

Shiksha Mandal's

Jankidevi Bajaj College of Science, Wardha

The Annual Quality Assurance Report
AQAR
2015-16

MHCOGN10016-Jankidevi Bajaj College of Science, Wardha-Maharashtra AQAR 2015-16



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

AQAR for the year

2015-16

1. Details of the Institution

1.1 Name of the Institution

Jankidevi Bajaj College of Science

1.2 Address Line 1

Jamnalal Bajaj Marg,

Address Line 2

Civil Lines,

City/Town

Wardha

State

Maharashtra

Pin Code

442001

Institution e-mail address

jbsciencewardha@yahoo.co.in

Contact Nos.

07152 230515, 230516, 9890845825

Name of the Head of the Institution:

Dr. Om Mahodaya

Tel. No. with STD Code:

07152 230515, 230516

Mobile:

09890845825

Name of the IQAC Co-ordinator:

Dr. S. S. Zade

Mobile:

09823304696

IQAC e-mail address:

jbc.iqac@gmail.com

1.3 NAAC Track ID (For ex. MHCOGN 18879)

MHCOGN10016

OR

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)

BC/66/RAR/139 Dt. 21.02.2014

1.5 Website address:

www.jbsw.shikshamandal.org

Web-link of the AQAR:

<http://shikshamandal.org> under the quick link IQAC → AQAR 2015-16

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	3star (***)	NA	09/10/1999	08/10/2004
2	2 nd Cycle	B+	NA	02/02/2006	01/02/2011
3	3 rd Cycle	A	3.21	2013	21.2.2014 to 20.2.2019

1.7 Date of Establishment of IQAC :

DD/MM/YYYY

06/01/2000

1.8 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)

- AQAR Session 2013-14 29/04/2014 (DD/MM/YYYY)
- AQAR Session 2014-15 16/11/2015 (DD/MM/YYYY)
- AQAR _____ (DD/MM/YYYY)
- AQAR _____ (DD/MM/YYYY)

1.9 Institutional Status

University	State	<input type="checkbox"/>	Central	<input type="checkbox"/>	Deemed	<input type="checkbox"/>	Private	<input type="checkbox"/>
Affiliated College	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>				
Constituent College	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>				
Autonomous college of UGC	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>				
Regulatory Agency approved Institution	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>				
(eg. AICTE, BCI, MCI, PCI, NCI)								
Type of Institution	Co-education	<input checked="" type="checkbox"/>	Men	<input type="checkbox"/>	Women	<input type="checkbox"/>		
	Urban	<input checked="" type="checkbox"/>	Rural	<input type="checkbox"/>	Tribal	<input type="checkbox"/>		
Financial Status	Grant-in-aid	<input type="checkbox"/>	UGC 2(f)	<input checked="" type="checkbox"/>	UGC 12B	<input checked="" type="checkbox"/>		
	Grant-in-aid + Self Financing	<input checked="" type="checkbox"/>	Totally Self-financing	<input type="checkbox"/>				

1.10 Type of Faculty/Programme

Arts	<input type="checkbox"/>	Science	<input checked="" type="checkbox"/>	Commerce	<input type="checkbox"/>	Law	<input type="checkbox"/>	PEI (Phys Edu)	<input type="checkbox"/>
TEI (Edu)	<input type="checkbox"/>	Engineering	<input type="checkbox"/>	Health Science	<input type="checkbox"/>	Management	<input type="checkbox"/>		
Others (Specify)	<div style="border: 1px solid black; height: 30px; width: 100%;"></div>								

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

Rashtasant Tukdoji Maharaj
 Nagpur University, Nagpur
 (RTMNU)

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

Autonomy by State/Central Govt. / University	<div style="border: 1px solid black; padding: 2px 10px;">Nil</div>		
University with Potential for Excellence	<div style="border: 1px solid black; width: 80px; height: 25px;"></div>	UGC-CPE	
DST Star Scheme	<div style="border: 1px solid black; padding: 2px 10px;">✓</div>	UGC-CE	<div style="border: 1px solid black; width: 120px; height: 30px;"></div>
UGC-Special Assistance Programme	<div style="border: 1px solid black; width: 80px; height: 30px;"></div>	DST-FIST	<div style="border: 1px solid black; width: 120px; height: 30px;"></div>

UGC-Innovative PG programmes

Any other (*Specify*)

UGC-COP Programmes

2. IQAC Composition and Activities

2.1 No. of Teachers	7
2.2 No. of Administrative/Technical staff	1
2.3 No. of students	1
2.4 No. of Management representatives	1
2.5 No. of Alumni	1
2.6 No. of any other stakeholder and community representatives	1
2.7 No. of Employers/ Industrialists	Nil
2.8 No. of other External Experts	1
2.9 Total No. of members	13

2.10 No. of IQAC meetings held

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

2.14 Significant Activities and contributions made by IQAC

- For the session 2015-16, the IQAC planned various curricular, teaching-learning, co-curricular, extracurricular and extension activities. Mechanisms for their implementation and monitoring were also planned.
- Steps were taken for compliance of the **11 recommendations** given by NAAC peer team for quality enhancement

- IQAC arranged 6 meetings with faculty, 1 with non-teaching staff, 1 with alumni, 2 meetings with parents.
- Prepared plans related to teaching-learning, co-curricular and extracurricular activities
- Implementation and monitoring of the plans throughout the year through academic diaries and self-appraisal.
- Measures for admitting better quality students at the entry level i.e. B.Sc. I
- Proper implementation of the new **Cluster** system (To reduce the dropout rate)
- Internal assessment to be done strictly on the basis of performance in various class, topicwise, unit and terminal exam tests as well as sincerity and creativity. (One more aspect to be added: The number of queries a student make during the session)
- Organized interactions of a guardian-teacher and cluster students to solve their academic and personal difficulties in weekly meetings
- Incorporation of additional subject tutorials in time-table for better understanding of subject fundamentals
- Proposals to UGC for add-on courses and Major and minor research projects
- Proposals to UGC, CPE , DBT for various schemes
- Facilitation of research , monitor and address the issues of research

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 *

S. N.	Activities chalked out by the IQAC in the beginning of the session 2015-16 towards quality enhancement of the institute	Outcome achieved at the end of session 2015-16
1.	<p>To follow the 11 recommendations proposed by NAAC peer team for quality enhancement of the institution:</p> <p>(i) Library needs expansion</p> <p>(ii) P.G. programmes in Maths, Physics, Computer Science and Electronics be introduced</p> <p>(iii) Career Guidance and placement cell need strengthening</p> <p>(iv) Central computer facility be established</p> <p>(v) Centralized instrumentation facility be created for research work</p> <p>(vi) A center to prepare students for competitive examination be established</p> <p>(vii) Internationally recognized</p>	<p>Compliance of the recommendations:</p> <p>(i) New library building has been constructed and Library has been shifted to the new building.</p> <p>(ii) Due to qualified faculty constraint in Maths, Laboratory and staff constraint in Physics, and student strength problem in Computer Science and Electronics P.G. courses have not been introduced so far.</p> <p>(iii) New Career Guidance and placement cell has been formed. Placement programme by Wipro and TCS were organized. Wipro employed 9 students, TCS selected 10 students, whereas Corning India has selected 4 students. Wipro has selected our institute as a Nodal college for district for its placement.</p> <p>(iv) College plans to establish a Central computer facility in near future.</p> <p>(v) As a first step in this direction, it was decided that instrumentation facilities in every department be known to all departments. Later a Centralized instrumentation facility will be created.</p> <p>(vi) A center for competitive examination has not been established. However, M.Sc. students will be guided for NET and SET exams by experts in the field.</p> <p>(vii) Every department to subscribe at least one internationally recognized journals for library</p> <p>(viii) Ph.D. programme is according to UGC guidelines (eg. Mandatory Course work and Pre submission seminar)</p>

