Shiksha Mandal's

Jankidevi Bajaj College of Science, Wardha

The Annual Quality Assurance Report

AQAR

2016-17

MHCOGN10016-Jankidevi Bajaj College of Science, Wardha-Maharashtra AQAR 2016-17

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)*

<div align="center">Part – A</div>

AQAR for the year

2016-17

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 2016-17
http://jbsw.shikshamandal.org/wp-content/uploads/2014/07/MHCOGN10016-Jankidevi-Bajaj-College-of-Science-Wardha-Maharashtra-AQAR-2016-17.pdf

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	3star (***)	NA	09/10/1999	08/10/2004
2	2nd Cycle	B+	NA	02/02/2006	01/02/2011
3	3rd 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 2010-11submitted to NAAC on 12-10-2011*)

   i.   AQAR Session 2013-14   29/04/2014   (DD/MM/YYYY)
   ii. AQAR Session 2014-15   16/11/2015   (DD/MM/YYYY)
   iii. AQAR Session 2015-16   31/12/2016   (DD/MM/YYYY)

1.9 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 [ ]   UGC 2(f) [√]   UGC 12B [√]

              Grant-in-aid + Self Financing [√]   Totally Self-financing [ ]

1.10 Type of Faculty/Programme

Arts [ ]   Science [√]   Commerce [ ]   Law [ ]   PEI (Phys Edu) [ ]

TEI (Edu) [ ] Engineering   Health Science [ ]   Management [ ]

Others   (Specify)   [.]

1.11 Name of the Affiliating University *(for the Colleges)*   [Rashtrasant 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   [No]

University with Potential for Excellence   [No]

UGC-CPE   [Yes]

   DST Star Scheme   [Yes]   UGC-CE   [No]

UGC-Special Assistance Programme   [Yes]   DST-FIST   [No]

UGC-Innovative PG programmes   [No]   Any other *(Specify)*   [Minority]

UGC-COP Programmes   [No]

2. IQAC Composition and Activities

2.1 No. of Teachers
$\boxed{5}$

2.2 No. of Administrative/Technical staff
$\boxed{1}$

2.3 No. of students
$\boxed{1}$

2.4 No. of Management representatives
$\boxed{1}$

2.5 No. of Alumni
$\boxed{1}$

2. 6 No. of any other stakeholder and
   community representatives
$\boxed{1}$

2.7 No. of Employers/ Industrialists
$\boxed{1}$

2.8 No. of other External Experts
$\boxed{1}$

2.9 Total No. of members
$\boxed{12}$

2.10 No. of IQAC meetings held $\boxed{4}$

2.11 No. of meetings with various stakeholders: No. $\boxed{12}$ Faculty $\boxed{8}$

Non-Teaching Staff Students $\boxed{1}$ Alumni $\boxed{1}$ Others $\boxed{2}$

2.12 Has IQAC received any funding from UGC during the year?   Yes $\boxed{}$ $\boxed{\surd}$

If yes, mention the amount $\boxed{-}$

2.13 Seminars and Conferences (only quality related)

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

Total Nos. $\boxed{\text{Nil}}$ International $\boxed{-}$ National $\boxed{-}$ State $\boxed{-}$ Institution Level $\boxed{-}$

(ii) Themes $\boxed{-}$

2.14 Significant Activities and contributions made by IQAC

- For the session 2016-17, the IQAC planed 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
- Preparation for getting Academic autonomy. A team of UGC visited the college on 15th - 16th March 2017 for considering the **academic autonomy status** to the college**.**
- Establishment of Central computer facility 'ICT centre'.
- Preparation for Centralized instrumentation facility
- IQAC arranged 5 meetings with faculty, 1with 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
- To reduce the dropout rate, proper implementation of the **Cluster** system
- 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
- Organization of State level student seminar competition **Scintillation** 2017
- Submission of the NIRF proposal
- Applied for academic and administrative audit by RTMNU.
- Facilitation of research , monitor and address the issues of research
- Proposals to UGC for Major research projects
- Proposals to UGC, CPE , DBT for various schemes

