



## Yearly Status Report - 2019-2020

### Part A

#### Data of the Institution

<b>1. Name of the Institution</b>	SHIKSHA MANDAL'S JANKIDEVI BAJAJ COLLEGE OF SCIENCE
Name of the head of the Institution	Dr. Om Mahodaya
Designation	Principal
Does the Institution function from own campus	Yes
Phone no/Alternate Phone no.	07152230515
Mobile no.	9890845825
Registered Email	jbsciencewardha@yahoo.co.in
Alternate Email	jbsciencewardha@gmail.com
Address	Bajaj College of Science, Civil Lines, Jamnalal Bajaj Marg, Wardha
City/Town	Wardha
State/UT	Maharashtra
Pincode	442001

<b>2. Institutional Status</b>					
Autonomous Status (Provide date of Conformant of Autonomous Status)		06-Apr-2017			
Type of Institution		Co-education			
Location		Urban			
Financial Status		Self financed and grant-in-aid			
Name of the IQAC co-ordinator/Director		Dr. S. S. Zade			
Phone no/Alternate Phone no.		07152230515			
Mobile no.		9823304696			
Registered Email		sanjivszade@gmail.com			
Alternate Email		sanjivzade@yahoo.com			
<b>3. Website Address</b>					
Web-link of the AQAR: (Previous Academic Year)		<a href="http://jbsw.shikshamandal.org/wp-content/uploads/2020/08/AQAR-2018-19.pdf">http://jbsw.shikshamandal.org/wp-content/uploads/2020/08/AQAR-2018-19.pdf</a>			
<b>4. Whether Academic Calendar prepared during the year</b>		Yes			
if yes,whether it is uploaded in the institutional website: Weblink :		<a href="http://jbsw.shikshamandal.org/wp-content/uploads/2020/06/Academic-Calendar-2019-20.pdf">http://jbsw.shikshamandal.org/wp-content/uploads/2020/06/Academic-Calendar-2019-20.pdf</a>			
<b>5. Accrediation Details</b>					
Cycle	Grade	CGPA	Year of Accrediation	Validity	
				Period From	Period To
3	A	3.21	2014	01-Feb-2014	19-Feb-2019
3	A	3.21	2019	21-Feb-2019	31-Dec-2022
<b>6. Date of Establishment of IQAC</b>			06-Jan-2000		
<b>7. Internal Quality Assurance System</b>					
Quality initiatives by IQAC during the year for promoting quality culture					

Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries
Planning of online activities to be conducted during Covid19 lockdown	05-Mar-2020 150	849
Guidance for competitive exams like IIT JAM, IBPS exams to advanced learners for enhancing students progression and placement activity.	07-Dec-2020 150	150
Remedial classes for slow learners to reduce dropout rate.	01-Jul-2019 180	350
Introduction of projects and seminars in the UG curriculum so as to develop research aptitude and presentation skills amongst the students	01-Jul-2019 180	699
Bridge course for BSc Semester I students to revise the basic concepts that are important to learn BSc syllabus effectively	01-Jul-2019 15	299
Extending the recommendations of NAAC peer team during 3rd cycle for college development: Starting the construction of new building for Chemistry and Physics departments, Addition of instruments in Central instrumentation Facility.	15-Jun-2019 180	849
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**8. Provide the list of Special Status conferred by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.**

Institution/Department/ Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Jankidevi Bajaj College of Science, Wardha	Autonomous College Grant	UGC	2019 365	900000
Jankidevi Bajaj College of Science, Wardha	CPE	UGC	2019 365	826521
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<b>9. Whether composition of IQAC as per latest NAAC guidelines:</b>	Yes
Upload latest notification of formation of IQAC	<a href="#">View File</a>
<b>10. Number of IQAC meetings held during the year :</b>	8
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	<a href="#">View File</a>
<b>11. Whether IQAC received funding from any of the funding agency to support its activities during the year?</b>	No
<b>12. Significant contributions made by IQAC during the current year(maximum five bullets)</b>	
Organized Innervate 2020: A National Conference on Reforming Higher Education: Role of Accreditation and Autonomy	
Distribution of responsibilities of various SSR and AQAR Criteria's amongst seven criteria committees	
Departments were directed to organize various cocurricular activities like quiz competitions, seminar competitions, workshops etc and extracurricular activities 1) Department of Chemistry under the aegis of IQAC organized of Two days workshop on "Scientific Writings: Beginner's Approach" for all MSc Sem III students of the college 2) 19th State Level MicrobioLogical Contest and MicrobiOlympiad was arranged at Department of Microbiology, Bajaj College of Science, Wardha	
Organized Online Workshop on NAAC in association with SPD RUSA Maharashtra	
Two online faculty development programmes were organized during lockdown period in collaboration with Spoken Tutorial, IIT Bombay	
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<b>13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year</b>	
Plan of Action	Achivements/Outcomes
To encourage the students to complete SWAYAM courses	39 PG and UG students enrolled for online courses of Swayam - January to May 2020
To organize guest lectures of eminent	A talk on 'History of DNA' few

