



SHIKSHANA PRASARAKA MANDALI'S
RAMNARAIN RUIA COLLEGE OF ARTS AND SCIENCE
MUMBAI - 400 019

ANNUAL QUALITY ASSURANCE REPORT (AQAR)
SUBMITTED TO NAAC

2015-16

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THE ANNUAL QUALITY ASSURANCE REPORT (AQAR) OF THE IQAC

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC. (*Note: The AQAR period would be the Academic Year. For example, July 1, 2012 to June 30, 2013*)

Part – A

I. Details of the Institution

1.1 Name of the Institution

Ramnarain Ruia College Arts & Science

1.2 Address Line 1

L.N.Road

Address Line 2

Matunga -E

City/Town

Mumbai

State

Maharashtra

Pin Code

400019

Institution e-mail address

principal@ruiacollege.edu

Contact Nos.

022-24143098, 022-24143119

Name of the Head of the Institution:

Prof. Suhas Pednekar

Tel. No. with STD Code:

Mobile:

Name of the IQAC Co-ordinator:

Mobile:

IQAC e-mail address:

1.3 NAAC Track ID (For ex. MHCOGN 18879)

1.4 NAAC Executive Committee No. & Date:
(For Example EC/32/A&A/143 dated 3-5-2004.
This EC no. is available in the right corner- bottom
of your institution's Accreditation Certificate)

1.5 Website address:

Web-link of the AQAR:

For ex. <http://www.ladykeanecollege.edu.in/AQAR2012-13.doc>

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	4 star	-	1999	2007
2	2 nd Cycle	A	-	2007	2012
3	3 rd Cycle	A	3.65	2012	Sept 14 th 2017
4	4 th Cycle	-	-	-	-

1.7 Date of Establishment of IQAC: DD/MM/YYYY

1.8 AQAR for the year (for example 2010-11)

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC (*for example AQAR 2010-11 submitted to NAAC on 12-10-2011*)

i. AQAR	<u>2009-10 date: 1-10-2011</u>	(DD/MM/YYYY)
ii. AQAR	<u>2010-11 date: 28-09-2011</u>	(DD/MM/YYYY)
iii. AQAR	<u>2011-12 date: 06-09-2013</u>	(DD/MM/YYYY)
iv. AQAR	<u>2012-13 date: 30-09-2013</u>	(DD/MM/YYYY)
v. AQAR	<u>2013-14 date: 20-11-2014</u>	(DD/MM/YYYY)
vi. AQAR	<u>2014-15 date: 05-12-2015</u>	(DD/MM/YYYY)
vii. AQAR	<u>2015-16 date: 04-11-2016</u>	(DD/MM/YYYY)

1.10 Institutional Status

University State Central Deemed Private

Affiliated College Yes No

Constituent College Yes No

Autonomous college of UGC Yes No

Regulatory Agency approved Institution Yes No

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution Co-education Men Women

Urban Rural Tribal

Financial Status Grant-in-aid C 2(f) UGC 12B

Grant-in-aid + Self Financing Totally Self-financing

1.11 Type of Faculty/Programme

Arts Science Commerce Law PEI (Phys Edu)

TEI (Edu) Engineering Health Science Management

Others (Specify)

1.12 Name of the Affiliating University (*for the Colleges*)

1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. /University	<input type="text"/>		
University with Potential for Excellence	<input type="text"/>	UGC-CPE	<input checked="" type="checkbox"/>
DST Star Scheme	<input checked="" type="checkbox"/>	UGC-CE	<input checked="" type="checkbox"/>
UGC-Special Assistance Programme	B.Voc	DST-FIST	<input checked="" type="checkbox"/>
UGC-Innovative PG programmes	<input checked="" type="checkbox"/>	Any other (<i>Specify</i>)	DDU KAUSHAL
UGC-COP Programmes	<input type="text"/>		

2. IQAC Composition and Activities

2.1 No. of Teachers	<input type="text" value="12"/>
2.2 No. of Administrative/Technical staff	<input type="text" value="1"/>
2.3 No. of students	<input type="text" value="2"/>
2.4 No. of Management representatives	<input type="text" value="1"/>
2.5 No. of Alumni	<input type="text" value="1"/>
2.6 No. of any other stakeholder and community representatives	<input type="text" value="Nil"/>
2.7 No. of Employers/ Industrialists	<input type="text" value="Nil"/>
2.8 No. of other External Experts	<input type="text" value="1"/>
2.9 Total No. of members	<input type="text" value="18"/>
2.10 No. of IQAC meetings held:	<input type="text" value="6"/>

2.11 No. of meetings with various stakeholders: No. Faculty
Non-Teaching Staff Students Alumni Others

2.12 Has IQAC received any funding from UGC during the year? Yes No
If yes, mention the amount

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos. International National State Institution Level

(ii) Themes

- Workshop :- Curriculum Design & Development , POGIL ,workshops on Techniques in Molecular Biology for Teaching staff & Research Students
- Stress Management and Team Building workshops for Non-teaching staff.

2.14 Significant Activities and contributions made by IQAC

- Preparation of the Prospectus for the Academic year 2015-16
- On line student feedback conducted on 20th February 2016
- Online Submission of AQAR for 2014-15 to NAAC in 05-12-2015
- Prepared and submitted the Profile of the College as per the required formats to
 - University of Mumbai, S P Mandali, Pune (College Management), All India Survey on Higher Education, Ministry of HRD, New Delhi(2015-16)
- Systematic and continuous student mentoring carried out for all students of the college
- Suggestions and support given to various committees for conducting Awareness programmes.
- Environmental activities carried out:
 - Organised environmental awareness lectures on :
 - Threat to Environment
 - Chemical Industry: its sustenance & environment
 - Faculty Academic Diary was made from recycled paper. The college was awarded a Green certificate by Ecofriends Industries
 - Carried out E waste disposal where students & staff also took initiative
 - Canteen waste was recycled to Compost in college premise
 - Fabrication of Solar Distillation units & study of their efficacy which was carried out by SYBSc students(Microbiology& Life Sciences)
 - A team of Four SYBSc (Microbiology) students worked on Solar Disinfection of drinking water in collaboration with Don Bosco Institute of Technology, Kurla, Mumbai.
 - Care & plantation of trees in nearby area was carried out by F Y & S Y Botany students
 - Meetings between Varshasookt Consultancy & Reliance communications Ltd. Were carried out to learn for possibilities of collaborations for Biogas, on the leasing of Solar Power System and water harvesting.