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 2016-17 towards quality enhancement of the institute	Outcome achieved at the end of session 2016-17
1.	**To follow the 11 recommendations given by NAAC peer team for quality enhancement of the institution:**	**Compliance of the recommendations:**
	(i) Library needs expansion	(i) New library building has been constructed with all required facilities.
	(ii) P.G. programmes in Maths, Physics, Computer Science and Electronics be introduced	(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 in these subjects so far.
	(iii) Career Guidance and placement cell need strengthening	(iii) New Career Guidance and placement cell has been formed. In Session 2016-17 Placement Activities by TCS Chennai, was organized and12 students were selected.
	(iv) Central computer facility be established	(iv) College has established a Central computer facility 'ICT centre'.
	(v) Centralized instrumentation facility be created for research work	(v) As a first step in this direction, It was proposed that instrumentation facilities in each department be known to all other departments also. Later a Centralized instrumentation facility will be created.
	(vi) A **center** to prepare students for competitive examination be established	(vi) A center for competitive examination has not been established. However, M.Sc. students are guided for NET and SET exams. 9 students were selected for PG courses in reputed institutes such as NIT, IIT, IISER, and Pune University for academic year 2016-17. Six students of B.Sc. Final qualified IIT JAM exam in March 2017.

	(vii) Internationally recognized journals be subscribed for library	(vii) It was proposed that every department should subscribe atleast one Internationally recognized journal for library
	(viii) Ph.D. programme be according to UGC guidelines	(viii) Ph.D. programme is according to UGC guidelines (Mandatory Course work and Pre submission seminar)
	(ix) Efforts be made to reduce the drop-out rate	(ix) Drop-out rate depends on result. To increase the result extra efforts are being taken especially for weaker students. B.Sc.I Maths section has been divided into two sections on the basis of student performance in class tests, unit tests and sincerity. There is monitoring of attendance and performance through cluster system.
	(x) Student feedback be analyzed and needed action be taken	(x) A new Student feedback form with more options to be designed. Student feedback are not analyzed and hence needed action cannot be taken.
	(xi) Collaborations be introduced with industries and National Research institutions	(xi) Earlier two Collaborations with CMET and NCCS have been established. No new collaborations have been established this year.
2.	To improve students' performance in exams	Topic-wise tests in addition to unit tests have been conducted by every department.
3.	To conduct 2 Unit tests in Aug and Sep. and a semester terminal exam in October for odd Sem I, III and V. To conduct Unit test and terminal exam for even semesters.	For odd semesters unit tests and Terminal exam have been conducted.For even semesters Question papers of Terminal exam have been given to all students. These are to be solved at home.
4	To guide students for competitive examination like IIT JAM, NET, SET, GATE, PET	B.Sc. students are guided for various PG entrance examinations. As a result, 9 students were selected for PG courses in reputed institutes such as NIT, IIT, and Pune University for academic year 2016-17.

Six students of B.Sc. Final qualified IIT JAM exam in March 2017.

Also, M.Sc. students are guided for NET, SET GATE and PET exams.

Mr. Aniket Balapure and Mr. Suraj Kukade qualified SET examinations in Chemistry(2016). |

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. Students are provided with 'My academic diary'.
6	Every department to propose Research Project to UGC and other funding agencies.	This year faculty has applied for one Major Research Project. There is One ongoing minor Research project.
7.	To promote research	Two workshops have been organized in collaboration with 'National centre for cell sciences (NCCS), Pune' under education bridge between NCCS & JB Science college supported by DBT star college scheme: **Recommendations of Research committee to promote research**: • Provision of seed money to the faculty for research • Faculties of every department to undertake Major/Minor research project of UGC • Hands-on training on instrumentation • Recommended to publish papers in peer reviewed/indexed National and International Journals • every department should subscribe atleast one Internationally recognized journal for library • Collaborative research should be enhanced.
8	To organize National / state level Student seminars.	State level student seminar competition **Scintillation** 2017 in seven subjects was organised on 1st March 2017. 175 students from various colleges of the state participated in this seminar.
9	To make necessary preparations for acquiring **academic autonomy.**	• A talk by Prin. Dr. Vijay Joshi of Somaiya college Mumbai on **academic autonomy** was organized on 15th sep 2016. • Principal and five teachers visited 3 institutions who got academic autonomy - Somaiya college Mumbai, St. Xaviers college Mumbai, Fergusson college, Pune. • A team of UGC visited the college on 15th - 16th March 2017 for considering the **academic autonomy status** to the college**.** The committee visited all the departments and central facilities and arranged meetings with teaching, nonteaching staff and students. • For the visit every department made necessary

