SHIKSHANA PRASARAKA MANDALI'S

RAMNARAIN RUIA COLLEGE OF ARTS & SCIENCE

MUMBAI - 400 019

ANNUAL QUALITY ASSURANCE REPORT (AQAR)

SUBMITTED TO NAAC

2017-18

THE ANNUAL QUALITY ASSURANCE REPORT (AQAR) OF THE IQAC

Part – A

1. 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:

> Dr. Anushree Lokur

Tel. No. with STD Code:

> 022-24143098, 022-24143119

Mobile:

> 9820023919

Name of the IQAC Co-ordinator:

> Dr. Jessy Pius

Mobile:

> 9892196346

IQAC e-mail address:

> ruiacollegeiqac@gmail.com

1.3 NAAC Track ID (For ex. MHCOGN 18879)   MHCOXX14804

1.4 NAAC Executive Committee No. & Date: EC/61/RAR/83 dated 15-9-2012

1.5 Website address: http://www.ruiacollege.edu

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	1st Cycle	4 star	-	1999	2007
2	2nd Cycle	A	-	2007	2012
3	3rd Cycle	A	3.65	2012	Sept 14th2017
4	4th Cycle	A+	3.70	2017	29th October 2024

1.7 Date of Establishment of IQAC: DD/MM/YYYY   6th July 1999

1.8 AQAR for the year (for example 2010-11)   2017-18

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

   i.   AQAR   2012-13 date: 30-09-2013   (DD/MM/YYYY)

   ii. AQAR   2013-14 date: 20-11-2014   (DD/MM/YYYY)

   iii. AQAR   2014-15 date: 05-12-2015   (DD/MM/YYYY)

   iv. AQAR   2015-16 date: 04-11-2016   (DD/MM/YYYY)

   v.   AQAR   2016-17 date: 10-08-2017   (DD/MM/YYYY)

   vi. AQAR   2017-18 date: 26-12-2018   (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)   University of Mumbai

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

Autonomy by State/Central Govt. /University   ☑

University with Potential for Excellence ☐   UGC-CPE ☑

DBT Star Scheme ☑   UGC-CE ☑

UGC-Special Assistance Programme   B.Voc.

UGC-Innovative PG programmes ☑   Any other (Specify)   DDU KAUSHAL Centre

UGC-COP Programmes ☐

2. IQAC Composition and Activities

2.1 No. of Teachers

| 18 |

2.2 No. of Administrative/Technical staff

| 1 |

2.3 No. of students

| 2 |

2.4 No. of Management representatives

| 1 |

2.5 No. of Alumni

| 1 |

2.6 No. of any other stakeholder and community representatives

| Nil |

2.7 No. of Employers/ Industrialists

| Nil |

2.8 No. of other External Experts

| 1 |

2.9 Total No. of members

| 24 |

2.10 No. of IQAC meetings held:

| 04 |

2.11 No. of meetings with various stakeholders: No. | 5 |

Faculty | 17 |

Non-Teaching Staff | 2 | Students | 4 | Alumni | 2 | Others | 2 |

2.12 Has IQAC received any funding from UGC during the year?   Yes ☐   No ☑

If yes, mention the amount | NA |

2.13 Seminars and Conferences (only quality related)

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

Total Nos. | 7 | International | - | National | - | State | -- | Institution Level | 7 |

(ii) Themes : Workshops

o   Chemical handling and laboratory safety
o   Choice Based Credit System'
o   'Bloom's Taxonomy' in Teaching, Learning and Evaluation
o   'RUBRICS'
o   How to use N-LIST e-resources & Shodhganga
o   'Waste segregation' (घन-कचऱ्याचे व्यवस्थापन)-for Support Staff
o   'Health management '- for Support Staff

2.14 Significant Activities and contributions made by IQAC

- Preparation of the Prospectus for the Academic year 2017-18

- Online Submission of AQAR for 2016-17 to NAAC on 10th August 2017

- Prepared and submitted addendum   for 4th cycle of accreditation by NAAC

- Systematic and continuous student mentoring carried out for all students of the college
- Suggestions and support given to various committees for conducting Awareness programmes.
- Installed a Water harvesting unit in August 2017

- Installed a Biogas plant in September 2017

- Initiated the work on Digital Archive of Ruia-August 2017

- Conducted an Examination audit on 7th September   2017

- Conducted a Gender audit on 6th October 2017

- Conducted On line student feedback -April 2018

- Conducted five faculty development programme & 2 programmes for Support staff

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 *

Sr. no	Plan of Action	Outcome
	Preparation of AQAR	AQAR of 2016-17 submitted 10th August 2017
	Preparation of addendum	Prepared and submitted to NAAC in July 2017
	To install a water harvesting unit	Installed in August 2017
	To Install a Biogas plant	Installed in September 2017
	Digital Archive of Ruia	Initiated the work in August 2017
	To conduct a Gender Audit	Conducted on 6th October 2017
	To conduct an Examination Audit	Conducted on 7th September 2017
	To conduct Activities for Support staff	o ‘waste segregation’ (घन-कचऱ्याचे व्यवस्थापन)-for Support Staff(14th March 2018) o 'Health management '- for Support Staff(21st April 2018)
	To conduct faculty development programme	o Choice Based Credit System’ o ‘Bloom’s Taxonomy’ in Teaching, Learning and Evaluation o ‘RUBRICS’ o How to use N-LIST e-resources & Shodhganga

To conduct activities for UG/ PG/Research students	o Chemical handling and laboratory safety o How to use N-LIST e-resources & Shodhganga

 * 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 and with the steering committee members. IQAC made necessary changes according to the suggestions given

Part – B

Criterion – I

1. 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	-		
PG	05- Aided- M Sc (By Papers) 07- Unaided M Sc (By Papers) 08 - M Sc (By Research)		07	-
UG	*Arts* Aided-12 Unaided-03 *Science* Aided - 08 Unaided – 03		03- Arts 03- Science	-
PG Diploma	-	-	-	-
Advanced Diploma	-	-	-	-
Diploma	-	-	-	-
Certificate	7	05	-	12
Others	Skill based courses-03 • B Voc (Sanctioned by the UGC, New Delhi) (2014): • Tourism & Travel Management • Pharma Analytical Sciences • Green House Management		-	-
Total	61	05	13	12

Interdisciplinary				
Innovative				

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

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

1.3 Feedback from stakeholders*Alumni   ✔ Parents   ✔ Employers   ✔ Students   ✔
    (On all aspects)

Mode of feedback   : Online   ✔   Manual   ✔

Co-operating schools (for PEI)

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.