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality Enhancement and the outcome achieved by the end of the year *

Plan of Action	Achievements
To Strengthen mentoring, attendance and result	Mentoring carried out for all students. Each teacher was allotted a group of students for mentoring. Mentors were provided orientation in mentoring service and were also offered periodic help in the mentoring of students as and when required.
To further Strengthen the Career guidance & Placement cell activities- Organise training for competitive tests	Career guidance & Placement cell conducted a number of workshops to expose the students to various conventional and unconventional career opportunities. The cell also arranged an informative talk on "Preparations for Civil Service Examinations", a seminar on "Study Abroad." Campus selection was carried out through 14 companies.
To Conduct Academic audit	Departments and college prepared the report for Academic audit
Strengthening International Collaboration.	Signed MoU with Commonwealth of Pennsylvania. 6 faculty headed by the principal visited five universities in Pennsylvania and 40 students and 2 faculty lead by the vice principal also availed this collaboration. They visited 7 Universities in Pennsylvania between 18 th October to 26 th October 2015. Dr. Vasumati Badrinathan from French department was awarded with the prestigious Fullbright 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.)
To organise FDP/ exchange programmes to enhance the teaching learning process	IQAC organised a training On Moodle, Curriculum design & Development, POGIL, three workshop on Techniques in Molecular Biology for Teaching staff & two for Research Students.
To organize Development programmes for non- teaching staff	Stress Management and Team Building for Non-teaching staff (Two).
To encourage the departments to submit proposals for organising Seminar/ conference/ workshop	2 seminars were organised by the following departments-Greenhouse Management and History. Most of the departments conducted syllabus related workshops and training programmes for students /Staff
To encourage all departments to have at least one ISR -community services /collaboration	To inculcate social responsibility among the students, IQAC established an Extension and outreach committee which conducts awareness lectures and activities for students

To enhance Environmental awareness activities	Environmental awareness committee conducted awareness lectures. SY BSc Botany students prepared and displayed posters regarding Environmental awareness and cleanliness of the surroundings.
To train the students in laboratory safety	Safety and security committee organised Chemical handling and laboratory safety workshops for all F.Y. B.Sc. students and non teaching staff of all science departments by Dr Rajiv Jukar and Dr. Sunil Divekar, eminent experts from industry who have experience of more than two decades. Demonstration of the use of newly purchased fire extinguishers was organized for teaching non teaching staff of the college in the Quadrangle.

* Attach the Academic Calendar of the year as Annexure. *Annexure I*

2.16 Whether the AQAR was placed in statutory body Yes No
Management Syndicate Any other body

Provide the details of the action taken

AQAR was discussed in IQAC meeting with all the staff members. Quality improvement initiatives were discussed by the Principal with the staff members.
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Part – B

Criterion – I

I. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	12	1(English)		
PG	05- Aided- M Sc (By Papers) 10- Unaided M Sc (By Papers) 08 - M Sc (By Research)		08	
UG	Arts Aided-12 Unaided-03 Science Aided - 08 Unaided - 04		03- Arts 04- Science	
PG Diploma	1	-	-	-
Advanced Diploma	-	-	-	-
Diploma	1	-	-	-
Certificate	-	-	-	-
Others	<i>Skill based courses</i> <ul style="list-style-type: none"> • B Voc (Sanctioned by the UGC, New Delhi) (2014): • Tourism & Travel Management • Green House Management 2	<i>Skill based course</i> <ul style="list-style-type: none"> • B Voc (Sanctioned by the UGC, New Delhi) (2015): • Pharma Analytical Sciences 1	-	-
Total	66	2	15	
Interdisciplinary				
Innovative				

- 1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options
(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	✓ (UG & PG)
Trimester	
Annual	

- 1.3 Feedback from stakeholders* (On all aspects)
- | | | | | | | | |
|--------------------------------|-------------------------------------|---------|-------------------------------------|-------------------------------------|-------------------------------------|----------|-------------------------------------|
| Alumni | <input type="checkbox"/> | Parents | <input checked="" type="checkbox"/> | Employers | <input checked="" type="checkbox"/> | Students | <input checked="" type="checkbox"/> |
| Mode of feedback : Online | <input checked="" type="checkbox"/> | Manual | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| Co-operating schools (for PEI) | <input type="checkbox"/> | | | | | | |

*Please provide an analysis of the feedback in the Annexure- **Annexure II**

- 1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

The University of Mumbai revises the syllabus both in practical and theory every 3 years as per the recommendation of Board of Studies in various subjects. The same syllabus is followed by all the affiliated colleges.

- 1.5 Any new Department/Centre introduced during the year. If yes, give details.

DDU KAUSHAL Kendra (2015-16)

Ramnarain Ruia College is the only college in Mumbai University to be Granted permission by UGC to start a KAUSHAL (Deen Dayal Upadhyay Centres for knowledge Acquisition and Up gradation of Skilled Human Abilities and Livelihood)Kendra in August 2015 under the 12th Plan Scheme. This innovative scheme provides skill-based, job-oriented degree under the title “B.Voc” (Bachelor of Vocation). The college is running three courses under this centre, namely B Voc in Green House Management, Pharma Analytical Sciences and in Tourism and Travel Management.

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
68	26	41	1	-

2.2 No. of permanent faculty with Ph.D.

44

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
26	-	41	-	1	-	-	-	68	-

2.4 No. of Guest and Visiting faculty and Temporary faculty

4

76

73

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	09	29	5
Presented papers	16	17	2
Resource Persons	4	5	13

2.6 Innovative processes adopted by the institution in Teaching and Learning:

- Use of ICT in Teaching ,learning and evaluation
- Introduced Learner- centered teaching strategies (Moodle, POGIL, problem solving, project based, Photo Journal, Flip your Class room)
- Preparation of models, charts, enacting skits to convey difficult to understand concepts.
- Audio-visual facilities for exposing the students to various topics/
- Conducting field trips and industrial visits

2.7 Total No. of actual teaching days during this academic year

164

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

The institution implements rules laid down by University of Mumbai.