		preparations such as framing of syllabus, Power point presentation etc.
10	Participation in Rashtriya Avishkar Abhiyan (RAA)	JBC has been assigned the mentoring institute by RAA. It has been assigned the responsibility for carrying out RAA activities in schools of the region. Principal and 4 teachers participated in the workshop for coordinators of mentoring institutes at RTM Nagpur University.
11	To apply for NIRF	The college has submitted the proposal in the NIRF provided format in 2015-16. College has to submit a new updated proposal up to 30th Sep 2016
12	To conduct Academic audit	The college has applied for academic and administrative audit by RTMNU.
13	Faculties to publish papers in peer reviewed/indexed Journals	Faculty published 24 papers in peer reviewed/indexed National and International Journals
14	Book Publication	The Faculty published one book in 2016-17.
15.	To encourage students to participate in various curricular, co-curricular, and extra curricular activities, value education.	Students participation in : Tree Plantation, world population day, Teachers day programmes. Student seminars are conducted in every department. A talk on 'Naturopathy' by Dr. Vilas Patil was organized on 22nd feb. 2017. Students participate in various extracurricular activities in extension programs NCC, NSS, CWSS and PEC.
16.	To purchase quality reference books, and text books related to new Semester pattern.	Reference and text books related to new Semester pattern are purchased.
17.	To utilize UGC CPE Grant	UGC CPE grant is being utilized for the required purpose (Details of grant utilization are with the office)
18.	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)

19.	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)
20.	To enhance sport activity-participation in university, state, national and international level sport events	Number of students participated in sports: University level = 243 Inter University =13 State level = 62 National = 04 Handball and Ball badminton women team won Bronze medal at University tournament. Students excelled in various tournaments and won medals.

* 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

The AQAR of the IQAC of Jankidevi Bajaj College of Science, Wardha for the session 2016-17 was placed in the LMC of the college. After verification of the AQAR it is observed that adequate efforts are being taken for academic and administrative improvement of the Institution. A team of UGC visited the college on 15th - 16th March 2017 for considering the academic autonomy status to the college. The institution has been granted academic autonomous status from session 2017-18. Every support will be extended for improvement of infrastructure and other facilities in order to comply with the recommendations of NAAC Peer team and successful running of autonomy.

Shiksha Mandal wardha
सहमंत्री
शिक्षा मंडल, वर्धा

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.)	4(Chemistry; Botany; Microbiology; Zoology)	-	-	-
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	Add on Course		2(Add on Course)	2+2=4 (Add on Course)
Others	-	-	-	-
Total	11	-	-	-

Interdisciplinary	4 (Add on Course)	-	-	
Innovative	-	-	-	-

1.2 (i) Flexibility of the Curriculum: CBCS/~~Core~~/~~Elective option~~ / ~~Open options~~ (CBCS at PG level)

(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) ☐

Analysis of the feedback is provided in Annexure ii

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.

> -

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Other
32	19	13 (Including Principal)	Nil	Nil

2.2 No. Of permanent faculty with Ph.D :   21

2.3 No. Of Faculty Positions Recruited (R) and Vacant (V) during the year 2014-2015

	Asst.Professors		Associate Professors		Professors		Others		Total	
	R	V	R	V	R	V	R	V	R	V
	19	23	13	Nil	Nil	3	Nil	Nil	32	23

2.4 No. Of Guest and Visiting faculty and Temporary faculty

Botany – 2

Chemistry – 6

2.5 Faculty participation in conferences and symposia :

No. of Faculty	International Level	National Level	State Level
Attended	02	09	Nil
Presented Papers	02	06	Nil
Resource Persons	Nil	02	Nil

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

1. Lectures are taught through power-point presentation using DLP.
2. ICT facilities are provided to students in the Library and respective Departments.
3. E-learning resources such as science videos, audio-visuals, pvc models, computer assisted compound microscopes, advanced instruments such as UV-VIS, Centrifuge, Cryostats are taught to students and allowed the students to work on them under faculty supervisions.
4. 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
5. During theory classes classified notes are prepared and distritubed and models are shown in teaching classes for interactive learning.
6. Seminars and group discussions are held as a frequent practice to evaluate the students' learning process and boost up their confidence.

7. Identification of slow and advanced learners- B.Sc. I sections were split into two depending on students' performance. Teaching organized according to academic development in two sections. Remedial coaching for slow learners and higher learning for advanced learners.

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 session 2016-17.