scientists and academicians	applications' by Dr. Arvind Natu and Dr. Bhas Bapat from IISER, Pune on 14 Dec 2019. "Career Scope In Clinical Research, Pharmacovigilence and Medical Coding."by Mr. Sharad Halmare and Anjali Patle from SPRUCE, Nagpur, 25th January 2020 A lecture by Mr. Athrav Patankar from SINE, IIT Bombay, on Biotechnology, 27Jan. 2020. "Fermentation Kinetics" by Dr. Sanjeev Patankar on 12th March 2020.
To organize Faculty Development programmes	"Department of Electronics organized a one week Online Faculty Development Program on Arduino in association with Spoken Tutorial Project of IIT, Mumbai from 28th April 2020- 4th May 2020. Department of Chemistry organized one week Online Faculty Development Program on 'Jmol Applications' in association with Spoken Tutorial Project of IIT, Mumbai from 6-14 may 2020."
To improve the Career Guidance and Placement	B.Sc. students are guided for various PG entrance examinations. Students are guided for NET, SET GATE and PET exams. A guest lecture on Career avenues in Life sciences was delivered by Mrs. Supriya Kashika, Founder and CEO , GenNext Pvt Ltd. Nagpur. A guest lecture on 'Entrepreneurship and career opportunities in Biotechnology' by Ashish Polkade, director, vision ecologicas pvt. Ltd. (B/T dept) "
Organization of Seminar/ workshops/Quizzes	The IQAC organized 'RUSA supported NAAC workshop' (online) on 13th June 2020. Department of Chemistry organized Quiz on periodic table on 28/12/2019 State Level MicrobiOlympiad contest organised for MB students of BSc on 25th Jan. 2020.
To promote research culture in the college	"Ph.D. awarded to 3 PhD Scholars and 1 Faculty member, Six UG students completed summer project in 6 different research institutions. One student received INSA fellowship. College has functional MOUs with NCCS-Pune, MGIRI-Wardha, Kamala Pathalogy, and Amej Pathalogy-Wardha"
To enhance the infrastructural facilities in campus	Construction of two ICT enabled / digital classrooms is complete. Paver blocks have been fixed near Kalaniketan.
To start new degree and certificate courses	The college got approval from RTMNU to start M.Sc. Mathematics and M.Sc. Computer Science from 2020-21 session. In addition to this two Certificate coueses, one in Botany and other in

	Zoology, got approval under NSQF scheme.				
To organize National seminar on Autonomy and NAAC theme.	The college organised a National seminar 'Innervate 2020', 'Reforming higher education: Role of Accreditation and Autonomy' in March 2020.				
To obtain approval for autonomy marksheets from University	The RTMNU has approved marksheets of UG and PG				
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<b>14. Whether AQAR was placed before statutory body ?</b>	Yes				
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Name of Statutory Body</th> <th style="width: 50%;">Meeting Date</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">CDC</td> <td style="text-align: center;">06-Nov-2020</td> </tr> </tbody> </table>		Name of Statutory Body	Meeting Date	CDC	06-Nov-2020
Name of Statutory Body	Meeting Date				
CDC	06-Nov-2020				
<b>15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?</b>	Yes				
Date of Visit	12-Mar-2020				
<b>16. Whether institutional data submitted to AISHE:</b>	Yes				
Year of Submission	2020				
Date of Submission	17-Jan-2020				
<b>17. Does the Institution have Management Information System ?</b>	Yes				
If yes, give a brief description and a list of modules currently operational (maximum 500 words)	The college is using a specially designed software in administrative office for managing the students' data like admission, collecting fees, generating various reports and transfer certificates of students. The college promotes cashless system. All fees are collected online from the students. All GOI scholarships are disbursed to students through MIS. Ledger records are maintained electronically using Tally. Students' information for enrollment is uploaded on the university portal online. All information regarding the college is uploaded on the college website so that it could be easily accessible. The examination department keeps and maintains the database of students				

which is used for submission of internal marks, generation of hall tickets, preparing mark sheets and other examination related work.

