, social and cultural issues:

- i) Recognition of social, cultural issues and awareness of social and civic responsibilities.
- ii) Informed about ethical implications regarding social and cultural issues.

V) Proficiency to use modern technologies:

- i) Knowledge of the range of available technologies.
- ii) Ability to use the relevant technology appropriately.
- iii) Competency to adapt and imbibe skills for using newer technological tools.

VI) Skills of Leadership, Communication and Team work:

- i) Ability to take up leadership role in social and cultural settings.
- ii) Ability to communicate effectively within a professional context.
- iii) Capacity to contribute productively leading to group-based outcomes.

Acquisition of knowledge, development of higher order skills, research abilities and innovativeness are developed through various teaching and learning activities such as- Brain storming, Concept mapping, Field based learning, Case studies, Simulations, Debates, Games, Quiz, Role-plays, Discussion forums, Peer assisted learning, Seminars, Video and Photo journals and student internship

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

A Grievance Redressal Cell at the University and the College addresses the grievances related to evaluation. Students with grievances as regards to the marks obtained can approach the Cell and apply for verification and revaluation as per University rules. Revaluation process for both internal and external components in each paper are clearly spelt out by the University, and all colleges affiliated to the University of Mumbai follow a common pattern of revaluation. Tests, assignments and project report submission are carried out according to



University guidelines. The College follows a CAP (Centralised Assessment Program) for evaluation. The CAP-in-charge draws the time schedule for the CAP and displays the same on the notice board. Assessment is followed by moderation, as per university guidelines. In case of any grievance regarding the evaluation, the student is required to fill a form and submit it in the college/university office. For the reevaluation procedure, a nominal fee is charged as decided 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?

Every course of the college has clearly stated their learning outcomes that define the abilities of students expected at the time of graduation. Learner centric initiatives undertaken by the institution ensures effective teaching learning.

The College and its staff work hard to achieve learning outcomes which have been outlined as the abilities to:

- understand complex, real world problems.
- investigate and interpret research literature
- generate ideas
- understand social, ethical issues and discharge social responsibilities
- imbibe skills and use modern technological tools
- function on multi-disciplinary teams
- understand professional and ethical responsibilities
- engage in lifelong learning
- understand and articulate content through group processes

The learning outcomes are in line with the graduate attributes.

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

The progress and performance of the students is monitored through regular mentoring activity. The students are counselled for improvement of performance and overcoming barriers of learning. Their progress is then monitored across semesters and they are guided to attend remedial lectures as per need. Each department monitors students' progress after tests/projects at regular intervals. The mechanism of informal communication and feedback available from the assignments/class tests is communicated to individual students in the classroom.

Departments conduct parent-teacher meetings to share the analysis with parents especially in cases where the student is falling short of the expected standards or potential. Re-orientation is given to the students at the time of semester report card distribution. Subject specific counseling to the students regarding their performance, the grading and examination systems are provided by teachers. Remedial measures are taken to address shortfall and improve the performance.

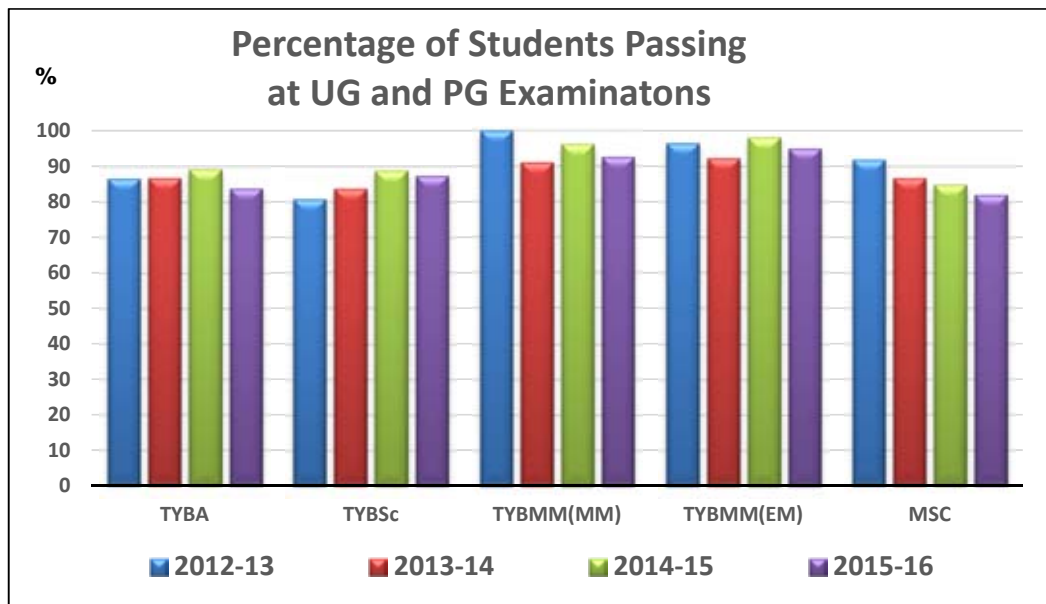
Shortfall in student performances are noted and suggestions from students and parents are considered by each Department. In the ensuing academic year, the teaching plans of the



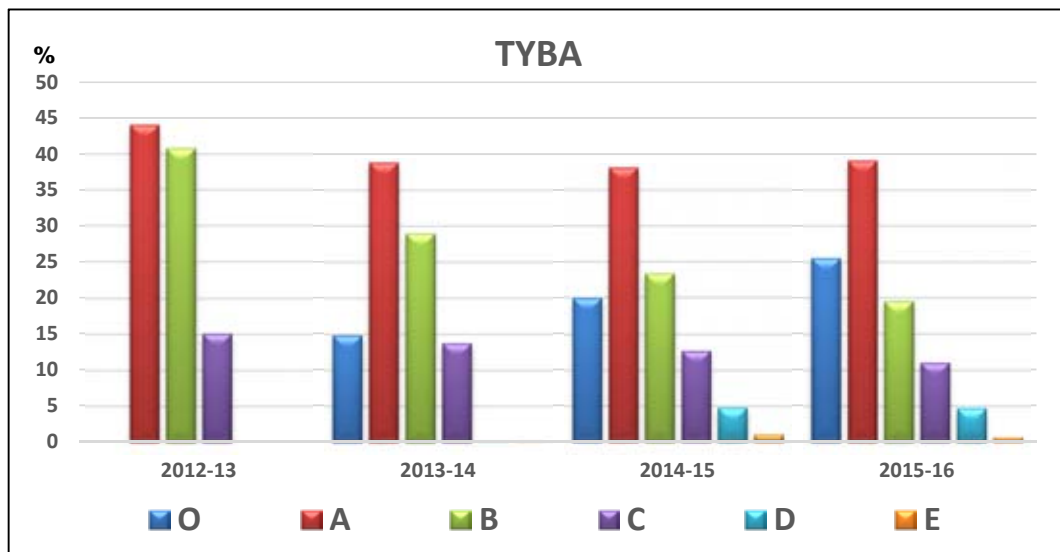
teachers are modified to accommodate the changes and suggestion so as to meet student requirements.

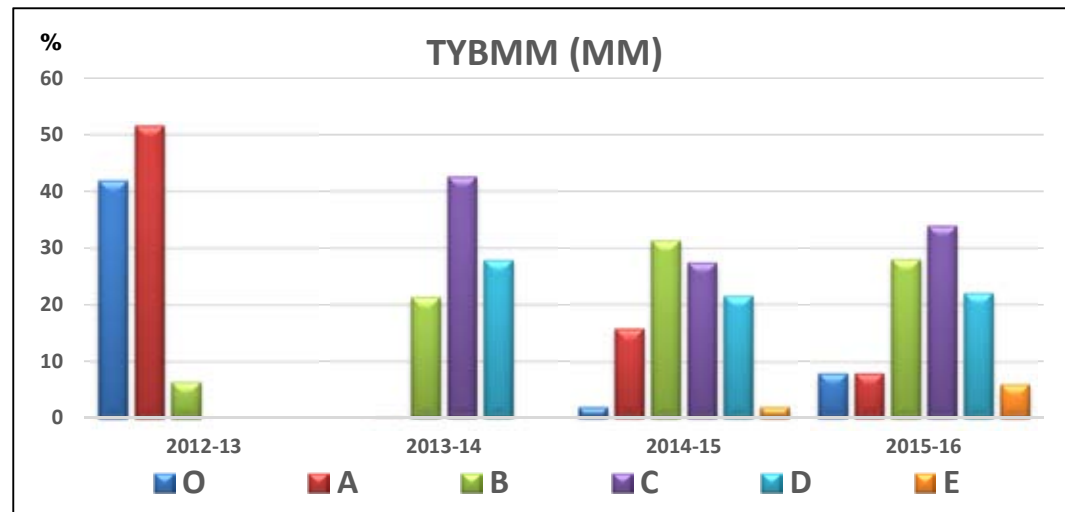
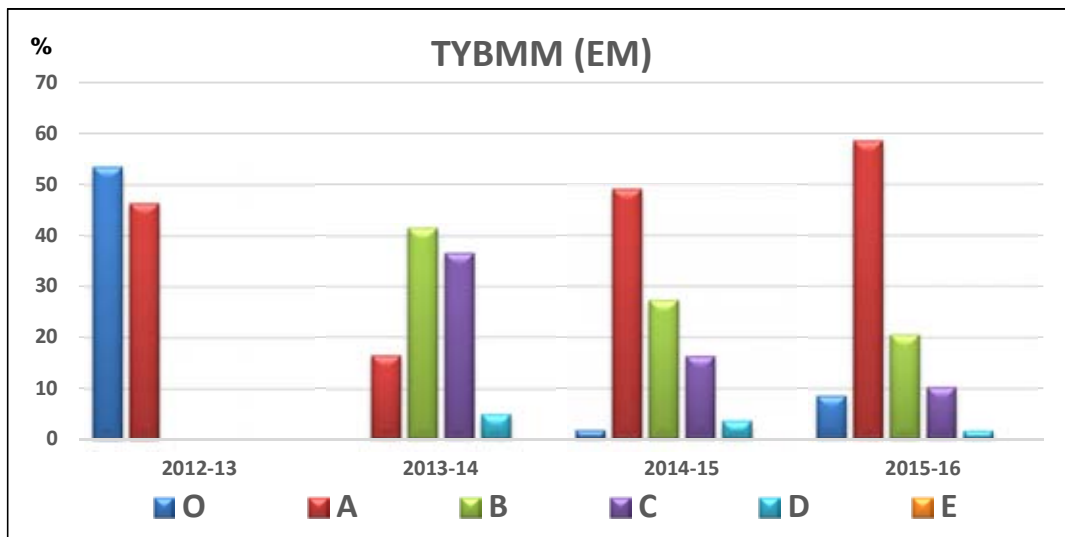
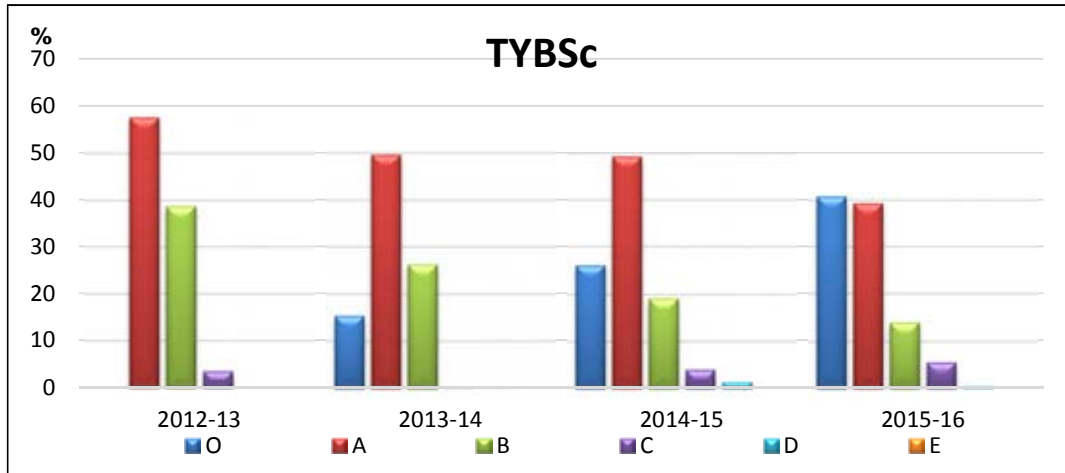
In the past 5 years, the names of 77 students have appeared in the General Merit list of the University of Mumbai. Every year 15-27 students from different subjects fetch laurels for the College as their names appear in the General Merit List of the University of Mumbai.

The graph below depicts the overall percentage of the students passing from the undergraduate as well as postgraduate sections. The average percentage of the students who appear for the Bachelor's degree examination is 90.04%



The results of the students as depicted in the graphs below clearly indicate the increase in the percentage of students securing 'O' grade, across courses.



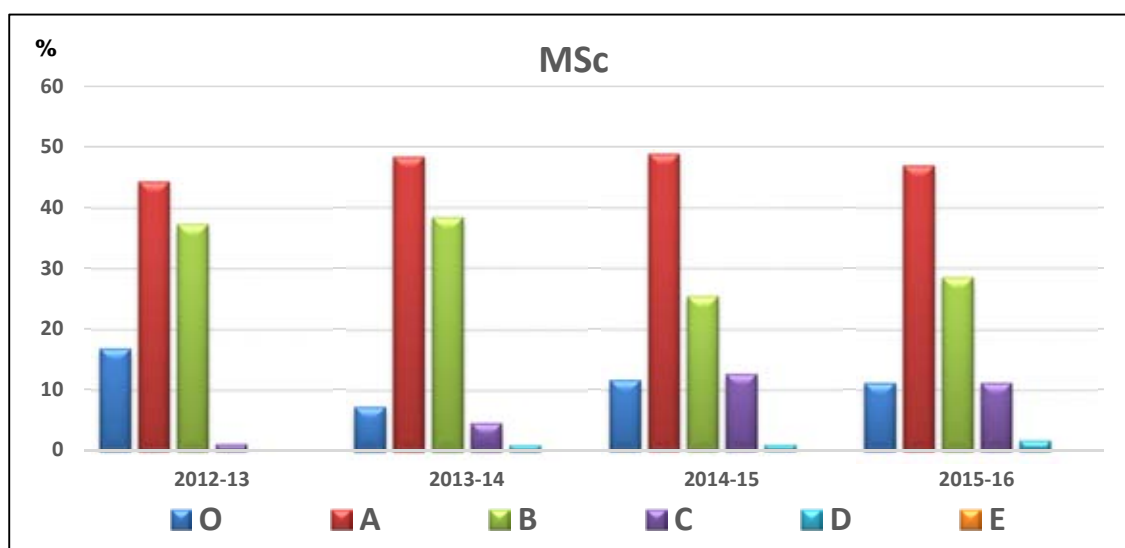




The following table provides an overall comparison of performance of students across various courses as mean percentage of students obtaining each grade in the last five years.

Courses	Mean Percentage of Students securing grades in last five years					
	E	D	C	B	A	O
TYBA	0.41	2.39	13.16	28.16	40.04	15.08
TYBSc	0.0	0.41	03.31	24.59	48.98	20.55
TYBMM(E)	0.0	2.58	15.84	22.40	42.69	16.00
TYBMM(M)	1.99	17.85	26.01	21.78	18.84	12.97
MSc	0.0	0.96	07.48	32.48	47.21	11.83

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



Teaching learning strategies:

- The teachers make use of ICT and Audio-Visual methods of teaching to facilitate the use of educational technology to supplement the conventional method of teaching.
- The Departments of, Microbiology, Computer Science are involved in designing various modules in Moodle in addition to the existing syllabus.
- Teachers spell out the lesson plan weekly and new and effective teaching methodologies like Pre-lab and Post Lab sessions and Flip the classroom are effectively implemented, to encourage interactive as well as independent learning.
- To assess the effectiveness of the subject and the teaching methodologies employed, a feedback is obtained on the curriculum and teaching.
- Internal and External Academic Audits are conducted with representation from various sectors like industry experts and subject experts who give feedback and suggestions for the smooth functioning of the departments.
- Industry feedback is also obtained in various newly added courses like the vocational courses (BVoc) and Bioanalytical Sciences wherein there is Industry representation either as an Industry Partner or in the BoS.



Photo journal and video journal that are introduced, aid the student in documentation and reinforcement of the principles, concepts and methodologies involved during practical.

Internships are an integral part of every program and is reinforced so as to ensure that the students are well aware and exposed to the recent developments in the respective areas.

Various activities viz. Research Paper Presentations, Group Discussions, Seminars, Viva, Film reviews, quizzes, case studies on the topics associated with the existing syllabus as well as the extension of the same, are conducted and the progress of the students is assessed. These activities not only give an idea on the level of understanding of the student but also indicate problem areas that need to be improved and also enhance the employability of students.

For the academically weaker students, special support in the form of remedial coaching helps in improving their performance. The departments conduct different value added /Add on courses that help the students.

For better understanding of the subject, efforts to correlate the subject with current issues is given more emphasis. This not only leads to academic progress, but also, the students become aware of the latest advances and developments in their subject.

To promote deeper understanding of the subject lectures by experts are arranged to guide the students.

Assessment strategies:

Faculty orients the students about the learning outcomes of the program at the beginning of the course.

Students are given continuous formal and informal guidance in the subject areas throughout the year.

Formative assessment in the form of assignments, projects while summative assessment in form of Internal Class Tests, Practical Examinations and Semester end examinations are conducted to gauge the level of understanding of the students in the core subject areas.

University has reformed its evaluation guidelines introducing mechanisms for continuous assessment. This is followed diligently by the College and has resulted in the student being involved in the curriculum throughout the year.

In order to ensure the achievement of learning outcomes by all students, additional mentoring programs and one to one interactions are arranged for the needy students.

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

Social and Economic Relevance:

Student Placement:

Achieving successful placements is the best way to measure the success of any program in meeting its objectives. The College, therefore gives lot of importance to placements of its students. Every two years, AVENUES - a biennial career festival is organized by the Career Guidance Cell (CGC) of Ramnarain Ruia College. The CGC strives to incorporate something



exclusive during this festival so as to give maximum benefit to the students. Seminars on topics like Careers in Life Sciences, Fine Arts, Stock Exchange, Foreign Languages, and Law are arranged to provide the students with an overview of the career opportunities in different fields of Science and Humanities. Areas like Entrepreneurship Development and Industrial Psychology and Media are specifically addressed with specialized seminars. Mock tests for various examinations like GMAT, CAT, GRE and AMCAT (general aptitude test) are also conducted to acquaint the students to these examinations. Since many students from the College apply for civil services, a mock UPSC examination was also conducted by CGC. In addition to CGC, the Departments undertaking vocational courses also coordinate and arrange for placements and internships in their respective subject specific areas. (Refer criteria V for details)

Entrepreneurship:

Though entrepreneurship is not the main object of University curriculum, the College has been emphasizing its importance at all levels of its teaching – learning process. The College conducts several add-on courses and enrichment courses to augment the entrepreneurial attitude among the students.

The College has set up an Innovation, Incubation and Entrepreneurship Cell to nurture creativity and support innovations that would potentially lead to successful start-ups. A team of faculty with experts from industry and financial institutions would be managing and monitoring the activities of the Cell.

Vocational courses conducted under KAUSHAL program have direct involvement of the industry partners to ensure employability of students. The curriculum in these courses have entrepreneurship as an integral part of the skill training.

The College supports several activities and programs to enhance the culture of self-employment in the students. The students are encouraged to take up responsibilities of organizing, conducting and even obtaining financial supports for various programs. This enables students to learn and understand the practical issues of the outside world, understand event management and also to troubleshoot problems along the way.

Several programs are arranged by various departments where the students exhibit their creative talent and try to sell their creations. The students of Biochemistry exhibited unique recipes with nutritive ingredients. The students of Green House Management developed novel terraria, Bonsai and indoor artifacts with plants that were sold at district level exhibitions.

(Refer criteria V for details)

Innovation and research aptitude:

The long-standing research culture at Ruia College has had its influence in form of active research programs at the undergraduate level which is a hallmark of Ruia college. Six departments have been conferred the STAR Status by DBT, Govt. of India whereas 6 more departments have been awarded Star College Scheme by DBT,



Govt. of India. Under these schemes, several programs and hand-on training sessions are conducted for UG students of the Science faculty, so as to enrich their knowledge and get a fair exposure to a number of interesting topics beyond the boundaries of the syllabus framework. Small undergraduate research projects are encouraged with funds available in these programs. Collaborative projects with Industry and Institutions by UG/PG Science/Arts students is also undertaken to acquaint the students with the fine nuances of research culture.

(Refer criteria III for details)

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

Student performance is a fine indicator of effectiveness of the teaching methodology employed. The College has a well-structured mentoring program for improvement of student performance. Mentors are assigned to every class to monitor academic progress of the students. Student mentoring data is collected, evaluated and academically weak students are identified. Additional coaching is provided by all the departments for such students. Students having other personal problems are identified and referred to expert counselors for guidance and treatment as needed.

In order to improve the teaching-learning quality, feedback is taken from the students on each teacher and their performance is analyzed. Based on this feedback a Teacher's Evaluation Report is prepared for every teacher. At the departmental level, workshops/training programs are conducted for the benefit of the students on various topics of life skills. Student involvement in these activities enables them to overcome barriers of learning to a great extent.

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

Monitoring the achievement of learning outcome:

Ruia College strives to empower the students with the necessary qualities and life skills in order to successfully pursue a field of professional practice. A well-defined mentoring system has been in place with active involvement of faculty members to examine the growth of the students. A member of the teaching staff is appointed as a student mentor to each class. The student mentors monitor the progress of the students throughout the year. The student responses recorded in these mentoring sessions provide valuable inputs for evaluating the outcome of teaching-learning practices.

Projects are assigned to the students as per university norms to encourage project based learning. The participation of students in the projects ensures positive learning outcomes. Remedial workshops are also conducted by the departments for academically weak students for achieving inclusiveness in learning outcomes. The individual departments conduct several add-on or value added courses to enhance the employability of students. IQAC collects regular feedback from various stakeholders which also contribute to the monitoring of learning outcomes.

**Ensuring the achievement of learning outcome:**

The syllabi are covered by the teachers in time as per the University norms and they adopt innovative techniques in teaching-learning process. The subjects are handled in innovative ways using ICT and POGIL to ensure better learning outcomes. Teachers themselves participate in research activities and encourage students to do the same. Different extracurricular and co-curricular activities, are planned to expose the students to newer concepts, thus going beyond the syllabus. Lectures by eminent personalities are arranged for the benefit of the students to appraise them of recent developments and guide them to become critical thinkers.

The faculty also conducts continuous assessment of the students which provides regular assessment of learning outcomes. Any shortfalls are met with additional efforts and remedial supports to the needy students. Based on the student's interests and latest industry needs, the Placement Cell arranges campus interviews for students. In addition to the Placement Cell, departments also conduct industry-specific campus recruitment programs.

2.6.7 Does the institution and individual teachers use assessment/evaluation 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.

In all colleges affiliated to the University of Mumbai, the University sets the standards to be attained by the students, clearly defining the level of knowledge and skills to be gained at different stages of education. The Institution adheres to these guidelines set by the University. Students need to separately qualify the internal assessments, semester end theory and practical examinations. Results of these summative assessments are used as effective indicators by the faculty. Learning objectives which are in line with the graduate attributes are assessed by the faculty regularly. Student performance is monitored at the end of each semester and is compared with earlier records. This enables the faculty to plan for additional guidance and remedial supports, if necessary. Expert Guidance lectures can also be arranged in order to address the difficulties encountered in various topics in new perspectives. The students not performing well in the formative and summative evaluations are separately counseled and guided for improvement in their performance. To cite an example, the students from vernacular medium are provided special coaching in English for improving their communication and writing skills. Practical sessions offering more hands-on time to improve technical skills are arranged for less endowed learners.

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

To augment the teaching learning practices and to provide a global perspective to the academic programs, the College has signed MoUs with two Universities of Commonwealth of Pennsylvania. This has opened avenues for faculty training, exposure of teachers to global practises and to experience advanced teaching techniques practiced at these Universities. Programs have been finalised to host faculty members from these Universities for conducting specific training programs for faculty and students of the College.



The College makes attempts to involve the stake holders like parents and alumni in the teaching learning process being practiced at the institution. In this context some notable efforts are ;

- The College Principal consciously makes an attempt to speak to the new incumbents at the beginning of each academic year to acquaint them with the institutional aspirations and goals. This session is attended by the parents too.
- Parent and Teacher Meetings are a regular feature of the College, which enables the teachers to strike a meaningful progressive dialogue with the parents.
- “Jewel of Ruia” (awarded to alumni with exemplary achievements) and “Rising Star of Ruia” (awarded to young achievers among alumni with promising prospects of excellence) have been instituted by the Ruia College Alumni Association. These awards are conferred annually at a glittering function arranged in the College premises. These awards go a long way in motivating and encouraging current students to excellence.
- To make the evaluation process more transparent and to increase its reliability, the Exam Cell of the College is computerised, with well-trained support personnel, Mark sheets are on pre-printed stationary with water mark and with the photograph of the student to enhance authenticity.



CRITERION III

RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research

Ramnarain Ruia College has a strong legacy of research culture which the institution has integrated in teaching. The College has always been promoting active research based enquiry and problem solving practices within its teaching programs. The institution has produced over 450 doctorates and they have contributed significantly in building a strong industry-academia linkage. Well-equipped laboratories, experienced research guides and special research programs for undergraduate students have resulted in the College being recognised as a centre for higher learning and research by several funding agencies of the Government like UGC, DST, DBT, NMPB and AYUSH. Continued performance of the college in research, enabled the institution to receive special grants under CPE, CE and STAR College programs from the Government of India. The expertise of the faculty in applied research has helped the College to continue its industry-academia linkage and obtain several industry sponsored projects. The industrial services in R&D offered by the College, has enable it to be recognised as a Scientific and Industrial Research Organisation by the Department of Scientific and Industrial Research, Government of India. Involvement of students in research projects enable the students through, enquiry based learning to learn skills for employability and entrepreneurship. The research facilities at the College are also extended to the research students and faculty from various other institutions and Universities.

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

- The College has as many as 11 departments recognized by University of Mumbai for research namely, Bioanalytical Sciences, Biotechnology, Botany, Chemistry, Life-science, Microbiology, Physics and Zoology in Science stream and History, Sanskrit, English in Arts stream.
- The College is also recognized by the University of Mumbai for research in Applied Biology.
- The Department of Scientific and Industrial Research (DSIR), Govt. of India has recognized the College as a Scientific and Industrial Research Organization (SIRO). Due to this recognition, the College is able to import scientific equipment with concession in custom duty.
- The College has been awarded the status of a recognized laboratory for testing and research of Ayurvedic, Siddha and Unani medicine by the Department of Ayurved, Yoga, Unani, Siddha and Homeopathy (AYUSH) of the Ministry of Health, Government of India.
- The College has an Animal Testing Facility which is approved by the Committee for



the Purpose of Control and Supervision of Experiments on Animals (CPCSEA), Government of India (Registration number: 315/PO/RE/S/2000/CPCSEA).

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

The College has established a Research Advisory Committee in order to provide guidance and to encourage active involvement of the teachers and students in research. The Research Committee meets twice a year to discuss and review the status of various research projects and to monitor the progress of research projects being carried out by the students.

Composition of the committee

The committee comprises the Principal, all the research guides, experts from Industry (Dr. Milind Joshi, J.B. Chemicals & Dr. Srinivas Purandare, Cipla Ltd) and two Academicians from other institutes (Dr. S. D. Samant, ICT and Dr. Savita Kulkarni, BARC).

The Committee has the role of:

- Providing guidance on contemporary research approaches
- Providing valuable advice to overcome hurdles in research methodologies.
- Suggesting potential funding agencies, industries for collaborations.
- Evaluating and approving various research programs

Recommendations made by the committee and their impact

The Committee had made the following recommendations;

- Involve more departments in Research.
- Make provisions to support research students especially with travel grants.
- Increase collaborations with industry so that financial support for maintenance and upkeep of instruments is made available.
- Organise workshops on technical/ scientific/ creative writing.
- Organise lectures by eminent scientists/ subject experts of national / international repute.

In response to the recommendations, following actions have been taken by the College;

- The number of recognised research guides in the faculty of arts has been increased. Efforts are being made to increase it further. Departments conducting self-financed courses like Bioanalytical Sciences and Biotechnology are also being involved in carrying out research projects.
- Two travel fellowships namely; Srimati Balasaraswathy Krishnan Award (USD 500), one for Biological Science and one for Chemistry and Netravali Research Paper Competition (Rs. 50,000/-) have been instituted for supporting travel of research scholars for presenting their research work in seminars and conferences.
- Training has been organised for students in technical/ scientific/ creative writing by IQAC



for example, Two day workshop on Research Methodology in September, 2014 and Art of Writing in August, 2016 that were funded by CE.

- Various departments organised talks and brainstorming sessions involving eminent Scientists and experts (a representative list is included in 3.1.8). In addition, the College has instituted Netravali grant to support the expenses of organising lectures by prominent scientists of national and international repute.

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

The College Management takes special efforts to ensure smooth progress of research activities by the faculty. Some of the measures that have significantly contributed to the growth of research activities at the College are;

- **Freedom to the Principal Investigator:**

Adequate freedom is provided to the Principal Investigator by the institution for meeting the objectives of the research project. This helps in smooth progress and implementation of research schemes/projects.

- **Timely availability or release of resources:**

The Institution makes all necessary arrangements for availability of resources in time for smooth progress and implementation of research schemes/projects. The institution makes arrangements for bridging funds especially to tide over delays in obtaining financial grants from the funding agencies.

- **Adequate infrastructure and human resources:**

The institution ensures adequate support services for the research project. Administrative support and support staff are also made available by the College. The salary of these administrative staff is borne out of the Institutional funds, if such provisions are not available from the project grants. Specialised facilities and instrumentation provided for research, by the College, includes;

- Animal House facility for small animals, approved by CPCSEA, Government of India.
- Animal Tissue culture facility at the Department of Biotechnology.
- A green House with infrastructure for aquaponics and hydroponics.
- Separate instrumentation laboratory in various science departments to cater to specific research needs like Microfluidics Lab at Microbiology Department, Plant Tissue Culture facility at the Department of Green House Management and Animal Tissue Culture facility at Biotechnology Department.
- Library is fully computerised and equipped with a support centre for e Resources.

- **Time-off, reduced teaching load, special leave etc. to teachers:**

Eight permanent teachers who were eligible for FDP under UGC guidelines, have been



relieved of their academic duties to pursue their research interests. Teachers are also encouraged to take up faculty exchange programs so that their perspectives could be widened for e.g. Dr. Vasumati from the Department of French was granted leave for Fulbright fellowship in US. The faculty are granted necessary leaves and duty concessions for attending conferences, seminars, workshops (both in India & abroad).

- **Support in terms of technology and information needs:**

Wi-Fi connectivity, adequate computers in the Departments, well equipped library with subscriptions to scientific journals is made available to the faculty. The College takes care of the maintenance and calibration of instruments and equipment. The College provides adequate technical support for research with state-of-art labs like P.S. Ramnathan Advanced Instrumentation Center, IATRIS: a separate center with sophisticated instruments for Bioanalysis, the Microfluids Lab., a CPCSEA approved Animal Testing Centre, Data analysis Lab with Statistical Software.

- **Facilitate timely auditing and submission of utilization certificate to the funding authorities**

Timely auditing of the account and timely submission of the utilisation certificate for all the grants received is taken care by the administrative staff. The Institution provides administrative support especially for the management of finances related to research programs and industry funded projects.

- **Any other: Twinning research programs with other institutions and Universities**

The College encourages collaborative research with other institutions and universities to provide active platforms for the faculty members to interact and gain more experience.

- The College has ongoing research collaboration with the North Eastern Hill University (NEHU), Meghalaya wherein faculty members and research scholars from NEHU had training at Ruia College and the faculty of Ruia College with research scholars visited NEHU to gain more insight about the project.
- The College has developed research collaborations with well-known research institutions like Haffkine Institute, Parel, Mumbai, BARC Dental Hospital, Mumbai and Department of MRI, Nanavati Hospital, Mumbai. Research scholars from the College are involved in collaborative research projects with these Institutes.
- Department of History had a collaborative program with Rakshashakti University, Ahmedabad.
- The College has also initiated collaboration with the Commonwealth of Pennsylvania State which also has potentials for research collaborations.

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

- In order to develop scientific temper and research culture and aptitude among students, the College promotes participation of both the postgraduate (PG) and the undergraduate (UG) students in research activities through project based learning. They are also



encouraged to participate in National /International seminars/workshops/conferences and training programs and present their research work as and when possible. As of date 14 Research students are recipients of the JRF (Junior Research Fellowship) of UGC, DBT- Twinning, DAE, BARC, BRNS and NMPB for their research work. Faculty members of different departments are encouraged to apply for research grants from various funding agencies.

- The College has appointed an Adjunct Professor, Dr. Ramesh Chougule (retired Professor from TIFR) in the Department of Chemistry to enhance and supplement the research expertise in the areas of Nanotechnology and Biotechnology.
- The College implements project based learning to inculcate scientific temper among the students for e.g. Department of Microbiology conducts projects in microbial biodiversity to teach microbial identification, Department of Botany conducts projects in secondary metabolites of plants to teach Phytochemistry. Additionally, the grants received under STAR programs of DBT are utilized for supporting research projects of undergraduate students while the grants received under the CE program is utilized for supporting research at undergraduate and postgraduate level.

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.)

Several faculty members from both Science and Arts faculties carry out research projects funded by industries, Govt of India and UGC. The number of faculty members involved in research from various Departments is given below;

Department	Number of Faculty members involved in research	Department	Number of Faculty members involved in research
Bioanalytical Sciences	02	Information Technology	01
Biochemistry	01	Life Science	05
Biotechnology	02	Mathematics	02
Botany	04	Microbiology	05
BVoc	06	Physics	04
Chemistry	08	Political Science	01
Economics	01	Sanskrit	01
English	01	Statistics	01
Hindi	02	Zoology	04
History	03	-----	-----



In the last five years, 13 major research projects from different funding agencies have been completed and currently there are 04 ongoing major research projects. The College received 44 minor research projects, in the last five years, of which 40 have been completed and 04 are ongoing. Major research projects in the faculty of Science mainly are in the areas of validation of chromatographic methods, effects of radiation and green chemistry while the minor research projects are mainly in the areas of design and fabrication of apparatus, application of analytical methods for herbal standardization and nanotechnology etc. The research projects in Humanities are mainly in the areas of Genealogy, History, Vedic literature, tribes of Arunachal Pradesh etc.

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

Regular workshops, training programs and popular lectures by eminent scientists and speakers are organised by various departments to sensitize the students and faculty to inculcate research culture in them. The College also hosts several programs related to research which also provide platforms for faculty and students to interact with experts and scientists from other institutions. Few to name are:

- **‘Entrepreneurship for Young students and Researchers’:** A workshop was organized in collaboration with IITB’s Entrepreneurship Cell and Ruia College Science Association in which the keynote speaker Dr. Anil Kakodkar emphasized on the need of productive research which can be transformed into technology for common man. Other speakers, Mr. Rohit Bhagwat (Entrepreneurship), Mr. Sanjay Jain (Interface between product price and market), Mr. Indraneel Dev (Start-ups and IPR) and Prof. Pankaj Joshi (Can we see a black hole?) delivered informative and interesting lectures.
- **‘Art of Writing’:** A workshop was organized under CE grant for staff and students. The workshop covered the topics like profile writing, research paper writing, presenting data analysis, thesis and research paper writing. The training was carried out by Dr. Savitri Mani from Department of Atomic Energy, Government of India.
- **Research methodology:** A two-day workshop on research methodology was conducted under the CE grant where eminent scientists from ICT, IITB, NIRRH gave valuable guidance to students
- **Prior Art Search:** A workshop on “Prior Art Search” was conducted, under the CE grant, for students to sensitize them to IPR related issues.
- **Brain Storming Session:** This session was conducted for students where eminent scientists from different organizations interacted with students to discuss about modern research trends and approaches to solve various interesting problems.
- **‘Live streaming of lectures by nine Nobel Laureates at Vibrant Gujarat Summit, 2017’**



Live webcast of lectures by nine Nobel laureates was organized by DBT Star College at 'Nobel Prize Series India', Gandhinagar, Gujarat on the themes 'Basic and Applied Research – fostering an innovative environment' and 'Local Research – Global Impact – Addressing Global Challenges'. Students in large numbers were shown the Web broadcast at various places in Ruia College.

- **'Molecular Biology techniques in Diagnostics'**: A 12 day National level training workshop was organized by the Department of Botany in "Molecular Biology Techniques in Diagnostics". The national workshop was sponsored by DBT for training teachers and researchers.
- **'Second year coordinators meet of Star College Scheme (DBT)'**: In this meet organized at Ramnarain Ruia College (August, 2013), 96 Colleges which were under the STAR College Scheme, from all over India participated. In all, 172 coordinators and principals presented their annual Star College Scheme reports. Fifteen eminent scientists from reputed institutes like BHU, St. Stephens College along with Dr. Suman Govil (Adviser, DBT, GOI) evaluated the reports.
- **Ruia College Alumni Association**: The alumni of the College are encouraged to come and interact with students. Many of the well-placed alumni visit the College to give lectures, talks on various fields in Science and Humanities. The industry contacts of the alumni also prove helpful in obtaining financial support for research projects.
- **Project Based Learning**: Project based training is provided in the BVoc courses and students are involved in projects for e.g. students of Green House Management design models of Cool boxes, irrigation systems, terrariums etc. The students of Pharma Analytical Sciences are involved in industrial projects as a part of their training. The students of Microbiology undertake projects on Microbial diversity to learn Taxonomy of microorganisms. Students of History Department are involved in research projects outside the College.
- The Department of History conducts courses in archeology to encourage students to the field of excavations of historically important sites.
- The Department of Political Science carry out activity based learning like Mock UN, Mock parliament, visit to monsoon session of parliament to sensitize students to governmental processes.

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

Prioritised research areas

Green Chemistry, Nanosciences, Microfluidics, Phytochemistry, Medicinal plants, algal biotechnology, Marine Biotechnology, culinary history, environmental history, genealogy, plant biotechnology, Vedic and Classical Sanskrit Literature are some of the research areas where faculty members have expertise.



Research areas and expertise

The major areas of research that are pursued by members of faculty of different Departments are enlisted below (In alphabetical order of Departments);

Sr. No	Name of the Dept.	Name of the Faculty	Research Areas and the Expertise
SCIENCE FACULTY			
1	Biochemistry	Dr. Jyoti Vora	Nutrition, Bioanalytical Sciences
2	Botany	Dr. Behnaz Patel	Environmental Botany
		Dr. Sunita Shailajan	Pharmacognosy, Pharmacology
		Dr. Bhavna Narula	Plant physiology, Environmental botany
		Dr. Jessy Pius	Tissue culture, Nanotechnology
		Dr. Manjusha Nikale	Medicinal Botany, Anatomy
		Dr. Sunil Shankhdarwar	Phycology, Biodiversity
3	BVoc	Dr. Sasikumar Menon	Bioanalysis, Toxicology, Pharmacokinetics
		Dr. Shama Zaidi	Micropropagation, Hydroponics & Nanotechnology
		Dr. Mandar Mhatre	Bioanalysis, Herbal Medicine
		Shrutika Kumtekar	Plant Tissue Culture
4	Chemistry	Prof. Suhas Pednekar	Green Chemistry, Nanosciences, Marine Biotechnology
		Dr. Padmakar Sathe	Electrochemistry & Drug Standardisation
		Dr. Vikas Vaidya	Chromatography, Drug standardisation
		Dr. Manish Hate	Electoanalytical methods in Drug Standardization
		Dr. Vidya Dighe	Standardization of Herbal Drugs
		Dr. Kamini Donde	Coordination Chemistry, Polymer Chemistry



		Dr. Madhavi Badole	Quality Control of Herbal Drugs
		Dr. Vijay Chavan	Coordination Chemistry, Polymer Chemistry
		Prof. Ramesh Chougule (Adjunct Professor)	Biotechnology & Nanotechnology
5	Life science	Dr. Ganesh Iyer	Algal Biotechnology, Fungal Biotechnology
		Dr. Seema Shinde	Environmental Science
		Dr. Nilima Gajbhiye	Environmental Science, Molecular Biology
		Dr. Kanchan Chitnis	Phytochemistry, Food and Nutrition
		Dr. Hansa Boricha	Environmental Studies and Molecular Biology
6	Mathematics	Dr. Rajeshwar Andhale	Commutative Algebra
		Dr. Sanjeevani Gharge	Combinatorics, Design Theory
7	Microbiology	Dr Ravindra Phadke	Microfluidics – Lab on Chip / Lab on Paper / Enzymology
		Dr. Dipak Vora	Industrial Microbiology
		Ms. Urmi Palan	Immunology
		Ms. Anushree Lokur	Microfluidics – Lab on Chip / Lab on Paper / IPR
		Dr. Varsha Shukla	Microbial Biofilms
8	Physics	Dr. Rajlaxmi Neogi	Nanofilms and their properties
		Mr. Rajendra Rathi	Electronics, Material Science, Programming
		Dr. Pratap Patil	Interfacing, Synthesis of Nanofilms
		Dr. Nana Pradhan	Ion Implantation, Dilute Magnetic Semiconductor, Magnetic Sensor, Magnetic Quantum Dots, Advanced Electronics
		Mr. Bhupesh Mude	Basic Concepts in Physics, Solid State Physics
		Mr. Vijay Mayekar	Solid State Electronics, Electronics,



			Microcontrollers
9	Zoology	Dr. Sanjay Bhagwat	Cytology, Experimental Efficacy studies
		Dr. Vaishali Phusate	Physiology and Endocrinology
ARTS FACULTY			
1	Commerce	Dr. Urmila Moon	Banking, Entrepreneurship
2	Economics	Dr. Aditi Abhyankar	Developmental Economics, Growth Economics
3	English	Dr. Anjali Bhelande	Canadian Literature, Stylistics, Feminism
4	French	Dr. Vasumati Badrinathan	Intercultural Studies, Technology Assisted Language Learning
5	Hindi	Dr. Pravinchandra Bisht	Hindi Katha Sahitya
6	History	Dr. Mohsina Mukadam	Food History & Culture
		Dr. Louiza Rodrigues	Environmental History, Genealogy
7	Marathi	Ms. Leena Kedare	Buddhism, Marathi Drama
		Ms. Shilpa Neve	Poetry, Didactics of Language and Pedagogy
8	Philosophy and Psychology	Dr. Sangeeta Kamath	Psychology
9	Political science	Dr. Vaibhavi Palsule	International Relations
10	Sanskrit	Dr. Manjusha Gokhale	Vedic and Classical Sanskrit Literature

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

Contacts of faculty involved in research, industry-academia linkages and alumni are effectively used to interact with scientists from reputed institutions. In order to expose students to the current areas of research and contemporary global approach, several eminent scientists are invited to the college for popular lectures and talks on specific topics. Some of prominent researchers who visited the college during last five years are listed below.



SPEAKER	INSTITUTE	DEPARTMENT
Dr. Anil Kakodkar	DAE	Multiple Departments
Lord Meghnad Desai	United Kingdom	Economics
Dr. Narendra Jadhav,	Member of Rajya Sabha	Economics
Dr. B. N. Jagtap	BARC	Chemistry
Prof. G. D. Yadav	ICT	Chemistry
Prof. Amol Dighe	TIFR	Physics
Prof. Janos Pach	EPFL, Switzerland and Renyi Institute, Hungary	Mathematics
Prof. L. S. Shashidhara	IISER	Botany
Dr. Bharathan	Indiana university, USA	Biotechnology
Prof. Ramani Narayanan	Purdue University, USA	Chemistry (Alumnus)
Prof. Shyam Asolekar	IITB	IQAC
Dr. Avinash Shenoy	Imperial College, UK	Microbiology (Alumnus)
Prof. Dilip Nachane	University of Manipur	Economics (Alumnus)

Following is table enumerating the number of eminent personalities who visited the College on invitation from various Departments;

Year	Faculty	
	Arts	Science
2012-13	08	39
2013-14	21	38
2014-15	27	93
2015-16	30	43
2016-17	58	36
Total	144	249

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?

Being a grant-in-aid college, sabbatical leave is not easily admissible within the rules of University and State Government but Dr. Vasumati Badrinathan was granted Special Leave for pursuing Fulbright Fellowship by the College. The institute also encourages eligible



faculty to avail FDP of UGC to pursue PhD program. The faculty members pursuing research attract students to these areas of research like Green Chemistry and Nanotechnology, Algal Biotechnology, Phytochemistry, Microfluidics, Design Theory, Food History & Culture, Genealogy, Buddhism, Vedic Literature. Thus, these areas of specific expertise are established, nurtured and developed within Departments.

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)

- The Departments arrange seminar/workshop/guest lectures in which the teachers and the students of other colleges are also invited to participate in the deliberations and discussions. Thus, the information regarding research spreads among other institutions and ultimately among the community at large through research abstracts, posters, reports and publications.
- The College encourages students and faculty members to participate in conferences and seminars for oral and poster presentations where research findings are exchanged.
- Necessary support for obtaining funds for research is also provided by the College administration to the faculty.
- Research outcome of various projects is transferred to industries and governmental agencies for necessary application e.g. Neo Pharma, Ajanta Pharma, Central Dogma and NiChem Laboratories.

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.

Being a grant-in-aid institution, there is no budget allocation for research. Financial resources for research, however, is mobilised from various research grants and industry sponsors. The College supports faculty to apply for research grants from various funding agencies. The College has been making concerted effort to obtain grants under various programs of CPE, CE (UGC), STAR (DBT). In last four years, a total of around Rs. 4Crores has been generated. The College utilises the grants according to the proposals and as per the guidelines of funding agencies.

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?

College provides seed money, if needed, especially when the funding agency delays the release of the sanctioned grant. However, it permits the teachers to avail all the infrastructure



facilities available with the College. Generally, the preliminary work carried out before submission of research proposals are funded through institutional funds.

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

The College receives funds through various research grants from funding agencies like NMPB, DBT-STAR College Scheme, UGC-CPE and CE, DAE-BARC, DAE-BRNS. It also generates funds through collaborative research, consultancy services and industry sponsored projects. In the last four years, fourteen research students have received Junior Research Fellowship. Research projects of students working on the industry projects are sponsored 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 endeavours and challenges faced in organizing interdisciplinary research

- The College has 31 research guides and they are involved in interdisciplinary research in the areas of phytochemicals, microfluidics, medicinal plants, nanosciences, marine biotechnology etc.
- Some of the success stories include patent granted for Herbal mosquito repellent (DBT) obtained by the college (collaboration of Chemistry, Life Science & Zoology).
- The College has collaborative research program with Dental Hospital of BARC through which novel dental fillings with nano-materials have been developed.
- The collaborative research with Nanavati Hospital has resulted in development of novel contrast agents for use in MRI scanning.
- The major challenge faced in organizing interdisciplinary research is the maintenance of high-end instruments and their time to time upgradation to meet the current industrial needs.

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

- Major instruments which require high maintenance are made available at centralized laboratories like P.S. Ramanathan Instrumentation Centre and Herbal Research Lab. In addition, there are central facilities like Animal Testing Centre, Tissue Culture laboratory, A Polyhouse, e-Learning centre, Language Lab and well equipped modern library. These instruments are made available for use by faculty members of various departments.
- Faculty members are given the responsibility to manage and monitor the use of these equipments and ensure their optimal use by researchers. These equipments are used to conduct hands-on training for the students (UG/ PG and research) of our institution and also of other institutions.



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.

The College received assistance from various sources including industries during the last four years. They are listed below;

Facility	Funding Agency	Amount
P.S. Ramnathan Advanced Instrumentation Center	Shimadzu, India	2.2 Lakhs for upgrading GC-MS system with autosampler
Laboratory for Algal Culture	Reliance Industries	6.0 Lakhs
Upgradation of facilities	CPE, UGC	100 Lakhs
Upgradation of Facilities	CE, UGC	200 Lakhs
Departments of Botany, Chemistry, Life Science, Microbiology, Physics and Zoology	STAR College Scheme (DBT)	15.00 Lakhs for developing facilities for undergraduate research
Departments of Bioanalytical Sciences, Biochemistry, Biotechnology, Statistics,	STAR College Scheme (DBT)	10.00 Lakhs for developing facilities for undergraduate research
Departments of Botany, Chemistry, Lifescience, Microbiology, Physics and Zoology	STAR Status Program (DBT)	50.00 Lakhs for developing facilities for undergraduate research

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.

- Faculty members are given information about various grants and staff is encouraged to attend seminars on various programs, thrust areas and grants available with different funding agencies. They are encouraged to submit research proposals to various funding agencies including minor research projects to the University of Mumbai.
- The Research Advisory Committee convened by the principal provides an overall guidance to the research projects conducted at the College. The Innovation and Research Committee convened by senior member of faculty oversees the submission of proposals.
- In the last five years IQAC conducted Research Methodology workshops, every year. Workshop had been organised for students in technical writing by IQAC under CE Grant which included hands on training and relevant theory sessions on Profile



writing, Research Paper writing, Effective Data presentations, Thesis and Research proposal writing, Content mapping and Content sequencing.

In the last five years, the College received following grants for research;

Granting Agency	Amount Sanctioned	Amount Received (in last four years)
FIST	49.00 lakhs	4.85 lakhs
Basic Development Grant XIIth Plan	41.00 lakhs	7.60 lakhs
CPE	1.00 Cr	1.00 Cr
CE	2.00 Cr	1.58 lakhs
DBT – STAR College Scheme	66.00 Lakhs	15.00 Lakhs for developing facilities for undergraduate research
DBT STAR Status	75.00 lakhs	50.00 lakhs for developing facilities for undergraduate research
DBT – STAR College Scheme	66.00 Lakhs	10.00 Lakhs for developing facilities for undergraduate research

The details of Major and minor research projects are provided in the table below.

Duration Year From to	Title of the project	Name of the funding agency (Principal investigator)	Total Grant		Total grant received till date (Rs. In lakhs)
			Sanctioned (Rs. In Lakhs)	Received (Rs. In lakhs)	
Nature of the project: Minor Projects (On-going)					
2015-2017	Biochemical and Pharmacognostic evaluation of <i>Piperbetel</i> Linn. Betel leaf varieties	University Grants Commission (Dr. Kanchan Chitnis – Life Science)	4.49	4.49	4.49
2015-2017	Value Inculcation through Anupana Medication	University Grants Commission (Mrs. Jyoti Waghmare)	1.9	--	--
2016-2017	Biochemical, nutritional and organoleptic assessment of <i>Caricapapaya</i>	University of Mumbai (Dr. Jyoti Vora and Ms. Sneha Pednekar - Biochemistry)	0.32	--	--
Nature of the project: Minor Consultancy Projects of Faculty (On-going)					
2015-2017	Storm in a Teacup: The Culture of Tea Drinking in	Sir Dorabjee Tata (Dr. Mohsina Mukadam –	1.0	0.5	0.5



	Mumbai'	History)			
Nature of the project: Minor Projects (Completed)					
2010-2012	Cookbook as Tasty Sampler of History	University Grants Commission (Dr. Mohsina Mukadam - History)	1.05	1.05	1.05
2011-2012	Study of Immunomodulatory activity of Plant & Algal extracts	University of Mumbai (Mrs Urmi Palan - Microbiology)	0.30	0.30	0.30
2011-2012	Detection Anti-Quorum Sensing Activity of <i>Valerianofficinalis</i> (Valariana) and <i>Rosemary officinalis</i> (Rosemary) using Microbial Biosensor Strains	University of Mumbai (Mrs Anushree Lokur - Microbiology)	0.50	0.50	0.50
2011 – 2013	Bhumandalikaran ki daur ki Hindi Kahani	University Grants Commission (Dr. Dattatray Murumkar)	0.80	0.80	0.80
2011-2013	Standardization of <i>Putranjivaroxburghii</i> Wall. And <i>Dioscoreabulbifera</i> Linn. And evaluation of its immunomodulatory activity	University Grants Commission (Dr. Madhavi Badole – Chemistry)	1.20	1.20	1.20
2012 – 2013	Nutritional analysis and consumer acceptance survey on bread consumption	University of Mumbai (Dr. Jyoti Vora – Biochemistry)	0.114	0.114	0.114
2012-2013	Study of Microbial Tannases	University of Mumbai, (Dr. Dipak Vora - Microbiology)	0.50	0.50	0.50
2012-2014	Synthesis of Biologically Active Amino Coumarin and its derivatives	University Grants Commission (Dr. Vikas Vaidya – Chemistry)	1.75	1.75	1.75
2012 - 2013	Activity based evaluation of <i>Rhododendron arboretum</i> Smith. Flowers as estrogenic agent	University of Mumbai (Dr. Sunita Shailajan – Botany)	0.274	0.274	0.274
2012 - 2013	Evaluation and enhancement of Cadmium phytoremediation potential of <i>Cosmos bipinnatus</i>	University of Mumbai (Dr. Bhavna Narula – Botany)	0.27	0.27	0.27
2012 - 2013	Hepatoprotective activity of leaves of <i>Salaciachinensis</i> on CCl ₄ induced albino rats	University of Mumbai (Dr. Manjusha Nikale – Botany)	0.27	0.27	0.27
2012 - 2013	Exploring cyanobacterial flora from Thane lake and investigating them for Novel products.	University of Mumbai (Dr. Sunil Shankhadarwar – Botany)	0.27	0.27	0.27
2012 - 2013	Evaluation of important bioactive principles from <i>Mirabilis jalapa</i> L. and their	University of Mumbai (Dr. Jessy Pius – Botany)	0.27	0.27	0.27



	biological activity				
2012-2013	Standardization of plant with anti-obesity activity	University of Mumbai (Dr. Vijay Chavan – Chemistry)	0.274	0.274	0.274
2012-2013	Application of analytical method for standardization of an antidiabetic plant, <i>Lagerstroemia speciosa</i>	University of Mumbai (Dr. Vikas Vaidya – Chemistry)	0.274	0.274	0.274
2012-2013	Standardization of wound healing plants	University of Mumbai (Dr. Vidya Dighe – Chemistry)	0.274	0.274	0.274
2012-2013	A Study on Female Buying Behaviour In Cosmetics Market in Mumbai	University of Mumbai (Dr. Urmila Moon)	0.32	0.32	0.32
2012-2013	Study on standardization of <i>Boerhaaviadiffusa</i> (L) plant having diuretic property using analytical methods.	University of Mumbai (Dr. Jyoti Patwardhan – Chemistry)	0.264	0.264	0.264
2012-2013	Study of Analytical method for standardization of plant used for treatment of obesity	University of Mumbai (Dr. Rukmani Venkatchalam – Chemistry)	0.274	0.274	0.274
2012-2013	Synthesis, Characterization and Biological Activity of Mixed Ligand Metal Complexes of Schiff Bases derived from 5-Bromosalicylaldehyde.	University of Mumbai (Dr. Atmaram Mapari – Chemistry)	0.114	0.114	0.114
2012-2013	Study of Ferrites	University of Mumbai (Dr. Rajlakshmi Neogi – Physics)	0.32	0.32	0.32
2012-2013	Preparation of Nano materials	University of Mumbai (Dr. Pratap Patil – Physics)	0.27	0.27	0.27
2012-2013	Study of III-V Compound Semiconductors	University of Mumbai (Dr. Nana Pradhan – Physics)	0.30	0.30	0.30
2012-2014	Biochemical and Biostatistical Assessment of Global Student Population with the perspective of emotional eating	University Grants Commission (Dr. Dipak Vora-Microbiology)	0.90	0.90	0.90
2012-2014	Synthesis of Biologically active Amino Coumarin and its derivatives.	University Grants Commission (Dr. Vikas Vaidya - Chemistry)	1.75	1.75	1.75
2013-2014	Biochemical and Biostatistical Assessment of urban Indian Population with the perspective of emotional eating	University Grants Commission PI: (Dr. Dipak Vora-Microbiology) CoPI: Dr. Jyoti Vora – Biochemistry	0.85	0.85	0.85
2013-	Anti-microbial Action of ZnO	University Grants	1.67	1.67	1.67



2015	Nanoparticles	Commission (Dr. Rajlakshmi Neogi – Physics)			
2014-2015	Development Of Microfluidics Based Chip Platform For Microbial Analysis	University of Mumbai, (Dr. Ravi Phadke - Microbiology)	0.30	0.30	0.30
2014-2015	Eradication of <i>Staphylococcus aureus</i> biofilms on implant surface by tannin rich plant extracts	University of Mumbai, (Dr. Varsha Shukla - Microbiology)	0.25	0.25	0.25
2014-2015	पुलिस-प्रसंगों पर आधारित हिन्दी उपन्यासों का समाजशास्त्रीय अनुशीलन	University of Mumbai, (Dr. Pravin Chandra Bisht - Hindi)	0.24	0.24	0.24
2014-2015	Synthesis of Nanostructure Zirconia by Hydrothermal Method	University of Mumbai, (Dr. Pratap Patil – Physics)	0.25	0.25	0.25
2014-2015	Synthesis of BaTiO ₃ nanoparticle using Sol gel method and Its characterization.	University of Mumbai, (Mr. Bhupesh Mude)	0.255	0.255	0.255
Nature of the project: Minor Consultancy Projects of Faculty (Completed)					
2009-2012	The Genealogy of the Seth/Sethna Family: 1930 – 2012	K. R. Cama Oriental Institute (Dr. Louiza Rodrigues - History)	2.60	2.60	2.60
2012-2017	Sir John Malcolm (1769-1833)	Asiatic Society of Mumbai (Dr. Mohsina Mukadam - History)	1.25	--	--
2012-2013	Impact of modernization on the Apatanis and Nishis of Arunachal Pradesh	Asiatic Society, Mumbai (Mrs. Himani Chaukar)	0.12	0.12	0.12
2012-2013	Biography of Phillip Anderson 1837 to 1857	Asiatic Society of Mumbai (Dr. Louiza Rodrigues - History)	1.20	1.25	1.25
2012-2013	Qatar Unified Imaging Project	Exeter, Centre for gulf studies, UK (Dr. Louiza Rodrigues)	1.50	1.50	1.50
2012-2013	Anderson Philip – Biography	Asiatic Society of Mumbai - (Dr. Louiza Rodrigues - History)	1.2	1.2	1.2
2014-2015	Partial purification of one polysaccharide sample	Chemicalli (a LLP based in Mumbai , Maharashtra) (Ms. Supriya Kale - Biotechnology)	0.18	0.18	0.18
Nature of the project: Major Projects (On-going)					
2013-2015 Extended upto 2017	Endocrine glands function and histology in rats exposed to organic herbicides	University Grants Commission (Dr. Vaishali Phusate – Zoology)	12.85	8.318	8.318



2014-2017	Molecular characterization and chemo-profiling of two pharmacologically relevant species of <i>Dendrobium</i> found in northeast India	Department of Biotechnology, in DBT- Program (with NEHU, Shillong) (PI: Dr. Sunita Shailajan – Botany) (CoPI – Professor Suhas Pednekar – Chemistry CoPI- Dr. Sasikumar Menon – Zoology)	27.15	27.15	27.15
2015-2018	Evidence based evaluation of medicinal plants used for treating polycystic ovary syndrome	University Grants Commission (PI: Dr. Sunita Shailajan – Botany CoPI: Dr. Sasikumar Menon – Zoology)	15.49	10.39	10.39
Nature of the project: Major Consultancy Projects of Faculty (Ongoing)					
2016-2017	Willington Sports Club: History and Social: 1917-2017	Willington Sports Club, Mumbai. (Dr. Louiza Rodrigues – History)	25.0	16.0	16.0
Nature of the project: Major Projects (Completed)					
2008-2012	Environment management and capacity building	University Grants Commission (Dr. Medha Somaiya)	47.50	47.50	47.50
2009-2013	Effect of ionizing radiations on non-human biota (Plants)	Department of Atomic Energy-Bhabha Atomic Research Centre (DAE-BARC) (PI - Dr. Behnaz Patel, CoI - Dr. Jessy Pius, Dr. Bhavna Narula, Dr. Sunil Shankhadarwar - Botany)	26.0	26.0	26.0
2009-2012	Patterns of Communal Violence and Terrorism: A Case Study of Mumbai (1947-2009)	University Grants Commission (Dr. Sheela Nabar)	5.312	5.312	5.312
2010-2012	Green chemistry approach to synthesis of medically important compounds	University Grants Commission (PI - Professor Suhas Pednekar - Chemistry, CoI - Dr. Dipak Vora - Microbiology)	5.448	5.448	5.448
2010-2014	Development of a polyherbal combination as a potential immunomodulator and evaluation of its efficacy as antimycobacterial agent	DAE-BRNS (PI- Dr. Sunita Shailajan – Botany) (CoPI – Dr. Sasikumar Menon – Zoology)	18.655	18.655	18.655
2010-2013	The prevalence in diagnosis and management of neurological diseases in adult population	University Grants Commission (Dr. Rohini Shivbalan - Zoology)	11.70	11.70	11.70
2011-2014	Standardization of medicinal plants using modern analytical techniques and evaluation of	University Grants Commission (Dr. Vidya Dighe - Chemistry)	9.508	9.508	9.508



	their potential immunomodulatory activity				
2012-2014	Phytochemical profiling, molecular characterization and conservation of <i>Flemingia vestita</i> : Endemic medicinally important plant of Northeast India	Department of Biotechnology-Twinning Program (with NEHU, Shillong) (PI- Dr. Sunita Shailajan – Botany) (CoPI – Dr. Sasikumar Menon – Zoology)	30.39	30.39	30.39
2014-2015	Police in Gujarat: Continuity and Change	Raksha Shakti University, Ahmedabad (Dr. Louiza Rodrigues - History)	14.807	14.807	14.807
2014-2015	Algal characterization	Reliance Company (Dr. Ganesh Iyer and Dr. Seema Menon – Life Science)	32.22	32.22	32.22
2014-2016	Development of HPLC methods for some known phytochemical markers and their validation as per ICH guidelines with bioavailability studies	National Medicinal Plant Board – AYUSH, New Delhi (PI- Dr. Sunita Shailajan - Botany) (CoPI – Dr. Sasikumar Menon – Zoology)	25.65	25.65	25.65
Nature of the project: Major Consultancy Projects of Faculty (Completed)					
2010-2012	The Genealogy of the Seth/SethnaKhandan: 1930 - 2010	F. H. B. Sethna Trust, Mumbai (Dr. Louiza Rodrigues - History)	20.00	20.00	20.00
2011-2013	Art Furniture and Household Decoration in Nineteenth Century Bombay: Trading Art Across the Globe'	Mrs. Avabai B Wadia Research Fellowships in memory of Phiroz Dorabji Mehta at The K R Cama Oriental Institute (Dr. Louiza Rodrigues - History)	2.50	2.50	2.50
Industry Sponsored Projects					
2012-13	GC-MS Analysis	Analytical Solutions Ltd.	6.20	6.20	6.20
2013	Anti diabetic study	Emcure Pharmaceuticals Ltd.	1.00	1.00	1.00
2014	HPTLC Analysis	Ajanta Pharma Ltd.	0.40	0.40	0.40
2014	Antilice study	NeoPharma, UK	2.00	2.00	2.00
2015	GC-MS analysis	S. S. Chemicals Ltd.	0.20	0.20	0.20
2015	HPTLC Analysis	Ajanta Pharma Ltd.	2.71	2.71	2.71
2016	HPTLC Analysis	Ajanta Pharma Ltd.	3.27	3.27	3.27
2016	HPLC Analysis	Padmaja Laboratories	0.08	0.08	0.08

3.3 Research Facilities

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

The College has 11 departments recognized by the University of Mumbai for research namely, Bioanalytical Sciences, Biotechnology, Botany, Chemistry, Life-science, Microbiology, Physics and Zoology in Science Stream and History, Sanskrit and English in



Arts Stream. In addition, mentors and industry experts provide guidance to students for research in contemporary areas.

Research facilities

- The College has separate Postgraduate Research laboratories for each department.
- Department of Microbiology has specialized facilities like Animal Tissue Culture Laboratory Molecular Biology Facility, Lab-on-chip fabrication and testing facility with clean room and Computer Laboratory cum Smart Classroom.
- The College houses an Animal House, Plant Tissue Culture laboratory, a Green House and a Herbal Research Laboratory. We are one of the few Colleges in Mumbai with an Animal-testing Laboratory with CPCSEA registration.
- To enable advanced scientific and technical computing, the Department of Statistics has two statistical software- SPSS and STATISTICA, the Department of Mathematics has MATHEMATICA and MATLAB and Department of Economics has Stata and EViews. Free Wi-fi and internet facilities are available for the research students in library and at various laboratories.

Library Facilities

- Ruia College Library possesses Institutional Membership of Asiatic Library, American Library and British Council Library. It is also registered as the member of INFLIBNET 'N-LIST' project under which the Library provides, to all teaching staff and post graduate students, free access to more than 50000 e-Resources including variety of e-Journals and e-Books.
- The library has a separate reference / periodical section with back volumes and current journals/magazines for ready reference. All library collections are cataloged using computer programming for ease of access.

Instrument facilities available at the following laboratories;

- The P. S. Ramnathan Advanced Instrumentation Centre with sophisticated instruments for chromatography and spectrophotometry.
- IATRIS with sophisticated instruments for bioanalysis and drug testing
- Herbal Research Laboratory with sophisticated instruments for chromatography and phytochemical analysis
- Department of Chemistry with Labmate Microwave synthesis system for research in Green Chemistry.
- The research laboratories of the Departments of Biotechnology, Chemistry, Bioanalytical Sciences, Statistics, Mathematics, Botany, Life science, Computer science, Green House Management and Pharma Analytical Sciences are also available for the students.
- The College permits staff and students from other colleges to use these facilities and they are also trained in handling them carefully and efficiently.



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

- The College strategizes its research policies based on the suggestions and recommendations given by the Research Advisory Committee, industry experts, scientists from reputed institutes, well placed alumni and the research expertise available with the faculty.
- Based on their inputs, the College identifies emerging areas of research in which the College can make meaningful contribution.
- New infrastructural facilities are upgraded and created to implement these plans. Faculty members with specific expertise are encouraged to take up research projects in the emerging areas by availing these new facilities.
- Additionally, the College also organizes training programs using these upgraded facilities to give exposure to faculty in emerging areas. For e.g. twelve days training workshop in ‘Molecular techniques in diagnostics’, ‘Microfluidics training program in Microbiology’, ‘Training in advanced chromatography in P. S. Ramanathan Lab (PSRAIC), Animal Handling workshops in Animal Testing Centre (ATC) etc.’

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.