> Under autonomy departments have the freedom to upgrade the syllabus (15-20%). every year all departments revises the syllabi both in theory and practical. Changes are also made as per the recommendation given by Subject Board in all subjects.

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

> NIL

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of
permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
58	21	34	3	-

2.2 No. of permanent faculty with Ph.D.

43

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
21	-	34	-	3	-	33(adhoc)	-	-	-

2.4 No. of Guest and Visiting faculty and Temporary faculty

9		24		50

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	13	21	4
Presented papers	11	17	1
Resource Persons	1	5	4

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

"Sequential Station Based Evaluation of Experiments" (SSBEE)- One of the methods used for evaluating students in B Voc programme. This pattern involves devising tasks for students to be completed in several sequential "stations". Each station is a "timed capsule" where the student completes a part of the assigned task within a specified time limit. The students move from one "station" to the other till the task is completed.

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

173

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

Under autonomy 60: 40 pattern and Double Valuation is accepted. Departments have the freedom to select the method of internal evaluation.

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

Under Autonomy, the The BoS of each department has two staff members of the department as BoS members in addition to the HoD

2.10 Average percentage of attendance of students | 83 |

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	334	25.15	29.64	27.54	4.79	87.13
TYBSc	457	40.48	36.54	13.35	0.44	90.81
TYBMM (Marathi & Eng. medium)	131	23.66	28.24	21.37	16.03	89.3
PG	205	NA	48.4	38.35	-	86.75
PhD	71	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(The teacher as the creative spark: capacity building & strategies for enhancement in teaching and learning(TCS-CBS), Art of Scientific writing)
- 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 at the end of the year.
- Student's feedback on faculty and also on curriculum is taken. Formal feedback from parents, alumni and support staff is also obtained.

Evaluation:
- Students' feedback is analysed and used to understand the strong and weak areas of teachers and also improvement in curriculum. Accordingly necessary steps are taken by the teacher/ Department. The gist of suggestions and responses are communicated to the Principal by IQAC. These are also discussed at length in the IQAC as well as the HOD meetings. Suggestions by stake holders on the curriculum are considered during the BoS meetings.
- The IQAC organized workshops on Blooms Taxonomy and Rubrics for effective evaluation of students in both, semester end and internal examinations.

2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	02
UGC – Faculty Improvement Programme	05
HRD programmes	• 7 Programmes attended by all faculty • 4 staff members visited five universities in Pennsylvania
Orientation programmes	--
Faculty exchange programme	Faculty exchange programme was organised by Department of French with a high school in France named 'Lycée Saint-Esprit' in the region of Brittany in France. Two faculty visited France with 12 students and 12 French students along with 2 French accompanying teachers visited Mumbai.
Staff training conducted by the university	--
Staff training conducted by other institutions	04 (training it K.J. Somaiya college)
Summer / Winter schools, Workshops, etc.	2
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	82	25	--	25
Technical Staff	52	39	-	Total : 41 Adhoc

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.

The College has appointed a Dean for Research and Industrial Consultancy in order to coordinate all research activities at the College.

Various departments at the College carry out interdisciplinary research and this enables efficient sharing of common facilities and expertise. The college also emphasizes industry collaboration in research to foster more applied work. Such industry collaborations include consultancy services where the expertise of the faculty members is used.

The outlook of research at the College is globalized by the faculty members who are associated with major publication houses of technical and research papers. Many faculty members are members of editorial boards of national and international journals and are reviewers of peer reviewed journals in interdisciplinary areas.

- Ruia College has been selected to host a DST Inspire Faculty Fellow, Dr. Mayuri Rege in the Department of Microbiology.
- 7 students participated in 'Biotechnology Exploration Program 2017' which was conducted In collaboration with **Indiana University of Pennsylvania , USA, from 14th May to 9th June 2017.**
- College organised 29 workshops and 4 seminars, 12 public lectures, 1 UGC recognised refresher Course, 15 faculty worked as Resource person in various seminars / Conferences
- In 2017-18 College has 2 major on- going Major research project, and 6 Industry collaborative projects.

Awards and Recognitions:

- Dr. Jyoti D. Vora received 'Dr. K KTyagi Gold Medal' for Women Scientists, awarded by 'The Indian Academy of Environmental Sciences' on 10th August 2017.
- Prof. (Dr.) Suhas Pednekar received 'Best Presentation Award' in ICCMS 2017: 19th International Conference on Chemistry and Materials Science at Denmark, 11-12 June, 2017.

Research Guide Recognition:

- Dr.Kanchan Chitnis (Life Science) for PhD
- Dr. Sunil Shankardwar (Botany) for PhD
- Dr.Manjusha Nikale (Botany) for MSc by Research.