## Part B

### CRITERION I – CURRICULAR ASPECTS

#### 1.1 – Curriculum Design and Development

1.1.1 – Programmes for which syllabus revision was carried out during the Academic year

Name of Programme	Programme Code	Programme Specialization	Date of Revision
BSc	UG	Microbiology	27/07/2019
BSc	UG	Physics	27/07/2019
BSc	UG	Biotechnology	24/04/2019
BSc	UG	Botany	27/07/2019
MSc	PG	Botany	27/07/2019

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1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Programme Specialization	Date of Introduction	Course with Code	Date of Introduction
BSc	Nanoscience - Certificate Course in Nanotechnology	19/02/2019	CC4-N	19/02/2019
BSc	Herbs and Herbal Products	05/08/2019	CC2-HHP	05/08/2019
BSc	Clinical Laboratory Techniques	01/10/2019	CC1-CLT	01/10/2019

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#### 1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the Academic year

Programme/Course	Programme Specialization	Dates of Introduction
Nil	NIL	Nil

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1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
MSc	Chemistry	15/06/2019
MSc	Microbiology	15/06/2019
MSc	Zoology	15/06/2019
MSc	Botany	15/06/2019

### 1.3 – Curriculum Enrichment

#### 1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
Communication English	23/08/2019	193
Computer Awareness	26/07/2019	193
Certificate Course in Nanotechnology	19/02/2019	12
Spoken Tutorial - IIT	20/07/2019	302
Certificate Course in Clinical Laboratory Technology	01/10/2019	18
Herbs and Herbal Products	05/08/2019	20
Heartfulness Relaxation Teaching	27/07/2019	280
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#### 1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BSc	Field Projects	Nil
MSc	Field Projects	50
BSc	Internship	2
MSc	Internship	2
<a href="#">View File</a>		

### 1.4 – Feedback System

#### 1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	No
Alumni	Yes
Parents	Yes

#### 1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained
<p>Feedback on curriculum has been taken from stakeholders like students, teachers, and alumni. It is analyzed by the feedback committee and the feedback is discussed in the common meetings and CDC. The feedback is used for the development of college as well as for curriculum. Analysis of Student's Feedback The students are the most important stakeholders of Higher Education system. For academic year 2019-20 feedback from our under graduate and post graduate students have been collected and analyzed. The report is as follows- For Under graduate on average 18.42 students in the favor of excellent, 34.82 in very good, 35.68 in good, 11.39 in average 1.64 in below average with the current curriculum designed by Bajaj College of Science, Wardha. For Post graduate on an average 21.42 students in the favor of excellent, 43.43 in very</p>



good, 30.29 in good, 3.77 in average 1.00 in below average with the current curriculum designed by Bajaj College of Science, Wardha. Analysis of Teachers' Feedback For the Academic year 2019-20 feedback from under graduate and post graduate teachers have been collected and analyzed. The report is as follows- For Under graduate on an average 51 teachers strongly agree, 44.5 agree, 3.5 uncertain 1.00 are disagree with the current curriculum designed by Bajaj College of Science, Wardha. For Post graduate on an average 39.5 teachers strongly agree 56.0 agree 4.5 uncertain 1.00 are disagree with the current curriculum designed by Bajaj College of Science, Wardha. Analysis of Alumni's' Feedback Majority of the alumni feel strongly that learning in Bajaj College of Science was definitely useful to them in career. Many alumni strongly agree with the development of BCS like Autonomy status, NAAC 'A' Grade, CPE, RUSA etc. They also talked about introduction of new courses specially job oriented. Analysis of Parents Feedback Most of the parents strongly agree with the current curriculum of the various programs designed by the Bajaj College of Science, Wardha. It is analyzed that current curriculum is carrier oriented provides better opportunities. They have suggested to start PG course like M.Sc in Mathematics Physics. Some of them recommended to start guidance centre for NET/SET examinations.