The college has received special funding from Shimadzu Pvt. Ltd. for establishing an advanced instrumentation centre called P. S. Ramanathan Advanced Instrumentation Centre (PSRAIC) which include state of art instruments like;

Sr. No.	Equipment	Model	Make
1	HPLC	Autosampler Prominence CTO – 20AC Manual – LC 20AD	SHIMADZU INDIA PVT. LTD.
2	GC	GC – 2014	
3	GC – MS	GCMS – 2010 Ultra	
4	AAS	AA – 7000	
5	FTIR	IR – Prestige 21	
6	UV – Visible	UV – 1800	
Recent Upgradations (last Five Years)			



7	GC-MS	Autosampler with 12 sample capacity	SHIMADZU INDIA PVT. LTD.
8	HPTLC	Spotter LINOMAT IV, TLC Scanner – 4	CAMAG

The College has received grants from DBT, CPE, CE, NMPB, DBT – Twinning, DAE, UGC,. Various instruments and equipment were purchased using these grants. These instruments are installed in the Departments to address their specific needs. These instruments, however, are also made available to other Departments. The list of equipment purchased, under various funds received by the College (value above Rs. 50000/-) are provided below.

Sr. No	Details of instrument	Amount (in Lacs)
1	CAMAG High Tech UV cabinet (CAMAG Cat no. 022, 9070)	1.10
2	Labomed Trinocular research Microscope (LX 300) + Motic Digital Camera (Motican 480)	0.99
3	Laminar Air Flow Cabinet (HM-1)	0.73
4	Canon Camera with closeup lens	0.98
5	Centrifuge REMI R8C BL	0.51
6	TLC Plate Derivatization Tank CAMAG	0.75
7	Deuterium and mercury lamps for Scanner	1.50
8	Automatic Spotting assembly of HPTLC	0.50
9	Laptops	1.50
10	Projectors (Epson TW5300)	1.40
11	UV-VIS Spectrophotometer	1.00
12	Electrogravimetry apparatus from abrolins electrolyzers	0.76
13	Platinum 10% wire gauze electrode	0.86
14	Shimadzu digital electronic balance internal calibration model – aux-220 cap: 220 g acc: 0.1 mg	0.79
15	Systronics digital flame photometer model: 130 with Na, K, Ca, Li filter & compressor	0.60
16	Water and soil testing kit	0.99
17	Ion selective electrodes	0.67
18	Polarograph	0.99
19	Pellet maker for KBr pellets (FTIR)	0.99
20	Lamps for UV-Vis Spectrophotometer	1.50



21	Autopot	1.00
22	Autopot accessories	0.90
23	Column for HPLC and GC	0.95
24	Lamps for AAS (Cadmium & zinc)	0.85
25	Bacteriological incubator Temperature control	0.60
26	Light trinocular research microscope with LCD camera	0.88
27	UV-VIS Spectrophotometer	1.00
28	Vertical Gel Electrophoresis (Techno Source) Small gel two lanes	0.75
29	Binocular microscope (Labomed) Inbuilt lamp	1.00
30	Air sampler (Himedia)	0.50
31	Colony Counter (Himedia)	0.50
32	Deep freeze -25°C(Local heavy duty brand)	1.00
33	Digital autoclave (Heavy duty)	1.00
34	Environmental Weather monitor instruments (Agri Tech)	1.00
35	Rotary Shaker with temperature control (HALLY)	1.00
36	Laminar Air Flow (Locally made brand- Heavy Duty)	1.00
37	Desktop Computers	2.31
38	Microscopes and spare parts (LED illuminator)	1.00
39	Push button pipettes	1.00
40	Nano spectrophotometer	3.00
41	Syringe Pump	2.50
42	Peristaltic pump	2.00
43	Michelson interometer with gas chamber and diode laser unit With Collimating stand, Total internal reflection equipment and Optic fiber losses set up	1.40
44	Microcontroller 805 Anshuman Model XPO51, PIC program development board (UET 01) with PIGGYABACK 16F877A, Main development board (UET 01) with PIGGYABACK ARM LPC2148 etc.	1.30
45	8051 microcontroller kits Anshuman Co. Ltd	0.55
46	DSO Aplab	0.70



47	Personal Computer (Intel)	0.50
48	ICT System (Nikon)	1.25
49	Muffle furnace with Micro PID controller cum indicator with sensor (Laboratory model / HMG)	0.62
50	Water distillation Unit (2 lit.) (Ganesh Scientific Industries)	0.50
51	He Ne laser (PD300R(7Z02436) /Ophir Optronics)	2.42
52	Sensor head (PD300R(7Z02436) /Ophir Optronics)	0.60
53	Display unit (StarLite (7Z01565) /Ophir Optronics)	0.76
54	Trinocular microscope with image grabber	0.97
55	Microtome	0.50
56	Horizontal & vertical gel electrophoresis apparatus with trans illuminator	0.68
57	Research Microscope	0.88
58	Refrigerated Centrifuge (REMI CM-8 Plus)	1.30
59	Compound microscopes Self illuminated	1.15
60	Upgradation to Reprostar 3 Photodocumentation unit	3.50
61	Low Volume Evaporator (SpeedoVap)	2.50
62	Mathematica Software	4.50
63	SEdR Software	0.57
64	SPSS Software	3.02
65	CO ₂ Incubator	2.53
66	Freezer (- 80 °C)	2.91
67	Rotary Vacuum Evaporator	0.66
68	Trinocular Microscope with phase contrast attachment	1.17
69	15 Computers Intel Core i5 4440 Processor	4.80
70	Shimadzu (Asia Pacific) Autosamplers AOC 20i for GC-MS	2.11
71	Software STATA	2.42
72	Language Lab Software	0.94
73	Gel Documentation System	2.00
74	SIUS Electronic Storage system	2.74
75	Modified Microwave	0.67
76	Epson Display System	1.57
77	HPTLC System	27.00



78	EVOS FL Auto Fluorescence Microscope & Imaging System	16.48
79	Harric Plasma Cleaner	4.15
80	Spin Coater	2.81
81	Push-button Pipette	1.00

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

- The research facilities of the College are extended to students of other institutions and other Universities. The College also has collaborative research project with North Eastern Hill University, Shillong and also train students from there. In addition, the College uses these facilities to conduct training programs for faculty and Government funded training programs (Training for practitioners, DBT Sponsored workshop in Molecular Biology).
- The College also helps students to avail the facilities at reputed institutes like IIT, BARC, ICT, CIRCOT, and also laboratories associated with the collaborative projects like Haffkine Institute, BARC-Dental Hospital, MRI Centre of Nanavati Hospital.

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

Ruia College Library is one of the oldest, largest and best equipped college libraries affiliated to the University of Mumbai. The Ruia College Library functions as the Knowledge Resource Centre for supporting research activities at the College. It is richly stocked with a collection of books related to mainstream syllabi, reference material, manuscripts, precious archives, journals, magazines, periodicals, CDs and DVDs. There are 93,402 reference books and 49 journals (national and International) catering to the specific needs of researchers. Additionally, the library has maintained a collection of back-volumes of reputed Journals, some of which are no longer available as eCopies. For access to eResources, the library is registered as the member of Government of India's INFLIBNET 'N-LIST' eConsortia project to provide the researchers with free access to variety of e-Resources. Library has a distinguished rare collection of 5855 documents (Books + Manuscripts) which have been digitized and is used by various researchers in Humanities and those who are interested in Science History.

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

Major instruments which require high maintenance is made available in a common facility (e.g. P. S. Ramanathan Instrumentation Centre, Herbal Research Lab.) for the students and faculty members. Adequate support staff is made available to manage and monitor the use of these



equipment and to ensure optimal use by researchers. Faculty members are assigned the responsibilities of managing these facilities. In addition, there are central facilities like Instrumentation Centre, Animal Testing Centre, Algal Biotechnology, Plant and Animal Tissue Culture facility, Statistical Analysis facility and Language Lab.

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)

Patent granted

Ramnarain Ruia College, Dr. Ganesh Iyer, Dr. R. T. Sane and Dr. Sasikumar Menon: Novel herbal mosquito repellent- 422/MUM/2003.

Request for Patent Examination has been filed

- Dr. Sunita Shailajan, Dr. Sasikumar Menon, Marico Industries: Polyherbal composition for skin disorder- 827/KOL/2007– **2007**
- Dr. Sunita Shailajan, Dr. Sasikumar Menon, Marico Industries: Polyherbal composition for hair growth- 828/KOL/2007– **2007**
- Dr. Suhas Pednekar: Tetrazolinohydrahydrazino Pyrazoline-5-one, a useful antibacterial molecule- 953/MUM/2012- **2012**
- Dr. Naresh Bhaskar Shejawal: Method and apparatus for measurement of bizarre shaped object volume– 1831/MUM/2013 - **2013**.
- Dr. R. P. Phadke and Ms. Anushree Lokur: Araldite Epoxy Resin Coating Composition Applied - Indian Patent application No 3016/MUM/2014 - **2014**.
- Dr. Ganesh Iyer: Anti Cancer drug from *Michaleachampaca*-**2015**.

*Original research contributing to product improvement

Product developed

- Anti-fungal ointment: Anti-fungal efficacy on Guinea Pig model(Sun Pharma)
- Central Dogma Pvt Ltd in collaboration with Ruia College has developed a kit in Molecular Biology.

Products in Pipeline

- Novel dental fillings using Nanomaterials for effective anti-microbial protection.



- Solar distillation unit.
- Simple cold boxes for storing cut flowers.
- Lab on Chip and Lab on Paper for simple tests in clinical biochemistry.
- Portable Culture device

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

- Two potentially significant contributions to community service are in the offering by the outcomes of research at the College, namely; detection of microorganisms using Lab on Chip and Lab on Paper technology, detection of water quality using Portable Culture Device for rural and remote field having low resource settings.
- Research carried out in the area of Nanosciences has resulted in the development of magnetic nanoparticle with potential use in drug delivery systems.
- Life Science and Microbiology students carried out projects on fabrication of Solar Distillation Units and Solar Disinfection (SODIS) for drinking water.
- Chemistry students carried out audit on electricity usage and survey on solid waste in the College. Based on these findings, the College did energy audit with the help of an external agency (Synergy). The College collaborates with Stroomukti Sanghatna for recycling solid waste and converting it into academic diaries for the teachers.
- Bioavailability studies carried out by IATRIS resulted in about 40 new formulations to be marketed in India in the last three years. Centre for Slum Studies creates awareness on several issues related to slums through research projects.

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

Centre for Slum Studies, in collaboration with TISS, Mumbai and United Nations Population Fund for Social Action Plan on Child Marriage and Early Pregnancy organized poster competition in 2013-14. These students also prepared research based projects on a variety of topics such as poverty, environment, micro-industries and urban slums.

Portable culture device using lab on paper technology developed by the Department of Microbiology has potential to be used in detection of potability of water for the community.

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?

The institution does not publish or partner in publication of research journal, however, the College publishes a monthly e-Journal called e-Bulletin. Many departments also have their own departmental magazine in which contributions of students are published (Refer Criterion V).



3.4.3 Give details of publications by the faculty and students:

- Publication per faculty
- Number of papers published by faculty and students in peer reviewed journals (national/international):
- Number of publications listed in International Database (for Eg: Web of Science, Scopus, Humanities International Complete, Dare Database International Social Sciences Directory, EBSCOhost, etc.)
- Monographs
- Chapter in Books:
- Articles in Books:
- Books Edited:
- Books with ISBN/ISSN numbers with details of publishers:
- Citation Index
- SNIP
- SJR
- Impact factor :
- h-index:

The list of publications by the faculty and students during the last four years are listed below;

Title	No
Publications	Total- 336 International- 280 National- 56
Papers presented	105
Posters presented	102
Monographs	07
Chapter in Book(s)	36
Books	12 Single author 12 Co-authored



Note : The exhaustive list of publications by the faculty and students are available in the Evaluative Report of the Departments.

3.4.4 Provide details (if any) of

➤ Research awards received by the faculty

- Dr. Louiza Rodrigues received **Samudra Manthan Award** in recognition of Research in Maritime History (2016).
- Dr. Sunita Shailajan received **Dr. P.D. Sethi National Award** for the best HPTLC paper (2012, 2013, 2014 and 2015).

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

- Professor Suhas Pednekar has been nominated as,
 - State Level **'Best Teacher Award'** by the Govt. of Maharashtra (2012), **'Vocational Excellence Award'** by Rotary International (2012), National Level **'Best Chemistry Teacher Award'** (2013).
 - **Chairman, Sub-Committee for Evaluation** of Lab Manuals, SOPs and e-Resources by DBT, GOI (2015).
 - **Member, Working Group on Higher Education** (XIIth Five Year Plan), Planning Commission of India, New Delhi (2012)
 - **Member, Task Force Committee** of Government of Maharashtra for implementation of New Education Policy
 - **Member, Peer Team, National Assessment and Accreditation Council** (NAAC), Bangalore (Assessed and accredited seventeen colleges in various states of India)
 - **Member, Expert Committee for Star College Scheme**, DBT, GOI (2013)
 - **Member, Expert Committee of UGC** to consider the proposals and recommend grants under various schemes to Universities and Colleges (2013)
 - **Member, Review Committee for execution of recommendations** made by three committees (Dr. Anil Kakodkar Committee, Dr. Arun Nigawekar Committee & Dr. Ram Takwale Committee) on reforms in Higher Education, GOM (2012)
- Dr. P. A. Sathe was appointed as a **Delegation Leader (Head Mentor)** for International Olympiad in Chemistry at Hanoi, Vietnam (2014).
- Dr. Ravi Phadke was felicitated as **illustrious alumni** at "Integrating Basic and Translational Research in Modern Biology" conference, M S University of Baroda (2015-16).



- Dr. Dipak Vora was recognized for **Novel Culture deposition** in Japanese Collection of Microorganisms (2015-16).
- Ms. Anushree Lokur and Ms. Urmi Palan received **oral presentation award** at International Conference on 'Biotechnology and Bioengineering', Dubai (2014).
- Ms. Varsha Malwade was selected for **associateship** from UGC Inter-University Centre, Shimla (2013-14).
- Dr. Sasikumar Menon has been nominated on **National Advisory Committee for Olympiads** (2016-17).
- Dr. Sunita Shailajan has been nominated as a **national committee member** by MHRD, GOI, and has been nominated as a **sub-committee member** of e-Resource development in Biological Sciences by Star College Scheme, DBT(2016). She has also been appointed as **reviewer** for Journal of Ethnopharmacology and PLOS One.
- Dr. Vasumati Badrinathan was the recipient of **Fulbright Fellowship, USA** (2015-2016)
- Dr. Sanjeevani Gharge was the **only college teacher** from India who was **invited** to present at the **International Congress of Mathematicians** held at Seoul, South Korea (2014). Her travel was supported under UGC travel grant fellowship.
- Dr. Louiza Rodrigues received **national award** for best paper in Indian History Congress (2013)
- Dr. Varsha Shukla received **best paper presentation** award in National Conference on Recent Trends and Future Prospects in Microbiology (2014).
- Ms. Himani Chaukar was the recipient of the prestigious **Asiatic Society research fellowship** for social science for the year (2012-2013) and **Dr. Mani Kamerkar prize** received the Junior Research Scholarship.

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

- Teachers with special achievements are felicitated by the Principal on the Annual College Day.
- College provides facilities to teachers to visit international universities and laboratories to get global exposure.
- The College provides financial support and duty leave to faculty members to attend / participate and present research papers at workshops/seminars and conferences at both National and International levels. The College has to its credit **336** research publications in the last five years
- The College encourages the faculty members to submit research proposals to various funding agencies.



- The teachers are encouraged to avail of facilities as per the UGC guidelines. In the last five years **08** confirmed faculty members were granted leave under the Faculty Development Program (FDP) scheme of UGC to pursue their PhD.

3.5 Consultancy

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

College has a separate industry coordination cell which facilitates Industry-Academia linkage through industry sponsored R&D projects. Consultancy available at P. S. Ramanathan Advanced Instrumentation Centre, Herbal Research Lab, Animal Testing Centre, Microbiological testing unit, IATRIS and Departments of Life Science and Bioanalytical sciences is utilized by various industries like Cipla, Neo Pharma, Ajanta Pharma, Sun Pharma, Pitambari, Analytical Solutions, Shimadzu, NiChem and Godrej.

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

- Institutional policy in promoting consultancy is to involve faculty and research scholars to foster Industry-Academia linkage.
- The consultancy services are in the areas where the faculty members have adequate expertise. The institution publicises the expertise available for consultancy services through participation in educational fairs, exhibitions, National/ International seminars and conferences. The consultancy expertise of the College is also publicised through the College brochure on research activities and the College website. Assistance of well-placed alumni is used for advocating the expertise of the College and in obtaining industry sponsored research projects.

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

College authority arranges meetings with the faculty members to encourage them to utilise their expertise in getting industry projects. As an incentive, the faculty members receive 22.5% of the total generated revenue for providing expertise in the industry projects.

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

The College provided consultancy services in the areas of herbal drugs, method validation, toxicity, efficacy (Herbal Research Lab), Instrumental Analysis & training (P. S. Ramanathan Centre) and Bioanalysis (IATRIS).

The revenue generated in different years during the period 2012-2017 is as follows;



Dept	Activity	2012-17
Animal House	Toxicity, eye irritation, various efficacy studies	6.43 Lakhs
Herbal Research lab	HPTLC and HPLC analysis	7.28 Lakhs
P. S. Ramnathan centre	HPTLC, GC, GC/MS, AAS, FTIR, HPLC analysis	44.39 Lakhs
IATRIS	Clinical Studies and Bioavailability studies	480 Lakhs

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

The College follows a policy of sharing 22.5 % of the project cost with the faculty member(s) involved in the consultancy. The revenue generated through consultancy services is used for research projects of the respective Departments. 22.5% of the revenue generated is given to the faculty concerned and the remaining amount is utilized for developing research facilities and infrastructure of the College. Additionally, research work undertaken by students under these projects, is sponsored by the College.

3.6 Extension Activities and Institutional Social Responsibility (ISR)

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

NSS, NCC, Sports and cultural activities of the College are the primary instruments of promoting institution-neighbourhood-community network. Through them, the students reach out to the respective target audience in society within the city as well as outside. Extending a helping hand and rising to the occasion has been a tradition of Ruia College. This gets reflected in many activities conducted by the college.

- NSS unit organises various activities like group bonding program, blood donation drive, tree plantation, anti-plastic rally, street play and peace rally on various social issues to inculcate team spirit and for the holistic development of students.
- Nere village in Shantivan, Panvel have been adopted by the NSS Unit of Ruia College and the student volunteers under the guidance of the faculty have been proactively working towards the progress of these villages.
- The Extension and Outreach Committee of the College conducted various activities towards the fulfilment of Institution's social responsibility. It collaborated with various NGOs. (Refer 3.6.4)



- The College has established an Extra Mural Committee to coordinate activities and actions to make the campus greener and environment friendly. The management of College garden and its upkeep is looked after by the Committee.
- The College has set up a Gender Sensitization Cell under which various programs are arranged
 - To promote well-being of female student and faculty
 - To inculcate healthy life style in female students
 - To emphasize awareness programs on the rights of women
- With the growing need to understand the environmental problems and its impact, the Environment Awareness Committee organized various programs involving faculty and students. These programs involved tree plantation and tree naming around Ruia College, energy audit, converting solid waste into compost, seed plantation and making students aware about biodiversity.
- ‘Centre for Mindfulness and Well-being’ organises inspiring talks by experts on mindfulness and the management of negative emotions such as anger, fear and stress. The centre also takes care of individual and group counselling.
- Green house management regularly conducts workshops/ training programs for the community around the College on kitchen gardening, composting and soilless cultivation to create awareness about new alternative farming technologies.
- Centre for Slum Studies organises number of visits to slums in the city every year to sensitise the students to social issues such as urban poverty, problems of street children, social mapping, water conservation, and conservation of mangroves to name a few.
- Ramnarain Ruia College has entered into an MoU with S.K. Patil College situated in Malvan, District Sindhudurg of Maharashtra. Ruia College will lend its expertise and support to stimulate and facilitate academic development of S.K. Patil College through sharing knowledge, infrastructure and other resources available at Ruia College.

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

- The multifarious activities mentioned above are undertaken to promote citizenship roles and motivating social interaction among the students of the College using the structured institutional framework.
- At the student level (Tier 1 - grass root), there are disciplined student coordinators (Tier - 2) gathering and collating information pertaining to various student activities listed earlier which are then passed on to the relevant teacher coordinators(Tier 3) who in turn informs the authorities at the top – The Principal.
- All programs arranged and conducted by the students are with knowledge and consent from the College administration. A faculty member is assigned the responsibility of



from the College administration. A faculty member is assigned the responsibility of coordinating and monitoring activities of each student group / association.

Exemplary achievements and contributions by students in social causes are recognized and felicitated at the Annual Day celebrations (for e.g. Major Dadkar Trophy for Bravery, Prof. Sahuraja trophy for best NSS volunteer)

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

The IQAC coordinates the feedback process from various stakeholders like parents, students, alumni and the responses of these feedbacks are sought from the respective Departments. Necessary follow-up actions are implemented by the college administration in consultation with respective Departments.

Principal holds regular meetings with HODs and IQAC Coordinator during which progress and future plans of the Departments are evaluated.

Every year alumni get-together is organized during which illustrious alumni of the college are felicitated. During this function, the Principal makes the alumni aware of the overall progress made by the College.

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

At the beginning of the academic year, the Principal, Vice- Principals and the faculty in-charge of various extension activities jointly chalk out yearly calendar of activities and the expenditure involved for conducting these activities. The schedule of activities is made in accordance with the academic calendar.

Ruia College has always encouraged students` involvement in extension and outreach activities through NSS, NCC and Centre for Slum Studies and through various other Departments. The NSS unit of Ruia College has left no stone unturned in strengthening the social responsibility of Ruia College. To carry out various activities of NSS, the University allocates Rs. 220/- per student and Rs. 400/- per student to organise the annual NSS camp.

Ruia NSS unit organizes blood donation camp, save water project, Malaria awareness program, tree plantation drive, anti-plastic rally, peace rally annually. Every Saturday, NSS volunteers help the adivasi girls in subjects like Mathematics, Science and English of grades 5th-8th at Vidhayak Sansad-Shramajeevi Sanghatna's Eklavya Parivartan Ashram-School at Usgaon, Vasai. Ruia College has adopted the Indira Nagar Slums in Vikhroli, Mumbai, and the NSS Unit of the college conducts education activity in these slums every year and encourages activities like informative seminars, group bonding camps and gender equality awareness sessions. As a part of Swachh Bharat Abhiyaan, NSS volunteers took the charge of cleaning the College campus. The NSS unit of the



developmental activities for the villagers.

- Some of the special events in which NSS participated are Group bonding camp (2012), Uttarakhand Relief Fund collection, book donation drive (2013), Preparation of teaching aids for children with multiple disorders(2014), traffic control duty, recycling of paper waste by making paper bags, Self-defense training workshop (2015), tree plantation, Andhashradha Nirmulan drive, snake awareness session, painting of a ashram school, Paper waste collection drive (2017) to impart a sense of social responsibility among the students. At the adopted villages, the NSS volunteers built a *bandhara* (bund) on the river flowing through the village (2016) to stock water during monsoon for use during the lean period.
- NCC cadets, every year, assist the local police in cleaning the beaches after Ganpati Visarjan. They also participate in awareness programs on 'Don't Drink While Driving' along the highways.
- Centre for Slum Studies of the College takes active part in extension and outreach activities. Students did research based projects on a variety of topics like Poverty and Slums, Environment and Slums, micro-industries and slums.
- Extension and Outreach Committee invited NGOs like Sulabha Special School, NASEOH, Paraplegic society and Pocket Pal for sensitizing students to different socially relevant issues.
- To inculcate in the students an enhanced sense of social responsibility and sensitivity towards the underprivileged, the Extension and Outreach Committee sent 14 students to different centers that serve in areas like health, education and disability assistance during the winter break, in December 2016. Students helped the inmates of these centers in their daily activities, devised new methods to help the underprivileged and also organized New Year parties for them.
- Under the initiatives of Extension and Outreach Committee, the Department of Microbiology organized a 2-day workshop 'Exploring Biology' for students of Class IX of Sadhana Vidyalaya, Sion. Twenty five students, 12 from English medium and 13 from Marathi medium participated in this workshop. Student volunteers demonstrated the importance of beneficial and harmful bacteria through various experiments, blood grouping and different types of blood cells. The participants visited the composting unit and the Green House of the College. Department of Botany organized interesting experiments in Chromatography, plant anatomy and exhibited different specimens to these students. Department of Zoology arranged an exhibition of all animal specimens, from the College museum, to explain the concept of animal classification. The student volunteers conducted a quiz - game, BioHousie for these young students.

Participation in all such activities sensitizes the students and gives them an understanding of their social relevance and helps in character building, leadership and motivates them to become responsible citizens of the country.

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 faculty in extension activities through NCC, NSS, Extension and Outreach Committee, through Centre for Slum Studies of the college and also through respective Departments. Several Departments regularly involve the faculty and students in extension activities targeted to neighbourhood schools, communities and housing societies.

To acquaint the students with the activities of NSS and NCC, detailed information is provided in the College prospectus. At the beginning of the academic year the Principal and the NSS and NCC coordinators conduct an orientation for the students where they stress on the contribution of the NSS /NCC in promoting overall personality development, social service and patriotism.

- Volunteers of NCC and NSS arouse interest among students by displaying informative posters and also visit each class for canvassing.
- The College management has been always supportive in providing the needed infrastructural facilities and also gives freedom to the concerned staff to plan and execute their activities.
- The faculties are given duty leave for all extension activities.
- The students are allowed to adjust their practical and classes.
- On the College Day, certificate of appreciation and awards are given to students and faculty members of NSS/NCC to acknowledge their active participation, to celebrate their success and to motivate them. The best NSS and NCC students are felicitated on the College Day for exemplary work done throughout the year.
- College has an Extension and Outreach Committee which gives suggestions to the departments to encourage the students to take part in such activities, sensitize them to the social issues and also to organize awareness programs on the same.

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?

- As per a MoU with S.K. Patil College, Sindhudurg, Ramnarain Ruia College shares with them the resources of Ruia College in the form of faculty exchange and sharing of facilities which would help them in their academic development.
- Students of Chemistry Department have carried out an audit on the electricity usage and survey on solid waste in college.
- The College through the volunteers of NSS & NCC conducts socio-economic surveys of



the different schemes introduced by the government for upliftment of under privileged communities. The College has about 64 visually challenged students. NSS volunteers help these students in reading, writing and recording their notes and writing examinations.

- Ruia College also implements schemes like “Each One Adopt One” to provide financial support for education.
- The Ruia Counselling Centre aims at enhancing the educational, social and emotional development of students by conducting workshop, training and counselling.
- The Ruia Centre for Slum Studies organises visits to various slums especially at Dharavi, Bandra, Worli, Annabhau Sathé Nagar and Mankhurd to make students aware of different issues related to slums and to understand the socio-economic, political and educational status of the slum community.
- The Ruia Centre for Slum Studies in collaboration with the Samtol Foundation organized a survey to understand problems of street children.
- The Department of Microbiology organized a one day workshop for 48 school children from a lower socio economic strata. UG students interacted with these school children and explained simple biological concepts using demonstrations and experiments.

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.

Objectives:

The College encourages extension activities to promote exchange between the College and the society at large cutting across practices of teaching, research, and service. Vibrant outreach and extension activities will enhance the lives of students and will instil in them a deeper sense of service and social responsibilities towards community.

Outcomes of the extension activities:

- Through the various activities conducted by Departments, NSS, NCC and Centre for Slum Studies, the students received a wider social exposure. They were made aware of their roles, responsibilities and duties besides knowing their rights. Students developed several organisational skills from planning to execution, team work, cooperation, which enriched them to be a better human being with leadership qualities.
- Involvement in extension activities developed community orientation, community leadership and this lays the foundation for generating social workers in future. This also led to creation of awareness and scientific rationale, hygiene/health and sustainable development. The experience gained through extension and outreach programs helped students make better decisions, adapt to change, improve their self-esteem and better



prepare for their career, among other benefits. Such programs encouraged students to develop a lifelong ethics of service to society. Many such sensitized students opt for post-graduation in Social Services at Institutions like TISS, IIPS and Nirmala Niketan.

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

- The College makes plan for social activities with the consultations of Non-Governmental Organizations. With their valuable cooperation, the College starts its social activities like camps organized by NSS and other programs. The College-community participation helps to spread social extension activities. With the participation of the community, NSS undertakes developmental activities in the villages adopted by the College.
- The Institution ensures the involvement of the community in its out-reach activities and contribute to the community development by organising various activities such as anti-plastic drive, cleanliness drive, e-Waste Management, cancer awareness program, anti-aids rally, Andha Shraddha Nirmulan drive to name a few.
- In the project Kanya Bachav Abhiyan, NSS students performed street-plays to spread the message and create an awareness about 'Female Feoticide' and its impact on the society at various places like Indira Nagar, Vikroli, Mahul, Lal Maidan, Kala Chowki, Airoli and Abhudaynagar.

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

- The College with the help of K.E.M Hospital, Mumbai organizes Blood Donation Camp every year in the campus. Ruia NSS in association with Anubhav, Mumbai Unit conducts Group Bonding camp for team building, Residential camp, Peace rally and visit to J.J Hospital. A group of 40 volunteers worked with Muskan foundation at Bandra which works for children with multiple disorders. The NSS volunteers participated in voting registration campaign conducted in the College in collaboration with the NGO- 'Volunteer for a Better India'.
- NCC students with SNTD College, carried out an awareness drive, 'Save A Girl Child'. Ruia NCC cadets visited Matunga-Sion Police station to understand the administration and working in a police station. Information about various weapons and the judicial system was given by the police inspector at the station. NCC cadets actively participate every year in Ganpati Visarjan duty to assist the Traffic Police in handling the traffic.
- School students from various colleges in the vicinity were invited for workshops and various activities based on their curriculum by the Departments of Microbiology, Botany and Zoology.
- Under 'VISHWAS', a program is organized every year for the children from the neighboring schools. For two days the school children are taken on tour to various Science Departments where display of specimens and demonstrations of practical are



carried out.

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

The College has a long history of regionally relevant extension activities being conducted through its NSS Unit. This is amply exemplified by the award of best NSS unit and best NSS Program Officer at District level that the College received in the year 2015-16. Some of the awards received by the institution for extension activities and/contributions to the social/community development during the last four years are;

Competition	Rank/Prize/Championship	Event	Year
Inter-collegiate competition organised By SIWS College and Women development cell on the theme of “Meri Beti Pyari Beti”	2 nd prize at District level	Street Play	2012
Anubhav Mumbai (NGO) of Nirmala Niketan College of Social Work	Prizes won	Priyanka Tupe, Vasant Kocharekar and Khushali Valia in Poster competition	2013
University of Mumbai, theme of ‘Road Safety’	Prize won	Somnath Palicha, Inter – Collegiate Poster competition	2013
Nashamandalis Mahamandals State Level Competitions	First Prize	Street Play	2013
Overall Championship for Best College		Udaant (Kirti College)	2013
Elocution	First prize		
Best Out of Waste	First Prize		
Street Play	First Prize		
Debate	First Prize		
Poetry Appreciation	First Prize		
Wall Painting	Second Prize		
Towards A Human Society	Second Prize		
Overall Championship for Best College		Janeev (Sathaye College)	2013
Elocution	First and Third Prize		
Essay	Third Prize		
Poster Competiton	Third Prize		
Street Play		Sphurti (M.D.College)	2013



Poster Making	Second Prize		
Debate	Consolation		
Ideal Jallos State Level Competition	First Prize	Street Play	2013
Yuvak Biradari Competitions	Second Prize	Street Play	2013
Medical Attachment Camp at INHS Aswini	2nd prize	SUO Aishwarya R First Aid program	2014
Overall Championship		'Indradhanushya' (M.L Dhanukar College, Vile-Parle)	2013
Street Play	First Prize		
"Igneel" organized by the NSS unit of Bhavans College, Girgaon Chowpatty	Overall Championship		2013
Lakshya' organized by the NSS unit of SIES College, Sion	Four prizes		2013
Remarkable Blood Collection within Mumbai City District Colleges	Special Trophy by MDACS		2013-14
The CATC camp was held at Bhayandar	First prize and Best Cadet First prize First prize	Cdt. Anuja Kulkarni in Drill and Solo Dancing Cdt. Sayali Kasare in Solo singing Cdt. Mayuri Patkar in Poster making	2015
Inter-collegiate Drill Competition organized by K.J.Somaiya College	First prize First prize	Drill Competition SGT Anuja Kulkarni as Best Dahina Darshak.	2015
ATC cum RDC camp at Home Guard, Ghatkopar	First prize First prize	JUO Revati Gokhale in Drill Competition CQMS Vrunda Harba in Best Piloting Competition	2015
NSS Unit and P.O	District Level Award for best NSS unit and Best P.O	Ms. Shilpa Neve, NSS in-charge, Ruia College	2015-16

3.7. Collaboration

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



The College, proactively establishes collaborations with various research institutes, laboratories and industries to facilitate the faculty to carry out research in contemporary fields in Science and Humanities. Some of the important collaborations are listed below;

Collaborative research,

- College has Industry collaboration center which collaborates with industries providing expertise in the areas like Chromatography, Analytical support, Algal Biotechnology, Animal Studies, Genealogy, Archival, Intercultural studies.
- College collaborates with Industries, Institutes and Research laboratories through the contact of the Principal, alumni and faculty members who have strong rapport with them. Department of Mathematics, Physics, Microbiology and other Departments of Biological Sciences use resources of TIFR, IIT, ICT, BARC. for joint research programs.
- DBT, Government of India along with Indian Statistical Institute, Kolkata financed two days workshop on 'Application of Mathematics and Statistics' in areas ranging from Biology to Geology for 21 students and 5 teachers of Mathematics and Statistics.

Staff exchange,

- Under DBT Twinning program, JRFs and faculty members from other Universities are trained in Herbal Research Lab on analytical techniques.

Sharing facilities and equipment,

- MoU with S.K. Patil College will enable Ruia College to extend benefit of resources of Ruia College like well-equipped laboratories and digitalized library to the progress of S. K. Patil College.
- Departments of languages and Social Sciences share the facilities of Asiatic Society of Mumbai, Heras, K R Cama Oriental Institute, Bhandarkar Oriental Research Institute.

Research scholarships

- Two fellowships for supporting travel of research students for presenting research papers in conferences and seminars (SBK & Netravali) have been instituted

Others

- On recommendation from our faculty, many students are selected for fellowships in foreign Universities for e.g. one student from Department of Mathematics received Chancellor's scholarships at University of Warwick, England for doctoral research work.

3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of national importance/other universities/industries/Corporate (Corporate entities) etc. and



how they have contributed to the development of the institution.

The details of the MoUs and collaborative projects with other universities and industries is given below in the table;

Department/Individual	Activities	Collaborating Agencies	Year
Ramnarain Ruia College	Visit to various Universities and programs based on individual expertise	College has signed MoU with two universities of the Commonwealth of Pennsylvania namely; Harrisburg University and Westchester University.	2014-15
	Developing kits for Molecular biology experiments	Central Dogma Pvt. Ltd. 12 th April 2016	2015-16
Computer science		Zen Technologies	2013-14
		IGATE Global Solutions ltd. 5 th Nov 2014	
Tourism and Travel Management	Syllabus Framing	Garware Institute of Career and Education Development	2014-15
	Syllabus Framing, Internship	Veena World	
	Syllabus Framing, Internship	Yatra Metro X	2015-16
Greenhouse Management	Syllabus Framing, Internship	Professional Agrotech Pvt. Ltd. 2014	2014-15
	Syllabus Framing, Internship	Blooms Horticulture Consultation and Solutions. 2014	2014-15
	Internship	Yaswant Krishi Paryatana Kendra	2015-16
	Internship	Farner City	2015-16
		Suez Environment India Pvt Ltd	
Pharma Analytical Science	Syllabus Framing, Internship	J. B. Chemicals & Pharmaceuticals Ltd. 15 th June 2015	2015-16
		Cipla Ltd. 22 nd June 2015	2015-16
		Nichem Solutions. 15 th June 2015	2015-16



Animal Testing Centre and IATRIS	Anti-lice study	NeoPharma	2014
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College has a large number of collaborations for research and extension activities with various organizations as follows;

International	Westchester University and Harrisburg University (Commonwealth of Pennsylvania), Unilever (Thailand), Unilever Industries (Singapore), Cincinnati University (USA), Iladevi Herbal & cosmetic products (London), University of Turku (Finland), University of Charles de Gaulle, AGRAF International Research group, Valparaiso University (USA), Ontario Universities (Canada), Universities in Philadelphia (USA)
National	BARC, Ministry of Environment & Forest, Dept of Biochemistry (M.S. University, Baroda), ICT, BRNS, NBHM, NCM, Dept of Chemistry (Nanded), Agarkar Research Institute (Pune) UM-DAE Centre for Excellence in Basic Sciences (University of Mumbai)

Number of Linkages Created During the last five years

Dept./ Faculty	Nature of Activity	Collaboration With	Local	State	National
Dr. Ganesh Iyer, And Dr. Seema Menon	Tree Plantation	Moef And Baif Pune		√	
R P Phadke L R Phadke	Research Project	US Dept of Agriculture, USA.			
L R Phadke	Research Project & Training	Biogenomics	√		
Dr. D Vora	Enzyme Assay	Dr. Ambedkar University			
Physics Dr. Pratap Patil	Characterization of Thin and Thick Films	Institute of Science, Mumbai.		√	--
Dr. Sunita Shailajan	Major project:- development of a polyherbal combination as a potential immunomodulator and evaluation of its efficacy as antimycobacterial agent	BARC			√



	Major Project:- Phytochemical Profiling, Molecular Characterization And Conservation Of <i>Flemingia Vestita</i> : Endemic Medicinally Important Plant Of Northeast India	North Eastern Hill University, Shillong			√
	Major Project:-Molecular Characterization And Chemoprofiling Of Two Pharmacologically Relevant Species Of <i>Dendrobium</i> Found In Northeast India	North Eastern Hill University, Shillong			√
	HPTLC Analysis of Herbal Samples	NMIMS		√	
	HPTLC Fingerprinting	MVLU College		√	
	HPTLC Analysis (Fingerprinting And Quantitation)	University of Mumbai		√	
	HPTLC Analysis (Quantitation Of Markers From Plant Extracts And Herbal Formulation)	Ajanta Pharma, Mumbai		√	
	HPLC Analysis	Tilak Ayurveda Maha Vidyalaya		√	
	Antilice Study	Neo Pharma, UK			
	HPTLC Method Validation	University of Mumbai, Kalina	√		
	Pharmacokinetic Study And HPTLC Analysis of Spices	NMIMS School of Science	√		
	HPTLC Analysis of Aloe And Quantitation of A Marker	M.S. University, Vadodara		√	
Dr. Jessy Pius	Research	ICT		√	
	Circot-lit			√	
Louiza Rodrigues	Research Project , Designed Syllabus on Environmental Criminology	Raksha Shakti Universtiy, Ahmedabad			√
Dr. Sanjeevani Gharge	Mini-MTTS Program	NBHM			√
	Madhava Nurture Program	NBHM			√
	ATMW (Almora)	NCM-Joint			√



		venture of TIFR, IITB			
	IMOTC(MUMBAI)	HBCSE-TIFR			√
	Workshop on Applications of Mathematics and statistics with Machine Intelligence Unit (MIU)	Indian Statistical Institute, Kolkata			√
BVoc GHM	Curriculum development, Internships and Teacher training	Blooms	√		
		Professional Agrotech	√		
BVoc TTM	Curriculum development, Internships and Teacher training	Abacus			√
		Garware Institute	√		
		Yatra Metro X			√
BVoc PAS	Curriculum development, Internships and Teacher training	J.B Chemicals, LabIndia & NiChem			
Chemistry Dept.	Projects	Dept. of Chemistry, ICT, Mumbai		√	
Marathi, BMM (Marathi), NSS	Film Festival for Gender Sensitization	Mawa		√	
Dept. Of Sanskrit	Conference	Maharshi Vyasa Vidya Pratishthan, Mumbai			√
	Workshop on Local Level	Dept of Linguistics (University of Mumbai)			√
	Seminar and Study Tour	Dept of Sansk (University of Mumbai)- Kalidasa Un. Ramtek		√	
Louiza Rodrigues	Coordinator, Conducting Surveys In Mumbai	Suez Environment Pvt. Ltd.			√



Ruia College has entered into a ‘Higher Education Academic Partnership’ with the Commonwealth of Pennsylvania by signing a MoU with the Commonwealth of Pennsylvania. (Dec. 4, 2014). The MoU includes exchange programs for teachers as well as students and will also offer the College an opportunity to have tie ups for Projects, Research, Teaching etc. for the Faculties of Arts and Science.

Ruia College has established a Centre for American Education Collaborations in American Education & Research, Mumbai under a MoU with Commonwealth of Pennsylvania.

Fifty five collaborations /linkages established by the Institution have helped in developing contact, knowledge sharing, training students & faculty in the field of research & extension activities and increasing international exposure for the College.

The industrial projects conducted by the College and industrial services provided by the College not only nurture the industry-academia linkage but also helps College to generate additional funds. As mentioned earlier, part of the revenue from such collaborations is shared with the respective faculty while the remaining part is used for the maintenance and managements of the instruments.

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.

International collaboration with NeoPharma, (United Kingdom) for Anti-lice study which was conducted in Animal Testing Centre, Ramnarain Ruia College for a period of five months.

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.

Ruia College invites eminent scientists, expertise and scholars for national conferences wherein the College is a host for the event. Various conferences and seminars organized by the College, in the last five years, are as follows:

Year	Conferences (07)			Seminar (11)			Names of eminent scientists who contributed
	Local/ State	National	Inter - national	Local/ State	National	Inter - national	
2012-13	--	03	--	--	01	--	Dr. Narendra Jadhav, Dr. Dilip Nachane



2013-14	--	02	--	--	--	--	Dr. Ajit Datar, Dr. D. G. Naik, Dr. Pushpa Rajapure-Tapas, Pandit Satyashil Deshpande, Dr. Aruna Dhere, Sucheta Chapekar, Dipak Kannel
2014-15	01	01	--	--	04	--	Prof. Ramani Narayan, Prof. B.M. Bhanage, Ms. Chitralkha Vaidya, Dr. N.T.Joshi, Dr. B.N.Jagtap, Dr. Anirudha Pandit, Dr. Amol Kulkarni, Dr. Rajnish Kumar, Dr. Rangrajan.(Sanskrit and philosophy to be added)
2015-16	--	--	--	--	--	--	Dr. D.G. Naik, Dr. Ajit Datar, Dr. Bal Phondke, Dr. Nilu Damle, Dr. Abhijit Ghorpade, Dr. Anupama Muzumdar, Prof. Shehernaz Nullwala
2016-17	--	--	--	01	01	01	Dr. Narendra Jadhav, Dr. Dilip Nachane

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

- The linkages and collaborations of BVoc courses have resulted in total 15 MOUs with industries. The beneficiaries of the linkages are industries and research scholars. Students are benefitted as they get an exposure of working with industrial personnel and they also get an opportunity to work as interns in industries.
- The College has signed MoUs with Harrisburg University and Westchester University (Pennsylvania, USA). As a part of this MoU with Harrisburg University, a workshop has been organized by the Harrisburg University at the College, for UG students and teachers of Science faculty in July 2017 in the emerging applications of biotechnology and nanobiotechnology. The faculty for Harrisburg University would be conducting the workshop and will also be delivering lectures to the students on topic related to Biotechnology and nanosciences.
- In a program to expose students and faculty to global practices a collaborative program has been scheduled in the Summer of 2017. 21 students and 2 teachers will be



participating in a 3 weeks workshop on “The Biotechnology Exploration Program” at Indiana University of Pennsylvania in May, 2017.

- The College has been actively collaborating and has established linkages with various industries like Ajanta Pharma, Sun Pharma, Pitambari, etc. and governmental agencies like UGC, DBT, NMPB, DAE-BARC, BRNS, Rakshashakti University. These linkages have helped in strengthening and improving quality of various research programs in the college.

a) Curriculum development/enrichment

- The experience, interaction and feedback from the different collaborations of the College with various organizations helped in identifying new and emerging trends and job oriented areas which should be included in the curriculum so as to contextualize them. For e.g. BVoc courses like Tourism and Travel Management, Green House Management and Pharma Analytical Sciences.
- To frame syllabus for the above mentioned skill based courses based on the skill gap in various sectors, MoUs were made before framing the syllabus. College has made 12 MoUs with industries from Agriculture/Horticulture sector, Tourism sector and Pharma sector.
- The curriculum was designed by the various subjects’ Board of Studies as per UGC norms. Suggestions received from the collaborating agencies are incorporated within the frame work of curriculum designed by the University.

b) Internship/On-the-job training update

- The PG and UG students of the Science Departments like IT, Computer Science, Biochemistry, Biotechnology, Bioanalytical sciences, Chemistry, Physics, Statistics, Lifescience, Botany and Zoology undergo internship in various industries or research institutes to get hands on experience in research, to learn good laboratory practices and realize real time situations. Some of the PG students carry out short term projects in collaboration with different research institutes and NGOs.
- Students of BVoc courses like Tourism and Travel Management are doing internship with Yatra Metro X, Green House Management with Baramati Agriculture University, Professional Agrotech Pvt. Ltd., and well known nurseries in Mumbai, Pharma Analytical Science students with Pharma companies like Cipla, Ajanta Pharma, Sun Pharma, J. B Chemicals. Students from most of the Science Departments undergo on-the-job training in various Industries/ research institutes while they work for their MSc dissertations. Such students are able to compete better nationally as well as globally in getting placements.

c) Summer placement

Students from IT are regularly placed in industries like TechMahindra, Cognizant, L&T,



Infotech, Reliance, J&J,IIT (Mumbai), ICT (Mumbai), Himedia Lab, Wellingkar's Sports Club, TCS, French University of Education. Students from Microbiology are placed in VJTI Summer School Programs. Under 'Inspire' DST Program students are placed in reputed Universities like, DU, MS University.

d) Faculty exchange and professional development

The College utilizes its established collaboration proactively to foster exchange of knowledge and to enhance the technical skills of the faculty members. The expertise of various faculty members have been utilised by various universities like,

1. Dr. Ravi Phadke (Microbiology) is a visiting faculty at ICT, VJTI and Olympiads
2. Dr. Mohsina Mukadam (History) was elected as a member of Senate and BCUD by University of Mumbai.
3. Dr. Louiza Rodrigues (History) has been invited for a lecture on 'Heritage of Mumbai' in Jai Hind College, Mumbai.
4. Dr Jyoti Vora (Biochemistry) is a visiting faculty at IITB and University of Mumbai.
5. Dr. Sasikumar Menon (Zoology) is an invited faculty at ICT, Mumbai. Academy for Clinical Excellence for Bombay College of Pharmacy, NMIMS (School of Sciences).
6. Dr. Sunita Shailajan (Botany) has been nominated as a mentor in Star College Scheme at KC College and Vaze College.
7. Dr. Sanjeevani Gharge (Mathematics) is an invited faculty at ICT, NCM and NBHM training programs and Olympiads.

e) Research

The linkages that the College has established, have made the orientation of research in the College to be more interdisciplinary with interdepartmental collaborations in various projects/programs like;

1. Phytochemistry, Pharmacology (DBT Twining)
2. Clinical Microbiological studies (IATRIS)
3. Algal Biotechnology (CE)
4. Microfluidics (CE)

f) Consultancy

The College encourages consultancy through its industry-academia linkages. Departments like Bioanalytical Science, Animal Testing Centre, Herbal Research lab and P. S. Ramanathan Instrumentation Centre are involved in consultancy projects like Toxicity and



Eye irritation studies sponsored by Ajanta Pharma, Anti-fungal studies sponsored by Sun Pharma, Toxicity studies sponsored by Pitambari.

g) Extension

The expertise in research and training developed at various labs in the college are extended to research students of various other Universities like NEHU, MS University and industry personnel like IATRIS. Some of the research outcomes have been patented (Marico Industries and CLRI, Chennai under DST).

h) Publication

Various research projects undertaken at the College have resulted in 336 publications in last five years, out of which 280 articles are published in International Journals and 56 in National Journals.

Outcomes of various collaborative projects are published as reports.

1. Report on Eye irritation study of ophthalmic solutions for Ajanta Pharma.
2. Report on Anti-fungal study on Hairless mice for Sun Pharma.
3. Publications generated (02) from collaborative project with NMPB and AYUSH, (Govt. Of India).
4. Monographs of six phytochemical markers have been published out of the data generated from projects sponsored by NMPB and AYUSH (Govt. Of India).

i) Student Placement

The involvement of research students for industry projects significantly improves their employability and many research students who are involved in industrial research have been placed in industries like;

1. Dr. Neelam Sayyed- ElectroLab
2. Dr. Kavita Khandari- Ajanta Pharma
3. Dr. Ashish Singh- Ajanta Pharma
4. Dr. Nilesh Joshi- Syngene, Bangalore
5. Dr. Bhalerao Khairnar- Glenmark
6. Dr. Mithun Sarandhar entrepreneur in Lab Services.

j) Twinning programs

The expertise of faculty member in the areas of phytochemistry, toxicology, extraction of



herbal materials, resulted in two collaborative research projects under the DBT Twinning program.

1. Molecular characterization and chemoprofiling of two pharmacologically relevant species of *Dendrobium* found in northeast India (2014-17).

k) Introduction of new courses

Utilising these long standing industry linkages with pharmaceuticals, the college started a skill based vocational programs (BVoc) in Green House Management and Pharma Analytical Sciences .

l) Student exchange:

In the year 2014-15 a total of 5students from the History department worked with Rakshashakti, Ahmedabad under a research program.

Under DBT- Twinning, exchange of research scholars and faculty were organised for the training and enrichment of skills in the areas of Plant Tissue Culture (NEHU) and Phytochemistry (Ramnarain Ruia College).

m) Any other

Collaborative research with industries has helped the college in following areas;

1. Maintenance and calibration of instruments
2. Availability of expensive phytochemical standards for research.
3. Contribution of the Institute in developing marketed formulation in the FMCG section like Figurin, Gripe water (Ajanta Pharma); ointment (Sun Pharma).

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

The College leverages its alumni, research students and governmental associations in obtaining newer projects and continuing the collaborations. Alumni who are well placed in the industry pay very significant role in initiating such collaborations.

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

The College has been continuing its legacy of over seven decades of research culture with proactive measures in promoting and nurturing industry-academia linkage which ensures not only the contemporary nature of the research but also making it applicative and



interdisciplinary in nature.

- The recognition of the College as a Scientific and Industrial Research Organization (SIRO) has been in place since last three decades which substantiates the institution's continued contribution to industrial R&D
- The commencement of skill based courses especially in the subjects of Pharma Analytical Sciences and Green House Management has been a direct result of the expertise developed by the institution by industry-academic linkage.
- The adoption of a College in the rural areas of Konkan in Maharashtra is another extension of its expertise in research & development.



CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

Ruia College facilitates effective teaching by creating infrastructure that would support and enhance the contributions of its faculty and involvement of the students. The College focuses on providing adequate facilities to all with an inclusive student-centric approach. Providing clean and healthy spaces that create an environment that is conducive for study and relaxation and technological support systems for innovative teaching-learning experience are integral part of the infrastructural development at the College. To meet the increasing demands of new courses and revised syllabi, the college has, over the last four years, augmented the ICT supports of classrooms and laboratories. The Library, the epicentre of knowledge dissemination, has been completely computerised with state of the art archiving facilities for ease of access and issuance of books and periodicals. The college has a well-equipped Gymnasium and a Gymkhana which houses a shooting range of international standards. Despite being situated in the heart of a metropolis like Mumbai, the College makes conscious efforts to optimize the utilization of the available space.

4.1 Physical Facilities

4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

The infrastructural policy of the college is student-centric and places emphasis on the educational upliftment and the well-being of students. The college encourages use of technologically advanced tools and resources and incorporates requisite support systems in the infrastructure. The College has successfully obtained support grants for infrastructure, equipment and teaching aids from various funding agencies like UGC, DBT and well-wishers. The College also obtained grants for implementing skill based courses for which special facilities were created under the DDU-KAUSHAL scheme. The inclusive approach of the College is reflected in the attempts made in last four years to redesign infrastructure making it friendly to differently abled students.

The College also requests the Ruia College Alumni Association to participate in the infrastructural development of the College. The Alumni Association has been quite proactive to these requests and several prominent alumni have contributed their mite in the development of various facilities at the College.

4.1.2 Detail the facilities available for

a) 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.

The College received grants under the programs of CPE, CE, UGC, STAR (DBT), and Skill based courses (DDU-KAUSHAL) which have been utilized for creating and upgrading various facilities at the College.

Classrooms

The College has 48 classrooms out of which 40 are smart classrooms equipped with Internet / Intranet connection, Data projector, computer and projection screen. In the last four years, the College has created several new facilities and upgraded many existing facilities as below:



Department	Facilities
New Additions	
Department of Communication & Mass Media	Two ICT enabled classrooms
Tourism and Travel Management	One Smart Class room
Pharma Analytical Sciences	One ICT enabled Classroom

Technology enabled learning spaces other than Classrooms and laboratories -New Additions:

- Audio-Visual Recording Studio at Multi Media Creative Centre
- Sound recording studio at the Department of Communication and Media
- Audio Recording facility at the Cell for Students with Special Needs
- Computerized Simulated Travel Desk with software (Sabre) at the department of Tourism and Travel Management

Upgradations:

- e-Learning Centre: Library has an E-learning Centre with 30 computers. The e-Learning Centre in the library is used by students and faculty for conducting seminars and hands-on sessions.
- College Campus is Wi-Fi enabled.

Seminar Halls

- One acoustically designed auditorium with a capacity of 380
- Two Seminar halls with a capacity of 120 each, of which, one was renovated in 2016.
- One Conference Hall with a capacity of 40
- Two seminar rooms with a capacity of 50 each
- Five smart classrooms that can be used as seminar rooms with a capacity of more than 80

Tutorial Spaces

Three computer laboratories are used as tutorial spaces. Two large classrooms double up as tutorial spaces.

Laboratories

The College increased the number of laboratories in various departments by adding new laboratories and upgrading the existing laboratories as enumerated below:



Department	Facilities
New Additions	
Green House Management	A Smart Lab with one Smart Board, Greenhouse (prototype) with automated fogger system and three shade net houses with eight different types of soilless cultivation units
Microbiology	Microfluidics Lab
Bioanalytical Sciences	One Laboratory
Lifesciences	One Algal Research Lab
All Languages	Two Language Labs with 10 Computer terminals each with Digital Language Lab software by ORELL & iLotus software (5 levels)
Special Research Laboratory	Research Lab with 10 computers with requisite statistical software (Stata & EViews)
Upgradations	
Chemistry	Two smart labs
Microbiology, Botany	Two smart labs each
Lifescience, Zoology	One Smart Lab each
Physics	One Smart Lab
Languages	Two Smart Labs
Pharma Analytical Sciences	Two well-equipped Laboratories
College Office	10 Additional computers

Botanical Garden

The College has a garden and plants needed for conduct of practical are grown in the garden. The garden is maintained by the Departments of Botany and Greenhouse Management. In addition, there is a Polyhouse where several ornamental and medicinal plants are grown.

Animal House

The College has an Animal Testing Centre which is approved by CPCSEA, Govt. of India (CPCSEA/315). The Animal Testing Centre is used extensively by postgraduate and research students to perform their experiments.

Specialized facilities and equipment for teaching, learning and research

- Plant tissue culture facility
- Animal tissue culture facility
- Shade net House with soilless cultivation units (Hydroponics, Aquaponics, etc.)
- Herbarium and Specimen museum Advanced Instrumentation Centre-PSRAIC Herbal Research Laboratory

Extra - Curricular Activities - Sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, public speaking, communication skills development, yoga, health and hygiene, etc.

Sports, outdoor and indoor games

- The College has setup a shooting range meeting international standards which is one-of-its-kind in a college. The facility has a wide range of Olympic standard weapons. The



Sports Department has procured two units of Electronics Target for shooting (International Category) with the help of funds received from the CE Grant.

- In addition to this, the College has a badminton hall, boxing equipment, table tennis tables, carrom and chess boards, weight lifting and power lifting facility, Taekwondo and Kabaddi mats, etc.
- An open ground shared by colleges of the same management is available nearby for practicing outdoor games. Additionally, the College rents nearby grounds for outdoor sports training sessions such as New Hind Cricket Club ground situated across the college for Cricket practice, Indian Gymkhana at Matunga for Basket Ball, Samarth Vyayam Mandir at Shivaji Park for Kho kho, etc.
- There are qualified coaches/instructors in the college who have been appointed to train the students in various sports like shooting, boxing, taekwondo, badminton, etc.

Gymnasium

A well-equipped gymnasium with trained instructors, is available within the campus, which offers its facilities to all students and staff.

Auditorium

- A state-of-the-art auditorium, with a seating capacity of 380
- A mini auditorium cum seminar room with a capacity of 120
- An open-air theatre
- A studio-cum-mini theatre

These facilities are used for extra-curricular activities conducted by RPAS (Ruia Performing Arts Society), Ruia Natyavalaya, Vidyarthi Pratinidhi Mandal, etc.

NCC and NSS

The facilities provided to the NCC include a room equipped with a computer and a printer and storage facility for uniforms and other material used during the practice sessions and parades. Also, dummy rifles are stored in the NCC unit and are used by the cadets during their parades. NSS unit has a separate room. The college provides infrastructure to carry out the activities of the NSS which include Blood Donation Drives and Composting.

Cultural Activities

The Auditorium, the Mini auditorium and the quadrangle are extensively used by the Ruia Performing Arts Society (RPAS) and Ruia Natyavalaya, which are part of the cultural initiatives taken by the college. The RPAS has a room of its own where practice sessions are held and musical instruments are kept. The Vidyarthi Pratinidhi Mandal (VPM), Student Council, which organizes intra and inter-collegiate events and encourages student participation in a variety of extra-curricular activities, also uses these facilities.

Public speaking

- The Department of Mass Media has a Multi Media Communication Centre which is utilized to conduct training and workshops in public speaking.



- Events like the G.D. Parikh state level elocution competition and other competitions organized by Marathi Vaadsabha as well as other departments are organized in the Mini auditorium.

Communication skills development

The Language Lab equipped with 20 PCs and 2 types of software - ODLL and iLotus Learning are utilized to improve English communication skills of vernacular medium students. The facility is used by other language departments too. Through video recording, students and faculty can improve their public speaking skills.

Yoga, health and hygiene

- The college has been regularly conducting yoga sessions for students and staff for physical and mental well-being. The college also celebrates International Yoga day in the quadrangle/terrace by holding sessions on yoga. Departments of English and Philosophy and NSS use a 50-minute documentary film 'Common Yoga Protocol' for teaching yoga to students and staff.
- The Centre for Mindfulness and Well-being organizes talks on self-development and workshops on Group Meditation. Guest lectures are also arranged on health and hygiene. In the last four years, 39 sessions were arranged and were attended by students.
- The Ruia College Alumni Association (RCAA) conducts annual medical camp for the benefit of students and non-teaching staff where dental health and general health are evaluated with pathological investigations.
- The Department of Psychology conducts Add-on courses in Basics in Neuropsychiatric Disorders, Hypnotherapy and Rational Emotive Behavioral Therapy. Students with mental health problems are counselled as and when required. Workshops on communication skills, assertiveness, leadership skills, emotional intelligence and self-esteem are held in the Department of Psychology. The Psychology laboratory is equipped with Reaction-time instrument for evaluating body responses.
- The Health and Counselling Centre is equipped with a bed, a wheel chair and a First-aid kit. First Aid Kits are also placed in all laboratories, VPM room, Staff room and office.

4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally 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 expansion, if any)

In order to meet the curricular demands of various subjects and new courses the college has generated funds through various agencies and sponsors including alumni for upgrading and augmenting the existing infrastructure. The management has also supported and helped in such upgradation.



Facilities	Grants Utilized	Amount Rs (in lakh)
New Additions		
DCM Classrooms (02), Computer Lab and Sound Recording Studio	Reliance	14.06
GHM Smart Lab with one Smart Board, a Greenhouse (prototype) with automated fogger system and three shade net houses with eight different types of soilless cultivation units	DDU-KAUSHAL	53.41
Microfluidics Lab (Microbiology)	CE	21.44
HPTLC & Modified Microwave Oven (Chemistry & Lifescience)	CE	27.89
Instruments (Chemistry)	UGC XII th Plan	0.73
One Laboratory (Bioanalytical Sciences)	College management	5.99
One Algal Research Lab (Life Sciences)	Reliance & UGC XII th Plan	12.36
Two Language Labs with 10	CE	9.90
Computer terminals each with Digital Language Lab software by ORELL & Lotus software (5 levels) – All Language Departments		
Research Lab with 10 computers with requisite statistical software (Stata & EViews) – Economics & Statistics	CE	2.56
Office space with one Meeting Room and one Admin Area	DDU-KAUSHAL	7.43
Upgradations		
One Smart Class room with Simulation Travel Desk (Tourism & Travel Management)	DDU-KAUSHAL	8.62
One ICT enabled Classroom (Pharma Analytical Sciences) and administrative area	DDU-KAUSHAL	12.09
Two smart labs (Chemistry)	CE	13.49
Four smart labs (Microbiology & Botany – two each)	CE	
Two Smart Labs (Lifescience & Zoology – one each)	CE	
One Smart Lab (Physics)	CE	
Two well-equipped Laboratories (Pharma Analytical Sciences).	DDU-KAUSHAL	54.03



Air-conditioning & Computerization (Cell for Students with Special Needs)	Well-wisher	1.00
Computers in the College Office & PA system	CE	9.70
CCTV Surveillance System	Management	1.98

The College has been utilizing grants received from CPE, CE, DBT (STAR College Scheme and STAR Status), KAUSHAL for equipping the laboratories and other infrastructural facilities with necessary equipment and software. Master Plan is attached as Appendix.

4.1.4 How does the institution ensure that the infrastructure facilities meet the requirement of students with physical disabilities?

- Ramps have been built at all the entrances to facilitate the entry of physically challenged students into the college.
- The boys' washroom in the College has been redesigned to facilitate use by physically challenged students.
- The College has around 60-65 visually challenged students and the Cell for Students with Special Needs is strategically located on the ground floor. The centre is equipped with Tape Recorders, Braille Embosser, Braille software for Braille typing, JAWS and NVDA, six iPods, computer operation software, books written in Braille, audio recording facilities, etc.

4.1.5 Give details on the residential facilities and various provisions available within them:

Hostel facility

The College does not provide any hostel facility. The faculty, however, assists the students by providing the necessary information about available accommodation facilities in the vicinity.

Recreational facilities, gymnasium, yoga centre, etc.

In addition to having a well-equipped Gymnasium and Gymkhana, the college is also well-equipped for indoor games like Badminton, Table Tennis, carrom, chess, boxing, etc.

Facilities for medical emergencies

There is a Health and Counselling Centre in the College. The various departments in the college have their own first aid kit for medical emergencies and there is also a doctor on call who would attend to the students, in case of any emergency.

Recreational facility - common room with audio-visual equipments

College has a well-maintained garden with areas for relaxation. An open-air theatre is available in the quadrangle. The Staff Common Room is equipped with a music system and is Wi-Fi enabled.



Constant supply of safe drinking water

Water Coolers with purification systems are installed on every floor in the premises including the students’ and staff common room.

Security

The security of the College is outsourced to a professional agency. CCTV cameras are installed at strategic positions. The Local police are contacted for additional security requirements like College day, Utsav, Aarohan, etc.

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?

- The College has a tie up with a local doctor, Dr Anjali Kulkarni, who resides in the vicinity and is available on call. In addition, the College also has contact details of doctors who can be available at times of emergency.
- The College has a Health and Counselling Centre equipped with a wheelchair, a bed and first aid.
- First aid kits are placed in all the laboratories, in VPM room, Staff Common Room, NSS, NCC rooms and the office.
- The Ruia College Alumni Association (RCAA), in conjunction with Doctors on the panel, conducts yearly health check-ups /medical camps for the benefit of students and non-teaching staff. Guest lectures by eminent doctors are also arranged to sensitize students on issues related with health and hygiene.
- The Centre for Mindfulness and Well-being conducts workshops for the staff and students on self-development and holds practical sessions on meditation. In addition to this, this centre also conducts various courses for holistic upliftment of students like Yoga, Stress Management, etc.
- The student counselling cell counsels the students for mental health problems whenever required.

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, Counselling and Career guidance, Placement unit, Health centre, Canteen, recreational space for staff and students, safe drinking water facility, auditorium, etc.

Facility	Location	Amenities
IQAC	First Floor	Separate designated room with computers, printers, internet and telephone facilities
Grievance Redressal unit	Conference Hall	Separate designated room with internet, telephone and projector facilities



Women's cell	Conference Hall	Separate designated room with internet, telephone and projector facilities
Career Guidance Cell	First floor	A separate room with internet, computer
Placement Cell	First Floor	
Entrepreneurship Cell	First Floor	
Health and Counselling Centre	Ground Floor	A separate room equipped with a wheelchair, bed and first aid
Canteen	Ground Floor	A well-managed canteen with separate dining areas for the students and faculty. The college canteen serves wholesome food at reasonable rates. Various types of cuisines are available to cater to the varied tastes of the students. Take away as well as bearer service is provided so that the staff members could enjoy meal in the staff room and departments. The canteen is also Wi-Fi enabled.
Auditorium	Third Floor	The auditorium is acoustically designed and has a seating capacity of 380. A lift is available for convenient access.

Recreational space for staff and students

- The staff and the students make use of Gymkhana and its facilities such as the badminton court and play indoor games like chess and carrom.
- There are separate common rooms for girls and boys with rest room facility, changing room and lockers.
- The College has a Wi-Fi enabled spacious quadrangle and two garden areas with comfortable seating arrangements for students to relax and rejuvenate.

Safe drinking water facilities

- Water coolers with water purifiers are installed on each floor of the college to provide safe drinking water to the staff and students. The water purifiers are maintained regularly through annual maintenance service contract.

Other facilities

- Fire extinguishers are installed at strategic locations and all science departments.
- 23 CCTV cameras are installed at various strategic positions on the campus for safety and security purposes. The expenses for the same, was borne by the Parent body.
- Public Address System is installed for announcements in general and at times of emergency.



4.2 Library as a 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?*

The Library Advisory Committee has the Principal as the Chairperson and Librarian as the Member-Secretary. Other members are representatives of teaching staff (four), non-teaching staff (one) and student representative (one).

The role of this committee is:

- To recommend suggestions for encouraging Library usage.
- To assist in the formulation of proposals in connection with grants for the Library and their allocation. If required, the Library Committee will suggest formation of a sub-committee for specific needs.
- To recommend withdrawal and weeding out of outdated Library material to the Principal for final action in the matter.
- To recommend re-classification of books from Active section to Passive section and vice versa.