Faculty obtained Ph D

- Dr. Pradeep Wagmare
- Dr. Anushree Lokur
- Dr. Sujata Suvarnapatki
- Dr. Himani Chaukar
- Dr. Rajendra Rathi
- Dr. Ashwini Deshpande
- Dr. Vijay Mayekar
- Dr. Devayani Ganapule

Faculty submitted Thesis

- Ms. Sucheta Ketkar

Number of books published:

- Dr.Vaibhavi Palsule (Political Science) published a book titled 'India-Pakistan relations from confrontation to Dialogue', Publisher- G.B. Books New Delhi, Under publication, ISBN No- 987383930630.
- Dr.VaibhaviPalsule (Co-authored) a book titled 'US-India Partnership Building – Leap forward', Allied Publishers, New Delhi, under publication, ISBN No- 9789385926730.
- Nana Pradhan published a booktitled 'Dilute Magnetic Semiconductors for Spintronics', publisher - Lambert Academic Publishing , Germany, at Heinrich-Böcking-Straße 6, 66121 Saarbrücken, Germany, ISBN No.- 978-3-330-08385-1, August 2017.
- 25 research papers were published by faculty in International journals and 5 in National level journals and 2 research papers accepted for publication.

3.2   Details regarding major projects—give the list of projects

	Completed	Ongoing	Sanctioned	Submitted
Number	--	02	--	1
Outlay in Rs. Lakhs	--	57.49	--	53.4

3.3   Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	--	--	--	-
Outlay in Rs. Lakhs	--	--	--	-

3.4   Details on research publications

	International	National	Others
Peer Review Journals	24	2	--
Non-Peer Review Journals	09	--	--
e-Journals	05	-	--
Conference proceedings	15	3	1

3.5 Details on Impact factor of publications:

Range | 0.18- 6.86 | Average | | h-index | 12 | 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 lakhs	Received lakhs
Major projects (on going)	2015-18	University Grants Commission, Government of India	15.49	10.39

	2018-21	Department of Science and Technology-SERB	42.0	12.49
Major projects (completed)	-	-	-	-
Minor Projects (on going)	-	-	-	-
Minor Projects (completed)	-	-	-	-
Interdisciplinary Projects	-	-	-	-
Industry sponsored	-	-	-	-
Projects sponsored by the University/ College	-	-	-	-
Students research projects (other than compulsory by the University)	-	-	-	-
		KarmveerBhauraoPatil College Viva College Ajanta Pharma Ltd. Pitambari Products Pvt. Ltd. Nichem Solutions	Rs. 27,600/- Rs. 27,600/- Rs. 41,400/- Rs. 89,090/- Rs. 59,000/-	
Any other(Specify)	-	-	-	-
Grand Total	-	7	**59.94**	**13.88**

3.7 No. of books published   i) With ISBN No. | 01 | Chapters in Edited Books | 02 |

ii) Without ISBN No. | 01 |

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   [47,350.00]

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	01	02	03	-	1+ 13+ 7 (workshops)
Sponsoring agencies	Dept. of Philosophy, collaboration with Bhakti Vedanta Institute, Bhakti Vedanta Institute	महाराष्ट्र राज्य हिन्दी साहित्य अकादमी	DBT STAR College Scheme		TECHX-CELLANC , DBT, Star & CE

3.12 No. of faculty served as experts, chairpersons or resource persons   [12]

3.13 No. of collaborations [8] International [1] National [--] Any other [7 (state)]

3.14 No. of linkages created during this year   [12]

3.15 Total budget for research for current year in lakhs:

From Funding agency [69.2]   From Management of University/College [2.4 (Industry)]

Total [71.6]

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	-
	Granted	-
International	Applied	-
	Granted	
Commercialised	Applied	-
	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
7	3	-	2	-	2	-

3.18 No. of faculty from the Institution
who are Ph. D. Guides and students registered under them

37

63

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

8 (in 2017-18)

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

JRF 1   SRF -   Project Fellows 02   Any other -

3.21 No. of students Participated in NSS events:

University level 167   State level 10

National level 1   International level -

3.22 No. of students participated in NCC events:

University level 52   State level 50

National level 52   International level -

3.23 No. of Awards won in NSS:

University level -   State level 01

National level -   International level -

3.24 No. of Awards won in NCC:

University level	02	State level	03
National level	02	International level	-

3.25 No. of Extension activities organized

University forum	--	College forum	07		
NCC	08	NSS	37	Any other	02

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

- Centre for Slum Studies conducted a Workshop in collaboration with Maharashtra State Commission for Women on 'Women in Slums, Security and Health: Challenges, Opportunities and Strategies. Financial support granted by MSCW to conduct this workshop on 27 Feb 2018. 85 women participated

- In order to sensitize the students to basic issues of social inequity and institutional social responsibility, Centre for Slum Studies conducted courses and also arranged field visits to slums in three wards of Mumbai.

- Awareness Lecture on Reality of the Slums in Mumbai , on Tenacity of Mumbai Slums on Solid Waste Management and Health and Hygiene, on Urban Environment Management were conducted on 8th , 9th, 15th and 23rd Jan 2018 respectively.

- Department of Greenhouse Management organized a one day workshop on 'Basics of Organic farming and Greenhouse Technology' for 8th, 9th , 10th and 11th standard students of an NGO 'ASHA' 29 students participated in this workshop.

- NSS and NCC students also conducted extension programmes as follows:
  - Organised a 'Jeevanvidya Mission' under which a session on "Organ donation' was conducted to spread awareness and information among the students. This awareness drive successfully culminated in 300 students registering for organ donation. (22nd Jan 2018).
  - Tree plantation drive in college campus and also at Paighar (150 indigenous trees) 1st July 2017, 14th October 2017.
  - Avhaan volunteers organized a mock drill on disaster management in the college premises on the following topics: fire session, water rescue, terrorist attack and bomb blast, etc.(16th December 2017)
  - A knowledgeable and interactive workshop was conducted by Mr. Rajendra Lokhande, the Head of Disaster Management Cell, BMC and his associate officers wherein students were informed about the various disasters that can take place and the precautionary measures which can be taken. Also training in basic first aid and quick response was conducted. (7th, 8th Feb 2018)
  - Literacy programmes were conducted for school students in Ashramshala of Vasai.