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

Board of Studies – 3	Curriculum Development - 1

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)	301	141	28	65	47	01	46.84
B.Sc. I (Semester 2)	287	164	35	67	62	00	57.14
B.Sc. II (Semester 3)	314	148	19	76	53	00	47.13
B.Sc. II (Semester 4)	315	140	15	76	49	00	44.44
B.Sc. III (Semester 5)	226	164	18	85	61	00	72.56
B.Sc. III (Semester 6)	228	190	24	106	60	00	83.33

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 every semester. 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 session and any
3. Suggestions extended by members are discussed and implemented by IQAC if necessary.
4. Mid-term meetings are held to monitor the progress of the planned activities.
5. Academic auditing / monitoring of teaching learning is done through academic diaries of teachers.
6. Feedback from students are used to for improvement in teaching learning.
7. 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	02
UGC – Faculty Improvement Programme	01
HRD Programmes	01
Orientation Programmes	05
Faculty Exchange Programme	Nil
Staff training conducted by the University	01
Staff training conducted by other Institutions	02
Summer/ Winter Schools, Workshops etc.	02
Others (Workshop of University Adult Education)	01

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	21	08	01	Nil
Technical Staff	50	11	01	Nil

Criterion – III
3. Research, Consultancy and Extension

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

- Collaborations and MoUs with other institutions/industries
- Central instrument facility for research
- Students research projects other than compulsory by the University

3.2   Details regarding major projects

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

3.3   Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	3	-	-	-
Outlay in Rs. Lakhs	69,778 (EXPENDITURE)	-	-	-

3.4   Details on research publications

	International	National	Others
Peer Review Journals	8	-	-
Non-Peer Review Journals	1	-	-
e-Journals	-	-	-
Conference proceedings	1	2	-

3.5 Details on Impact factor of publications:

Range: 0.438-4.23   Average   1.47

h-index : Scopus =13 , Google Scholar = 24, Nos. in Scopus =2 , Google scholor = 16

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	Received
Major projects	-	-	-	-
Minor Projects	-	-	-	-
Interdisciplinary Projects	-	-	-	-
Industry sponsored	-	-	-	-
Projects sponsored by the University/ College	-	-	-	-
Students research projects *(other than compulsory by the University)*	-	-	-	-
Star College Scheme	-	-	-	-
College with potential for excellence (CPE)	2016-17	UGC	26,10,756 (Expenditure)	-
Seminar	-	-	-	-
Total			-	-

3.7 No. of books published   i) With ISBN No.: 01   Chapters in Edited Books : 04(1 Book)

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 | All | CPE | 7 | DBT Star Scheme | 4 |

INSPIRE   CE ☐   Any Other (specify) ☐

3.10 Revenue generated through consultancy | 4650 |

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	-	-	1	-	3
Sponsoring agencies	-	-	UGC/DBT	-	UGC/DBT

3.12 No. of faculty served as experts, chairpersons or resource persons | 7 |

3.13 No. of collaborations: International | - | National | 1 | Any other | 3 |

3.14 No. of linkages created during this year | - |

3.15 Total budget for research for current year in lakhs : | - |

From Funding agency

From Management of University/College | -- |

Total | - |

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/ recognitionsreceived 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 | 9 |
And   students registered under them | 15 |

3.19 No. of Ph.D. awarded by faculty from the Institution | 2 |

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

JRF | - | SRF | - | Project Fellows | - | Any other | - |

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	37.55Acres	-	-	37.66Acres
Class rooms	22	-	-	22
Laboratories	08	-	-	08
Seminar Halls	01	-	-	01
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	02	02	UG	35 lac
Value of the equipment purchased during the year (Rs. in Lakhs)	7903393 217772		UGC Senior	7903393 217772
Others	-	-		-

4.2 Computerization of administration :

> **Administration**: The administrative office has CMS software for Admission , Issue of certificates, TC, bonafied certificate etc.   Software 'Tally' is used for accounting. Various online softwares 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 Book	26786	2959065	1026	251288	27812	3210353
Ref. Books	888	1058777	81	44209	888	1102986
Other Books	10874	607463	295	67610	10874	675073
e-Books	0	0	0	0	0	0
Journal/Periodicals	75	1025727	.	70254	75	1095981
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 Centres	Computer Centres	Office	Depart-ments	Others
Existing	131	1	3 fibre optic connections 50 MBPS – 250GB – 2 NOs. 40 MBPS – 60 GB – 1 NOs.	2	1	12 Computers		
Added	42	-	-	-	-	-		
Total	137	1	2	1	12 Computers	137		

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

4.6 Amount spent on maintenance (Rs.)   (During 2016-17)

   i)   ICT

                         85750

   ii) Campus Infrastructure and facilities

                         62362

   iii) Equipments

                         60474

   iv) Others (Senior)

                         139074

Total :   347660

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
862	123	10	-

(b) No. of students outside the state

NIL

(c) No. of international students

NIL

Men

No	%
145	16.82%

Women

No	%
717	83.17%

	Last Year(15-16)							This Year(16-17)						
General	SC	ST	OBC	Physically Challenged	NT, SBC, VJ	Total	General	SC	ST	OBC	Physically Challenged	NT, SBC, VJ	Total
166	118	39	510	-	64	897	185	113	34	472	-	58	862