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

16

-

27

2.10 Average percentage of attendance of students

82

2.11 Course/Programme wise distribution of pass percentage:

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
TYBA	378	NA	54.23	30.16	--	84.39
TYBSc	390	NA	70.0	17.43	--	87.43
TYBMM (Marathi & Eng. medium)	115	NA	40.86	55.65	--	96.51
PG	219	NA	48.4	38.35	-	86.75
PhD	69	NA	-	-		-

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

IQAC Contribution to teaching learning process:

- Suggested the Departments to submit their plans related to workshops/ seminars /conferences before the commencement of the year.
- Encouraging participation in Faculty development programmes
- Suggestions given to faculty to use alternate or innovative methods of teaching and evaluation
- Conducting workshops or interactive sessions to enhance teaching competency(on POGIL, Curriculum Design & Development)
- Suggestions given to Departments and all College committees to organise awareness lectures/ popular lecture students to sensitize them towards environmental / social / Gender Issues.

Monitor:

- Head of Departments' monthly meetings with the Principal and IQAC gives an insight into the activities being conducted and exchange of suggestions/ assistance required etc are discussed during this meeting.
- Strengthened the mentoring and remedial teaching practices.
- Academic diary is given to all the teaching staff for vividly outlining the Teaching plan in the beginning of the year itself. The details are to be fed in regularly and then the same is checked by the HOD' s at the end of the year.

Evaluation:

- Students' feedback is used to understand the strong and weak areas of teachers and accordingly necessary steps to be taken are discussed as well as suggested by the Principal. Informal feed is also taken from teaching, non teaching through suggestion boxes Parents feed back is taken by every department and accordingly necessary steps are taken by the departments.

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	04
UGC – Faculty Improvement Programme	04
HRD programmes	39 staff sanctioned permission for attending FDP(7 staff members visited 7 universities in US)
Orientation programmes	--
Faculty exchange programme	01 (Full bright scholarship)
Staff training conducted by the university	05(short term)
Staff training conducted by other institutions	01
Summer / Winter schools, Workshops, etc.	7
Others	--

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	22	8	--	
Technical Staff	69	6	2	Total : 48

Criterion – III

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

IQAC gives suggestions to the Innovation and Research Committee and departments to encourage research based training and research related activities in the Institution. It develops strategies to ensure sustained excellence in quality research, research training and knowledge transfer.

SCIENCE

- Formulated and submitted the proposal for “Netravali Research Paper Competition” (NRPC) for funding of a research scholar to present research paper at a national conference.
- Celebrated 30 years of completion of DBT, Government of India. As a part of the programme several innovative activities like bio-simulation, skits with scientific themes, slogan, bio-rangoli etc. were conducted. Students from Arts performed mime on ‘Tree Funeral’ and spread the message of saving trees.
- Presentation by research students on their research topic.
- Hands on training on Bioanalytical techniques for research scholars.
- Workshop on SOP preparation of ASU drugs for PG students of Bioanalytical Sciences.
- Appointment of research students as JRF’s for various projects funded by government agencies like UGC.
- Forwarded 2 major and 5 minor research projects proposals by faculty members.
- Provided guidance to departments applying under Star College Scheme.

ARTS

- Department of Sanskrit organized a lecture by Dr. Gauri Mahulikar, Head, University of Mumbai on ‘Research Methodology’ to guide the UG students on how to prepare and present a research paper. Twenty two students participated and presented in the National Level conference ‘Bruhan Maharashtra Prachya Vidya Parishad’ held by Fergusson College, Pune.
- The department of Sanskrit also organized a lecture on ‘Campus Literature in Sanskrit’ to guide the UG students for participation in the state level research paper competition on the above mentioned topic held by S. P. College, Pune. Eighteen students participated and presented their research papers and nine students bagged prizes.
- UG students from various subjects like History, Economics, Philosophy presented their research papers in various conferences in Maharashtra and outside. These students were guided by experts.
- UG students were also trained to work as research assistants on a project ‘Police in Gujrat: Continuity and Change’ supported by Raksha Shakti University, Gujrat.
- Forwarded 1 minor research project proposal by faculty member.

3.2 Details regarding major projects—give the list of projects

	Completed	Ongoing	Sanctioned	Submitted
Number	01	05	--	02
Outlay in Rs. Lakhs	12.82	112.25	--	73.54

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	05	08	--	05
Outlay in Rs. Lakhs	1.34	12.05	--	13.11

3.4 Details on research publications

	International	National	Others
Peer Review Journals	41	15	--
Non-Peer Review Journals	--	--	--
e-Journals	7	--	--
Conference proceedings	25	8	--

3.5 Details on Impact factor of publications:

Range Average h-index Nos. in SCOPUS

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned Rs/-	Received Rs/-
Major projects (on going)	3	NEHU	5377000/-	5377000/-
	3	UGC	15,49,000/-	15,49,000/-
	2	Willingdon Sports, Club, Mumbai	25,00,000/-	25,00,000/-
	1	Raksha Shakti University, Ahmedabad	1480700/-	1480700/-
	2	National Archives of India	3,19,500/-	3,19,500/-
Major projects (completed)	2	National Medicinal Plant Board, Government of India	12,82,500/-	12,82,500/-
Minor Projects (on going)	2	UGC	4,90,000/-	4,90,000/-
	2	UGC	1,90,000/-	1,90,000/-
	2	UGC	1,65,000/-	1,65,000/-
	1	Sir Dorabjee Tata Post-Doctoral fellowship instituted by Heras Institute of Indian History and Culture, St. Xavier's College,	1,00,000/-	1,00,000/-