	<p>journals be subscribed for library</p> <p>(viii) Ph.D. programme be according to UGC guidelines</p> <p>(ix) Efforts be made to reduce the drop-out rate</p> <p>(x) Student feedback be analyzed and needed action be taken</p> <p>(xi) Collaborations be introduced with industries and National Research institutions</p>	<p>(ix) Drop-out rate depends on result. To increase the result extra efforts are being taken especially for weaker students:</p> <ul style="list-style-type: none"> • B.Sc.I Sem-I Maths section has been divided into two smaller sections (on the basis of student performance in class tests, unit tests and sincerity). • The Teacher guardian cluster system in new format has been introduced for improving and monitoring of attendance, performance and overall development. • The even semesters have short time span available for teaching. To overcome the problem a new time table with increased theory classes has been implemented. <p>(x) A new Student feedback form with more options to be designed and feedbacks to be analysed.</p> <p>(xi) Two Collaborations and one linkage has been established (Details are with Research committee)</p>
2.	To improve students' performance in exams	Topic-wise tests in addition to unit tests have been conducted by every department
3.	To plan teaching for newly implemented semester pattern syllabus of sem V and Sem VI	Faculty prepared for the semester pattern syllabus of sem V and Sem VI
4.	To conduct 2 Unit tests and a semester test exam for Sem I, III and V	Two unit tests have been conducted in august and September. Also teachers independently and regularly conducted unit tests. Semester exam will start in the month of May.
5	Teacher-guardian student cluster scheme in a new form to be started	Teacher-guardian student cluster scheme in a new form has been started Teacher-guardian student cluster meetings have been held every Saturday. Teachers visited some student's homes.
6.	Every department to propose Major and Minor Research Project to UGC	5 Minor Research Projects have been proposed till March 2016 to UGC during 2015-16
7.	To promote research	<p>Recommendations of Research committee to promote research:</p> <ul style="list-style-type: none"> • Faculties of every department to undertake Major/Minor research project of UGC • Hands-on training on instrumentation

		<ul style="list-style-type: none"> Recommended the faculties and students to participate in workshops/seminars/conferences for paper presentation in reputed institutions only Recommended to publish papers in peer reviewed/indexed National and International Journals Faculties have been asked to undertake Ph.D. programmes Recommended the departments to get their laboratories recognized for higher learning and research (Ph.D.) from RTMNU, Nagpur Faculties have been asked to apply for recognition as Ph.D. supervisor in their respective subjects Every supervisor should supervise maximum two Ph.D. students in their recognized labs in order to maintain research quality Assigning Innovative projects to students under the guidance of subject teachers. Provision of financial support for projects Efforts to develop scientific temper among students through guest lectures, science exhibitions, science day celebration, etc. Access to internet facilities and INFLIBNET services 'National centre for cell sciences, Pune' has given the consent for visit of 10 scientists for hands on training and guest lecture in session 2015-16 under DBT supported star college scheme: 'Academic programme to form, education bridge between NCCS & JB Science college' Recommended for mandatory 'pre-submission seminar' before submission of the thesis
8.	To organize national seminar and workshop on nanotechnology	On occasion of Science Day National Seminar and Workshop on Nanotechnology was organized. (Details available with Organizing Committee)
9.	To encourage the staff for publishing books	The staff published 06 books : (Maths=02, Electronics =02, Physics=02)
10.	To organize an 'Innovative project competition'	Wipro-Earthian Innovative research competition was organized on 15 th sept 2015. 24 projects on water management, waste management and mobility in urban India were presented. The best project was submitted to Wipro-Earthian
11.	To encourage students to participate in various curricular, co-curricular, and extra curricular competitions.	<ol style="list-style-type: none"> Cluster level Word power competition organized. Students participated in various seminar, debate and quiz competitions A B.Sc. I student stood third in state level Chemistry Talent Search Examination organized by M. J. College, Jalgaon. Three C/S students bagged prize in paper presentation competition at DMIER Wardha
12.	To organize co-curricular activities such as Student seminars , Poster competitions etc.	Student seminars were conducted by every department.
13.	To purchase quality reference books, and text books related to new Semester pattern.	Reference and text books related to new Semester pattern are purchased.

14	To construct additional first floor to Girls hostel, and staff quarters	Construction of Girls hostel not yet stated. Construction of staff quarters completed.
15	To utilize UGC CPE Grant	UGC CPE grant is being utilized for the required purpose (Details of grant utilization are with the office)
16	To utilize XII plan grants for enhancing the academic activities, organizing additional co-curricular activities, procuring laboratory equipments, for boosting research, upgrading laboratory facilities etc.	XII plan grants is being utilized for the required purpose (Details of grant utilization are with the office)
17	To utilize Additional assistance grants for Infrastructure and scientific development, safety measures.	Additional assistance grants is being utilized for the required purpose. (Details of grant utilization are with the office)
18	To celebrate the Centenary of General theory of Relativity	A Talk / interaction by Padmashri Dr. T Padmanabhan, IUCAA Pune , has been organized in the Gandhi Memorial Hall by Department of Mathematics on 14 th July 2015
19	To implement the DBT's Star college scheme. To organize guest lectures on careers/opportunities in Biotechnology under Star college scheme	10 scientists to visit the college under E-Bridge programme between NCCS & JBCS. Dr Shekhar Mande, Director NCCS Pune, Dr. Arvind, scientist G, , and Dr Giridhari Lal , scientist visited on 22-23 th sept. Dr. Manas Kumar Santra Scientist 'D', Dr. Shrikant Rapole, Scientist visited on 9-10 th Oct 2015. Workshop in Botany 4-5 th March 2016
20	To arrange programmes on value education, health, population etc.	The college organized a debate competition on population explosion. Organised 'Path Natya' on Gram swachhata abhiyan' and 'Andh-shraddha nirmulan' and 'vyasan mukti' in Central Jail, Bapu Kuti and other places in Wardha were organized. Also 5 day NSS camp with central theme Beti Bachao – Beti Padhao was organized in village Dhotra.
21	To enhance sport activity-participation in university, state, national and international level sport events	Participation in inter collegiate RTM Nagpur University Tournament upto 5 March 2016 :- Men:-1. Kabaddi 2. Badminton 3. Volleyball 4. Judo 5. Basketball6. Table-Tennis 7. Cricket 8. Softball 9. Baseball 10. Handball 11. Boxing 12. Taekwado 13. Athletics 14. Ball- Badminton 15. Kho-KhoGirls :- 1. Volleyball 2. Badminton3. Basketball 4. Judo 5.Kabaddi 6.Cricket 7. Ball-Badminton 8. Handball 9. Taekwado 10. Athletics11. Softball 1 Ku. Mayuri Mankar (Judo) secured Silver Medal RTM Nagpur University. 2 Handball Women Team Secured Silver Medal in Women's