Additionally, **significant suggestions** of the committee were incorporated during the **renovation** of the Library carried out in three phases during the period between 2015 and 2016. The Committee was involved in the design, planning and execution of the renovation. The **new Reading Room** created inside the renovated Library is stocked with textbooks and other reading material, and has open access for all students as per the committee's recommendations. The **circulation** is automated with bar-coded collection and Smart Cards for users. It is proposed to implement **Smart Stock checking** using hand-held scanning devices.

4.2.2 *Provide details of the following:*

- *Total area of the library (in Sq. Mt.)*– Approx. 780 sq.m.
- *Total seating capacity*– 600 in Reading Halls + 82 in newly renovated Library
- *Working hours (on working days, on holidays, before examination days, during examination days, during vacation) –*
 - *On regular working days:* 8.30 am to 5.30 pm
 - *On Holidays:* as per demand with flexible hours between 8.00am to 8.00pm
 - *Before Examination days:* 8.30am to 8.00pm
 - *During Examination days:* 8.30am to 8.00pm
 - *During vacation:* 8.30 am to 5.30 pm
- *Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources) –*

Apart from the infrastructural facilities enumerated above, the Library serves its users as a **Knowledge Resource Center** to enable continual information dissemination through the use of ICT. The redesigned and renovated Library, includes **larger and more number of**



Reading spaces within the Library, such as – a new Reading Hall within the Library (seating for 42), a separate Reference section with large windows providing natural light and ventilation (seating for 12), a separate study room for Teachers (seating for 6), a different Periodicals Section (seating for 16), a special OPAC (Online Public Access Catalogue) room for students (seating for 6), Mobile compact-shelving Cupboards for optimum utilization of space and CCTV network in Library for better security. The Library is in the process of setting up a special **Digital Resources Centre** dedicated to avail the digitized data of rare books in the library collection and other e-Resources.

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.

For acquisition, all major publishers and distributors submit copies of books and latest catalogues for approval. The Library seeks suggestions from faculty and students of all departments. Books useful for the students and staff are purchased, on recommendation of students and respective subject experts, from faculty. Purchase is also made, considering the requirements of students, placed directly with the Library. The information about new arrivals in the Library is displayed on the Library Notice Board, College website and on the Library computers.

Financial sources for purchase are mainly through students' Library Fees, and other grants from UGC & DBT

Library holdings	Year 2012-13		Year 2013-14		Year 2014-15		Year 2015-16	
	No	Cost	No	Cost	No	Cost	No	Cost
(Purchased in each Year)								
Text books	370	50,748.00	370	43,765.00	134	15,351.00	447	59,740.00
Reference Books	1505	8,31,681.00	1505	8,55,794.00	1076	8,54,951.00	1408	10,12,754.00
Journals / Periodicals	86	1,05,444.00	86	1,09,669.00	86	1,07,281.00	84	1,08,720.00
e- resources *	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
CDs	10	2,547.00	5	560.00	Nil	Nil	Nil	Nil
Any Other (Specify)	-	-	-	-	-	-	-	-

*Note: College is registered for INFLIBNET 'N-LIST' which is free of cost.

Total Collection of Documents



All collection till 31.03.2016			
		Titles	Volumes
(i)	<i>Books</i>	1,05,214	1,32,464
(ii)	<i>Textbooks</i>	21,671	39,062
(iii)	<i>Reference Books (Ref + Other books)</i>	83,543	93,402
(iv)	<i>Current Journals</i>		
	Indian	46	46
	Foreign	3	3
(v)	<i>Peer-reviewed Journals</i>	17	17
(vi)	<i>Back Volumes of Journals</i>	6,536	6,536
(vii)	<i>Magazines</i>	38	38
(viii)	<i>E-Information Resources</i>		
	CDs-DVDs	217	217
	Databases	Registered Membership of INFLIBNET's e-Consortia for e-resources i.e. NLIST	
	Online journals		
(ix)	<i>Special Collection</i>		
	Competitive Examination	172 books, 5 periodicals, 2 yearbooks	
	Braille materials	61 Braille Study books & 52 other Braille books and magazines, 01 periodicals (Sparshadyan)	
	Rare Collection	5855 (5598 Rare books + 257 rare hand-written manuscripts & incunabula)	
(x)	<i>Book Bank (Institutional)</i>	423	1950



4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

- **OPAC** – Library uses Software for Library Management (SLIM). All the collection is duly entered in the computer and the necessary bibliographic details of the complete collection (books, journals) are accessible through the OPAC (Online Public Access Catalogue) in-built in the Library software.
 - **Electronic Resource Management package for e-journals** – No
 - **Federated searching tools to search articles in multiple databases** –No
- **Library Website** – Library has a webpage on the College website. It provides all the requisite details like Library's collection, its different sections, Library's working hours, various services and facilities provided, activities conducted, etc.
- **In-house/remote access to e-publications** – The Library is registered as the member of INFLIBNET 'N-LIST' project under which the Library provides password-based free access to more than 1 lakh e-resources including a variety of e-journals and e-books to all teaching Staff and students.
- **Library automation** – The Library is fully computerized and bar coded. Circulation is done using the combination of bar coding technology and interface of the Smart I-Cards given to users. The annual stock-checking has been planned to be done using hand held scanning device attached to a mobile computer with an inbuilt software application that helps in stock taking, shelving order and searching for specific items.
 - **Total number of computers for public access**– 5
 - **Total numbers of printers for public access** – Printing facility is made available on requirement.
 - **Internet band width/ speed** – 10 mbps
- **Institutional Repository** – The Library has incorporated the software add-on Digital Library with full text search that will assist in managing Institutional Repository of books and digitized material such as Electronic Thesis & Dissertation (ETD), Question banks, photos, archives and research publications.
 - **Content management system for e-learning** – No
- **Participation in Resource sharing networks/consortia** (like INFLIBNET) – Since 2009, the Library is registered as the member of INFLIBNET 'N-LIST' project under which the Library provides free access to more than 1 lakh e-resources including variety of e-journals and e-books to all teaching Staff and students.

4.2.5 Provide details on the following items:

- *Average number of walk-ins*– **about 800 per day**
- *Average number of books issued/returned* – **about 50 per day**
- *Ratio of library books to students enrolled* – **23:1**
- *Average number of books added during last three years*– **1647**
- *Average number of login to OPAC* – **about 120**
- *Average number of login to e-resources* – **the access password has been provided to all**



faculty members, research students and Post Graduate students. The users access the e-Resources anywhere in the College premises or from home.

- *Average number of e-resources downloaded/printed* – the access password has been provided to all faculty members, research students and Post Graduate students. The users download / print the e-Resources as convenient to them and not necessarily at the Library.
- *Number of information literacy trainings organized* – 3
- *Details of “weeding out” of books and other materials*

Library weeds out books and other materials which are in torn, mutilated condition or which are obsolete. The list of such material is included in annual Library report sent to the parent institution S. P. Mandali, Pune. After receiving a resolution to that effect from them, the listed books are weeded out from the Library and sent to pulp factory for recycling.

4.2.6 Give details of the specialized services provided by the library

- *Manuscripts* –257 rare handwritten manuscripts and incunabula mainly in Sanskrit on various aspects of religion. These are being made available in digitized form at the Ruia Digital Resources Center.
 - *Reference and Referral* - The Library has a newly created separate Reference section with natural illumination and ventilation and seating capacity of 12 which houses about 3000 books containing various dictionaries, encyclopedias, yearbooks and other reference material.
 - *Reprography* - The Library possesses a photocopy machine and the facility is extended to all staff and students on nominal charges.
 - *ILL (Inter Library Loan Service)* - Yes, Ruia Library has an informal network with all the Higher Education institutions in the vicinity and receives as well as provides ILL. The Library also possesses Institutional Membership of Asiatic Library, American Library and British Council Library. The Staff and students avail of this facility and access the collection of these renowned libraries.
 - *Information deployment and notification* - Book-jackets of newly acquired books are displayed on the notice boards along with list of new arrivals. Other notices important for the students such as invites for various competitions or courses are also exhibited in the new Reading Room.
 - *Downloads* - Available on requirement
 - *Printing* - Available on requirement
 - *Reading list / Bibliography compilation* - Available on requirement
 - *In-house / remote access to e-resources* - Password based Access provided to N-LIST
 - *User Orientation and awareness* - Performed every academic year for the new entrants
 - *Assistance in searching Databases* - Available on requirement
 - *INFLIBNET/IUC facilities* - Password based Access provided to all staff and students
 - *Any others* -
- **Automated Circulation** - The annual stock-checking is planned to be done using Mobile



Inventory Assistant system which has a mobile computer with an inbuilt barcode scanner and software to help stock taking, shelving order and searching for specific items.

- **e-Learning Centre-** A special 'e-learning Centre' is established to provide free Internet access with wireless internet connection to all students to check various educational websites and resource information. It is an air-conditioned room housing 30 computers open on weekdays from 10 a.m. to 5 p.m. and utilized frequently by the students.
- **Digital Resources Centre-** A special area with computer facility has been planned to provide dedicated access to the Digitized Rare collection. A special software will enable users for quick and easy access to the unique collection.

4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.

Efficient, helpful and user-friendly Library staff ensures ready access to the various Library facilities. For the search of books from the collection, two computers have been installed exclusively for access to students. All necessary bibliographic details of the complete collection (books, journals) are accessible through the OPAC (Online Public Access Catalogue) in-built in the Library software. To ensure safety of books, a separate Property Counter is maintained by the Library. All the visitors are asked to deposit their bags at this Property Counter before physically accessing the Library Collection. Access to the Rare Books Section is only on special permission. Overall maintenance and cleanliness of the Library is with centralized house-keeping company appointed by the College. The requisite training is provided to the Library staff whenever any new practice or service is introduced, for e.g. in 2016 the staff was trained in usage of Smart Cards in circulation as well how to operate Inventory Assistant device in Stock-checking.

4.2.8 What are the special facilities offered by the library to the visually / physically challenged persons? Give details.

The Library works in collaboration with the Cell for Students with Special Needs of the College to extend library facilities to the visually challenged students. The process of borrowing books has been simplified in case of the visually challenged students. Books in Braille are available in the Cell for Students with Special Needs for the ease of access to such students. For physically challenged students, the Library staff is always alert and forthcoming to help them according to their requirements. There is a separate collection of audio cassettes for visually challenged students.

4.2.9 Does the library get the feedback 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 feedback analyzed and used for further improvement of the library services?)

The Library's feedback is collectively taken as part of the complete College feedback collected by IQAC. It is analyzed and the suggestions are relayed to the respective departments. Additionally, library receives suggestions through suggestion boxes and improves upon the concerned areas.

4.3 IT Infrastructure

4.3.1. Give details on the computing facility available (hardware and software) at the institution. Number of computers with Configuration (provide actual number with exact configuration of each available system), Computer-student ratio, Stand alone facility, LAN



facility, Wi-Fi facility, Licensed software, Number of nodes/ computers with Internet facility, Any other.

- **Number of Computers with configurations (those in LAN are specifically noted)**

Department Name	No. of	Configuration
BMM English	32	Intel dual core Processor, 4 GB RAM 500GB HDD
BMM Marathi		17" LED monitor
Biochemistry	4	(2) Pentium 4 ,2 GB RAM 250GB HDD 17" LED monitor (2) Intel i3 Processor
Bio-analytical Sciences	4	Intel Pentium R Processor 3 GB RAM 500GB HDD 17" LED monitor
Bio-Technology	10	Intel Pentium R Processor 2 /4GB RAM 160/500GB HDD 17" LCD monitor
Gymkhana Office	1	Intel Pentium R Processor 2 GB RAM 500GB HDD 17" LCD monitor
Microbiology	25 (LAN)	ATOM Processor, 1 GB RAM 250GB HDD 17" LCD monitor, CRT MONITOR
Principal's Office	3	Intel i5 Processor, 4 GB RAM 1TB HDD 17" LCD monitor
	1	Intel i3 Processor, 4 GB RAM 500GB HDD 17" LED monitor
	1	Pentium 4 160 HDD1 GB RAM LCD monitor
SMAF Office	2	Intel Pentium R Processor 2/ 4 GB RAM 80/500GB HDD 17" LCD monitor
Main Office	5 (LAN)	Intel i3 Processor, 4 GB RAM 1TB HDD 17" LED monitor
	4 (LAN)	Intel dual core processor 4 GB RAM 250/500GB HDD 17" LCD monitor
	8 (LAN)	Intel Pentium R Processor4 GB RAM 500GB HDD 17" LCD monitor
Exam cell	1(LAN)	Intel ® Xeon 4 GB RAM 1 TB HDD CRT monitor
	1(LAN)	Intel ® Xeon 16 GB RAM 1 TB HDD LED monitor
	4 (LAN)	Intel Pentium R Processor 2/ 4 GB RAM 500GB HDD 17" LED monitor
Vice-Principals' Office	2	Intel dual core processor 2 GB RAM 250GB HDD 17" LCD monitor
Pharma Analytical Sciences	12	Intel dual core processor 2 GB RAM 500GB HDD 17" LCD monitor
Tourism & Travel Management	10	Intel dual core processor 2 GB RAM 500GB HDD 17" LCD monitor



Physics	15 (LAN)	Intel dual core processor 1/ 4 GB RAM 250/500GB HDD 17" LCD monitor
Cell for Students with Special Needs	11	Intel dual core processor 2/ 4 GB RAM 250/500GB HDD 17" LCD monitor
Electronics	2	Intel dual core processor 1/ 4 GB RAM 250/500GB HDD 17" LCD monitor
Centre for Slum Studies	10	i5 4GB RAM 250 HDD LED monitor
Computer Science & IT	1 Server	HP ProLiant ml110 g7, Xeon E3-1220 3.1 GHz 12 GB RAM ,1 TB HDD
	1 (LAN)	Intel 3420 GPV Motherboard Intel X3430 (QC 2.4 GHz, 6GB RAM 1 TB HDD LED monitor
	9 (LAN)	Intel i3 Processor 8 GB RAM 1 TB HDD 17" LED monitor (Wipro)
	25 (LAN)	Intel i5 Processor 8 GB RAM 1 TB HDD 17" LED monitor
	16 (LAN)	Intel i3 Processor 4 GB RAM 500GB HDD 17" LED monitor (Acer)
	16 (LAN)	Intel Processor Core 2 DUO 2.93 GHz 4 GB RAM, 1 TB HDD
Computer Science (Room 318)	14	Intel Processor Core 2 DUO 4 GB RAM 500 GB HDD LED monitor
	14	Intel i3 Processor 4 GB RAM 500GB HDD 17" LED monitor (Acer)
	2	Intel Processor Core 2 DUO 2.93 GHz 2 GB RAM, 1 TB HDD
Statistics	4	dual core Processor, 2GB RAM 250GB HDD 17" LCD monitor (Acer)
	3	Intel Pentium R Processor, 4 GB RAM 500GB HDD 17" LCD monitor
Mathematics	6	dual core Processor, 2GB RAM 250GB HDD 17" LCD monitor (Acer)
	8	Intel i3 Processor 2 GB RAM 500GB HDD 17" LED monitor (Wipro)
e-learning Centre	30	Intel Pentium R Processor 2B RAM 500GB HDD 17" LCD monitor
Green House Management	4+	Intel i5 Processor 4 GB RAM 500GB HDD 17" LED monitor
Botany	1	Intel Pentium R Processor 4 GB RAM 500GB HDD LED monitor
Zoology	2	Intel Pentium R Processor 2GB RAM 500GB HDD LED monitor
Library	1	Intel Xeon, 4 GB Ram 1 TB HD LED monitor
	2	i3 Processor, 4 GB RAM 500 GB HDD LED monitor
	3	P4 512 RAM 80 GV HDD
CHEMISTRY DEPT		
PSRAIC	9	core 2 duo 2 GB RAM 250 HDD LED monitor



F-13	1	P4 1 GB RAM 80 GV HDD LED monitor
F-13	1	i3 Processor, 4 GB RAM 500 GB HDD LED monitor
F-14	3	Intel Pentium R Processor 4 GB RAM 500GB HDD LED monitor
F-11	1	ATOM PROCESSOR 2 GB RAM 250 HDD
F-10	1	core 2 duo 2 GB RAM 250 HDD LED monitor
F-21	16	P4 512 RAM 80GB HDD
IQAC	1	P4 2 GB RAM 500 GB HDD LED monitor
Economics	10	Intel Pentium R Processor 2GB RAM 500GB HDD LED monitor
Language Lab	11 (LAN) (including one server)	Intel Pentium R Processor 2GB RAM 500GB HDD LED monitor

Computer-Student ratio

Department	No. of Computers	Computer-student ratio
Computer science	80	1:1
BMM	32	1:2
Information Technology	30	1:1
Chemistry	30	1:4
Tourism and Travel Management	12	1:3
Green House Management	4	1:3
Pharma Analytical Science	17	1:2
Microbiology	25	1:1
Physics	12	1:4
Statistics	7	1:3
Mathematics	20	1:2
Botany	4	1:3
Life Science	4	1:6
Zoology	2	1:10

The students of Arts faculty use computer facilities available in the following Centres /Laboratories:



Arts	Computers
Special Research Laboratory	10
Centre for Slum Studies	12
Language Laboratory	10
e-learning Centre	30
Cell for Students with Special Needs	11
Total Computers	73
Computer: Student Ratio	1:16

Stand-alone facility

Computers installed as standalone units are listed in the table above. Fax machines are available in Principal's office and Main office.

LAN Facility is available in some departments of college as indicated in the table above.

Wi-Fi

Reliance Jio Internet Wi-Fi facility is available in campus for students and staff.

Licensed Software

- College has Microsoft OS with Campus License and Antivirus software for all computers.
- Department of Statistics has SPSS (10 user license) and 10 Licenses of SEdR Software.
- Department of Mathematics has 10 licenses of Mathematica Software 11 Version.
- Language Lab has ODLL (ORELL Digital Language Lab) and iLotus Foundation + Advanced (1-5 Levels) + SRS software user licenses (10).
- CCMS software is purchased for college Content Management and administration.
- CollegeOmatic software is used for Online Attendance Management.
- SLIM software for Library Management System

Number of Nodes/computers with internet facility

All 447 computers have internet facility. Tata 6 Mbps leased line is distributed to all computers in college via Cat 6 cable and switches.

4.3.2 Detail on the computer and internet facility made available to the faculty and studentson the campus and off-campus

- The central computer facility for the students and the staff is available in the reading hallwith internet connection. Every department of College has computer facility withinternet connection. Tata 6 Mbps leased line is distributed to all computers in college viaCat 6 cable and switches. Reliance Jio Internet Wi-Fi facility is available in campus forstudents and staff.



4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

- The grants received under CE, CPE, UGC and DBT –Star College status were also utilized for development of IT infrastructure. The Language Lab was set up in February 2015 and two softwares ODLL (ORELL Digital Language Lab) and iLotus were purchased. 8 UG laboratories were converted to smart laboratories in 2014-15, by providing data projector, 2 computers with internet connection and screens. These systems helped in using ICT in pre-lab and post lab sessions, to demonstrate experiments and also to show virtual dissections. To cater to the new teaching methods, classrooms were upgraded with internet facility, computers and audio equipment. Adequate servers have been purchased to provide internet connectivity.
- The Star College scheme is a unique program sponsored by DBT to improve quality of science education at the undergraduate level. The College has already been awarded the ‘STAR COLLEGE’ status for six departments (Physics, Chemistry, Botany, Zoology, Microbiology, Life science). Six more departments were selected under Star College Scheme. Part of the grants received was utilized for IT infrastructure development.

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)

Year	Computer Procurement	Computer Up-gradation	Computer Maintenance	Grant
2012-13	2,86,000	Nil	Nil	DBT STAR
2013-14	Nil	Nil	1,05,000	CPE, UGC
2014-15	15,15,299	5,67,187	1,10,850	CE, UGC
2015-16	1,09,928	33,950	1,37,050	CE, UGC
2016-17	Nil	Nil	3,02,922	CE, UGC

The computers are maintained and upgraded as and when required. Annual Maintenance Contract is given and full time service engineer is available to undertake regular maintenance of the college computers. Under CE program, funds are specially allotted for maintenance of College LAN and smart classroom systems.

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?

- College has selected ICT implementation as a thrust area under its CE proposal and taken steps to sensitize and train students and staff and allotted funding for building facilities for implementation, development of material and training. Emphasis is on developing integrative approach for harnessing newer techniques made available by ICT in regular teaching of university courses.
- The Language Lab with requisite software is available to the students for use.
- To support ICT enabled learning, a Learning Management System like Moodle is used by the faculty and students. Moodle server is already installed and made available for many years and teachers are encouraged to develop their courses to support the students with integrating e-Learning with university courses and exploit additional features made available by technology in their teaching. Some departments have registered all its students on Moodle.



- Many Training Programs are organized for encouraging and enhancing use of ICT in teaching Learning. Training programs were organized for language teachers in the months of February and March 2015 with Ms. Suman Keluskar as the resource person under CE. Experts from C-DAC, Mumbai provided training to faculty members in use of Learning Management System – Moodle, for course creation and integration into their regular teaching.
- IQAC in association with Lab India organized training workshop for teachers on e-content development using iSpring software.
- The Library organized a workshop on Effective search using Google and free reference manager and Zotero.
- In addition to these efforts, free online educational packages of Google are also actively exploited by various departments in the form of Google groups, Google websites, Google documents, Wiki projects, etc. for excellent fault free communication, discussion and sharing of documents and materials.
- To sustain these efforts and build support system, IQAC has constituted, department wise Technical Committee consisting of two techno-savvy teachers and student groups for fault free working of ICT during daily use in classroom environment.

4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line 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.

- Departments of Chemistry, Microbiology, Life Science, Computer Science and Information Technology use **Pre-lab and Post-lab Modules**, interactive material and conduct practical classes with the help of these modules. This approach ensures uniform, accurate and extensive instructions to every student.
 - **Photo-journal and Video-journal** are prepared by the students of the Department of Microbiology wherein they compile photos and videos taken during practical classes and create a link for the photo/video journal. This helps to train students to generate online records of their experimental work.
- **Moodle** is used for teaching and evaluation. Teachers from the Microbiology, Life Science, Mathematics and Computer Science departments use Moodle based online for teaching and testing. Moodle is routinely used by faculty members for conducting objective tests and collecting assignments. Moodle activity ‘Workshop’ is also used for encouraging discussions amongst students and for writing consolidated reports of practical classes.
- All departments actively contribute to the development of **Flip the Classroom** concept. The study material related to the topic is provided to the students in the form of internet resources such as reference articles, links of the videos on YouTube as well as the books and copies of articles from journals. This allows for classroom time to be dedicated to discussions, problem solving and exploring different methods like presentations, group discussions and interaction, written assignments and reports, debates, quiz, skit, preparing question bank, etc. for the better understanding of the topics.



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?

- Ruia College Library is a subscribed member of UGC-INFLIBNET’s **National Library and Information Services Infrastructure for Scholarly Content (N-LIST)**. Under this program, the Library provides all the teaching staff and Post-Graduate students of College free and open access to 3000+ e-journals (full-text), 1 Lac+ e-books and other renowned bibliographic databases like MathSciNet, Web of Science, Annual Reviews, Project Muse and Nature.

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 upkeep of the following (substantiate your statements by providing details of budget allocated during last four years)?

Based on the requirement and proposed activities college upgrades its facilities each year. The Principal sanctions the money, in consultation with the Management. The Infrastructure Committee and Safety and Security Committee give suggestions for upkeep of the building, plumbing, pest control, AC repair, etc. Alumni of the College also contribute to the cause of maintenance and upgradation of building and other facilities. Housekeeping and Security is outsourced and the funds are allocated through a special budget head supported by the parent body since there is no allocation in the Grant-in aid budget.

The table below enumerates the allocation of funds with various heads:

Sr. No.	Heading	2012-13 (Rs.)	2013-14 (Rs.)	2014-15 (Rs.)	2015-16 (Rs.)
a.	Building	37,68,771	36,23,994	40,63,834	34,40,628
b.	Furniture	4,20,781	1,43,747	1,27,363	2,02,080
c.	Equipment	3,66,147	3,53,338	5,89,534	14,751
d.	Computers	1,60,358	2,22,255	2,02,918	1,56,922
e.	Vehicle	NA	NA	NA	NA
f.	Any Other				
	Water purifier	2900	10460	18930	17600
	Telephone	70,674	58,525	72,007	68,055
	Pest control	59,813	44,701	1,11,549	15,250
	Fire safety	Nil	Nil	Nil	75,500
	AC	2,08,288	2,75,060	1,42,029	35,0487
	Electrical	1,63,168	2,68,107	3,97,004	1,18,109
	Security	8,86,291	9,00,870	7,58,263	8,71,851
	House Keeping	10,01,261	11,24,224	11,29,606	8,82,329

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

An Infrastructure Committee consisting of teaching and support staff gives suggestions and looks after the overall maintenance in the campus.



Routine maintenance such as carpentry, plumbing, minor repairs are handled by carpenters and plumbers appointed as per requirements and are paid according to the work done. The College has appointed an electrician on contract.

For all the major work in the college, quotations are taken from various contractors and the job is allocated in compliance to the management policy.

Housekeeping and Security is outsourced to professional agencies. Housekeeping comprises of cleaning of all classrooms, corridors, staff room, floors and laboratories. The laboratory staff ensure the cleanliness of the laboratory and maintenance of the equipment.

The college gives Annual Maintenance Contract (AMC) for the maintenance of appliances like air condition units, water purifiers, fire extinguishers, etc.

Sophisticated instruments of various departments are under Annual Maintenance Contract of respective agencies.

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/ instruments?

Equipment / instruments are under AMC, so they are regularly maintained by the respective agencies. For precision instruments like balances, HPLC, etc. calibrations are carried by agencies approved by the manufacturers. The college provides for the arrangement for need based repair and replacement of equipment.

4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)

The voltage stabilizers along with spike busters are installed, to protect instruments from voltage fluctuations. Sensitive equipment is maintained by the concerned manufacturers or agencies as per requirement. Computers and sophisticated instrumentation laboratories are provided with air conditioners to maintain ambient temperature. Ion exchange column and ice maker equipment are installed to cater to special needs of de-ionised water and ice flakes.

Any other relevant information:

The College implements a policy of maximising the utilization of available space. The College working schedules are managed in two shifts so that all students are able to avail the facilities.

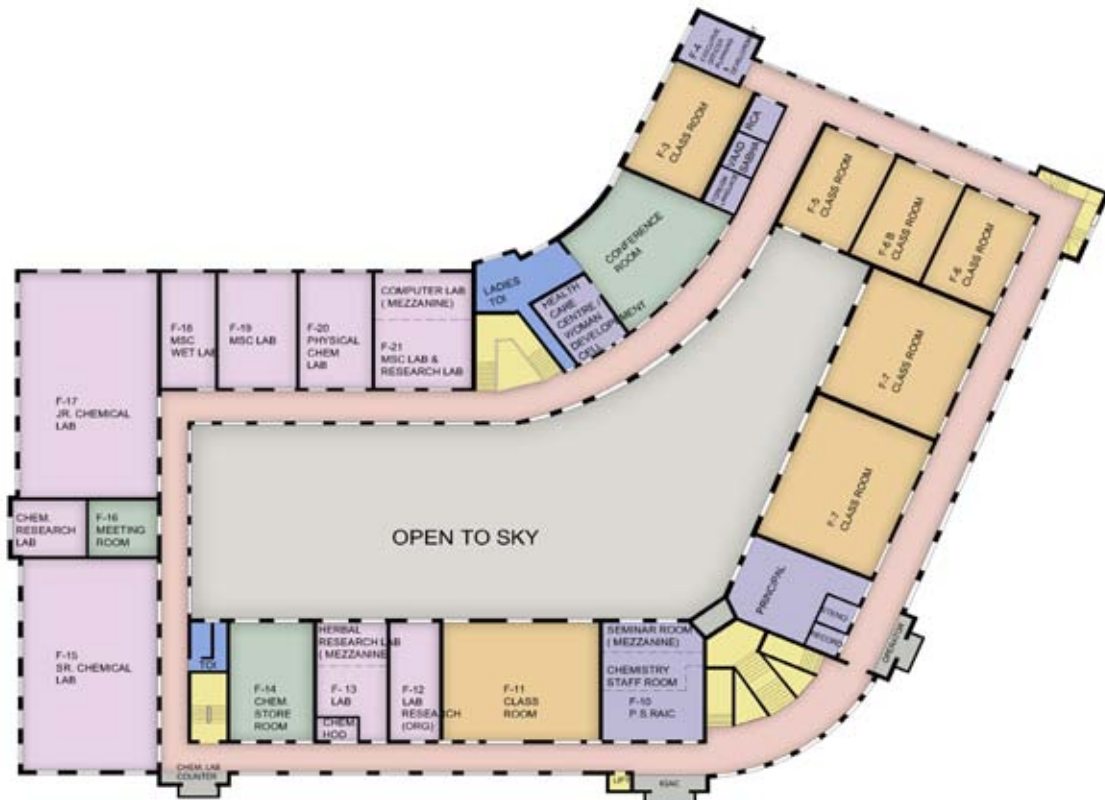
- The mini auditorium has been provided a separate access to the garden so that the garden area could be extended for hospitality purposes.
- CCTV surveillance, Plasma display boards, Public Address Systems are installed for security and efficient dissemination of information.
- Reprography facilities with heavy duty Copiers are available for administrative purposes.
- The large quadrangle is provided with well paved flooring and is used by students during various activities including “short-version” sporting events.



Annexure I: Master Plans – Main Building



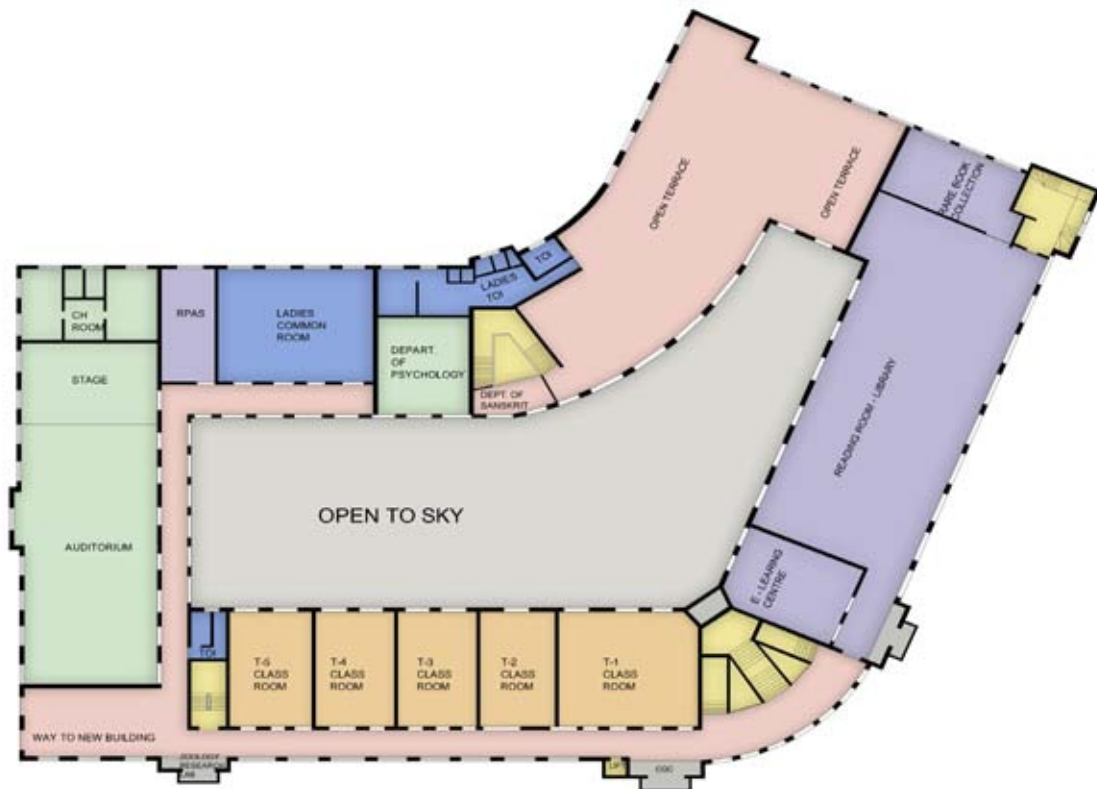
MAIN BUILDING - GROUND FLOOR



MAIN BUILDING - FIRST FLOOR



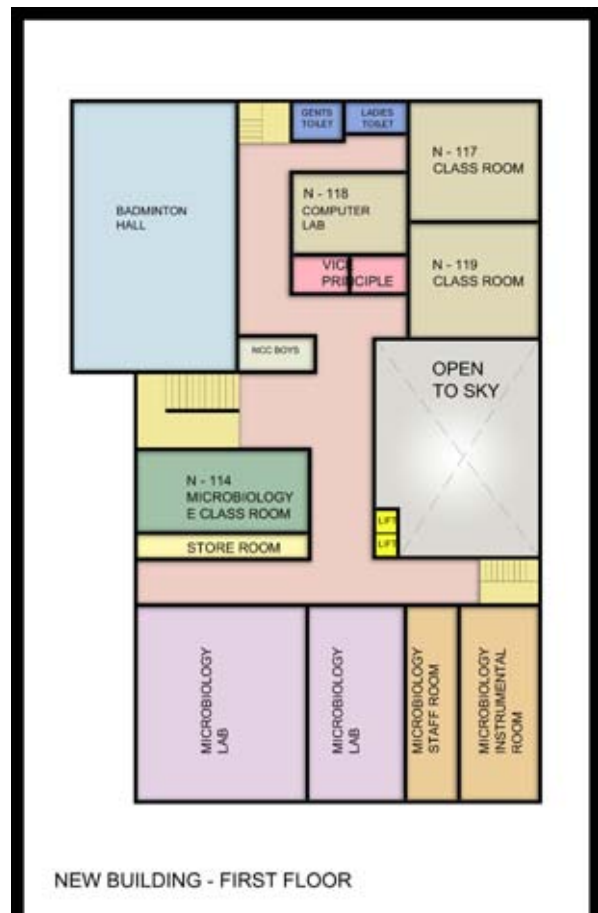
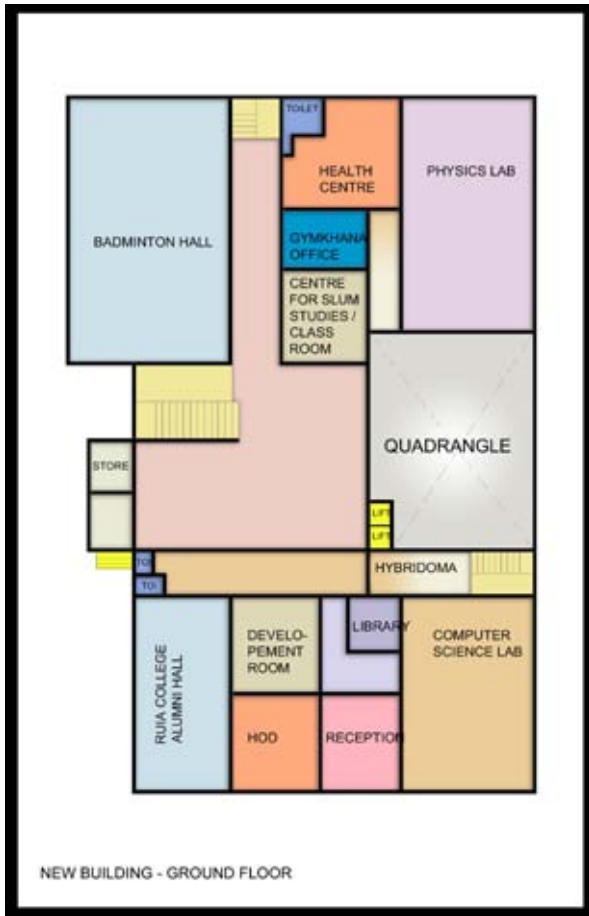
MAIN BUILDING- SECOND FLOOR

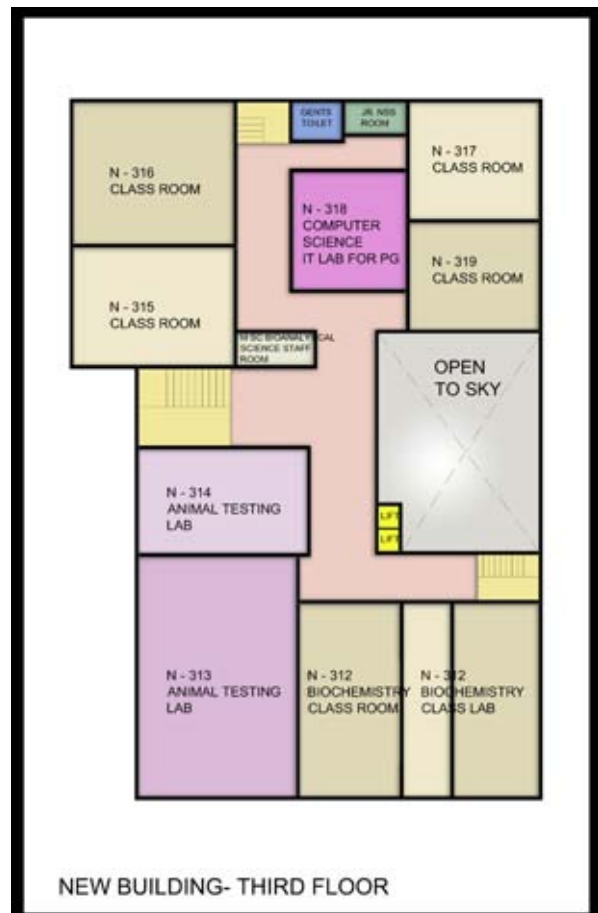
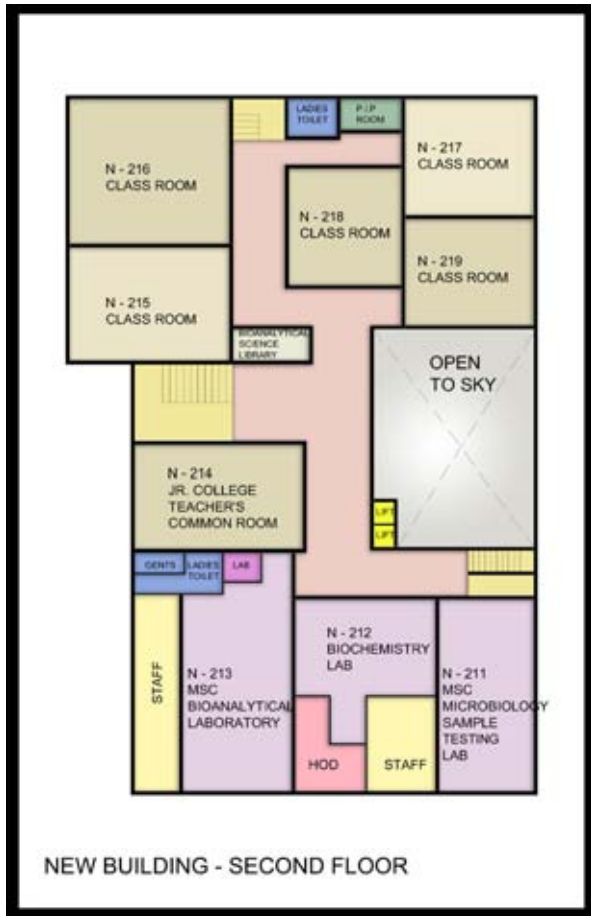


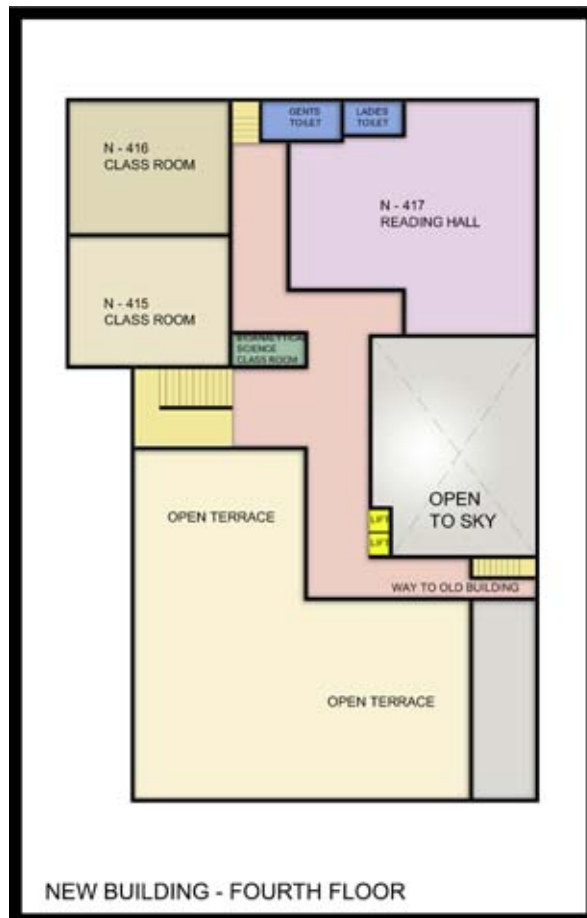
MAIN BUILDING THIRD FLOOR

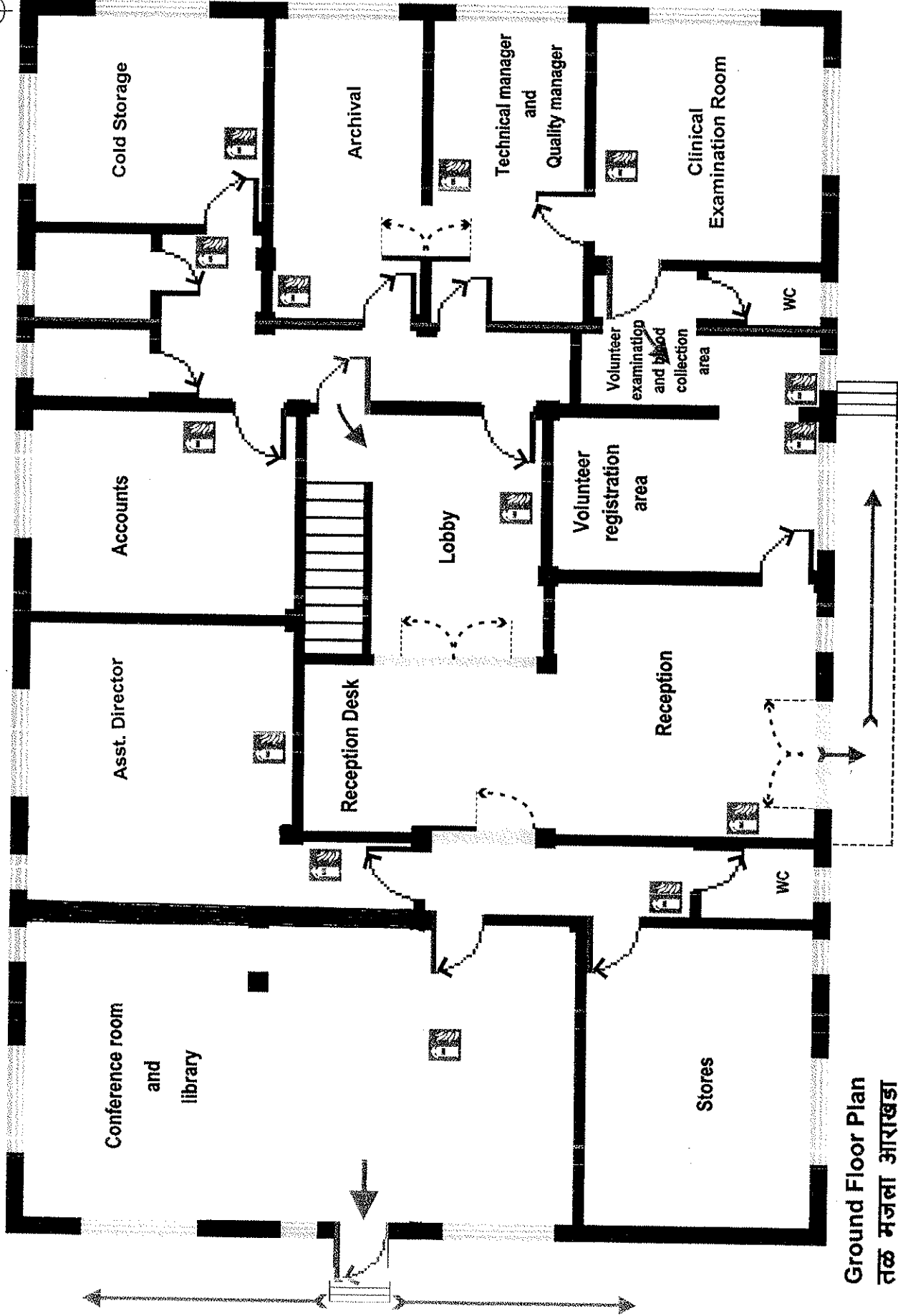


Master Plans – New Building

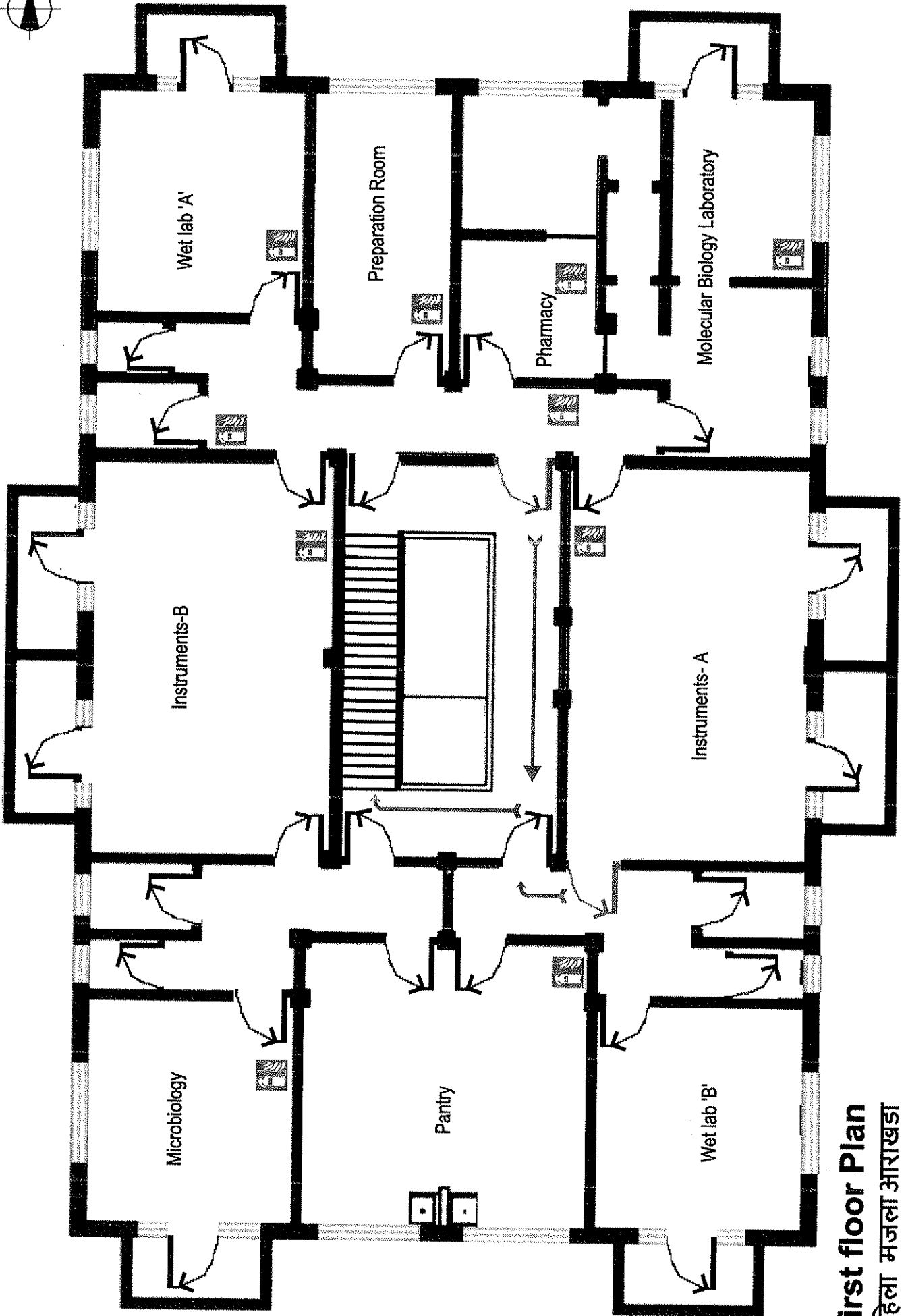
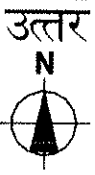




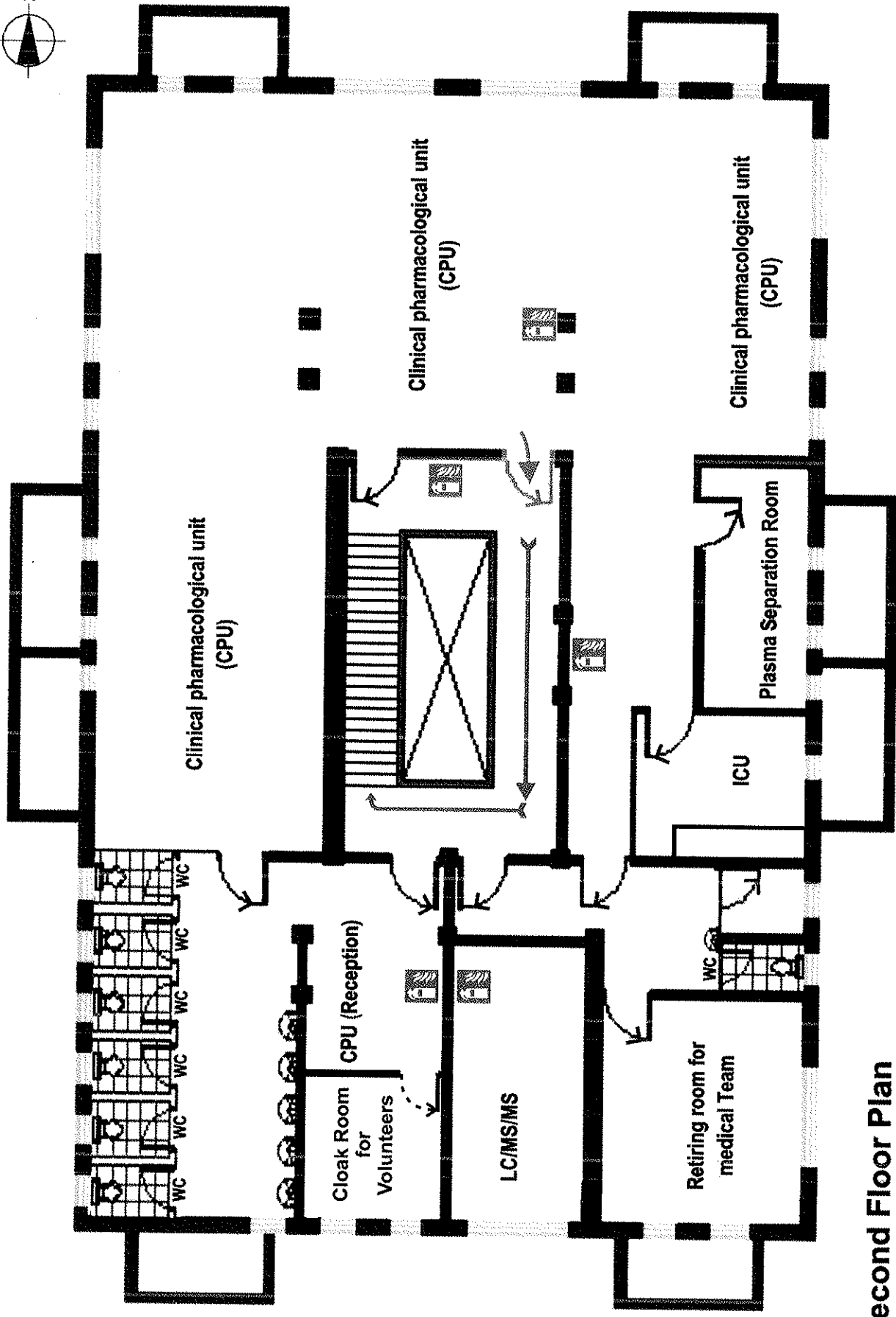




Ground Floor Plan
तक मजला आराखडा



First floor Plan
पहिला मजला आराखडा



Second Floor Plan
दूसरा मजला आराखडा



CRITERION V: STUDENT SUPPORT AND PROGRESSION

The College emphasizes on holistic education with a student centric inclusive approach. The College therefore, implements several activities and programs to impart life skills and other technical skills to enhance the employability and inculcate entrepreneurial attitude among the students. Student mentorship programs by various departments ensure inclusive approach and encourage better student-teacher interactions. The Centre for Mindfulness and Well-being provides add-on training in anger and stress management, managing inter-personal relationships and Yoga. As a priority in its educational practices, the College attempts to inculcate research culture among the students by augmenting facilities for technical training and project based learning. The College has augmented laboratory facilities of the Science departments while newer facilities like the Language Lab and computerized Research Lab for the Arts faculty have been provided. The College has very active Alumni Association which is involved in student support, upgradation of College facilities, medical check-up of students and placements. The Career Guidance Cell and Placement Cell coordinate programs, activities and campus interviews for internships as well as placements of students. The Centre for Students with Special Needs and the Cell for Students with Special Needs cater to students who need special assistance. The College implements several schemes of scholarships, free-ships and fellowships for students who are differently-abled and economically challenged. Various associations and student committees organize several co-curricular and extra-curricular activities that provide adequate and effective platforms for exposition of students' talents in areas beyond academics. These efforts have largely paid off because Ruia College has consistently been producing rank holders in the final year examinations in Arts and Science and have also consistently excelled in sports and cultural fields. Many of the alumni of the College are well placed and have excelled in their field of activities.

5.1 Student Mentoring and Support

5.1.1 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?

The college publishes the prospectus every year. The prospectus includes the information about:

- The historical background, vision, mission and goals of the college
- Admission rules, courses offered, subject combinations and fee structure
- Information about Statutory Committees such Examination, Anti-Ragging, Gender Sensitization and Internal Compliance Committee.
- Non-departmental Associations/Centres/Cells
- Government rules and regulations
- List of the scholarships offered
- Examination Schedule
- Information about the IQAC : the sentinel of Institutional quality



At the beginning of the academic year, the college prepares the academic calendar and the schedule of the events for the current year. All the information about the academic schedule, examinations and activities are displayed regularly on the Notice Board, Plasma Screen and Official website.

The College publishes its annual magazine – RUIAITE which includes annual reports of all the departments and various associations which are verified by the IQAC and the Vice Principals. The RUIAITE also includes the literary contributions from students and teachers.

The IQAC along with the Vice-Principals collates relevant information for the prospectus. The IQAC evaluates the authenticity of information and the correctness of data which is reflected in the prospectus. It also coordinates with various departments in the College and external agencies to ensure timely publication and disbursement of the document. The information is also uploaded on the website in time before the admission.

5.1.2 Specify the type, number and amount of institutional scholarships/free-ships given to the students during the last four years and whether the financial aid was available and disbursed on time?

Ruia College has instituted several prizes and awards to facilitate and encourage the students. The 'Each one Adopt one' scheme helps the financially weaker and underprivileged students to pay their fees. Sports scholarships and sports free-ships are given to the students every year. Scholarship is also given to the MSc. students. Besides, students are given the opportunity to "Earn and Learn." In the last four years, five students have availed this facility.

Israni Foundation has started giving scholarship to the needy but meritorious students of unaided departments from the academic year 2016-17. Eight students have availed of this scholarship.

The Smt. Balasaraswaty Krishnan (SBK) award has been instituted, which offers financial assistance to research students to present their research work overseas.

The Netravali Fellowship offers support for oral presentation of research paper at national seminar or conference.

The total amount of scholarship and free-ship given to the students in last four years is INR 14, 91,413/- (Rupees fourteen lakhs ninety-one thousand four hundred and thirteen only). The College sends out notices regarding these schemes from time to time to ensure that maximum students benefit from them.



DETAILS OF SCHOLARSHIP FOR THE YEARS FROM 2012-13 TO 2015-16								
PARTICULARS	2012-13		2013-14		2014-15		2015-16	
	NO	AMT (Rs.)	NO	AMT (Rs.)	NO	AMT (Rs.)	NO	AMT (Rs.)
EACH ONE ADOPT ONE	48	2,40,000	34	1,70,000	26	1,30,000	33	1,65,000
FREESHIP SPORTS (SR)	32	1,16,255	77	1,11,200	82	75,000	65	75,200
SPORT SCHOLARSHIP	77	1,11,200	10	43,000	10	19,308	59	74,500
MSc SCHOLARSHIP	42	42,900	39	40,300	39	38,800	35	38,750
TOTAL	199	5,10,355	160	3,64,500	157	2,63,108	192	3,53,450
Grand Total								14,91,413

5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

Students are benefitted with financial assistance from State government and Central government and the assistance is disbursed, as per Government rules, to eligible students.

Year	Number of Students receiving Central and State Government Scholarship	Percentage of students
2012-13	204	08.16
2013-14	298	11.09
2014-15	377	15.08
2015-16	544	21.76

5.1.4 What are the specific support services/facilities available for Students from SC/ST, OBC and economically weaker sections?

In addition to the support schemes listed in 5.1.2 and 5.1.3., the College extends financial support for students from economically weaker sections through the 'Each One Adopt One' Scheme. With a view to provide financial assistance to disadvantaged students of the college, the Students' Mutual Aid Fund was started in 1948. The college provides scholarships, free-ships and book bank facility so that students from all strata of society get equal opportunities in education. College also provides facility of paying fees in instalments.

- *Students with physical disabilities*
 - The Cell for Students with Special Needs caters to the special needs of the visually challenged students. This Cell uses NVDA software.
 - The Cell has 11 computers, 8 speakers and 5 brailers. The Cell provides the study material in Braille, records lectures of teachers and organizes training sessions in Basics of Computer.
 - Origami sessions are also conducted to help the visually challenged students to improve their motor coordination. Regular yoga and meditation sessions



take care of their physical and mental wellbeing.

- In addition, skill based training is imparted to them (Computer software skills, Mathematical reasoning skills, English Grammar skills) and they are given a platform to showcase their entrepreneurial skills like chocolate making.
- The college has provided the necessary infrastructure like ramps and support-holds have been made in toilets for convenience of such students.
- Writing assistance is provided to such students during examinations.

- *Overseas Students*

The College encourages overseas students and makes it easier for them to mingle with local students. For instance, the students of French department hosted 14 students visiting from France for 2 weeks in the academic year 2015-16. Each visiting student was hosted by a student of the College which led to greater exchange of culture and traditions.

- *Students to participate in various competitions - National and International*

- The College pro-actively encourages students to participate in various competitions at intra-collegiate, inter-collegiate national and international levels in both academic and cultural events. The College is represented at the Youth Festival organized by the University, which is one of the pinnacles in youth activities.
- The students who represent the College are trained by the peers and alumni. These students are given flexibility in appearing for evaluation programs. These students are allowed to appear in additional examinations so that they can cope up with the academic schedule. These are elaborated in 5.1.6.
- The College also encourages research paper presentation and poster presentation at inter collegiate level as well as at University level, namely Avishkar. Special mentoring and guidance is provided to the students for such activities.



- *Medical assistance to students: health centre, health insurance, etc.*
 - The college takes special interest in the health of its students and their well-being. The College has extended the *YuvaRaksha* health insurance scheme for all students.
 - College has arranged an “on-call” tie up with a local doctor, Dr. Anjali Kulkarni, who resides in the vicinity. In addition, the College also maintains contact details of doctors who can be available in times of emergency.
 - College has a Health & Counselling Centre which is equipped with a wheel chair, bed, and first aid facilities. First aid box is made available at various locations in the College.
 - Ruia College Alumni Association organises health check-up camps annually. Health awareness seminars are conducted for the students, for example, Dr Nandini Dave from KEM hospital conducted an informative session on first aid and cardiac resuscitation. A well-known nutritionist and alumna, Ms Rujuta Divekar guided students for better dietary regimes.
 - The Centre for Mindfulness and Well-being organizes talks and discussions on stress and anxiety management. Guided meditation sessions are also organized to take care of their mental wellbeing.

- *Organizing coaching classes for competitive exams*

The Career Guidance Cell organizes seminars and mock tests to guide the students for preparing for competitive examinations. The College conducts foundation course for UPSC and MPSC aspirants by inviting experts from academia. The Departments of Microbiology, Chemistry, Mathematics, Political Science and History organize sessions to train their students for competitive examinations. Apart from official programs, the Departments of Arts and Science organize expert lectures, aptitude tests, group discussions and mock interviews to train students for competitive examinations.

- *Skill development (spoken English, computer literacy, etc.)*
 - The College has established a Language Laboratory in the academic year 2014-15 for enhanced language communication under the College of Excellence Scheme. The laboratory focuses on teaching and practicing phonetics, correct pronunciation, and diction in French, English and Sanskrit. The Language laboratory has a server with 30 computers and is equipped with specialized Software for French and English.
 - The Department of English organizes training sessions for the students from vernacular medium to improve their communication skills in English.
 - The Department of Computer Science organizes training to enhance computer literacy. Cell for Students with Special Needs has special courses for enhancing computer literacy and employability of visually challenged students.
 - As mentioned in Criterion one, various departments conduct add-on courses specifically designed for students of their department to augment their employability skills.
 - The Career Guidance Cell organizes expert lectures, aptitude tests, group discussions, mock interviews to enhance the students` skills for employability.
- *Support for “slow learners”*
 - Special remedial lectures are conducted for slow learners and for those who find it difficult to clear evaluation tests.
 - A “Cell for Students with Special Needs” has been established and training sessions are conducted for teachers to cater to the needs of such students. Examination rules prescribed by the University for the students with certified learning disabilities are



diligently followed by the College.

- *Exposures of students to other institution of higher learning/corporate/business house, etc.*
 - Departments arrange visits to industrial and research institutes and provide training sessions which are useful to familiarize students to on-site working procedures and also provide opportunities to interact with experts and company heads. Ruia College has established a 'Higher Education Academic Partnership' with the Commonwealth of Pennsylvania, USA by signing an MoU with them on Dec. 4, 2014 at Ruia College. The MoU includes exchange programs for Teachers and Students. It will also offer the College an opportunity to have tie ups in Projects, Research, Teaching etc. for the Faculties of Arts and Science. In Oct. 2015, 40 students and in October 2016, 20 students visited selected Universities in Pennsylvania, USA.
 - Dr. P. S. Ramanathan Advanced Instrumentation Centre, Herbal Research Lab, Animal Testing Centre provide hands-on training to students and staff on various laboratory techniques and also support their research activities.
 - The Departments regularly take their students for visits to institutions of higher learning such as BARC, IISER, ACTREC, Indian Statistical Institute, Bhandarkar Oriental Institute, Vaidic Sanshodhan Mandal, Godrej Archives, Heras Institute, Cama Institute, and Water Purification Plant.
 - Students are also deputed for internship at various institutions and organizations and companies like AIWM, C.B. Patel Research Centre, MITCON, Goldfinch Engineering Systems Pvt. Ltd, Godrej & Boyce Mfg. Co. Ltd., to name a few.
 - As a part of the global collaboration of the College, 40 students and 02 faculty members attended workshops at seven different Universities of the Pennsylvania State, USA.
 - In an effort to provide global experience, the College has organised the participation of 21 students and 2 faculty members in three weeks workshop on emerging areas in Biotechnology at the Indiana University of Pennsylvania, USA.
 - As a part of the MoU signed with the Harrisburg University, a Workshop in Biotechnology and nanosciences has been organised in the month of July 2017, wherein the faculty for Harrisburg University would be conducting the training for students and faculty at the College.
- *Publication of student magazines*

Ruiaite is the annual magazine of the College which is published every year. In addition, from August 2015 the monthly magazine – “Ruia Monthly” is published online and it is uploaded on the website. Ruia College Students have initiated several web based publications and communities which are listed in 5.3.4 below.

5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills among the students and the impact of the efforts.

- College has set up the KAUSHAL Kendra, under the Government initiative of DDU-KAUSHAL program. Ramnarain Ruia College is the only college in Mumbai University to be granted permission by UGC to start a KAUSHAL Kendra (Centre for Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood) in August 2015. This innovative scheme provides skill-based, job-oriented graduate (B.Voc) programs which focus mainly on honing skills for entrepreneurship. Several students from Green House Management & Tourism and Travel Management have been successfully placed or are interning with reputed



firms. Some of them have even ventured into start-ups. Within one year of training, a student from Pharma Analytical Sciences could get a placement in a drug regulatory services firm.

- The Career Guidance Cell arranges seminars on social entrepreneurship. A group of students were mentored by Asian Institute of Family Managed Business.
- Bookledo is an entrepreneurial activity started by the students of Ruia which facilitates easy availability of books to the needy students at reasonable rates.
- Unity Groups India is a company started by Ruia students who were a part of the Dept. of History and Dept. of B. Voc. Tourism & Travel Management.
- Under the auspices of the National Academy of Sciences, India (NASI), the Mumbai Chapter of NASI with the cooperation of IIT Bombay's Entrepreneurship Cell (e-Cell) organized a workshop on "NASI Science & Technology Based Entrepreneurship for Young Students and Researchers". The College has also initiated discussions with National Academy of Sciences for guidance and support to the Centre for Innovation, Incubation and Entrepreneurship of Ruia College.

5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extra-curricular 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*
- Participation in extra-curricular and co-curricular activities is an important part of student life at Ruia College. Students participating in competitions are sanctioned leave on the days of competitions and are permitted to attend additional exams.
- The College provides the students with recreational, cultural and sports facilities like well-equipped Gymnasium, Badminton Court, International Shooting Range and Boxing ring. The Gymnasium facility is offered at concessional rates. The College provides scholarships to sports persons and takes care of the total expenses during the participation at state and national level events. The College provides food allowance to the competing students and special dietary instructions are given by the Health Counsellors. The requisite sports-wear, sports-gear and training equipment and training facilities are provided by the College.
- NSS volunteers are granted 10 additional marks as per University norms for participation in NSS activities.
- Vidyarthi Pratinidhi Mandal (VPM), the student council of the College encourages students to participate in intercollegiate competitions. It organizes the Annual Cultural Fest – ‘Utsav’ and intercollegiate Fest ‘Aarohan’ which includes many cultural and literary events and talent expositions. The VPM also organizes Monsoon sports in the month of August and Annual sports – Ruia Cup in the month of December every year. Ruia College has a Quiz Club, which organizes quiz competitions for the students.
- The College encourages the students to participate in University level competitions like Youth Festival and State level competitions like Maharashtra Utsav.
- The College not only provides professional coaching but also arranges for Peer-training and training by eminent alumni. Significantly, several alumni who have excelled in drama and cinema come back to College to train students for cultural events. In addition to bearing expenses of participation in competitions, the College



also extends free-ships and scholarships to deserving students.