		Mumbai		
	1	Asiatic Society of Mumbai	125000/-	125000/-
	2	UGC	85000/-	85000/-
Interdisciplinary Projects		-		
Industry sponsored		-		
Projects sponsored by the University/ College	1	Mumbai University	25,000/-	25,000/-
	1	Mumbai University	25500/-	25500/-
Students research projects (other than compulsory by the University)		-		
Any other(Specify)				
Total		-		

3.7 No. of books published i) With ISBN No. Chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from - NA

UGC-SAP CAS DST-FIST
DPE DBT Scheme/funds

3.9 For colleges
Autonomy CPE DBT Star Scheme
INSPIRE CE Any Other (specify)

3.10 Revenue generated through consultancy

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number		-	-	-	2+ 11(workshops)
Sponsoring agencies					Garware Institution of Career Development and Education

3.12 No. of faculty served as experts, chairpersons or resource persons

22

3.13 No. of collaborations

11

International

2

National

5

Any other

29(state)

3.14 No. of linkages created during this year

18

3.15 Total budget for research for current year in lakhs :

From Funding agency

134.77

From Management of University/College

0.50

Total

135.27

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	1
	Granted	4
International	Applied	Nil
	Granted	
Commercialised	Applied	Nil
	Granted	

3.17 No. of research awards/ recognitions received by faculty and research fellows

Of the institute in the year

Total	International	National	State	University	Dist	College
2	2	-	-	-	-	-

3.18 No. of faculty from the Institution

21

who are Ph. D. Guides and students registered under them

68

3.19 No. of Ph.D. awarded by faculty from the Institution

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF SRF Project Fellows Any other

3.21 No. of students Participated in NSS events:

University level	<input type="text" value="104"/>	State level	<input type="text" value="04"/>
National level	<input type="text" value="1"/>	International level	<input type="text" value="-"/>

3.22 No. of students participated in NCC events:

University level	<input type="text" value="156"/>	State level	<input type="text" value="8"/>
National level	<input type="text" value="23"/>	International level	<input type="text" value="-"/>

3.23 No. of Awards won in NSS:

University level	<input type="text" value="18"/>	State level	<input type="text" value="-"/>
National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>

3.24 No. of Awards won in NCC:

University level	4	State level	14
National level	3	International level	-

3.25 No. of Extension activities organized

University forum	-	College forum	9		
NCC	5	NSS	45	Any other	2

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- In order to sensitize the students to basic issues of social inequity, Institutional Social Responsibility, Centre for Slum Studies conducted courses and also arranged field visits to the Bandra, Dharavi and Worli slums in Mumbai.
- The centre also signed an MOU with International Company , Suez Environment India Private Limited, on Mumbai Water Distribution Improvement Programme.
- NSS and NCC students are also actively involved in extension programmes. They also conducted activities as follows:
 - Special Remedial Coaching for Tribal girls of Eklavya Parivartan Vidyalaya of Usgaon, Vasai
 - Blood Donation Drives
 - conducted collaborative Program With CORO(women empowerment), SAKAL Media group(Street plays on social issues), Stree Mukti Sanghatana (E-waste collection from various societies), NFB and TATA(activities for visually challenged students), and with KOTAK Education Foundation (remedial teaching for school children).
- All TYBSc students of Life Sciences Department participated in tree plantation drive at Neral.
- TY B A Marathi students organized Vishnushastri Chiplunkar lecture series for society.
- SY and TY BSc students of Botany were involved in tree plantation and caring of trees in societies around the college.
- Under the programme, ‘Swachhata Abhiyan’, Ruia NCC Girls Unit organized a Cleanliness Drive at Shivaji Park. This activity was volunteered by CQMS Shehnaz Shaikh.

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	2 acres	NA	-	2 acres
Class rooms	39	2	-	41
Laboratories	19	1	-	20
Seminar Halls	2	NA	-	2
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	-	20	CE, KAUSHAL	20
Value of the equipment purchased during the year (Rs. in Lakhs)	-	Rs. 77,85,075	-	Rs. 77,85,075
Others	-	-	-	-

4.2 Computerization of administration and library

The Library collection is computerized using SLIM (Software for Library Management). All bibliographic details of books, journals are accessible through the Online Public Access Catalogue (OPAC). Library information is also provided on Library's webpage in Ruia College website - www.ruiacollege.edu

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value Rs.	No.	Value Rs.	No.	Value Rs.
Text Books	38615	Approx. Rs. 1 crore 49 lakh	447	59,740.00	39062	Approx. Rs. 1 crore 60 lakh
Reference Books	91994		1408	1012,754.00	93402	
e-Books	Nil	Nil	Nil	Nil	Nil	Nil
Total Books	130609	~ 1,49,00,000.00	1855	1072,494.00	132464	~ 1,60,00,000.00
Journals	86	Different every year	84	108,720.00	84	Different every year
e-Journals	Nil	Nil	Nil	Nil	Nil	Nil
Digital Database	Nil	Nil	Nil	Nil	Nil	Nil
CD & Video	217	50021.00	Nil	Nil	Nil	Nil
Others (specify)	-	-	-	-	-	-

4.4 Technology up gradation (overall)

	Total Computers	Computing Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	168	1	60	1	1	12	72	21 (Lib. + Language Lab)
Added	20	8	Nil	Nil	Nil	02	10	-
Total	188	9	60	1	1	14	82	21

4.5 Computer, Internet access, training to teachers and students and any other programme for technology up gradation (Networking, e-Governance etc.)

- | |
|---|
| <ul style="list-style-type: none"> • Moodle training to teachers • Tally training to Administrative staff |
|---|

4.6 Amount spent on maintenance in lakhs :

i) ICT	Rs. 24,08,447/-
ii) Campus Infrastructure and facilities	Rs. 53,04,977/-
iii) Equipments	Rs. 77,85,075/-
iv) Others	Rs. 12,68,755/-
Total :	Rs. 1,67,67,254/-

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

IQAC conducts awareness programmes through various committees like Gender sensitisation committee against sexual harassment and internal complaints committee, Antiragging Committee, Environment awareness committee, Vidhyarthi Pradinidhi Mandal and Nature club.