		<p>Divisional Tournament.</p> <p>3 Volleyball (Womens), Baminton (Womens) Volleyball (Mens) team Qualified for Quarter-Final.</p> <p>4. Raja Pardeshi secured Bronze medal in Boxing, RTM Nagpur University Tournament.</p> <p>5. Ku. Pratibha Gate secured Fourth place in Athletics (100mt & long jump) RTM Nagpur University Tournament.</p> <p>6. Senior Handball Women Team Secured Bronze Medal RTM Nagpur University Tournament.</p> <p>7. Senior Ballbadminton Women Team Secured Bronze Medal RTM Nagpur University Tournament.</p> <p>8. Softball (Men) and Ball-badminton (Men) Qualified for Quarter-Final.</p> <p>9. Dept. of Physical Education & Sports organized following RTM Nagpur University Tournaments for 2015-16: 1. Softball (Men) 2. Ball-Badminton (Women)</p> <p>B. Players selected in Maharashtra State Team for National Championship:</p> <p>1. Ku. Rekha Manekar and Ku. Sneha Meshram – Ball-Badminton (Khammam, Telangana)</p> <p>3. Ku. Yasmin Kha and Ku. Namrata Chavan - Handball (Patna, Bihar)</p> <p>C. Following players were selected in RTM Nagpur University teams for Inter University Tournaments:</p> <ol style="list-style-type: none"> 1. Ku. Yasmin Kha (Handball – Varanasi(U.P.)) 2. Ku. Namrata Chavan (Handball – Varanasi(U.P.)) 3. Ku. Madhuri Choudhari (Kabaddi-Ratnagiri & Nanded) 4. Ku. Pratiksha Pande (Baseball – Chandigarh and Cricket – Sagar, M.P.) 5. Vishal Hole (Softball – Jalandhar and Ball-Badminton – Manglore) 6. Ku. Mayuri Mankar (Judo – Bhubneshwar) 7. Raja Pardeshi (Boxing – Kurukshetra) 8. Ku. Unnati Singh (Ball-Badminton) 9. Ku. Rekha Manekar (Ball-Badminton) 10. Ku. Prajakta Moon (Ball-Badminton) 11. Abhishek Bakre (Baseball – Chandigarh) <p>D. Dr. Suresh Bongade Elected</p> <ol style="list-style-type: none"> 1) Senior Vice-President Ball-Badminton Federation of India for 2015-2019 2) Vice-President, Ball-Badminton Federation of Asia 2016-17 to 2019-20 3) Secretary General, Maharashtra State Handball Association 2016-17 to 2019-20
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** Attach the Academic Calendar of the year as Annexure.*

Academic calendar is given in Annexure i

2.15 Whether the AQAR was placed in statutory body Yes ☒ No ☐

Management ☒ Syndicate ☐ Any other body ☐

Provide the details of the action taken:

Governing body's Observation is provided herewith:

Management's Remark about the AQAR

We have verified the AQAR of IQAC of Jankidevi Bajaj College of Science, Wardha for the session 2015-16. It is observed that the process of academic and administrative improvement of the Institution is on the proper path. Adequate efforts are being taken in this regard. The Institution has applied for 'academic autonomy' and the committee is expected to visit the Institution in coming months.

Every support will be extended for improvement of infrastructure and other facilities in order to comply with the recommendations of NAAC Peer team.

Shiksha Mandal wardha

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	2(Chemistry; Botany)	-	-	-
PG (M.Sc.)	3(Chemistry; Botany; Microbiology)	-	-	-
UG (B.Sc.)	1with 10 combinations CBZ, CBBT, CZBT, CMBBT, CBMB, CZMB, PCM, PEM, PECs, ECsM	-	Optional subjects at UG level Biotechnology & Computer Science is self financed departments.	-
PG Diploma	-	-	-	-
Advanced Diploma	-	-	-	-
Diploma	-	-	-	-
Certificate	2(Add on Course)	-	-	2 (Add on Course)
Others	-	-	-	-
Total	9	-	-	3

Interdisciplinary	2 (Add on Course)	-	-	2 (Add on Course)
Innovative	-	-	-	-

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

Pattern	Number of programmes
Semester	PG and UG
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***

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

With the implementation of semester pattern the UG and PG syllabus has been revised by university.

At university level Board of study is the main body looking after it.

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

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Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Other
35	20	15 (Including Principal)	Nil	Nil

2.2 No. Of permanent faculty with Ph.D : 23

2.3 No. Of Faculty Positions Recruited (R) and Vacant (V) during the year 2015-2016

Asst.Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
20	23	15	Nil	Nil	3	Nil	Nil	35	23

2.4 No. Of Guest and Visiting faculty and Temporary faculty

Botany - 2	Chemistry-6	Micro-biology - 2
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2.5 Faculty participation in conferences and symposia :

No. of Faculty	International Level	National Level	State Level
Attended	Nil	13	
Presented Papers	01	08	
Resource Persons	01	Nil	01

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

- 1) ICT facilities are provided to students in the Library and Department
- 2) E-learning resources such as science videos, audio-visuals, pvc models, computer assisted compound microscopes, advanced instruments such as UV-VIS, Centrifuger, Cryostats are taught to students and allow the students to work on them under faculty supervisions
- 3) Typewritten and laminated Charts are provided to students during Practicals, 3D videos of structure and systems of animals are shown to students for better conceptual understanding.
- 4) During theory classes classified notes are prepared and distributed and models are shown in teaching classes for interactive learning
- 5) Seminar and group discussion are held as a frequent practice to evaluate the students learning process and boost up their confidence
- 6) B.Sc. I Sections were split into two sessions according to their performance. Teaching organized accordingly for academic development and improvement in result.

2.7 Total No. of Actual teaching days during this Academic Year : 210 days

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

Unit Tests are held for students during the sessions are taken

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

Board of Studies
– 2

Curriculum
Development -
8

2.10 Average percentage of attendance of students

Above 80%

2.11 Course/Programme wise distribution of Pass Percentage:

Title of the Programme	Total no. of students appeared	No. Of students passed	Division				
			Distinction%	I%	II%	III%	Pass%
B.Sc. I (Semester 1)	347	138	12.31	7.24	52.17	28.26	39.76
B.Sc. I (Semester 2)	345	139	19.42	48.20	32.31	-	40
B.Sc. II (Semester 3)	315	134	13.43	44.77	41.79	-	42.50
B.Sc. II (Semester 4)	280	146	13.70	47.55	37.67	0.65	52.00
B.Sc. III (Semester 5)	222	128	9.46	48.44	35.16	-	57.65
B.Sc. III (Semester 6)	220	133	15.79	53.38	30.83	-	74.09

2.12 How does IQAC contribute/monitor/evaluate the teaching and learning processes :

The IQAC contribute/monitor/evaluate the teaching-learning processes in the following manner:

1. The first meeting of IQAC is held in the beginning of the session. In this meeting schedule related to teaching-learning (academic, Co-curricular, Extra- curricular activities) are prepared. Methods for their implementation are also planned and discussed
2. The HODs, and the members of IQAC, monitor the teaching plans throughout the year and any advice regarding improvement is discussed and implemented
3. In the mid-term, meeting is held to monitor the progress of the planned activities, suggestions extended by members are discussed and implemented by IQAC if necessary.
4. Difficulties faced in execution are discussed and the methods for improvement are suggested.