- To enable students who miss regular academic schedules due to competitions, the College arranges special classes, provides concessions in examinations and also arranges special evaluation programs. Students competing at tournaments are also provided the requisite uniform and College blazer. Achievers in the competitions are felicitated at the appropriate forum.

The following are the various trophies and awards instituted for the students:

Trophy/ Award/Prize	Achievement
THE VIDYA BHUSHAN AWARD AND THE LATE SHRI KAPOOR CHAND VARDHAN SILVER MEDAL	Student who has an excellent academic record and has also participated in co-curricular activities of the College.
THE SRIMATI YAMUNABAI HIRLEKAR PRIZE	The best all-round student of the College, who has to his / her credit a good academic career and distinctive achievements in the extra-curricular activities of the College including sports.
THE LATE MAJOR DADKAR MEMORIAL PRIZE	students, the Late Major Dadkar, who was martyred in action during the Indo-Pak War of 1971, is awarded to a student who performs, at considerable personal risk a feat, which is of public interest and which evokes special admiration and praise
THE PROFESSOR K. SHRIKUMAR TROPHY	Instituted by Prof. K. Shrikumar, former H.O.D. of English, to be awarded to student/s who has/have given an excellent performance in the Academic Field
THE SHIELD OF HONOUR	A Rolling Trophy which was instituted by the students of the B.A. class of 1970-71. It is awarded to student / students for distinction in curricular and co-curricular activities (other than sports)
THE PROFESSOR R.R. SAHURAJA ROLLING TROPHY	This Rolling Trophy was instituted by the non-teaching staff of the college, and it is to be awarded to a student who excels in the NSS activities of the college
THE PROFESSOR R.R. SAHURAJA TROPHY	This trophy was instituted in 1985-86 by Prof. R R Sahuraja, Ex-faculty, Dept. of Economics, and Retired Principal of R A Podar College. It is to be awarded to a student who displays excellent qualities



	as an organizer of co-curricular activities
THE LATE (MRS.) KALINDI M JAYAKAR SANGEET BHUSHAN AWARD	This Rolling Trophy was instituted by Prof. I M Jayakar, Ex-Vice Principal, Ramnarain Ruia College, in the memory of his mother, the late (Mrs.) Kalindi Jayakar. This trophy is awarded to a student who excels in cultural activities that include classical and light music, instrumental music and dance
THE LATE SUJATA PABREKAR ENDOWMENT PRIZE	The Late Sujata Pabrekar Trust in memory of the late Sujata Pabrekar who was a distinguished student of the College has instituted this prize. The prize is awarded to a student who excels in extracurricular activities.
THE MASTER GIRISH IYER TROPHY	This Trophy was instituted by Professor A K Iyer, retired Head of the Department of Statistics in the memory of his son. It is to be given to a student who is selected as the best volunteer of the College
THE CAREER GUIDANCE CELL ROLLING TROPHY	Best Volunteer/s for his/her extraordinary contribution towards Career Guidance Cell activities.
RASHTRIYA SEVA YOJANA MAJI SWAYAMSEVAK PARITOSHIK	Volunteer who has shown consistent dedication and unparalleled devotion towards NSS activities and has rendered exemplary services for the overall development of the unit
VIDYARTHI PRATINIDHI MANDAL ROLLING TROPHY (VPM)	This Trophy is instituted by Vidyarthi Pratinidhi Mandal (VPM) and is awarded to Contingent Leaders of Intercollegiate Competitions in recognition of their contribution.
KRIDA BHUSHAN AWARD	Students of the Junior and Senior College who excel in Sports at the National and International level.

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, ATE/CAT/GRE/TOFEL/GMAT/Central/State Services, Defence, Civil Services, etc.

- A good number of students appear for competitive examinations, NET, SLET, GATE, GRE, TOEFL, Civil Service examinations, etc.



- The different departments of Science and Arts organize training sessions, lectures, and mentoring sessions for the students seeking admission to various post graduate courses through All India entrance examinations. Departmental libraries and the central library provide large number of books related to competitive examinations.
- The CGC and Placement Cell organize aptitude tests, group discussions and mock interviews to prepare the students for competitive examinations.
- Special training programs for IIT-JAM are organized respectively by the departments of Microbiology and the Department of Chemistry.
- Many students appear for competitive exams after they pass out from the College. Though, the College provides active support in mentoring these students for such examinations, the exact data on participation and success rate are not available. About 30% students attempt Tests for admission to foreign universities, about 10% students attempt NET Examination while about 30% students appear for Civil Service examinations. A general indicative data may be listed as follows:

Number of students qualified in UGC NET/SET/GRE/ TOEFEL

In the past **2012-2016** years **73 students** qualified in UGC NET/SET/GRE/ TOEFEL

Year	Sr. No.	Name of the student	Eligibility Test
2012-13		Nabila Kachi Rupali Patankar Ashwini Kamle Ms Prerna Singh Mr. Anand Desai	GATE
		Mr. Jignesh Mehta Neha Athavle Manali Pawar Bhagyashree Tarde Samira Gujar	CSIR-NET
		Roshan Shaikh	UGC NET
		Tanmay Paranjape Sachin Dahibaokar Gaurav Gadgil	NET, SET
Total- 14			
2013-14		Ms Prerna Singh	UGC NET
		Sakshi Vichare Mugdha Bhosekar Vidnyapana Gavkar	SET
		Ashwini Kamle Soumita Maiti	GATE
		Shamini Joshi Swapnil Bangal Neerja Israni Akshita Champaneriya Aditya Sarnaik	NET



		Sneha Nagarkar	
		Mr Kamlaksh Rinkesh Dharod	SLET
		Anukul Shenoy Jazeel Limzerwala	GRE, TOFEL
		Mrunali Katare	MPSC
Total- 17			
2014-15		Akshita Champaneria Radha Singh Anuja Joshi Kaiwalya Walawalkar Aanindya Bhattacharya Ankita Shetty Swapnil Pradhan Aditya Daiphule Rupali Kamble Samira Joshi Mrunal Newalkar	NET
		Aditya Daiphule	JRF
		Sagar Shah	SLET
		Meera Suryanarayanan Maithili Sawant Ketaki Koparkar	SET
		Supriya Karekar Priyanka Desai Isha Mhatre	GRE, TOFEL
		Kirti Sawant Rajeev Pogaru Maitri Mishra Kinjal Patel	GATE
Total- 23			
2015-16		Sayuri Gawaskar	TOFEL
		Rupali Kamble Meera Suryanarayanan Madhura Ketkar Ramya Nair Varsha Deshpande	NET
		Prasad Damale Maithili Sawant	SLET
		Madhura Bane Preksha Lalwani	SET
		Swapnil Pradhan	GATE
		Sanjana Nair Amruta Veer	CSIR fellowship



Total – 11			
2016-17		Ms. Padma Srinivasan Amita Chandanshive Mrs. Saeer Joshi Pankti Amrit Pal	NET
		Hoonjan Kaur	GATE
		Shweta Jha	CAT
		Devayani Balasra Pallavi Ramane Sagar Karkhanis	SET
		Kimaya Thakur	GRE, TOFEL
Total- 08			
Grand total		73	

5.1.8 What type of counselling services are made available to the students (academic, personal, career, psycho-social, etc.)

- Every department conducts career counselling sessions for their students by inviting experts from specific fields of specialisation.
- The Counselling Cell of the College offers personal counselling by trained and qualified psychologists from the Department of Psychology.
- Stress management workshops and the counselling workshops are organized by the Centre for Mindfulness and Well-being.
- There is a structured mentoring system since 2013 for classes from FY to MSc and the mentoring report is submitted to the IQAC.
- Whenever necessary, the students are sent for personal counselling. Around 320 students are counselled every year. (Refer 2.3.7)

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 the 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 programs).

- The College has in place, a Career Guidance cell, Placement Cell and Entrepreneurship Cell. Students interested in placements approach the Placement Cell and register themselves by recording their personal details, skill sets and areas of interest. Placements are coordinated with respective Industries who approach the College. There is no specific placement day allotted in the academic calendar but placements happen generally towards end of each semester. Many industries approach the College for summer internships which is coordinated through the respective departments.
- The Career Guidance and Placement Cell facilitates placement of our students in industries and coordinates with the Alumni Association. The students are notified about job offers through students' and teachers' Google groups. The College has tie-ups with some companies for student placements as listed below:



Name of the Organization	Percentage of placement out of students who availed the facility
L &T InfoTech	45.395
Times Group	65.45
J.P. Morgan Chase	15.38
Wipro India Ltd.	43.75
Tommy Hilfiger	31.57
Rubicon Pvt.	62.49
Kansai Nerolac	22.22
HDFC	20.00
Deloitte	18.9

Career Guidance Related Activities (Seminars):

Year	Topic	Speaker	Number of students participated
2012-13			
	Careers in sports	Mr. Jay Kowli- a well-known athlete and football coach	74
	Careers in Life Sciences	Dr. Sasikumar Menon	80
	Careers in Fine Arts	Samir Hazari	35
	Stock Exchange; Theory and concepts	Mr. Purv Shah	75
	Foreign Languages and Careers	Mr. Alope Palsikar	45
	Careers in Law	Advocate Sreerang Mulye	60
	Entrepreneurship Development	Mr. Sunil Pevekar	75
	Careers in Media	Mr. Harish Iyer	60
	Role of Industrial Psychology	Dr. Meera Shankar	80
2013-14	Youth Upliftment	Mr. Sasane Mahesh, Branch Manager, LIC	45
2014-15	Staff Selection Commission exams and Institute of Banking Personal Selection	Mr. Kishore Dhotre	52
	Chemistry and its Implications in Industry and Society	Mr. Ravi Raghavan, Editor, Chemical Weekly	71
	Overseas Education	Ms. Purav Tantia	94
	Career guidance session for BSc students	Dr. Dhananjaya Saranath, Chief spokesperson, NMIMS School of Science	104



2015-16			
	Preparations for Civil Service Examinations	Mr. Amod Nagpure, proud alumnus of Ruia College and IPS officer	74
	Multiple Aptitude test for TYBSc students.	Pearl Academy	73
	Mock test based on UPSC Prelim Examination	Dr. Wahi of Royal IAS Academy	76
2016-17			
	Careers in Banking Sector	Mr Nilesh Chavan, our own visually challenged alumnus, working in SBI, Andheri	72
	Careers in Health Care	Mr Syed- Head Operation, Professional InfoTech	82
	Opportunities in Financial Marketing	Prof Gurudatta Dhanokar from Bombay Stock Exchange	30
	Preparation for Entrance Exams UPSC, MPSC	Mr Prasad Awari, Spectrum Academy	93
	Social Entrepreneurship	Mr Abhijit Patil Spectrum Academy	27
	Entrepreneurship and Going Beyond Fear	Mr. Pratish Nair ,The Prahlad Kakar School of Branding and Entrepreneurship	35
	Education abroad with scholarships in USA/Canada/Germany;	Mrs Akalpita Katre, FACT.	82
	Entrepreneurship and Start ups	Prof Parimal Merchant, Principal Advisor ,Asian Institute of Family Managed Business	76
	Careers Abroad ACE Overseas Education Consultants	Ms.Anzhelika Andreeva	28
	Multiple Aptitude test for TYBSc students.	Pearl Academy	79
	Asha National Scholarship Test (Aptitude test) under Rashtriya Uchchatar Shikshan Abhiyaan (RUSA), Govt of India	In collaboration with IMS Learning Resources Pvt Ltd	94



Soft Skill Development Activities:

Year	Topic	Speaker	Number of students participated
2014-15			
	“Ontology- Reason behind career choice”	Mr. Sundar Shetty	78
	‘A to Z of Marine Engineering’	Experts from Golden Maritime institute Educational Trust.	53
	Interview Processes, group discussions	Ms Roopak Mehta, ITM group	86
	Empower Yourself	Anita Rane, Proventus	74
	Résumé Building & SOP writing workshop	Ms. Harsha Almad	89
2015-16			
	Corporate Readiness	Wasan Knowledge Hub	60
	Stress Management and Team Building	Mr. Pevekar of Aksun Institute	53
	Graphology	In collaboration with Times of India	45
2016-17			
	Resume Building	Mr Ramesh Mishra T.I.M.E. Pvt Ltd	125
	Group Discussion and Personal Interview	Mrs Roopam Gosain ITM Group of Institutions	70
	Soft Skills	Prof Mohandas Nair IBS Business School	33
	Communication Skills/ Problem Solving	Prof Salim Shamsher FLAME University	22
	Bridging the Gap: Transitioning from College to the Corporate World	Ms Shveta Raina, (Harvard Business School Graduate), CEO Talerang Finishing School	60
	How to become a CEO	Mr Tarun Singh Anand, Universal Business School	32

Career Guidance Related Visits Arranged:

Year	Place	Activity	Number of students participated
2016-17			
	Pearl Academy , Andheri	Talk on career opportunities, workshops were also arranged in Product Design, Photography, Communication Skills	45



		and Fashion Design	
	Institute of Packaging, Andheri	Talk about course, internships, placements, infrastructure at IIP	42

Entrepreneurship Development:

- 2014-15

Desi Hangover was envisioned to uplift the Indigenous Indian products in a global marketplace and to foster the growth of a new Indian brand amidst the international brands.

Interactive seminar on ‘Starting Early and Being An Entrepreneur’ by Desi Hangover, a youth entrepreneurship was arranged. The group promotes the local artisans abroad. 74 students attended this session and benefitted.

- 2016-17

Girish Rasam (SY Psychology), Shweta Madgulkar (SY Life Science) and their group (total 4 students) has been nominated as Student Entrepreneurs for Free mentoring program 2017 under Asian Institute of Family Managed Business. They were mentored by Ms Sabina B of Foam Home Company, which she is managing for 36 years.

5.1.10 Does the institution has a student grievance redressal cell? If “yes”, list (if any) the grievances reported and redressed during the last four years.

The College has a Student Grievance Redressal cell. Its function is to address the grievances of the students. No cases of grievance have so far been brought to this Cell during the last four years.

5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?

The College has established a Gender Sensitization Committee against Sexual Harassment to create awareness regarding gender related issues and Internal Complaints Committee for redressing issues related to sexual harassment. No such issues however have been reported in the last four years. A session on “The Sexual Harassment of Women at Workplace (Prevention, Prohibition, And Redressal Act, 2013) was attended by 240 students of TYBA, TYBSc and MSc classes.

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?

The College has established an Anti-Ragging Committee and Anti-Ragging Squad which functions as per the norms of the University. In the last four years no issues of ragging have been reported. At the beginning of every academic year, the posters with ‘Ragging is banned’ are displayed at prominent places. The Committee Members and Members of the squad take the rounds in the institution premises to keep vigilance. Senior members of our Students’ Council also help the College in this mission.



Teachers make proactive announcements in the classrooms that ragging is banned and the contact numbers of specific teachers or committee members is provided for the students to approach in the event of experiencing / or having knowledge of any ragging incident.

5.1.13 Enumerate the welfare schemes made available to students by the institution.

- The College has established a Student Welfare Cell to advice and implement the various student welfare schemes and programs in the College. As a commitment to the welfare of the students the College has in place 'YuvaRaksha' Group Insurance scheme covering all students. 'Each One Adopt One' scheme sponsored by well-wishers helps the financially weaker and underprivileged students to pay their fees. Sports scholarships and sports free-ships are given to the students every year. 'Earn while you learn' scheme provides part time employment to some students with weaker financial background.
- Two special scholarships, Netravali and Smt. Balasaraswaty Krishnan (SBK) were recently introduced for the benefit of research students to present their research papers in national and international conferences.
- The College has an active Career Guidance Cell for career counselling. The department of Psychology is involved in giving personal counselling to the students in academic as well as non-academic problems. Teachers of the respective departments formally act as mentors, and informally counsel their students on academic and personal issues.
- Under the UGC College of Excellence (CE) program, the College had instituted a special counselling program for all PG students of the college where trained counsellors administer psychological tests and provide necessary counselling.

5.1.14 Does the institution has a registered Alumni Association? If 'yes', what are its activities and major contributions for institutional, academic and infrastructure development?

- The institution has proactive Alumni Association named Ruia College Alumni Association (RCAA), the registration of which is in the process. It organizes several fund-raising programs to support the College in its developmental activities.
- RCAA also organises health check-up camps involving prominent doctors of the city, who are also alumni of the college.
- The Jewel of Ruia and Rising Star award function is the annual signature event of RCAA. In the last five years several prominent alumni including Padmashree awardees have been felicitated with 'Jewel of Ruia' and many young achievers have been felicitated as 'Rising Stars'. Both these awards form constant encouragement and motivation to the current students of the College especially in boosting their future aspirations.
- Inspiring talks have been organized for the students by illustrious alumni like Dr. K. Kasturirangan, Dr. Raghunath A. Mashelkar, Dr. Swapneil Parikh, Dr. Sandesh Mayekar and Dr. Nandini Dave.
- RCAA has contributed generously for infrastructural development in the College. The renovation of library and seminar halls providing ICT support to class-rooms, refurbishment of the Ladies Washrooms have been some of the major initiatives undertaken by the RCAA.

5.2 Students Progression

5.2.1. Providing the percentage of students processing to higher education or employment (for the last four batches) highlight the trends observed.



<i>Student progression</i>	Percentage
<i>UG to PG</i>	60-70%
<i>PG to MPhil</i>	NA
<i>PG to Ph.D.</i>	10-20%
<i>Ph.D. to Post-Doctoral</i>	~ 1%
<i>Employed:</i> • <i>Campus selection</i> • <i>Other than campus recruitment</i>	Around 15% Data not available

5.2.2. Provide details of the program wise pass percentage and completion rate for last four years (cohort wise/batch wise as stipulated by the university)? Furnish program-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliation university within the city / district.

Details of academic performance of last four years are given below:

- Examination Results (Program-wise data of past 4 years)

Result (Year)	Courses	Pass Percentage	Distinction	1st Class	2nd Class	3rd Class
2012 – 2013	B.A.	86.6	00	134	214	46
	B. Sc.	80.78	00	177	119	11
	BMM	98.87	43	43	02	00
	M. Sc.	91.93	29	76	64	02
2013 – 2014	B. A.	87.34	00	152	121	43
	B. Sc.	83.74	00	198	103	59
	BMM	92.37	00	53	68	00
	M. Sc.	83.54	14	92	73	11
2014 – 2015	B. A.	89.26	00	169	122	00
	B. Sc.	88.88	00	223	73	00
	BMM	93.75	02	37	68	00
	M. Sc.	84.85	00	119	77	00
2015 – 2016	B. A.	83.86	00	205	112	00
	B. Sc.	87.43	00	273	68	00
	BMM	93.27	00	47	129	00
	M. Sc.	81.95	19	79	48	22

Ruia College has been consistently figuring in the University list of honours with several students being awarded top ranks for their academic performance.

- University Rank Holders in the last four years are listed below;

Year	No. of University rank holders
2012 – 2013	14
2013 – 2014	29
2014 – 2015	21
2015 – 2016	Awaited



- Comparative analysis of the institutional academic performance with reference to previous performance.

Year	B. A.		B. Sc.		M. Sc.	
	2007 – 2012	2012 – 2016	2007 – 2012	2012 – 2016	2007 – 2012	2012 – 2016
	86.92	88.52	86.98	85.12	91.36	85.56

- Comparative analysis of the institutional academic performance in comparison with university.

Year	B. A.		B. Sc.		M. Sc.	
	College Results (%)	Mumbai University Results (%)	College Results (%)	Mumbai University Results (%)	College Results (%)	Mumbai University Results (%)
2012 – 2013	89.09	76.05	80.78	45.58	91.93	68.27
2013 – 2014	88.79	66.49	83.74	47.61	83.54	80.11
2014 – 2015	90.41	59.69	88.88	56.79	84.85	71.64
2015 – 2016	86.11	Awaited	87.43	Awaited	81.95	67.18

5.2.3. How does the institution facilitate student progression to higher level of education and / or towards employment?

- As is evident from the table listed in 5.2.1., a significant number of students progress successfully to higher levels of education. The College, through various departments, arranges several training and guidance programs for students which enable them to prepare for entrance examinations of various institutions and national selection processes. Departments organize dialogues with achievers and Alumni to guide the students about opportunities available in the various fields both in India and abroad. The Career Guidance Cell exposes students to various conventional and unconventional education options and career opportunities through several programs.
- The Career Guidance Cell, The Placement Cell and Entrepreneurship Cell organize various seminars and workshops to inculcate “Corporate Culture” among students.
- In the Academic Year 2015-2016, the Centre for Slum Studies organized a three months Certificate Course in GIS (Geographical Information System). After completing this course one student secured placement in Suez Environment India Pvt. Ltd. An MoU was signed with this company and 17 students worked as Intern Fellows with this company between December 2015 and May 2016.
- In the year 2014-15, 18 students from the Department of Biotechnology went for internship at MITCON, Goldfinch and C.B. Patel Research Centre. Two students from Department of French interned at the French Consulate. One student from Department of Microbiology undertook Summer Fellowship at Bose Institute, Kolkata. Two students of Commerce Department interned at AIWM, Bandra and two students of History Department interned at Godrej Archives. B.Voc programs are more in partnership with industries which take care of skill components. Internships for students are arranged in industries.



5.2.4. Enumerate the special support provided to students who are at risk of failure and drop out?

- The dropout rate is negligible (less than 1.0%) at Ruia College. The College puts in sincere efforts for imparting quality education by providing good infrastructural facilities like departmental libraries, e-learning centre, etc. The College also meets the requirements of socially and economically disadvantaged students by providing hand outs, e-material, etc.
- Department staff and the mentors take efforts to identify slow learners and remedial coaching is offered to them in addition to regular classes. Students of vernacular medium are helped to improve their vocabulary, presentation, writing and learning skills. The Psychology Department uses remedial techniques like concrete teaching method, use of mnemonic devices and cognitive map method for those with learning handicaps. The record of the remedial classes conducted is maintained with each department.

5.3 Student Participation and Activities

5.3.1 List the range of sports, games, cultural and other extra-curricular activities available to students. Provide details of participation and program calendar.

- Ruia College provides the students with recreational, cultural and sports facilities like well-equipped Gymnasium, Badminton Court, International Shooting Range and Boxing ring. The College provides scholarships to sports persons and takes care of the total expenses during the participation at state and national level events. The details are enumerated in 5.1.6.
- Students participate in sports activities like Swimming, Water Polo, Badminton, Khokho, Taekwondo, Shooting, Judo, Gymnastics, Fencing, Athletics, Yoga and Tug of War at Inter Collegiate, Inter University, and State and Zonal levels.
- Ruia College has an Annual Cultural Fest – ‘Utsav’ which includes events like, folk dance, classical dance, Marathi one act play, Hindi one act play, Indian group singing, Western group singing, Western solo singing, Indian light vocal, percussion, folk orchestra, skit, quiz, spot painting, photography, English elocution, letter writing, poetry. Ruia College also organizes an Inter-Collegiate Competition - Aarohan.
- Students participate in all these cultural events in the College, as well as Inter-collegiate festivals like Malhar, Umang, Rendezvous, Mood I and Maharashtra Utsav.
- Ruia ‘Natyavalaya’ has contributed immensely to Marathi theatre and our students have won prestigious trophies in the last few years.

The Program Calendar for Ruia College is as follows:

Semester One	
Fresher’s Party	July
Monsoon Sports	August
Independence Day	15 August
Teachers` Day	5 September
Rose Day	September
Semester Two	
Utsav, Aarohan, Colosseum Ruia Cup	December



College Day	December/ January
Samanvay	December/January
VPM day	January

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.

Following are the students` achievements:

CO-CURRICULAR, EXTRACURRICULAR AND CULTURAL ACTIVITIES:

Prizes Won: Year and Level wise report

YEAR	LEVEL	Total Prize winners
2012	Inter Collegiate/ University	17
	Zonal and State	02
	National	02
	International	Nil
2013	Inter Collegiate/ University	24
	Zonal and State	04
	National	01
	International	Nil
2014	Inter Collegiate/ University	41
	Zonal and State	10
	National	Nil
	International	Nil
2015	Inter Collegiate/ University	55
	Zonal and State	14
	National	Nil
	International	Nil

Having won the Overall Championship at Maharashtra Utsav, for three consecutive years, Ruia College was awarded a special appreciation by the Government of Maharashtra. In the year 2015-16, once again, Ruia College bagged the Overall Championship Trophy at Maharashtra Utsav.

SPORTS ACHIEVEMENTS:

YEAR	LEVEL		PRIZES	No. of Winners
2012	University	Team Championship	Winner	05



			1st Runner up	04
			2nd Runner up	03
		Individual championship	Gold	07
			Silver	08
			Bronze	09
		Inter-University	Gold	01
	Silver		12	
	Bronze		08	
	National	Gold	Nil	
		Silver	Nil	
		Bronze	Nil	
	2013	University	Team Championship	Winner
1st Runner up				04
2 nd Runner up				04
Individual championship			Gold	03



			Silver	09		
			Bronze	05		
	Inter-University			Gold	05	
				Silver	08	
				Bronze	10	
	National			Gold	Nil	
				Silver	Nil	
				Bronze	Nil	
	2014	University	Team Championship	Winner	03	
1st Runner up				05		
2 nd Runner up				02		
Individual championship					Gold	09
					Silver	02
					Bronze	06



	Inter-University		Gold	04
			Silver	10
			Bronze	05
	National		Gold	03
			Silver	02
			Bronze	Nil
2015	University	Team Championship	Winner	03
			1st Runners up	05
			2 nd Runners up	01
		Individual championship	Gold	07
			Silver	08
			Bronze	06
	Inter-University		Gold	08
			Silver	01
			Bronze	08



	National	Gold	Nil
		Silver	Nil
		Bronze	Nil

SPORTS ACADEMY

Ruia is one of the Colleges to establish a **SPORTS ACADEMY** with professional coaching in the following events:

- Shooting (AIR PISTOL and AIR RIFLE)
- Boxing
- Taekwondo
- Badminton

Besides this, seasonal training is also given to students for participating in Tournaments for events such as Water Polo, Football, Basketball, KhoKho, Kabaddi, Volley Ball and Cricket. There is a well-equipped Health centre as well.

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?

- Departments benefit from feedback from academic peers, students from other institutes, industries during training or workshop sessions. Students are asked at the end of the year about the changes they would prefer in the syllabus which are then forwarded to the respective Board of Studies.
- Important feedback is provided by students who come back after internships regarding newer techniques practiced in the industries, which can be potentially incorporated in the syllabus.
- Ruia College has an active Alumni Association which provides feedback with reference to various developmental issues as well as all possible support in terms of expertise, finance and sponsorships. The Alumni Association also gives its feedback about the curriculum to make it contemporary.

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.

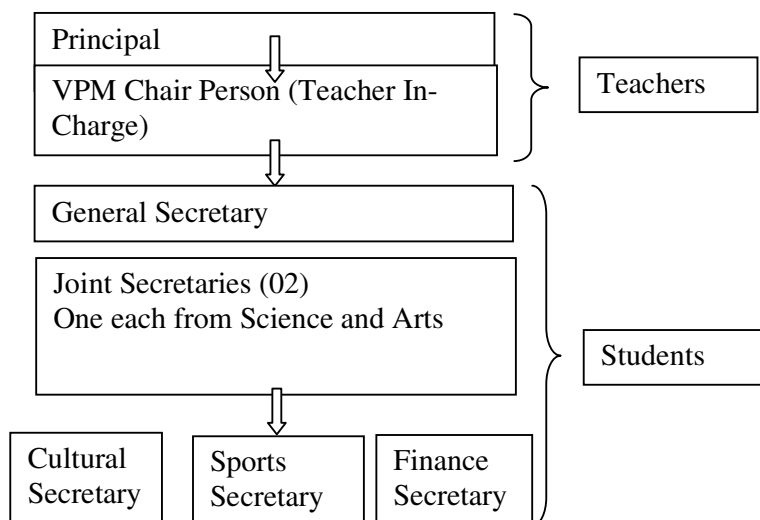
- The College publishes its magazine ‘Ruiaite’ annually.
- The College also publishes a monthly e-Bulletin
- Ruia College students have Computer Blog named ‘Ruia Camera Creatives’. An online community has been established by our college students namely ‘Ramnarain Ruia College Photography Forum’ and ‘Ruia V.P.M.’.



- Department of French publishes the departmental annual multilingual magazine created by the students called ‘Namasté Français’.
- Department of Sanskrit publishes its annual write-up named ‘Sanwad’.
- Department of Economics publishes a biannual magazine ‘Homoeconomicus’.
- Department of Bioanalytical Sciences has a blog called ‘Bioanalytical blogshala’.
- Marathi BMM publishes a magazine with all the details of their Industrial Visit.
- Departments effectively utilize the departmental notice boards as means to make it into an effective learning platform.
- Ruia students have filmed a documentary, tracing the Journey of Ruia College since its establishment.

5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.

- The Vidyarthi Pratinidhi Mandal (VPM) is the Students’ Council. One of the faculty members is the Chairperson of the students’ council. VPM works as an interconnecting link between the students and teachers, hence harmonizes the planning and execution of all the intra and inter-collegiate activities like Freshers’ party, Rose day, Sports, Utsav and other events.
- Selection of the members of the VPM is made as per the guidelines of the University of Mumbai. The class toppers are nominated as Class Representatives. The Sports Secretary is nominated by the Sports In-charge of the College. The Cultural Secretary is selected by a panel interview of VPM (Students’ Council) Advisory Committee. Ladies’ representatives are chosen amongst the toppers; one of which belongs to Reserved Category. NSS and NCC representatives are nominated by their respective in-charges. NCC girls’ representative is chosen from the reserved category. The class representatives along with Sports and cultural secretaries, two Ladies’ representatives and NSS and NCC representatives elect the General Secretary.
- Its constitution is as follows:





VPM gets its financial support not only from Ruia College but also from sponsors with the help of the marketing team of the students who work for various inter and intra collegiate events.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

- Student representatives actively participate in the following Committees:

Vidyarthi Pratinidhi Mandal, the Students' Council, Departmental Associations, NSS, NCC, Natyavalay and Ruia Performing Arts Society (RPAS), Gymkhana Committee, Career Guidance and Placement cell, IQAC, Gender Sensitization Committee against Sexual Harassment, Internal Complaints Committee, Anti-Ragging Committee, Anti Ragging Squad, Library and Ruia Science Association.

- Students also contribute in editing Ruia's magazine - 'Ruiate'. The E-Bulletin is entirely managed by the students. Ruiate Mehfil is a monthly discussion club which creates an open and equal platform for both students and teachers to put forth their viewpoints on various topics.

5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.

- Ruia College has a very active Alumni Association. Its office bearers consist of alumni and former faculty members. It felicitates its outstanding students in academics and sports on 15th August every year. The RCAA enables the alumni of the College to associate themselves closely with the activities of their alma mater. The former faculty members are specially invited to share their expertise in the subject with the students.
- Inspiring talks, talks on career guidance and informative talks by several illustrious alumni are organized for the students by different departments. Workshops for students on various topics like 'Skills for Success' was conducted by our alumnus Ms. Harsha Almad and her group.
- RCAA organizes several fund raising programs to support the College in its developmental activities. Organizing health check-up camps is a regular feature of RCAA. Their dedicated team of doctors provides invaluable services.
- Ruia College alumni has contributed generously for infrastructural development in the college. The renovations of the library, classrooms, refurbishment of the Ladies' Washrooms have been the major initiatives undertaken by the RCAA.

Any other relevant information regarding Student Support and Progression which the college would like to include.

- Most of the students at Ruia College are adequately motivated, during their years of graduation, to pursue higher levels in education.
- The students are imparted sufficient life skills to develop into responsible global citizen



CRITERION VI: Governance, Leadership and Maintenance

Ruia College has been consistently striving to achieve excellence by reaching higher levels of performance in teaching, research and related academic pursuits. The diligent efforts taken, in this direction, by the institution are based on the philosophy, 'Education for all' set by the founders of its parent body, 'The Shikshana Prasarak Mandali, and the 'Vision' and 'Mission' statements of the College itself. These efforts have evidently enabled Ruia College to move from 'College of Potential Excellence (CPE)', awarded in 2010-11 to 'College of Excellence (CE)' in April 2014. Ruia College is the first College in the country to achieve the 'College of Excellence' status by the University Grants Commission (UGC). Ruia College was also the first College in Maharashtra to receive the 'Star College Status' from the Centre's Department of Biotechnology (DBT) in November 2015. It was the first College in the University of Mumbai to receive approval from UGC to start a KAUSHAL Centre in August 2015. Teamwork, functional autonomy given to Departments, strategic administrative leadership and supportive management have been the key driving factors towards its consistent performance and achievements. Ruia College, in the last four years, has continued its further progress to higher levels of academic excellence

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.?

The main goals and objectives of higher education that emphasizes upon 'Access, Equity and Quality' are well reflected in the Vision and Mission statements of Ruia College:

Vision

To emerge as a centre of higher learning and innovative research to meet the challenges of a global society.

Mission

Mainstreaming the practices that facilitate intellectual, emotional, physical and cultural growth of students.

Ramnarain Ruia College with almost eight decades of experience in higher education and training along with long standing industry-academia linkages, has developed immensely, as a direct outcome of its research in Humanities and Sciences. The distinguishing features of Ruia College are highlighted as under:

- Offers 12 PhD programs (03 in Arts and 09 in Science)
- The College received DBT Star Status in November 2015 for six departments; 6 more departments received Star College Scheme in 2016 to improve and support undergraduate Science education and research.
- Ruia College is the only College in Maharashtra with a Centre for Slum Studies focused

- on studying the nature and complexity of the issues related to urban slums.
- It is the only College affiliated to University of Mumbai which has an Herbal Research Laboratory and an Animal Testing Centre.
- Its Foreign Language Centre offers various courses in Spanish, Japanese, German, and Chinese to prepare our students for global demands.
- The ‘Dr. P. S. Ramanathan Advanced Instrumentation Centre’ provides hands-on training in high-end instrumentation to students and staff and supports research activities.
- The College has active collaborations and student exchange programs like ‘Higher Education Academic Partnership’ with the Commonwealth of Pennsylvania (MoU with the Commonwealth of Pennsylvania signed on Dec. 4, 2014 at Ruia College).
- Strong research culture at the College nurtures several research projects undertaken in collaboration with industry and other research institutes.
- Its Departments conduct annual festivals and programs, apart from Student Council activities, to support overall personality development of the students.
- It has a Language Lab equipped with audio-visual aids and software to facilitate better teaching-learning process.
- Its ‘Centre for Mindfulness and Wellbeing’ promotes sound and holistic education by imparting valuable life skills to the students and faculty.
- The College has a State of the art ‘**Cell for Students with Special Needs**’ for the visually challenged students.
- The College undertakes remedial teaching for academically weaker students from socially deprived backgrounds in order to enable their retention and better performance.
- The ‘Cell for Students with Special Needs’ caters to the special teaching requirements of the students who are differently-abled.

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

The College plans and executes all the academic and administrative reforms in accordance with the Vision and Mission of the College. The proactive management provides substantial freedom and autonomy to the Head of the Institution (Principal) to set goals and to achieve them within the purview of the Management. The Principal, IQAC, Heads of Departments and faculty prepare strategic plans pertaining to academic and institutional activities. The management provides professional support systems for the staff along with adequate infrastructure and facilities for enhancing the quality of teaching- learning.

The Principal plays a key role to inspire, guide, and support the faculty in implementation of the plans. Institutional governing bodies act in consensus while developing strategies that bring institutional change in terms of quality assurance, efficiency and effectiveness.

The Management and the Principal link with policymakers, key administrators, the higher education research community as well as alumni, other institutions and industry for creative dialogue on the elements of Vision, Mission and plans of the College and make their successful implementation possible.

Decentralised planning and administration of activities along with responsibility and accountability ensure successful implementation of quality policy and plans.

6.1.3 What is the involvement of the leadership in ensuring:

- *The policy statements and action plans for fulfilment of the stated mission*

The Head of the Institution applies democratic and participative policies to continually improve and develop the College. There are timely reviews and monitoring of programs.

The institutional plans are derived in line with the Vision and the Mission statements. Strategies and procedures are regularly communicated to the staff to set the tone for improvement and change. This in turn empowers the staff and fosters accountability.

The Principal has been instrumental in creating positive relationships and developing collaborative associations with other organizations/institutions. As a leader, the Principal takes responsibilities for leading, delivering and bringing about a beneficial all-round change.

- *Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan*

The policies and plans are prepared after need analysis, departmental inputs and consultations of the Principal with the Management. A monthly meeting of all Heads of the Departments is conducted by the Principal along with the Vice-Principals, IQAC coordinator, LMC teacher representatives and Registrar to discuss academic and administrative matters during which new activities and goals are planned.

Periodic meetings with faculty, support staff, LMC and students provide inputs for formulation of plans and the same are incorporated by the IQAC into the strategic plan. Discussions are held and feedbacks are obtained during the meetings which are used to take decisions while preparing strategic plans.

- *Interaction with stakeholders*

The College management ensures regular interactions with various stakeholders to obtain feedback, suggestions and critical reviews on various aspects of institutional performance.

- Interaction with students by the Principal during lectures.
- Interaction with faculty and support staff: The Heads of council meetings, staff common room meetings, support staff meetings, IQAC meetings, LMC meetings conducted periodically to review the progress and plan of action.
- Interaction with Parents during Orientation program for students.
- Interaction with Alumni during Ruia College Alumni Association (RCAA) meets.
- Interaction with industry through joint research programs, visits by industry experts and other institutions.



➤ Interaction with institutions abroad by the Principal and faculty helps to study their best practices.

- *Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders*

The Principal and Vice-Principals follow an open door policy providing easy access to the stakeholders for exchange of ideas and information. The staff and students are involved in the process of planning and decision making.

Members of various Committees/Cells continuously are in the process of brainstorming for creating frameworks and processes for effective functioning. Meetings and feedbacks from the students, faculty and parents are the major sources of input for planning and strategizing programs to meet institutional goals.

IQAC and various departments organize and coordinate regular interactions with different stakeholders to facilitate the inputs. Research facilities in Humanities and Social Sciences have been encouraged through setting up of PhD Centers and laboratories. College makes use of its Alumni and Industry-Academia linkages to undertake need analysis to understand and then strategize to meet the contemporary needs of the society.

- *Reinforcing the culture of excellence*

The culture of excellence at the College, is strengthened through a process of continuous training and aligning and realigning goals of the Institution. Faculty and students are allowed and encouraged to experiment with new ideas. The Institution has a focus on innovation in infrastructure development, in all functions and at all levels.

Academic reforms including skill-based programs relevant to current globalised scenario and innovations in teaching-learning methods have been introduced.

The Departmental activities, the activities conducted by NSS and NCC help to inculcate values, sense of social responsibilities and community involvement.

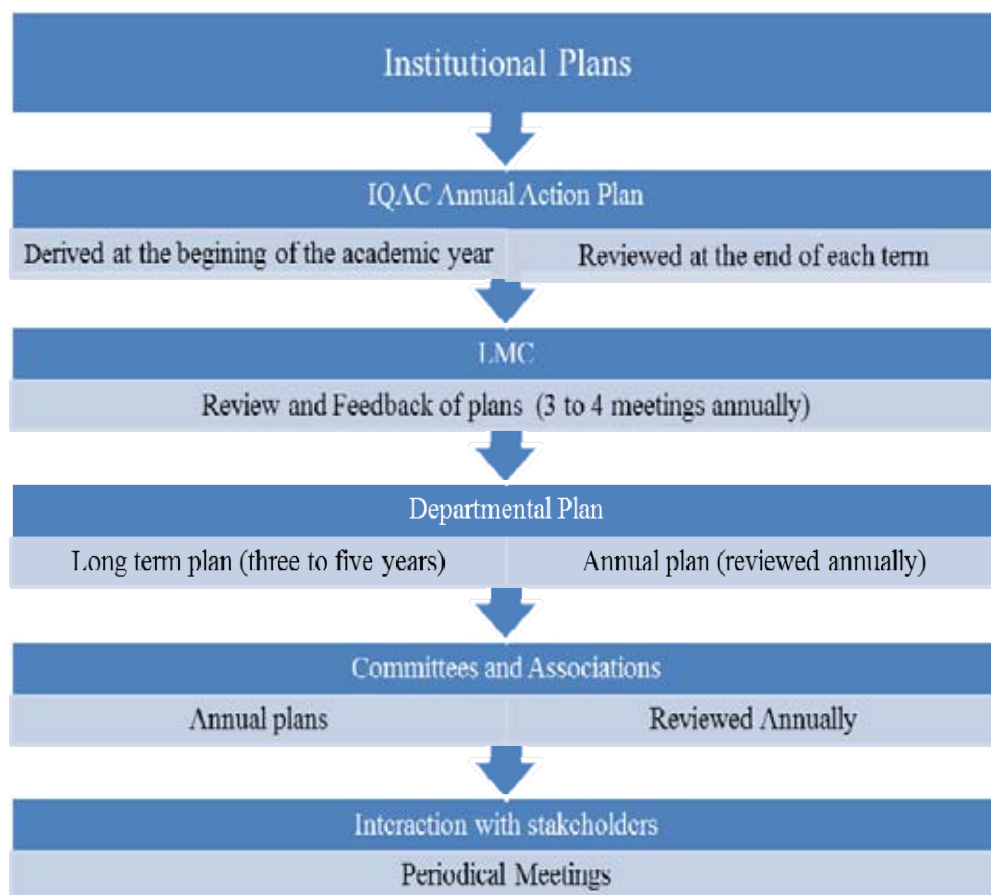
- *Champion organizational change*

- The Management, the Principal and the staff have been constantly pursuing to strengthen the academic and physical infrastructure for achieving excellence in teaching, research and outreach programs. Participatory delegation of work and inclusive approach by the leadership and the Management ensure a sense of belongingness among both students and faculty.

- Focus of various programs conducted by the College is on initiating skill oriented programs, honing entrepreneurial skills, strong commitment towards social responsibility, upgradation of library and its resources, providing excellent research facilities, FDPs for staff and nurturing students' excellence through academic, curricular and co-curricular activities. All these mechanisms, framework and activities ensure timely and effective organizational change to meet societal needs.



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?



- The Management, Principal, IQAC and LMC together become the regulating and controlling authority. They prepare strategic goals based on institutional objectives. The Management has regular meetings with the Head of the Institution regarding financial matters and developmental schemes of the College.
- The Heads of Departments / Committees / Cells / Units submit their plans to the IQAC in order to streamline the activities of the Institution. A report of the activities conducted is submitted to the IQAC.
- An Academic calendar is prepared in the beginning of the year by the Exam Committee in consultation with the Principal, Vice Principals and Heads of Departments.
- Yearly self-appraisal forms and teachers' feedback forms are reviewed by the Principal for evaluating the staff performance with regards to the strategic initiatives.
- Annual Academic Audit of the Departments provides inputs for improving the activities of the departments.
- Suggestions from Parent-Teacher meetings are reviewed for follow-up action.



- Inputs are received through Industry academia linkages at the College on innovations in teaching-learning process, which is communicated, with necessary budget allocations, to the Management by the Principal for approval.
- There are 42 associations in the College for managing the co-curricular and extra-curricular activities. These activities give them the freedom to execute their innovative ideas in accordance with the goals of the institution.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

The Management follows the practice of proactive support, evaluation and development of teacher quality as its core principle of effective leadership. The faculty is allowed to exercise their own discretion in how they implement the curriculum, sequence and organize instructional resources to ensure quality. The faculty is encouraged to make themselves abreast of national and international developments in areas of teaching, learning, evaluation and prioritizing innovations. To achieve this, following initiatives are undertaken:

- Capacity building workshops and faculty development workshops are conducted to help the faculty in acquiring knowledge, skills and values for effective implementation of course programs.
- The MoU with the Commonwealth of Pennsylvania gives the faculty exposure to global innovative practices in teaching-learning, research and student related activities.
- Project based learning has enabled the faculty and students to experience the teaching-learning experience better. Acquisition of new knowledge, drawing conclusions by analysing data and discussing ideas is easier when students work together where the teacher becomes the facilitator of the learning process.
- ICT training provided to the faculty has led to increased use of computers and better use of new tools in teaching and learning.
- Involving the faculty and non-academic staff in preparation and implementation of proposals and plans has improved accountability and a sense of belongingness among the faculty. This has helped the College in successful implementation of the CE program, Star College scheme, several major and minor research projects from the UGC, DST, DBT, University of Mumbai.
- The Principal approves allocation of funds for purchasing library resources and conducting departmental activities, the utilization of which is under the authority of the assigned faculty.
- Wholehearted support is provided to the staff to initiate new projects and also to encourage students to participate in extra-curricular activities.
- Research Scholars Meet held by Science Departments like Chemistry provides exposure to the faculty on research projects and new developments in the field of Science and Technology.
- Faculty is encouraged to file patents to encourage novel creative activity and to protect their intellectual property.
- Innovations and Research Committee promotes research activities by encouraging faculty to engage in research as well as reviews and endorses research proposals.
- Departmental autonomy in planning and implementation of curriculum and activities is provided to the faculty.



6.1.6 How does the College groom leadership at various levels?

The College management practises delegation of responsibilities, with an inclusive attitude, which is evident in the constitution of various Committees, Associations and Cells with specific faculty members as In-charge. To ensure appropriate faculty representations, Vice Principals are appointed both from Arts and the Science faculties. The post of Vice-Principal is rotated every few years to provide opportunities for faculty members to take up responsibilities. They assist the administration and hone their leadership skills in process.

- S. P. Mandali, the managing body of the College, undertakes proactive measures in inculcating leadership and progressive thinking among the teachers by organising workshops by experts from areas of leadership, team building, strategic planning.
- The Principal, as head of the institution, deposes Vice Principals, Heads of departments and / or faculty members to various programs and encourages expression of ideas on various platforms to nurture leadership at different levels of organisational hierarchy
- Senior faculty with operational experience and subject expertise, guide the newly appointed faculty by delegating responsibilities pertaining to the departmental work.
- Through goal setting, assessment, delegation and accountability, the staff becomes active and responsible towards the objectives of various activities.
- The faculty is encouraged to promote networking with Centres/Departments and laboratories around the country.
- Faculty development programs, participation in conferences and seminars aid to encourage leadership in initiating innovations to enhance the quality of the learning and teaching process at the undergraduate and postgraduate levels.
- Various training programs involving sessions on leadership and capacity building are conducted for faculty and support staff.
- Support staff is provided with training in softwares, stress management, safety management and any other necessary training which is instrumental in their development
- The College promotes leadership building activities like management, planning and organisation of departmental festivals, student council activities, research paper presentations and research projects, student participation in intra-collegiate, inter-collegiate platforms.
- The Management supported the participation of our Principal in two international programs in Harvard (USA) and Oxford (UK) Universities in 2015 on Academic Leadership for the Principal to get global exposure in academic administration.

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 College makes conscious and systematic efforts to help percolate decision making power to the lower levels of the institutional hierarchy.



- In order to decentralize administration, there are several need-based administrative committees formed by the College administration, with faculty members being given the powers of decision making.
- The meetings of the Heads of Departments with the Principal, Common Room meetings of teaching and support staff, committee meetings, IQAC meetings result in vertical reporting to the Principal and also horizontal reporting to colleagues.
- All Departments are entrusted the responsibility to make annual plans comprising of academic and co-curricular activities and programs in the beginning of the year which are communicated by the Heads of Departments to the Principal and IQAC.
- This results in the interrelation and collaboration of various job roles and responsibilities of the staff. Departments are given functional autonomy. Decentralization has resulted in improved participation of the faculty as well as greater transparency and accountability.

6.1.8 Does the College promote a culture of participative management? If 'yes', indicate the levels of participative management.

The culture of participative management has been the core of all the activities at Ruia College. The administrative domain of the institution comprises of the Principal, IQAC, LMC, Vice Principals, Examination-in charge, Heads of Departments, Faculty, Support staff, Registrar and Students' Council. All decisions are taken after discussions in the meetings with the respective members at lower rungs of hierarchy. These meetings encourage members to participate in discussing new plans and solve various administrative issues.

IQAC keeps the platform for discussions open and active for the entire staff to suggest steps in ensuring continuous enhancement in academic and administrative arenas.

The College ensures that each stake holder contributes to the institution's practices and help the institution to take a holistic approach. The College incorporates all such suggestions in the decision making process.

Recommendations from the Student Council, suggestions from parents through parent teacher meetings, inputs from industry experts through industry academia collaborative activities, alumni inputs and alike ensure necessary changes in the courses, teaching-learning processes and infrastructure.

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?

FORMALIZATION OF QUALITY POLICY:

- The Management, Principal and IQAC draw a set of basic principles and associated guidelines for formulation of Quality Policy.



- The Quality Policy is derived in line with Vision and Mission of the institution and enforced by the governing body of the institution which directs and limits its actions in pursuit of long term goals.
- The Quality Manual is published as a document which encompasses the management perspective of achieving institutional goals within the framework of Quality Policy to safeguard quality at all spheres of activity.
- A compendium has been prepared by IQAC which details out the Preamble, functions, objectives and guidelines for each Committee/Cell/Centre set up in the College. This compendium acts as a motivating tool for developing plans and conducting activities every year.
- IQAC prepares an annual plan including training programs, seminars/conferences/workshops for faculty /non-teaching staff /students and also introduces necessary administrative changes desired for proper implementation of plans which are reviewed at the beginning of each year.
- Based on the perspective plan and strategic plans, annual plans are prepared by the respective departments, committees and centres. All Committees/Cells/Centres prepare their annual plans in the beginning of the academic year and submit it to IQAC.

DEPLOYMENT OF QUALITY POLICY

- The Quality Manual with the Quality Policy is deployed by the IQAC and copies are circulated to all Departments. It is available for reference and the IQAC members help the staff members in understanding the management outlook on ensuring quality while achieving institutional goals and objectives.

REVIEW OF QUALITY POLICY

The Quality Manual is reviewed yearly by the IQAC and amendments/ modifications are made to suit the requirements necessitated by the policy needs and / or the statutory compliances.

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Yes, the institute prepares its perspective plan and strategic plans on the basis of SWOC analysis.

The institution's perspective plan focuses upon the path of progression to a hallmark institution /Centre of Excellence enabling a research environment, high quality faculty, improved technology for education delivery and internationalization of education. The plan is prepared and strategized on the basis of SWOC analysis carried out by each department.

It includes the following aspects (some of which are already initiated):

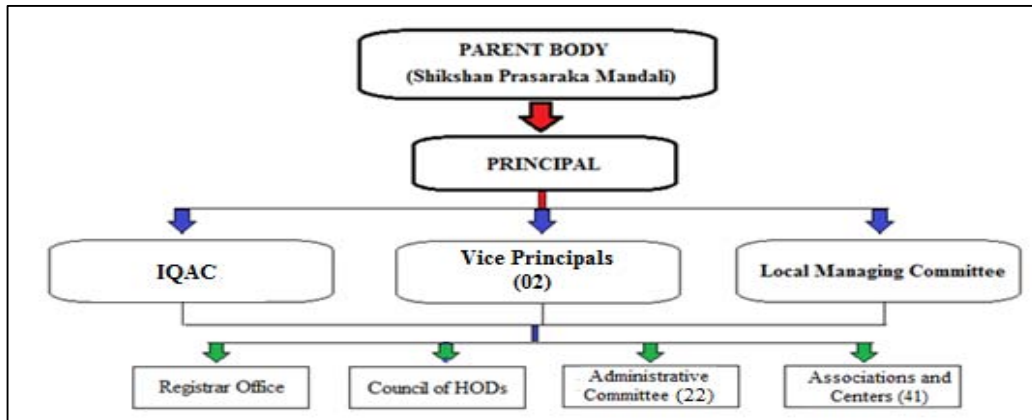
- Delivering a comprehensive range of experiential learning programs for an increasingly diverse group of learners.
- Take applied research initiatives that support a growing group of industry and community partners in their efforts to innovate, improve and address real-world needs and opportunities.
- Become a destination of choice for career-focused degrees
- Provide access to education and training for a diverse range of learners through comprehensive planning and implementation of teaching-training programs.
- Increase research activities and impact to meet real-world needs and drive productivity, innovation and prosperity
- Academic collaboration and networking with other institutions, both in India and overseas. Expand opportunities for students to study abroad through collaborations with universities abroad.
- College is in the process of becoming an autonomous institution in order to deliver high quality programs and services, a comprehensive range of programming and applied research initiatives to better meet the needs of students.
- Through the grants received under CE and Star College, the College plans to refurbish and develop facilities that targets career-focused learning.
- Build on existing industry academia partnerships in development of facilities, programming, and opportunities for students
- Expand opportunities for local and regional programming through academic partnerships
- Develop centres for innovation and excellence through government, industry, community and academic partnerships
- Strengthen commitment towards Institutional Social Responsibility and become increasingly responsive to community-based development initiatives

6.2.3 Describe the internal organizational structure and decision making processes.

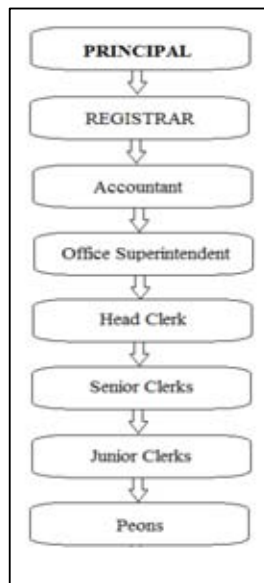
Ramnarain Ruia College is one of the thirty-six educational institutions managed by the trust – ‘Shikshan Prasarak Mandali’, a Pune based organization in Maharashtra. The administration of Ruia College is the responsibility of the Principal who is directly accountable to the Parent Body. The Managing Council of the S.P. Mandali controls finance and approves schemes of development.



The organization structure of Ruia College is as follows:



Organizational structure of Non-Academic Unit:



- **Principal :**

The Principal and the Management together are the regulating and controlling body. They prepare strategic plans and goals based on institutional objectives. These plans emphasize on the use of modern tools of ICT, promoting research culture, encouraging self-employment, developing industry collaborations and forming various committees for administrative purposes.

- **Local Managing Committee (LMC):**

The LMC is a statutory body formed as per Section 85 of the Maharashtra Universities Act, 1994 which outlines the powers and duties of the same. The LMC comprises of



elected representatives of the teaching (03) and non-teaching staff (01), representatives (04) of the parent body and the Principal. Every year, two to three meetings of the LMC are held.

- **Vice Principals:**

The Principal is assisted by two Vice Principals. The administrative and operating decisions are taken jointly in consensus with the staff of the College.

- **Heads of Departments: (Council of HoDs)**

The Council of Heads of the Departments consists of all HoDs, Vice Principals, Registrar, Convener of IQAC and all the teaching members of the LMC. It is an important body in the general governance and administration of academic and extra-curricular activities of the College. The Heads of Departments have advisory and executive functions and the body discusses on matters such as the academic calendar, admissions, introduction of new courses or methods of curriculum administration, examinations, results, assessment, Library, student development and counselling. They also review performances and suggest solutions. The body coordinates the upward and downward line of communication in the management hierarchy. They formulate plans and assist in translating Vision and Mission into action and achievements.

- **Administrative Committees:**

The Administrative Committees comprising of faculty members, assist the College administration in carrying out various routine functions like Examinations, Grievances, Unfair means, Anti ragging, Library Committee, Purchases, Admissions, Gender Sensitization and a Cell Against Sexual Harassment, Infrastructure, Collaborations, Publications, Attendance, Research and Development, etc.

- **Co-Curricular and Extra-Curricular Associations/Centres:**

There are 42 co-curricular and extra-curricular associations and centres set up for the purpose of conducting co-curricular and extra-curricular activities. These associations carry out many innovative activities to promote an all- round development of students which are in consonance with the goals of the institution.

- **Staff Common room (General Body):**

The Staff Common Room meetings are held periodically (four to six times a year). In these meetings, matters like new policies, plans, performance reviews and achievements are discussed. The Staff Common Room provides a forum for open interaction between the Principal and teaching faculty.

- **Student Council (Vidyarthi Pratinidhi Mandal - VPM):**

The Student Council (VPM) is an apex body comprising of nominated students. The Chairperson, a faculty member, the Secretary, a student member and other nominated

student members govern the Council. The Student Council organizes and conducts co-curricular and extra - curricular programs throughout the academic year.

- **Parent-Teacher Association**

The Principal is the convener of this Association which comprises of faculty members and representatives from the parents.

6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following:

- *Teaching & Learning*

Following initiatives have been implemented by the College to improve the quality of teaching and learning:

- Adoption of POGIL
- Digitalization of the library
- Inviting renowned speakers for Guest Lectures and Memorial lectures
- Involvement in curriculum development at Mumbai University through faculty members who are members of Board of Studies
- Training for Moodle based Learning Management System conducted by C-DAC for enhancing innovation in teaching-learning
- Mentoring program for students
- Teachers' Diary for keeping records of teaching plans and lectures taken
- Implementation of Project Based Learning
- Organization of workshops on Curriculum Design and Curriculum Development
- Conducting Academic Audit by internal and external agencies
- Obtaining feedback from Students on the teaching-learning and institutional facilities
- Obtaining feedback from students, alumni and other stakeholders on the curriculum

- *Research & Development*

The College has initiated the following to augment the quality of R&D at the Institution:

- Institution has Research Advisory Committee with external experts as members
- Signing of MoUs with various agencies
- Promoting industry-academia linkage for more applicative research
- Obtaining patents for protection of intellectual property
- Obtaining research Funding from governmental agencies like the UGC, DBT, DST, AYUSH, NMPB and University of Mumbai
- Promoting Inter-departmental and interdisciplinary research projects
- Initiating research on urban slums through the Centre for Slum Studies
- Initiating research at undergraduate levels through DBT's STAR programs
- Set up smart laboratories



- *Community engagement*

The College extends its services to the Community through the following initiatives:

- Extension activities carried out by the NSS, NCC, and by various Departments
- Institutional social responsibility activities such as adopting villages for rural upliftment
- Adoption of a College at Malvan in Konkan region
- Projects, Programs and workshops held by the Centre for Slum Studies
- Extension activities by the faculty at personal and at College level
- Providing infrastructure, library facilities and assistance to students of The Cell for Students with Special Needs.

- *Human resource management*

In order to improve quality of human resource available at the Institution, the following initiatives have been taken:

- Granting of special leave for faculty exchange programs
- Workshops on improving teaching skills organized by IQAC for faculty
- Appointment of Faculty as coordinators/ members on College committees to encourage participation in decision making
- Performance appraisal of faculty for filling performance gaps and planning FDPs.
- Training programs for support staff to accelerate their performance.
- Starting of Credit Society for Non-teaching staff members in College from year 201. The Credit Society provides loan at lower interest rates for the non-teaching staff
- Providing need based educational aid every year to wards of non-teaching staff
- Providing admission in the College to the wards of teaching and non-teaching staff.
- Organisation of medical camp through the Ruia College Alumni Association every year for the students as well as non-teaching staff

- *Industry interaction*

The College ensures quality interaction with Industries by the following means:

- MoU between the Institute and industries for academic linkages and research activities.
- Professional consultancy by the faculty to industries
- Industrial services by involving the faculty and students in Industry service activities for example, Laboratory work and surveys.
- Joint research programs and field studies by faculty and experts from industries
- Visits of faculty to industry for discussions or delivering lectures on subjects of mutual interest



- Visits of industry executives and practicing professionals to the Institute for overseeing research work and laboratories, discussions and delivering lectures on industrial practices, trends and experiences
- Workshops, conferences and symposia with joint participation of the faculty and industries
- Participation of experts from industry in curriculum development
- BSc and MSc projects/dissertation work in industries under joint guidance of the faculty and experts from industry/other institutions
- Internships for students in industries
- Appointing experts from industries as Visiting faculty/.

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?

- During various stakeholders' meetings the discussions with Principal and the suggestions obtained by him are presented to the top management.
- LMC meetings are conducted periodically to review the progress and plan of action. In case of financial matters, the feedback is referred to the Parent body for decisions and sanctions.
- Heads of Councils meetings held monthly, provide a feedback on Departmental activities.
- Academic Audit report feedback is presented by the Principal to the Staff during Staff Common room meetings.
- The Principal also communicates with the alumnus during alumni association programs.
- Student Council meetings with the Principal provide him the feedback on the activities, achievements and difficulties faced by the students.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

Feed back, discussions and suggestions obtained through administrative meetings improve the effectiveness and efficiency of the Institutional processes. Staff Common Room and support staff meetings takes place at least 4 to 6 times in a year. Annual plans, quality improvement initiatives and administrative issues are discussed during these meetings. Minutes of these meetings are maintained for records and future reference.

6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

The College has a Local Managing Committee which reports to the Administrative Board and the Managing Council of the Parent body, S. P. Mandali, Pune. The Local Managing Committee meets about four times a year. The recommendations of the Local Managing



Committee meetings such as developmental activities, leaves, budget, specific issues related to staff are discussed and resolved by the Managing Council of the Parent Body through the Administration Board. The resolutions related to these decisions are available at the office and will be provided to the NAAC Committee during their visit. Some of the main resolutions made last year include- renovation of library, renovation of Chemistry Lecture Hall, establishment of infrastructure facilities of DDU-KAUSHAL Kendra which were implemented immediately.

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?

Yes, the affiliating University makes a provision to accord status of autonomy to affiliated colleges. The College had applied for autonomous status and the procedures have been completed. The College has recently received the letter from the UGC granting autonomous status to Ruia College from 2017-18 to 2022-23. The College is awaiting the notification in this regard from the State Government.

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?

Separate Grievance Redressal Cells (GRC) for teachers, support staff and for students have been set up in the College as per provisions of Maharashtra University Act 1994. The Grievance Redressal Cells are set up to receive, consider, attend, resolve and settle grievances of employees amicably. Anti-Ragging Cell is formulated to prevent Ragging in the Campus. A Grievance Box is kept in the foyer and in the staff room. There is an Internal Complaints Committee to address issues related to sexual harassment as per the norms of the Government. The Principal and the Vice-Principals are easily approachable to handle any grievance of staff and students and they try to settle grievances of staff and students amicably.

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?

In the last four years, there has been no court cases filed against the institute.

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?

Student feedback is used as a vital feedback on many areas which relate to teaching-learning and institutional performance. The students' feedback is administered every year by the IQAC. Feedback questionnaire also includes questions on preparation, communication skills, and punctuality as well as questions on institutional facilities in respect of library facilities, support staff and infrastructure. The students also give feedback on curriculum contents and the same is communicated through the IQAC to the concerned Board of Studies of the University. The quantitative data is collected and analysed to determine areas of strength as well as potential areas for improvement of faculty and the Institution. The results are used to



identify needs for amendments and professional development opportunities for the faculty. The results of this feedback are communicated to each teacher to look for further improvements wherever necessary and incorporate the same into the teaching-learning process.

The areas where improvement has been carried out based on the suggestions from students are as follows:

- Improvement in library facility and library timings
- Improvement in rest room facilities
- Enhancement in students' research activities
- Providing more open access to the library

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?

IQAC has taken various initiatives towards faculty development as well as development of non-teaching staff. The CE grant has also been used to enhance the professional development of faculty and non-teaching staff through various training/re-training programs.

Faculty Development Programs for teaching staff:

Faculty development also takes place through large number of faculty participating in seminar/conferences/workshops organized by various departments in the College:

- Number of Conferences/Seminars/Training and conferences organized in last five years by various departments and IQAC – 28
- Workshops organized by departments – 56

A few important ones are listed below:

2012-13

Workshops conducted:

- BLUEPRINT learning & organizational development
- Effective Presentation Skills
- Effective Team Building
- E-content development training program

2013-14

Workshops conducted:

- Capacity Building Outbound training program
- Voice Culture for effective teaching
- Workshop on the process of Career Advancement Scheme

**2014-15**

Workshops and Seminars conducted:

- A National seminar sponsored by NAAC on 'Quality Sustenance: Aspects & initiatives' Training on 'Stress Management and Capacity Building'
- Research methodology

2015-16

Workshops conducted:

- Laboratory Safety
- Curriculum design and development
- POGIL facilitator training workshop
- Searching and Managing Information' and a special session on 'Dealing with Differently-abled Learners
- Molecular biology techniques
- 'Moodle' for enhancing teaching-learning process

Non-teaching staff training programs:**2012-13**

- Training on laboratory safety, handling of chemicals and chemical safety was given to Non-teaching staff by Botany, Chemistry, Life Science and Zoology Departments.

2013-14

- Nine non-teaching staff were provided training on 'Tally' software in September 2014.
- A brief training on 'Basic computer course' was conducted by Mr. Mahavir Advaya from Department of Computer Science for 20 non-teaching staff from 22nd to 26th February 2013.

2014-15

- A five day training program on 'Unicode' was provided to 3 Non-teaching staff members from 22nd June 2015 to 27th June 2015. The training was organized to expose them to the digital world and was a blend of lectures as well as practical sessions and the learning process was interactive.

2015-16

- Under CE Grant, Mr. S Pevekar conducted two workshops on 'Stress Management' & 'Team Building' on 8th Sept. 2015 and 29th Sept. 2015 respectively, attended by 39 participants.
- Foundation course in English speaking for 4 non-teaching staff was conducted on 12th & 15th-17th December 2015 in the Language Lab.
- Demonstration of the use of newly purchased fire extinguishers was organized for non-teaching staff of the College by the Safety and security committee, in the Quadrangle on



2nd March, 2016 at 11am. A total of 60 teaching and nonteaching staff members attended the demonstration.

Initiatives for Global Interactions

- The College organized for 7 faculty members to visit and interact with faculty of 11 Universities of Pennsylvania State of USA. The interaction exposed the teachers to modern innovative teaching-training practices of these Universities. (October – November 2015)
- In its efforts to provide global exposure to faculty and students, the College made arrangements for 6 teachers to visit 5 Universities of Pennsylvania State of USA. During these visits, they not only interacted with the faculties of these Universities but also participated in workshops conducted specially for them. (October – 2016)
- Two faculty members along with students will be participating a three-week Summer Training in Biotechnology at Indiana University of Pennsylvania, USA.
- Under the MoU signed with the University of Harrisburg, the faculty from the University will be conducting a workshop on Biotechnology and Nanosciences, at Ruia College, for the faculty and students, in the month of July 2017.

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?