5.2 Efforts made by the institution for tracking the progression

- Head of departments provide monthly departmental report to the Principal in Departmental meeting.
- Students feedback on teacher's teaching learning is evaluated by IQAC. In addition some departments conduct the feedback at the departmental level too.
- Each faculty is provided an Academic diary in the beginning of the academic year to keep the record of teaching plan and all co-curricular and extracurricular activities carried outwork carried out
- Departmental Profile and Personal Profile of faculty are collected at the end of academic year to assist evaluation and track the progression.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
2598	453	59	4(MSc RES)

(b) No. of students outside the state

16

(c) No. of international students

Nil

	No	%		No	%
Men	1086	31.0	Women	2417	68.99

Last Year (2014-15)						This Year (2015-16)					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
2248	424	54	631	75	3432	2235	447	50	525	65	3257

Demand ratio

~1:4

Dropout %

~1.5%

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

Career guidance & placement cell organised 3 work shop, 2 seminars and 5 motivational talks on various career options gearing the students up to various career options and interactive sessions in order to tap entrepreneurial abilities in students.

- on “Preparations for Civil Service Examinations”.
- on “ Stress Management and Team Building”, Graphology in collaboration with Times of India, on “ Corporate Readiness’ with Wasan Knowledge Hub, aptitude test
- seminar on interview processes, group discussion, A mock test based on UPSC Prelim Examination by Roya IAS Academy, Mumbai; personal interview in collaboration with ITM group, Kharghar
- The different scholarships and fellowships offered by the various universities abroad with Ace Overseas

No. of students beneficiaries

587

5.5 No. of students qualified in these examinations

NET

4

SET/SLET

2

GATE

1

CAT

IAS/IPS etc

State PSC

UPSC

Others

5.6 Details of student counselling and career guidance

250 UG and 98 PG students availed the student counselling and career guidance facility from different departments.

No. of students benefitted

348

5.7 Details of campus placement

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
L &T InfoTech	53	20	-
Rubicon Pvt.	30	10	
HDFC	15	03	
Kanasi Nerolac	03	01	
Clariant Ltd	01	01	
IBM	03	01	
Wipro	17	05	
Johnson and Johnson	07	01	
Cognizant	10	04	
Hi-media Labs	07	01	
Willingdon Sports Club	05	01	
Cipla	06	06	
Accu Test	01	01	
ATOS India	15	06	
TCS	02	01	
SEEDInotech	04	04	
Hi- Media	06	01	
Travelogue Mumbai		01	
French Ministry of Education	01	01	
Reliance	02	02	
Kansai Nerolac	09	01	

5.8 Details of gender sensitization programmes

- To sensitise the students about gender issues the following activities were carried out:
 - Gender based Film Festival Samabhav collaboration with MAVA
 - Self Defence (collaborative Program with E.B.T.R. A)
 - Gender Sensitization Orientation,
 - Street Play Performances
 - Yuva Abhivyakti competitions
 - Activities with CORO

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events

State/ University level National level International level

No. of students participated in cultural events

State/ University level National level International level

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports: State/ University level National level International level

Cultural: State/ University level National level International level

5.10 Scholarships and Financial Support

	Number of students	Amount Rs
Financial support from institution	--	--
Financial support from government	544	7021890/-
Financial support from other sources	--	--
Number of students who received International/ National recognitions	--	--

5.11 Student organised / initiatives –

Fairs : State/ University level National level International level

Exhibition: State/ University level National level International level

5.12 No. of social initiatives undertaken by the students

5.13 Major grievances of students (if any) redressed: NIL

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Vision

“To emerge as a Center of Excellence in Higher Learning and Innovative Research to meet the challenges of the Global Society”

Mission

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

6.2 Does the Institution has a management Information System

The college runs ‘Centralized Computerization of Management System’ (CCMS), which is very effective in maintaining office and administration records, exam results, attendance, student data and faculty related information. College has made pre-admission form online from 2014-15. CCMS is also linked to the college website. The college has continually improved and maintained the quality and accuracy of management information system through the successful use of ICT. The MIS of the college is extremely useful in planning, maintaining and reviewing the data for taking decisions and preparing future strategies. For the smooth and effective functioning of the College, interactions with stakeholders comprising of faculty, parents, alumnae and the students, are organised. Feedback received from stakeholders are considered for continuous review and revision which are relevant to the changing needs of higher education.

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

College follows the Curriculum set down by the University of Mumbai Board of Studies. Many of staff members are a part of BOS and become a part of reviewing and framing the syllabus.

6.3.2 Teaching and Learning

Faculty members are motivated to use innovative teaching methods so that the teaching learning becomes student centric. Training sessions were conducted for faculty in POGIL. College introduced project based learning to UG students under DBT star college scheme. College also introduced Research base learning. Three faculty underwent training at IISER for Research as a Pedagogical tool in teaching & learning.

6.3.3 Examination and Evaluation

Credit based grading system has been introduced as per University of Mumbai rules. It includes continuous assessment and end semester Examinations with 75 :25 weightage.

6.3.4 Research and Development

- College has a long tradition of research and fosters research culture among the faculty and students. College has an Innovation and Research Committee to encourage the active involvement of faculty and students in research. Teachers are encouraged to apply for research projects and also to attend/ present their research papers at seminar/ conferences, National and International level. At present there are 05 Major and 08 minor ongoing research projects and 01 completed Major and 05 minor completed research projects. Proposals for 02 major and 05 minor projects are submitted. 56 research papers have been published by faculty in reputed Journals and 33 in conference proceedings. Through DBT star college scheme, research culture is encouraged among UG students . College has an IPR cell and helps in filing the patents. A proposal for “Netravali Research Paper Competition” (NRPC) was submitted.

6.3.5 Library, ICT and physical infrastructure / instrumentation

Library:

Renovation of library is ongoing. It aims at converting Ruia Library into Knowledge Resource Center that enables continual information dissemination through the use of ICT.

ICT : 36 SMART classrooms and additionally each department has been provided with one or more (as required)computer/s, a laptop and a LCD projector. A language has been established which is equipped with computers and a Software for French and English (ORELL+ iLotus software) . A total of 20computers were added in the current year in various departments. In addition in the library there is an e learning centre with 27 computers.