2.13 Initiatives undertaken towards faculty development :

Faculty/ Staff Development Programmes	Number of faculties benefitted
Refresher Courses	03
UGC – Faculty Improvement Programme	Nil
HRD Programmes	-
Orientation Programmes	01
Faculty Exchange Programme	Nil
Staff training conducted by the University	01
Staff training conducted by other Institutions	02
Summer/ Winter Schools, Workshops etc.	08
Others	01*

* Dr. S. S. Zade participated in Research based paedagogical tools workshop at IISER Pune

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	13	08	Nil	Nil
Technical Staff	40	10	Nil	Nil

Criterion – III

3. Research, Consultancy and Extension

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

- Ph.D. Programme according to UGC's guidelines
- Established collaborations with
 - (i) 'National centre for cell sciences (NCCS), Pune':
Accordingly, scientists from NCCS has provided 'hands on training' under DBT supported star college scheme: 'Academic programme to form, education bridge between NCCS & JB Science college' Four workshops have been organized in college. A workshop organized at NCCS Pune, where four faculty from college participated.
 - (ii) C-MET Pune :
A National Level workshop (hands-on-training and live demonstration) on experimental techniques in 'Nanotechnology' held in collaboration with C-MET.
- Provision of seed money to the faculty for research
- Submitted proposal to DST (FIST) to promote research facilities in institution
- Students' research projects other than compulsory by the University
- Students' internship linkage in reputed academic institution
- Enhancement in Interdisciplinary Research

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	-	2	-	2
Outlay in Rs. Lakhs	-	14.36	-	54.45

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	-	2	-	4
Outlay in Rs. Lakhs	-	6.50	-	20.00

3.4 Details on research publications

	International	National	Others
Peer Review Journals	18	-	-
Non-Peer Review Journals	-	7	-
e-Journals	3	-	-
Conference proceedings	2	13	-

3.5 Details on Impact factor of publications:

Range: 0.364-7.8 Average 1.049

h-index: Scopus =13 , Google Scholar = 24

Nos. in Scopus =2 , Google scholar = 16, Pubmed = 3, Web of science = 3

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

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	2015-16	UGC	14.36	Nil
Minor Projects	2015-16	UGC	6.50	Nil
Interdisciplinary Projects	-	-	-	-
Industry sponsored	-	--	-	--
Projects sponsored by the University/ College	-	-	-	-
Students research projects (other than compulsory by the University)	-	-	-	-
Star College Scheme	2015-16	DBT	3.41	3.41
College with potential for excellence (CPE)	2015-16	UGC	99.40	99.40
National Seminar and workshop	2015-16	UGC	2.26	2.26
Total			125.93	105.07

3.7 No. of books published

i) With ISBN No.: 11 Chapters in Edited Books : 02

ii) Without ISBN No. Nil

3.8 No. of University Departments receiving funds from

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

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

3.10 Revenue generated through consultancy

2000/-

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	-	02	-	-	8
Sponsoring agencies	-	UGC/DBT	-	-	UGC/DBT

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

12

3.13 No. of collaborations International

-

National

1

Any other

1

3.14 No. of linkages created during this year

2

3.15 Total budget for research for current year in lakhs :

125.93

From Funding agency

From Management of University/College

--

Total

125.93

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 : **Nil**

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

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

15

4

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 Inspire Fellows

3.21 No. of students Participated in NSS events:

University level State level
National level International level

3.22 No. of students participated in NCC events:

University level State level
National level International level

3.23 No. of Awards won in NSS:

University level State level
National level International level

3.24 No. of Awards won in NCC:

University level State level
National level International level

3.25 No. of Extension activities organized

University forum College forum
NCC NSS Any other

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

NSS

(1) 'International day for Yoga' celebrated on June 21, 2015

(2) 'World Population Day' was jointly organized by NSS, PEC & CWSS, on 11/07/2015.

Debate competition was organized on the same day.

- (3) Women empowerment programme was jointly organized with CWSS on topic 'Social problems to women' in presence of Mamata Afune, women's helpline chief of Wardha
- (4) 'International Literacy Day' was organized by NSS volunteers on 08/09/2015 under which volunteers make street play related with illiteracy.
- (5) 'Cleanliness Week' was observed by NSS volunteers in the college from 02/10/15.
- (6) 'NSS Day' was celebrated, on 24/09/2015.
- (7) NSS volunteers and programme officers participated in the rally to BAPU-KUTI, Sewagram Ashram on account of Gandhi Jayanti & Shashtri Jayanti, on 02/10/15.
- (8) NSS volunteers performed 'drama' on cleanliness at Bapu-kuti on same day
- (9) NSS student visit 'district jail' and performed street play for 'Tuberculosis awareness'.

NCC

- 1) 'Swachha Bharat Abhiyan'
- 2) Tree plantation
- 3) Shramdan
- 4) Polio eradication campaign
- 5) Awareness about Military, civil defence, first aid
- 6) Ahinsa Rally on 2nd Oct. 2015

CWSS & PEC

- 1) 'World Population Day' was jointly organized by NSS, PEC & CWSS, on 11/07/2015. Debate competition was organized on the same day.
- 2) Women empowerment programme was jointly organized with CWSS on topic

Criterion – IV**4. Infrastructure and Learning Resources****4.1 Details of increase in infrastructure facilities:**

Facilities	Existing	Newly created and amount	Source of Fund	Total
Campus area	37.55Acres	-	-	37.66Acres
Class rooms	22	-	-	22
Laboratories	08	Renovation 255220	Sr. No Grant UGC	08
Seminar Halls	01	-	-	01
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	NIL	NIL	NIL	NIL
Value of the equipment purchased during the year (Rs. in Lakhs)	-	1436402	-	-
Others: Infrastructure (Library + Staff Qtr.)	-	11400000	S.M. (Management)	-

4.2 Computerization of administration:

Administration: The administrative office has CMS software for Admission, Issue of certificates, TC, certificate etc. Software ‘Tally’ is used for accounting. Various online software’s from RTM Nagpur university are used for affiliation, enrolment of students, exam form filling, uploading of internal and practical marks, etc. Processes of salary, GPF, scholarships, IT forms etc. are computerized.

4.2 Computerization of library

Library is computerized with the help of customized library software "**LIBTECH**". Acquisition, cataloguing, housekeeping, etc. Operations are carried out through this software. Online Public Access Catalogue (OPAC) has been made available for the users. Books and Borrowers Ticket are provided with barcode to minimize the errors. CCD scanner is being used to scan the barcodes. Library has a dedicated server with fifteen computers connected in LAN, out of which twelve computers are for public access.