- Awareness program through street plays on 'Gender equality', 'Say no to drugs', 'Save environment' and 'Swacha bharat abhiyan' were conducted in College and adivasi padas of Nere, village
- Extension and Outreach Committee collaborated with NGO Masoom for student volunteering Program under which 13 students tutored students from different night schools in Mumbai in various subjects. The committee also organized a e waste collection drive with NGO, EcoRox.

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	112062.00 sq.mt	NA	-	112062.00 sq.mt
Class rooms	48	-	-	48
Laboratories	20	-	-	20
Seminar Halls	2	NA	-	2
No. of important equipment's purchased (≥ 1-0 lakh) during the current year.	7	1	New Star College Scheme Grant	8
Value of the equipment purchased during the year (Rs. in Lakhs)	10.0	35.28	-	45.28
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	39389	Approx. Rs. 1 crore 71 lakh	1029	1,23,638.00	40418	Approx. Rs. 1 crore 82 lakh
Reference Books	94795		1072	8,60,475.00	95867	
e-Books	Nil	Nil	Nil	Nil	Nil	Nil
Total Books	**134184**	**~ 1,71,00,000.00**	**2101**	**9,84,113.00**	**136285**	**~ 1,82,00,000.00**
Journals	87	Different every year	87	1,65,164.00	87	Different every year
e-Journals	Nil	Nil	Nil	Nil	Nil	Nil
Digital Database	Nil	Nil	Nil	Nil	Nil	Nil
CD & Video	Nil	Nil	Nil	Nil	Nil	Nil
Others (specify)	-	-	-	-	-	-

	All collection till 31.03.2017		Added in Yr. 2017-18		All collection till 31.03.2018	
	Titles	Copies	Titles	Copies	Titles	Copies
Books	106430	134184	1095	2101	107525	136285
Textbooks	21776	39389	165	1029	21941	40418
Reference Books (Ref + Other bks)	84654	94795	930	1072	85584	95867
Magazines	38	38	-	-	38	38
Current Journals	49	49	-	-	49	49
Indian	46	46	-	-	46	46
Foreign	3	3	-	-	3	3
Peer-reviewed Journals	17	17	-	-	17	17
Back Volumes of Journals	6536	6536	-	-	6536	6536

Ruia Library is completely revamped and is converted into **Knowledge Resource Center** that enables continual information dissemination through the use of ICT. Redesigning & Renovation of current space provision (ideally designed for Library) includes – Larger & more number of Reading spaces within the Library, A new Reading Hall within the Library, A separate room for Teachers, A different Periodicals Section, A special OPAC room for students, Compact-stacking Cupboards for optimum utilization of space, CCTV network in Library for better security.

4.4 Technology up gradation (overall)

	Total Computers	Computing Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	204	9	60	1	1	14	98	21 (Lib. + Language Lab)
Added	-	-	-	-	-	-	-	-
Total	204	9	60	1	1	14	98	21

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

- Tally training to Administrative staff
- How to use N-LIST e-resources & Shodhganga

4.6 Amount spent on maintenance in lakhs :

   i) ICT

2.49

   ii) Campus Infrastructure and facilities

115.58

   iii) Equipments

2.06

iv) Others

6.16

Total :

126.29

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, Anti-ragging Committee, Environment awareness committee, Vidhyarthi Pratinidhi 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.
- Student's 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
- IQAC instructs the departments to keep a record of student progression in each department.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
3084	590	71	01(MSc RES)

(b) No. of students outside the state

Nil

(c) No. of international students

Nil

Men

No	%
1520	40.6%

Women

No	%
2226	59.4%

Last Year (2016-17)						This Year (2017-18)					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
2032	382	48	525	65	3052	2152	427	58	577	32	3246

Demand ratio ~1:4   Dropout % ~1.5%

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

- 3 weeks training was provided to the students of the SYBA and TYBA to prepare for the banking examination.
- Career guidance & placement cell organised 4 work shop, 1 seminar 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.
- A Mega Job Fair was organised in Ramnarain Ruia Autonomous College on 9 December 2017, in collaboration with CII- Model Career Centre, a project of Ministry of Labour and Employment, Government of India, with Times of India as media partner. More than 30 companies had come to hire job aspirants, there were around 3240 applicants, 1440 got offer letters. Companies which participated: Sutherland Global Services , Hawkins ,NIIT, The Cosmo Homes , Navnit Group, Bankedge, Autovista, Venus Security, Fun & Joy, Advance Power Display, Global Quest, Hexaware Technologies, Marcus Evans, Simran Motors, NIHAM, Home Credit

No. of students beneficiaries | 1440 |

5.5 No. of students qualified in these examinations

NET | 03 | SET/SLET | 01 | GATE | -- | CAT | 01 |

IAS/IPS etc | -- | State PSC | -- | UPSC | -- | Others | 07 |

5.6 Details of student counselling and career guidance

> 214 students availed the facility of counselling and career guidance

No. of students benefitted | 178 |

5.7 Details of campus placement

On placement			
No	Job Details	applied	got placed
1	Greenpeace Foundation,	09	03 AishwaryaKamble, ChinmayeeKadam, Bhagyashree Kale
2	Educational Institute, Badlapur	01	01Babita Kamble
3	Target Publications, Content writing	04 (Marathi), 01 Chemistry, 01 Life Science	01 chemistry, 01 Life Science (SnehaMenon)
4	Larsen and Tubro	04	04 Computer Science
5	Delloitte, campus placements for BSc CS	37applied, 8 got selected in test conducted on 30 Nov 2016, 8 had interview on 12 December 2016	07 got selected finally. ShravaniGawade, Vishal Lad, Amolaksingh Hunjan, Shivaprasad Shetty, Anjali Nair,