- The Faculty is encouraged to participate in short term training programs in Teaching Methodologies, Innovative and Effective Teaching, research methodology, orientation to NAAC, Credit Based Semester Grading System, developing soft skills, etc.
- Duty Leaves and other forms of concessions in duty are provided to the faculty for attending orientation and refresher courses, paper presentations in seminars/conferences at national and international level.
- Faculty visiting abroad through the MoU of the Commonwealth of Pennsylvania are exposed to innovative practices in teaching-learning, research and student related activities.
- The Faculty is provided short term leave for attending career advancement programs, training courses, seminars, conferences, etc. The College has implemented API (Academic Performance Indicators) System for promotion of Teachers under CAS Scheme of UGC 2013-14 to 2016-17 and initiated the processing of the CAS data for the post of Professors.
- To motivate the Faculty, they are appreciated for exemplary achievements and contributions at important events and functions .
- Welfare schemes for faculty and support staff act as a motivating factor.

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 based on the guidelines provided by the UGC, the State Government and the University of Mumbai. These performance appraisals are used to evaluate employees and are also useful to provide constructive feedback.



- A self-appraisal form is filled up every year by each faculty member and submitted to the Principal and IQAC through the Heads of Departments. The Performance Appraisal is based on criterion like additional skills/ qualifications acquired, participation in seminars and conferences, research paper presented and published, innovative teaching-learning techniques implemented, extension activities, participation and contribution to student activities, university work and involvement in college administration. Tools like performance appraisals, performance planning and development and performance management are used to engender a high performance culture.
- The faculty is required to compare the performance of previous years and the current year and initiate steps for improvement if necessary. The IQAC informs the Principal for necessary actions required in case of any particular faculty/Department on the basis of the performance gaps observed.
- If any performance gaps are identified, those are communicated directly by the Principal to the concerned faculty. The Principal personally addresses and counsels teachers after reviewing performance appraisals of faculty through a meeting with the departments. New opportunities and plans are discussed along with suggestions necessary to upgrade the performance of the faculty. The students' feedback received is also useful in determining the performance of the faculty.
- The academic audit also provides an insight into areas that have great potential for further growth and improvement at the individual and departmental level.

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?

The feedback on performance appraisal is directly communicated by the Principal to the concerned staff/Department. Based on the feedback from performance appraisal, faculty / Department needing improvement / assistance are identified. Requisite remedial actions are planned and implemented. For instance, faculty who were in need of training in the area of using ICT in teaching-learning programs benefitted from the training programs in ICT and POGIL conducted by the IQAC. Training programs for support staff were conducted to improve their efficiency and more involvement in the administrative system.

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 College has established separate Welfare cells for teaching and support staff .
- Children of support staff who are in need are provided educational aid.
- The Credit Cooperative Society for teaching and support staff was started in April 2014 and has a total of 108 members till date.
- Free health check-up is organized by Ruia College Alumni Association every year for teachers and non-teaching staff.
- The Centre for Mindfulness and Wellbeing conducts talks by experts and organizes workshops for staff.



- A Medical camp on Body Fat and Body Mass Index (BMI) was conducted jointly by IQAC and Women Development Cell for the faculty and non-teaching staff.
- The Gender Sensitization Committee conducts talks by experts for staff and girl students on awareness about sexual harassment.
- Financial support to teachers to participate in seminars, workshops and conferences is provided.
- Generally, over 90% of teaching and support staff avail the above facilities.

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

- The teaching staff and non-teaching staff are recruited as per Maharashtra State regulations. A selection committee is decided as prescribed by the Government Standard code.
- The Institution provides a positive working environment including research facilities with complete autonomy provided to attract and retain permanent faculty. One Retired Professor from the Tata Institute of Fundamental Research has been appointed as an Adjunct Professor in Department of Chemistry to enhance research activities.
- There is no bias applied on Departments or its staff on the grounds of aided and self-financed courses when it comes to appointment of staff on different Committees/Cells/Units or appointing delegates to represent the College at the national or international level. The Principal encourages all Departments equally to come up with new initiatives to develop the College and faculty effectively.
- The staff development programs and leaves for FDP/conferences motivate the staff to develop skills and reach their fullest potential.

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

The budget of the College is prepared by the Registrar and Principal which is placed before the Local Managing Committee for sanction. It is finally approved by the Managing Council of S. P. Mandali. As per the budget allocations for each Department, the funds are disbursed. The plans for utilization of the funds are placed before the Purchase Committee which evaluates and ensures the adherence of purchases to the guidelines of the management. After utilization of the funds, Departments submit the bills within a specified time. All the funds are utilized as per the specific guidelines of the University/ funding agencies.

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 Institution are annually audited by Government recognized external auditors. An Internal audit is conducted every six months in each term by the College. The auditors are appointed by the Parent body for the purpose of internal and external audits. The

copy of audit reports will be made available to the Peer Team during their visit. The last audit was done in March 2017.

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 the reserve fund/corpus available with Institutions, if any.

- Being an affiliated College, the major sources of institutional receipts/funding are the grants received by the College from the State Government, the UGC / University / DBT / DST, sponsoring industries and the College share of fees collected from students.
- Deficit in the budget provisions are generally managed by the Parent Body.
- Income expenditure copies are attached and detailed statements will be made available to the Peer Team during their visit.

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

- Based on the scores obtained by the College after the NAAC 3rd cycle of Reaccreditation, the College applied for grants under the CE program, under the STAR program of DBT and under the DDU-KAUSHAL Kendra. The College was sanctioned all these grants and the funds are utilized as per the specific guidelines of each funding agency.
- The Principal in association with Ruia College Alumni Association actively contact various donors and philanthropists to obtain funds. With these funds, the College has been able to renovate and upgrade various facilities in the campus.
- The faculty members are motivated to apply for research grants from various funding agencies. (Refer Criterion III.)

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?

This Cell was established in the academic year 1999-2000 as per the guidelines set forth by NAAC. The IQAC functions very effectively as an 'input-transformation-output system'. The IQAC assists and coordinates various operations across departments, committees, associations, staff and students of the institution and also identifies and suggests strategies for improving and maintaining the quality of education, developing suitable infrastructure and obtaining necessary resources.

The IQAC carries out the following activities:



- Formulates the Quality Manual which encompasses the management perspective of quality in meeting institutional goals.
- Demands an annual plan from each department and Committees/Cells/Units and accordingly, prepares an action plan. The action plan focuses on areas of students' skill development, faculty development and developmental programs for non-teaching staff, research and innovative teaching-learning methods, etc.
- Conducts academic audits of departments
- Recommends processes for effective administration.
- Suggests upgradation of technology, laboratories on the basis of feedback.
- Coordinates and arranges developmental programs for faculty and support staff.

Effectiveness of IQAC is ensured by setting goals, monitoring and analysing performances of each Committee/Cell/Centre. Students' online feedback, feedback on curriculum, mentoring, etc. are some of the few exercises introduced and carried out by IQAC.

b. How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?

Suggestions made by the IQAC are evaluated by the Principal and most of them are implemented. Following suggestions of the IQAC were approved by the management and implemented:

Student centric

- Ruia College applied to UGC for setting up the DDU Kaushal Kendra and accordingly three skill based programs were initiated.
- The Environment Awareness Committee – to sensitize the staff and students on environmental issues was set up in 2013-14.
- Annual conduction of Laboratory Safety Workshops for all Science students
- Online feedback given by the students started from the year 2013-14.
- Student Mentoring activity

Faculty oriented

- Feedback on curriculum
- Organizing of Faculty Development Programs (for both teaching and support staff)

Infrastructure

- Digitization of the library
- Installation of Public address system, CCTV in the campus and renovation of washrooms was carried out.

Quality of teaching and training

Academic audit by external experts



Extension & outreach programs

- Extension and Outreach Program Committee – to initiate Institutional Social Responsibility related activities was set up in 2015-16.
- Extra-Mural Committee was set up in 2015-16.
- Environmental Audit (green audit) was conducted (wet & dry waste audit, energy audit, e-waste audit, Hazardous waste disposal) and necessary measures implemented.

c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

External members are nominated to the IQAC Committee. Dr. S. D. Samant, Dean, Institute of Chemical Technology, Matunga, Mumbai and Ms. Madhuri Misal – member of the Managing Council are external members on the committee currently.

Suggestions given by the external members have been implemented as under:

- A compendium for Committees/Units/Cells including their roles, objectives, functions has been prepared by IQAC. It is a ready-to-use manual for old as well as new Committee members and helps to understand the activities of each Committee/Units/Cells for efficient functioning of the committees.
- Audit of all Committees/Cells/Units to be carried out annually in order to review their activities and provide a feedback to the respective In-charges.
- Structuring and strengthening of mentoring activities of the students has been carried out effectively.
- Increased collaborations with national and international institutions. (Pennsylvania MoU)

d. How do students and alumni contribute to the effective functioning of the IQAC?

Students' representatives on IQAC gather information from students through Divisional representatives, Students Council members and volunteers who provide suggestions and share their problems regarding academic and non-academic issues which is considered by IQAC as quality improvement measure. Students proactively participate in the feedback mechanism and helps in the collation of information. Alumni provide feedback about the institutional functioning and in formulating strategic plans.

e. How does the IQAC communicate and engage staff from different constituents of the institution?

- The IQAC has representations of students, faculty, support staff, management and alumni. It conducts four to six meetings every year. The discussions and decisions taken during these meetings are reported by the Principal, Heads of Departments, faculties and support staff during designated meetings. Student representatives communicate the decisions to the students.
- The College has a Teachers' Google group through which all notices and circulars are shared. Any program or activity conducted by departments and Centres/Committees are also shared on this group.



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 operationalization.

- A Quality Manual has been prepared by the IQAC. A compendium comprising roles, objectives, functions of all 42 Committees/Cells/Centres provides guidelines for activities to be carried out by each committee. Each committee is allowed to plan and perform its activities which are communicated to the IQAC.
- The Principal and coordinator of the Committees/Cells/ Centres work proactively with full democratic and open approach towards execution and implementation of the evolved mechanisms. All the activities so performed are reviewed by IQAC and the Principal annually. The decisions of IQAC are communicated to the respective in-charges. IQAC formulates an action plan for the year based on suggestions and requirements of all committees, staff, students, parents and alumni, and also by collecting data, analysing it and by benchmarking.
- The students' feedback report, departmental reports, performance appraisal report, self-appraisal report, College annual report, directives from the Government, etc. become the basis for evaluating the overall performance of the institution and also to identify areas of development.
- The system involves various institutional units within an integrated framework where decisions are taken and new proposals are prepared by all committees/cells/centres. Hence, quality policies are framed and implemented through a decentralized governance system, participative management and faculty empowerment strategies.

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.

On the basis of analysis carried out by the IQAC and suggestions from the Principal, Departments and support staff, various development programs and training programs are planned and conducted for effective implementation of the quality initiatives in the areas of teaching-learning, research, students support activities and collaboration as mentioned earlier in this Criterion.

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?

Academic Audit is carried out annually for each department in which two external experts (one subject expert and one non-subject academic/industry expert) along with the Principal and the IQAC chairperson are involved. The parameters of the academic audit of the departments are based on curriculum, teaching-learning methods employed, performance of students, student achievements, etc. The suggestions, ideas and solutions provided by the audit team are used to prepare new plans/proposals and to overcome any problems/barriers faced by the department. Departments continually and consciously strive to improve teaching and learning, compare and understand practices of other Departments.

Internal Academic Audit was conducted on 10th to 14th October 2016 and External Academic Audit by University of Mumbai was conducted on 9th January 2017.

6.5.5 How are internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The NAAC was envisaged by UGC clearly distinguishing it to be one of the most important quality assurance agencies in education. Based on the NAAC requirements, the IQAC was set up, which plans, reviews and suggests new activities to be undertaken by various units in the institution. The IQAC has evolved mechanisms and procedures for effective functioning of various committees. Overall SWOC analysis of the institution is done, considering the peer team report by NAAC. The College also implements all the regulatory norms prescribed by the University of Mumbai.

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?

Teachers' diary is provided by IQAC to each faculty in the beginning of the academic year. It comprises of teaching plan, lectures conducted and method of teaching-learning adapted by the faculty for the entire academic year. The diary aids in evaluating teaching-learning practice of each faculty which is reviewed during the academic audit of the department. This helps the faculty to design teaching-learning mechanisms to stimulate student involvement in the teaching-learning process. It also aids in deciding the resources and incorporation of relevant curricula.

The mechanisms that are used in evaluation of teaching -learning and operational outcome at the College are:

- Academic Audit
- Teaching Plan
- Monthly HOD Council meetings
- Students' Feedback
- Examinations
- Results
- Performance Appraisals of faculty

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

The decisions, recommendations and mechanisms are communicated to the staff through the meetings of the IQAC, LMC, and Students' council, Heads of Councils and staff meetings. Other sources to communicate quality initiatives to the stakeholders include:

- College website
- Notice Boards
- Annual Day Celebrations
- PTA meetings
- Orientation Programs



- The College actively uses internet through platforms like the Teachers' Google group which is used to share all notices, reports, faculty development programs, exam duties, programs conducted by Departments/Centres/Cells/Units, etc. This group facilitates diffusion of information and interaction regarding responsibilities and tasks to be achieved.

Any other relevant information regarding Governance Leadership and Management which the College would like to include.

- The College management, S. P. Mandali is a trust which is 129 years old and was originally formed by four school teachers. The Management therefore has strong core values in education which has percolated to all its institutions.
- Ruia College has a special standing in the University of Mumbai and with its dynamic leadership, has been on the forefront of implementing progressive changes and outlook in higher education and learning.
- The leadership at the College has always been practicing democratic values, decentralized academic controls and inclusive approach in delegation of duties and responsibilities.



CRITERIA VII: INNOVATIONS AND BEST PRACTICES

In an era of continuous innovations and technological progress, Ruia College creates an environment to allow innovation to thrive by providing a supportive environment to its faculty as well as students. It consistently remains in forefront in initiating new courses, specialized programs and adapting to technological innovations. These new initiatives are mainly focused to provide skill based training and to inculcate research culture at both undergraduate and postgraduate levels. Each progressive step by the College helps students to develop their critical thinking, technical skills, soft skills, communication skills, problem solving skills, pedagogical skills and become equipped to make better choices and widen their civic engagement. Multiple activities carried out by students in various capacities while working for college programs, departmental associations, student council and alike provides a platform to foster their abilities. Innovative teaching techniques like POGIL, Project based Learning, specialized programs organized by Center for Mindfulness and Wellbeing, DDU-KAUSHAL Kendra and various Departmental programs provide a valuable learning experience to the students. Research activities are further expanded to undergraduate students, which helps in popularizing science education. Sensitization of students to environmental issues is ensured through various awareness programs and sustainable practices within the campus.

7.1 Environment Consciousness

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

Yes, the College conducts a Green Audit of the campus and facilities. As a part of Green Audit, the College conducted an Energy audit (Synergy), Solid waste Audit and Wet Waste audit (Stree Mukti Sanghatana). The Audits were initiated by involving students who documented the trees in the College campus, surveyed both wet and dry waste produced in the campus and electricity usage in the premises. Understanding the impact of chemical effluent produced by the Science laboratories, the College has made a conscious effort to adopt Green Chemistry, Micro-volume reactions and micro-fluidics in its laboratory practices. The Environmental Awareness Committee organizes activities to sensitize the students about the environmental issues.

7.1.2 What are the initiatives taken by the College to make the campus eco-friendly?

The College has taken significant initiatives to make its campus eco-friendly by taking various steps as follows:

- **Energy conservation:**

Energy audit of the College was carried out in 2012-13 by a group of chemistry students. Later, an official Energy audit of the College was conducted by Synergy in 2013-14. Based on the recommendations of the audit, the College initiated several activities to percolate the awareness about energy conservation among students. Various initiatives like awareness lectures, switching to LED lamps, LED computer screens and Star rated electrical appliances have been implemented. Science Departments were specifically instructed to economize the use of gas in laboratories. Attempts have been made to shift



to Compressed Natural Gas from LPG. The Chemistry Department also uses alternate source of energy in the form of microwaves and ultrasound for reactions.

- **Sustenance of resources by Micro Scale techniques:**

The College has made efforts to reduce pollution and waste generation by resorting to Micro Scale techniques and Green Chemistry. These practices are being implemented in undergraduate (UG) and postgraduate (PG) Chemistry laboratories to reduce the waste generation. The Department of Microbiology has implemented the use of Microfluidics in its project based learning for all students.

- **Use of renewable energy:**

The College has planned to install biogas generator and solar panel generators in the campus soon. The College has initiated action for the installation of leased solar power system from Varshasookt Consultancy. The undergraduate students of Life Science and Microbiology in collaboration with Don Bosco Institute of Technology, Mumbai, fabricated Solar Distillation units and studied the efficacy of Solar Disinfection of drinking water.

- **Water harvesting:**

College is planning to install a rain water harvesting system within the campus and deliberations are on with concerned agencies. In order, to create awareness about water conservation among the students, a Poster and Model competition was organized by the Students Council- VPM on Water harvesting. Biotechnology Department in their annual festival 'Chimera' had set up a stall on rain water harvesting.

- **Check dam construction:**

The students of NSS built a *bandhara* (bund) on the river flowing through Nere village in Shantivan, Panvel for stocking the water during the monsoons so that it can be used throughout the year in the village.

- **Use of power saving equipment:**

The College has planned to replace in phased manner, high power consuming electric appliances with Star rated models. A practice of selecting Star rated appliances for all new purchases has been started. For e.g. All ACs fitted in newly renovated class rooms are energy efficient with "Star Power" rating. All fluorescent tube lights of are being replaced by LED lights and all computer monitors are being upgraded to LED monitors.

- **Waste recycling:**

The College undertook dry and wet waste auditing with the NGO Stree Mukti Sanghatana in 2013-14. Following the audit, the College adopted the policy of Zero Waste. The College has constructed a compost pit where the canteen waste is recycled using microbial composting. The paper waste from the campus is recycled into envelopes,



Teachers' Academic Diary and Notepad in collaboration the NGO, Stree Mukti Sanghatana. As a special campaign, student volunteers of NSS collect paper waste and recycle them into paper bags and attractive envelopes. The students sell these recycled articles in coordination with the College office.

- **Efforts for Carbon neutrality:**

The College has made efforts towards Carbon neutrality by improving greenery in the College premises by augmenting garden area and using the terrace of the college for green house and shade net house. The Greenhouse Management department conducts training in urban farming and terrace gardening to initiate citizen's actions towards carbon neutrality. The College makes conscious efforts towards minimizing the use of electricity wherever possible by forming student groups to act as vigilantes.

- **Plantation:**

A program funded by Ministry of Environment and Forests, Govt. of India is implemented through the Department of Life Science in which 1000 native trees are planted annually along the hills around Mumbai. The department also planted several trees in denuded areas of Nerul- Matheran range in the Western Ghats. Local adivasi children were also involved in the drive.

NSS and NCC units of the college also organize tree plantation program annually. They planted 1000 trees at Mahim Nature Park, Mumbai. Students and staff of the Department of Botany along with the residents of Hindu Colony, Matunga are involved in the care and nurture of rare trees in areas around the College. The Botany department also provides advice to the Mumbai Municipal Council for identifying and planting indigenous trees to the city of Mumbai.

- **Hazardous waste management:**

The College has signed an agreement with SMS Envoclean Pvt. Ltd., an approved agency authorized by Municipal Corporation of Greater Mumbai and Maharashtra Pollution Control Board for Safe disposal of wastes of Biohazard. Wastes from animal experimentation laboratories, clinical waste from Microbiology and other biohazard wastes are segregated into colour coded bags (red, yellow, blue etc.) as per the standard bio-waste disposal codes.

In laboratories, especially in Departments of Biological Sciences samples of body fluids like blood and serum are treated with sodium hypochlorite before disposal. Wastes from microbiological experiments are autoclaved before disposal. Carcinogenic wastes from Molecular Biology experiments are oxidized to safer compounds before disposal.

As a measure to prevent accidents in laboratories, Safety and Security Committee organizes Workshops on Safety in laboratories (Biology and Chemistry laboratories) annually since 2014-15. Green Chemistry principles are employed in Chemistry laboratories.

- **e-Waste management:**

The College with the supports of students and faculty undertook a drive to collect e-Waste like old keyboards, chargers, headsets and even old CPUs from the College campus. The e-Waste (139 Kg) was disposed in collaboration with Ecofriends Industries (MPCB and CPCB approved), who awarded a 'Green certificate' to College for this initiative (March 2015). Students of the Department of Computer Science and Department of Mass Media conducted a collection of e-Waste and in collaboration with Trimurti Solar Equipment Ltd., converted the e-Waste into innovative products like chess boards for the visually impaired, lamps and solar chargers.

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.

The College functions as an affiliated College adhering to the guidelines of the University. Within this restricted sphere of functions, the College strives to innovate in its deliverables to the students and other societal stakeholders. Innovations introduced by the College in various spheres of its functioning can be comprehensively enumerated as follows:

- **Curricular Aspects:**

Being an affiliated College, the curriculum implemented is the one prescribed by the University. Despite the challenge of adhering to the prescribed syllabus, the College undertook an introspection of the curriculum involving interactions of faculty with parents, alumni, industry experts and other stakeholders. The feedback from students was also an integral part of the exercise. The College has made conscious efforts towards innovations in implementation of curriculum and in initiating add-on courses, skill based courses to positively transform the students by;

- Emphasizing on skills of analysis and introspection
- Encouraging critical thinking and analysis
- Making them understand moral implications of actions
- Enabling them to shift from idealism to pragmatism

Some of the areas that needed special attention were development of employable skills, opportunities for lifelong learning, improvement in communication skills, soft skills, developing skills of enquiry, analysis and critical thinking etc. The language Lab. undertakes special training in improving language skills of students to improve communication. As a part of training the trainers, a workshop on Curriculum Design and Development was organized for the faculty in collaboration with Dr. K. Mohanan from IISER, Pune.

In last four years the College, focused on initiating three skill based programs that not only make the students job ready but also instil entrepreneurship skills among the



students. The College has established the Centre for Mindfulness and Wellbeing to provide various life skills for holistic development of students through various enrichment courses. Most of the Departments arrange add-on Courses in modular pattern to inculcate, specialized knowledge skills, technical skill and soft skills.

- **Teaching Learning:**

- The teachers at Ruia College, over the last five years, have transgressed from the classical “Chalk & Board” through ICT enabled teaching to the role of teacher as a facilitator for active learning. The approach of the faculty is more student centric with considerable focus on the outcome of teaching rather than the input. This transformation has been mainly through the use of platforms like Moodle based Learning Management System, Flip the Classroom approach, Enquiry Based Learning approach, POGIL and the use of Research Based Pedagogical Tools. The students over these years are being transformed from passive learners to active learners with an enriched learning experience.
- The Language Lab set up by the College addresses the issue of weak communication skills in English, especially among students joining from vernacular medium.
- The implementation of innovations in teaching techniques have shifted the emphasis on class-room teaching to ICT based teaching aids. About 23 online tests have been conducted so far with a total of 827 students appearing for these tests.
- Techniques like Flip the Classroom, has increased discussions in class-rooms and it helps students to think and sharpen their communication skills, social skills and build their confidence.
- Project-based learning (PBL) improved the retention of content and has made students' attitudes towards learning more positive. On an average 20% of the topics were taught by this method. Both Science (Chemistry, Microbiology, Life Science, Botany and Physics) and Humanities (English, Sanskrit, Hindi, Philosophy and History) Departments implemented this method of teaching which encouraged more and more students to think originally and critically. Project based learning also enabled the shift of emphasis to critical thinking and trans-disciplinary approach.
- POGIL being a student-centered strategy; students work in small groups with individual roles to ensure that students are fully engaged in the learning process. It was implemented by various departments and enabled students to hone their skills in team building, presentation skills and facilitated enquiry based learning.
- The sessions conducted by the Centre for Mindfulness and Wellbeing were followed by real life activities such as guided meditation, *asanas*, yoga, calming meditation, lively question answer sessions and Sahaja Yoga Meditation. Overall 184 students and 21 faculties were benefited from these activities.
- To encourage the students further, to learn the subject, fun activity based learning, was carried out by many Departments. Sanskrit Department organized a Sanskrit Day and staged plays in Modern Sanskrit which are based on current issues. French Department used Flash cards specially designed for teaching French phonetics to students. The Microbiology Department students learned taxonomy by inquiry based projects and has encouraged students to design educational games based on Molecular Biology, Immunology and Biochemistry.



- A special program to celebrate completion of 30 years by DBT, Govt. of India was organized, wherein students put up the concepts of Photosynthesis, Electron Transport System through dance and drama. Departments of Botany and Microbiology organized their own summer training programs to train the UG students in using more sophisticated instruments/ techniques, thereby helping the students to acquire advanced scientific skills.
- A student of English Department was selected under the Kizuna (Bond) Summer Project by the Embassy of Japan for a ten day (3rd to 13 March 2013) educational tour of the nuclear disaster-stricken areas.
- The College is trying to inculcate research culture in UG as well as PG students by encouraging them to participate in various competitions, seminars, conferences organized nationally and internationally. A student of Microbiology Department bagged a gold medal in UG category and another from Chemistry Department was awarded a silver medal, at state level Avishkar competition organized by Mumbai University in 2012-13. A total of fifty teams participated in Avishkar 2012-13 at UG, PG and PhD levels.
- **Research, Consultancy & Extension:**
 - In the last four years, the College has made conscious efforts to encourage research at under-graduate level and to popularize Science education.
 - Through the STAR College program of DBT, Govt of India, in 12 Science departments, the college has been able to support research projects of undergraduate students. Some of these students have been able to present their research outcome at research meets and win accolades.
 - Through College of Excellence Program, the research facilities in 4 Departments have been augmented like HPLC system for Chemistry and Life Science, Microfluidics Lab at Microbiology and a research cell for Economics with software like Stata & EView.
 - In most of the departments of Arts and Science faculties, project based learning has been implemented to inculcate research culture among the students. To support this approach, all laboratories have been upgraded to “Smart Labs” with ICT support for enriching the Pre-lab and Post-lab experience.
 - Additionally, the College has established collaborations with nearby institutes of national repute like Institute for Chemical Technology (ICT), IITB, Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Tata Institute of Fundamental Research (TIFR) for mentoring the students in research projects.
 - Recently the College has instituted scholarships for Research scholars to support their participation in National and International events in the form of Netarvali Research Paper Competition and Shrimati Balasaraswaty Krishnan (SBK) scholarship.
- **Industry collaborations:**

The College sustains its industry-academia linkage by continuing industrial services for Rand D. The Herbal Research Lab, P.S. Ramnathan Center for Advanced Instrumentation and the Animal Testing Unit carried out projects from various industries like Ajanta Pharma, Sun Pharma, Cipla Ltd, Neopharma and Pitambari etc.



- **Extension:**

- The College organizes several extension activities as per local and regional needs and priorities. Every year the College through the Extension and Outreach Committee invites students from nearby schools and provide them experience of laboratory experimentation to foster their interests in Science education.
- Research fellows and teachers from other institutes and universities are trained in various instrumentation and analytical skills for e.g research fellows from M.S University, Baroda and NEHU, Shillong availed such benefits.
- The College has adopted an educational institute, S.K. Patil College from Malvan, Konkan region of Maharashtra and has plans to extend the facilities and the expertise of college faculty in teaching and training to the students of the rural region.
- Microbiology Department has established linkages with Dr. Manu Prakash from Stanford University, USA to expand the applications of “Foldscope” in Science education.
- The College has set-up unique facilities to train students in specific skills like Simulated Travel Desk (Tourism and Travel Management), Hydroponics and Aquaponic systems (Green House Management), Drug testing facility and Clinical Pharmacology Unit (Pharma Analytical Sciences) and Microfluidics Lab (Microbiology).

- **Developing Life Skills:**

To mitigate emotional stress and promote holistic development of students, the Center for Mindfulness and Wellbeing has been set up in the College. The Centre, one of its kind among Colleges, conducts various programs where learners are enabled to develop qualities like patience, openness, acceptance and empathy. Some of the sessions conducted by the Center are ‘Stress Management through Yoga’, ‘Techniques to deal with Anger and Fear’, ‘Positivity and well-being’ etc.

- **Any other:**

The College has introduced Radio Frequency Based Identification Tags for students with appropriate supporting software. This has improved the management of attendance record and has also improved the attendance of students in classes.

To correlate the database of students, the College upgraded software for management of Library (SLIM) and Examinations (Computerized College Management System).

7.3 Best Practices

7.3.1 Elaborate on any two best practices which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.



The two best practices followed at the College are as follows:

1. Fostering integrated growth through diverse skills

2. Enhancement of Research culture

1. Fostering integrated growth through diverse skills

Goal:

In the present scenario in Higher Education, there is a huge gap in curricula between theoretical knowledge and skill based learning. Hence, the acquisition of skills along with knowledge has emerged as a challenge for Institutions imparting higher education. Ruia College makes efforts to serve students with diverse backgrounds and abilities by using different teaching methods for developing higher order thinking skills in them. It has also taken initiatives for multi-skill development and accordingly augmented the training of students and staff (Teaching staff & Support staff) in a big way in the past few years. This helps students to prepare and adapt to real work situations. The College also aims at fostering and nurturing creative competencies of students to widen their career horizons into the fields of Arts, Drama and Media. The College can boast of several alumni who were students from the Science stream but have excelled in creative fields of Arts and Media.

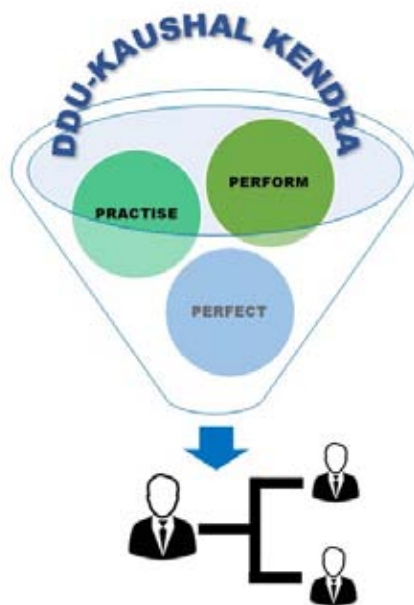
Main aims of this practice are:

- To enhance students' skills for employability
- To mould them as future entrepreneurs
- To develop soft skills and specific technical skills to adapt to the changing circumstances
- To foster and nurture their creative competencies
- To equip them with life skills and to foster emotional and spiritual intelligence

The Context:

Ruia College has a long standing history of producing eminent personalities in various fields of Art, Literature, Theatre, Music, Sports, Administration/ Government, as well professionals in the fields of Medicine, Law, Research and Industry. The College has been continuously developing the infrastructure and facilities, arranging for sessions of experts from various fields, and organizing intensive training programs to augment the capacities of its faculty and support staff. The College has been consciously making efforts to be in the forefront by introducing new courses and programs to meet the challenging needs of the global scenario.

Skill development in the youth of India is one of the flagship initiatives of Government of India. Ruia College was the first College in the city of Mumbai to initiate three skill based programs under this Government initiative (DDU-KAUSHAL Kendra).



The practice:

The following practices are adopted to foster the integrated growth of students;

- The College runs 61 courses to cater to the global needs. It offers multiple options in subject combinations in both Arts as well as Science faculties. Realizing the industrial demands for specialized skilled human resources, the College introduced Vocational Biotechnology and Vocational Industrial Chemistry at the under graduate level way back in 1994. These courses were later amalgamated into the main curriculum.
- The Applied Components that the college offers with various subjects have been selected with a view to enhance the skills of students complimenting the core subject. For example, Applied Biotechnology is offered along with Microbiology and Biochemistry; Drugs and Dyes, Non-conventional Energy Sources and Waste Recycling with Chemistry and Horticulture with Life Science, Botany as well as Biotechnology. Similarly, Investment Analysis, Journalism, Mass Communication and Gandhism is offered for humanities.
- Ruia College is the first college among the colleges affiliated to University of Mumbai to introduce Bioanalytical Science at M.Sc. level as an interdisciplinary subject in 2003. It also was the pioneer in starting five years Integrated Course in Bioanalytical Sciences.
- B.Voc in Green House management and B.Voc in Tourism and Travel Management were introduced by the college in 2014.



- Recognising the efforts taken by the institution in skill based education, Ruia College was sanctioned the status of a Community College and a new B.Voc program in Pharma Analytical Sciences was initiated.
- One of the important milestones in the efforts of the College in Skilled Based education is the sanction of DDU Kaushal Kendra, under the Prime Minister's flagship program of Skilling India. Ruia is the only college under Mumbai University to be sanctioned a KAUSHAL Kendra. All B.Voc programmes were later subsumed under the umbrella of DDU-KAUSHAL Kendra and all these programmes can be later pursued up to Masters as well as PhD levels.
- A recent initiative to further our efforts in skill based education is the establishment of 'Cell for Innovation, Incubation and Entrepreneurship' to encourage enquiry, sustain inquisitiveness, promote innovation, and nurture entrepreneurial skills.
- The College has an Intellectual Property Cell which is a unique feature amongst all affiliated colleges. The Cell has been sensitizing students about the importance of Intellectual Property and also the significance of 'searches' to avoid re-invention of wheel. The Cell also guides students in exploring patentable ideas and assists in patent applications.
- To promote global adaptability of the students, especially to overcome communication barriers, the College has an active Foreign Language Centre which conducts courses in several foreign languages like Spanish, German, French, Chinese and Japanese.
- To augment the communication skills of students, the Language Lab trains students in phonetics, diction and spoken language. The Lab is adequately equipped with software and audio equipment that is compatible with various languages.
- College provides the students with sports facilities like badminton court, International standard shooting range, boxing equipment and well equipped gymnasium. College has appointed professional coaches for training the students and provides scholarships and tournament allowances to enhance their performance at the competitions.
- Self Vision Centre conducts various workshops and training programs such as Computer Software training program, training in Mathematics and reasoning skills, training for Group Discussion and English Grammar Skills for the visually challenged students to enhance their level of competence.
- Modular add-on courses to bridge the gaps between the curriculum and the demands of the industry are conducted regularly. These include, Techniques in Molecular Biology, Child Psychology, Hypnotherapy, Heritage of Mumbai and Introduction to Food History and Culture
- Ruia College is also unique in having a Centre for Slum studies that offers GIS facility. The Centre regularly conducts various hands on workshops and training programs related to urban slums and problems.
- Another unique centre of the College- 'Centre for Mindfulness and Wellbeing' promotes sound holistic education and imparts valuable life skills to the students and faculty. Students are encouraged and enabled to develop qualities like patience, openness,



acceptance, fearlessness, inner calmness and empathy, which are missing to a great extent from the current educational scenario. This activity is managed by humanities departments of English, Philosophy, Psychology and Sanskrit. The centre has a google website link <https://sites.com/site/ruiamindfulnesscentre/>

- Two pertinent associations namely, Ruia Performing Arts Society and Ruia Natyavalay have been instrumental in sculpturing future artistes who excel in their respective fields and carve a niche for themselves.

Evidence of success :

- The students passing out from vocational courses in Biotechnology and Industrial Chemistry, have done remarkably well both nationally and internationally. For example, Dr. Avinash Shenoy is an accomplished faculty at the Imperial College, London. Rujuta Divekar is a renowned nutritionist. Many more students are well placed in various sectors like Pharmaceuticals, R&D establishments, financial institutions, Media, Insurance, Information technology, healthcare etc.
- Students from the B.Voc Courses have initiated start-ups especially those from the Green House Management. Many students from Tourism and Travel Management have started initiatives by organising tours and heritage walks on their own. Few students from Pharma Analytical Sciences have received placements with Drug Regulatory consultants. A group of four students, from the College, has been nominated as Student Entrepreneurs for Free mentoring program 2017 under Asian Institute of Family Managed Business.
- Many of our young alumni have formed their own companies like Envirocare, Biogenomics, Microchem, EnvisBE, OncoStem Diagnostics.
- The workshops and training programmes offered by Self Vision Centre have enabled the visually challenged students to secure jobs mainly in banking sector.
- Ruia 'Natyavalay' has contributed immensely to Marathi theatre and our students have won prestigious trophies in the last few years
- 2012-13 was the third consecutive year of securing Overall Championship Trophy in Maharashtra Utsav, an Inter collegiate State level cultural competition. Since it was 3 years in a row, Ruia College was given a special appreciation letter for the same. Again in the year 2015-16 Ruia bagged the Overall Championship Trophy in Maharashtra Utsav
- In last five years, students have bagged 26 gold medals, 27 silver medals and 31 bronze medals at University level sports competitions, 18 gold, 31 silver and 29 bronze medals at Inter University level, and 3 gold and 2 silver medals at National Level sports competitions.

Problems encountered and Resources required:

- As students come from diverse backgrounds with different abilities, offering a uniform course and to incorporate all the students in teaching learning activities and developing the necessary skill sets is a major challenge.



- The College has to undertake conscious and consistent efforts to develop the necessary skills and keep the Faculty abreast of the global developments.
- To overcome the challenges of meeting ever changing needs of the industry sector, the College is working closely with various industries and external agencies for regular upgradation of programs. More partnerships with industries are needed to give more opportunities for internships to students so as to give them hands on training.

2. Enhancement of Research Culture

Goal:

Research is an integral part of higher education. It helps to create scientific temper, generates new knowledge, contributes to knowledge sharing and develops students' investigative and technical skills.

It is necessary to inculcate a research culture at the UG level for developing critical thinking, to help students to identify a problem, analyse it and find a solution for it. Promotion of research at UG level will enable;

- students to link knowledge with application and develop an aptitude for enquiry based learning
- students to adopt a scientific approach to study a problem
- students to understand interdisciplinary approach to problem solving and break barriers between subjects
- students to create intellectual property and more importantly to be able to find solutions to many societal problems through innovations
- enhance networking and collaboration, of the College, with academic and research institutions by creating possibilities for exchange of students and faculty members.

The context:

Ruia College has a strong research culture which dates back to 1940. So far the College has successfully produced more than 600 research scholars. Ruia College takes pride to be a pioneer in establishing, at an affiliated Institution, Animal Testing Centre, Herbal Research Laboratory and a sophisticated common Instrumentation Facility to support high-end research activities. Currently, the College has 31 Research guides. In the last four years about 336 Research papers have been published.

The College continues its efforts to enhance the quality of research by actively encouraging and fostering research culture amongst the teachers and students.

**The practice:**

Though, research projects are part of curriculum of post graduate courses, Ruia College has been inculcating research at the UG level. These efforts of the College were further consolidated with grants from DBT-STAR, CPE and CE.

- Under the College of Excellence program of UGC, the Departments of Chemistry, Microbiology, Life Science and Economics have been recognised as highly rated Departments. The undergraduate students from these Departments carry out research in interdisciplinary areas like Microfluidics, Phytochemistry and Nanotechnology.
- Under the CE program, workshops on Research methodology, Scientific writing, Tools for Reference Management were organized for both students and staff to further promote research.
- The College received DBT STAR Status for six Science Departments (Botany Chemistry, Zoology, Life Science, Microbiology and Physics) and thereafter six more Departments (Statistics, Mathematics, Biotechnology, Bioanalytical Science, Biochemistry and Computer Science) have been selected under Star College Scheme for promoting undergraduate research.
- The College encourages students to present their research work in the form of research papers, articles and posters in conferences and competitions and also publish their research in journals, magazines.
- The Department of Chemistry conducts an annual research meet where Ph.D students present their research work.
- Faculty from Arts has equally contributed in research activities. Three departments in humanities are recognized as research centres (English, Sanskrit, and History).
- Centre for Slum Studies undertake surveys and research projects in slums related to social issues.
- To support innovation and research the College has set up the Cell for Innovation, Incubation and Entrepreneurship and the Intellectual Property Cell.
- The College has instituted SBK (USD 500) and Netravali (Rs. 50,000/-) travel fellowships for supporting travel of research scholars to present their research work. These fellowships are instituted by our Alumni.
- The College continues to upgrade, augment facilities at Herbal Research Lab., P.S. Ramathan Institute for Advance Instrumentation, Animal Testing Unit, Microfluidics Lab to make available contemporary technological support for research.

Evidence of success:

- In the last four years, 336 number of research publications have been published , 63 research projects from Governmental agencies and industry sponsored projects have been undertaken.
- 15 Faculty members have acquired their PhD in last five years and 04 have submitted their thesis. 18 Faculty members are currently pursuing their PhD.



- 63 students have completed their PhD successfully in the last five years. Currently 65 students have registered for PhD.
- 242 research papers were presented by undergraduate students at scientific events. 85 students got prizes for paper and poster presentations.
- 73 students have cleared competitive exams like NET, GATE, SLET, GRE etc.
- Maintenance of high quality in research at Ruia College, have yielded collaborations with BARC (through BRNS), and active student internships at Central Dogma, Pune and Institute of Chemical Technology, Mumbai.

Some remarkable outcomes of UG research are listed below;

- Fabrication of Solar Distillation units and study of their efficiency
- Standardization of Solar Disinfection of drinking water in collaboration with Don Bosco Institute of Technology, Mumbai
- Development of Educational games in Genetics, Molecular Biology, Immunology, Environmental Biology.
- Improvisation of resin based Glycosylated Haemoglobin kit for use in ELISA reader.
- Modified Portable Culture device for on-field microbiological testing.

The inculcation of strong research culture in students is evident in the significant number of students who pursue research for Masters and doctoral degrees both in India and abroad. The College receives regular R&D projects from various industries like Pharmaceuticals (Ajanta Pharma, Cipla Ltd, Sun Pharma), Nutraceuticals (Marico Industries, Hindustan Unilever) Chemicals (Pitambari Industries) etc. which reflects the applicative value of the institutional research.

Problems encountered and Resources required

- Inadequacy of funds to meet the expenses on maintenance and repairs of sophisticated equipment.
- Support for research quality infrastructure within the available space to conduct expansive research activities. Carrying out research activities along with the regular time table
- To meet the financial needs, approaching additional funding agencies and more collaboration with industries is required.
- Setting up new research laboratories to meet the increasing demand in the research activities at the Undergraduate level.



Contact Details:

Name of the Principal: Prof. Suhas Pednekar

Name of the Institution: Ramnarain Ruia College

City: Mumbai

Pin Code: 400019

Accredited Status: Third Cycle

Work Phone: 022 24141335

Website: www.ruiacollege.edu

Mobile: 9820023919

Fax: 022-24142480

E-mail: principal@ruiacollege.edu



Department of Commerce

1. **Name of the Department:** Commerce
2. **Year of Establishment:** 1979
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
4. **Names of Interdisciplinary courses and the departments/units involved:** NA
5. **Annual/ semester/Choice Based Credit System (programme wise):**
Semester, Choice Based Credit System
6. **Participation of the department in the courses offered by other departments:** NA
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**
NA
8. **Details of courses/programmes discontinued (if any) with reasons:** NA
9. **Number of Teaching posts:** 1

	Sanctioned	Filled
Professors	--	--
Associate Professors	1	1
Asst. Professors	--	--

10. Faculty profile with name, qualification, designation, specialization, (DSc/D.Litt./PhD/ MPhil etc.): (for the year 2015-16)

Name	Qualification	Designation	Specialization	No. of years of Experience	No. of PhD Students guided for the last 4 years
Dr. Urmila Moon	M.Com, PhD	Associate Professor/ Head	Advanced Accountancy	20	--

11. **List of senior visiting faculty:** NA
12. **Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** NA
13. **Student -Teacher Ratio (programme wise):** 130:1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:** NA
15. **Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:** PhD
16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:** NA
17. **Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:** NA
18. **Research Centre /facility recognized by the University:** NA



19. Publications: Papers: 4 and Book: 1

* a) Publication per faculty: 5

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Dr. Urmila Moon	5	1	3	-	-	-	-	1	25	-	-	3.094	3

Key:

a-publication per faculty, b1 papers published in national journal b2 international journal c- publications-international database, d- Monograph, e Chapter in books, f books edited, g-books with ISBN/ISSN h- citation index i-SNIP, j-SJR, k-Impact factor l,-h: index

20. Areas of consultancy and income generated: NA

21. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards

C. Editorial Board:- Member of Advisory Board ‘Abhinav – International Journal of Research’ Commerce & Management, Arts and Education, Science and Technology, www.abhinavjournal.com. ‘ABHINAV’, Open J-Gate (Global e-journal gateway) Index Copernicus.

22. Student projects:

a) Percentage of students who have done in-house projects including inter departmental/programme: NA

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 5 percent

23. Awards / Recognitions received by faculty and students:

- Faculty: Dr. Urmila Moon received Sau. Sunanada Trimbak Sane Smruti Paritoshik (awarded to the best all round teacher of Ruia college), 2012-13.

24. List of eminent academicians and scientists / visitors to the department:

- Mr. Prasan Kamat (Director of C.L. Educate Ltd.)
- Dr. Satish Naringrekar (Associate Professor of L. S. Raheja College)

25. Seminars/ Conferences/Workshops organized & the source of funding: NA

b) International: - NA

26. Student profile programme/course wise:

Name of the Course/programme	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBA					
2015-16	4269	69	10	59	98.2%



27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
B.A.	100%	NA	NA

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. : 7 students

29. Student progression:

Student progression	Against % enrolled
UG to PG	75 to 80 %
PG to M.Phil	--
PG to PhD	--
PhD to Post-Doctoral	--
Employed	5%
Campus selection	
Other than campus recruitment	75%
Entrepreneurship/Self-employment	10%

30. Details of Infrastructural facilities:

- a) Library: College Library
- b) Internet facilities for Staff & Students: 1 Computer for staff, Computer lab for students
- c) Class rooms with ICT facility: Yes
- d) Laboratories: Nil

31. Number of students receiving financial assistance from college, university, government or other agencies:

As per university norms, students benefit financially via freeships. Also from 'Each One Adopt One' scheme and 'Earn while you Learn' of the College.

32. Details on students' enrichment programmes (special lectures/workshops/seminar) with external experts:

On 12th December, 2014, a visit to ITM- Institute of Financial Markets, Kharghar which hosted a workshop on 'Trading on Simulated Securities' (TOSS)

33. Teaching methods adopted to improve student learning

Audio-visual aids, Flip your classroom, assignments, case studies, ICT, study material provided

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Member of Extension and Outreach committee since 2014-15



35. SWOC analysis of the Department and Future plans:

Strengths:

- Committed Faculty

Weaknesses:

- Unhealthy student – faculty ratio

Opportunities:

- Research and project based learning,
- Strengthening the collaboration with Industry and Institutes,
- Internships with organisations working for environment protection,
- Work with NGOs

Challenges:

- Maintaining balance between slow and advanced learners

Future Plans

- Courses on Advertising and Marketing Research Collaborative activities with other departments.
- Skill-based workshops (training in soft skills, stock markets),
- Research projects in collaboration with Industry and Research Institutes.



Department of English

1. **Name of the Department:** English
2. **Year of Establishment:** 1937
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG; Ph.D
4. **Names of Interdisciplinary courses and the departments/units involved:** NA
5. **Annual/ semester/Choice Based Credit System (programme wise):** Semester , Choice Based Credit System
6. **Participation of the department in the courses offered by other departments:** Yes
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** NA
8. **Details of courses/programmes discontinued (if any) with reasons:** NA
9. **Number of Teaching posts:** 3 Full Time + 1 CHB

	Sanctioned	Filled
Professors	--	--
Associate Professors	1	1
Asst. Professors	2	1

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

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of PhD Students guided for the last 4 years
Dr. Anjali Bhelande	PhD, M.Phil., MA, D.T.E.	Associate Professor & Head	Canadian Literature, Stylistics & Feminism	32	Nil
Mr. Arjun Kharat	M.Phil., MA	Assistant Professor	Dalit Literature	12	NA
Ms. Meera Suryanarayanan	MA	Assistant Professor (2014 to date)	Gender Studies & Post Colonial Studies	5	NA
Ms. Priyal Panchal	MA	Assistant Professor (2016 to 2017)	Romantic & Victorian Literature	2 months	NA



Dr. Dinaz Munshi	PhD, MA	Assistant Professor (1999 to date with breaks)	Gender Studies & Post Colonial Studies	26	Nil
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11. List of senior visiting faculty: None

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 25 lectures + 4 tutorial

13. Student -Teacher Ratio (programme wise): UG 60:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: NA

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:

1	Dr. Anjali Bhelande	MA, M. Phil., PhD
2	Mr. Arjun Kharat	MA, M. Phil. (on FDP)
3	Ms. Meera Suryanarayanan	MA
4	Dr. Dinaz Munshi	MA, PhD
5	Ms Priyal Panchal	MA

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: None

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: None

18. Research Centre /facility recognized by the University: Ph.D. Centre

19. Publications:

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Anjali Bhelande	1	-	1	-	1	-	-	-	-	-	-	-	-
Arjun Kharat	1	-	2	-	-	1	-	-	-	-	-	-	-

20. Areas of consultancy and income generated: NA

21. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards....

- Dr. Anjali Bhelande – Member of Advisory Board for Wisdom Garden Institute, U.S.A. www.wisdomgardeninstitute.org



22. Student projects:

- a) **Percentage of students who have done in-house projects including inter departmental/programme : 10%**
- b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: NA**

23. Awards / Recognitions received by faculty and students: 1

- Student (Amruta Shenoy won the title – Miss *Malhar* in 2015
- Student (Amrita Shenoy) -Vidya Bhushan Pusakar ,
- Student (Hridaya Ajgaonkar)- Prof. K. Shri Kumar’ Rolling Trophy College Subject Topper and D. P. Naik Gold medal University Subject Topper Ruia College for the academic year 2016-2017.

24. List of eminent academicians and scientists / visitors to the department:

- Prof. Coomi Vevaina: Former Head, Dept of English, University of Mumbai
- Dr. Marie Feranandes Principal, St. Andrews College, Mumbai
- Mr. Gangadharan Menon, Environmentalist

25. Seminars/ Conferences/Workshops organized & the source of funding :

- a) National – National Seminar on ‘Sustaining Values: Ideas into Actuality’ (9th&10th Dec, 2014) funded by Edelweiss Financial Securities and College.
- b) International – NIL

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBA					
2016-17	4269	89	14	75	87%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
BA	100%	-	-

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

- 2 NET (2014 and 2015)
- SET (2013)

29. Student progression:

Student progression	Against % enrolled
UG to PG	35
PG to M.Phil.	1



PG to PhD	1
PhD to Post-Doctoral	
Employed Campus selection Other than campus recruitment	At Praxis Teachologies. 3 at Ruia Degree College, 3 at Ruia Jr. College, 3 teachers in various schools.
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities:

- a) Library – Dept Library: 650 books
- b) Internet facilities for Staff & Students – Only for staff: 1 PC, 1 Laptop, 1 research lab for students
- c) Class rooms with ICT facility – All
- d) Laboratories – 1 language laboratory

31. Number of students receiving financial assistance from college, university, government or other agencies: -

- Apart from Regular freships provided by the Government students also avail benefit from ‘Each One Adopt One’ scheme and ‘Earn while you Learn’ schemes initiated by college.

32. Details on students enrichment programmes (special lectures /workshops / seminar) with external experts:

- Ms. Priti Nair, Director of Curry Nation Ad agency, gave a talk on ‘Indianness in Advertising’
- Prof Nick Parker, University of Banger gave a talk on ‘Some Innovative Ways of Teaching English’.
- Mr. Gangadharan Menon, delivered a talk on ‘Threats to the Environment’, our own alumnus, suggested many practicable measures for conserving the environment.
- Centre for Mindfulness and Well-being help the student members to manage their negative emotions and inculcate in them the spirit of tolerance, hardines , co-operation, empathy and positivity through lectures, workshops, and field visits.

33. Teaching methods adopted to improve student learning:

- lecture method,
- seminar method,
- group discussion method,
- with blackboard and audio-visual aids,
- flip the classroom and
- project based learning.



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

- 1 faculty member – in charge of Center for Slum Studies

35. SWOC analysis of the department and Future plans:

Strengths:

- Committed Faculty;
- Excellent Infrastructure with ICT facilities;
- Adequately stocked Departmental Library.

Weaknesses:

- Classes with heterogeneity
- Students with mixed learning ability.

Opportunities:

- Innovative syllabus under Autonomy;
- Project-based learning,
- Establishing linkages with media industries.

Challenges:

- Motivating slow-learners.



Department of Economics

1. **Name of the Department:** Economics
2. **Year of Establishment:** 1937
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** BA & BSc
4. **Names of Interdisciplinary courses and the departments/units involved:**
5. **Annual/ semester/Choice Based Credit System (programme wise):** Semester, Choice Based Credit System
6. **Participation of the department in the courses offered by other departments:** NA
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** NA
8. **Details of courses/programmes discontinued (if any) with reasons:** NA
9. **Number of Teaching posts:** 04

	Sanctioned	Filled
Professors	--	--
Associate Professors	4	3 + 1 FDP
Asst. Professors	2	2 contract

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

Name	Qualification	Designation	Specialization	No. of years of Experience	No. of PhD Students guided for the last 4 years
Dr. Aditi Abhyankar	MA, PhD	Associate Professor	Quantitative Economics	27	---
Ms. Varsha Malwade	M.A.	Associate Professor	International Economics	23	--
Ms. Devayani Ganpule	MA (FDP 2015-17)	Associate Professor	Industrial Economics	22	
Ms. Puja Thakur	MA	Assistant Professor	International Economics	02	--
Ms. Bhakti Junnare	M.A.	Assistant Professor	Macroeconomics	05	--

11. List of senior visiting faculty: None

12. Percentage of lectures delivered and practical classes handled (programme wise by temporary faculty: 25%



13. Student -Teacher Ratio (programme wise): 60:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: NA

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:

Name	Qualification
Dr. Aditi Abhyankar	MA, PhD
Ms. Varsha Malwade	MA, PhD registerd
Ms. Devayani Ganpule	MA, PhD registerd (on FDP)

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: NA

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: UGC CE Grant

Name of the faculty	Funding agency	Period	Amount Rs.
Dr. Aditi Abhyankar	UGC CE grant	2014-2019	50,000/-

18. Research Centre /facility recognized by the University: NA

19. Publications:

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Aditi Abhyankar	3	2	1	-	-	-	-	-	-	-	-	-	-
Varsha Malwade	2	-	2	-	-	-	1	-	-	-	-	-	-
Devayani Ganpule	1	1	-	-	-	2	-	-	-	-	-	-	-

20. Areas of consultancy and income generated: Yale University Rs.45000/-

21. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards....

- Dr. Aditi Abhyankar: Member of Indian Econometric Society and Indian Economic Association.
- Ms. Varsha Malwade: Associate of the Valparaiso University, USA. Member of Women Developmental Cell, University of Mumbai, Member of Open Educational Resources for Economics, University of Mumbai, Associateship at UGC-Interuniversity Centre for Humanities and Social Sciences, Officer on Special Duty to Vice-Chancellor, University of Mumbai.

22. Student projects:

a) Percentage of students who have done in-house projects including inter departmental/programme: 20



b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies : 05

23. Awards / Recognitions received by faculty and students:

Faculty:

- Dr. Aditi Abhyankar :- Rotary Club Best Teacher Best Award 2014

Students: Gold Medalist, Preksha Lalwani- 2012-13

24. List of eminent academicians and scientists / visitors to the department:

- Lord Meghnad Desai, Emeritus Professor, London School of Economics, UK
- Dr. Narendra Jadhav, Ex-Member, Rajya Sabha and Planning Commission
- Dr. Bhalchandra Munagekar - Ex-Member, Rajya Sabha and Planning Commission
- Deepak Mohanti – Senoir Officer, RBI
- Neeranjan Rajadhyaksha – Executive Director, Mint

25. Seminars/ Conferences/Workshops organized & the source of funding :

- National: 02, UGC & ICSSR
- International None

26. Student profile programme/course wise:

Name of the Course/programme	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBA					
2016-17	4269	206	58	148	92%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
FYBA	95 %	5 %	5%

28.How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ?:- 05

29.Student progression:

Student progression	Against % enrolled
UG to PG	70 to 80%
PG to M. Phil.	--
PG to Ph.D.	10 to 15%
Ph.D. to Post-Doctoral	2 to 3%
Employed	2
Campus selection	10
Other than campus recruitment	
Entrepreneurship/Self-employment	02



30. Details of Infrastructural facilities:

- a) Library: main library is equipped with most modern books on Economics
- b) Internet facilities for Staff & Students: One computer, one laptop, 1 Research Lab for students
- c) Class rooms with ICT facility: Yes
- d) Laboratories: Reserach Laboratory with EView and Stata Software

31. Number of students receiving financial assistance from college, university, government or other agencies:

- As per university norms, students benefit financially via freeships. College also support students via schemes such as 'Each One Adopt One' and 'Earn while you Learn' of the College.

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts: 02 workshop on Behavioural & Experimental Economics

33. Teaching methods adopted to improve student learning: Use of ICT and Google Group

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

35. SWOC analysis of the department and Future plans :

Strengths:

- Excellent faculty

Weaknesses:

- Diverse student profile especially in terms of medium of instruction.

Opportunities:

- Linkages with industries
- Post graduation in department

Challenges:

- Industry education

Future plans:

- Establish linkages with the industry
- Organize skill based certificate courses
- Collaborate with research Institutions
- Establish post graduation and research centres



Department of French

1. **Name of the Department:** French
2. **Year of Establishment:** 1937
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
4. **Names of Interdisciplinary courses and the departments/units involved:** NA
5. **Annual/ semester/Choice Based Credit System (programme wise):** Semester , Choice Based Credit System
6. **Participation of the department in the courses offered by other departments:** NA
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**NA
8. **Details of courses/programmes discontinued (if any) with reasons:**NA
9. **Number of Teaching posts:** 4

	Sanctioned	Filled
Professors	--	--
Associate Professors	3	3
Asst. Professors	1	2 on contract

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

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of PhD Students guided for the last 4 years
Dr. Vasumati Badrinathan (Joined Univesity Department, March 2016)	MA, PhD (France)	Asst. Prof.	French	7	-
Ms. Varsha Deshpande	MA	Asst. Prof. (contract)	French	2	-
Anjor Deshpande	MA	Asst. Prof. (contract)	French	1	-

11. **List of senior visiting faculty:** NIL
12. **Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** 50 % of the lectures
13. **Student -Teacher Ratio (programme wise):** 20: 1



14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: NIL

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.: PhD and MA

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: 4

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Vasumati Badrinathan	2	-	2	-	-	-	1	-	-	-	-	-	-
Varsha Deshpande	2	-	2	-	-	-	-	-	-	-	-	-	-

Dr. Vasumati Badrinathan joined the University of Mumbai in June 2016

20. Areas of consultancy and income generated: NIL

21. Faculty as members in: a) National committees b) International Committees c) Editorial Boards: None

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 –**

- 2 students did their internship at the French consulate
- English Language Assistants in France selected by Ministry of French

23. Awards / Recognitions received by faculty and students:

- One faculty member was awarded Fulbright Scholarship 2015-16

24. List of eminent academicians and scientists / visitors to the department:

- Dr. Malini Shankar – IAS, Director General Shipping, Mumbai
- Kenize Mourad – Renowned French author
- Prof. Michel Morange – Prof of Science History, Paris

25. Seminars/ Conferences/Workshops organized & the source of funding:

a) **National:** Various teachers' training programs

b) **International** – International Bilingual Conference on Autonomy in language learning -2011-12



26. Student profile programme/course wise:

Name of the Course/programme(refer question no. 4) FYBA	Application Received	Selected	Enrolled		Pass Percentage
			Male	Female	
2016-17	4269	19	02	17	95%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
BA French	100%	0	0

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:

Student progression	Against % enrolled
UG to PG	50 to 70 % of the students each year enroll for PG
PG to M.Phil.	-
PG to PhD	-
PhD to Post-Doctoral	-
Employed Campus selection Other than campus recruitment	70% of the students are recruited as teachers in international schools or as translators in multinational companies
Entrepreneurship/Self-employment	--

30. Details of Infrastructural facilities:

- a) library equipped with latest books.
- b) **Internet facilities for Staff & Students:** Language Lab, One computer, One Laptop 1 Research lab for students
- c) **Class rooms with ICT facility:** yes
- d) **Laboratories**

31. Number of students receiving financial assistance from college, university, government or other agencies:

- 'Each One Adopt One' scheme and 'Earn while you Learn' of college.

32. Details on students enrichment programmes (special lectures / workshops /seminar) with external experts:-

- Organizing guest lectures,
- Hatalkar Memorial lectures,
- Department festivals and



- Language learning workshops

33. Teaching methods adopted to improve student learning:

- Teaching with ICT
- Flipped classroom
- Communicative and action-based approach to learning and teaching languages

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

35. SWOC analysis of the department and Future plans :

Strengths:

- Qualified faculty,
- Guest lectures,
- Public lectures,
- Exchange program,
- Teacher training program,
- Close collaboration with French Consulate.

Weaknesses:

- Classes with heterogeneity
- students with mixed learning ability

Opportunities:

- Internships for students,
- Learner autonomy,
- Participation in cultural exchange and interaction with francophone public,
- Improve and harness French and language skills.

Challenges:

- Maintaining a balance between French and Francophone studies.

Future Plan

- Internships for students
- Skill based courses
- Tie-up with media agency



Department of Hindi

1. **Name of the Department:** Hindi
2. **Year of Establishment:** 1937
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
4. **Names of Interdisciplinary courses and the departments/units involved:** NA
5. **Annual/ semester/Choice Based Credit System (programme wise):**
Semester/Choice Based Credit System
6. **Participation of the department in the courses offered by other departments:** NA
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** NA
8. **Details of courses/programmes discontinued (if any) with reasons:** NA
9. **Number of Teaching posts:** 02

	Sanctioned	Filled
Professors	--	--
Associate Professors	--	--
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	No. of Years of Experience	No. of PhD Students guided for the last 4 years
Dr. Pravin Chandrabisht	PhD	Assistant Professor	Story & Novel	5 Year 7 Month.	Nil
Dr. Pandurang V. Mahalinge	M. Phil, PhD	Assistant Professor	Dalit Sahitya	2 Years 4 months	Nil

11. **List of senior visiting faculty:** NA
12. **Percentage of lectures delivered and practical classes handled (programme wise by temporary faculty:** NA
13. **Student -Teacher Ratio (programme wise):** 50:1



14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: NA

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG: 2-Ph. D, M. Phil

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Completed Minor Research Project , University of Mumbai , 14-15, 24000/

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: NA

18. Research Centre /facility recognized by the University: -

19. Publications:

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Pravin Chandra Bisht	13	11	2	-	-	1	-	-	-	-	-	-	-
P V Mahalinge	8	8	-	-	-	-	-	-	-	-	-	-	-

20. Areas of consultancy and income generated: NA

21. Faculty as members in:

a) National committees, b) International Committees, c) Editorial Boards....

Dr. Pravin Chandra Bisht: **Sub – Editor** with half yearly magazine “**Sameecheen**” **Mumbai from 2007**. Member of the **Subject Board in Hindi – K.J.Somaiya College of Arts & Commerce from 28th January 2012**.

Dr. P. V. Mahalinge: Chairman and Member of the Subject Board in Hindi IDOL University of Mumbai from 2008

22. Student projects: NA

a) Percentage of students who have done in-house projects including inter departmental/ programme

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies : -

23. Awards / Recognitions received by faculty and students:

Faculty:- Dr. Pravin Chandra Bisht Recognized P. G. Teacher From 3rd June 2014 in University of Mumbai.



Dr. P.V. Mahalinge: Recognized PhD Guide from 10 Dec. 2013 University of Mumbai.

Students:

1	Heena Shaikh, Sana Shaikh and Sagar Jha	St. Xavier's College , Bharantendu Upahaar Intercollegiate Extempore Competition	1 st Prize
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2013-14

1	Sagar Jha	Ramniranjan Jhunjhunwala College, Lt. R. P. Singh Poem Recitation Competition	1 st Prize
2	Heena Shaikh, Sana Shaikh and Sagar Jha	St. Xavier's College , Bharantendu Upahaar Intercollegiate Extempore Competition	3 rd Prize
3	Sagar Jha & Namrata Sauda	K.J. Somaiya College, " Rastrakavi Maithili Saran Gupt Chal Vijay Chinha " Extempore Competition	1 st Prize
4	Roshni Gupta	K.J. Somaiya College, Prem Chand Intercollegiate Story - telling Competition	Consolation Prize
5	Prajakta Marathe	Ramniranjan Jhunjhunwala College, Smt. Abhiramji Indradev Singh, Song Recitation Competition	1 st Prize

2014-15

1	Vivek Pandey	Patkar College , Competition on Maithili Saran Gupt	1 st Prize with Rs13000/
2	Vivek Pandey	Ramnarain Ruia College, intercollegiate Elocution competition	1 st Prize
3	Vivek Pandey	National College, Intercollegiate poem recitation competition in the memory of Ramdhari Singh Dinkar	1 st Prize
4	Vivek Pandey	National College Intercollegiate Extempore Competition	2 nd Prize
5	Vivek Pandey	K.J. Somaiya College, " Rastrakavi Maithili Saran Gupt Chal Vijay Chinha " Extempore Competition	Consolation Prize
6	Vivek Pandey	B.M.Ruia Girl's College, Intercollegiate Bhajan Competition	Consolation Prize
7	Sagar Jha & Namrata Sauda	B.M.Ruia Girl's College, Intercollegiate Poem Recitation	Shield



		Competition	
8	Namrata Sauda	St. Andrew's College, Intercollegiate poem writing competition	2nd Prize
9	Archana Gosavi & Priyanka Nanavare	Ramniranjan Jhunjhunwala College, Smt. Abhiramji Indradev Singh, Song recitation competition	Shield

2015-16

1	Vivek Pandey	Ramniranjan Jhunjhunwala College, Elocution Competition on ' Shri Prithviraj Singh'	2nd Prize
2	Vivek Pandey	Ramniranjan Jhunjhunwala College, Lt. R. P. Singh Poem recitation competition	1st Prize
3	Vivek Pandey	Ramnarain Ruia college, Intercollegiate Elocution competition	2nd Prize
4	Vivek Pandey	B. M. Ruia Girl's College, Intercollegiate Bhajan Competition	Consolation Prize
5	Vivek Pandey	Guru Nanak College, Intercollegiate Elocution competition	2nd Prize
6	Anusha Singh	Ghanshyamdas Saraf College, Intercollegiate Debate Competition	2nd Prize
7	Vivek Pandey	SonuBhauBasant College, Intercollegiate Elocution competition	Consolation Prize
8	Vivek Pandey	B. M. Ruia Girl's College, Intercollegiate Poem Recitation Competition	2nd Prize
9	Roshni Gupta	K.J. Somaiya College, Prem Chand Intercollegiate Story-telling competition	1st Prize

24. List of eminent academicians and scientists / visitors to the department:

1. Eminent Poet (Haasya Kavi) Dr.Rajnikant Mishra – Judge for Elocution Competition.
2. Special Lecture for mass Media by Dr. Ram Ahalad Chaudhary – Head University of Kolkatta.
3. Multi talented famous Film actor Major Vikramjeetkanvarpal - Judge for Elocution Competition



4. Guest Lecture on 'SahityakiRachanaPrakriya' by famous writer & critic Dr.Devesh Thakur
5. Guest Lecture by Dr. Satish Pandey – H.O.D, K.J. Somaiya College
6. Guest Lecture by Dr.Sheetla Prasad Dubey – H.O.D, K.C. College
7. Guest Lecture by Dr.Umesh Shukla - - H.O.D, M.D. College
8. Dr. Dinesh Pathak, H.O.D, S.I.E.S College – as Judge for Poem Recitation Competition

25. Seminars/ Conferences/Workshops organized & the source of funding: NA

- a) National
- b) International

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBA	4269	65	31	34	64%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
BA	100%	-	-

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

29. Student progression:

Student progression	Against % enrolled
UG to PG	90%
PG to M.Phil.	-
PG to PhD	-
PhD to Post-Doctoral	-



Employed	5%
<ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	50%
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities:

- a) **Library:** Department library
- b) **Internet facilities for Staff & Students:** One computer for staff
- c) **Class rooms with ICT facility:** yes
- d) **Laboratories:** One computer lab and one Language Lab

31. Number of students receiving financial assistance from college, university, government or other agencies:

As per university norms , students benefit financially via freeships.
Also from 'Each One Adopt One' scheme and 'Earn while you Learn' of the College.