4.3 Library services

	Existing		Newly Added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	25683	2698085	1103	260980	26786	2959065
Ref. Books	779	957887	109	100890	888	1058777
Other Books	10589	589610	285	17853	10874	607463
e-Books	0	0	0	0	0	0
Journal/Periodicals	75	955573	.	70154	75	1025727
e-Journals	0	0	0	0	0	0
Digital Database	0	0	0	0	0	0
CD & Video	121	23945	0	0	121	23945
Others (specify)

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centers	Computer Centers	Office	Departments	Others
Existing	95	1	15 VPN 2 Broadband on 60 computers	2	1	12 Computers		
Added	42	-	1 Broadband		-	-		
Total	137	1	Available on 60 computers	2	1	12 Computers		

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

A work shop on ICT was organized by dept. of C/S.

4.6 Amount spent on maintenance (Rs.): 2015-16

i) ICT	59127
ii) Campus Infrastructure and facilities	
iii) Equipments	95898
iv) Others (Building)	70262
Total:	225287

Criterion – V**5. Student Support and Progression****5.1 Contribution of IQAC in enhancing awareness about Student Support Services**

- Students with good percentage in HSc are encouraged to apply for INSPIRE Fellowship.
- Coaching for MSc entrance exams.
- NET, SET exam Guidance
- Placement cell
- Guardian-Teacher (cluster scheme), Teacher parent meet and Value based programs/lectures
- Educational tours to national laboratories, industries and University departments

5.2 Efforts made by the institution for tracking the progression

Students are made aware of various higher learning opportunities. The faculties encourage and provide academic support to the UG students to pursue admission to PG courses and motivate the PG students for higher learning, research, Ph.D. etc. Every department keeps record of the student progression from UG to PG, and from PG to Ph.D. or other higher education. The career counselling and placement cell extends guidance to the students and organise campus interviews. The cell also keeps track of the students who are placed in various organizations.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
897	83	10	-

(b) No. of students outside the state

NIL

(c) No. of international students

NIL

Men	No	%	Women	No	%
	149	16.61%		748	83.38%

Last Year(14-15)						This Year(15-16)						
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	NT, SBC, VJ	Total
172	116	26	488	-	802	166	118	39	510	-	64	897

Demand ratio: %

Dropout : %

5.4 Details of student support mechanism for coaching for competitive examinations: Through the career guidance and placement cell guest lectures are arranged for preparing MPSC, UPSC, BANK and various competitive examinations (like IIT JAM Entrance cleared).

No. Of students benefited

11

5.5 No. Of students qualified in these examinations

NET	Nil	ET/SLET	01	TE	Nil		Nil
IAS/IPS etc	Nil	State PSC	Nil	UPSC	Nil	Others	Nil

5.6 Details of student counselling and career guidance

The career guidance and placement cell was set up in the season 2006-07. In this campus recruitment program are conducted and the industries are invited for the campus selection.

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
07	412	32	06

5.8 Details of gender sensitization programmes

Our college is a co-educational institute. Gender sensitization programmes were organized under NSS, NCC, CWSS, PEC. These include:

1. A workshop on responsibility and accountability towards female gender in collaboration with Datta Meghe Institute of Medical Sciences, Wardha.
2. Participation in 'Social status of women' in MGIMS Sewagram,

5.9 Students Activities

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

State/ University level	307	National level	28	International level	Nil
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No. of students participated in cultural events

State/ University level	15	National level	Nil	International level	Nil
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5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports : State/ University level	28	National level	11	International level	Nil
Cultural: State/ University level		National level		International level	

5.10 Scholarships and Financial Support

	Number of Students	Amount
Financial support from institution	Nil	Nil
Financial support from government	665	3,62,5580/-
Financial support from other sources	Nil	Nil
Number of students who received International/ National recognitions	Nil	Nil

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

02

5.13 Major grievances of students (if any) redressed:

02

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Vision:

To contribute in building a new India through well educated, socially conscious students with good values and make such education accessible to students of this region.

This is the reason our parent organization Shiksha Mandal came into being in 1914. Its credo “A century of nationalistic, value based, quality education” expresses this vision.

Mission:

- To promote academic growth of students by running excellent graduate, post graduate and doctoral programs in Science
- To develop human potential to its fullest extent and inculcate sound human values in students

6.2 Does the Institution has a management Information System: **Yes**

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

6.3.1 Curriculum Development

Institution follows the curriculum of RTMNU. Three faculties are members of BOS of RTMNU. They contribute in curriculum development of RTMNU.

6.3.2 Teaching and Learning

The normal method of teaching is the conventional chalk and board method. However, for making the teaching effective, teachers use various audio-visual aids like OHP, DLP, educational CDs, charts, models, etc

6.3.3 Examination and Evaluation

The institution is affiliated to RTM Nagpur University Nagpur. Hence Examination/ Evaluation processes of the university are followed.

6.3.4 Research and Development

- Autonomy extended to principal investigator under the policy framed by IQAC and Research committee
- Resources are released whenever required
- Necessary institutional infrastructure is always provided.
- Additional technical hand provided if sanctioned in the project
- Labs are permitted to be utilized even after working hours
- Efforts are made to enrich lab with modern instruments and ICT facility
- Provided support by the institute as well as by research institutes located in nearby areas

- Staff members are motivated to undertake projects in collaboration with other Research Institutes and NGOs.

6.3.5 Library, ICT and physical infrastructure / instrumentation

In library, Acquisition, cataloguing, housekeeping operations are carried out through the LibTech software. All the books are bar coded. Barcode CCD scanner is available to scan the barcodes.

The college has internet facility in every department. Students can access internet in C/S and Library.

6.3.6 Human Resource Management

Faculties are deputed for orientation and refresher courses organized by the Universities.

Faculties are encouraged to participate in seminars, workshops, and conferences organized by academic and research institutes and publish their research papers and form patents.

Faculties are encouraged to take major and minor research projects and to pursue PhD.

6.3.7 Faculty and Staff recruitment

Applications from eligible candidates having required qualifications are invited as per the UGC, University, and Government norms. Institution screens the applications and conduct written test, classroom demonstration and personal interview for appropriate selections.

6.3.8 Industry Interaction / Collaboration

Faculties are encouraged to visit the other labs for their major and minor research work as well as for research work. Faculties and students visit industries to enhance technical know-how.

6.3.9 Admission of Students

The list of eligible students according to Government and University norms is displayed. The candidates are instructed to secure their admission by submitting original documents and paying requisite fees in scheduled time. After ensuring admissions of the list, remaining seats are filled from eligible students already enrolled in earlier list.

6.4 Welfare schemes for

Teaching	Credit co-operative society 'J.B.C.S. staff credit cooperative society Ltd.' It offers long term, short term, article and emergency loan.
Non teaching	
Students	1.GOI scholarships to all BC and OBC students 2. EBC concession 3. Additional books allocation to BC students 4. Fee waiver for meritorious students 5. Hostel facility at subsidised rates 6. Health check-up camp

6.5 Total corpus fund generated: Nil. (Available corpus fund = Rs. 2,60,311/-)

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	IQAC of College
Administrative	Yes	Joint Director (H.E. Govt. of Maharashtra)	Yes	By assigning the internal auditor.