			TamimSangrar and Ishita Sahu.
6	Asian Paints campus placements for MSc Analytical, Organic and Physical Chemistry	MSc Organic, Analytical and Inorganic students (12 shortlisted out of 27) 02 shortlisted further for interview- AmrutaPise, CrissDcosta	Results awaited
7	ZydusCadila, Ahmedabad Plant for vaccine development, for MSc Biotech, Micro, LS,.	06- 04 MSc Biotech and 02 MSc Life Science	Results awaited
8	SGS chemicals,	03- MSc Chemistry JayeshKurkure, ShivaniVichare, SurabhiAgre	01- Shivani Vichare
9	Bank of Maharshtra, post of clerk, For FY Arts (earn while you learn)	Marathi FY 03	Results awaited
10	McLeodsPharma	Bioanalytical Sciences -04 applied	Results awaited

5.8 Details of gender sensitization programmes

- The College conducted a Gender Audit on 6th October 2017, with the following objectives:
  - To find out the areas where gender balance exists and the factors behind the gender balance.
  - Take active steps to establish good gender balance in decision-making processes in all areas of the college activities.
  - To examine the policies of the college rules / actions toward the needs and interests of both males and females.
  - Suggest measures for bridging the gender gap.
  - Foster gender equality in all aspects of college life and throughout the college community.
  - To see the work and capacity for prevention of sexual harassment at the college.

The College was granted a Certificate of Gender Compliance on 9th October 2018 by the Committee with a few recommendations to be incorporated into the mainframe.

  - To sensitise the students about gender issues, an awareness lecture was arranged for the PG students regarding "The Sexual Harassment of women at workplace (Prevention, Prohibition and Redressal) Act, 2013"on 28th September 2017. The resource person was Dr. Manjusha Molawane, Member Secretary, Maharashtra State Commission for Women.
  - Sanitary napkin vending machines and sanitary napkin incinerators are installed in the girls toilets (one each) situated in the LCR as well as the first floor in September 2017.
  - The NSS unit of the college organised the following:
  - The College participated in the 5 day workshop organized by MAVA (Men Against Violence and Abuse). The objective of the workshop was to instill a deeper understanding of gender based issues in the society and instigate youth to stand up for these issues against gender Discrimination issues. 10-14,19[th] Aug 2017
  - One Day Seminar on Women Empowerment in 21st Century in collaboration with MAVA. 16[th]September 2017
  - Session on Gender Equality by YWCA, 24th Nov 2017

5.9 Students Activities

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

State/ University level   210   National level   23   International level   --

No. of students participated in cultural events

State/ University level   73   National level   -   International level   -

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

Sports: State/ University level   46   National level   06   International level   --

Cultural: State/ University level   12   National level   3   International level   -

5.10 Scholarships and Financial Support

	Number of students	Amount Rs
Financial support from institution	--	--
Financial support from government	306	4168422/-
Financial support from other sources	--	--
Number of students who received International/ National recognitions	--	--

5.11   Student organised / initiatives –

Fairs : State/ University level   2   National level   _   International level   -

Exhibition: State/ University level   4   National level   _   International level   -

5.12   No. of social initiatives undertaken by the students   40

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. The College Administration Management system, takes care of the conduct and management of the evaluation system. The system has been suitably upgraded for the revised pattern of evaluation under autonomy. The CCMS software at the Exam Cell of the College, is now being upgraded and enhanced to generate the question paper codes, hall tickets, marksheets and for generic result processing and certification. The College has introduced the OSM (On Screen Marking) system for PG evaluation.

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

6.3.1 Curriculum Development

> Curriculum design and its proper implementation is the hallmark of any successful educational institution. Freedom to design and implement its own curriculum, therefore, provides the necessary impetus to excel in the field of education. Under Autonomy, the College therefore, has evolved strategies to address key areas in the syllabi, that were perceived as issues that need immediate attention. Each Department has constituted a Subject Board (Board of Studies) by including subject experts from reputed institutions and industries to get all-round inputs. Each Department has undertaken an exercise to evaluate the University syllabi and identified aspects that needed revision. The Departments have revised their syllabi accordingly and have also made provisions to permit lateral mobility of students from the College to other institutions that are in the affiliated status. The College, in the autonomous status, has retained its focus on imparting skill-based learning, with emphasis on developing entrepreneurship aptitude.

6.3.2 Teaching and Learning

Several new initiatives have been envisaged by the College in the teaching learning program to encourage research at undergraduate level. The curriculum has been revised to include more project-based learning. To meet the requirements of various Subject Boards in the revised syllabi, the College has

augmented many of its infrastructural facilities that are offered to the faculty and students. Most of the facilities in the College have been restructured to make it disabled-friendly. The College is looking forward to a paradigm shift in its focus by incorporating skill-based programs to make education more application-based in nature. Training sessions were conducted on Choice Based Credit System', Bloom's Taxonomy' in Teaching, Learning and Evaluation and on 'RUBRICS' to help the faculty to orient towards the autonomous status.

6.3.3 Examination and Evaluation

The College has been adopting a multipronged approach to improve the transparency and reliability of the evaluation system. On one hand, the evaluation pattern has been revised to ensure continuous assessment of the student acumen in problem solving while on the other hand, the management of the examination has been upgraded with increased involvement of ICT. The evaluation has been revised to the 60:40 continuous evaluation pattern involving 40% of marks allotted for internal assessment. The internal assessment will involve objective assessment of the students for skills acquired, involvement in the learning process, completion of assignments, execution of projects, soft skills etc. Each Subject Board has the liberty to plan their internal examinations, as per the needs of the subject and the skills that are being assessed.

The College Administration Management system, which is ICT based software, takes care of the conduct and management of the evaluation system. The system has been suitably upgraded for the revised pattern of evaluation under autonomy. The CCMS software at the Exam Cell of the College, is being upgraded and enhanced to generate the question paper codes, hall tickets, marksheets and for generic result processing and certification. The results of the evaluations are declared by the College within a month of the conduct of examinations. The dates and schedules for the declaration of results are made available on the college website. The College has introduced the OSM (On Screen Marking) system for PG evaluation.