Demand ratio: 395.45 %   Dropout : 74.67 %

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 beneficiaries

04

5.5 No. Of students qualified in these examinations

NET | Nil | SET/SLET | 01 | GATE | Nil | CAT | 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

On campus			Off Campus
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
01	34	12	-

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 | 243 | National level | 17 | International level | Nil |

No. of students participated in cultural events

State/ University level | 51 | National level | Nil | International level | 12 |

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

Sports : State/ University level | 22 | National level | 04 | International level | Nil |

Cultural: State/ University level | 05 | National level | Nil | International level | 03 |

5.10 Scholarships and Financial Support

	Number of Students	Amount
Financial support from institution	862	2,0,5000/-
Financial support from government	CPE Grant	80,000/-
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 | Nil |

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 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. The college conducts unit tests and semester test exam for improving student performance.

6.3.4   Research and Development

- Organization of d workshops in collaboration with reputed institutes like'National centre for cell sciences (NCCS), Pune'
- Provision of seed money to the faculty for research
- Faculties of every department to undertake Major/Minor research project of UGC
- Hands-on training on instrumentation
- Recommended to publish papers in peer reviewed/indexed National and International Journals
- Subscription of at least one Internationally recognized journal for library by each department
- Collaborative research
- Labs are permitted to be utilized even after working hours
- Laboratories enriched with modern instruments and ICT facility

6.3.5 Library, ICT and physical infrastructure / instrumentation

New library building is constructed. 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 established ICT centre. The college has planned to establish instrumentation centre. The college has internet facility in every department. Students can access internet in C/S and Library.
Requirement of advanced instruments from each department are invited.

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 research projects and to pursue Ph.D.

6.3.7 Faculty and Staff recruitment

To fill vacant posts, applications from 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

> The college takes efforts to establish collaboration with reputed industries and institutes 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 admission process is tranparant and as per the Government and University norms. The list of eligible students according to merit is displayed. The candidates are instructed to secure their admission by submitting original documents and paying requisite fees in scheduled time.

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. Fee waiver for meritorious students 4. Hostel facility at subsidised rates 5. 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	No		Yes	By assigning the internal auditor.

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?

On-screen Evaluation of answer books is introduced by University

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 applied for academic autonomy. A team of UGC visited the college on 15th - 16th March 2017 for considering the **academic autonomy status** to the college**.**

6.11 Activities and support from the Alumni Association

The alumni decided to provide help to needy students.

6.12 Activities and support from the Parent – Teacher Association

Two Teacher –parent meetings were organised

Issues regarding regularity, and performance were discussed.

Parent responsibilities were discussed.

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
- 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

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

7.1 Environment Consciousness

Yes, a green audit of its campus and available facilities has been conducted by the institute . The Botany and Zoology department look after the environmental planning and its execution.

Parameters of Auditing

1) Plantation and maintenance:

• Plantation programme every year on 15th August and on some important occasions.

• Maintenance of the existing and newly planted plants is done throughout the year.

• Well maintained Botanical garden.

• Apiculture garden in college premises.

• Potted plants.

• Lawn .

2) Electric consumption

• Use of CFL bulbs, tube lights of lesser watts

• Use of solar water heater in girls and boys hostel

• Ventilated classrooms and laboratory with sufficient natural light to minimizes the use of electricity.

3) Water

• Filtered (purified) drinking water for students and staff.

• Water saving taps in campus.

4) Cleanliness

• Cleanliness drive to remove polythene and waste with the help of students

• Congress grass eradication by students

• Use of dustbins

• Compost pits by NSS students

• Proper Sanitation .

• Proper Drainage .

5) Awareness programmes

• Environment studies is incorporated in curriculum of B.Sc. II .

• Guest/ popular lecture on environment awareness.

• Field visits/study tours .

• CDs, DVDs, film shows.

• Display boards in campus.

Method of Auditing

• The institute takes review of the various parameters of green audit every year.

• It identifies the activities to be undertaken for particular / concerned parameters

• Institute tries to implement these activities through various extension programmes.

7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

1. **Energy conservation:** The institute conserves energy in the following ways;

• Ventilated classrooms and laboratories with sufficient natural light

which minimizes the use of electricity .

• Use of CFL bulbs wherever possible.