32. Details on students' enrichment programmes (special lectures/workshops/seminar) with external experts:

Hindi Department regularly arranges Guest lectures for the benefit of the students.

33. Teaching methods adopted to improve student learning: Story-telling method, debate

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: One faculty member is on the Committee of the 'Slum Study Centre' and is actively involved in the Institutional Social Responsibilities through various activities and programs of the Center.

35. SWOC analysis of the department and Future plans

Strengths:

- Committed Faculty

Weaknesses:

- A Student profile with majority of non-hindi speaking students

Opportunities:

- Introduction of new topics in syllabus under Autonomy
- Research and project based learning.
- Strengthening the collaboration with Industry and Institutes Saral Hindi curriculum

Challenges:

- Maintaining a balance between slow and advanced learners



Future Plan

- Implementing Case study as a Research methodology.
- Special lecture for preparing students for various competitive exams at the Departmental level
- To introduce to the students the - use of Mass media in Hindi Literature
- To update students about the films and short films etc. based on literary work.
- To encourage the students for group discussion & presentation

Department of History

1. **Name of the Department:** History
2. **Year of Establishment:** 1937
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

Sr. No	Aided	Year
1	B.A	1937
2	Ph. D	2001
3	Certificate courses 1)Heritage of Mumbai 2)Introduction to Archaeology 3) Food History and Culture	2012- 2017 2014 2014, 2016

4. **Names of Interdisciplinary courses and the departments/units involved:** N.A
5. **Annual/ semester/Choice Based Credit System (programme wise):** Semester and Choice Based Credit System
6. **Participation of the department in the courses offered by other departments:** Yes
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** N.A.
8. **Details of courses/programmes discontinued (if any) with reasons:** N.A.
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	No. of Years of Experience	No. of PhD Students guided for the last 4 years
Dr. Mohsina Mukadam	M.A., M.Phil., PhD	Associate Professor	Food History	29	02 Registered
Dr. Louiza Rodrigues	M.A., M.Phil., PhD	Associate Professor	Environmental History, Geneology	28	04 Registered
Pradeep Waghmare	M.A. SET (PhD Thesis Submitted)	Asst. Prof	Labour Movement , Dalit Movement,	8 years	NA

11. List of senior visiting faculty: N.A.

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: N.A

13. Student -Teacher Ratio (programme wise): 60:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Nil

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:

- P.G: 03
- M. Phil: 02
- PhD: 02

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Dr.Mohsina Mukadam	2012	Asiatic Society of Mumbai	Rs. 1.25 Lakhs
	2015		
Dr.Louiza Rodrigues	2015	Wilmington Club	Rs. 25 Lakhs
		Raksha Shakti University	Rs. 14.307 Lakhs

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: NA

18. Research Centre /facility recognized by the University: Ph. D. Research Centre recognized by the University: yes (2001)



19. Publications:

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Mohsina Mukadam	1	-	1	-	-	5	-	-	-	-	-	-	-
Louiza Rodrigues	-	-	-		1		2	2	-	-	-	-	-
Pradeep Waghmare	3	-	3	-	-	1	-	1	-	-	-	-	-

20. Areas of consultancy and income generated: --

21. Faculty as members in:

- a) **National committees:** 01
- b) **International Committees:** 01
- c) **State Committees:** 02
- d) **Editorial Boards:** 03
- Dr.Mohsina Mukadam- Directorate, Dept of Archeology &

22. : Student projects

- a) **Percentage of students who have done in-house projects including interdepartmental/ programme :** Nil
- b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies:**

23. Awards / Recognitions received by faculty and students:

Faculty:

- Dr. Loiuzza Rodrigues :
 1. National Award & Cash prize- Best Paper on 'Commercialization of Forests, Timber Extraction and Deforestation of Malabar, Early Nineteenth Century', 73 Session, December 2013, Indian History Congress, Odissa.
 2. Samudra-Manthan Award 2017 in recognition for research in Maritime History

Student:

- Kshipra Joshi, Chhatrapati Shivaji Maharaj Award in Gymnastics

24. List of eminent academicians and scientists / visitors to the department: Eminent academicians:

- Prof. Makarand Paranjpe (Professor, JNU, New Delhi)
- Prof. Rajeev Bhargava (Professor, Centre for Societies and Development Studies, New Delhi)
- Dr. Aditya Mukherjee (Professor, Centre for Historical Studies, JNU, New Delhi)



- Prof. S.M. alias Raja Dixit (Director, Inter-departmental Studies, Savitribai Phule Pune University)
- Prof. Valerian Rodrigues (Professor Emeritus, Mangalore University)

25. Seminars/ Conferences/Workshops organized & the source of funding :

- a) **National:** 01, Mani Kamerkar Memorial Foundation
- b) **International:** Nil
- c) **Workshops:** 04

26. Student profile programme/course wise:

Name of the Course/programme(refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBA					
2016-17	4269	219	76	143	50%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
F.YB.A.	99%	01%	-
S.Y.B.A.	99%	01%	-
T.Y.B.A	100%	-	-

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

- NET : 05
- SET: 05
- CIVIL SERVICES: 03
- M.P.S.C : 01

29. Student progression:

Student progression	Against % enrolled
UG to PG	40%
PG to M.Phil.	01%
PG to PhD	10%
PhD to Post-Doctoral	
Employed	5 %
Campus selection	75%
Other than campus recruitment	
Entrepreneurship/Self-employment	5%



30. Details of Infrastructural facilities:

- a) **Library:** Departmental Library: 100 Books
- b) **Internet facilities for Staff & Students:** One computer, One laptop, one projector and 1 research lab for students
- c) **Class rooms with ICT facility:** Yes
- d) **Laboratories:** N.A.

31. Number of students receiving financial assistance from college, university, government or other agencies:

- As per university norms, students benefit financially via freeships.
- Also from 'Each One Adopt One' scheme and 'Earn while you Learn' of the College.

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts: Special Lecture : Dr. Sonali Pednekar (' Modi Lipi - Unravelling the lost script of Maharashtra'), Dr. Roopali Mokashi (Inscriptions), Mahesh Kalra (Numismatics Workshop), Ms. Sanghmitra Chatterjee (Archival Science)

33. Teaching methods adopted to improve student learning: Remedial Lectures conducted for students from vernacular medium, Use of multimedia , Discussions , Presentations , Field Visits

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:In-charge of Slum Study Centre

35. SWOC analysis of the department and Future plans :

Strengths:

- Excellent faculty
- Strong research culture
- Skill based courses for students
- Internship and placements
- Universty Rankers for the last four years

Weaknesses:

- Difficulty in maintaining balance between English and Marathi medium students and slow and advanced learners

Opportunities:

- To encourage students to continue undertaking research projects
- To tie up with research institutions at the National level
- To develop linkages with industries

Challenges:

- Maintaining a balance between heterogenous students

Future Plan



- Setting up Ruia College E-Archives
- To develop digital source material for teaching history
- Presentations, C. D's, D. V. D's. on Indian history.
- To prepare history lessons with the help of 'talking photo' software.
- To Publish Research Journal
- To publish Departmental magazine
- To continue and introduce more skill based /Job Oriented training programme

Department of Marathi

1. **Name of the Department:** Marathi
2. **Year of Establishment:** 1937
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
4. **Names of Interdisciplinary courses and the departments/units involved:** NIL
5. **Annual/ semester/Choice Based Credit System (programme wise):** semester, Choice Based Credit 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:** 2

	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	No. of Years of Experience	No. of PhD Students guided for the last 4 years
Ms. Leena Kedare	MA, NET (on FDP)	Associate Professor	Marathi & Aesthetics	21 Years	-
Ms. Shilpa Neve	MA, SET	Assistant Professor	Marathi & Aesthetics	19 Years	-
Ms. Sharada Gangurde	MA, NET	Assistant Professor (Against FDP)	Marathi	14 Years	-

11. **List of senior visiting faculty:** NIL
12. **Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** 2 Lectures (5%)
13. **Student -Teacher Ratio (programme wise):** UG (460 Students, Ratio – 230:1)



14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: NIL

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.: PG

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:

Name of the faculty	a	b ₁	b ₂	c	d	E	f	g	h	i	j	k	l
Leena Kedare	-	-	-	-	-	-	1	-	-	-	-	-	-
Shilpa Neve	1	-	1	-	-	-	1	-	-	-	-	-	-

20. Areas of consultancy and income generated: NIL

21. Faculty as members in: NIL

a) National committees b) International Committees c) Editorial Boards.... NIL

22. Student projects: NIL

a) Percentage of students who have done in-house projects including interdepartmental/programme

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

23. Awards / Recognitions received by faculty and students:

Shilpa Neve: NSS Best Unit & Programme Officer Award

24. List of eminent academicians and scientists / visitors to the department: -

25. Seminars/ Conferences/Workshops organized & the source of funding :

b) National Drama: AN ENDURING ART – UGC (Funding)

c) International

26. Student profile programme/course wise:

Name of the Course/programme(refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBA					



2016-17	4269	133	63	70	58%
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27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
UG	100%	-	-

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

NET : 1, SET : 2, State Competitive Exam : 1

29. Student progression:

Student progression	Against % enrolled
UG to PG	90%
PG to M.Phil.	1 Student
PG to PhD	-
PhD to Post-Doctoral	-
Employed Campus selection Other than campus recruitment	Other Than Campus Recruitment : 80%
Entrepreneurship/Self-employment	Entrepreneurship : 1 Student Self – Employment : 10%

30. Details of Infrastructural facilities:

- a) **Library:** Yes (Departmental Library)
- b) **Internet facilities for Staff & Students:** One laptop with internet.
- c) **Class rooms with ICT facility:** Yes
- d) **Laboratories:** 1 language lab and 1 Research lab

31. Number of students receiving financial assistance from college, university, government or other agencies:

College supports needy students those who cannot avail University Freeships via schemes such as each one adopt one & 'Earn while you learn' initiated by the College.

32. Details on students enrichment programmes (special lectures /workshops /seminar) with external experts:

- Special Lecture by Jitendra Joshi, Renowned Actor & Poet
- Special Lecture by Scholar Dr. Raja Dixit, Dr. Arun Tikekar



- Prof. Meena Gokhale on *Dnyantapasvi Rudra*

33. Teaching methods adopted to improve student learning:

- Group Discussions
- Surprise Test
- Special Lectures by External Experts
- Remedial Lectures
- Workshops for Development of Literally & Oratory Skills
- Use of ICT

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

- Shilpa Neve Worked for NSS as Incharge and Programme Officer for 5 Years
- *Vidyarthi Sahitya Samelan* in Collaboration with Mumbai Marathi Sahitya Sangh. (2012 - 2013)

35. SWOC analysis of the department and Future plans :

Strength

- Committed Faculty
- Students participation in co-curricular activities
- Popular lectures conducted

Weakness

- Inadeqaute time to inculcate adequate logical skills needed to acquire language proficiency

.Opportunities

- To tie up with Media agencies: print media, electronic to meet the employability needs.
- Opportunities in the field of translation.

Challenges

Significant number of students are from economically / socially deprived classes.

- Integration of these students into the mainstream of education.

Future Plans

- Emphasis on Skill Development
- Undertake Research Activity
- Industry Linkages
- Project Based Learning



- Short Term Courses of Various Skills :
- Journalism, Mass Communication, Advertisement, Indology, Drama & Film Appreciation, etc.

Department of Mass Media Studies

(English Medium)

- 1. Name of the Department:** Department of Mass Media Studies
- 2. Year of Establishment:** 2006-07
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** Bachelor of Mass Media
- 4. Names of Interdisciplinary courses and the departments / units involved:**
Departments involved: English, Economics
- 5. Annual/ semester/Choice Based Credit System (programme wise):**
Semester, Choice Based Credit System
- 6. Participation of the department in the courses offered by other departments:**
NA
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** NA
- 8. Details of courses / programmes discontinued (if any) with reasons:** NA
- 9. Number of Teaching posts:**

	Sanctioned	Filled
Professors	--	--
Associate Professors	--	--
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	No. of Years Of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Sujata Suvarnapathki	M.Sc. Ph.D.	In Charge-Head of the	Statistics	25	NA



		department			
Ms. Priyanka Desai	Masters in Communication and Media	Assistant Professor	Mass Media	03	NA

11. List of senior visiting faculty:

Sr. No	Name of Visiting Faculty
1	Neil Joshi
2	Shridhar Naik
3	Vrinda Modge Dev
4	Arvind Parulekar
5	Rinkesh Chheda
6	Aparjita Deshpande
7	Anita Madrekar
8	Meera Suryanarayanan
9	Rutu Ladage
10	Pradeep Shashidharan Kumar

12. Percentage of lectures delivered and practical classes handled

(programme wise) by temporary faculty: 70% of the lectures are delivered by the visiting faculty.

13. Student -Teacher Ratio (programme wise): 50:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

- Ms. Savita Patil
- Mr. Abhishek Sawant

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:

Dr. Sujata Svarnapatki- Ph D

16. Number of faculty with ongoing projects from a) National b)

International funding agencies and grants received: NA

17. Departmental projects funded by DST - FIST; UGC, DBT,

ICSSR, etc. and total grants received: NA

18. Research Centre /facility recognized by the University: NA

19. Publications: Nil

20. Areas of consultancy and income generated: NA

21. Faculty as members in: a) National committees b) International

Committees c) Editorial Boards.... NA



22. Student projects:

- a) Percentage of students who have done in-house projects including inter departmental/programme: 30%
- 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: NA

24. List of eminent academicians and scientists / visitors to the department:

- 1. Leena Basrur-Medicounts Life sciences
- 2. Dr. Ulhas Dixit- University of Mumbai

25. Seminars/ Conferences/Workshops organized & the source of funding :

- a) National: NA
- b) International: NA

26. Student profile programme/course wise:

Name of the Course/programme	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBMM					
2016-17	550	60	24	36	73%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
B.Sc.	100	0	0

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

29. Student progression:

Student progression	
UG to PG	10%
PG to M.Phil.	-
PG to PhD	5%
PhD to Post-Doctoral	-
Employed	-
Campus selection	50%
Other than campus recruitment	-
Entrepreneurship/Self-employment	

30. Details of Infrastructural facilities:

- a) **Library** – Departmental Library (Books, Audio CDs, Movie DVDs)



b) Internet facilities for Staff & Students –one computer, one laptop, one Camera- Sony PD 170, 2 Amplifiers+ Mixer of Studio Master, Recording studio

c) Class rooms with ICT facility – Yes, Classroom with audio video recording facility

d) Laboratories – 1 Computer lab

31. Number of students receiving financial assistance from college, university, government or other agencies:

- ‘Each One Adopt One’ scheme and ‘Earn while you Learn’ of the College.

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts

- Professionals from industry like advertising and media are invited to conduct workshops.

33. Teaching methods adopted to improve student learning:

- Presentations, Discussions, Project based learning involving Short film making

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

- Internationally Acclaimed movies, involving Social issues. This is done in association with NGO, MAWA (Men against violence and Abuse). Festival is open to students from other colleges as well as citizens in the nearby areas.

35. SWOC analysis of the department and Future plans:

Strengths:

- Use of innovative techniques in teaching, practical approach related to media

Weaknesses:

- Most of the faculty is visiting faculty hence time management is difficult.

Opportunities:

- Linkage of Academic & Industry

Challenges:

- Establishing stronger Industry linkages

Future Plans:

- Making education edutainment
- Identifying the current trends of Indian Media & convergence of Print, Electronic and Digital Media Industry.
- Structural changes in the Syllabus according to current trends in Media. Include the topics like professional ethics in media.
- Offering Electives to the students in Last Year, so as to make students become employable/industry ready at the end of the course.
- Project based learning.



Department of Mass Media Studies

(Marathi Medium)

1. **Name of the Department:** Mass Media (Marathi)
2. **Year of Establishment:** 2010-11
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** BMM
4. **Names of Interdisciplinary courses and the departments/units involved:** -
5. **Annual/ semester/Choice Based Credit System (programme wise):**
Semester, Choice Based Credit System
6. **Participation of the department in the courses offered by other departments :**
Teaching
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** NA
8. **Details of courses/programmes discontinued (if any) with reasons:** NA
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	No. of Years of Experience	No. of PhD Students guided for the last 4 years
Ms. Ashlesha Rangnekar	M.A., MJMC	Asst.Professor & Course Coordinator	Marathi Literature	10	--
Mr. Koustubh Joshi	M.A.	Asst.Professor	Business Economics & Corporate Management	6	--

11. List of senior visiting faculty:

Visiting faculty
Mr. Chandrashekhar Nene
Mr. Amit Bhide



Mr. Vaibhav Chalke
Mr. Parag Phatak
Mr. Abhijeet Deshpande
Mr. Arvind Parulekar

- 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** 70% of the lectures are delivered by the visiting faculty.
- 13. Student -Teacher Ratio (programme wise):** 50:1
- 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:** 02Ms. Savita Patil Mr. Abhishek Sawant
- 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:** PG-02
- 16. Number of faculty with on going projects from a) National b) International funding agencies and grants received :** NO
- 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:** NO
- 18. Research Centre /facility recognized by the University:** No
- 19. Publications:** Nil
- 20. Areas of consultancy and income generated:** -- -- Nil
- 21. Faculty as members in:** a) National committees b) International Committees c) Editorial Boards.... – Nil
- 22. Student projects:**
- Percentage of students who have done in-house projects including inter departmental/programme – Nil**
- 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:** – Nil
- 24. List of eminent academicians and scientists / visitors to the department:** -Nil
- 25. Seminars/ Conferences/Workshops organized & the source of funding : -- No**
- a) National b) International NIL
- 26. Student profile programme/course wise: --**

Name of the Course/programme(refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBMM(Marathi)					
2016-17	350	69	42	27	56.52%



27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
B.M.M. (Marathi)	100%	Nil	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:

Student progression	Against % enrolled
UG to PG	10%
PG to M.Phil.	--
PG to PhD	05%
PhD to Post-Doctoral	--
Employed Campus selection Other than campus recruitment	10% Various students from department are employed in industry and media sector. 70%
Entrepreneurship/Self-employment	5%

30. Details of Infrastructural facilities:

a) Library – Departmental Library (Books, Audio CDs, Movie DVDs)

b) Internet facilities for Staff & Students –one computer, one laptop,

c) Class rooms with ICT facility – yes and Classroom with audio video recording facility

d) Laboratories – 1 Computer lab

31. Number of students receiving financial assistance from college, university, government or other agencies: As per university norms, students benefit financially via freeships. Also from 'Each One Adopt One' scheme and 'Earn while you Learn' of the College.

32. Details on students' enrichment programmes (special lectures/workshops/seminar) with external experts: Aug 2015 - one day workshop on Voice culture & its effective use as a career option. Renowned Radio Jockies Mayuresh Shirke and Rashmi Warang shared experience with students. This was coorganized with Marathi Literary Circle of the College. Students of TYBMM visited Saam Marathi News channel's office at Navi Mumbai where an interactive session was held.

Department also organized a film Appreciation workshop.

33. Teaching methods adopted to improve student learning: Flip the classroom Chalk and duster method, group discussions, viva for communication skills development.



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

A festival where, internationally Acclaimed movies, involving Social issues were screened. This is in association with an NGO, MAWA (Men Against Violence and Abuse). The festival was open to students from other colleges as well as citizens in the nearby areas.

35. SWOC analysis of the department and Future plans:

• **Strengths:**

Use of ICT supported innovative techniques in teaching, practical approach related to media

• **Weaknesses:**

Catering differential needs of students coming from diverse backgrounds

• **Opportunities:**

Linkage of Academic & Industry

• **Challenges :**

Faster upgradation of technology and trends of changing media

Future Plans:

- Identifying the current trends of Indian Media & convergence in Print, Electronic and Digital Media Industry.
- Structural changes in the Syllabus according to current trends in Media. Include the topics like professional ethics in media.
- Offering Electives to the students in last year, so as to make students become employable/industry ready at the end of the course.
- Project based learning.

Department of Philosophy

1. **Name of the Department:** Philosophy
2. **Year of Establishment:** 1937
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG
4. **Names of Interdisciplinary courses and the departments/units involved:**
5. **Annual/ semester/Choice Based Credit System (programme wise):** Semester/ Choice Based Credit 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	1	1
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	No. of Years of Experience	No. of PhD Students guided for the last 4 years
Ms. Vatsala Pai	M. Phil (Registered for PhD, on FDP)	Associate Professor	Socio-Political Philosophy, Vedanta Philosophy,	29	--
Ms. Himani Chaukar	M.A (Registered for PhD)	Assistant Professor	Yoga Philosophy, Logic, Tribal studies	11	--
Ms. Jyoti Waghmare	M.A (Registered for PhD)	Assistant Professor	Buddhism, Vipassana	7	--
Mr. Tamay Parajape	M.A	Assistant Professor (Against FDP)	Socio-Political Philosophy,	2	--



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): 60:1
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Nil
15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.: M.Phil – 1, PG -2
16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Jyoti Waghmare - 1
17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: Nil
18. Research Centre /facility recognized by the University:
19. Publications:

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Vatsala Pai	-	-	-	-	-	-	-	1	-	-	-	-	-
Himani Chaukar	1	-	-	-	-	-	-	1	-	-	-	-	-
Jyoti Waghmare	1	-	1	-	-	-	-	-	-	-	-	-	-

20. Areas of consultancy and income generated: -- Nil
21. Faculty as members in:
 - a) National committees b) International Committees c) Editorial Boards....
 - Himani Chaukar - selected as a member of the committee formed by the Government of Maharashtra for the preparation of the encyclopaedia of terminologies of Philosophy and Logic (2015-16)
22. Student projects:
 - a) Percentage of students who have done in-house projects including inter departmental/ programme –
All TYBA students every year conduct an orientation session for the FYBA class and also provide them with different carrer prospects.
 - b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies
6% students of SYBA class attended a training session organized by Smaritans (an NGO working for suicide prevention)



23. Awards / Recognitions received by faculty and students:

- Himani Chaukar – Won gold medal at Avishkar Inter-University Research Convention – 2013-14

24. List of eminent academicians and scientists / visitors to the department:

- Prof. Akeel Bilgrami, Professor, Dept. of Philosophy, Columbia University, USA
- Prof. Raghuramraju, Professor, Dept. of Philosophy, Hyderabad university
- Prof. Deepti Gangavane, HOD, Philosophy, Fergusson College, Pune
- Prof. Shubhada Joshi, Professor, Dept. of Philosophy, University of Mumbai

25. Seminars/ Conferences/Workshops organized & the source of funding :

- National – 2 (UGC)
- International – 1

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
F.Y.B.A					
2016-17	4269	115	21	94	76.52%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
BA	100%	--	--

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ? : 4

29. Student progression:

Student progression	Against % enrolled
UG to PG	50%
PG to M.Phil.	5%
PG to PhD	2%
PhD to Post-Doctoral	
Employed	40% Other than campus selection
Campus selection	
Other than campus recruitment	
Entrepreneurship/Self-employment	--

**30. Details of Infrastructural facilities:**

- **Library** – Yes
- **Internet facilities for Staff & Students** – 1 Laptop
- **Class rooms with ICT facility** – Yes
- **Laboratories** - NA

31. Number of students receiving financial assistance from college, university, government or other agencies:

- As per university norms, students benefit financially via freeships.
- Also from 'Each One Adopt One' scheme and 'Earn while you Learn' of the College.

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts:

- Certificate Course in 'Philosophy of Good life' (2014-15)

33. Teaching methods adopted to improve student learning:

- ICT methods used in teaching, POGIL

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

Students present a programme for an NGO 'Advitya' which work for mentally challenged students annually, Active NSS volunteers.

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

- Good student-teachers ratio,
- Committed and hardworking staff
- Consistent performance, 100% passing,
- Subject toppers in the university list every year

Weakness

- Classes with heterogeneous, mixed learning ability students

Opportunities

- Inter-disciplinary research opportunities
- Linkages with NGOs
- Linkages with hospitals and corporate sector on the committees for ethics

Challenges

- Maintaining balance between slow and advanced learners

Future plan

- Certificate courses in Life Management skills, Philosophy of Good Life
- Course in Critical Thinking for students from different faculties



- Yoga Philosophy and Practice (Certificate course and practical workshops)
- A National Seminar on 'Bio-Ethics and Professional Ethics
- Workshop on Philosophical Counseling

Department of Political Science

- 1. Name of the Department:** Political Science
- 2. Year of Establishment:** 1959
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** Majors in Political Science
- 4. Names of Interdisciplinary courses and the departments/units involved:** NA
- 5. Annual/ semester/Choice Based Credit System (programme wise):** Semester, Choice Based Credit System
- 6. Participation of the department in the courses offered by other departments:** NA
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** NA
- 8. Details of courses/programmes discontinued (if any) with reasons:** NA
- 9. Number of Teaching posts:**

	Sanctioned	Filled
Professors	--	--
Associate Professors	1	1
Asst. Professors	3	3 on contract basis

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

Name	Qualification	Designation	Specialization	No. of years of experience	No. of Ph.D. Students guided for the last 4 years
Dr. Vaibhavi Palsule	M.A PHD	Associate Professor	Political Science	22	NA
Ms.Madhura Bane	MA, SET	Assistant Professor	Political Science	4	-
Ms. Manasi Misal	MA	Assistant Professor	Political Science	3	-
Ms. Gayatri Lele	MA	Assistant Professor	Political Science	2	-



11. List of senior visiting faculty: NA
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty- 75%
13. Student -Teacher Ratio (programme wise): 50:1students per teacher at FY and SYBA
14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: None
15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.: 1 Ph.D
16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received-NA
17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received-NA
18. Research Centre /facility recognized by the University-NA
19. Publications

Name of the faculty	a	b ₁	2	c	d	e	f	g	h	i	j	k	l
Vaibhavi Palsule	-	-	-	-	-	1	-	-	-	-	-	-	-

20. Faculty as members in: NA
21. National committees b) International Committees c) Editorial Boards-
One faculty member is on the Committee for Inclusion of Election Awareness in School Curriculum, under the Chief Election Commisior, Maharashtra State.
22. Student projects: NA
 - a) Percentage of students who have done in-house projects including inter departmental/programme
As a part of assignment of TYBA, students are regularly screened films on socio-political issues. The screenings are followed by discussions and presentations.
 - b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies
The students of TYBA visited Vidhan Sabha during Assembly Session and the visit was followed by a discussion on political process in the state.

The students of TYBA visted Ralegan Siddhi and undertook a field study to understand sustainable development for socio-economic progress.
23. Awards / Recognitions received by faculty and students: NA
24. List of eminent academicians and scientists / visitors to the department:
 - Prof. Uttara Sahasrabudhe, Dept. of Civics & Political Science, University of Mumbai.
 - Prof Manisha Tikekar, Dept. of Political Science, SIES College, Mumbai



- Dr. Deepak Pawar, Dept. of Civics & Political Science, University of Mumbai and language movement Activist
- Prakash Bal, Director C.D. Deshmukh Academy, Thane
- Vinay Sahasrabuddhe, Vice –President, Asiatic Society of Mumbai
- Dr. Aruna Pendse, Dept. of Civics & Political Science, University of Mumbai

25. Seminars/ Conferences/Workshops organized & the source of funding :NA

a) National

b) International

26. Student profile programme/course wise:

Name of the Course/programme(refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
2016-17	4269	251	84	167	64.54%

27. Diversity of Students: NA

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
TYBA	100%		

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. 1 SET 1 IPS

29. Student progression:

Student progression	Against % enrolled
UG to PG	App. 40%
PG to M.Phil.	
PG to PhD	5%
PhD to Post-Doctoral	
Employed	5%
Campus selection	50%
Other than campus recruitment	
Entrepreneurship/Self-employment	5%

30. Details of Infrastructural facilities:

- a) **Library** – Well equipped College Library with most modern books on political Sciences



b) **Internet facilities for Staff & Students** – 1 laptop, 1 computer and 1 research lab for students

c) **Class rooms with ICT facility** – All

d) **Laboratories** - NA

31. Number of students receiving financial assistance from college, university, government or other agencies:

- As per university norms, students benefit financially via freeships.
- Also from 'Each One Adopt One' scheme and 'Earn while you Learn' of the College.

32. Details on students enrichment programmes (special lectures /workshops /seminar) with external experts: NA

33. Teaching methods adopted to improve student learning: Discussions, paper presentations

34. Participation in Intuitional Social Responsibility (ISR) and Extension activities: Students of the Department are involved in Institutional Social Responsibility through NSS and other extra-curricluar activies and programs.

35. SWOC analysis of the department and Future plans:

Strength –

- Committed young staff with innovative ideas – hardworking, intelligent, good students
- Consistency in Results, 100 % results
- University Rankers for 3 consecutive years

Weakness –

- Inadequate space to develop and augment Departmental facilities.

Opportunities –

- Interdisciplinary programme

Challenges

- Research

Future Plans:

- Visit to libraries, Museums, Government offices, Parliament
- Tie up with NGOs, Research Organizations and Think tanks
- Innovative workshops such as drawing political cartoons
- Short courses and workshops for e.g. Right to information, Psephology



Department of Psychology

1. **Name of the Department:** Psychology
2. **Year of Establishment:** 2007
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**UG
4. **Names of Interdisciplinary courses and the departments/units involved:** Nil
5. **Annual/ semester/Choice Based Credit System (programme wise):** Semester/ Choice Based Credit 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	2	2

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

Name	Qualification	Designation	Specialization	No. of Years Of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Sangeeta Kamath	M.A. B.Ed., D.P.M., Ph.D	Teacher	Clinical psychology	24	Nil
Mr. Adwait Kapileshwari	M.A.	Assistant Professor	Social Psychology	4	Nil
Ms. Trupti Nawar	M.A.	Assistant Professor	Clinical Psychology	4	Nil

11. **List of senior visiting faculty:** Nil
12. **Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** 100%
13. **Student -Teacher Ratio (programme wise):** 8:1
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:** Nil



15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG : Ph.D. –
Ms. Sangeeta Kamath

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:

Name of the faculty	a		b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Dr. Sangeeta Kamath	2		-	2	-	-	-	-	-	-	-	-	-	-

20. Areas of consultancy and income generated:

- Value added Course
- (Basic Course in Neuropsychiatric Disorder,
- Child Psychology,
- Family and Marital Therapy,
- Hypnotherapy,
- Rational Emotive Behavior Therapy),
- Vocational Guidance, Counseling services offered to the student and the staff

21. Faculty as members in: a) National committees b) International Committees c) Editorial Boards - Nil

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:
Students Awards

- Sushmita Gokhale won the Vidya Bhushan Award for her outstanding performance in academic as well as extracurricular activities
- Suraj Shah won 1st prize in the Intercollegiate Psychological Festival ‘Psychsabha’ organized by Jai Hind College
- Mohaneesh Pitre – won Gold Medal in the Annual Athletics Championship in the event of Hammer throw organized by University of Mumbai won Gold Medal in the event of Tug of War organized by University of Mumbai won ‘Best All Round Student of the college’ award.



- Poorva won Gold Medal in the event of Tug of War organized by University of Mumbai
- Akshada Wavekar won Silver Medal at All India Inter University Gymnastics Competition
- Aishwarya Patwardhan won the Yamunabai Hirlekar ward for Best All Rounder Student.

24. List of eminent academicians and scientists / visitors to the department: 2016-17

- Deepti Puranik, M.A. Talk on Forensic Psychology
- Tonmoy Haldar, M.A.talk Session on Dance Therapy

25. Seminars/ Conferences/Workshops organized & the source of funding : Nil

a) National

b) International

26. Student profile programme/course wise:

Name of the Course/programme(refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBA 2016-17	4269	109	9	100	87.15

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
TY	100	00	00

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

- Ms. Ashwini Date
- Ms. Sayali Gurav

29. Student progression:

Student progression	Against % enrolled
UG to PG	95
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-



Employed	5%
Campus selection	75%
Other than campus recruitment	
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities:

- a) **Library:** Well stocked common Library with separate reference section
- b) **Internet facilities for Staff & Students:** 1 PC, 1 Laptop for staff, Research lab for students
- c) **Class rooms with ICT facility:** All
- d) **Laboratories:** 1

31. Number of students receiving financial assistance from college, university, government or other agencies:

- As per university norms , students benefit financial help via freeships.
- Also from 'Each One Adopt One' scheme and 'Earn while you Learn' of the College.

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts: Nil

33. Teaching methods adopted to improve student learning:

- Graded learning, Programmed Instruction

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

- Providing counseling assistance to the visually challenged students in Self-Vision Centre

35. SWOC analysis of the department and Future plans :

Strength:

- Well qualified teachers with a strong motivation,
- A well-equipped laboratory facility

Weakness:

- Being a young department, there is inadequate facilities for knowledge repository and knowledge dissimination for higher learning like research.

Opportunities:

- Establish linkages with industry,
- Provide Internships.

Challenges:

- Dealing with less privileged students
- Maintaining balance between slow and advanced learners.



FUTURE PLANS ---

- To build up research skills in the students of FY and SY and motivate them
- To publish research papers.
- To continue the ongoing courses in Psychology.

Department of Sanskrit

- 1. Name of the department:** Sanskrit
- 2. Year of Establishment:** 1937
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG, Ph. D.
- 4. Names of Interdisciplinary courses and the departments/units involved:** NA
- 5. Annual/ semester/Choice Based Credit System (programme wise):** Semester/ Choice Based Credit System
- 6. Participation of the department in the courses offered by other departments:** NA
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** NA
- 8. Details of courses/programmes discontinued (if any) with reasons:** NA
- 9. Number of Teaching posts:**

	Sanctioned	Filled
Professors	--	--
Associate Professors	01	01
Asst. Professors	01	2 on contract

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

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Manjusha D. Gokhale	M.A., Ph.D.	Asso. Prof. & Head	Sanskrit Poetics	20	04
Sameera Joshi	M.A. Ph D registered, NET	Assistant Professor	Alankarshatra	01	--
Mughda Deshpande	M.A. SET	Assistant Professor	Veda	01	--

- 11. List of senior visiting faculty:** NA
- 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** 50%



- 13. Student -Teacher Ratio (programme wise): 25:1**
- 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: NA**
- 15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:**
Ms. Manjusha Gokhale and Ms. Sameera Joshi
- 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: NA**
- 17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: NA**
- 18. Research Centre /facility recognized by the University: Research Centre recognized by University of Mumbai.**

19. Publications:

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Dr. Manjusha Gokhale	-	-	-	-	-	3	-	-	-	-	-	-	-

- 20. Areas of consultancy and income generated: NA**
- 21. Faculty as members in: NA**
- a) National committees b) International Committees c) Editorial Boards....
- 22. Student projects:**
- a) Percentage of students who have done in-house projects including inter departmental/ programme: NA
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: NA
- 23. Awards / Recognitions received by faculty and students:**
- Manish Walvekar (student) – Lakhmibai Naik Gold Medal by Uni. of Mumbai
- 24. List of eminent academicians and scientists / visitors to the department: 2015-16-**
- Dr. Madhavi Narsalay, Head, Mumbai Uni. dept. of Sansk.
 - Dr. Gauri Mahulikar, Ex. Head, Mumbai Uni. dept. of Sansk.
 - Dr. Malhar Kulkarni, asso. Prof., Dept. of Humanities, IIT Mumbai
 - Dr. Madhav Bhagvat, Botanist & ayurveda scholar
- 25. Seminars/ Conferences/Workshops organized & the source of funding : NA**
- c) National
- d) International



26. Student profile programme/course wise: NA

Name of the Course/programme(refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
2016-17	4269	20	1	19	95%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
UG	100%	-	-

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

29. Student progression: NA

Student progression	Against % enrolled
UG to PG	50%
PG to M.Phil.	30%
PG to PhD	20%
PhD to Post-Doctoral	10%
Employed	-
Campus selection	80%
Other than campus recruitment	10%
Entrepreneurship/Self-employment	--

30. Details of Infrastructural facilities:

- Library** – Departmental library with 500 books & some issues of Journals
- Internet facilities for Staff & Students** – 1 computer with internet facility and research lab for students
- Class rooms with ICT facility:** NA
- Laboratories:** NA

31. Number of students receiving financial assistance from college, university, government or other agencies:

- As per university norms, students benefit financially via freeships.
- Also from 'Each One Adopt One' scheme and 'Earn while you Learn' of the College.

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts: 2015-16 -

- Special lecture series on Sanskrit Grammar - Experts – Vivekanand Ghate, Harshada Savarkar, Ajay Pendse



- Special lecture on Animals & birds in the Literature of Kalidasa- Dr. Madhavi Narsalay
- Special lecture on Paninian Grammar – Dr. Malhar Kulkarni
- Special lecture on Herbal Medicines – Dr. Madhav Bhagvat

33. Teaching methods adopted to improve student learning:

- Lectures,
- Classroom Discussions,
- Presentations,
- Internet, DVD-s etc.

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

- Participation in state-level Sanskrit one-act play competition highlighting important social issues.
- Popularising Sanskrit as a language with strong traditional roots amongst public by various activities and programs.

35. SWOC analysis of the department and Future plans :

Strengths:.

- Dedicated & enthusiastic students
- University Rankers
- Students participation in co-curricular and extra curricular activities

Weaknesses:

- Classes with heterogeneous, and mixed learning ability students

Opportunities:

- Inter-disciplinary projects

Challenges:

- Maintaining a balance between slow and advanced learners in Sanskrit

Future plans -

- To organize certificate course and Advanced certificate course in Linguistics
- To organize state-level conference on Sanskrit Epics
- To initiate inter- disciplinary projects



Department of Statistics

1. **Name of the Department:** Statistics
2. **Year of Establishment:** 1957
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** B.Sc. (Statistics) and B.A. (Economics (3 Units) and Statistics (3 Units))
4. **Names of Interdisciplinary courses and the departments/units involved:** NA
5. **Annual/ semester/Choice Based Credit System (programme wise):** B.Sc. (Statistics) and B.A. (Economics (3 Units) and Statistics (3 Units) Semester, Choice Based Credit System
6. **Participation of the department in the courses offered by other departments:** M.Sc. (Bioanalytical Sciences), M.Sc. (Biotechnology)
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** NA
8. **Details of courses/programmes discontinued (if any) with reasons:** NA
9. **Number of Teaching posts:**

	Sanctioned	Filled
Professors	NA	NA
Associate Professors	02	02
Asst. Professors	04	02

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

Name	Qualification	Designation	Specialization	No. of Years Of Experience	No. of Ph.D. Students guided for the last 4 years
Sucheta Ketkar	MSc Pursuing PhD	Associate Professor	Statistics	26	NA
Dr. Sujata Suvarnapathki	MSc PhD	Assistant Professor	Statistics	25	NA
Ashwini Deshpande	M.Sc Pursuing PhD	Assistant Professor	Statistics	18	NA
Savitri Govindan	MSc	Associate Professor	Statistics	32	NA
Asha Kamat	MSc	Assistant Professor	Statistics	18	NA
Aruna Ganu	Sc	Assistant Professor	Statistics	08	--



11. **List of senior visiting faculty:** NA
12. **Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:** Nil
13. **Student -Teacher Ratio (programme wise):** BSc (50: 1) and BA (20:1)
14. **Number of academic support staff (technical) and administrative staff; sanctioned and filled:** Lab Assistant: 01
15. **Qualifications of teaching faculty with DSc / D.Litt/ Ph.D/ M.Phil / PG.:** NA
16. **Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:** NA
17. **Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:** Grant received under DBT Star College Scheme: Rs. 5 Lacs (Non Recurring) and Rs. 2 Lacs Recurring (Every year for 3 years starting from 2016)
18. **Research Centre /facility recognized by the University:** NA
19. **Publications:** NIL
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:** NA
23. **Awards / Recognitions received by faculty and students:** NA
24. **List of eminent academicians and scientists / visitors to the department:**
 - Mr. Mayur Ankolekar (Actuary)
 - Mr. Vinayak Deshpande (CMD, Sankhya Analytical Research Pvt Ltd)
25. **Seminars/ Conferences/Workshops organized & the source of funding:**
 - a) National: NA
 - b) International: NA

26. Student profile programme/course wise:

Name of the Course/programme	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
2016-17					
FYBA	4269	35	7	28	97%
FYBSc	5480	102	51	51	93%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
BSc	90%	10%	0%
BA	100%	0%	0%



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ? None

29. Student progression:

Student progression	Against %enrolled
UG to PG	95%
PG to M.Phil.	NA
PG to PhD	5%
PhD to Post-Doctoral	NA
Employed Campus selection Other than campus recruitment	Most of the students (95%) pursue the higher studies so very few go for placements immediately after UG.
Entrepreneurship/Self-employment	--

30. Details of Infrastructural facilities:

- a) Library: Department library has 200 Books available for Teachers and Students
- b) Internet facilities for Staff & Students: The laboratory facility has 8 Desktops and one laptop- All the desktops are connected to internet facility.
- c) Class rooms with ICT facility: All the classrooms have the LCD Projectors.
- d) Laboratories: The laboratory facility has 8 Desktops and one laptop, 2 printers

31. Number of students receiving financial assistance from college, university, government or other agencies:

- As per university norms, students benefit financially via freships.
- Also from 'Each One Adopt One' scheme and 'Earn while you Learn' of the College.

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts:

- Special lectures by eminent speakers are held for students for current topics in Statistics.

33. Teaching methods adopted to improve student learning:

- Project Based Learning, Flip the classroom

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

- Some students participate in NCC and NSS as their volunteers.

35. SWOC analysis of the department and Future plans :

Strength

- Committed Faculty

Weakness

- Number of Research publications is very less.



Opportunities

- Interdisciplinary programme
- Establishment of linkages with industries

Challenges

- Managing the balance between teaching arts and science students simultaneously

Future Plans:

- To undertake training in statistical tools for students and also faculty training.
- To hold interdisciplinary workshops for the faculty and for the students.

Department of Tourism and Travel Management

The Self-evaluation of every department may be provided separately in about 3-4 pages, avoiding the repetition of the data.

- 1. Name of the Department:** B.VoC Tourism and Travel Management
- 2. Year of Establishment:** 2014-15
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** B.VoC Tourism And Travel Management
- 4. Names of Interdisciplinary courses and the departments/units involved:** -
- 5. Annual/ semester/Choice Based Credit System (programme wise):** Semester Pattern
- 6. Participation of the department in the courses offered by other departments:** NA
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** NA
- 8. Details of courses/programmes discontinued (if any) with reasons:** NA
- 9. Number of Teaching posts:** 02

	Sanctioned	Filled
Professors	-	-
Associate Professors	NIL	NIL
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	No. of Years Of Experience	No. of Ph.D. Students guided for the last 4 years
Ms. Amrita Gokhale	PGDTTIM and pursuing masters	Asst. Professor	Tourism and Travel Mgmt	12 (corporate and teaching)	NA
Ms. UrmiParalikar	M.A. History	Asst. Professor	History	2	

11. List of senior visiting faculty:

Sr. No.	Visiting faculty
	Mr. Shailesh Thakur
	Mr. Parag Tharthare
	Ms. MeeraSuryanaryan
	Ms. ReshmaRandive
	Mr. Nikhil Srinivasan

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 30%

13. Student -Teacher Ratio (programme wise): 35:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: 0

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:

Ms. Amrita Gokhale	PGDTTIM and pursuing masters
Ms. Urmi Paralikar	M.A. History

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : NO

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: As per Kaushal

18. Research Centre /facility recognized by the University: No

19. Publications:-

- o a) Publication per faculty– NO



- o Number of papers published in peer reviewed journals (national / international) by faculty and students. – No

Number of publications listed in International Database (For Eg : Web of Science , Scopus , Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) -- Nil

20. Areas of consultancy and income generated: -- No

21. Faculty as members in:

- a) National committees b) International Committees c) Editorial Boards.... No

22. Student projects:

a) Percentage of students who have done in-house projects including inter departmental/programme–10% students went as asst. tour escorts for departmental study tours

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies –50% students placed for summer internships

23. Awards / Recognitions received by faculty and students:-- YES

24. List of eminent academicians and scientists / visitors to the department:--
No

25. Seminars/ Conferences/Workshops organized & the source of funding :--
No

- a) National
- b) International

26. Student profile programme/course wise:--

Name of the Course/programme (refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
2016 – 17	136	48	33	15	80%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
B.Voc. TTM	100%	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ? NO



29. Student progression:

Student progression	
UG to PG	Not Applicable
PG to M.Phil.	Not Applicable
PG to PhD	Not Applicable
PhD to Post-Doctoral	Not Applicable
Employed	Various students from department currently employed by leading corporates for March to May 2017.
<ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	
Entrepreneurship/Self-employment	03

30. Details of Infrastructural facilities:

- a) Library - Yes
- b) Internet facilities for Staff & Students - Yes
- c) Class rooms with ICT facility - Yes
- d) Laboratories - Yes

31. Number of students receiving financial assistance from college, university, government or other agencies: Apart from the financial assistance from UGC under Kaushal Scheme, Students also avail benefit from various schemes initiated by college.

32. Details on students enrichment programmes (special

lectures/workshops/seminar) with external experts:Dr. Anya Diekmann, HoD University of Brussels, Tourism Dept. PhD in Slum Tourism – Lecture on Tourism

- Perspective in Europe with Special focus on Belgium and Comparative analysis of Emerging Tourism Trends and Novel Tourism Practices Across World.
- Mr. Sushant Pilankar, MD Tourkraft Travel Services Pvt. Ltd, Motivational Talk on Leadership and Team Building and Life Skills
- Ms. SunilaPatil, BoDVeena World, Skill Development in Travel Industry
- Mr. Neil Patil, BoDVeena World, Trends in Tourism and Millennial Traveller

Industry Visits conducted for the Students:

- Half Day Heritage walk of Colonial Mumbai conducted by Ms. Shraddha Bhatavdekar
- One Full day excursion organized to Nashik to understand current trends of agro tourism and gastro tourism
- Day excursion to JijamataUdyan and BhauDaji Laud Museum with a private guide



- Half Day visit to UNESCO World Heritage Site at Chatrapati Shivaji Terminus with a licensed guide.
- Full Day Visit to travel trade fair – ITM
- Half day Industrial visit to Yatra Metro X corporate office for understanding different departments in an agency setup

Seminars Attended by Students:

Seminar on Accessible Tourism conducted by GICED on account of World Tourism Day

Workshops conducted for the Students:

- 02 Domestic Tour Operations Workshop – Ms. NavazKharanjia, focused on basic circuits, mapping an itinerary and basics of costing
- 03 Days Corporate Ready workshop at Hyatt Regency, Wasan Knowledge hub – focused on basic
- corporate etiquettes, grooming and presentation skills
- 04 Days Food History/ Gastro tourism and coupled with Food walks by Dr. Mohsina Mukadam.
- “Conservation of Archaeology for Development and Promotion of Tourism Activities: Dr. Anya Diekmann, HoD University of Brussels, Tourism Dept. PhD in Slum Tourism

❖ **Study Tour of Golden Triangle:**

Students along with the faculty visited the DEL AGRA JAIPUR sector for 08 days as a part of departmental activity. The designing of the tour, inclusions for sightseeing, costing, bookings for transportation, travel and hotels along with enroute meals was organized and managed in its entirety by the students of BVoc T.T.M.

33. Teaching methods adopted to improve student learning:

Flip the classroom Chalk and duster method, group discussions, viva for communication skills development, presentations in the class room, visiting local sites, showing relevant documentaries in class, teaching through powerpoint presentations,

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

Heritage walks for citizens to sensitize them to heritage diversity of Mumbai City.

35. SWOC analysis of the department and Future plans:

Strengths:

- Affordable fee structure
- Faculties appointed on floor is an expert and related directly to the industry
- Syllabus is framed as per current requirement in the industry



- Library facilities available with books over 100 to refer on different subjects related to tourism
- An in house computer lab as to enable students to work on assignments and projects as and when required
- Smart board available for interactive and audio visual sessions
- Interactive programmes/ seminars and workshops conducted for enhancing skills of the candidates

Weakness

- Lengthy administrative process to align syllabus to meet all needs. NSDC, College structure and UGC
- Students are lured to several private agencies providing courses with no accreditation due to inadequate public understanding of the field,

Opportunities:

- Continuing education for intellectual enrichment and for young minds wanting to make a mark in the tourism industry
- online opportunities worldwide
- Opportunity to build an undergraduate experience using the best practices and skills
- off-campus study and exchange programs
- becoming a leader in Vocational course

Challenges:

- Retaining expert faculty in presence of lucrative industry placements.
- Growing competition from courses which are conducted by established travel agencies

Future Plans:

- Introducing research projects pertaining to different trends in tourism
- Introducing add on courses for personality development
- Introducing segment of gastro tourism and adventure tourism with special credits
- Being the most preferred organization for internship and placements
- Subscribe monthly for tourism related Magazines for references and read



Department of Bioanalytical Sciences

1. **Name of the Department:** Bioanalytical Sciences
2. **Year of Establishment:** 2004
3. **Names of Programmes / Courses offered**
 - Five years Integrated M.Sc. in Bioanalytical Sciences
 - M.Sc in Bioanalytical Sciences By papers & By Research
 - Ph.D. in Bioanalytical Sciences
4. **Names of Interdisciplinary courses and the departments/units involved:** The courses offered by Department of Bioanalytical Sciences are interdisciplinary in nature and departments involved are Botany, Physics, Mathematics, Statistics & Chemistry.
5. **Annual/ semester/Choice Based Credit System (programme wise):** CBSGS
6. **Participation of the department in the courses offered by other departments:** nil
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Collaboration with Industries such as Shimadzu India Pvt.Ltd, Central Dogma Pvt. Ltd,
8. **Details of courses/programmes discontinued (if any) with reasons:** Nil
9. **Number of teaching posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	-	-
Assistant professors	07	07

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

Name	Qualification	Designation	Specialization	No. of years of experience	No. of PhD Students guided for the last 4 years
Mr. Sachin Palekar	M.Sc.(Botany) Registered for PhD	Asst. Professor & Head	Plant Proteomics & Phytochemistry	09	-
Ms. Nandini Sathe	M.Sc (Bioanalytical	Asst. Professor &	Bioanalytical Techniques &	06	-



	Sciences) Registered for PhD	Course Coordinator (MSc)	Regulatory affairs in Pharma		
Ms. Sandhya Menon	M.Sc (Life Sciences) Registered for PhD	Asst.Professor & Course Coordinator (Inte.MSc P.G.)	Applied Medical Sciences	06	-
Ms. Himani Vaishnav	MSc in Chemistry	Asst.Professor	Organic Chemistry	02	-
Mr. Vishwajit Kale	MSc in Chemistry	Asst.Professor	Analytical Chemistry	02	-
Ms. Vrushali Patil	MTech Bioinformatics	Asst.Professor	Bioinformatics	05	-
Ms.Ashwini Joshi	MSc in Bioanalytical Sciences	Asst.Professor	Bioanalysis	01	-

11. List of senior visiting faculty:

Dr. Ajit Datar, Senior Consultant, Shimadzu India Pvt Ltd

Dr. Mary Francis, Director, CRIMSON

Dr. Aditi Bhugra, Asst.Manager, Glenmark

Dr. Shreeram Oak, National Manager, Brucker India Pvt.Ltd

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 13%

13. Student -Teacher Ratio (programme wise): Integrated Masters (20:1) P.G. (20:1)

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: sanctioned 06, filled 3

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:

Name	Qualification	PhD
Mr. Sachin Palekar	MSc	Registered for PhD
Ms. Nandini Sathe	MSc	Registered for PhD
Ms. Sandhya Menon	MSc	Registered for PhD
Ms. Himani Vaishnav	MSc	-
Mr. Vishwajit Kale	MSc	-
Ms. Vrushali Patil	MTech	-
Ms.Ashwini Joshi	MSc	-

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: DBT- Star College Scheme

18. Research Centre /facility recognized by the University: Ph.D. Centre

19. Publications:

Name of the faculty	a	b1	b2	c	d	e	f	g	h	i	j	k	l
Mr. Sachin Palekar	2	0	2	0		0	0	0	-	-	-	2.47	-
Ms.Sandhya Menon	1	1	0	0	0	0	0	0	-	-	-	4.856	-

20. Areas of consultancy and income generated: Nil

21. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards: None

22. Student projects:

a) Percentage of students who have done in-house projects including inter department /programme: 6.5%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 24%

23. Awards / Recognitions received by faculty and students:

24. List of eminent academicians and scientists / visitors to the department:

- Dr. Anjali Apte-Deshpande Director, Central Dogma Pvt. Ltd.
- Dr. Savita Kulkarni, Scientist BARC
- Dr. Ajit Datar, Consultant Shimadzu India Pvt. Ltd.

25. Seminars/ Conferences/Workshops organized & the source of funding :

a) National: None b) International:None

26. Student profile programme/course wise:

Name of the Course/programme	Application Received	Selected	Enrolled		Pass percentage
			*M	*F	
FYBSC 2016-17	150	42	6	36	69%

*M= Male*F= Female

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
M.Sc in Bioanalytical Sc	98%	2%	NIL
Integrated MSc in Bioanalytical Sciences	98%	2%	NIL



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. None

29. Student progression:

Student progression	Against % enrolled
UG to PG	100
PG to M.Phil.	-
PG to PhD	10
PhD to Post-Doctoral	-
Employed	90%
Campus selection	70
Other than campus recruitment	20
Entrepreneurship/Self-employment	1

30. Details of Infrastructural facilities:

- a) Library: Yes. Around 300 books on interdisciplinary Bioanalytical Sc.
- b) Internet facilities for Staff & Students: 4 Computers for staff with internet facility
- c) Class rooms with ICT facility: All
- d) Laboratories: 2 Laboratories, Computer Lab,

31. Number of students receiving financial assistance from college, university, government or other agencies: As per University norms, students benefit financially via freeships. College also funds them via 'Each One Adopt One' & 'Earn While You Learn' schemes.

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts: 2 special lectures, 2 workshops

Special Lectures:

1. Brainstorming session on Bioanalysis & its Industrial Applications
2. Career Opportunities in Bioanalytical Sciences

Workshops:

- Analytical techniques in Genomics and Proteomics
- Expression of Recombinant Protein in Bacterial Host
- Hands on training workshop on Tablet testing for Undergraduate students funded by DBT
- Workshop on stability of Pharmaceutical dosage forms

33. Teaching methods adopted to improve student learning: ICT, POGIL

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

- a) Cleaning of Beaches of Mumbai after Ganapati immersion



b) Assistance to visually challenged students as writers

35. SWOC analysis of the department and Future plans:

Strengths

- Young & dynamic faculty members having interdisciplinary approach in teaching
- Loyalty & Dedication of the faculty towards Institution
- Innovative methods towards teaching learning methodology.

Weakness

- Reliance on industry experts whose availabilities are uncertain
- Higher number of faculty joining industry.

Opportunities

- Collaboration with Industry for Research Projects.
- Collaboration with pharma & analytical instrumentation industry for developing newer avenues in Bioanalysis.

Challenges

- Maintaining balance between slow and advance learners for global competence.

Future Plan:

- Starting certificate courses in the field of pharmacovigilance, Regulatory affairs for Pharma Industry



Department of Biochemistry

1. **Name of the Department:** Biochemistry
2. **Year of Establishment:** 2004
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** B.Sc.in Biochemistry (single major – six units), M.Sc.in Biochemistry (By Papers& Research),
4. **Names of Interdisciplinary courses and the departments/units involved:**
 - Certificate program in Food Science and Quality Control for FYBSc students of the Department,
 - Diploma program in Food Science and Quality Control for SYBSc students of the Department,
 - Advanced Diploma program in Food Science and Quality Control for TYBSc students of the Department organized by the Department of Biochemistry and Food Science and Quality Control.
5. **Annual/ semester/Choice Based Credit System (programme wise):** CBSGS
6. **Participation of the department in the courses offered by other departments:**

Sr. No.	Name of Faculty	Participation
1	Dr. Jyoti D Vora	Visiting faculty, Examiner, Paper setter and Guide for Dissertation for Bioanalytical Sciences, Psychology, Nutraceutical Sciences, Food Preservation and processing, Food Nutrition and Dietetics
2	Mr. Prashant M Masali	Examiner and Paper setter for Food Preservation and processing, Food Nutrition and Dietetics
3	Ms Sneha Pednekar	Examiner and Paper setter for SVT College, SNTD

7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:**
 - Workshop on Laboratory techniques in Biochemistry for Post Graduate Diploma in Dietetics and Nutrition students, of Netaji Subhash Institute, Kurla
 - Association with Ross Lifesciences, Pune
 - The Department has signed an MoU with Nirmala Niketan College of Home Sciences, University of Mumbai: for the MSc program of Food Preservation and Processing
8. **Details of courses/ programmes discontinued (if any) with reasons:** NIL



9. Number of Teaching posts:

	Sanctioned	Filled
Professors	-	-
Associate Professors	--	01
Asst. Professors	06	05

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

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Jyoti D. Vora	MSc, PhD, F.S.Sc, MASSFBC	Associate Professor &Head,	Biochemistry	28 years	3
Mr Prashant M. Masali	M.Sc, PGDCR	Assistant Professor	Biochemistry	14 years	---
Ms. Sneha R. Pednekar	MSc	Assistant Professor	Biochemistry	5 years	---
Ms. Aditi U. Patwardhan	MSc	Assistant Professor	Biochemistry	4 years	---
Ms. Padma Srinivasan	MSc	Assistant Professor	Biochemistry	2 year	---

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): M.Sc. 10:1, B.Sc.20:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Sanctioned	06
Filled	03

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:

- Dr. Jyoti D. Vora, M.Sc., Ph.D, F.S.Sc, MASSFBC
- Mr Prashant M. Masali, M.Sc., PGDCR
- Ms. Sneha R. Pednekar, M.Sc.
- Ms. Aditi U. Patwardhan, M.Sc.
- Ms. Padma Srinivasan, M.Sc



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: M.Sc. by Research & Papers

19. Publications:

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Dr. Jyoti D. Vora	59	35	24	-	-	-	-	-	-	-	-	1.34- 5.30	-
Ms.Sneha Pednekar	17	10	07	-	-	-	-	-	-	-	-		-
Ms. Aditi Patwardhan	06	04	03	-	-	-	-	-	-	-	-		-
Ms. Padma Srinivasan	10	06	04	-	-	-	-	-	-	-	-		-

Number of publications listed in International Database (For Eg : Web of Science , Scopus , Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) -Nil

• **Books Edited:**

Dr. Jyoti D Vora

- Emotional eating assessment of Urban Indian population- a Biochemical and biostatistical insight, Lambert Academic Publishing, Germany, 20th July 2012, (ISSN: 978-3-659-18881-7)
- Biochemical & Organoleptic Analysis of Dietary Variant Using Mushroom- A Novel Nutraceutical Product Development, Lambert Academic Publishing, Germany, 31st August 2013, ISBN: 978-3-659-44788-4
- Comparative Perspective of Plain Yogurt & Probiotic Yogurt: A Biochemical and Biostatistical Assessment, Lambert Academic Publishing, 15th November 2012, (ISBN: 978-3-659-30394-4)

20. Areas of consultancy and income generated: NIL

21. Faculty as members in:

a) **National committee:** Dr. Jyoti D. Vora is Life Member Indian Science Congress, Nutrition Society of India & Indian Dietetic Association

b) **International Committees:** Dr. Jyoti D. Vora : Full Individual Membership of the Third World Organization for Women in Science (TWOWS), Member of the Genome India International

c) **Editorial Boards:** Dr. Jyoti D Vora is currently on the following Editorial Boards of

- African Journal of Plant Science (ISSN: 1996-0824)
- International Journal of Physiology and Pathophysiology (ISSN: 2155-0158)



- International Journal of Science Education [ISSN 0950-0693 (Print); ISSN 1464-5289 (Online)]
- International Journal of Functional Foods (ISSN: 1756-4646)

22. Student projects:

- Percentage of students who have done in-house projects including inter departmental /programme: 100% (M.Sc)**
- Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 100%**
(Postgraduate & Undergraduate)
Training in food industry for Undergraduates
Training at Ross Life-sciences International, Pune for Post Graduates

23. Awards / Recognitions received by faculty and students: University Toppers at T. Y .B. Sc level

24. List of eminent academicians and scientists / visitors to the department:

- Dr. Steve Winder, Sheffield University, UK
- Dr. Geeta Ibrahim, Principal, Nirmala Niketan College of Home Sciences
- Padmabhushan, Dr. Suresh H Advani

25. Seminars/ Conferences/Workshops organized & the source of funding:

- National NIL
- International NIL

26. Student profile programme/course wise:

Name of the Course/programme	Application Received	Selected	Enrolled (2016 – 2017)		Pass percentage
			Male	Female	
FYBSc Biochemistry	110	36	06	30	75%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
BSc Biochemistry	97%	3%	-
MSc Biochemistry	97%	3%	-

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:

Student progression	
UG to PG	90%
PG to M.Phil.	NIL



PG to PhD	30%
PhD to Post-Doctoral	10%
Employed	
Campus selection	NIL
Other than campus recruitment	NIL
Entrepreneurship/Self-employment	NIL

30. Details of Infrastructural facilities:

- a) **Library:** Departmental Library 250 books
- b) **Internet facilities for Staff & Students:** 4 computers and 1 laptop
- c) **Class rooms with ICT facility:** All
- d) **Laboratories:** 1 laboratory for Undergraduate and 1 laboratory for Postgraduate

31. Number of students receiving financial assistance from college, university, government or other agencies: Apart from the regular freeships from the Government, students avail financial help to pay the fees via ‘Each one adopt one’ & ‘Earn while you learn’ schemes of the College.

32. Details on student enrichment programmes (special lectures/workshops/seminar) with external experts:

➤ Special Lectures by:

Name of the Lecturer	Year	Topic
Dr. Steve Winder, Sheffield University, UK	2014	Stem cell research
Dr. Geeta Ibrahim, Principal, Nirmala Niketan College of Home Sciences	2015	Nutrigenomics
Dr. Steve Winder, Sheffield University, UK	2015	Muscular Dystrophy
Padmabhushan, Dr. Suresh H Advani	2016	Emerging Trends in Cancer biology
Dr. Sagarika Damle, Head, Dept of Life Sciences, K C College	2017	Bean-e-Barat Dawat-e-Pod

33. Teaching methods adopted to improve student learning:

- ✓ Use of ICT for enhanced teaching & learning
- ✓ Students are encouraged to present seminars on scientific topics and also encouraged to scientific articles in peer reviewed journals

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Participation in Informal diet counseling for Undergraduate students and Non-teaching staff of the college

35. SWOC analysis of the department and Future plans:

Strength:

- Committed Staff Members



Weakness:

- Retaining non teaching staff

Opportunities:

- Expansion of the Add-on Advanced Diploma, Diploma and Certificate program in Food Science and Quality Control for under graduate students
- Undergraduate research under the Star College Scheme

Challenges:

- Global Compatibility of curriculum

Future Plans:

- Organization of National Seminar, Conference, Short-term value addition courses, Enhancement of Industry – Department interaction

Department of Biotechnology

- 1. Name of the Department:** Biotechnology
- 2. Year of Establishment:** 2002
- 3. Names of Programmes / Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG, PG, Ph.D
- 4. Names of Interdisciplinary courses and the departments/units involved:** NA
- 5. Annual/ semester/Choice Based Credit System (programme wise):** CBSGS
- 6. Participation of the department in the courses offered by other departments:** Herbal Science
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** Short term research project with ICT and Chemicalli
- 8. Details of courses/programmes discontinued (if any) with reasons:** NA
- 9. Number of Teaching posts:** 7

	Sanctioned	Filled
Professors	--	--
Associate Professors	--	--
Asst. Professors	7	7



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

Name	Qualification	Designation	Specialization	No. of years of experience	No. of PhD Students guided for the last 4 years
Ms. Supriya Kale	MSc	Assistant Professor	Microbiology	11	NA
Ms. Pramada Karnik	MSc	Assistant Professor	Biotechnology	2 years	NA
Mr. Sagar Shah	MSc	Assistant Professor	Biotechnology	1 year 9 months	NA
Ms. Vibha Udyawar	MSc	Assistant Professor	Biotechnology	1 year 3 months	NA
Dr. Neha Ahir	MSc	Assistant Professor	Biotechnology	2 years	NA
Ms. Sneha Sawant	MSc, PhD	Assistant Professor	Biotechnology	Recently Appointed	NA
Ms. Navjeet Kaur	MSc	Assistant Professor	Biotechnology	Recently Appointed	NA

11. List of senior visiting faculty:

- 1) Dr. P.A.Sathe
- 2) Dr. Bhavna Narula
- 3) Dr. R.Neogi
- 4) Ms. Ashwini Deshpande
- 5) Ms. Anushree Lokur

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 95% and Visiting faculty : 5

13. Student -Teacher Ratio (programme wise): 20:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Sanctioned: 06 Filled: 05

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.: PG-7

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: NA

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: DBT – Star college (One)

18. Research Centre /facility recognized by the University: M.Sc. & Ph.D.



19. Publications:

Name of the faculty	a	b1	b2	c	d	e	f	g	h	i	j	k	l
Ms. Supriya Kale	2	-	2	-	-	-	-	-	-	-	-	-	-
Ms.Navjeet Kaur Lote	4	1	3	-	-	-	-	-	-	-	-	1-5	-
Dr Sneha Sawant	2	-	2	-	-	-	-	-	-	-	-	2.1-3.5	-

20. Areas of consultancy and income generated: Nil

21. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards.... None

22. Student projects:

a) Percentage of students who have done in-house projects including inter department/ programme: 50%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 90% only for M.Sc. students

23. Awards / Recognitions received by faculty and students : Nil

24. List of eminent academicians and scientists / visitors to the department:

- ✓ Mr. Aditya Sarnaik- Institute of Chemical technology,
- ✓ Ms. Sonali Purav- Cognizant India Pvt. Ltd.