6.3.4 Research and Development

At present there are 2 major on going Major research project, and 6 Industry collaborative projects.26 research papers were published by faculty in Peer reviewed journal. 5 in e-journal 15 in conference proceedings. To support travel of research scholars for presenting their research work in seminars and conferences. Two travel fellowships namely; SBK Award (USD 500), one for biological science and one for chemistry and Netravali Research Paper Competition (Rs. 50,000/-) have been instituted.

6.3.5 Library, ICT and physical infrastructure / instrumentation

Library: The Library is fully computerized and bar coded. Circulation of the books is automated with bar -coded technology and Smart I-Cards for users. The annual stock-checking is done using Mobile Inventory Assistant device with an inbuilt barcode scanner and software application. Redesigning and renovation of library include larger and more number of reading spaces, a separate reference section, a separate study room for teachers, a separate periodical section and an OPAC facility and CCTV network in the Library for better security. With over 1.32 lakh printed books, 6500 back volumes and subscription to 87 national and international journals, the College library functions as an efficient nerve-centre for information exchange.

ICT : The College has 48 classrooms out of which 40 are smart classrooms equipped with Internet / Intranet connection, Data projector, computer and projection screen. In addition in the library there is an e learning centre with 20 computers.

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 parent's feedback is also taken for the improvement at departmental level.
- During the Heads of department meetings and common room meetings, innovative ideas and plans to be implemented are discussed for acquiring suggestions of teachers.
- 02 teachers availed FDP for completing their doctoral degree and 8 teachers acquired their doctoral degree in this Academic year.

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 19 Institutes and 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). A six-day Workshop on Nano- & Biotechnology- Innovation & Revolution was organized by Ramnarain Ruia College in collaboration with Harrisburg University from 10th-15th July, 2017. 21 students from Departments of Biotechnology and Bioanalytical Sciences underwent a 28day training program entitled 'Exploration Program in Biotechnology' at Indiana University of Pennsylvania in May 2017.

6.3.9   Admission of Students

The admission process is as per the rules and regulations of the University of Mumbai. In accordance with the directives of the University, application forms are accepted, three Merit lists are displayed and the admission process is completed on the stipulated dates provided by the University. The University has now, centralized the system at the entry level. It has made it mandatory for the students to apply online and then seek admission to the Institutes. 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 to address queries of students and parents. Preadmission form is online. The College has a web based centralized college management system (Master software) for managing Academic and administrative activities.

6.4 Welfare schemes for

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

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	_	Yes	College made a committee with external Subject experts
Administrative	Yes	-	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?

> The evaluation system has been upgraded with increased involvement of ICT. The evaluation has been revised to the 60:40 continuous evaluation pattern involving 40% of marks allotted for internal assessment. The internal assessment will involve objective assessment of the students for skills acquired, involvement in the learning process, completion of assignments, execution of projects, soft skills etc. For conscientious and objective evaluation the College has introduced Double blind correction of answer sheets. Similarly for evaluation of the answer sheets of the PG students, the On Screen Marking system has been introduced..

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

> The College has been granted Autonomous status with effect from the academic year 2017-2018.

6.11 Activities and support from the Alumni Association

The Ruia College Alumni Association conducted the following activities:
- On 15th August 2017, RCAA felicitated academic, sports and NCC achievers (2 in each category)
- An Annual health check -up camp was organised on 29th and 30th November 2017. 203 students and 18 administrative staff were examined by a team of doctors led by Dr. Shrikrishna Joshi.
- This year, RCAA sponsored the rain water harvesting, an environment friendly project of the College.
- The 'Jewel of Ruia and Rising star 2017' award function was held on 24th January 2018. The Jewel of Ruia awardees for this year were Former Commissioner of Police, Mr. Ronald Mendonca and Smt. Ashwini Bhide Deshpande, the noted classical vocalist. The Rising Star Awardees were Ms. Archana Shukla, economic journalist and Ms. Renu Savant, documentary film maker. The Awards function and has been uploaded on the RCAA website.
- Departments or Associations collaborated with RCAA for organizing guest lectures. Seven lectures have been sponsored by RCAA under this banner during the academic year:
    1. Inaugural lecture on How to be a Successful Entrepreneur by Ms. Achalatai Joshi in collaboration with the Career Guidance Cell on 19th July 2017
    2. Lecture by Smt. Ranjana Gaur on Building Self Esteem in collaboration with the Centre of Mindfulness on 3rd August 2017
    3. Lecture by Dr. Coomi Vivenia on Wisdom of Shakespeare along with Department of English on 12th August 2017
    4. Ms. Sunila Patil was the speaker on 8th September on Opportunities in the Tourism Industry in collaboration with B Voc. Department of Tourism and Travel Management
    5. RCAA sponsored the felicitation program of the meritorious students of the Department of Sanskrit held on 18th September 2017
    6. Sex Education: Facts, Myths and Fallacies by Dr. Rajan Bhosale in collaboration with the NSS unit.
    7. A lecture on Crime and Terrorism by Additional DGP and Chief of ATS, Maharashtra State, Shri. Atulchandra Kulkarni in collaboration with the NCC unit (Girls and Boys)
- The members of the Managing Committee of RCAA enthusiastically participated in the exhibition and interaction during the visit of the NAAC Peer Team.
- The constitution of RCAA was revised w.e.f. October 2017 and RCAA has been certified as a Section 8 Company of the Companies Act 2013 w.e.f. 21st June 2018.

6.12 Activities and support from the Parent – Teacher Association

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 are platforms to gain inputs on curriculum, in bringing in knowhow, suggesting qualitative changes in teaching/learning and identifying significant research areas.

6.13 Development programmes for support staff

- o A talk on 'Waste Segregation' (घन-कचऱ्याचे व्यवस्थापन) was organized on14th March 2018, by NGO, EcoRox.
- o A workshop on 'Health management ' was organized on 21st April 2018.