• Use of solar water heater in Girls and Boys Hostel

2. Compost preparation: The institute prepares organic manures in the form of compost in pits. The compost is prepared from the following materials:

• Eradicated Congress grass

• Dried leaves of plants

• Cut branches, twigs at the time of pruning of trees

• Creepers and grasses grown on wasteland

3. Water harvesting:

• The rain water from the roofs of the building is collected through pipes in nearby pits .

• Runoff water on the grounds is also streamlined in nullahs and collected in pond located in campus premises.Wastage and spillage of water is avoided in campus premises.

4. Check dam construction

• Check dams are constructed in order to conserve the run- off water, in nearby villages, through NSS activity. Students of NSS are actively involved in this

5. Plantation

The institute undertakes the following types of plantations:

• Energy tree plantation (Teak plants)

• Botanical garden (Rare medicinal plants)

• Apiculture garden (Different flowering plants)

• Fencing plantation(Different types of trees and mehendi)

• Lawns (Near college office)

6. Hazardous waste management

Hazardous waste management is accomplished by Chemistry department

• Chemical solutions produced after practicals are properly disposed .

• Microscale techniques for some practicals have been implemented in order to minimize the use of (hazardous) chemicals .

(The department organises a one day workshop on microscale techniques for students and teachers to create awareness)

• The use of some hazardous chemicals like benzene, carbon tetrachloride, β-naphthylamineetc is replaced with safer chemicals like ethanol, glycerol, etc.

7. Eco-friendly waste management

Eco-friendly waste management is accomplished by the Microbiology Department, They carry out various activities like;

• Preparation of compost tea from agro-waste

• Preparation of compost from urban kitchen waste

• Production of citric acid from pineapple waste

7.2 INNOVATIONS

7.2.1 Give details of innovations introduced during the last four years which have

created a positive impact on the functioning of the college.

1.Innovations in Research:

J.B.C. undertakes innovations in research involving major and minor research projects, Ph.D. work, Student projects, seminars and workshops etc. These innovative activities have created an investigatory impact.

Impact

• It inculcates research attitude among students and faculties.

• It promotes staff members to undertake major and minor research projects and Ph.D. work.

- It encourages the staff to participate in research, attend conferences, seminars etc.

- It motivates the faculties for publications of research projects and books.

- It facilitates the staff and students to interact with the invitee resource persons/scientists in conferences/seminars.

2.Innovations in Training:

J.B.C. entirely focuses on the student centric training process

(teaching/learning).In order to broaden the vision of knowledge, its understanding and application among students, various teaching –learning activities are organized by the institute.

Impact of Training on Students:

- Broaden the vision of students.

- Learn the methodology of various curricular, co-curricular and extracurricular areas.

- Build up their confidence through the participatory involvement during seminars, poster exhibitions etc.

- Learn the art of creativity through preparation of practical kits, charts, models and electronic circuits etc.

- Understand the methodology of using resources at the minimal level through micro-scale techniques.

- Acquire the knowledge of utilizing the local resources, their processing and product formulation through various carrier oriented programmes, there by inculcating the approach of "Appropriate Technology".

3. Innovations in Extension:

J.B.C. motivates the students through innovative extension activities for creating communications with the society and educating masses.

Impact

- The students and faculty in-charges of N.C.C. and N.S.S. activities conduct the diagnostic camps for detection of sickle cell, anaemia, blood grouping etc.

- Awareness creation through rallies (AIDS, Population explosion, Women empowerment, Liquor prohibition etc.) and display of poster, exhibition are organized under P.E.C/C.W.S.S./N.S.S. and N.C.C.

- The students are motivated regarding identification and conservation of rare medicinal plants, those are grown in the college Botanical garden

- In Apiculture programme students learn environment friendly technology of honey extraction which prevents loss of valuable diversity

7.3 Best Practices

7.3.1 Elaborate on any two best practices as per the annexed format which have

contributed to the achievement of the Institutional objectives and/or

contributed to the quality improvement of the core activities of the college:

J.B.C. has the tradition of following best practices:

1. Teacher- Guardian student cluster
2. Additional subject tutorials
3. General Knowledge Test
4. Academic Diary for faculty
5. Installation and successful operation of biometric machine since 2009-10.
6. Dress code for students
7. Provision of subject options to students for admission in B. Sc and M. Sc. courses
8. Self motivated enrolment of students in extension programmes (P.E.C/ CWSS/ NCC/ NSS, etc.)
9. Involvement of students in various career oriented programmes
10. Engagement of the periods of the faculty on leave by other faculties
11. Every dept. with Major or Minor Research projects
12. Students Seminar at U.G level in each subject
13. Projects by U.G. students
14. Open access to Library for all 1st division students of B.Sc. and all M.Sc. students.
15. Free Internet access to all students and staff with unlimited use
16. Participation of students in various extracurricular activities. drama, debate, singing, dancing, poem, drawing, rangoli, flower show, fancy dress, etc.
17. Encouragement to faculty for participation in research Conferences,Seminars, Workshops and trainings and publication of research papers
18. A Sport options for girls and boys with excellent coaching for State and National competitions
19. Publication of annual college magazine
20. Distribution of book 'Vichardhan' to newly admitted students
21. Fee waiver to 2nd year and 3rdyear students who secure 75% marks in previous university examination.
22.Free coaching and guidance to students for various competitive exams like JAM,GATE,etc
23. Self fabrication of low cost experiments for undergraduate students.
24. Free distribution of syllabus reference books to needy students.

The two best practices of the institution
   1. Teacher- Guardian Student clusters &
   2. Group projects
   are given in Annexure iii

7.4 Contribution to environmental awareness / protection

- Congress grass eradication drives were organised.
- Tree plantation was done. Maintenance of Botanical and Apiculture garden.
- Students informed about harmful effects of polythene bags and were advised to avoid their use in campus as well as daily life.
- 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 is done through NSS activity in order to conserve the run- off water.
- Arranged popular/ guest lectures of eminent personalities on environment, health, population control etc.

7.5 Whether environmental audit was conducted?   Yes | √ | No | |

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
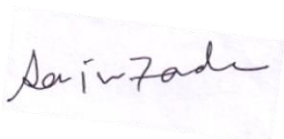- Alumni association

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

Dr. S.S. Zade   Dr. Om Mahodaya

Co-ordinator, IQAC   Principal & Chairman, IQAC

_____***_____

Academic Calendar

Shiksha Mandal's

Jankidevi Bajaj College of Science, Wardha.

Beginning of regular classes of B.Sc -II and III   Dt. 16th June, 2016

Beginning of classes of B.Sc -I   Dt. 20th June, 2016

ACADEMIC CALENDAR

Month	Week / Date	Events / Activites
JUNE	First Week	Distribution of Prospectus & B.Sc.I Admission
	2nd, 3rd Week	Admission process (after the declaration of
	4th Week	result of HSSC) Commencement of Regular
		Classes of B.Sc. Sem-III & Sem-V
JULY	1th Week	Address of Principal to B.Sc I Students.
		Commencement of regular Classes of
		B.Sc. Sem-I
	2nd Week	Sports / Competitions & Classes as per
		University directions
	11th July	World Population Day
	3rd Week	M.Sc. Admission (after declaration of B.Sc.
		Final Result)
	4th Week	Regular Classes of M.Sc Sem-I & Sem-III
	4th Week	Staff Council Meeting
AUGUST	1th Aug.	Last Date of Admission
	15th	Independence Day Celebration &
		Tree Plantation
	4rd Week	1st Internal Quality Assurance Cell Meeting
	4th Week	Students' Council Elections
SEPTEMBER	5th	Teachers' Day Celebration
	8th	International Literacy Day
	2nd Week	1st Unit Test
	3th week	Students' Seminars
OCTOBER	2nd	Mahatma Gandhi Jayanti,
		Congress Grass Eradication
	1st Week	General Knowledge Test
	2nd Week	Students' Seminars / Projects
	2nd Week	U.G. College Test Exam., Teacher Parent meet
	21.10.2016	Commencement of Univ. Exam.
		Sem-I, Sem-III, Sem-V, PG Winter 2016
	28.10.16 to 27.11.16	Winter Vacation
	28.11.16 to 30.04.17	Second term