Physical infrastructure / instrumentation: Smart class rooms, Language Laboratory, seminar halls, conference rooms, audio visual rooms, Administrative offices, staff rooms, well equipped laboratories, library, students’ common room, canteen, Health Centre, Self Vision Centre, Department of Culture and Media and Sports facility. College also has an Advanced Instrumentation Centre equipped with a number of sophisticated instruments. Under B Voc programme(Green House Management) college has set up a polyhouse, three shade net houses and a soilless cultivation unit

6.3.6 Human Resource Management

- The Performance Appraisal of faculty is conducted every year on various criterions. Accordingly, suggestions are provided for further improvement and achievements are appreciated. The students feedback received is also useful in determining the performance of the faculty. Every year parents feedback is also taken for the improvement at departmental level.
- A certificate of appreciation is given by the college every year to two teachers and two non-teaching staff, based on their performances in academic, extra-curricular, co-curricular research and extension and college administrative activities performed.
- During the Heads of department meetings and common room meetings, innovative ideas and plans to be implemented are discussed for acquiring suggestions of teachers.
- Teachers attended 8 UGC sponsored and 58– non UGC sponsored workshops, Seminars conferences and trainings.

6.3.7 Faculty and Staff recruitment

- Faculty and staff are recruited as per Maharashtra State Government regulations. The selection panel is decided as prescribed by the Government standard code. Selection is done according to the Government Norms.

6.3.8 Industry Interaction / Collaboration

College has established interaction and collaboration with 18 industries and 16 Institutes

6.3.9 Admission of Students

The admission process is as per the rules and regulations of the University of Mumbai. The College website and Prospectus contain information about the institution and the programmes offered. The prospectus that highlights the details of various programmes of the College is prepared by IQAC prior to the commencement of admissions. The prospectus also gives details of norms for admission, cancellation, exam pattern and also the Academic calendar. It is given to the applicants along with the application form. A Help Desk is set up during admissions. College has a web based centralized college management system (Master software) for managing Academic and administrative activities. Preadmission form is online.

6.4 Welfare schemes for

Teaching	Financial assistance to teachers for participating and presenting papers in seminars and conference
Non teaching	Educational aid to wards of Non- teaching staff
Students	Yuva Raksha Earn and Learn Each One Adopt One Student counselling support

6.5 Total corpus fund generated

Rs 5030750/-

6.6 Whether annual financial audit has been done

Yes

No

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	No	-	No	-
Administrative	Yes	Govt.	Yes	Management

6.8 Does the University/ Autonomous College declare results within 30 days?

For UG Programmes

Yes

No

For PG Programmes

Yes

No

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

University of Mumbai has introduced credit based semester grading system

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

University of Mumbai conducted a meeting of Principals of the colleges with B and above grade in NAAC accreditation.

6.11 Activities and support from the Alumni Association

College has a vibrant Alumni association and conducts a large number of activities. Several departments invite their alumni for delivering guest lecturers or workshops and also for conducting collaborative programs. Ruia College Alumni Association organizes annual health check up for Ruia students every year. Two Day Medical camp' for the benefit of 'Ruiates' as well as non teaching staff was organized on 10th and 11th September 2015. Also felicitated outstanding students in the field of academics, sports, curricular and extracurricular activities on 15th August 2015.

6.12 Activities and support from the Parent – Teacher Association

In the beginning of the academic year it is mandatory for the parents of First semester students to attend an Orientation which is addressed by the Principal. Departments also organise meetings with parents to make the parents familiar with the credit system, workflow/ annual calendar of the department or co curricular activities organized by the department. These meetings build up a better rapport between teacher and parents and thereby help achieving better all round development of the students.

6.13 Development programmes for support staff

Teaching Staff: Work shop on

- Curriculum design & Development
- Techniques in Molecular Biology
- POGIL

Non Teaching Staff- Stress Management and Team Building (2 Workshops)

6.14 Initiatives taken by the institution to make the campus eco-friendly

- Guest lectures were organized for students in the year 2015-16 on Threat to Environment, Chemical Industry: its sustenance & environment
- Continued all the Eco-friendly initiatives started in the year 2013-14
- Discussions ongoing to install a biogas plant and water harvesting system
- UG students fabricated a Solar Distillation units & did a study of their efficacy
- A team of Four SY BSc (Microbiology) students worked on Solar Disinfection of drinking water (SODIS)
- SY and TY Botany students undertook the Care & plantation of trees in nearby area (Hindu Colony)

Criterion – VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

- Initiated three skill based Degree courses(B Voc) Under DDU KAUSHAL Kendra
- MoU with Commonwealth of Pennsylvania for student and teacher exchange programme
- Cross Platform training of students / corporate readiness training program for students
- Greenhouse and shade houses: Under DDU KAUSHAL Kendra, college has set up greenhouse with soil and soilless cultivation units and an automatic fogging system. Two shade houses are also made with various soilless cultivation units. Vegetables grown are utilised.
- Simulated training area for Front-Desk Management: Under DDU KAUSHAL Kendra, college has set up this facility for the B Voc Tourism and Travel management course.
- New software for Language lab to enhance communicative skills

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

- Started UGC recognized DDU KAUSHAL Kendra
- A new Skill base B Voc degree course (Pharma Analytical Sciences) started.
- Permission granted for Skill based post graduation courses viz. M Voc in Green house management and Pharma Analytical Sciences
- Different college committees were constituted and their meetings were held.
- Seminar/workshops/ training programmes /popular lectures were conducted by various committees at the department and college level as planned at the beginning of the academic year
- Green Audit of the campus was conducted
- Initiated the preparation of the Self Study Report for the Accreditation cycle-4
- A large number of faculty presented papers in various conferences/ seminars

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)-

Annexure III

Title of the practice:

1. Project based learning
2. The Language laboratory

****Provide the details in annexure (annexure need to be numbered as i, ii, iii)***

7.4 Contribution to environmental awareness / protection

- Students of Department of Botany and B Voc Greenhouse Management conducted a Green audit of the college campus
- Under B Voc Greenhouse Management course, the department has set up a greenhouse and shade houses with luxuriant growth of flowering, foliage and vegetable plants. This helps directly in reducing carbon foot print.
- SYBSc -Life Science and Microbiology students fabricated a Solar Distillation unit and studied their efficacy. A team of Four SYBSc (Microbiology) students worked on Solar Disinfection of drinking water (SODIS)
- Students and staff of Botany department and NCC were involved in the care and plantation of trees in nearby area of the college (Hindu colony & Parsi colony).
- With the leadership of NSS students, an E - waste collection drive was carried Out. College was awarded a 'Green certificate' by Ecofriends Industries for this activity.
NSS students did the cleaning of Dadar railway station on 26th January 2016 as a part of the Swatchh Bharat Abhiyan programme.