## CRITERION II – TEACHING- LEARNING AND EVALUATION

### 2.1 – Student Enrolment and Profile

#### 2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BSc	General	960	1464	679
MSc	Chemistry	44	44	43
MSc	Botany	44	44	43
MSc	Zoology	44	44	43
MSc	Microbiology	44	44	43

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### 2.2 – Catering to Student Diversity

#### 2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2019	679	172	33	7	35

### 2.3 – Teaching - Learning Process

#### 2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
54	54	8	13	Nil	5

[View File of ICT Tools and resources](#)

**2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)**

Student's Mentoring system - Regular Faculty of our college has been working as mentors for undergraduate and postgraduate students. Based on their performance, faculty categorize students as slow learner and advanced learner. Slow learners: It is a term used for students having below average IQ levels. These students are part of our regular college. These students are not physically or mentally disabled but only pace disabled. The only problem with them is that they learn concepts at a slower rate than other students. They are identified on the basis of performance in previous academic year, classroom interaction and attitude of participation in various academic and cultural activities. They are also identified when subjected to various methods of evaluations like vocal responses, assignments, monthly unit tests, projects, extra experiments, class room seminars and test examination at the end of semester. Teachers of our college play pivotal roles in a slow learner's life. Their support, motivation and encouragement go a long way to overcome their hurdles by creating a healthy and conducive environment. Some of the remedial measures taken by teachers are as follows. • By repeating every basic instruction, keyword and concept again and again in the classroom so that their weak cognitive skills coupled with the slow speed learning can be matched. • Special extra time is given to slow learners to increase their confidence. • By explaining concepts and situations using real life practical examples. • By not pressurizing them for time management or anything else. • Remedial classes are arranged for these students. • Clusters are formed to address their difficulty at a personal level on every Saturday. Advanced learners: The teachers also take extra efforts to support advanced learners in the best possible way. The advanced learners are motivated to go for higher studies. They are given academic and financial support to participate in various competitions like Quiz, elocution, debate, science exhibition etc. Motivational lectures are organized to channelize their potential to accomplish their goals.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
679	33	1 : 21

**2.4 – Teacher Profile and Quality**

**2.4.1 – Number of full time teachers appointed during the year**

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
80	54	26	9	26

**2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )**

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2019	Nill	Nill	Nill

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**2.5 – Evaluation Process and Reforms**

**2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year**

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
MSc	PG	Supplementary (Online Exam), Semester III, Summer 2020	19/10/2020	21/10/2020
MSc	PG	Supplementary	05/10/2020	07/10/2020

		(Online Exam), Semester I, Summer 2020		
BSc	UG	Regular, Semester I, Semester III, Semester V Winter 2019	11/12/2019	20/12/2019
MSc	PG	Regular, Semester I, Semester III Winter 2019	10/12/2019	23/12/2019
BSc	UG	Supplementary, Semester II, Semester IV Winter 2019	15/07/2019	27/12/2019
MSc	PG	Supplementary, Semester II, Semester IV, Winter 2019	08/07/2019	27/12/2019
BSc	UG	Supplementary (Online Exam), Semester III, Summer 2020	04/10/2020	21/10/2020
BSc	UG	Supplementary (Online Exam), Semester V, Summer 2020	04/10/2020	21/10/2020
MSc	PG	Regular (Online Exam), Semester IV, Summer 2020	27/10/2020	31/10/2020
BSc	UG	Regular (Online Exam), Semester VI, Summer 2020	20/10/2020	31/10/2020

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2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
38	1067	3.56

## 2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

<http://jbsw.shikshamandal.org/wp-content/uploads/2020/12/POsPSOsCOs-BSc-BCS.pdf>

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
UG	BSc	Winter 2019, Semester I	275	84	30.55
UG	BSc	Winter 2019, Semester III	240	119	49.58
UG	BSc	Winter 2019, Semester III	151	116	76.82
PG	MSc	Winter 2019, Semester I	87	70	80.46
UG	BSc	Summer 2020, Semester II	260	250	96.15
UG	BSc	Summer 2020, Semester IV	232	229	98.71
UG	BSc	Summer 2020, Semester VI	151	151	100
PG	MSc	Summer 2020, Semester II	86	86	100
PG	MSc	Summer 2020, Semester IV	80	80	100

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## 2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

<http://jbsw.shikshamandal.org/wp-content/uploads/2020/12/SSS-from-BSc-2019-20-.pdf>

## CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 – Promotion of Research and Facilities

3.1.1 – The institution provides seed money to its teachers for research

No

No file uploaded.