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

- Ruia Environment Awareness Committee along with Chemistry dept. organised an intercollegiate slogan competition on the theme- 'Save energy'. 8 best slogans were selected and displayed as stickers in classrooms, labs and common rooms.
- Installation of the following was done jointly by REAC & IQAC, with the sponsorship from RCAA:
  - o Rain water harvesting system -Aug 17
  - o Biogas plant -Oct.17
- REAC and Department of Chemistry jointly installed 14 big plastic containers in various chemistry and biological sciences laboratories for collection of broken glass in Sept.2017. NGO Stree Mukti Sangathna collected the broken glass waste in March 2018 for recycling.
- The Environmental Awareness Committee of Ramnarain Ruia Autonomous College gave the E- Waste to E-Incarnation Recycling Pvt. Ltd. for recycling
- College also installed a Sanitary napkin vending machine and an incinerator in September 2017

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.

- College has initiated the implementation of online courses with Montogomerry County Community College, Philadephia, USA.
- **A Novel Evaluation System for Skill Based Courses:** "Sequential Station Based Evaluation of Experiments" (SSBEE). This pattern involves devising tasks for students to be completed in several sequential "stations". Each station is a "timed capsule" where the student completes a part of the assigned task within a specified time limit. The students move from one "station" to the other till the task is completed. Every station is designed to be "self-contained" by providing the necessary consumables, reagents, chemicals and instruments.

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

- Conducted an examination audit on 7th September   2017
- Conducted a gender Audit on 6th October 2017
- To Strengthen the value system among the students, the Centre for Mindfulness and Wellbeing conducted the following:
    - Quest for human excellence by Dr. O. P. Sharma (DSU- Haridwar), who in a lucid and interesting manner explained to the students the need for excelling and focusing on the goals in life on the 18th of July, 2017 jointly with the Department of Philosophy.
    - On the 12th of August, 2017 a talk was delivered by Prof. Coomi Viviana on "Wisdom through Shakespeare" in collaboration with the Dept. of English.
    - On 17th August, 2017 Smt. Ranjana Gaur delivered a lecture on Building Self Esteem.
    - In the month of March, Principal Dr. Suhas Pednekar led a team of teachers to Dev Sanskriti Vishwa Vidyalaya (DSVV) at Haridwar and discussed the possibilities of collaborative activities that can be conducted mutually. MOU was signed between the two institutions to undertake activities of mutual interests that would benefit the students and teachers of both the institutions.
- A separate Centre for coaching for civil services has been set up
- Organised environmental awareness activities through Environment awareness committee

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. Fostering integrated growth through diverse skills**
>
> **2. Enhancement of Research Culture**

(Provided the details in Annexure III)

7.4 Contribution to environmental awareness / protection

- Ruia Environment Awareness Committee with Chemistry dept. Organised an intercollegiate slogan competition on save energy and cleanliness. Best 8 slogans were selected and 50 stickers were made using these slogans which were stuck in classrooms , labs and common rooms to create awareness.
- With the joint efforts of REAC & IQAC , and with the sponsorship from RCAA , Rain water harvesting system and Biogas plant was installed in Aug 2017 and Oct.2017 respectively.
- REAC and Department of Chemistry jointly organized purchase of 14 big plastic containers which were kept in various chemistry and biological sciences labs for collection of broken glasswares, bottles etc. (sept.2017) . Waste so collected was recycled by NGO Stree mukti sangathna.
- Waste paper collected from various departments was also recycled by Stree Mukti Sangathana .
- A street play was performed by the NSS volunteers on the topic of tree conservation named 'Zade lava, Zadejagva' near Dadar station and Ruia naka for creating the awareness on tree plantation on 5th June 2017. Tree plantation activity was conducted at Palghar where volunteers planted almost 150saplings of Ashoka, coconut, etc on 29th July 2017.

7.5 Whether environmental audit was conducted?   Yes [✔]   No [ ]

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

STRENGTHS	WEAKNESS
- Institution with a high academic reputation nationally as well as Internationally - Academic and research collaborations with institutions of repute within and outside country - Strong research culture with very good research facilities and strong industry linkages - Highly qualified and versatile faculty with research background - Large number of subject combinations offered to students in Arts and Science - Structured mentoring and student support system - Excellent library facilities - Integration of ICT in teaching learning	- Restriction/ ban on recruitment of teaching and support staff by the state government - Very limited scope for expansion of the campus in Mumbai

• Good infrastructural facilities for sports and games • A Centre for Mindfulness and well-being for the holistic development of the students	
OPPORTUNITIES	**CHALLENGES**
• Developing and strengthening industry-academia partnership • Scope for dual/ twinning programs with highly reputed national and international Universities • Exploring more interdisciplinary and multidisciplinary academic activities(certificate courses, Mooc, more skill based programs) • Expanding Slum studies to Urban Studies Centre • 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 • Further strengthening of Alumni Association for its support to its alma mater	• Financial self-sufficiency to make all activities sustainable • To attract students towards basic sciences

8. Plan of the Institution for next year:

Areas that require special focus(2018-19)

- *Teaching and Learning/ Train the Trainers*
  - To undertake a workshop on "Teacher as a Leader"
  - To involve external agencies / institutions for training teachers for innovations in teaching-learning process.