DECEMBER	6th	Dr. Ambedkar Mahaparinirvan Day
	3rd Week	2nd Internal Quality Assurance Cell Meeting
	3rd-4th Week	Univ. Practical Exam. of PG
JANUARY	7th Jan.	Mata Jankidevi Bajaj Memorial Day (Birth Anniversary)
	2nd Week	Univ. Spot valuation Quiz Competition
	9th & 10th	Kamalnayan Bajaj Memorial Inter-University
Seminar/Elocution Competition		
	3th Week	Practical Exam. of Univ. (U.G.)
	4rd Week	Prize Distribution
	23th	Birth Anniversary of Kamalnayan Bajaj
	4st Week	College Day Functions
	26th	Republic Day Celebration
	27th-28th	Scintillation-2017
FEBRUARY	1th-2nd Week	Regular classes & Practical of B.Sc Sem-II, IV & VI
	2nd Week	3rd Internal Quality Assurance Cell Meeting, Unit
Tests		
	3rd-4th Week	Quiz Competition / Poster Competition / Debate
Competition		
	11th	Death Anniversary of Kakaji Jamnalalji Bajaj
	4th Week	National Service Scheme Camp
	28th	Science Day Celebration
MARCH	1st-2nd Week	Regular classes & Practical of B.Sc Sem-II, IV & VI
	3rd Week	Unit Test
APRIL	1st 2nd Week	Stock Checking
	2nd-3rd Week	College Exam.
	3rd-4th Week	Valuation of Answer books
	4th Week	Staff Council Meeting
	4th Week	Self Assessment by Faculty (PBAS),Magazine
Publication		
	30th	Last working Day.
MAY	1.5.2017 To 15.6.2017	Summer Vacation
	2.5.2017	Commencement of Univ. summer Exam.
		(Even semester, Failure of odd semester)

Analysis of the feedback

Student feedback

Students are satisfied regarding course, syllabus, library, classes and sports.

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:
- Competitive classes should be there.

Opinion regarding course, atmosphere, teachers, principal , library, office:
- Good.

Opinion regarding cluster:
- Good scheme.

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). A process of working with small target groups is found to be convenient and gives better results. This is the main goal of the formation of cluster.

Considering this need, JBC has divided the students of each class in small interactive groups in order to solve their personal difficulties related to the academics and other 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 look after the personal academic difficulties of students in each subject
• To provide them the required educational inputs by the teachers in their subjects
• To solve their difficulties at educational front
• To inculcate confidence in students
• To involve them in co-curricular activities including student seminars and student projects
• 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. B.Sc. I students are not acquainted with the writing of descriptive answers.
2. Most of the students suffer from inferiority complex
3. They are not well acquainted with 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 the 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 towards 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 solving their educational and even personal problems related to adolescent age. 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
- Helping in curbing the absenteeism
- Overall personality development by encouraging them for participation in Extracurricular/Cocurricular/Extension programmes etc.
- In bridging the gap between teachers and students
- Slight improvement in the result.
- Improvement in the the attendance.

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 interaction, which otherwise is not possible. The various factors 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. Family background doesn't provide requisite facilities due to poor economical conditions (most of them are farmers and labours) and put a hindrance in their mobility. Collectively this issues affects their confidence, communication skill which in

turn makes them less interested for the higher education (cluster may act as a motivational aspect for committed students). These problems cannot be solved at once. This requires a very long attention towards them which is possible every time. However, our small practice of clustering opens the window for them which helps to overcome this.

(b) Resources required: In order to elevate their confidence and communication skill students are required to be exposed to such an environment where they can see, listen and learn with no burden. This could be possible by arranging residential camps in vacations. These camps should have programmed of exposing the students to various extra-curricular and cocurricular activities, computer learning and some visits to a places from where they can elevate themselves academic and all round development. For achieving above cited target necessary machinery is 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: Group projects

2. Goal:
Students studying science at UG have curiosity or interest of some kind or other in a particular area of curriculum, social, economic etc. and have a desire to do some innovative work in this area. Goal of this activity is to provide an environment to develop his/her interest and skills in the particular area. Besides this the objective is to inculcate research attitude among the learners. This also gives an experience to work on a project in a team with colleagues.
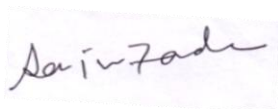
3. Context:
Our UG students usually go for higher studies- PG or research. These courses invariably have projects. The college intends provides a platform for higher studies by introducing the student project activity. The activity develops the students' practical skills and confidence to undertake bigger projects.

4. The Practice: A teacher works as a mentor for a group of 4-6 students for projects. Projects related to curriculum, need based social, economic projects of students' choice are selected and assigned to the group of students. The methodology of project is explained. They learn to refer books and articles from journals. The work is monitored by the mentor. A progress report is submitted after four-five months. After that actual practical work r leading to completion of project is carried out. The group of students have to complete and submit the project at the end of session.

5. Evidence of Success: The technical skills of students are found improved. There is increase in confidence of students to undertake challenging and involved projects. The students seem motivated to pursue higher studies and research.

6. Problems encountered and resources required:
Due to very high student to teacher ratio, and the time constraint, it is difficult to give personal attention to every activity of the project. This somehow affects the quality of work during the project.

Dr. S. S. Zade   Dr. Om Mahodaya
Co-ordinator, IQAC   Principal & Chairman, IQAC