7.5 Whether environmental audit was conducted? Yes No

7.6 Any other relevant information the institution wishes to add. (For example SWOT Analysis)

Ramnarain Ruia College has been promoting the cause of value-based Higher Education with total commitment, enthusiasm and devotion. Ruia College has taken initiative in promoting skill based education since 2-14-15. In 2014-15 College got permission from UGC to initiate two skills based B Voc courses- Green House Management & Tourism and Travel Management. Ruia College is the only college under Mumbai University to be granted permission by UGC to start DDU KAUSHAL Kendra in 2015-16. In addition to this the College has also got permission for B Voc in Pharma Analytical Sciences by UGC (2015-16). At present there are three B Voc programmes ongoing under this Kendra. College has also got permission for M Voc in Green House Management and Pharma Analytical Sciences.

STRENGTHS	WEAKNESS
<ul style="list-style-type: none"> • Qualified and dedicated faculty • High demand ratio for the programmes offered • Highly recognised institution at both national and international levels • Strong research culture amongst faculty and students • Structured mentoring and student support system • Excellent library facilities • New ways of using ICT in teaching learning • Good infrastructural facilities for sports and games 	<ul style="list-style-type: none"> • Managing the institution with less than the sanctioned number of permanent teaching and non teaching staff. • Space constraint
OPPORTUNITIES	CHALLENGES
<ul style="list-style-type: none"> • Developing and strengthening industry-academia partnership • Networking and collaborations with foreign institutions • Expanding opportunities for undertaking multidisciplinary and interdisciplinary research activities at both national and global levels. • Expertise of faculty to tap the corporate sector for consultancy and funding for research projects • Effective utilisation of grants received under various schemes 	<ul style="list-style-type: none"> • Effectively bridging the gap between the course and employability • To generate employability for differently abled students

8. Plans of institution for next year

- To get Autonomy Status
- To conduct Academic audit
- To strengthen the placement cell
- To enhance Institutional Social Responsibility activities
- To train the students for competitive/entrance exams
- To introduce more Skill oriented courses under autonomous status
- Implementation of innovative teaching methods
- Faculty training programmes(Teaching & Non-Teaching)
- To organise awareness lectures, seminars, workshops through Department & Non- Departmental associations & IQAC for students
- To enhance environmental awareness
- To organise more Gender sensitization activities
- To conduct activities for inculcating value system among the students

Name: Dr. Jessy Pius



Signature of the Coordinator, IQAC

Name: Prof. Suhas Pednekar



Signature of the Chairperson, IQAC

Annexure I

Academic Calendar of the Year

ACADEMIC CALENDAR 2015-2016
FOR
F.Y.B.A. / B.Sc. & S.Y.B.A. / B.Sc. /
B.M.M / BIOANALYTICAL Sc. / B.Voc.

I & III - SEMESTER

- **I / III SEMESTER INTERNAL EXAMINATION 4TH WEEK OF AUG.-2015**
- **OLD COURSE ATKT EXAMINATION : OCTOBER-2015**
- **ARTS /SCIENCE/BMM/ BIOANALYTICAL Sc. I & III SEMESTER EXAMINATION:
1ST WEEK OF OCTOBER 2015.**
- **RESULT DECLARATION : IST & IIIRD SEMESTER RESULT
3RD WEEK OF NOVEMBER- 2015.**
- **A.T.K.T. & ADDITIONAL EXAMINATION ALL SEM 1ST WEEK OF DEC- 2015**

II & IV- SEMESTER

- **II / IV SEMESTER INTERNAL EXAMINATION 1ST WEEK OF FEB.-2016**
 - **OLD COURSE ATKT EXAMINATION : MARCH-2016**
 - **ARTS /SCIENCE/BMM/ BIOANALYTICAL Sc. IIND & IVTH SEM: 1ST WEEK OF MARCH
2016**
 - **RESULT DECLARATION : IIND & IVTH SEMESTER RESULT
1ST WEEK OF APRIL 2016.**
 - **A.T.K.T. & ADDITIONAL EXAMINATION –3RD WEEK OF APRIL- 2016.**
 - **A.T.K.T. & ADDITIONAL EXAMINATION RESULT 2ND WEEK OF JUNE- 2016.**
-

VPM Calender: 2015-16		
Ist Term		
Fresher's Party	2.00pm	1 st August
Monsoon Sports	After 2.00pm	6,7,8 th August
Independence Day	--	15 August
Teachers` Day	----	5 September
Rose Day	After 2.00pm	12 th September
IInd Term		
Samanvay		2 nd 4 th January
Utsav and Ruia Cup	Non instructional	2,3,4 th 16,17 th January
Arohan		4,5 th January
College Day	Non instructional	26 January
Ruia Marothan		30 th January
VPM day	-	31 January

Analysis of feedback

STAFF ASSESSMENT REPORT

The college conducts (formally and informally) the exercise of evaluation of faculty by students. Students are asked to grade teachers on a 10 point scale under different aspects, like punctuality, knowledge of their subject, innovative teaching aids used, interactive sessions conducted, additional information beyond syllabus, availability and accessibility etc. From 2013-14 onwards the feedback mechanism was upgraded and was conducted online. Each teacher is then given a report (in confidence), containing the average grade point (AGP) obtained by him/her under each of the aspects. This report is able to point out the strengths and weaknesses of a teacher with a fair degree of accuracy. In 2015-16, 32.95% of staff was graded with an AGP above 9.1, 51.14% between 8.1 to 9.0, 18.18% between 7.1 to 8.0 and 1.1% between 6% to 7%.