6.8 Does the University/ Autonomous College declares 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?

Semester Pattern has been introduced for B.Sc. I and M.Sc. I from 2013-14. Internal marks are introduced in theory subject at UG and practicals at PG. Separate seminar marks are also introduced for each subject at M.Sc.

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

The affiliating University, RTMNU, has a provision for granting autonomy status to its affiliated institution which apply for autonomy and fulfil the necessary criteria. Our college has initiated the process for autonomy

6.11 Activities and support from the Alumni Association

Interaction of alumni with students.

Popular lecture by Mr. Subhash Patankar.

6.12 Activities and support from the Parent – Teacher Association

Teacher –parent meetings were organised

Issues regarding regularity, and performance were discussed.

Parent responsibilities were discussed.

A need for reducing the use of Mobile phones was felt

6.13 Development programmes for support staff

A work shop on computer awareness was organised by dept. of C/S.

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

- Energy conservation, by having ventilated classrooms and laboratories with sufficient natural light , use of CFL bulbs and use of solar water heater in Girls and Boys hostel
- Compost preparation from eradicated congress grass, dried leaves of plants, cut branches etc.
- Water harvesting in college and Check dam construction in nearby villages through NSS activity in order to conserve the run-off water.
- Tree plantation, Botanical garden, Apiculture garden

Criterion – VII

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.

-
- Installation of CCTV in library and campus
- Student Seminar competitions were organised at department and college levels.
- Poster competitions have been organized. .
- Career guidance lectures were organised.

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

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

Plan 1: To follow the 11 recommendations given by NAAC peer team for quality enhancement of the institution:

- (i) Library needs expansion
- (ii) P.G. programmes in Maths, Physics, Computer Science and Electronics be introduced
- (iii) Career Guidance and placement cell need strengthening
- (iv) Central computer facility be established
- (v) Centralized instrumentation facility be created for research work
- (vi) A center to prepare students for competitive examination be established
- (vii) Internationally recognized journals be subscribed for library
- (viii) Ph.D. programme be according to UGC guidelines
- (ix) Efforts be made to reduce the drop-out rate
- (x) Student feedback be analyzed and needed action be taken
- (xi) Collaborations be introduced with industries and National Research institutions

Action Taken:

- (i) New library building has been constructed and Library has been shifted to the new building.
- (ii) Due to qualified faculty constraint in Maths, Laboratory and staff constraint in Physics, and student strength problem in Computer Science and Electronics P.G. courses have not been introduced so far.
- (iii) New Career Guidance and placement cell has been formed. Placement programme by Wipro and TCS were organized. **Wipro** employed 9 students, **TCS** selected 10 students, whereas **Corning** India has selected 4 students.

Wipro has selected our institute as a **Nodal college** for district for its placement.

(iv) College plans to establish a Central computer facility in near future.

(v) As a first step in this direction, it was decided that instrumentation facilities in every department be known to all departments. Later a Centralized instrumentation facility will be created.

(vi) A center for competitive examination has not been established. However, M.Sc. students will be guided for NET and SET exams by experts in the field.

(vii) Every department to subscribe at least one internationally recognized journals for library

(viii) Ph.D. programme is according to UGC guidelines (eg. Mandatory Course work and Pre submission seminar)

(ix) Drop-out rate depends on result. To increase the result extra efforts are being taken especially for weaker students:

- B.Sc.I Sem-I Maths section has been divided into two smaller sections (on the basis of student performance in class tests, unit tests and sincerity).
- The Teacher guardian **cluster** system in new format has been introduced for improving and monitoring of attendance, performance and overall development.
- The even semesters have short time span available for teaching. To overcome the problem a new time table with increased theory classes has been implemented.

(x) A new Student feedback form with more options to be designed and feedbacks to be analysed.

(xi) Two Collaborations and one linkage has been established

Plan 2: To improve students' performance in exams

Action Taken: Topic-wise tests in addition to unit tests have been conducted by every department

Plan 3: To plan teaching for newly implemented semester pattern syllabus of sem V and Sem VI **Action**

Taken: Faculty prepared for the semester pattern syllabus of sem V and Sem VI

Plan 4: To conduct 2 Unit tests and a semester test exam for Sem I, III and V

Action Taken: Two unit tests have been conducted in august and September. Also teachers independently and regularly conducted unit tests. Semester exam will start in the month of May.

Plan 5: Teacher-guardian student cluster scheme in a new form to be started

Action Taken: Teacher-guardian student cluster scheme in a new form has been started Teacher-guardian student cluster meetings have been held every Saturday. Teachers visited some student's homes.

Plan 6: Every department to propose Major and Minor Research Project to UGC

Action Taken: 5 Minor Research Projects have been proposed to UGC

Plan 7: To promote research

Action Taken: Teachers were directed to publish papers in reputed peer reviewed journals and present papers in reputed seminars/conferences. Researchers were provided financial assistance for paper presentation and

published papers in various national/international journals Formed an education bridge between NCCS Pune & JBCS'

Plan 8: To organize national seminar and workshop on nanotechnology

Action Taken: On occasion of Science Day National Seminar and Workshop on Nanotechnology was organized.

Plan 9: To encourage the staff for publishing books

Action Taken: The staff published 06 books

Plan 10: To organize an 'Innovative project competition'

Action Taken: Wipro-Earthian Innovative research competition' was organized

Plan11: To encourage students to participate in various curricular, co-curricular, and extra curricular competitions

Action Taken: Cluster level Word power competition organized. Students participated in various seminar, debate and quiz competitions A B.Sc. I student stood third in state level Chemistry Talent Search Examination organized by M. J. College, Jalgaon. Three C/S students bagged prize in paper presentation competition at DMIER

Plan12: To organize co-curricular activities such as Student seminars , Poster competitions etc.

Action Taken: Student seminars were conducted by every department.

Plan13 : To purchase quality reference books, and text books related to new Semester pattern.

Action Taken: Reference and text books related to new Semester pattern are purchased.

Plan14 : To construct additional first floor to Girls hostel, and staff quarters

Action Taken: Construction of Girls hostel not yet stated. Construction of staff quarters completed.

Plan15: To utilize UGC CPE Grant, XII plan grants for enhancing the academic activities, organizing additional co-curricular activities, procuring laboratory equipments, for boosting research, upgrading laboratory facilities etc., and Additional assistance grants for Infrastructure and scientific development, safety measures.

Action Taken: UGC CPE grant , XII plan grants is and Additional assistance grants are being utilized for the required purpose.

Plan16 : To celebrate the **Centenary of General theory of Relativity**

Action Taken: A Talk / interaction by **Padmashri Dr. T Padmanabhan, IUCAA Pune**, has been organized in the Gandhi Memorial Hall by Department of Mathematics on 14th July 2015

Plan16: To implement the DBT's Star college scheme. To organize guest lectures on careers/opportunities in Biotechnology under Star college scheme

Action Taken: visits of 10 scientists were organised under **E-Bridge** programme between NCCS & JBCS.

Plan17: To arrange programmes on value education, health, population etc.