3.1.2 – Teachers awarded National/International fellowship for advanced studies/ research during the year

Type	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency

National	Nil	NA	08/10/2020	NA
International	Nil	NA	08/10/2020	NA
<a href="#">View File</a>				

### 3.2 – Resource Mobilization for Research

#### 3.2.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Major Projects	1096	Department of Science and Technology, New Delhi	37.38	17.08
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#### 3.2.2 – Number of ongoing research projects per teacher funded by government and non-government agencies during the years

1
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### 3.3 – Innovation Ecosystem

#### 3.3.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Two days workshop on "Scientific Writings: Beginner's Approach"	Chemistry in association with all other departments	13/09/2019
Online Faculty development program on "Jmol Application"	Department of Chemistry in association with Spoken Tutorial of IIT Bombay	03/03/2020
Online Faculty development program on "Arduino" program.	Department of Electronics in association with Spoken Tutorial of IIT Bombay	28/04/2020
"Career alternatives in Life Sciences" By Dr. Supriya Kashikar, Founder CEO Genext Genomics laboratories, Nagpur	Microbiology	31/08/2019
"Different grants like Biotechnology Ignition Grants (BIG), BIRAC grants" by Mr. Athrav Patankar from SINE, IIT Bombay	Microbiology	20/01/2020
"Career Scope In Clinical Research and Medical Coding" Anjali Patle, Certified Medical Coder, Ascent Business Solution, Nagpur Mr. Sharad Halmare, Director, SPRUCE Training Centre,	Microbiology	25/01/2020

Nagpur		
"Innervate- 2020", A National Conference on "Reforming Higher Education: Role of Accreditation and Autonomy"	IQAC	03/03/2020
A RUSA supported NAAC workshop 'Modalities of NAAC Process to enhance the quality parameters in HEIs'	IQAC	13/06/2020
<a href="#">View File</a>		

### 3.3.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
NIL	NA	NA	08/10/2020	NA
<a href="#">View File</a>				

### 3.3.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start-up	Date of Commencement
NIL	NA	NA	NA	NA	08/10/2020
<a href="#">View File</a>					

## 3.4 – Research Publications and Awards

### 3.4.1 – Ph. Ds awarded during the year

Name of the Department	Number of PhD's Awarded
Chemistry	1
Botany	2

### 3.4.2 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
International	Chemistry	2	0.24
International	Physics	1	1.85
International	Electronics	5	0.26
International	Microbiology	5	0.2
International	Biotechnology	1	5.5
<a href="#">View File</a>			

### 3.4.3 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
Department of Microbiology	4
Department of Physics	2
Department of Chemistry	6
<a href="#">View File</a>	

## 3.4.4 – Patents published/awarded during the year

Patent Details	Patent status	Patent Number	Date of Award
Nil	Filed	00	08/10/2020
<a href="#">View File</a>			

## 3.4.5 – Bibliometrics of the publications during the last academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Synthesis of RE3 (RE3 Ce3, Dy3, Eu3 and Tb3) activated Gd2SiO5 optoelectronics materials for lighting	V.V. Shinde, Ashish Tiwari, S.J. Dhoble	Journal of Molecular Structure, 2020, 1217, 128397	2020	1	Bajaj college of science Wardha	1
Ultrasonic Investigations on Molecular Interactions of N-Phthaloyl Compounds in Protic and Non-Protic Solvents at 303-318 K	Pradip Tekade, Bhagyashri Tale, and Sonal Bajaj	Russian Journal of Physical Chemistry A 2019, 93(9), pp-1703-1707	2020	1	Bajaj college of science Wardha	4
Synthesis of Dy3, Eu3 and Tb3 Activated Y2O2S Optoelectronic Phosphors for N-UV LED Applications	V. V. Shinde, S. J. Dhoble	International Journal of Innovative Technology and Exploring Engineering (IJITEE), 2020, 9 (4), pp-2068-2074	2020	0	Bajaj college of science Wardha	Nil
Studies on Isolation	S. S. Khandare, K. A.	Journal of Emerging T	2019	0	Bajaj college of science	Nil

and Characterization of Plant Growth Promoting Endophytic Azospirillum from Roots of Wheat Plant (Triticum aestivum) of Semiarid Soil of Wardha District, Maharashtra.	Dhumane, M.G. Ingale	Technologies and Innovative Research, 2019, 6 (6), pp-990-1000			Wardha	
Isolation and Identification of Natural Compounds with Anti-Bacterial Potential from Ocimum basilicum against Some Food Borne Pathogens	S. S. Khandare, S. A. Wankhede, M. G. Ingale, P. G. Borkar	International Journal of Research and Analytical Reviews, 2019, 6 (2), pp-60-72	2019	0	Bajaj college of science Wardha	Nil
Prospective of Monascus pigments as an additive to commercial sunscreens.	Sunil H. Koli, Rahul K. Suryawanshi, Bhavana V. Mohite, Satish V. Patil	Natural Product Communication, 2019, 14(12), 1-7	2019	1	Bajaj college of science Wardha	1
Eu <sup>3</sup> and Dy <sup>3</sup> ?activated LaAlO <sub>3</sub> phosphor for solid? state lighting	S. K. Ramteke, A. N. Yerpude, N. S. Kokode, V. Shinde, S. J. Dhoble.	Journal of Materials Science: Materials in Electronics, 2020, 31 (8), pp-6506-6509.	2020	1	Bajaj college of science Wardha	2