Each teacher is then asked to write an action taken report about the changes brought about by him/her in the light of this feedback. If the reports of some teachers point out some major lacunae, the Principal counsels these teachers.

REPORT OF THE PARENTS MEETING 2015-16

Parents Feedback was obtained through a questionnaire. This year the departments conducted parents meeting and College received feedback from 1320 parents. On analysis of the report, it was found that majority of the parents were satisfied with teaching, learning environment and infrastructure facilities of the college. Parents appreciated the Mentoring activity carried out in college. Some of the suggestions which came from the parents include: more skill based courses, improvement in library facility, enhancement in student research activities, and more encouragement to students for exploration.

Based on the suggestions given by parents, renovation and digitalisation of the library is ongoing , Mentoring activity for all students (UG & PG) is strengthened and continued. All students belonging to Science & Humanities Streams were distributed in small groups made up of 20-30 mentees/ Mentor & mentoring sessions were organized in both first & second term of the year 2015-16. Students were informed about importance of regularity & were guided upon their individual problems affecting their performance. To encourage the students to explore more areas, through star college they were encouraged to take up Interdisciplinary Projects at UG level and summer internships for UG and PG students to enhance research and Industry-institute linkage.

Title of the practice:

1. Projects based learning

Goal:

The main goal of this innovative teaching method is to prepare students to survive in today's world. Solving highly complex problems requires both fundamental skills (reading, writing, and math) and special skills (teamwork, problem solving, research gathering, time management,

information synthesizing, utilizing high tech tools). With this combination of skills, students become masters of their learning process, guided and mentored by a skilled teacher.

The context:

Project-based learning is a teaching approach that engages students to work in small, collaborative groups. Project based learning was encouraged through Star College scheme and CE programme among UG students.

The practice:

Project based learning concept was extended to 20% topics covered in syllabus for augmenting conventional teaching methods. Both science (Chemistry, Microbiology, Life Science, Botany, Physics, zoology, Maths, Statistics, Biotechnology, Biochemistry, Bioanalytical Sciences, and Computer science) and humanities (English, Sanskrit, Hindi, Philosophy and History) departments encouraged more and more students to think originally and critically. It involved creation of small affinity groups (for project based learning) in theory classes involving both online and offline interactions, with faculty as mentor. Project based learning also emphasized critical thinking and trans-disciplinary thinking. Students enjoyed doing projects even though it meant working more and doing research on their own which demanded more time and energy.

This technique allowed students to demonstrate their capabilities while working independently. It improved their ability to research about a particular topic and the ability to work with their peers, building teamwork and group skills. From the point of view of a teacher, project based learning enabled us to learn more about the students as a person and helped us communicate in more meaningful ways with them on variety of issues.

Evidence of success:

Under Star College Scheme and with the CE programme departments introduced project based learning at the undergraduate level. Project based learning is considered as an important tool to achieve learning various stages of research process. The process involved both short term and long term projects, in some cases in collaboration with other research institutes like IIT, ICT, ASI. Topics covered for training in this work were in sync with research thrust of the respective department. For eg. Department of Chemistry selected topic of analytical methods standardization and application development for the students of F.Y.B Sc where students were introduced to different analytical methods and asked to carry out the same determination from different samples (Food, drugs, environmental) collected from the market / environment. Department of Microbiology selected microbial taxonomy and biodiversity for project based learning scheme for the class of SYBSc Microbiology. Under this scheme, following theme were explored during this period. Based on collaboration established with ICT Mumbai, screening of Brackish water samples for salt tolerant algae was successfully completed and 7 different isolates obtained were handed over to ICT for further studies on their usefulness for bioenergy production. Students isolated microorganisms involved in various types of interactions like commensalism, amensalism, symbiosis etc and demonstrated these interactions.

A total of approximately 300 students availed this facility by getting involved in various projects. Some of the important projects include - Microbiological analysis of Ruia Compost , Fabrication of Solar Distillation units and study of their efficacy and Solar Disinfection of drinking water (SODIS). SODIS project was carried out in collaboration with Don Bosco Institute of Technology, Kurla, Mumbai.

Each of the participating department has developed electronic repository of the material collected by students during projects for the purpose of publication and/or future development of this technique.

Title of the practice:

2. The Language Laboratory

Goal-

The purpose of a language lab is to enhance the language skills of the students in forms of speech, comprehension, listening and writing skills. This can be achieved through student's active participation in language lab exercises.

The context:

Mixed ability heterogenous students need to be given customised lessons on various aspects of English language learning according to the existing abilities and proficiency of each student.

The practice:

Language lab has installed two softwares like ODLL (ORELL Digital Language Lab) and ILOTUS FOUNDATION + ADVANCED (1-5 Levels) + SRS. It has a server, 20 computers, with suitable accessory . Necessary software and functionality for various languages (Particularly French & English) is installed. The facility is also used for preparing the students for GRE, TOFEL, group discussions and report writing etc.

Evidence of success:

Faculty from department of French, English, Sanskrit, Marathi and Hindi have undergone necessary training and checked for their proficiency. Regional languages like Marathi and Hindi has developed at least one interactive module for use with language laboratory infrastructure. Service is also extended to other foreign language taught at certificate courses.

Four training programmes were organized for language teachers in the months of February and March 2015. Language lab conducted 07 Language Lab session using ODLL (ORELL Digital Language Lab) and ILOTUS FOUNDATION + ADVANCED (1-5 Levels) + SRS softwares. Language lab also conducted 04 Foundation Courses in English Speaking in which 111 participants were benefited from these activities. The department of Sanskrit organized a workshop 'Introduction to the Concept of Language Laboratory' in the E-learning centre. The faculty members of the regional language departments participated in the workshop. Two experts from Oreal Technosystems guided the participants regarding how to use language laboratory for the benefit of the students. Sessions were also conducted to teach English prosody/scansion through the language lab.

Departments of Hindi, Marathi and Sanskrit will develop their own teaching materials and upload it on the ODLL software in the next academic year.