Action Taken: programmes on value education, health, population etc. were assigned to NCC, NSS, CWSS and PEC wing and organised.

Plan18: To enhance sport activity- participation in university, state, national and international level sport events

Action Taken: Efforts were taken by sport dept for enhances sport participation in various fames. Studentd excelled in various sports and won trophies.

Plan18: To prepare students for competitive exams like IIT JAM and SET/NET

Action Taken: Coaching and Guidance was provided to students. Eleven students passed IIT-JAM

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

Two best practices are given in Annexure iii

7.4 Contribution to environmental awareness / protection

- Polythene eradication and congress grass eradication drives were organised.
- Tree plantation was done.
- Maintenance of Botanical and Apiculture garden.
- The institute conserves energy by having ventilated classrooms and laboratories with sufficient natural light , use of CFL bulbs.
- use of solar water heater in Girls and Boys Hostel.
- Water harvesting in college and Check dam construction in nearby villages through NSS activity in order to conserve the run- off water.
- Arranged popular/ guest lectures of eminent personalities on environment, health, population control etc.
- Provision for filtered purified water and use of water saving taps.
- Use of dustbins and maintenance of proper sanitation in college.
- Compost pits by NSS students

7.5 Whether environmental audit was conducted?

Yes

☒

No

☐

Method of Auditing

- The institute takes review of these parameters of green audit every year.
- It identifies the activities to be undertaken for the prioritized parameters
 - Institute plans to implement these activities through various extension programmes.

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

SWOT Analysis of the Institution

Strengths :

- Legacy of 50 years (1962-2015) of J.B. College of Science which is running on Gandhian values, honesty, sincerity, commitment and integrity to the educational system
- Enhanced focus on research activity along with regular teaching
- Enriched infrastructure of laboratories with respect to instrumentation

- More than 36000 collection of books along with National and International Journals in the library
- Regular classes throughout the session
- Better inculcation of research activities by adopting a method of assigning projects to the students (not prescribed in curriculum of university)
- Closeness between faculty and students through cluster mentor system
- Profound sports activities putting students at State, National and International level
- Additional subject tutorials to curb difficulty during regular classes
- Alumni association

Weaknesses :

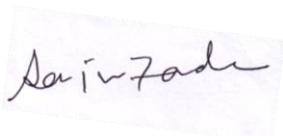
- Linkages / MoUs with industries and research institutions / laboratories
- Feasibility for consultancy
- Enrolment of students having good academic standards
- Centralized research laboratory at institutional level
- NET / SET guidance cell

Opportunities:

- To remain updated and avail the facilities of University Grants Commission like various 5 years plans, basic science research grant, additional assistance grants, merged scheme, major, minor research projects and grants for travelling abroad
- Availing the honor of College with Potential for Excellence
- Availing the honor of Star College Scheme floated by Department of Biotechnology, Government of India, New Delhi
- Hands on training with sophisticated instruments as expected by Department of Biotechnology “Star College Scheme”

Challenges :

- Reluctance of H.S.C. Board students to opt basic science courses due to mushroom growth of Engineering and Medical colleges
- Less employment opportunity
- To get academic autonomy



Dr. S.S. Zade

Co-ordinator, IQAC



Dr. Om Mahodaya

Principal & Chairman, IQAC

Annexure i

Academic Calendar

Shiksha Mandal's Jankidevi Bajaj College of Science, Wardha.			3 rd Week	2 nd I.Q.A.C. Meeting (Senior & Junior College)
Academic Calendar (University) for B.Sc. I, II & III would be displayed on Notice Board, on availability.			3 rd -4 th Week	Univ. Practical Exam. of PG
Beginning of regular classes of B.Sc. -II and III Dt. 15 th June, 2015			3 rd -4 th Week	Special Coaching Classes (XII Std.)
Beginning of classes of B.Sc. -I Dt. 1 st July, 2015			3 rd -4 th Week	Test Series II
TENTATIVE ACADEMIC CALENDAR (2015-16)				
Month	Week / Date	Events / Activities		
JUNE	First Week	Distribution of Prospectus & B.Sc.I Admission		
	2 nd , 3 rd Week	Admission process (after the declaration of result of HSSC)		
	4 th Week			
JULY	1 st Week	Address of Principal to B.Sc I Students & Commencement of regular Classes		
	2 nd Week	Sports / Competitions & Classes as per University directions		
	11 th July	World Population Day		
	3 rd Week	M.Sc. Admission		
	4 th Week	Regular Classes of PG		
	4 th Week	Staff Council Meeting		
AUGUST	6 th Aug.	Last Date of Admission		
	15 th	Independence Day Celebration & Tree Plantation		
	2 nd Week	1 st Unit Test (XI Std.)		
	4 th Week	1 st I.Q.A.C. Meeting (Senior & Junior College)		
	4 th Week	Student's Council Elections		
SEPTEMBER	5 th	Teachers' Day Celebration		
	8 th	International Literacy Day		
	2 nd Week	1 st Unit Test (Senior College)		
	3 th week	Students' Seminars (Senior College)		
OCTOBER	2 nd	Mahatma Gandhi Jayanti, Congress Grass Eradication		
	1 st - 2 nd week	1 st Terminal Examination (Std. XI & XII)		
	1 st Week	General Knowledge Test		
	2 nd Week	Workshop on Microseale Technique		
	2 nd Week	U.G. College Test Exam., Teacher Parent meet		
	18.10.2015	Commencement of Univ. Exam.		
	21.10.15 to 20.11.15	Sem-I, Sem-III, Sem-V, PG winter 2015 Winter Vacation		
Prospectus-2015-16			Prospectus-2015-16	

Analysis of the feedback

Student feedback

Rating regarding course, syllabus, library, evaluation system, research activity, guest lecturers is good , satisfactory.

Suggestions:

Tours and extracurricular activities should be enhanced.

Auditorium should be constructed and canteen should be big and with more variety of food.

Parent feedback

Suggestions regarding academic enhancement of the institution:

- Hobby classes should be there.

Grievances towards college :

- Toilet should be clean.

Opinion regarding course, atmosphere, teachers, principal , library:

- Good.

Opinion regarding office:

- Official process should be fast.

Opinion regarding cluster:

- Good scheme.

Alumni feedback

Suggestions regarding academic enhancement of the institution:

- Competitive classes should be regular feature.
- Infrastructure should be enhanced, big canteen , ladies room .

Opinion regarding course, atmosphere, teachers, principal, office, sports and library :

- Satisfactory, good.