25. Seminars/ Conferences/Workshops organized & the source of funding:

Seminars - 01 (Current trends in food biotechnology)

Workshop – 01 (Animal Tissue Culture under DBT Star college scheme.)

a) National

b) International

26. Student profile programme/course wise:

Name of the Course/programme	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
2016-17	650	28	7	21	42.85

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
B.Sc	94%	6%	1%
M.Sc	97%	3%	NIL



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. –NET-02, GATE- 04, JNU-07, JAM- 07, IISER/IISc/NCBS-02

29. Student progression:

Student progression	Against % enrolled
UG to PG	80%
PG to M.Phil.	--
PG to PhD	Almost 20 to 30 %
PhD to Post-Doctoral	--
Employed	
Campus selection	10%
Other than campus recruitment	80%
Entrepreneurship/Self-employment	--

30. Details of Infrastructural facilities:

a) Library: Departmental library with nearly 1000 books covering different topics related to biotechnology

b) Internet facilities for Staff & Students: Bioinformatics laboratory furnished with 13 computers and internet facility

c) Class rooms with ICT facility: - All

d) Laboratories: Well-equipped PTC, ATC, Bioinformatics, Molecular biology Labs

31. Number of students receiving financial assistance from college, university, government or other agencies: Apart from regular freeships provided by the government, students also take benefit of various schemes which are introduced by the college

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts: Seminars on Current trends in food biotechnology and a Workshop on ATC

33. Teaching methods adopted to improve student learning: PowerPoint presentations, assignments to students, flip the classroom sessions, Videos, Skits, Debates, and Quizzes

34. Participation in Intuitional Social Responsibility (ISR) and Extension activities: collaboration with NGO -Subhalahari pratishthan which deals with awareness regarding genetic disorders

35. SWOC analysis of the department and Future plans:

Strengths:

- Dedicated and enthusiastic teaching staff
- Well maintained departmental library with approximately 1000 books
- Supportive non teaching staff



Weakness-

- Instability of the staff members

Opportunities-

- Short term research projects, & industry Collaborations

Challenges:

- Space crunch, project funding

Future plans:

- Minor research projects
- ATC related projects in collaboration with Industry

Department of Botany

- 1. Name of the Department:** Botany
- 2. Year of Establishment:** 1937
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG, PG and Ph.D.
- 4. Names of Interdisciplinary courses and the departments/units involved:** NA
- 5. Annual/ semester/Choice Based Credit System (programme wise):** Semester CBSGS
- 6. Participation of the department in the courses offered by other departments:** NA
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** NA
- 8. Details of courses/programmes discontinued (if any) with reasons:** NA
- 9. Number of teaching posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	-	3
Asst. Professors	7	4



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

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr Behnaz Patel (Retired)	MSc PhD	Associate Professor	Cytogenetics	36	4
Dr. Sunita Shailajan	MSc, M Phil., PhD	Head, Associate Professor	Standardization of medicinal plants and Phytochemistry, Pharmacology	29	8
Dr. Bhavna Narula	MSc PhD	Associate Professor	Economic Botany, Plant Physiology	25	-
Dr. Jessy Pius	MSc, M Phil., PhD	Associate Professor	Mycology Plant Tissue Clture	23	3
Dr. Manjusha Nikale	MSc, MPhil, PhD	Assistant Professor	Anatomy, Pharmacognosy	22	-
Ms. Anjali Lade	MSc	Assistant Professor	Paleobotany	22	-
Dr. Sunil Shankhadarwar	MSc PhD	Assistant Professor	Algae	13	-
Mr. Mayuresh Joshi	MSc	Assistant Professor (Temporary)	Phytochemistry	09 months	-

11. List of senior visiting faculty: NA

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 10%

13. Student -Teacher Ratio (programme wise): 20:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: 6

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:

Name	Qualification
Dr. Sunita Shailajan	MSc, MPhil, PhD
Dr. Bhavna Narula	MSc PhD
Dr. Jessy Pius	MSc, MPhil, PhD
Dr. Manjusha Nikale	MSc, MPhil, PhD
Ms. Anjali Lade	MSc
Dr. Sunil Shankhadarwar	MSc PhD
Mr. Mayuresh Joshi	MSc



16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Number of Faculty: 5, Total Grant received: 26 lakhs + Rs. 1,43,85,900/-

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received:

- UGC: 15,49,000/-
- NMPB: Rs. 25,65,000/-
- BRNS: Rs. 18,65,500/-
- DBT: Rs. 83,79,000/-
- University of Mumbai: Rs. 27,400/-

18. Research Centre /facility recognized by the University: Yes

19. Publications:



• a) Publication per faculty

Name of the faculty	a	b1	b2	c	d	e	f	g	h	i	j	k	l
Dr. Behnaz Patel (Retired)	4	2	2	-	-	-	-	-	-	-	-	0.761-2.49	-
Dr. Sunita Shailajan	53	05	48	-	05	02	-	-	365	0-1.551	0-1.156	0-3.169	11
Dr. Bhavna Narula	2	2	-	-	-	-	-	-	-	-	-	-	-
Dr. Jessie Pius	10	-	10	-	-	-	-	-	-	-	-	0.233-4.859	2.18
Dr. Manjusha Nikale	4	-	4	-	-	-	-	-	-	-	-	4.85	
Dr. Sunil Shankhadarwar	5	-	5	-	-	-	-	-	-	-	-	2.117-3.29	

20. Areas of consultancy and income generated: Rs. 16,00,000/-

21. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards....

Dr.Sunita Shailajan is

- Member of the International organizing committee for the Society of Ethnopharmacology for International Congress of Ethnopharmacology.
- Treasurer of the Society for Applied Biology and Biotechnology.
- Member of Advisory Board of Women's College- Uttaranchal.
- Life Member of Indian Pharmaceutical Association, Nature and Environment Pollution Technology and Journal of Applied Botany and Biotechnology.
- Appointed as the member of Sub Committee of the DBT, Govt. of India for evaluation of Lab manuals. SOPs and e Resources developed by different Star Colleges across India at Ramnarain Ruia College, Matunga, and Venkateswara College, New Delhi, 2015.
- Appointed as a resource person for Avishkar Workshop 2014-15 of Category Pure Science held at D. G. Ruparel College, Mumbai, 16th July 2014.
- Appointed as a member of the core committee and expert for delivering lecture at Summer School in Science and Technology - 2014 organized by Hon'ble Vice-Chancellor, University of Mumbai for undergraduate and post graduate students.
- Appointed as a board member of the organizing committee for the 'International Conference and Exhibition on Pharmacognosy, Phytochemistry and Natural Products' by OMICS Group Conferences, Westlake, Los Angeles, USA.(December 2013)
- Appointed as a Nodal Officer for coordinating the recognition of Ramnarain Ruia College, Mumbai of as Scientific and Industrial Research Organization (SIRO) by the Department of Scientific and Industrial Research, 2012.



- Appointed as a member of Ad-hoc Board of studies in Bioanalytical Sciences by the Hon'ble Vice Chancellor, University of Mumbai, 2012.
 - Appointed as a member of LIC Committee by the University of Mumbai to visit and evaluate Botany Research Lab of Jai Hind College, Mumbai.
 - Appointed as a Reviewer of PLOS ONE Journal.
 - Appointed for three years as a member of Ad-Hoc Board of Studies under Faculty of Science, University of Mumbai, 2015.
 - Reviewer of Journal of Ethnopharmacology- An Elsevier Publication.
 - Reviewer of Journal AYU.
 - Reviewer of Project proposals submitted to National Medicinal Plants Board (NMPB), Government of India. Appointed as a reviewer of research projects for National Medicinal Plant Board (NMPB) (Government of India, Ministry of Health & Welfare, Department of Family Welfare, Department of AYUSH).
 - Appointed as a Reviewer of Arabian Journal of Chemistry and Journal of Traditional and Complimentary Medicine.
- 22. Student projects:**
- a. **Percentage of students who have done in-house projects including inter departmental/programme: PG 100%**
 - b. **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies : UG 50%**
- 23. Awards / Recognitions received by faculty and students: --**
- Awards:**
- Received Dr. P.D. Sethi award 2014 (3rd prize) for the best research publications using HPTLC from India entitled "A High Performance Thin Layer Chromatographic method for the evaluation of marmelosin from Aegle marmelos Corr. extract and its traditional formulation from rat plasma: Application to pharmacokinetics."
 - Received Dr. P.D. Sethi award 2014 for best HPTLC paper (Certificate of merit) for papers entitled; a) A comparative estimation of quercetin content from Cuscuta reflexa Roxb. using validated HPTLC and HPLC techniques; b)Pharmacognostic and phytochemical evaluation of Chrysophyllum cainito Linn. Leaves
 - Received Dr. P.D. Sethi award 2013 (2nd prize) for the best research publications using HPTLC from India entitled " Evaluation of impact of regional variation on β sitosterol content in Asteracantha longifolia Nees seeds using HPTLC and HPLC technique.
 - Received Dr. P.D. Sethi award 2013 for best HPTLC paper (Certificate of merit) for papers entitled;



- a. Impact of Regional Variation on Lupeol content in *Carissa carandas* Linn. fruits: evaluation using validated High Performance Thin Layer Chromatography;
 - b. Pharmacognostical Evaluation of Leaves of *Parkia biglandulosa* Wight & Arn.: An Important Ethnomedicinal Plant;
 - c. Simultaneous estimation of three triterpenoids ursolic acid, β – sitosterol and lupeol from flowers, leaves and formulations of *Rhododendron arboreum* Smith. using validated HPTLC method;
 - d. Standardization of *Shadbindu Taila*: An Ayurvedic oil based medicine;
 - e. Quality Evaluation and Standardization of an Ayurvedic formulation *Bilvadileha*: A bioanalytical approach;
 - f. Biomarker based quality control method for *Carissa carandas* Linn. fruits using HPTLC technique;
 - g. Estimation of rhein from *Cassia fistula* Linn. using validated HPTLC method;
 - h. Evaluation of quality and efficacy of an ethnomedicinal plant *Ageratum conyzoides* L. in the management of pediculosis
- Received Dr. P.D. Sethi award 2012 (2nd prize) for the best research paper in India entitled “ bioanalytical and multidisciplinary approach for the quality assessment of *Sufoof - Ziaabetes- Dulabi*: A popular traditional Unani antidiabetic medicine.
 - Received P.D. Sethi award for paper entitled “A liquid chromatography/electrospray ionization tandem mass spectrometric method for quantification of asiatic acid from rat plasma: application to pharmacokinetic study in rats published in *Rapid Communications in Mass Spectrometry*, 2012, 1899-1908.
 - Ms. Anjali Lade won first prize at 4th Bharatiya Vigyan Sammelan & Expo 2015 for her paper on Validation of wound healing activity ethanolic extract of *Rhododendron arboreum* leaves
 - Under the guidance of Dr. Sunita Shailajan, Mayuresh Joshi and students from S. Y. B. Sc (Suraj Mishra, Snehal Bhansode, Priyanka Mahanty, Yamini Damle, Sudhanshu Rane Bhavna Bisht) and T. Y. B. Sc (Aditya Mhatre, Sruthi Pillai), won first and second award at One Day International seminar on ‘360 Degree Cosmetics’ at Vaze College.
 - Appreciation certificate for contribution in the field of education by “Uttaranchal Mahasangh Organization, 2012.

Recognition

- Appointed for three years as a member of Ad-Hoc Board of Studies under Faculty of Science, University of Mumbai, 2015.
- Appointed as a Reviewer of *Arabian Journal of Chemistry* and *Journal of Traditional and Complimentary Medicine*.



- Appointed as the member of Sub Committee of the DBT, Govt. of India for evaluation of Lab manuals. SOPs and e Resources developed by different Star Colleges across India at Ramnarain Ruia College, Matunga, and Venkateswara College, New Delhi, 2015.
- Appointed as a session Coordinator by the organizing committee for Symposium on “Recent advances in Cancer Biology”, held during 102nd Indian Science Congress 2015 at Kalina University, Mumbai and submitted the report of the same to the University of Mumbai.
- Invited as an expert to attend meeting for creating a “Community for Effective learning of Life Sciences (CELLS) through Technology” organized by MHRD/NMEICT on 25th July 2014.
- Nominated as the Hon’ble Vice-Chancellor’s nominees as a subject expert for screening cum evaluation committee for Career Advancement Scheme to recommend promotion of teachers in the subject of Botany.
- Invited as a Judge at Avishkar in pure Science category (zonal level) at Kalina University. (4th and 8th January 2014)
- Appointed as a board member of the organizing committee for the ‘International Conference and Exhibition on Pharmacognosy, Phytochemistry and Natural Products’ by OMICS Group Conferences, Westlake, Los Angeles, USA.(December 2013)
- Appointed as a Nodal Officer for coordinating the recognition of Ramnarain Ruia College, Mumbai of as Scientific and Industrial Research Organization (SIRO) by the Department of Scientific and Industrial Research, 2012.
- Appreciation Certificate from University of Mumbai for enormous contribution in the preparation of projects under UGC XIIth Plan Scheme, 2012.
- Evaluation of Dissertation of AYUSH training projects for Bioanalytical Sciences
- Appointed as the Member Secretary of IAEC, coordinated the IAEC meetings regarding the approval of animal study protocols of research students.
- Appointed for three years as a member of Ad-Hoc Board of Studies under Faculty of Science and as a member made certain suggestions about inspection of colleges to check the status of instruments and labs.

24. List of eminent academicians and scientists / visitors to the department:

- Dr. Savita Kulkarni (Scientific Officer (G), (B.A.R.C.)
- Dr. Anjali Apte-Deshpande (Director/Promoter, Central Dogma Pvt Ltd)
- Dr. LS. Shashidhara (Dean (Research & Faculty), IISER, PUNE)
- Dr. Archana Krishnan (Founder-Directors, BioGenomics)
- Dr. Kripa Murzello (Senior Manager, Bharat Serums & Vaccines Ltd.)
- Dr Ajit Datar (Advisor, Shimadzu Analytical India Pvt. Ltd.)
- Dr. Sanjay Sonar (Director, BioGenomics Limited)



- Dr. Aparna Bhanushali (Research Scientist & Senior Manager, SRL)
- Dr. Shubhada Shenai (Application Specialist, LABINDIA)
- Dr. Hemalatha Ramachandran (Associate Professor, Life Sciences, Sophia College)
- Dr. Josekautty P., Plant Tissue Culturist, Australia
- Dr.S.R. Yadav, Kolhapur University

25. Seminars/ Conferences/Workshops organized & the source of funding :

- National** - National Seminar on Fungi and Human Welfare, 8th and 9th February 2013
- International:** Nil

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
UG Botany					
2016-17	5480	128	26	102	89%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
UG BOTANY	99%	1%	NIL
PG BOTANY	100%	NIL	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ? 02 (NET)

29. Student progression:

Student progression	
UG to PG	50%
PG to M. Phil.	-
PG to Ph.D.	25%
Ph.D. to Post-Doctoral	-
Employed	-
Campus selection	
Other than campus recruitment	
Entrepreneurship/Self-employment	-

29.Details of Infrastructural facilities:

- Library:** Departmental library with 250 books



- b. **Internet facilities for Staff & Students:** 6 desktop computers and 2 laptops with several terminals for Internet connectivity.
- c. **Class rooms with ICT facility:** All
- d. **Laboratories:** One UG lab (S-13) and one PG lab (S-11A).

30. Number of students receiving financial assistance from college, university, government or other agencies: nil

31. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts:

	Date	Speaker/ External expert	Title
Special Lectures	06th August, 2015	Professor S. R. Yadav	Lecture on current status and conservation in plant diversity
	04th January, 2016	Dr. Rajendra Shinde	Biodiversity
	04th January, 2016	Dr. Tara Menon	Role of microbes in soil
	04th January, 2016	Dr. Tabassum Khan	Climate based issues
	04 th January, 2016	Dr. Satish Sarfare	Interaction of flora and fauna
Workshops	Conducted yearly	Dr. Sunita Shailajan	AYUSH training (Conducted yearly) (Preparation and standardization of traditional formulations)
	1st-5th June, 2015	Dr. Anjali Apte-Deshpande	Molecular Biology
	19 th Jan 2016	Dr. Suman Govil	Celebration of 30 years of DBT
	4th-5th February, 2014	Dr. D.G. Naik	Workshop on chemoprofiling of plants
Seminar	Conducted yearly	Dr. Sunita Shailajan	AYUSH training (Conducted yearly) (Preparation and standardization of traditional formulations)
	04th January, 2016	Dr. B. B. Sharma	Motivational lecture during poster presentations
	04th January, 2016	Dr. Satish Sarfare	Lecture on interaction of flora and fauna
	04th January, 2016	Dr. Tabassum Khan	Lecture on climate based issues
	04th January, 2016	Dr. Tara Menon	Lecture on role of microbes in soil
	04th January, 2016	Dr. Rajendra Shinde	Lecture on Biodiversity
	8th January, 2015	Dr. Banerjee, Dr. Daftary, Dr. Das	Symposium on 'Recent advances in Cancer Biology', held during 102 nd Indian Science Congress



32. Teaching methods adopted to improve student learning:

- Chalk and Board,
- Models, Charts,
- ICT enhanced learning using.

33. Participation in Intuitional Social Responsibility (ISR) and Extension activities:

- Tree Plantation,
- Tree naming
- Displaying and mounting posters for environmental awareness and cleanliness.

34. SWOC analysis of the department and Future plans:

Strengths

- Thrust on Research Activities
- Good Infrastructure and ICT facility
- Sophisticated instrumentation laboratory for analysis of plants and plant samples
- Good connections with industries

Weaknesses

- While the brilliant students are ever willing to participate, the academically weaker students needs to be motivated to participate in project based learning and other techniques of participatory learning.

Opportunities

- Funding for UG students from DBT under Star Status

Challenges

- Time constraint along with Semester system for carrying out Research.

Future Plans

- Train the trainers- for Herbal Analysis
- To develop state of art Facilities for Plant Tissue culture



Department of Chemistry

1. **Name of the Department:** Chemistry
2. **Year of Establishment:** 1937
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
 - B. Sc. In Chemistry
 - M. Sc. In Chemistry (By Papers), M. Sc. In Chemistry (By Research)
 - Ph. D. In Chemistry
4. **Names of Interdisciplinary courses and the departments/units involved:** Nil
5. **Annual/ semester/Choice Based Credit System (programme wise):** CBSGS
6. **Participation of the department in the courses offered by other departments:** 02 (Bioanalytical Sciences and Bio Technology)
7. **Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
8. **Details of courses/programmes discontinued (if any) with reasons:**
01 (Diploma in Analytical Chemistry) Reason: Less response
9. **Number of Teaching posts**

	Sanctioned	Filled
Professors	01	01
Associate Professors		07
Asst. Professors	17	08

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

Name	Qualification	Designation	Specialization	No. of Years Of Experience	No. of Ph.D. Students guided for the last 5 years
Dr.S.R.Pednekar	M. Sc. Ph. D.	Professor	Organic Chemistry	32	05
Dr. P. A. Sathe (Retired)	M. Sc. Ph. D.	Associate Professor	Physical Chemistry	33	07
Dr.R.Venkatachalam	M. Sc. Ph. D.	Associate Professor	Organic Chemistry	32	-
Dr.V.V.Vaidya	M. Sc. Ph.	Associate	Analytical	31	10



	D.	Professor	Chemistry		
Dr. V.V. Dighe (Retired)	M.Sc. Ph.D.	Associate Professor	Analytical Chemistry	29	04
Dr.C.M.Rege (Retired)	M. Sc. Ph. D.	Associate Professor	Organic Chemistry	26	-
Dr.J.S.Patwardhan	M. Sc. Ph. D.	Associate Professor	Organic Chemistry	25	-
Dr. M.S.Hate	M. Sc. Ph. D.	Associate Professor	Inorganic Chemistry	21	01
Dr.A.K.Mapari	M. Sc. Ph. D.	Assistant Professor	Organic Chemistry	13	-
Dr.K.J.Donde	M. Sc. Ph. D.	Assistant Professor	Inorganic Chemistry	12	-
Dr.M.R.Badole	M. Sc. Ph. D.	Assistant Professor	Organic Chemistry	12	-
Dr.V.M.Wagh	M. Sc. Ph. D.	Assistant Professor	General Chemistry	11	-
Dr.V.L.Chavan	M. Sc. B. Ed. M. Phil. Ph.D.	Assistant Professor	Organic Chemistry	08	-
Dr.S.A.Vanamali	M. Sc. Ph. D.	Associate Professor	Organic Chemistry	03	-
Dr. S.T. Trivedi	M.Sc. Ph.D	Assistant Professor	Organic Chemistry	16	-
Mr. T.M. Padte	M.Sc	Assistant Professor	Analytical Chemistry	07	-
Dr. V. Salvi	M.Sc. Ph.D.	Assistant Professor	Analytical Chemistry	07	-
Ms. P.M. Kambli	M.Sc.	Assistant Professor	Organic Chemistry	03	-
Dr. M.M. Naik	M.Sc. Ph.D.	Assistant Professor	Organic Chemistry	03	-
Mr. P. Pradhan	M.Sc.	Assistant Professor	Analytical Chemistry	01	-
Mr. N.N. Sanzgiri	M.Sc.	Assistant Professor	Organic Chemistry	02	
Ms. Manik Rathod	M.Sc. SET	Assistant Professor	Organic Chemistry	01	-
Ms. Siddhi Dalvi	M.Sc.	CHB	Physical Chemistry	01	-
Ms. Dipika Raorane	M.Sc.	CHB	Analytical Chemistry	01	

11. List of senior visiting faculty: Dr. Sreela Dasgupta, Dr. Sangita Parab, Dr. G. Carneiro, Dr. I. A. Mendes (Sophia), Dr. Chitra Kamath, Dr. Lakshmi Ravishankar

12. Percentage of lectures delivered and practical classes handled (programme wise by temporary faculty): 12 %

13. Student -Teacher Ratio (programme wise): 20 :1



Number of academic support staff (technical) and administrative staff; sanctioned and filled:

	Sanctioned	Filled
Technical staff	-	-
Administrative	22	17

14. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.: 13

15. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Nil

16. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: 01

Research Centre /facility recognized by the University: M.Sc & Ph.D

17. Publications

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Dr.S.R.Pednekar	12	02	10	-	-	01	-	01	212	-	-	5-7	02
Dr. P. A. Sathe	04								-			-	-
Dr.R.Venkatachalam	-	-	-	-	-	-	-	-	-	-	-	-	-
Dr.V.V.Vaidya	27		27						-			-	-
Dr.C.M.Rege	Nil	-	-	-	-	-	-	-	-	-	-	-	
Dr.J.S.Patwardhan	Nil	-	-	-	-	-	-	-	-	-	-	-	
Dr. M.S.Hate	07	07	-	-	-	-	-	-	-	-	-	-	-
Dr.A.K.Mapari	17	17	-	-	-	-	-	-	-	-	-	-	-
Dr.K.J.Donde	04	-	04	-	-	-	-	-	-	-	-	-	-
Dr.M.R.Badole	02	-	02	-	-	-	-	-	-	-	-	-	-
Dr.V.M.Wagh	02	02	-	-	-	-	-	-	-	-	-	-	-
Dr.V.L.Chavan	05	05	-	-	-	-	-	-	-	-	-	-	-
Dr.S.A.Vanmali	Nil												

Number of publications listed in International Database (For Eg : Web of Science , Scopus , Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

Books

- **Dr.S.R.Pednekar** : ISBN No.1-58883-260-0@2015 by American Scientific Publishers.
- **Dr. P.A. Sathe:**
 - (i) TYBSc Physical Chemistry, ISBN-978-93-5149-357-0@2014



- (ii) TYBSc Analytical Chemistry, ISBN – 978-93-5149-167-5
- (iii) FYBSc Physical and Analytical Chemistry, ISBN- 978-93-5149-044-
- (iv) FYBSc Physical and Analytical Chemistry, ISBN: 978-93-5149-044-9
- (v) SYBSc Physical and Analytical Chemistry, ISBN: 978-93-5149-306-8

• **Dr. S.A.Vanmali :**

- 1) ISBN No. 978-93-5262-128-6@2016 by Himalaya Publishing House
- 2) ISBN No. 978-93-5202-691-3@ 2015 by Himalaya Publishing House
- 4) Dr. Jyoti Patwardhan :
ISBN No. 978-93-5149-325-9@ 2015 by Sheth Publishers pvt. Ltd

18. Areas of consultancy and income generated: Nil

19. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards....

Name	Members
Dr.S.R.Pednekar	National committees: 05 International Committees: 01

20. Student projects:

- a) **Percentage of students who have done in-house projects including interdepartmental/programme :** about 5%
- b) **Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies-**
02

21. Students Awards / Recognitions received by faculty and students: 04

22. List of eminent academicians and scientists / visitors to the department:

- a. Dr. S. D. Samant, ICT Mumbai,
- b. Dr. Ajit Datar, Senior Consultant, Shimadzu India Pvt. Ltd
- c. Dr. Rohitkumar Vora, USA

23. Seminars/ Conferences/Workshops organized & the source of funding

- a) National :01b) International : Nil

24. Student profile programme/course wise:

Name of the Course/programme	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBSC					
2016-17	5489	208	51	157	88%



27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
TYBSc	100		Nil
M. Sc. II	100		Nil

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

NET-01, Defense Services = 01

29. Student progression:

Student progression	Against % enrolled
PG to M.Phil.	-
PG to Ph.D.	10%
Ph.D. to Post-Doctoral	-
Employed	09
Campus selection	11
Other than campus recruitment	-
Entrepreneurship/Self-employment	

30. Details of Infrastructural facilities:

- a) Library: 100 books
- b) Internet facilities for Staff & Students: 06 computers, 03 Laptops
- c) Class rooms with ICT facility: 03 dedicated classrooms
- d) Laboratories: 09

31. Number of students receiving financial assistance from college, university, government or other agencies: Many students avail the assistance in paying the fees for through 'each one adopt one' scheme of the College.

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts:

Several lectures were arranged during hands on training workshops on topics Spectroscopy, Stereochemistry, Safety workshop, Instrumentation, Mass spectrometry.

33. Teaching methods adopted to improve student learning: Flip the classroom, POGIL Project based learning



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

Name	
Dr. S.R.Pednekar	President, Vijnan Bharati, Konkan Region
Dr.V.V.Vaidya	Drushti Ethical committee, Member of Govandi Education Society

35. SWOC analysis of the department and Future plans:

Strength- Strong Research culture, Devotion of teachers towards students

Weaknesses- Inadequate faculty members on permanent posts.

Opportunities: To develop strong industry academia linkage

Challenges: Catering different needs of slow and advance learners

Future plans-

- a) To establish an incubation centre for young entrepreneurs

Department of Computer Science and Information Technology

1. **Name of the Department:** Computer Science and Information Technology
2. **Year of Establishment:** 1999
3. **Names of Programmes / Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
 - B.Sc. Computer Science
 - M.Sc. Computer Science
 - M.Sc. Information Technology
4. **Names of Interdisciplinary courses and the departments/units involved:** NIL
5. **Annual/ semester/Choice Based Credit System (programme wise):**
 - B.Sc. Computer Science - Choice Based Credit System
 - M.Sc. Computer Science - Choice Based Credit System
 - M.Sc. Information Technology - Choice Based Credit 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.:**
 - Collaborations with industries such as Seed InfotechMock placements, Zen Technologies

- Certificate course in Ethical Hacking in collaboration with Asterix Solutions
- Java and Android Programming in collaboration with Campus Credentials
- Job skills enhancement programme collaboration with iGate Pvt Ltd

8. Details of courses/programmes discontinued (if any) with reasons: NIL

9. Number of Teaching posts:

	Sanctioned	Filled
Professors	-	-
Associate Professors	-	-
Asst. Professors	7	7

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

	Qualification	Designation	Specialization	No. of Years Of Experience	No. of Ph.D. Students guided for the last 4 years
Ms. Megha Sawant	MSc Computer Science	Assistant Professor & Head	Computer Science	13	Nil
Ms. Rasika Mundhe	MSc	Assistant Professor	Computer Science	09	Nil
Ms. Edith Michael	MSc	Assistant Professor	Computer Science	09	Nil
Mr. Mahavir Advaya	MCA	Assistant Professor	Computer Science	07	Nil
Mr. Abhijeet Gole	MSc	Assistant Professor	Computer Science	06	Nil
Ms. Sana Ansari	MSc	Assistant Professor	Computer Science	05	Nil
Ms. Pooja Rasam	MSc	Assistant Professor	Computer Science	02	Nil

11. List of senior visiting faculty:

- Yogesh Karunakar, Convener of E-Cell
- Mr. Sachin Dedia, Cyber Crime Investigator.
- Dr. Allahd Kuwadekar, University of Glamorgan, UK



12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: NA

13. Student -Teacher Ratio (programme wise):

B,Sc Computer Science - 30:1

MSc Computer Science - 80:1

MSc Information Technolog - 40 : 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Administrative staff (total sanctioned):-02

Administrative staff (Actual strength) :- 02

Technical Support Staff (Total sanctioned strength):- 04

Technical Support Staff (Actual strength):- 04

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:

Ms. Megha Sawant	M.Sc. Computer Science
Ms. Rasika Mundhe	M.Sc.
Ms. Edith Michael	M.Sc.
Mr. Mahavir Advaya	M.C.A.
Mr. Abhijeet Gole	M.Sc.
Ms. Sana Ansari	M.Sc.
Ms. Pooja Rasam	M.Sc.

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: Funded under Start College Scheme from Department of BioTechnology, Government of India.

18. Research Centre /facility recognized by the University: M.Sc. by Papers

19. Publications:

Abhijeet Gole	Information Communication Technology Part I	Quadrum	2015, Nigeria
Abhijeet Uday Gole, Meghna Bhatia	Text Book on Computer Systems and Applications for T.Y.Bcom	Sheth Publishers PVT.LTD	Mumbai
Abhijeet Gole, Nina Phatak	Text Book for Computer Application for Business for B.B.A.	Sheth Publishers PVT.LTD	Baroda

Books Published

20. Areas of consultancy and income generated: NIL

21. Faculty as members in:



- a) National committees b) International Committees c) Editorial Boards....
None

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:

- Arun Nair and Lakshman Chavan of MSc Computer Science won First Prize in the State level project exhibition Vidnyan Yagnya at S. K. Somaiya College, Vidyavihar, January 2012
- Mahesh Gavkar of MSc Computer Science won First Prize in the Poster Presentation organized by Science Association, Ramnarain Ruia College in 2012
- Shreya Patwardhan of TYBSc Computer Science stood 3rd in the University Merit List of TYBSc Exam 2013
- Harsh Shah & Ritesh Sawant from TYBSc won the DELL CAMPASSADOR PROGRAM, MY HERO MY INSPIRATION contest organized by DELL INDIA at National Level in the month of March 2015.
- Imran Ahmad from MSc CS Part II was shortlisted in the Final of Code-Unicode International Competition organized by EC Council in the month of December 2014.
- Nilesh Varma from MSc IT Part II secured First Prize in a technical event "Select * from brain;" based on SQL queries at SIWS College on February 11, 2016.

24. List of eminent academicians and scientists / visitors to the department:

Dr. Seema Purohit, Director NMITD
Dr. Sunita Mahajan, Principal, MET College
Dr. P G Sarang, CEO, ABCOM
Mr. Sachin Dedia, Cyber Crime Investigator.
Dr. Allahd Kuwadekar, University of Glarmorgan, UK

25. Seminars/ Conferences/Workshops organized & the source of funding :a) National b) International: Nil

26. Student profile programme/course wise:

Name of the Course/programm	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
2016-17					
FYBSc	525	53	26	27	90%



27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
B.Sc. Computer Science	100%	-	-
M.Sc. Computer Science	95%	5%	-
M.Sc. Information Technology	95%	5%	-

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:

Student progression	Against % enrolled
UG to PG	60%-70%
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-
Employed Campus selection Other than campus recruitment Entrepreneurship/Self-employment	- 80%

30. Details of Infrastructural facilities:

a) Library: Department Library

UG Books - 475 Books

PG (Comp Sci) - 400 Books

PG (I. T.) - 160 Books

b) Internet facilities for Staff & Students

Internet facility for entire college through WiFi

c) Class rooms with ICT facility

All Classrooms mounted with projectors and Computers

d) Laboratories

4 state of art laboratories for undergraduate and post graduate students. Laboratories are equipped with high speed internet connection and latest configuration of servers.

Other facilities –

- Internet – Tata indicom (upto 6 MBPS speed).
- All systems in Network.
- Laser printers – 3.
- Scanners – 2.
- Data projectors – 2.



- Laptop – 1.
- Undergraduate – Total books – 475.
- Post Graduate(CS) – Total books – 355.
- Post Graduate(IT) - Total books 160.

31. Number of students receiving financial assistance from college, university, government or other agencies: Apart from regular freeships, students avail of the 'Earn while you Learn' and 'Each one Adopt one' scheme of the College.

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts:

Special Lectures on:

Emerging projects in IT- Dr. P. G. Saarang CEO, ABCOM

Android Development - Mr. Choudhari, ATS Infotech

on Cyber Security using Penetration Testing- Mr. Haja, Appin Technologies

33. Teaching methods adopted to improve student learning: Flip classrooms, Online lectures, Classroom discussions / Debate / Group discussions

34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Projects undertaken to promote social welfare and inculcate a sense of social responsibility like apps for blind students, chat application for dumb and deaf etc.

35. SWOC analysis of the department and Future plans :

Strength

- State-of-the-art infrastructure with Computer facilities and high speed internet connection.
- Placements of eligible UG & PG student in reputed IT companies like iGate, L & T, Infosys, Cognizant etc every year
- Strong Industry linkages in terms of collaborations with industries for FDP, Student trainings like iGate, Asterisks, Campus Credentials

Weaknesses -

- Lack of flexibility in introducing innovative and job/entrepreneurial development Concepts and topics in curriculum.

Opportunities -

- To be one of the recognized department in field of Computer Science and IT

Challenges -

- Autonomy in curriculum design and implementation.



Department of Green House Management

- 1. Name of the Department:** B.Voc- Green House Management
- 2. Year of Establishment:** 2014
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** UG; PG- Sanctioned
- 4. Names of Interdisciplinary courses and the departments/units involved:** NIL
- 5. Annual/ semester/Choice Based Credit System (programme wise):** CBSGS
- 6. Participation of the department in the courses offered by other departments:** Visiting faculty for - MSc. Bioanalytical Sciences
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** B.Voc GHM is conducted in collaboration with following industries: Blooms Horticulture Consultations and Solutions & Professional Agrotech Pvt. Ltd.
- 8. Details of courses/programmes discontinued (if any) with reasons:** Nil
- 9. Number of teaching posts**

	Sanctioned	Filled
Professors	--	-
Associate Professors		-
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	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Shama Zaidi	Ph.D(Botany)	Asst. Professor	Plant Biotechnology	3 yrs	-
Dr. Shrutika Kumthekar	PhD (Botany)	Asst. Professor	Plant Biotechnology & Cytogenetics	1 yr	-
Dr. Sanchita Chaudhuri	PhD (Botany)	Asst. Professor	Plant Biotechnology	1yr	-

11. List of senior visiting faculty:

- Dr. Behnaz Patel
 Dr. Nagesh Tekale, Retd Assoc. Prof in Botany, Thane College
 Dr. Rajendra Deshmukh



Dr. Shirish Patil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: NIL

13. Student-Teacher Ratio (programme wise): 18:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled :

15. Qualifications of teaching faculty with DSC/ D.Litt/ Ph.D/ M.Phil / PG.: 03

Dr. Shama Zaidi	Ph.D (Botany)
Dr. Shrutika Kumthekar	PhD (Botany)
Dr. Sanchita Chaudhuri	PhD (Botany)

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:

18. Research Centre /facility recognized by the University: NO

19. Publications:

Name of the faculty	a	b1	b2	c	d	e	f	g	h	i	j	k	l
Dr.Shama Zaidi	6	3	3	-	-	-	-	-	-	-	-	-	-
Dr.Shrutika Kumthekar	6	3	3	0	0	0	0	0	-	-	-	-	-
Dr.Sanchita Chaudhari	4	1	3	0	0	0	0	0	-	-	-	-	-

20. Areas of consultancy and income generated:NIL

21. Faculty as members in:NIL

a) National committees b) International Committees c) Editorial Boards....

22. Student projects:

a) Percentage of students who have done in-house projects including inter departmental/programme : 100%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies – One

23. Awards / Recognitions received by faculty and students:

2015-16

- a. Neeta Banait (SYBVoc) 2016- 2nd Prize Bonsai Collection, 3rd Prize Fern Collection.

2016-17



- b. Pankaj Shinde - 2nd Prize in Collection of Orchids.FOT competition, February 2017
- c. Neeta Banait & Rashmi Patil (TYBVoc) FEB 2017 – 2nd Prize Ikebana.
- d. Neeta Banait (TYBVoc) – 1st Prize in Display of Bonsai, 3rd Prize in Landscape
- e. Rashmi Patil (TYBVoc) – 2nd Prize Bonsai landscape , 2nd Prize in Bonsai.
- f. Vishwesh Naik & Akshay Kokate (TYBVoc & SYBVoc) – 1st Prize Terrarium
- g. Vinita Khope & Vaibhav Chavan – 2nd Prize Terrarium.

24. List of eminent academicians and scientists / visitors to the department:

Lt.Cdr. C.V.Prakash, Mr. Bhaskar Rao, Mr Hemant Dumbre, Mr. Vishwas Jadhav, Mr. Karolkar, Mr. Nandan Kalbag, Mr Atul Jadhav

25. Seminars/ Conferences/Workshops organized & the source of funding:

- a. National - 01
- b. International - Nil
- c. Workshops – 04
- d. Local Awareness programme - 05

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
F.Y.B.Voc	125	31	19	12	100

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
B.Voc – Green House Management	100	-	-

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:

Student progression	Against % enrolled
UG to PG	-
PG to M.Phil.	-
PG to Ph.D.	-
Ph.D. to Post-Doctoral	-



Employed	
Campus selection	04
Other than campus recruitment	04
Entrepreneurship/Self-employment	05

30. Details of Infrastructural facilities:

- a. Library: Main Library of the College as well as Departmental Library with 50 books
- b. Internet facilities for Staff & Students: 3 desktops and 2 laptops all equipped with Internet facility.
- c. Class rooms with ICT facility: 2 classrooms
- d. Laboratories: 1 Laboratory, 1 Polyhouse and 3 Shadenet Houses

31. Number of students receiving financial assistance from college, university,

government or other agencies: The entire course is funded by UGC under theDDU-KAUSHAL Scheme.

1. Details on students enrichment programmes (special lectures /workshops /seminar) with external experts:

Lecture	Workshop	Seminar
Integrated Pest Management	Bonsai	Smart Farming Technologies-Need of the Hour
Landscape	Cactus Grafting	
Internet of Things (Agriculture)	Hydroponics and Aquaponics	
	Kitchen Gardening and Composting	

33. Teaching methods adopted to improve student learning: ICT effectively utilized; More emphasis on field training and projects

34. Participation in Intuitional Social Responsibility (ISR) and Extension activities: -

- Awareness lecture on Vertical and Urban Farming and Workshop on Terrarium, Microgreens and Hydroponics for school children: St. Anthony's, Mankhurd, St. Mary's Convent, Mulund
- Awareness Lecture on Green House Technology for school children: Sadhana Vidyalaya, Sion.

35. SWOC analysis of the department and Future plans:

Strength:

- Skill based course with strong industry academia linkage



Weakness:

- Catering to different age groups in a single batch

Opportunities:

- Opportunity for students to develop the entrepreneurship ventures

Challenges:

- Gaining popularity in cities for the skill based courses

Future plans

- Establish National and International Collaborations for Student/Faculty Exchange
- Campus Placements
- More Industry linkages

Department of Life Science

1. Name of the Department: Life Science

2. Year of Establishment: 1977

3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., and Integrated Masters; Integrated Ph.D., etc.):

B. Sc in life science

M.Sc. in Life Science

Ph.D. in Life Science

4. Names of Interdisciplinary courses and the departments/units involved: None

5. Annual/ semester/Choice Based Credit System (programme wise): Semester CBSGS

6. Participation of the department in the courses offered by other departments: None

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: None

8. Details of courses/programmes discontinued (if any) with reasons: Nil

9. Number of Teaching posts:

	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	3	3
Asst. Professors	4	2



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

Name	Qualification	Designation	Specialization	No. of Years Of Experience	No. of Ph.D. Students guided for the last 4 years
Dr Ganesh Iyer (retired)	MSc., PhD	Associate Prof	Botany	34	4
Dr Seema Menon	Msc., Ph.D DHE	Associate Professor	Life-Sciences	19	nil
Dr Nilima Gajabiye	M.Sc. Ph.D.	Assistant Professor	Lifescience	13 years	nil
Mr Bhupendra Madhavi	M.Sc.NET	Assistant Professor	Life Sciences		
Dr Kanchan Chitnis	M.Sc. Ph.D	Assistant Professor	Biochemistry	7 years	nil
Dr Hansa Boricha	M.Sc., Ph.D	Ast. Prof. (Temporary)	Microbiology	2 years	nil

11. List of senior visiting faculty: nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty: 15%

13. Student -Teacher Ratio (programme wise): 30:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: 1+4

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG:

Name	Qualification
Dr Ganesh Iyer	MSc., PhD
Dr Seema Menon	Msc., Ph.D DHE
Dr Nilima Gajabiye	M.Sc. Ph.D.
Mr Bhupendra Madhavi	M.Sc.NET



Dr Kanchan Chitnis	M.Sc. Ph.D
Dr Hansa Boricha	M.Sc., Ph.D

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Name of Faculty	Project title	Funding agency	Amount and duration
Dr. Ganesh Iyer	Algal project	Reliance Industry	1Cr for 3 years (2012-16)
Dr Kanchan Chitnis	'Biochemical and Pharmacognostic evaluation of Piper betel (Linn)(betel) leaves.'	UGC Minor Research Project Grant	4,90,000/-, 2 years , 2015-17

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: Rs. 1, 4,90,000/-

18. Research Centre /facility recognized by the University: M.Sc. by papers & Research ,

19. Ph.D.Publications:

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Dr Ganesh Iyer (retired)	11	1	10	-	-	-	-	-	-	-	-	2.6-3.6	7-16
Dr Seema Menon	11	1	10	-	-	-	-	-	-	-	-	2.6-3.6	7-16
Dr Nilima Gajabiye	4	-	4	-	-	-	-	-	6	-	-	0.45-0.9	1
Mr Bhupendra Madhavi	--	-	-	-	-	-	-	-	-	-	-	-	-



Dr Kanchan Chitnis	3	-	3	-	-	-	-	-	10	-	-	0.3-0.636	2
Dr Hansa Boricha	3	-	3	-	-	-	-	-	27	-	-	0.4-2.93	2

20. Areas of consultancy and income generated: Nil

21. Faculty as members in: a) National committees b) International Committees c) Editorial Boards: None

22. Student projects:

a) Percentage of students who have done in-house projects including inter departmental/programme: 50%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies =4 students: 2 in Cancer institute 2 Hematology dept. KEM

23. Awards / Recognitions received by faculty and students:

- Dr. Ganesh Iyer has been recognized as one of the Best plant physiologist in India by Agriculture dept. at national level.2015
- Dr. Nilima Gajbhiye- Recognition for Ph.D guideship in 2015
- Dr Kanchan Chitnis: Recognition as Guide for MSc by Research In 2014

24. List of eminent academicians and scientists / visitors to the department: None

25. Seminars/ Conferences/Workshops organized & the source of funding:

- National
- International

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
F.Y.B.Sc.					
2016-17	4219	69	6	63	91%

27: Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad



BSc Life Science	100	-	-
MSc Life Science	100	-	-

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

29. Student progression:

Student progression	Against % enrolled
UG to PG	50%
PG to M.Phil.	Nil
PG to Ph.D.	4
Ph.D. to Post-Doctoral	Nil
Employed Campus selection Other than campus recruitment Entrepreneurship/Self-employment	2 students in reliance industry 5 recommended in different industry

30. Details of Infrastructural facilities:

- a) Library: Department library
- b) Internet facilities for Staff & Students: 2 computers
- c) Class rooms with ICT facility: 2
- d) Laboratories: 2

31. Number of students receiving financial assistance from college, university, government or other agencies: nil

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts: nil

33. Teaching methods adopted to improve student learning: computer aided videos, modeling biological systems

34. Participation in Intuitional Social Responsibility (ISR) and Extension activities: plantations of trees. More than 10,000 trees planted in Neral-Matheran range.

35. SWOC analysis of the department and Future plans :

Strength:

- Dedicated Interdisciplinary Faculty

Weakness:

- Inadequacy of space and infrastructure

Opportunities:



- Development of interdisciplinary courses

Challenge

- Interdisciplinary treatment of the subject topics

Future Plan

- Project based learning, hands on training, short term courses



Department of Mathematics

- 1. Name of the Department:** Mathematics
- 2. Year of Establishment:** 1937
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):** BSc in Mathematics, BA in Mathematics
- 4. Names of Interdisciplinary courses and the departments/units involved:** BA in Economics and Mathematics
- 5. Annual/ semester/Choice Based Credit System (programme wise):** semester CBSGS
- 6. Participation of the department in the courses offered by other departments:**
Department of Mathematics collaborates in teaching at Dept of Biotechnology and Department of Bioanalytical Sciences
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** NIL
- 8. Details of courses/programmes discontinued (if any) with reasons:** No course is discontinued so far
- 9. Number of teaching posts:**

	Sanctioned	Filled
Professors	--	--
Associate Professors	--	02
Asst. Professors	05	03

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

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. RajeshwarAndhale	MSc PhD	HOD and Associate Professor	Commutative Algebra	24	-
Mr. NitinkumarPotadar	MSc	Assistant Professor	Analysis of Partial Differential Equations	12	-
Dr. Sanjeevani Gharge	MSc MPhil PhD	Associate Professor	Design Theory	4 yrs.(30 yrs total)	-



Dr M D Patwardhan	MSc Ph D	Assistant Professor Superannuated in 2014-15	Functional Analysis	7 years (2007-2014)	
Ms Sae Joshi	MSc	Assistant Professor	-	6yrs (2010-2016)	-
Ms Sayali Kumthekr	MSc	Assistant Professor	-	01	-
Ms Reshma Shaikh	MSc	Assistant Professor	-	01	-

11. List of senior visiting faculty: Dr M D Patwardhan (AY 2014-15)

12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty:40%

13. Student -Teacher Ratio (programme wise):72:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Technical staff. Sanctioned one and filled one

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.: One faculty with MSc PhD degree and one faculty with M. Phil., PhD.

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: Department is recipient of Star College Scheme of DBT, GOI

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: (Rs 7 lakhs. (non-recurring 5kakh and recurring2 lakh)

18. Research Centre /facility recognized by the University: NIL

19. Publications:

	a	b1	b2	c	d	e	f	g	h	i	j	k	l
Dr. Rajeshwar Andhale	2	1	1-	-	-	-	-	-	-	-	-	-	-

20. Areas of consultancy and income generated: Nil

21. Faculty as members in:

a) National committees

- Dr. Rajeshwar Andhale : Organizing committee member on National Conference in recent Trends and Applications in Differential Equations
- Dr. Sanjeevani Gharge
 - invited on RRC, North Maharashtra University, Jalgaon
 - Organizing committee member of Indian Women in Mahematics-2013 held Univ. of Mumbai.

b) International Committees : Nil



c) Editorial Boards : - Nil

22. Student projects: 01

Abhijit Gangan is pursuing project at BARC- Mumbai

- a) Percentage of students who have done in-house projects including inter departmental/programme
- b) Percentage of students placed for projects in organizations 10% outside the institution i.e. in Research laboratories/Industry/ other agencies

23. Awards / Recognitions received by faculty and students: _

- Mr. Nitinkumar Potadar is NSS programme officer at Ruia College.
- Dr Sanjeevani Gharge of the department invited to give a talk at ICM-2014 at Seoul, South Korea

24. List of eminent academicians and scientists / visitors to the department:

2012-13

- Dr. Anil Kakodkar Formerly Chairman DAE.
- Padmashree M S Raghunathan NCM, IIT-TIFR (Bombay)
- Prof. S G Dani, NCM, IIT-TIFR (Bombay)

2013-14

- Prof. Kumaresan, Dean, Science Faculty, Central University, Hyderabad.

2014-15

- Dr. Sonali Desouza, Wolfram Mathematics.
- Dr. Arvind, Wolfram Mathematics.
- Mr. Kartik, University of Washington, Washington.

2015-16

- Prof. Sharad Sane, Department of Mathematics, IIT-Mumbai
- Prof. Amol Dighe, School of Physics, TIFR, Mumbai
- Prof. Sudhir Ghorpade, Department of Mathematics, IIT Bombay.
- Prof. Janos Pach, EPFL Lausanne and Renyi Institute Hungary
- Prof. Kumaresan, Director MTTTS Programme

2016-17

- Prof. Vinayak Sholapurkar, S. P College, Pune
- Prof. Shraddha Ingale New Arts, Commerce and Science College, Ahemadnagar
- Prof. Supriya Gandhi New Arts, Commerce and Science College, Ahemadnagar



- Prof. Sudhir Ghorpade, Department of Mathematics, IIT Bombay
- Prof. R. Narasimhan, D. J. Sanghavi College of Engineering, Mumbai.
- Mr. Shrikant of Amigo Optima, Hyderabad.
- Prof. Kumaresan, Director MTTS Programme, Hyderabad.
- Prof. Mangala Gurjar, St. Xaviers College, Mumbai.

25. Seminars/ Conferences/Workshops organized & the source of funding :

- National: Mini MTTS, Funded by NBHM 2013-14, 2015-16, 2016-17
- Workshop on Applications of Mathematics and Statistics at Indian Statistical Institute, Kolkata. Partly funded by DBT Star College Scheme and Indian Statistical Institute, Kolkata
- International: NIL

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Application Received		Selected		Enrolled		Pass percentage
	Male	Female	Male	Female	Male	Female	
FYBA	15	15	06	10	06	10	90%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
B.A.	100%	Nil	Nil

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

- Ramya Nair qualified UGC-CSIR NET in 2015-16 and selected for PhD program at IISER Pune
- Kshitij Vishwakarma participated in VSRP supported by Indian Academy Sciences.
- Athang Joshi participated in MTTS programme twice.
- Nina Dumasia selected for MSc program at IIT-Chennai,
- Niharika Pewekar participated in MTTS. She was recipient of INSPIRE Scholarship
- Ms. Aditi Shenvi of TYBA (Mathematics) admitted in University of Warwick, UK to pursue post graduate studies followed by Ph D.
- Ms Sneha Menon of TYBA(Mathematics) pursuing Ph D in Economics at Oxford University,UK



- Sagar Sawant, Roshni Gupta and Namrata Shah participated in Summer School on Differential equations at Jaipur.
- Anand Chitrao selected for Madhava Nurture Camp and ranked first in Mumbai Region in Madhava Competition. He is also selected at TIFR-Mumbai and TIFR-CAM Bangalore for Integrated PhD programme. He has secured 16th rank at all India level in JAM-2017
- Joshika Mandal admitted in National University of Singapore to do her masters programmes,
- Puja Parmar admitted in Gokhale Institute of Politics and Economics to do masters programme in Economics
- Vasudha Ramkrishna admitted in Madras School of Economics to do mastersprogramme, AkshayPawar admitted TISS,Tuljapur Campus.
- Sae Jishi cleared UGC-CSIR NET in Mathematics
- Vikrant Desai cleared UGC-CSIR NET for JRF in Mathematics.
- Akshay Sant stood first in Mumbai region in Madhava Mathematics Competition 2016-17

29. Student progression:

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

30. Details of Infrastructural facilities:

- Library: Main library equipped with latest books on Mathematics
- Internet facilities for Staff & Students Internet is available to all students
- Class rooms with ICT facility:1 dedicated classroom + all other classrooms
- Laboratories Computer lab with 20 computers

31. Number of students receiving financial assistance from college, university, government or other agencies: NIL

2. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts:

- mini MTTTS funded by NBHM



- Madhava Competition training workshop
- Workshop on Mathematica-11 for students and teachers from all departments of Ruia College. All together 86 students and 16 teachers benefitted from the workshop. This workshop was funded by DBT Star College scheme.
- Lectures held by eminent mathematicians during departments annual festival Mathtrix

33. Teaching methods adopted to improve student learning:

- Project based learning
- Flip the class room

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

- Guest lectures and contact programmes rendered to tribal students (UG) studying in Godawari Parulekar College in Palghar District (Lectures were delivered by Dr. Andhale and Mr. Potadar)
- Book release of 'Janili Tayane Anantata' (Marathi Translation of 'Man Who Knew Infinity' biography of S. Ramanujan) Translated by Mrs. Nila Chandorkar.

35. SWOC analysis of the department and Future plans

Strength: Dedicated Faculty, well equipped laboratory

Weakness: Diversity in profile of students

Opportunity: To establish a centre for mathematics studies for biology

Challenges: Maintain a balance between slow and fast learners



Department of Microbiology

- 1. Name of the Department :** Microbiology
- 2. Year of Establishment:** 1977
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
 B.Sc Microbiology
 M.Sc Microbiology (by papers & by research),
 Ph.D.
- 4. Names of Interdisciplinary courses and the departments/units involved:** Nil
- 5. Annual/ semester/Choice Based Credit System (programme wise):** B.Sc, M.Sc (by papers): Semester CBSGS
- 6. Participation of the department in the courses offered by other departments:**
 Dr. DipakVora : M.Sc Food processing and packaging course of Nirmala Niketan
 Ms. Urmi Palan, Ms. Anushree Lokur : M.Sc (Biotechnology)
 Urmi Palan and Dr. Varsha Shukla : MSc (Analytical Chemistry).
 Dr. R. P. Phadke and Mr. Swapnil Pradhan : M.Tech VJTI, Mumbai.
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** Nil
- 8. Details of courses/programmes discontinued (if any) with reasons:** None
- 9. Number of Teaching posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	-	6
Asst. Professors	7	1

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

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. R.P. Phadke	M.Sc, PhD	Associate Professor	Microbial Biochemistry, Microfluidics, Bioinformatics	39	3 students registered



Ms. Leena Phadke (retired)	M.Sc , M.Phil	Associate Professor	Microbial Genetics	37	-
Dr. D. Vora	M.Sc, M.Phil, PhD	Associate Professor	Microbial enzymes, Industrial Microbiology	35	2 students completed, 2 students registered
Ms. UrmiPalan	M.Sc , M.Phil	Associate Professor	Medical Microbiology & Immunology	34	-
Ms. Anushree Lokur	M.Sc , M.Phil	Associate Professor	Microbial Genetics, Microfluidics and IPR	29	-
Dr. Varsha Shukla	M.Sc, PhD, NET qualified	Associate Professor	Medical Microbiology and Applied Microbiology	25	-
Mr. Vidyadhar Tupe	M.Sc	Assistant Professor	Industrial Microbiology Applied Biotechnology	23	-
Mr. Swapnil Pradhan	M.Sc.	Assistant Professor	Microbiology	02	-
Mr.Sachin Rajagopalan	M.Sc.	Assistant Professor	Microbiology	01	-
Ms.Shweta Tiwari	M.Sc.	Assistant Professor	Microbiology	01	-

11. List of senior visiting faculty: Nil

12. Percentage of lectures delivered and practical classes handled(programme wise) by temporary faculty: B.Sc: 29.7% M.Sc: 100% Practicals

13. Student -Teacher Ratio (programme wise):B.Sc: 20:1 M.Sc: 10:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:Technical: Nil, Administrative: Sanctioned: 6, Filled: Permanent-3, Temporary-3

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.

Name	Qualification
Dr. R.P. Phadke	M.Sc, PhD
Ms. Leena Phadke	M.Sc , M.Phil
Dr. D. Vora	M.Sc, M.Phil, PhD
Ms. UrmiPalan	M.Sc , M.Phil
Ms. Anushree Lokur	M.Sc , M.Phil
Dr. Varsha Shukla	M.Sc, PhD, NET qualified



Mr. Vidyadhar Tupe	M.Sc
Mr. Swapnil Pradhan	M.Sc.
Mr.Sachin Rajagopalan	M.Sc.
Ms.Shweta Tiwari	M.Sc.

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: DBT-Star: UGC-CPE: 978739/-

UGC-CE: 2059345/-

DST-FIST: 312603/-

18. Research Centre /facility recognized by the University: M.Sc (by research)in Microbiology, PhD in Microbiology

19. Publications:

Name of the faculty	a	b1	b2	c	d	e	f	g	h	i	j	k	l
Dr. Ravindra Phadke	1	-	-	-	-	-	-	-	-	-	-	1	-
Mrs. Leena Phadke	1	-	-	-	-	-	-	-	-	-	-	-	-
Dr. Dipak Vora	9	-	-	-	-	-	-	-	-	-	-	2.07-5.9	-
Ms. Urmi Palan		-	-	-	-	-	-	-	-	-	-	-	-
Ms. Anushree Lokur	2	-	-	-	-	-	-	-	-	-	-	0.22	12
Dr. Varsha Shukla	3	-	-	-	-	-	-	-	-	-	-	1.687	-
Mr. Vidyadhar Tupe		-	-	-	-	-	-	-	-	-	-	-	-
Ms. Meghashree Deshmukh	3	-	-	-	-	-	-	-	-	-	-	-	-

Number of publications listed in International Database For Eg : Web of Science, Scopus , Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) 2+

20. Areas of consultancy and income generated: NIL



21. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards.... Dr. Dipak Vora, Appointed to the editorial board of Journal of Applied Veterinary Sciences

Dr. R.P. Phadke (2014-15 & 2015-16), Ms. Leena Phadke (2014-15) and Ms. Anushree Lokur (2015-16) appointed as Expert reviewer for BIG (Biotechnology Ignition Grant Scheme) proposals under DBT’s Biotechnology Industry Research Assistance Council (BIRAC) 2015-16

22. Student projects:

a) Percentage of students who have done in-house projects including interdepartmental/programme: 66/154: 45%

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies :4/18 M.Sc students worked on a collaborative project with ICT in 2015-16

23. Awards / Recognitions received by faculty and students:

Name	Awards / Recognitions
Dr. R.P. Phadke	<p>Expert reviewer BIG (Biotechnology Ignition Grant Scheme) proposals under DBT’s Biotechnology Industry Research Assistance Council (BIRAC) 2014-15 & 15-16</p> <p>External Referee for Ph D Thesis in Biotechnology (Science), University of Pune 2012-13</p> <p>External Referee for Ph D Thesis in Microbiology, North Gujarat University 2012-13</p> <p>Invited for Panel discussion at International conference: Integrating Basic and Translational Research in Modern Biology, M.S. University, Baroda Topic: Current challenges in teaching and training in modern biology 2013- 14</p> <p>Felicitated as Illustrious Alumni at “Integrating Basic and Translational Research in Modern Biology” conference,M.S. University, Baroda 2013-14</p> <p>Awarded the Principal’s Appreciation Award at Annual Day of RamnarainRuia College 2013-14</p>
Dr. Dipak Vora	<p>Delivered Key Note Address at National Seminar on Recent Trends in Chemistry, Shirpur</p>
Ms. L R. Phadke	<p>Expert reviewer BIG (Biotechnology Ignition Grant Scheme) proposals under DBT’s Biotechnology Industry Research Assistance Council (BIRAC) 2014-15</p> <p>External examiner for open defense of a M. Tech student of ICT Mumbai. 2012</p>



Dr. Dipak Vora	Appointed to the editorial board of Journal of Applied Veterinary Sciences Novel Culture Deposited in Japanese Collection of Microorganisms Article Reviewer, - International Journal of Food and Nutritional Sciences 14-15
Dr. Varsha Shukla	Article Reviewer, - Journal of Medicinal Plants Research published by Academic Journals 14-15, Bioaccent online Publishing group, USA, 15-16, American Journal of Applied Sciences published by Science Publications 14-15, Indian Journal of Medical Research published by Indian Council of Medical Research 15-16 Best Oral Presentation Award, At National Conference on Recent Trends and Future Prospects in Multidisciplinary Approaches in Microbiology RTFPM 2014
Ms. Urmi Palan	Best Oral Presentation Award, At International conference on “Biotechnology and Bioengineering” organized by Microbiologists Society in Dubai 14-15
Anushree Lokur	Expert reviewer BIG (Biotechnology Ignition Grant Scheme) proposals under DBT’s Biotechnology Industry Research Assistance Council (BIRAC) 2015-16 Best Oral Presentation Award, At International conference on “Biotechnology and Bioengineering” organized by Microbiologists Society in Dubai 14-15
Dr. R P. Phadke and Ms. Anushree Lokur	filed patent for Araldite Epoxy Resin Coating Composition - Patent for low cost Fabrication method for Microfluidics Platform (2014)

Name	Awards / Recognitions
Sanjana Nair,	State level research competition Avishkar
Kruttika Pevekar,	Qualification for state level Avishkar competition
Eshita Kadam, Nikita	selected for state level Avishkar Competition
Aditya Narvekar , Sanjana Nair, Anuja Nair	won 2nd Prize at Jigyasa Research Meet
Ms. Supriya Hait,	Academic excellence award from Ruia
Mr. Chinmay Kamale, Ms. Snovia Nixon & Ms. Shubhada Gude,	first rank final round of State level Microbio-olympiad-2015 organized by RC Patel ASC College, Shirpur



PrajaktaVaishampayan	Summer Fellowship sponsored by IASc (Bangalore), INSA (New Delhi) and NASI (Allahabad) at Bose Institute, Kolkata project titled- "Expression of cloned genes in E. coli
Mr. Yash Acharya	INSPIRE Fellowship
Mallika Bhatt	INSPIRE Fellowship
Sandip Venkatraman	Indian Academy of Sciences Fellowship
Priti Shenoy	Indian Academy of Sciences Fellowship
Mallika Bhatt,	Indian Academy of Sciences Fellowship
Prathamesh Dongre,	Indian Academy of Sciences Fellowship
Mr. Yash Acharya, Ms. Shreya Maste, Ms. Medini Sawant	First rank at Microbiolympiad 15-16
Mr. Aniket Sawant, Ms. Ayushi Dhakate, Ms. Prajakta Mahajan, Mr. Chinmay Kamale, Prathamesh Dongre, Mr.Tushar Dhamale	selected for final round -State level MicroBiOlympiad 2015-16
Sandip Venkatraman	1st Prize for project on 'Portable culture devices' at JigyasaResearchScholars Meet
Kavya Shetty, Bharavi Sawant, YashTiwarekar	3rd Prize for project on " Designing & optimizing Solar Distillation units" at St. Xaviers College- Consortium Environmental Microbial Biotechnology meet
Aishwarya Vishwanathan, Chinmay Kamale, Gayatri Kulkarni, Tejas Mahadevan, Kshipra Naik	2nd prize project presentation- Biofilms in flow systems at DBT 30 years Celebrations, Ruia College
Manasi Nadkarni, Nidhi Sathiapalan, Neha Bhandare, Rathod Pinkey	1st prize poster presentation- SODIS project at DBT 30 years Celebrations, Ruia College
Sandip Venkatraman	3rd prize poster presentation at DBT 30 years Celebrations, Ruia College
Prathamesh Dongre	Internship at National Institute of Pathology, ICMR, New Delhi
Chinmay Kamale	Internship at NCCS, Pune
Sandip Venkatraman	Internship at Genome Research Centre, MS University, Baroda
Priti Shenoy	Internship at Delhi University
Mallika Bhatt	Internship at Delhi University



Tejas Mahadevan and Aishwarya Vishwanathan	Campus Pennsylvania Program of Ruia College as part of the MoU between Ruia College and the Penn Hub to 7 universities in the state of Pennsylvania, US
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24. List of eminent academicians and scientists / visitors to the department:

S. No.	Name	Designation and host institute	Topic of lecture/ discussion
1.	Dr. Bhavin Shah	Post doctoral fellow at Max Planck Institute of Molecular Cell Biology and Genetics, Germany	'How neurons polarize?'
2.	Mr. Anand Ghaisas	TIFR	Identification of rock types for isolation of Endoliths
3	Dr. Beena Pillai	Scientist, CSIR- Institute of Genomics & Integrative Biotechnology, New Delhi (IGIB), New Delhi	'A hitch hiker's guide to the Galaxy of Indian Science' a talk on career options for students of Science stream
4	Dr. Hemant Suryawanshi	Post Doc fellow, IGIB, New Delhi	Guest lecture on 'MicroRNAs & their functional Inhibition' Forty eight students attended this talk.
5	Dr. Arnob Dutta,	Post Doc fellow, Stower's Institute for Medical Research, Kansas City, MO, USA	Guest lecture on ' A switch in Swi / Snf regulating remodeler recruitment to genes'
6	Dr. Andres W. Martinez	Assistant Professor of Chemistry at California Polytechnic State University San Luis Obsipo, US	'Microfluidics research'
7	Dr. Santosh Noronha	Assistant Professor, Chemical Engineering Department, IITB	Brain storming session to generate fresh ideas for teaching learning and UG Research.
8	Dr. Archana Krishnan	Director, Biogenomics Ltd	Brain storming session to generate fresh ideas for teaching learning and UG Research.
9	Dr. Anne Alexander	Assistant Professor, DBT-Centre for Energy Biosciences, ICT, Mumbai	Brain storming session to generate fresh ideas for teaching learning and UG Research.



10	Padmashri Dr. S. P. Kale	Head, Technology Transfer and Collaboration Division, Head, Pesticide Residues and Soil Science Section Nuclear Agriculture and Biotechnology Division, Bhabha Atomic Research Centre, Mumbai	“Human role in maintaining sustainability of environment”.
11	Mr. Niranjan Bilgi	Quantum Applications	Requirement & feasibility of rain water harvesting
12	Dr. Avinash Shenoy	Post-Doc Fellow, Yale University, USA	Undergraduate Research

25. Seminars/ Conferences/Workshops organized & the source of funding :

- a) National NIL
- b) International NIL

26. Student profile programme/course wise:

Name of the Course/programme	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
F.YB.Sc.	284	55	6	49	85 %

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
Undergraduate	100	Nil	Nil
Post graduate	100	Nil	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc. ? 07

29. Student progression:

Student progression	Against % enrolled
UG to PG	95-98%
PG to M.Phil.	-
PG to Ph.D.	5-8%
Ph.D. to Post-Doctoral	2-5%
Employed Campus selection Other than campus recruitment	98% :Other than campus recruitment
Entrepreneurship/Self-employment	--

30. Details of Infrastructural facilities:

- a) Library: Book Bank with >1300books
- b) Internet facilities for Staff & Students: Available
- c) Class rooms with ICT facility: 1



d) Laboratories: 3

31. Number of students receiving financial assistance from college, university, government or other agencies: Apart from regular freeships according to university norms, students also avail benefits from specialized schemes initiated by college.