- *Evaluation and Certification*
  - To bench-mark the College with the top institutions in the country, The College should go for NIRF ranking in this academic year

- *Innovation, Skill development & Entrepreneurship*
  - Every department to design additional skill development modules
  - To initiate programs to undertake ideation and incubation activities
  - To organise activities for students on IPR
  - To organise more entrepreneurial activities

- *Research, Industry – Academia Linkages*
  - Induct internship in M Sc / B Sc regular courses
  - To develop professional ethics amongst the students
  - To encourage the departments to arrange a seminar/conference

- *Infrastructure*
  - To formulate a college development plan in consultation with the Management
  - Renovation of classrooms and laboratories

- *Extension Activities*
  - To provide expertise and undertake teaching training to the adopted college at Konkan

- *Life skill & Responsiveness to social issues*
  - To organise workshops for students to promote human values
  - To undertake workshops for sensitizing students in gender equity

- e- Governance
  - Digitization of administration and data management
  - To digitize the systems of feedback from all stake holders
  - To introduce biometric attendance for students
  - To procure software to detect plagiarism

- Sports academy
  - Expansion of outdoor games
  - To get more sports scholarship

- Environmental friendly activities
  - To install alternative environment friendly Solar energy resources
  - Training for e-waste disposal for students

Name : Dr. Jessy Pius

Signature of the Coordinator, IQAC

Name : Dr. Anushree Lokur

Signature of the Chairperson, IQAC

S.P. MANDALI'S
RAMNARAIN RUIA AUTONOMOUS COLLEGE
MATUNGA, MUMBAI- 400019.

ACADEMIC CALENDAR 2017-2018

I, III & V - SEMESTER

- *I / III SEMESTER INTERNAL CLASS TEST EXAMINATION 4TH WEEK OF AUG.-2017*

- *ATKT EXAMINATION : OCTOBER – 2017.*

- *ARTS /SCIENCE/BMM/ BIOANALYTICAL Sc. 1ST, 3RD & 5TH SEMESTER END EXAMINATION:*
  4TH WEEK OF SEPTEMBER 2017.

- *RESULT DECLARATION : I, III & V SEMESTER RESULT*
  3RD WEEK OF NOVEMBER- 2017.

- *A.T.K.T. & ADDITIONAL EXAMINATION ALL SEM 1ST WEEK OF DECEMBE.- 2017.*

II, IV & VI SEMESTER

- *II / IV SEMESTER INTERNAL EXAMINATION 1ST WEEK OF FEB.-2018*

- *ARTS /SCIENCE/BMM/ BIOANALYTICAL Sc. 2ND , 4TH & 6TH SEM: 1ST WEEK OF MARCH 2018*

- *RESULT DECLARATION : 2ND , 4TH & 6TH SEMESTER RESULT 1ST WEEK OF APRIL 2018.*

- *A.T.K.T. & ADDITIONAL EXAMINATION – 3RD WEEK OF APRIL- 2018.*

- *A.T.K.T. & ADDITIONAL EXAMINATION RESULT 2ND WEEK OF JUNE- 2018.*

Dr. Mohsina Mukadam

Examination In-charge

**Student Council
CALENDER**

2017-18

Sr. No.	PROGRAMME	DATES
1.	Fresher's Party	4 August 2017
2.	Independence Day	15 August 2017
3.	Teachers` Day	5September 2017
4.	Rose Day	16 September 2017
5.	Winter sports	28- 29 October of 2017
6.	Utsav, Aarohan, Colosseum, Ruia Cup	19 to 21 December 2017
7.	*Samanvay* (Departmental Festival)	23 December2017
8.	College Day	26th January 2018
9.	Traditional Day	12 February 2018

Dr. Manish Hate
Chairperson,
Vidyarthi Pratinidhi Mandal

Analysis of feedback

STAFF ASSESSMENT REPORT-2017-18
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 2017-18, 45.4% of staff were graded with an AGP above 9.01, 38.7% between 8.01 to 9.0,12.6% between 7.01 to 8.0and 3.3% between 6.01 to 7.0 in Theory. 61.6% of staff was graded with an AGP above 9.01, 30.1% between 8.01 to 9.0, 8.2% between 7.1 to 8.0 in Practical.
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 and keeps a track of their performance.

REPORT OF THE PARENTS MEETING 2017-18

Parents Feedback was obtained through a questionnaire through departmental meetings. This year the departments conducted parents meeting and College received feedback from 1120 parents. On analysis of the report, it was found that majority of the parents were satisfied with the subject combinations provided by the college, quality of teaching, Infrastructural facilities provided by college. They also appreciated the efforts taken by the department for over all grooming and personality development of their children, the departmental activities and encouragement to the students for participation in various co-curricular and extra-curricular activities. They were also appreciative of the Students mentoring activity.
Some of the suggestions which came from the parents include:
- Some parents suggested more number of certificate courses
- Some parents also suggested a one semester compulsory internship for industry and job experience.
- Most of the parents expect that college should provide a regular information about the attendance and performance of their wards to the parents.
- Based on the suggestions given by parents, under Autonomy all departments upgraded the curriculum and many departments incorporated research component at the undergraduate level. Under autonomy college will be providing regular information about the attendance and performance of the wards through mobile application.

The interactive session with the parents helps the college to know the points for improvement

Two Best Practices of the institution

The institution since its autonomous status, has espoused the twin themes of 'Integrated growth through diverse skills' and 'Enhanced Research Culture' while redesigning the academic program.

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.

- 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. 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 at the regional and state level.

- **Novel Evaluation System for Skill Based Courses:**
  One of the primary objectives of evaluation program in a skill based course is to objectively examine the level of professional skills developed by the student. This is not adequately possible in a conventional evaluation schemes. In the BVoc program of Pharma Analytical Sciences, the College has devised and implemented a novel evaluation pattern to examine the professional skills developed by the student. The evaluation is carried out using "**Sequential Station Based Evaluation of Experiments" (SSBEE).** This pattern involves devising tasks for students to be completed in several sequential "stations". Each station is a "timed capsule" where the student completes a part of the assigned task within a specified time limit. The students move from one "station" to the other till the task is completed. Every station is designed to be "self-contained" by providing the necessary consumables, reagents, chemicals and instruments. A SSBEE evaluation program involves the student completing more than one task in about 10 to 12 stations and each station is separately marked.

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.