Best Practice 1**1. Title of the practice: Teacher-Guardian Student clusters**

2. Goal: Personal attention to each student is not feasible due to large volume of classes (100-120 students per class). Desired attention and guidance can be provided if students are divided into small groups and each group is assigned to teacher, as a guardian. This is the main goal of the formation of cluster. Accordingly here at JBC we have divided the students of each class in small interactive groups in order to solve their personal difficulties related to the academics and all-round development. Thus JBC has introduced the idea of Teacher Guardian-Student cluster especially for the entrants, i.e. B.Sc. Part I students. The aim of this programme is as follows :

- To solve the personal and academic difficulties faced by students.
- To provide them the required educational inputs by the teachers in their subjects
- To inculcate confidence in students through student seminars and student projects
- To encourage their participation in various co-curricular activities .
- To motivate them for participating in extra-curricular activities / sports and games
- To encourage them for participation in extension programs / add on courses
- To provide exposure for their all round development

3. Context : The institute has observed that the results of UG classes and particularly of B. Sc I is not up to the mark. Moreover, the participation of these students in co-curricular and extra-curricular activities is also not encouraging. While searching facts behind this, the Principal and faculties have pointed out the following:

1. Most of the students suffer from inferiority complex.
2. B.Sc. I students are not acquainted with the writing of descriptive answers.
3. They lack proper communication and writing skills in English language.
4. Since there is no guaranteed job potential before them even after passing B.Sc. and M.Sc., they are not serious about their studies.
5. As relatively the science education is not fully employable, the sense of insecurity makes them insincere towards the studies, which ultimately affect their result.
6. In the Indian context, most of the girls have their higher education for selecting the better marriage partners.
7. Last but not the least the other socio-economic factors adhered to the students affect their personality and thereby all-round development

In order to overcome these difficulties of students, JBC has planned to form the smaller groups of students to create interest about studies and active involvement in co-curricular activities leading to their all-round development.

4. The Practice: The practice and implementation of Teacher Guardian- Student cluster in our institute is as follows :

- The students enrolled in B.Sc. I are divided into small groups called clusters of about 8 to 10 each on the basis of their subjects.
- In each cluster, almost all students have at least one common subject.

- The formed clusters are assigned to the teachers teaching the particular common subject.
- Cluster students and teacher have a regular meeting on a specific day and time (mostly on Saturday, 9.30-10.10 am).
- In cluster meetings, students report about their academic difficulties. Students sometimes also use this platform to discuss their other difficulties faced during learning
- The guardian teacher of the cluster guides the students in solving his/her subject difficulties and communicate to the other concerned teachers (if needed) for their subject difficulties
- The teacher helps in resolving difficulties related to infrastructure facilities (water, electricity, light, blackboard, library, time table, washroom, parking, etc) with the consultation of concerned administrative authorities.
- The guardian teacher motivates his/her cluster students for participating in co-curricular, extra-curricular and extension activities as well as for enrolment in career oriented programmes.
- The guardian Teacher encourages the students to participate in various competitions (including cluster competition).
- The guardian teacher periodically reviews the academic and all round performance of students and guides them for their improvement.
- Thus the guardian teacher forms the personal relationship with his/her students which helps them in understanding and solving their educational and even personal problems . The practice of teacher guardian-student cluster is unique in the context of higher education in Indian scenario which otherwise is a part of schooling. Due to generation gap, impact of media and adolescent age, most of the students are in the confused state of mind and seek the help of trust worthy person. This requirement is fulfilled by his/ her teacher guardian with whom he/she can share his/her all sorts of personal problems.

5. Evidence of Success: This practice has helped the students in:

- Improving their self confidence.
- Bringing them in a common mass.
- Helped in curbing the absenteeism.
- Encouraging them for participation in Extra-curricular/Co- curricular/Extension programmes etc.
- In bridging the gap between teachers and students

6. Problems encountered and resources required: The clusters (mentoring the students) are formed to encounter the various problems of the students through face to face direct contact which otherwise is not possible.

The facts causing difficulties to the students in their studies and all round development are as follows:

(a) Socio-economic back ground of students: Majority of students in our institute are from remote and mofussil area where educational environment is not up to the mark. As most of the students come from farming community and have poor economical background they lack proper educational facilities and this affects their chances of higher education. Collectively this issues affects their confidence, communication skill which in turn makes them less interested for the higher education.

These all problems cannot be solved at once. It requires a very long attention towards them which couldn't be possible everytime. However, our small practice of clustering opens the window for them which helps to come out of this.

(b) Resources required : In order to elevate their confidence and communication skill they are needed to be exposed to such an environment where they can see, listen and learn with no burden. This could be possible

by arranging intermittently residential camps in vacations. These camps should have programme of exposing them to various extra-curricular and co-curricular activities, computer learning and some visits to places etc. for all round development. For achieving above cited target necessary facilities are required.

7. Constraints/ limitations:

- 1) Although the guardian teacher student cluster helps in solving the academic and other difficulties inside the institutions, the difficulties due to some socio-economic status cannot be solved. For example, train and bus transport timings, hostel facility, etc.
- 2) The academic up-liftment of the students is entirely based on the foundation of their basic knowledge acquired up to 12th standard. The students having weak foundation needs more personal attention and more practice for study, beyond the institutional timing and it solely depends on their practice at home.

Best Practice 2

1. Title of the practice: Additional subject tutorials (besides those prescribed by RTMNU)

2. Goal: The Principal and the staff of the college from their experience has observed that students admitted to B.Sc. I are poor in basic concepts in sciences. The clock hours assigned to the units of the curriculum seems to be insufficient. Therefore additional subject tutorials with extra timings are incorporated in order to solve the queries out of the regular classes.

The objectives of this practice are as follows:

- To strengthen the basics concepts in science of the newly admitted students.
- To pay personal attention towards students as the tutorial group is small.
- To help students in concentrating on their shortcomings of the subjects.
- To help them in building their confidence over the subject

3. Context:

- J.B.C. is affiliated to RTMNU, Nagpur in Maharashtra state which has large number of engineering colleges. Students with 40% are eligible for admission to these colleges. Therefore, most of the students prefer to go for these courses. As a result of this the students admitted to B.Sc. courses are of lower percentage.
- The newly designed HSC examination pattern demotivate them to write descriptive text as a answer to the questions asked

4. The Practice: In the context of present Indian higher education system, the permitted strength of a class is 100-120. It is difficult for any faculty to pay personal attention to individual student in such a class. Since the tutorials incorporated in J.B.C. pattern are batch wise (1 to 3 batches), the number of students in the tutorial class is comparatively less. Hence, a teacher is able to give personal attention to the academic difficulties of individual student. The practice of additional subject tutorials is implemented in J.B.C. as follows:

- The regular tutorials are incorporated in the timetable
- The maximum strength of students in tutorials goes up to 50
- Each faculty member has been assigned the respective tutorials besides their regular classes

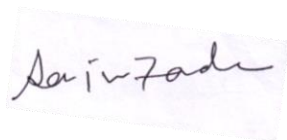
5. Evidence of Success: This practice has helped the students in:

- Improving the interactive skills
- Strengthening the basic fundamentals in all subjects
- Up-lifting their subject standard to the level of B.Sc. I
- Increasing the attendance in classes
- Improving their knowledge and understanding
- Creating interest in studies
- Minimising common writing mistakes
- Increasing sincerity
- Demotivating students to go for outside tuition classes

6. Problems encountered and resources required: An incorporation of tutorials in regular timetable is helping us to minimize the problems related to academics. Therefore, no major problems are encountered while practicing the tutorial approach.

7. Constraints/ limitations:

B.Sc. I has 2 languages in addition to 3 science subjects. Thus it has more periods than BSc. II and B.Sc. III. Hence their college time table for a day is packed. Hence it is difficult to accommodate the additional subject tutorials in the timetable.



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