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts:

Sr. no.	Name of the activity	List of Speakers
1	Guest Lecture	Dr. Bhavin Shah, Post doctoral fellow at Max Planck Institute of Molecular Cell Biology and Genetics, Germany delivered a lecture on 'How neurons polarize?'
2	Guest lecture	Mr. Anand Ghaisas, TIFR
3	Guest lecture	Ms. Ankita Shetty, Integrated PhD student, IISER, Pune.
4	Guest lecture	Dr. Beena Pillai, Scientist, IGIB, 'A hitch hiker's guide to the Galaxy of Indian Science' a talk on career options for students of Science stream
5	Guest lecture	Dr. Hemant Suryawanshi, Post Doc fellow, IGIB, New Delhi Guest lecture on 'MicroRNAs & their functional Inhibition' Forty eight students attended this talk.
6	Guest lecture	Dr. Arnob Dutta, Post Doc fellow, Stower's Institute for Medical Research, Kansas City, MO, USA ' A switch in Swi / Snf regulating remodeler recruitment to genes'
7	Certificate course in Molecular Biology	Conducted by Dr. Disha Mody. A total of twenty nine UG students from Microbiology & Life Sciences Department of our college participated in this course.
8	Workshop on PCR & Primer design.	Conducted by Dr. Beena Pillai, IGIB, New Delhi. A total of thirty one UG & PG students of our department participated in this workshop.
9	Hands- on session for both teachers & students - 'Enabling digitization in education'	Conducted by Dr. Hemant Suryavanshi, IGIB
10	Brain storming session to	Experts: Dr. Santosh Noronha, Dr. Archana Krishnan and Dr. Ann Anil



	generate fresh ideas for teaching learning process and research	
11	Intracollegiate workshop on Microfluidics	Ms. Charmi Chande and student volunteers coordinated. A total of 21 FYBSc students participated in this workshop
12	Guest lecture	“Human role in maintaining sustainability of environment” by Padmashri Dr. S. P. Kale, Head, Technology Transfer and Collaboration Division, Head, Pesticide Residues and Soil Science Section Nuclear Agriculture and Biotechnology Division, Bhabha Atomic Research Centre, Mumbai
13	Guest lecture	Requirement & feasibility of rain water harvesting by Mr. Niranjana Bilgi of Quantum Applications on
14	Guest lecture	Undergraduate Research by Avinash Shenoy, Post-Doc Fellow, Yale University, USA
15	Microfluidics workshop	Ms. Charmi Chande, alumnus
16	Coral Draw workshop	Ms. Charmi Chande, alumnus
17	Green Volunteer training workshop	conducted by WWF, India

33. Teaching methods adopted to improve student learning: Flip the classroom, use of POGIL, Project based learning, Use of critical thinking and inquiry based learning, interactive learning using dedicated websites, making photo video journals.

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

Sr. No	Names of the students/Class	Activities of the department
1.	40 FYBSC and SYBSC students	The Department organized a one day workshop for 48 school children on Friday 26/12/2014. A total of twenty two UG students interacted with these school children.
2.	20 UG and PG students	Two days workshop – “Exploring Biology” for 25 students from Sadhana Vidyalaya.



35. SWOC analysis of the department and Future plans :

STRENGTHS:

- Highly rated dept. under CE grant
- Well-equipped laboratories, smart laboratories
- New methods of Teaching learning: 'Flip the classroom', POGIL, Project based learning, learning using Critical Scientific Thinking and Inquiry (IISER, Pune),
- ICT enabled Teaching learning with use of new concepts like 'Moodle', pre-lab and post lab sessions, making e-journals, dedicated websites for interactive learning and projects.
- Research at Undergraduate Research under Star College grant by DBT
- Active participation of both UG and PG students at Research meets and competitions
- Strong linkage with Alumni

WEAKNESSES:

- Below optimal use of ICT resources
- Low output in terms of research grants and publications

OPPORTUNITIES:

- Generating e-resources for learning
- Increased use of MOODLE, POGIL etc. in teaching learning
- Create MOOC's
- Increase the research output of the department in terms of projects and publications

CHALLENGES:

- Infrastructure and manpower for implementation of opportunities listed above
- Mobilization of funds for State of the art infrastructure facilities.



Department of Pharma Analytical Sciences

- 1. Name of the Department:**Pharma Analytical Sciences
- 2. Year of Establishment:** August 2015
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**BVocPharma Analytical Sciences
- 4. Names of Interdisciplinary courses and the departments/units involved:** BVocPharma Analytical Sciences
- 5. Annual/ semester/Choice Based Credit System (programme wise):** Semester Choice Based Credit System
- 6. Participation of the department in the courses offered by other departments:** Teaching TYBSc Zoology & MSc. Bioanalytical Sciences
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc.:** Undergraduate Research Program under the NIUS programme with HomiBabha Centre for Science Education, DAE, Govt. of India.
- 8. Details of courses/programmes discontinued (if any) with reasons:** NIL
- 9. Number of Teaching posts:**

	Sanctioned	Filled
Professors	Nil	Nil
Associate Professors	One	One
Asst. Professors	Two	Two

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

Name	Qualification	Designation	Specialization	No. of Years Of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Sasikumar Menon	MSc., Ph.D.	Associate Professor	Toxicology, Bioanalysis & Drug Research	33 Yrs.	Twelve
Mr. Mandar Mhatre	M.Sc.	Assistant Professor	Bioanalysis & Drug Research	02 Yrs	NIL
Mr. Sachin Palekar	M.Sc.	Assistant Professor	Molecular Biology & Bioanalysis	05 Yrs	NIL



11. List of senior visiting faculty:

- Dr. Padmakar Sathe, Department of Chemistry, Ruia College
- Dr. Ajit Datar, Consultant, Shimadzu instruments
- Dr. Kamalakar Sonavne, Quality Consultant

12. Percentage of lectures delivered and practical classes handled (programme wise by temporary faculty): 60%

13. Student -Teacher Ratio (programme wise): 17 : 1, FYBVoc and SYBVoc

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled: Sanctioned One : Filled ONE

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:

Dr. Sasikumar Menon	M.Sc., Ph.D.
Mr. Mandar Mhatre	M.Sc., Ph.D
Mr. Sachin Palekar	M.Sc.

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: ONE, Dr. Sasikumar Menon as Co-investigator

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: NIL

18. Research Centre /facility recognized by the University: Mumbai University – Ph.D in Analytical Chemistry, Applied Biology University of Pune – Ph.D. In Analytical Chemistry

19. Publications:

Name of the faculty	a	b1	b2	c	d	e	f	g	h	i	j	k	l
Dr. Sasikumar Menon	80	-	-	-	-	-	-	-	-	-	-	0.6-3.5	
Mr. Mandar Mhatre	07	-	-	-	-	-	-	-	-	-	-	0.5-1.2	
Mr. Sachin Palekar	02	-	-	-	-	-	-	-	-	-	-	0.7-2.7	



Number of publications listed in International Database (For Eg : Web of Science , Scopus , Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) Nil

20. Areas of consultancy and income generated: BIOANALYSIS, Rs. 1.5 Crore in 2015-16

21. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards....

Dr. Sasikumar Menon: Member, National Steering Committee for Science Olympiads, DAE, Govt of India

22. Student projects:

a) Percentage of students who have done in-house projects including inter departmental/programme 100%

b) Percentage of students placed for projects in organizations 100% outside the institution i.e.in Research laboratories/Industry/ other agencies

23. Awards / Recognitions received by faculty and students:

24. List of eminent academicians and scientists / visitors to the department: Dr.Ajit Datar, Dr.Sonawane

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

a) National

b) International

26. Student profile programme/course wise:

Name of the Course/programme	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBVoc	110	25	6	19	NA

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
FYBVoc	100%	NIL	NIL
SYBVoc	100%	NIL	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:

Student progression	
UG to PG	NA
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA



Employed <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Campus selection <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Other than campus recruitment Entrepreneurship/Self-employment	Not Yet
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30. Details of Infrastructural facilities:

- a) Library :1200 books on advanced analysis
- b) Internet facilities for Staff & Students :Available with restrictions
- c) Class rooms with ICT facility: ONE
- d) Laboratories: Three

31. Number of students receiving financial assistance from college, university, government or other agencies:Entire Course supported by UGC grant

32. Details on students enrichment programmes (special lectures/workshops/seminar) with external experts:ONE in each semester – LABINDIA Instruments

33. Teaching methods adopted to improve student learning:Hands-on training, 60% weight age on practical skills

34. Participation in Intuitional Social Responsibility (ISR) and Extension activities: Institutional documentation and upkeep

35. SWOC analysis of the department and Future plans :

Strengths :

- 30 years of industry linkage with Pharma
- Approval of Ministry of Health for Bioanalysis
- Multiple Sophisticated Analytical Instruments for training

Weakness :

- Course is new with less public awareness
- Sector Skill Council prescription not in alignment with student experience.
- Students join course as last option

Opportunity :

- Involvement of industry in training
- Syllabus in tune with latest industry needs
- Potential of producing employable youth

Challenges :

- Convincing Sector Skill to align to ground realities
- Public awareness to more potential employability after the course
- Attracting best student talents



Future Plans:

- Aligning the syllabus with Sector Skill Council with more appropriate job roles
- Increasing industry involvements by seminars and workshops
- Improve infrastructure with more replicate instruments
- Incorporate regulatory component in syllabus
- Training programmes for trainers

Department of Physics

- 1. Name of the Department:** Physics
- 2. Year of Establishment:** 1937
- 3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
 B.Sc. in Physics
 M.Sc.in Physics
 Ph.D.
- 4. Names of Interdisciplinary courses and the departments/units involved:** NIL
- 5. Annual/ semester/Choice Based Credit System (programme wise):** Semester CBSGS
- 6. Participation of the department in the courses offered by other departments:**
 Inter-departmental projects under DBT -STAR
- 7. Lectures & Practicals conducted on physics for Integrated M.Sc. in Bioanalytical Sc. 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	Nil	Nil
Associate Professors	02	02
Asst. Professors	05	04



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

Name	Qualification	Designation	Specialization	No. of Years Of Experience	No. of Ph.D. Students guided for the last 4 years
Mr. Rajendra Rathi	M.Sc. M.Phil,	Assistant Professor	Electronics	25	NIL
Mr. Vijay Mayekar	M.Sc. SET	Assistant Professor	Electronics	26	NIL
Dr. Rajlakshmi Neogi (Retired)	M. Sc. Ph. D.	Associate Professor	X-ray spectroscopy	26	02
Dr. Pratap Patil	M. Sc. Ph. D.	Associate Professor	Electronics	29	NIL
Dr. Nana Pradhan	M.Sc. SET, Ph.D.	Assistant Professor	Electronics	21	NIL
Mr. Bhupesh Mude	M.Sc. SET	Assistant Professor	Solid State Physics	14	NIL

11. List of senior visiting faculty: NIL

12. Percentage of lectures delivered and practical classes handled programme wise by temporary faculty:10%

13. Student -Teacher Ratio (programme wise): undergraduate 20: 1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:

Name of teaching faculty	Qualification
Mr. Rajendra Rathi	M.Sc. M.Phil, Ph. D (Synopsis submitted)
Mr. Vijay Mayekar	M.Sc. SET, Ph. D (Synopsis submitted)
Dr. Rajlakshmi Neogi (retired)	M. Sc. Ph. D.
Dr. Pratap Patil	M. Sc. Ph. D.
Dr. Nana Pradhan	M.Sc. SET, Ph.D.
Mr. Bhupesh Mude	M.Sc. SET



16. Number of faculty with ongoing projects from

- a) National :NIL
- 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: M.Sc. Ph.D.

19. Publications:

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Dr R. Neogi (retired)	3	-	3									6.025	-
Mr.Rajendra Rathi	3	-	3	-	-	-	-	-	-	-	-	1.9	-
Mr.Vijay Mayekar	2	-	2	-	-	-	-	-	-	-	-	0.64-3.7	-
Dr.Nana Pradhan	4	-	4	-	-	-	-	-	-	-	-	0.7-4	-

20. Areas of consultancy and income generated: NIL

21. Faculty as members in: NIL

- a) National committees: NIL
- b) International Committees:

Faculty Name	International Institute
Dr. Pratap Patil	Member of World Congress of Engineers and Computer Scientists, (WCECS)
Dr. Nana Pradhan	1) Science and engineering institute (SCIEI) 2448 Desire Avenue, Rowland Heights, LA, CA 91748, USA, Membership number: 20140804001.
	2) Scientific, technical and editorial Review board, World academy of Science, engineering and Technology, Po Box 982, Riverside, Connecticut, CT 06878,USA.

Editorial Boards:

Faculty Name	International Institute
Dr. Nana Pradhan	Scientific, technical and editorial Review board, World academy of Science, engineering and Technology, Po Box 982, Riverside, Connecticut, CT 06878, USA. BODHI International Journal of Research in Humanities, Arts and Science

22. Student projects:

- a) Percentage of students who have done in-house projects including interdepartmental/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: NIL



24. List of eminent academicians and scientists / visitors to the department: NIL

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

a) National : NIL

b) International NIL

26. Student profile programme/course wise:

Name of the Course/programme(refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBSC	284	118	78	40	80%

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
B.Sc	100%	0%	0%

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

29. Student Progression:

Student progression	Against % enrolled
UG to PG	90%
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 :Well Equipped library facility with latest books

b) Internet facilities for Staff & Students: 16 computers with internet facility.

c) Class rooms with ICT facility

Room No.	Facilities
F-3	Internet with overhead projector

d) Laboratories



Room No.	Facilities
TYBSC Lab	Internet with overhead projector

31. Number of students receiving financial assistance from college, university, government or other agencies: NIL

32. Details on students' enrichment programmes (special lectures/workshops/seminar) with external experts:

Name of Students	Program	Date
SYBSC+TYBSC Students	Robotic Work Shop	3 rd Sept 2015

33. Teaching methods adopted to improve student learning: ICT, Project based learning

34. Participation in Intuitional Social Responsibility (ISR) and Extension activities: NA

35. SWOC analysis of the department and Future plans:

Strength

- Qualified and Committed faculty, excellent facilities and infrastructures with ICT installed class room as well as laboratory and fulfilled departmental library.

Weaknesses

- Inadequate permanent faculty members,

Challenges

- Attract and motivate students towards the subject by implementing an innovative teaching learning process.

Opportunity

- Framing of syllabus along with project based learning under autonomy.

Future plans:

- To introduce new application and project based program. The department also wishes to organize seminars, workshops and conferences.



Department of Zoology

1. **Name of the Department:** Zoology
2. **Year of Establishment:** 1937
3. **Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**
 - UG- B.Sc in Zoology
 - PG- M.Sc. in Zoology (Animal Physiology)
 - M.Sc. in Zoology (Oceanography)
 - Ph.D in Zoology
4. **Names of Interdisciplinary courses and the departments/units involved:** Nil
5. **Annual/ semester/Choice Based Credit System (programme wise):** Semester CBSGS
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:** none of the programme discontinued
9. **Number of Teaching posts:**

	Sanctioned	Filled
Professors	-	-
Associate Professors	-	02
Asst. Professors	07	01

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

Name	Qualification	Designation	Specialization	No. of Years Of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Sanjay Bhagwat (Retired)	M.Sc., Ph.D	Associate Professor	Cytology	30 years	03
Dr. Vaishali	M.Sc.,	Associate	Physiology	18 years	Nil



T. Phusate	CSIR-UGC NET, Ph.D	Professor			
Dr. Durga S Patkar	M.Sc. , Ph.D	Assistant Professor	Oceanography	13 years	Nil
Mr. Konark Borkar	M.Sc.	Assistant Professor	Marine Biology	2 years	Nil
Ms. Juliya Bodhak	M.Sc. B.Ed., CSIR NET-JRF, Mah-SET	Assistant Professor	Animal Physiology	1 year 6 months	Nil
Mr. Sharma Pandit Anurag	M.Sc.	Assistant Professor	Animal Physiology	09 months	Nil

11. List of senior visiting faculty: Dr. Sasi Menon

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty:

Programme	Percentage lectures delivered and practical classes
UG	60%
PG	60%

13. Student -Teacher Ratio (programme wise): 27:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

Staff support staff (technical) - 05

Administrative – 02

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ M.Phil / PG.:

Sr. No.	Name of the teaching faculty	Qualification
1	Dr. Vaishali T. Phusate	M.Sc., CSIR-UGC NET, Ph.D
2	Dr. Durga S. Patkar	M.Sc , Ph.D
3	Mr. Konark Borkar	M.Sc.
4	Ms. Juliya Bodhak	M.Sc., B.Ed., CSIR NET- JRF, Mah-SET
5	Mr. Sharma Pandit Anurag	M.Sc.

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:

Sr. No.	Number of faculty	National	Grants received
1	01	UGC	12.85 lac

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received: DBT - Star Status- grant received 10 lakhs

18. Research Centre /facility recognized by the University: PG & Ph.D



19. Publications:

Name of the faculty	a	b ₁	b ₂	c	d	e	f	g	h	i	j	k	l
Dr. Sanjay Bhagwat	04	14	-	-	-	-	-	-	-	-	-	1-1.3	-
Dr. Vaishali T. Phusate	03	-	03	-	-	-	-	-	-	-	-	4.85	-

20. Areas of consultancy and income generated: Nil

21. Faculty as members in:

a) National committees b) International Committees c) Editorial Boards Nil

22. Student projects:

a) Percentage of students who have done in-house projects including inter departmental/programme – 35% (All under Star Scheme/Status)

b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies.

23. Awards / Recognitions received by faculty and students: -

24. List of eminent academicians and scientists / visitors to the department:

25. Seminars/ Conferences/Workshops organized & the source of funding:

a) National

b) International

26. Student profile programme/course wise:

Name of the Course/program e (refer question no. 4)	Application Received	Selected	Enrolled		Pass percentage
			Male	Female	
FYBSc 2016-17	95	54	20	34	96

27. Diversity of Students:

Name of the course	% of students from the same state	% of students from the other states	% of students from abroad
B.Sc.	100%	-	-
M.Sc.	100%	-	-

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

29. Student progression:

Student progression	Against %enrolled
UG to PG	32
PG to M.Phil.	-



PG to Ph.D.	02
Ph.D. to Post-Doctoral	-
Employed Campus selection	-
Other than campus recruitment	-
Entrepreneurship/Self-employment	-

30. Details of Infrastructural facilities:

- a) Library – Departmental & College
- b) Internet facilities for Staff & Students-available
- c) Class rooms with ICT facility- Yes
- d) Laboratories-03

31. Number of students receiving financial assistance from college, university, government or other agencies: Nil

32. Details on student’s enrichment programmes (special lectures /workshops /seminar) with external experts:

Seminar on “Impact of Over- Damming on river and river basin of Ganges” by Snehal Dondre held on 7/3/17.

33. Teaching methods adopted to improve student learning:

Surprise test/exam, Self learning, Seminar, discussion, Power point presentation, flip the classroom, active learning, question bank

34. Participation in Intuitional Social Responsibility (ISR) and Extension

activities: Faculty members were involved in “Exploring Biology” a two day workshop for school schildren of Sadahana vidyalaya.

35. SWOC analysis of the department and Future plans :

Strength

- One of the oldest Zoology Departments in the city.
- Good Musuem Collection.
- Good collection of Books.
- Well equipped laboratory.

Weakness

- Inadequate permanent faculty members

Opportunity

- Vast fields with research potential
- Development of curriculum for Autonomous programmes/courses

Challenges

- To maintain student strength.



- To increase popularity of classical Zoology courses.

Future Plan

- To start Departmental course, to increase interdepartmental interaction and research.
- To start research-based learning courses



Post Accreditation Initiatives

Ruia College is one of the leading institutions of higher learning in India. Based on the suggestions given by the Peer Team Members in 3rd cycle of accreditation, College has been evolving new strategies not only for enhancing the quality but also for its sustenance in academic and administrative functioning. In continuing with our belief in achieving academic excellence, the College has applied for grant of autonomous status. The College, having fulfilled the necessary requirements, has received sanction letter from the University Grants Commission and is awaiting notification from the state government. The College is looking forward to start academic year 2017-18 under autonomous status.

In response to the suggestions and recommendations made by the Peer Team Members in 3rd cycle of accreditation, the College has taken several proactive steps not only to implement them but also to add more.

Following are the initiatives and measures with respect to each criterion:

Criterion I: Curricular aspects

- Three new skill based BVoc programmes (BVoc in Tourism and Travel Management, Green House Management and Pharma Analytical Sciences) were introduced under UGC funded DDU Kaushal Kendra. These courses have been designed to be innovative, creative, and entrepreneurial in their approach to inculcate research interests, provide internship and give placement in industries.
- Two new Ph D programmes were introduced- English and Applied Biology.
- IQAC Initiated “Academic Diary” for teachers for the effective implementation of teaching plans from the academic year 2014-15.
- Centre for Mindfulness and Well-being, Centre for Slum Studies and Environmental Awareness Committee conducted sensitisation/awareness lectures, workshops, add on courses to inculcate value system, environmental awareness and social responsibility among students.
- Short term courses and Popular/ Special lectures were introduced by departments and non-departmental cells/centres to enrich the curriculum and also to enhance the global competency
- Inter-departmental and inter-institutional Research and Industrial collaborations undertaken by the departments of the College with institutions like TIFR, ICT, CIRCOT, K. R. Cama Oriental Institute, Mumbai, Heras Institute, Mumbai, National Medicinal Plant Board (NMPB), Department of Ayush and Society of Ethnopharmacology to enhance the quality of project based learning. Six Science Departments of the College selected under the DBT, Star Status, trained the students for various research projects, which enriched their learning experience. The Department of Life science in collaboration with BAIF, Pune have obtained grant from Ministry of Environment and Forests (MOEF) for tree plantation drive along hill



slopes of Neral, Matheran. This was an attempt to sensitize the students to the issues related to environmental conservation.

Criterion II: Teaching, Learning and Evaluation

- Emphasis on 'Experimental Learning'.
- Implementation of Innovative teaching methods like POGIL, Moodle, FLIP the classroom, pre-lab, post-lab, photojournal and videojournal.
- Enhancement in ICT enabled teaching- google platform, blogs, facebook page, Mobile education, I-translator, e-content development and blended learning.
- Thrust on project based learning to increase the spirit of inquiry and inculcate research culture through DBT Star College grant and CE grant.
- Increased number of workshops for enrichment of knowledge of Faculty and students.
- Forty teachers were trained in e-content development (100hrs) using i-spring software (Feb-April 2013). A workshop on Moodle was organised (50 teachers) in April 2014 and 2015 and a manual on the same was prepared by faculty. Teachers were also trained in Innovative teaching techniques like POGIL (43 teachers).
- Establishment of a Language laboratory to enhance the language skills of the students in forms of speech, comprehension, listening and writing skills. Language lab has installed two softwares like ODLL (ORELL Digital Language Lab) and ILOTUS FOUNDATION + ADVANCED (1 -5 Levels) + SRS. It has a server and 10 computers, with suitable accessories.
- Institutionalisation of feedback mechanism from various stakeholders- i.e., students, parents, alumni, teaching staff and support staff. A separate feedback was collected from students for curriculum revision.
- Remedial coaching and Mentoring activity has been made more structured.
- As an initiative of IQAC internal and external Academic audit was conducted
- Awareness programmes for students regarding the sexual harassment at workplace were conducted in the context of the Act of 2013.

Criterion III: Research, Consultancy and Extension

- Various research programs were introduced at UG level under the grant from DBT, Star College Scheme, and CE (UGC) on Microfluidics, Phytochemistry, Nanotechnology, Embedded systems, Algal Biotechnology, Green chemistry.
- To provide an exposure to international/national education, College established Academia - Industry collaborations and MoU were signed with foreign Universities-



(Common wealth of Pennsylvania(2014); Westchester University, USA and Harrisburg UniversityUSA and 14industries.

- Mini-MTTS program in Mathematics of National level for Mumbai region has been conducted by Ruia College under the grant from NBHM (Department of Mathematics).
- Enhancement in research amongst the faculty is evident from the number of faculty attending/ presenting papers anddelivering talks as resource persons in various conferences/ seminarsand workshops.
- There is also a substantial increase in the number of research publications -347 as against 184 in 3rd cycle of Accreditation.
- In the last 5yrs the college has been granted 22 major and 48 minor research projects. The number of research projects undertaken by faculty is 70 in the last 5 years as against 56 in the previous cycle.
- Increase in number of UG students participating in research meets of the University (Avishkaar), at other inter-collegiate fests, and even those sponsored by industry where they presented posters /papers and won prizes.
- Number of extension activities undertaken by the college in the last 5years is 32 as against 15 in 3rd cycle of Accreditation.
- Ruia College has adopted S.K. Patil College, Malvan, Maharashtra to help them in their academic development.
- NSS has adopted Nere village in Panvel, Raigad District, Maharashtra and works towards its development.
- In “Swachh Bharat Abhiyan”, a mass movement for clean India, the Collegestudents (NSS and other students) participated in various activities like railway station cleaning, cleaning the adopted village, spreading the awareness through street play etc.

Criterion IV: Infrastructure and Learning Resources

- Construction of 5 smart class rooms, 4smart laboratories, one staff room and 4 special labs with computer facility(one lab with simulation unit, the rest with data analysis software for research students, one class room with Sound recording studio).Construction of one DDU KAUSHAL office.
- Renovation of Seven labs to smart labs, one class room and one laboratory.
- Establishment of a Greenhouse (prototype) with automated fogger system, three shade houses with 8 different types of hydroponic units and an Aquaponic unit.
- Establishment of a Language lab



- A Public addressing system is installed to connect all class rooms and lab with the Principal
- Introduced RFID card(Smart I-Cards) from 2016-17 the attendance of students are maintained by smart ID cards
- CPCSEA/315 approved Animal house has been renewed in 2015.
- Redesigning and renovation of library with separate rooms for teachers, for different periodical sections, and, a special OPAC (Online Public Access Catalogue) Room for students and a Compact-Stacking Cupboards for optimum utilization of space. Also Digitization of rare books and manuscripts.CCTV surveillance system has been installed for better security.
- The Library is fully computerized and bar coded and circulation of books is done using bar coding technology and Interface of the Smart I-Cards given to users.
- Wi-Fi facilities have been made available.

Criterion V–Student support and progression

- The number of students who featured in the general merit list have increased in the last 5years
- A total of 73 students cleared competitive exams including UGC NET/SET/UPSC/MPSC.
- Enhancement in number of student’s internship and placement since last accreditation.
- A Career Guidance and Placement cell is in place with a placement in-charge. The cell organises a number of activities to help the students know their owncareer and their employment opportunities. Increase in number ofcareer and skill development, entrepreneurship development activities conducted by CGC.
- The Self-financed departments and departments under DDU Kaushal Kendra have their own departmental placement cell. In the last five years students have been placed in 40 companies.
- Most of the students of the Self-Vision Centre (95%) have been able to get employed after their graduation or post-graduation(most of them in the banking sector). Some of the students have started their own organizations.
- Students initiated a Ruia Monthly online journal –Ruia e-bulletin which is uploaded on the website.
- DBT Star college status granted to 6 Departments and 6 more Departments under new Star College scheme.
- Structured mentoring system and strengthened Remedial lectures.



- Centre for mindfulness conducted a number of activities towards the mental and physical wellbeing of students and teachers.
- Special yoga sessions were conducted for students and teachers for stress and anxiety management.
- Vibrant Alumni Association of the college initiated regular health check-up camps for students and support staff and also instituted many awards.

Criterion VI: Governance , Leadership and Management

- IQAC of the College was restructured according to the NAAC guide lines to work towards realisation of the goals of quality enhancement and sustenance. with Principal as the chairperson, one member from administration, 11 faculty as members, one member from the management, one member as Alumnus and one Industry representative and two student representatives.
- Very active IQAC coordinates and monitors all activities of the College. A compendium comprising roles, objectives, functions for all Committees/Cells/Centres has been prepared by IQAC that provides a proper mechanism for the activities to be carried out by each group respectively.
- Twelve new committees were made since last accreditation for the smooth conduct of activities
- Twenty four faculty development programmes were organized for the teaching staff and support staff.
- As per the recommendations of NAAC third cycle, 2012, a Credit cooperative society for teaching and support staff was started from 4th April 2014 having a total of 107 members till date. It provides 5 % dividend and also gives loan facilities to the members.
- Establishment of a Centre for Mindfulness and Well-being to promote sound and holistic education and impart valuable life skills to the students and faculty.
- Conduct of Laboratory safety workshops for all science students, annually.
- Online feedback regarding teaching, infrastructure and support staff by the students has been started from 2013-14.
- Feedback on curriculum is obtained to enhance the teaching learning and curriculum effectiveness.



- Institutional Social Responsibility Committee has been set up to deliver strong commitment towards progress of society. Ruia College has signed a MOU with S.K. Patil College in Malvan, Maharashtra and has agreed to offer services and facilities in teaching learning and research.
- Internal Complaints Committee has been set up under the mandate of UGC 'Prevention, Prohibition and redressal of sexual harassment of women employees and girl students in higher educational institutions', Regulations 2015 and under the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 ("Act") and Rules, 2013 ("Rules"). The mandate to constitute ICC comes from Section 4 of the Act.

Criterion VII: Innovation and Best Practices

- Environmental Awareness Committee formed, initiated a number of Environment consciousness activities
- IQAC with Environmental Awareness Committee conducted various environmental audits like wet & dry waste audit, energy audit, e-waste audit, safe Hazardous waste disposal and implemented necessary measures like construction of compost pit, recycling of paper, e-waste collection drive and disposal of biomedical waste through SMS Envoclean Pvt. Ltd. College is planning to install a rainwater harvesting system and a biogas generator.
- The two best practices followed at the College are (i) Fostering integrated growth through diverse skills and (ii) Enhancement of Research culture. This is aimed at fostering the multi-skill development of students and staff and also to inculcate a research culture at the UG /PG level.
- Centre for Mindfulness and Wellbeing was established (2013-14) to promote sound and holistic education and impart valuable life skills to the students and faculty. The centre organises various life skill development activities including stress management.
- Safety and Security committee instituted by college organises 'laboratory safety workshops' every year to all science students (UG-PG) faculty and non-teaching staff. Hands on training on 'fire safety' was also organised by the committee.
- Internal and External audit are conducted to get feedback on the activities and improvement of the departments.
- A number of Social sensitisation programmes were carried out by various committees in the College.

Declaration by the Head of the Institution

I certify that the data included in this Self-Study Report (SSR) are 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.



Signature of the Head of the institution

with seal:



Principal
Ramnarain Ruia College
Matunga, Mumbai-400019

Date:

Place: Mumbai

Certificate of Compliance

(Affiliated/Constituent/Autonomous Colleges and Recognized Institutions)

This is to certify that Ramnarain Ruia College fulfils all norms


1. Stipulated by the affiliating University and/or
2. Regulatory Council/Body [such as UGC, NCTE, AICTE, MCI, DCI, BCI, etc.] and
3. The affiliation and recognition [if applicable] is valid as on date.

In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

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: 28-03-2017
Place: Mumbai



Prof. Suhas Pednekar
Principal/Head of the Institution
Principal
Ramnarain Ruia College,
Matunga, Mumbai-400 019.

THE BOMBAY PUBLIC TRUST ACT, 1950 SCHEDULE NO. VIII [Vide Rule 17(1)]
SHIKSHANA PRASARAKA MANDALI'S RAMNARAIN RUIA COLLEGE, MATUNGA, MUMBAI - 400 019.
BALANCE SHEET AS AT 31st MARCH 2013

FUNDS & LIABILITIES	2011-2012	2012-2013	PROPERTY & ASSETS	2011-2012	2012-2013
Trust Funds or corpus :			Immoveable Properties: at cost		
Balance as per last Balance Sheet			Balance as per last Balance Sheet		
Adjustment during the year			Additions during the year		
Other Earmarked Funds :			Less : Sales during the year		
Depreciation Funds :			Depreciation up to date		
FYSYBA/BSC Exam Fees Fully Utilised	583850.00	583850.00	Investments :-		
Sinking Fund			(Note: The market value of the above)		
			Investments in Rs. _____ only		
Reserve Fund Sch. "B"	528250.92	520869.92	Moveable Properties : Sch. " G "	47455996.84	44422781.11
Any other Fund			Furniture & Fixtures : Sch. " H "	5259883.49	4882331.49
			Balance as per last Balance Sheet		
			Additions during the year		
Loans (Secured or Unsecured)			Less : Sales during the year		
			Depreciation up to date		
			Loans (Secured or Unsecured)		
			Good / doubtful		
From Trustees			Loan Scholarships		
From others SCH. "D"	8276131.37	8119740.83	Other Loans		
Jr. College					
Deposit	4258484.00	4720534.00	Advances : - Working SCH-2	2570222.00	5667181.53
Liabilities :-			0 To Trustees/Contractors/Lawyers		
For Expenses			To Employees		
For Advances			To Others "		
For Rent and other Deposits	4960867.90	7304169.90	*Income outstanding		
Current Fund			Rent / Interest / Other Income		
S.P Mandali's A/c	258190544.99	289269020.26	Cash & Bank Balances Sch.-I	26886614.06	24273310.02
Balance as per last Balance Sheet			a) In current account or fixed deposit account with		
Less : Appropriation, if any			b) With the Trustees		
Add : Surplus			c) With the Manager		
as per income and			Current Fund :-		
Less : paid S.P.M.			Balance as per last Balance Sheet	194625412.79	231272580.76
Expenditure Account			Add : Deficit		
			as per Income and		
			Less : Surplus		
			Expenditure Account		
Total Rs.	276798129.18	310518184.91	Total Rs.	276798129.18	310518184.91

The above Balance Sheet to the best of my/our belief contains a true account of the Funds and Liabilities and of the Property and Assets of the Trust.

Prepare As per Books of Accounts

[Signature]
Chartered Accountants



[Signature]
PRINCIPAL
Principal
Ramnarain Ruia College
Matunga, Mumbai - 400 019.

THE BOMBAY PUBLIC TRUST ACT, 1950 SCHEDULE NO. IX [Vide Rule 17(1)]
Name of the Public Trust: SHIKSHANA PRASARAKA MANDALI, PUNE-30. RAMNARAIN RUIA COLLEGE, MATUNGA, MUMBAI - 400 019.
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDING 31st MARCH 2013

EXPENDITURE	2011-2012	2012-2013	INCOME	2011-2012	2012-2013
To expenses in respect of properties Rates, Taxes cesses Sch.-L	10228536.00	3791222.00	By Rent (accrued / realised)		
Repairs and maintenance					
Salaries			By Interest (accrued / realised)		
Insurance			On Securities		
Depreciation (by way of provision or adjustment)			On Loans		
Other Expenses			On Bank Account		
To Establishment Expenses Sch. M	32599703.00	36739718.34	On Fixed Deposit	39175	42497.00
To Remun. to Trustees					
Remun. in the case of a math) to the head of the math, including his household expenditure, if any					
To Legal Expenses			By Dividend		
To Audit Fees	0.00	0.00	By Donations in Cash or kind		
To Contribution and Fees					
To Amounts written off :			By Grants :	92948487.00	105703545.00
a) Bad debts					
b) Loan Sch.					
c) Irrecoverable rents					
d) Other items					
To Miscellaneous Expenses Sch.10	117186.00	161635.20	By Income from other sources (in details as far as possible) Sch-K	30436084.04	33921282.00
To Depreciation Sch. 11	9365081.00	8725818.00			
To Amounts Transferred to Reserve			By Transfer from Reserves		
or specific funds					
To Expenditure on objects of the trust Sch.-O					
a) Religious					
b) Educational Sc. 'O'	105199734.00	126896098.43			
c) Medical Relief					
d) Relief of poverty					
e) Other charitable objects					
To Surplus carried over to Balance Sheet			By deficit carried over to Balance Sheet	34086493.96	36647167.97
Total Rs.	157510240.00	176314491.97	Total Rs.	157510240.00	176314491.97

Prepare As per Books of Accounts

[Signature]
Chartered Accountants



[Signature]
PRINCIPAL
Ramnarain Ruia College
Matunga, Mumbai - 400 019.

THE BOMBAY PUBLIC TRUST ACT, 1950 SCHEDULE NO. VIII [Vide Rule 17(1)]
SHIKSHANA PRASARAKA MANDALI'S RAMNARAIN RUIA COLLEGE, MATUNGA, MUMBAI - 400 019.
BALANCE SHEET AS AT 31st MARCH 2014

FUNDS & LIABILITIES	2012-2013	2013-2014	PROPERTY & ASSETS	2012-2013	2013-2014
Trust Funds or corpus :			Immoveable Properties: at cost)		
Balance as per last Balance Sheet			Balance as per last Balance Sheet		
Adjustment during the year			Additions during the year		
Other Earmarked Funds :			Less : Sales during the year		
Depreciation Funds			Depreciation up to date		
FYSYBA/BSC Exam Fees Fully Utilised	583850.00	583850.00	Investments :-		
Sinking Fund			(Note: The market value of the above)		
			Investments is Rs. _____ only)		
Reserve Fund Sch. "B"	520869.92	526177.92	Moveable Properties : Sch. " G "	44422781.11	43444097.66
Any other Fund			Furniture & Fixtures : Sch. " H "	4882331.49	5695206.49
			Balance as per last Balance Sheet		
			Additions during the year		
Loans (Secured or Unsecured)			Less : Sales during the year		
			Depreciation up to date		
			Loans (Secured or Unsecured)		
			Good / doubtful		
From Trustees			Loan Scholarships		
From others SCH. "D"	8119740.83	14657092.33	Other Loans		
Jr. College			Advances :- Working SCH-2	5667181.53	4702414.46
Deposit	4720534.00	5133784.00	To Trustees/Contractors/Lawyers		
Liabilities :-			To Employees		
For Expenses			To Others		
For Advances			*Income outstanding		
For Rent and other Deposits	7304169.90	11200632.90	Rent / Interest / Other Income		
Current Fund			Cash & Bank Balances Sch.-I	24273310.02	33269498.83
S.P.Mandali's A/c	289269020.26	316359066.26	a) In current account or fixed		
Balance as per last Balance Sheet			deposit account with		
Less : Appropriation, if any			b) With the Trustees		
Add : Surplus			c) With the Manager		
as per income and			Current Fund :-		
Less : paid S.P.M.			Balance as per last Balance Sheet	231272580.76	261349385.97
Expenditure Account			Add : Deficit		
			as per Income and		
			Less : Surplus		
			Expenditure Account		
			Total Rs.	310518184.91	348460603.41

The above Balance Sheet to the best of my/our belief contains a true account of the Funds and Liabilities and of the Property and Assets of the Trust.

Prepare As per Books of Accounts

S. Y. Kanade & Co.
Chartered Accountants



S. Y. Kanade
PRINCIPAL
RAMNARAIN RUIA COLLEGE
MATUNGA, MUMBAI - 400 019.

THE BOMBAY PUBLIC TRUST ACT, 1950 SCHEDULE NO. IX [Vide Rule 17(1)]
Name of the Public Trust: SHIKSHANA PRASARAKA MANDALI, PUNE-30, RAMNARAIN RUJA COLLEGE, MATUNGA, MUMBAI - 400 019.
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDING 31st MARCH 2014

EXPENDITURE	2012-2013	2013-2014	INCOME	2012-2013	2013-2014
To expenses in respect of properties			By Rent (accrued / realised)		
Rates, Taxes cesses Sch.-I	3791222.00	8078500.00			
Repairs and maintenance			By Interest (accrued / realised)		
Salaries			On Securities		
Insurance			On Loans		
Depreciation (by way of provision or adjustment)			On Bank Account		
Other Expenses			On Fixed Deposit	42497.00	42497.00
To Establishment Expenses Sch. M	36739718.34	38277373.44			
To Remun. to Trustees					
Remun. In the case of a math) to the head of the math, including his household expenditure, if any					
To Legal Expenses			By Dividend		
To Audit Fees	0.00	0.00	By Donations in Cash or kind		
To Contribution and Fees					
To Amounts written off :			By Grants :	105703545.00	151327744.00
a) Bad debts					
b) Loan Sch.					
c) Irrecoverable rents					
d) Other items					
To Miscellaneous Expenses Sch. 10	161635.20	245799.00	By income from other sources (in details as far as possible) Sch-K	33921282.00	33080335.64
To Depreciation Sch. 11	8725818.00	8756975.45			
To Amounts Transferred to Reserve or specific funds			By Transfer from Reserves		
To Expenditure on objects of the trust Sch.-O					
a) Religious					
b) Educational Sc. 'O'	126896098.43	159168733.96			
c) Medical Relief					
d) Relief of poverty					
e) Other charitable objects					
To Surplus carried over to Balance Sheet			By deficit carried over to Balance Sheet	36647167.97	30076805.21
Total Rs.	176314491.97	214527381.85	Total Rs.	176314491.97	214527381.85

Prepare As per Books of Accounts

[Signature]
Chartered Accountants



[Signature]
PRINCIPAL
 RAMNARAIN RUJA COLLEGE
 MATUNGA, MUMBAI - 400 019.

SHIKSHANA PRASARAKA MANDALI's RAMNARAIN RUIA COLLEGE, MATUNGA, MUMBAI - 400 019.
BALANCE SHEET AS AT 31st MARCH 2015

FUNDS & LIABILITIES	2013-2014	2014-2015	PROPERTY & ASSETS	2013-2014	2014-2015
Trust Funds or corpus :			Immovable Properties: at cost)		
Balance as per last Balance Sheet			Balance as per last Balance Sheet		
Adjustment during the year			Additions during the year		
Other Earmarked Funds :-			Less : Sales during the year		
Depreciation Funds			Depreciation up to date		
FYSYBA/BSC Exam Fees Fully Utilised	583850.00	583850.00	Investments :-		
Sinking Fund			(Note: The market value of the above)		
			Investments is Rs. _____ only)		
Reserve Fund Sch. "B"	526177.92	536963.92	Moveable Properties : Sch. " G "	43444097.66	51316396.14
Any other Fund			Furniture & Fixtures : Sch. " H "	5695206.49	9637803.49
			Balance as per last Balance Sheet		
Loans (Secured or Unsecured)			Additions during the year		
			Less : Sales during the year		
			Depreciation up to date		
			Loans (Secured or Unsecured)		
From Trustees			Good / doubtful		
From others SCH. "D"	14657092.33	19007836.80	Loan Scholarships		
Jr. College			Other Loans		
Deposit	5133784.00	2555630.00	Advances : - Working SCH-2	4702414.46	3123187.38
Liabilities :-			0 To Trustees/Contractors/Lawyers		
For Expenses			To Employees		
For Advances			To Others		
For Rent and other Deposits	11200632.90	5241826.90	*Income outstanding		
Current Fund			Rent / Interest / Other Income		
S.P.Mandali's A/c	316359066.26	367933296.28	Cash & Bank Balances Sch.-I	33269498.83	31688686.19
Balance as per last Balance Sheet			a) In current account or fixed		
Less : Appropriation, if any			deposit account with		
Add : Surplus			b) With the Trustees		
as per income and			c) With the Manager		
Less : paid S.P.M.			Current Fund :-		
Expenditure Account			Balance as per last Balance Sheet	261349385.97	300093330.70
			Add : Deficit		
			as per Income and		
			Less : Surplus		
			Expenditure Account		
Total Rs.	348460603.41	395859403.90	Total Rs.	348460603.41	395859403.90

The above Balance Sheet to the best of my/our belief contains a true and correct account of the Funds and Liabilities and of the Property and Assets of the Trust.

Prepare As per Books of Accounts

[Signature]

Chartered Accountants



PRINCIPAL
Principal
 Ramnarain Ruia College
 Matunga, Mumbai - 400 019

**Name of the Public Trust: SHIKSHANA PRASARAKA MANDALI, PUNE-30. RAMNARAIN RUIJA COLLEGE, MATUNGA, MUMBAI - 400 019.
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDING 31st MARCH 2015**

EXPENDITURE	2013-2014	2014-2015	INCOME	2013-2014	2014-2015
To expenses in respect of properties			By Rent (accrued / realised)		
Rates, Taxes cesses Sch.-L	8078500.00	10576370.00			
Repairs and maintenance					
Salaries			By Interest (accrued / realised)		
Insurance			On Securities		
Depreciation (by way of provision or adjustment)			On Loans		
Other Expenses			On Bank Account		
To Establishment Expenses Sch. M	38277373.44	40639475.92	On Fixed Deposit	42497.00	42497.00
To Remun. to Trustees					
Remun. in the case of a math) to the head of the math, including his household expenditure, if any					
To Legal Expenses			By Dividend		
To Audit Fees	0.00	0.00	By Donations in Cash or kind		
To Contribution and Fees					
To Amounts written off :			By Grants :	151327744.00	119463782.00
a) Bad debts					
b) Loan Sch.					
c) Irrecoverable rents					
d) Other items					
To Miscellaneous Expenses Sch. 10	245799.00	223654.00	By Income from other sources (in details as far as possible) Sch-K	33080335.64	40511475.00
To Depreciation Sch. 11	8756975.45	12319292.35			
To Amounts Transferred to Reserve or specific funds			By Transfer from Reserves		
To Expenditure on objects of the trust Sch.-O					
a) Religious					
b) Educational Sc. 'O'	159168733.96	135002906.46			
c) Medical Relief					
d) Relief of poverty					
e) Other charitable objects					
To Surplus carried over to Balance Sheet			By deficit carried over to Balance Sheet	30076805.21	38743944.73
Total Rs.	214527381.85	198761698.73	Total Rs.	214527381.85	198761698.73

Prepare As per Books of Accounts

[Signature]

Chartered Accountants

[Signature]

PRINCIPAL
Principal
Ramnarain Ruia College
Matunga, Mumbai - 400 019



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23232701
23237721/ 23232317/23234116/
23236351



ज्ञान-विज्ञान विमुक्तये

UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAGAR MARG
NEW DELHI-110002

विश्वविद्यालय अनुदान आयोग
बहादुरशाह जफर मार्ग
नई दिल्ली - 110 002

UGC Website : www.ugc.ac.in

Speed Post -

No. F.1-1/2015 (CPP-I/C)

December, 2015

The Principal
Ramnarain Ruia College
Matunga
Mumbai
District Mumbai – 400 019
Maharashtra

15 DEC 2015

Subject : Inclusion of Ramnarain Ruia College, Matunga, Mumbai, District Mumbai – 400 019, Maharashtra under Section 2(f) and 12 (B) of the UGC Act, 1956.

Sir/Madam,

With reference to your letter No.UGC/585 dated 02.11.2015 on the above subject, I am to inform you that the name Ramnarain Ruia College, Matunga, Mumbai, District Mumbai – 400 019, Maharashtra established in the year of **1937**, affiliated to **Mumbai University, Mumbai** has **already** been included in the list of Colleges maintained under Section **2(f) & 12 (B)** of the UGC Act, 1956 under the head **Non-Government** College teaching upto **Master's** Degree.

Yours faithfully,

Charan Dass

Charan Dass
(Charan Dass)
Under Secretary

9th October 1999



National Assessment and Accreditation Council

An Autonomous Institution of the University Grants Commission
Bangalore

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
Ramnarain Ruia College, Mumbai
an affiliated college of the University of Mumbai, Maharashtra, as
Accredited¹
at the four star level².*

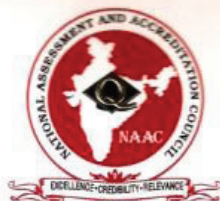


Date: October 09, 1999


Chairman

1. This certification is valid for a period of 5 years with effect from the assessment academic year 1999-2000.
2. An institutional score (%) in the range of 55-60 denotes one star, 60-65 two stars, 65-70 three stars, 70-75 four stars, and 75 and above five stars (upper limit exclusive).

31st March 2007



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
Shikshana Prasarak Mandali's
Ramnarain Ruia College
Matunga, Mumbai, affiliated to University of Mumbai
Maharashtra as
Accredited
at the A level.*

Date : March 31, 2007



Director

- This certification is valid for a period of Five years with effect from March 31, 2007
- 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)

March 31, 2007/RA/001

15th September 2012



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
Shikshana Prasarak Mandali's
Ramnarain Ruia College
Matunga, Mumbai, affiliated to University of Mumbai, Maharashtra as
Accredited
with CGPA of 3.65 on four point scale
at A grade
valid up to September 14, 2017*

Date : September 15, 2012



*H. K. Chaturvedi
Director*

EC/61/RAR/83

Peer Team Report

on

**Institutional Assessment and Re-Accreditation
(3rd Cycle)**

of

**RAMNARAIN RUIA COLLEGE,
L.N. Road, Matunga, Mumbai-400019, Maharashtra**

Date of Visit : August 9th - 11th, 2012

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission P.O. Box No.
1075, Nagarbhavi, Bangalore - 560 072, INDIA

**PEER TEAM REPORT
ON
INSTITUTIONAL ACCREDITATION OF
RAMNARAIN RUIA COLLEGE, MUMBAI-400019, MAHARASHTRA**

Section I: GENERAL INFORMATION	
1.1. Name & Address of the Institution	: RAMNARAIN RUIA COLLEGE, MUMBAI
1.2. Year of Establishment	: 1937
1.3. Current Academic Activities of the Institution (Numbers)	
• Faculties/Schools	: 02
• Departments/Centres	: 27
• Programmes/Courses offered	: PG :20 UG :37 P.G. Diploma :03 Ph.D. :10 Add On :30
• Permanent Faculty Members	: 75
• Permanent Support Staff	: Non-Teaching : 107 Technical :02
• Students	: 3289
1.4. Three major features in the institutional context (as perceived by the Peer Team)	<ul style="list-style-type: none"> • Multi-faculty College with good academic ambience. • Positive support of the management. • The management has made sincere efforts in implementing the suggestions made by the previous peer team.
1.5. Dates of visit of the Peer Team (A detailed visit schedule is included)	: 9 th - 11 th August, 2012 (Enclosed)
1.6. Composition of the Peer Team which undertook the on-site visit	:
Chairperson	: Prof. R.K. Kale Vice-Chancellor Central University of Gujarat Sector-30, Gandhi Nagar, 382030, Gujarat
Member Coordinator	: Prof. (Dr.) P.K. Biswasroy Head & Dean Department of Commerce, Berhampur University, Berhampur-760 007, Orissa.

R.K. Kale

NAAC for Quality & Excellence

Member :	Prof. Varkey K.T. Principal, CMS College of Science & Commerce Koimbatore-641049, Tamilnadu
NAAC Officer :	Dr. (Mrs.) K. Rama Deputy Advisor, NAAC Bangalore-560072

Section II: CRITERION-WISE ANALYSIS	
2.1. Curricular Aspects	
2.1.1. Curricular Design & Development	<ul style="list-style-type: none"> • Many teachers of different departments of the College are members of Board of Studies of the University and have contributed to the review and redesigning of the curricula. • Curriculum is geared to facilitate entry to further higher education as well as employment. • Ensures a blend of modernity with sustenance and tradition with technology.
2.1.2. Academic Flexibility	<ul style="list-style-type: none"> • The College offers 37 UG, 20 PG, 03 PG Diploma, 10 Ph.D. and 30 Add on Courses. • Large number of subject combinations are available. • Add-on courses, diploma and certificate courses are available to increase employability and personality development. • Inbuilt flexibility of courses ensures development of skill as well as knowledge.
2.1.3. Feedback on Curriculum	<ul style="list-style-type: none"> • The feedback on curriculum is obtained from Stakeholders on regular bases. • Suggestions obtained from stakeholders are analysed and communicated to the university.
2.1.4. Curriculum update	<ul style="list-style-type: none"> • Periodically curriculum is updated by the affiliating University. • The curriculum is designed to meet the challenges of emerging thrust areas. • Curriculum facilitates employability.
2.1.5. Best Practices in Curricular aspects (if any)	<ul style="list-style-type: none"> • Endowment lectures, Invited talks and outreach activities are regular features. • Introduced value based and specialized courses.

2.2. Teaching-Learning & Evaluation	
2.2.1. Admission Process and Student Profile	<ul style="list-style-type: none"> • Transparent mechanism for admission to different courses. • Students are admitted on the basis of merit for general courses and through common admission test of the State for professional courses, and duly monitored by a Committee. • The College ensures equity and access to students from the disadvantaged community, weaker section and sports personnel as per the policy of State Government.
2.2.2. Catering to the diverse needs	<ul style="list-style-type: none"> • College caters to the diverse needs • Special measures are taken for the benefit of Students belonging to the disadvantaged group • Mentoring and counselling are in place • Facilities for Differently-abled students need to be augmented.
2.2.3. Teaching-Learning Process	<ul style="list-style-type: none"> • The College has modernized the teaching-learning process. • Apart from class room teaching, student centred participatory and interactive process are followed. • The College adheres to its academic calendar
2.2.4. Teacher Quality	<ul style="list-style-type: none"> • 42 Teachers are Ph.D. holders, 09 possess M. Phil Degree and 29 Teachers have cleared the SLET/NET. • A good number of teachers are recipient of awards and publish Research papers, participated in Refresher / Orientation courses / workshops and conferences. • ICT integration in teaching needs to be expanded.
2.2.5. Evaluation Process and Reforms	<ul style="list-style-type: none"> • Continuous assessment of the students through assignments, internal tests, project work, class tests, group discussions and debates are practiced. • The examination system is transparent and held regularly. • Grievance Reddressal mechanism is to be further strengthened.
2.2.6. Best Practices in Teaching-learning and Evaluation (if any)	<ul style="list-style-type: none"> • The College gives special attention in developing core competence of the student. • Semester system is being adopted.



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2.3. Research, Consultancy & Extension	
2.3.1. Promotion of Research	<ul style="list-style-type: none"> • There is a Research Committee and to institutionalise research culture, collaborative research is initiated through M.O.U. • Teachers are encouraged to undertake research and management provides necessary support. • The College has a good number of P.G. teaching programmes with research orientation besides the PhD programmes.
2.3.2. Research and Publications Output	<ul style="list-style-type: none"> • Teachers are active in research and published papers in international and national journals; popular articles in dailies/magazines; and authored books. • Around 30 teachers are recognised research guides and many have successfully supervised research scholars. • Faculty members of the College have undertaken a good number of research projects funded by various funding agencies.
2.3.3. Consultancy	<ul style="list-style-type: none"> • College has generated good revenue through consultancy
2.3.4. Extension Activities	<ul style="list-style-type: none"> • The College has vibrant NSS and NCC Units. • The extension activities of the College include community development, health awareness programmes, blood donation camps and youth training programmes. • Informal partnership developed with GOs' and NGOs' for extension activities.
2.3.5. Collaborations	<ul style="list-style-type: none"> • The College has linkages with several organisations and institutions that have helped to promote on-the-job training and student placement. • Collaboration with National and International Institutes for research and other academic programmes is visible. • Institute-Industry linkage is strong.
2.3.6. Best Practices in Research Consultancy and Extension (if any)	<ul style="list-style-type: none"> • The extension and outreach activities reflect the institutional mission for meeting the goals of national integration and communal harmony.
2.4. Infrastructure & Learning Resources	
2.4.1. Physical Facilities for Learning	<ul style="list-style-type: none"> • College is strategically located in the heart of the city on a 2 acres of land. • The College has 40 classrooms out of which 36 are smart classrooms, Open air theatre, Audio

NAAC for Quality & Excellence

	<p>Visual rooms, Central Library, Reading rooms, Women's common room, Gymnasium, Auditorium and well equipped Laboratories.</p> <ul style="list-style-type: none"> The infrastructure facilities are used optimally.
2.4.2. Maintenance of Infrastructure	<ul style="list-style-type: none"> There is budgetary provision for the maintenance of the College. Campus and buildings are well maintained
2.4.3. Library as a Learning Resource	<ul style="list-style-type: none"> The College library has 1,24,108 books titles and subscribes to 46 national journals, 03 international journals and 37 magazines. It has 6384 back volumes of journals. The resource of the Library has been augmented continuously during the last five years. The library has open access system, reading room facility for teachers, scholars and students. The library is partially computerised, has internet, INFLIBNET and reprographic facilities and functions under the supervision of a advisory committee.
2.4.4. ICT as Learning Resources	<ul style="list-style-type: none"> There are 384 Computer in the College. The College computer centres caters to the needs of students and faculty. College has LAN facility. Wi-Fi and internet facility is available and the College website is updated regularly.
2.4.5. Other Facilities	<ul style="list-style-type: none"> There is adequate provision for administrative and academic activities. Parking, multi-gym, auditorium, indoor and outdoor sports and canteen facilities are available. College has world class Shooting Range Health Centre in the College attended by a qualified Doctor. The College has adequate water and electricity with generators.
2.4.6. Best Practices in the Development of Infrastructure & Learning Resources (If any)	<ul style="list-style-type: none"> Optimal use of available infrastructural facilities and learning resources. ICT has been integrated in the College activities.
2.5. Student Support and Progression	
2.5.1. Student Progression	<ul style="list-style-type: none"> Efforts are being made to minimize the dropout rate. The pass percentage of the College is impressive and students have been securing university ranks on a regular basis.



	<ul style="list-style-type: none"> Track record of student's progression for further studies / employment needs to be further strengthened.
2.5.2. Student Support	<ul style="list-style-type: none"> The College publishes its prospectus with all necessary details The College has placement and counselling centre The College supports the students through various schemes like endowment, free studentship, merit awards and scholarships The College has a Grievance Redressal mechanism in place. The College has an active alumni association. Personal rapport with parents facilitates student's discipline.
2.5.3. Student Activities	<ul style="list-style-type: none"> The College has excellent indoor games and sports facilities. Organises cultural programmes and sports events on various occasions which provides opportunity to the students to exhibit and develop their talents. Students participate in cultural and sports events at intercollegiate and inter-University meet as well as at National and International events. The students who are proficient in sports are given financial incentives. The College has a good track record of winning prizes
2.5.4. Best Practices in Student Support and Progression (If any)	<ul style="list-style-type: none"> The College has instituted prizes and cash awards to felicitate students who excel in studies, cultural activities, games and sports.
2.6. Governance and Leadership	
2.6.1. Institutional Vision and Leadership	<ul style="list-style-type: none"> The College has well defined vision and mission. The Management provides support to the College in its endeavour to achieve academic excellence. Since last accreditation the College has moved towards sustained academic progress. The institutional leadership is highly sensitive towards its social responsibilities.
2.6.2. Organizational Arrangements	<ul style="list-style-type: none"> The Principal plays a key role in the planning and management of the College and coordinates all activities. The College follows a decentralised system with an effective internal coordination.



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	<ul style="list-style-type: none"> • Participation of Stakeholders in governance is visible.
2.6.3. Strategy development & deployment	<ul style="list-style-type: none"> • The College has a prospective plan for future development of its infrastructure and academic programmes. • MIS is in place. • Various committees constituted for smooth running of academic programs.
2.6.4. Human Resource Management	<ul style="list-style-type: none"> • The College follows self-appraisal method of evaluation of performance of teachers in teaching research and extension activities. • The recruitment of teaching staff is as per norms of statutory bodies. • The management is proactive towards its employees.
2.6.5. Financial Management & Resource Mobilisation	<ul style="list-style-type: none"> • The College has good finance culture and its accounts are regularly audited. • The College has mobilised resources for endowment purposes. • The College utilises the funds provided by the UGC and State Government meaningfully and effectively. • Proper Budget is prepared every year to ensure optimum utilization of funds received from other sources
2.6.6. Best Practices in Governance and Leadership (If any)	<ul style="list-style-type: none"> • College has participatory Governance
2.7 Innovative Practices	
2.7.1. Internal Quality Assurance System	<ul style="list-style-type: none"> • The College has established an IQAC which meets at regular intervals to suggest measures for quality improvement. • Students' feedback, alumni response and observations of the stakeholders are taken into consideration for improving quality. • Different committees are constituted for decentralisation of responsibilities and efficient functioning.
2.7.2. Inclusive practices	<ul style="list-style-type: none"> • The College makes effort for the holistic development of the students. • Remedial classes and skill development programmes are initiated for students. • Development of social responsibility and citizenship among students through NSS, NCC, Centre for Slum Studies etc.

R.R.R.

	<ul style="list-style-type: none"> The visually challenged students are provided special facilities.
2.7.3. Stakeholder Relationship	<ul style="list-style-type: none"> Healthy interpersonal relationship between various Stakeholders is noticeable. Management facilitates the interaction of all the Stakeholders and encourages their connectivity.
Section-III: OVERALL ANALYSIS	
3.1. Institutional Strengths	<ul style="list-style-type: none"> Vibrant NSS and NCC units. Healthy research culture, with some of the Departments having a track record of PhD guidance/output, research projects, national level seminars; creative writings and winning awards/honours. Proactive Management Committed faculty Computerisation of most of the activities of the College. Wining performance of the students in the University examinations and co-curricular and extracurricular activities are praiseworthy.
3.2. Institutional Weaknesses	<ul style="list-style-type: none"> Inadequate Internet connectivity in terms of student strength for e-learning. Participation of women in governance is inadequate. Weak Research Culture in Social Sciences and Humanities
3.3. Institutional Opportunities	<ul style="list-style-type: none"> Better linkages with industry and corporate sector as being located in one of the big metropolitan cities. To develop networking with professional agencies for specific career counselling and guidance. To offer more courses in emerging areas which would enhance the employability Providing access and quality education to large number of students.
3.4. Institutional Challenges	<ul style="list-style-type: none"> Space constraint Keeping pace with changes in Higher Education. Development of employable / entrepreneurial / professional skills amongst the students belonging to disadvantaged sections of society.

[Handwritten Signature]

Section IV: Recommendations for Quality Enhancement of the Institution

- IQAC be further strengthened.
- Initiate measures to offer more need based PG courses particularly in Social Sciences and Humanities.
- The College may think of starting value added courses in areas such as Disaster Management; Stress Management etc.
- The ICT thrust in teaching / learning to be augmented.
- Adequate thrust may be given to faculty development activities, particularly in latest pedagogy and e-content preparation.
- Placement cell may be strengthened with a full time placement officer.
- College may establish a language laboratory
- Management may think of establishing an Employees' Co-operative Society and Medi-claim facility
- Alternative environment friendly energy resources and rain water Harvesting may be explored for campus.

I agree with the observations of the Peer Team as given in this Report.


Prof. Suhas Pednekar 11/08/2012
Principal
Principal
Ramarain Ruzia College
Matunga, Mumbai-400019

Signature of the Peer Team Members:

Prof. R.K. Kale
Chairman

11.8.12

Prof. P.K. Biswasroy
Member Coordinator

11/8/12

Dr. Varkey K.T.
Member

11.8.12

Dr. (Mrs.) K. Rama
NAAC Coordinator

Place: Matunga, Mumbai
Date : 11th August, 2012



डॉ. के. पी. सिंह
संयुक्त सचिव
Dr. K.P. Singh
Joint Secretary



सत्यमेव जयते

SPD +
JPS + RP + AL
24/6/14

विश्वविद्यालय अनुदान आयोग
University Grants Commission
(मानव संसाधन विकास मंत्रालय, भारत सरकार)
(Ministry of Human Resource Development, Govt. of India)

बहादुरशाह ज़फ़र मार्ग, नई दिल्ली-110002
Bahadur Shah Zafar Marg, New Delhi-110002

दूरभाष Phone : कार्यालय Off : 011-2323 9597

फैक्स Fax : 011-2323 6347, e-mail: kpsinghugc@nic.in

SPEED POST

DO.No.20-46-90/2010-2014/(NS/PE)

11.9 JUN 2014 June, 2014

Dear Sir,

This has reference to the Interface Meeting held on 03.06.2014 with the Expert Committee on "Colleges with Potential for Excellence"(CPE) to consider the proposal for additional grant of Rs.50.00 lakhs under the CPE Scheme.

I am glad to inform you that on the recommendation of the Expert Committee, UGC has approved the additional grant of Rs.50.00 lakhs. In this regard, it is to inform you that the terms and condition of CE status will remained same.

Based on the recommendation of the Expert Committee, the total budget approved to your College under the Scheme has been revised as under:-

Non-Recurring(NR) (Capital Assets-35)		
Sl. No.	Budget Head	Amount (Rs. in lakhs)
1	Lab up-gradation	55.00
2	Language Lab equipment	10.00
3	Teaching Aids	05.00
4	Library Automation	05.00
5	Computers	10.00
6.	Software's	03.00
6	Internet connectivity	03.00
7	Up-gradation of class rooms/seminar halls (no renovation)	20.00
8	Any other activities as per 7 (e)	19.00
Total: (Rupees one crore and thirty lakhs only)		130.00

Recurring (R) (Grant-in-aid General – 31)		
Sl. No.	Budget Head	Amount (Rs. in lakhs)
1	Lab consumables	30.00
2	Books & Journals	10.00
3	Internet services	04.00
4	Maintenance of equipments	10.00
5	Enrichment of teachers	10.00
6	Any other activities	06.00
Total: (Rupees Seventy Lakhs only)		70.00

Grand Total (NR+R) = Rs.200.00 Lakh (Rupees Two Hundred Lakhs Only).

Contd../-





डॉ. के. पी. सिंह
संयुक्त सचिव
Dr. K.P. Singh
Joint Secretary



सत्यमेव जयते

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फैक्स Fax : 011-2323 6347, e-mail: kpsingh.ugc@nic.in



SPEED POST

4 AUG 2015

D.O. No.3-19/2015(KAUSHAL)

Dear Sir/Madam,

Kindly refer to the proposal of your institution for starting vocational courses under the scheme of Deen Dayal Upadhyay Kaushal Kendra and subsequent interface with the Expert Committee in the office of the UGC. In this connection, this is to inform you that on the recommendation of the Expert Committee, UGC has approved establishment of DDU KAUSHAL KENDRA at your institution. You may start vocational course(s) as per the details given below:

Name of the Programs Approved	B. Voc. & M.Voc.
Sectors/Trades Approved	i. Green House Management. ii. Pharma Analytical Sciences.
Intake	50 (Each Programme)

Further, UGC has also approved a grant of Rs. 3.65 Cr. (Rs. three crore and sixty five lakhs only) to your institution under the scheme for a period of two years as per the details given below:

Sl. No.	Budget Head	Amount (Rupees in Crores)	
		F. Y. 2015 - 16	F. Y. 2016 - 17
Grant-in-aid General – 35 (Non-recurring)			
i.	Start-up Assistance	0.80	0.20
Grant-in-aid General – 31 (Recurring)			
i.	Staff (on Contract basis) a. Professor -0 b. Associate Professor -2 c. Assistant Professors-4 d. MTS -1 e. Technical Assistant - 1	0.80	0.85
ii.	Operative Cost	0.50	0.50
Total (year-wise)		2.10	1.55

Grand Total = Rs. 3.65 Cr. (Rs. three crore and sixty five lakhs only)



Ramnarain Ruia College
L.N. Road, Matunga, Mumbai - 400 019.