Synthesis and Luminescence Properties of La <sub>2</sub> O <sub>3</sub> :RE <sub>3</sub> (RE = Ce <sub>3+</sub> , Dy <sub>3+</sub> , Eu <sub>3+</sub> and Tb <sub>3+</sub> ) Submicron Size Phosphors for Lamp Industry	V. V. Shinde, S. J. Dhoble	International Journal of Innovative Technology and Exploring Engineering (IJITEE), 2020, 9 (4), pp-1898-1907	2020	0	Bajaj college of science Wardha	Nil
Luminescence study of LiMgBO <sub>3</sub> :Dy for $\gamma$ and carbon ion beam exposure	Mangesh Yerpude Vibha Chopra N. S. Dhoble R. M. Kadam Aleksander Krupski	Luminescence, 2019, 34(8), 933-944	2019	1	Bajaj college of science Wardha	2
Thermoacoustical studies of molecular interaction of N-[[[(2S)-1-ethylpyrrolidin-2-yl]methyl]-2-methoxy-5-sulfamoyl]benzamide at different temperature	Mohabansi N P and Satone A K	International Research Journal of Science and Engineering, 2020 Special Issue A7: Page no. 133-137	2020	1	Bajaj college of science Wardha	1

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3.4.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Ultrasonic Investigations on Molecular Interactions of N-Phthaloyl Compounds	Pradip Tekade, Bhagyashri Tale, and Sonal Bajaj	Russian Journal of Physical Chemistry A 2019, 93(9), pp-1703-1707	2019	5	4	Bajaj college of science Wardha

in Protic and Non-Protic Solvents at 303-318 K						
Thermoacoustical studies of molecular interaction of N-[[[(2S)-1-ethylpyrrolidin-2-yl]methyl]-2-methoxy-5-sulfamoylbenzamide at different temperature	Mohabansi N P and Satone A K	International Research Journal of Science and Engineering, 2020 Special Issue A7: Page no. 133-137	2020	2	1	Bajaj college of science Wardha
Luminescence study of LiMgBO <sub>3</sub> :Dy for $\gamma$ ray and carbon ion beam exposure	Mangesh Yerpude Vibha Chopra N. S. Dhoble R. M. Kadam Aleksander Krupski	Luminescence, 2019, 34(8), 933-944	2019	2	2	Bajaj college of science Wardha
Synthesis and Luminescence Properties of La <sub>2</sub> O <sub>2</sub> S:RE <sub>3</sub> (RE <sub>3</sub> Ce <sub>3</sub> , Dy <sub>3</sub> , Eu <sub>3</sub> and Tb <sub>3</sub> ) Submicron Size Phosphors for Lamp Industry	V. V. Shinde, S. J. Dhoble	International Journal of Innovative Technology and Exploring Engineering (IJITEE), 2020, 9(4), pp-1898-1907	2020	3	Nil	Bajaj college of science Wardha
Eu <sub>3</sub> and Dy <sub>3</sub> activated LaAlO <sub>3</sub> phosphor for solid state lighting	S. K. Ramteke, A. N. Yerpude, N. S. Kokode, V. V. Shinde, S. J. Dhoble.	Journal of Materials Science: Materials in Electronics, 2020, 31(8), pp-6506-6509.	2020	3	2	Bajaj college of science Wardha

Prospective of Monascus pigments as an additive to commercial sunscreens .	Sunil H. Koli, Rahul K. Suryawanshi, Bhavana V. Mohite, Satish V. Patil	Natural Product Communication , 2019, 14(12), 1-7	2019	11	1	Bajaj college of science Wardha
Isolation and Identification of Natural Compounds with Anti-Bacterial Potential from Ocimum basilicum against Some Food Borne Pathogens	S. S. Khandare, S. A. Wankhede, M. G. Ingale, P. G. Borkar	International Journal of Research and Analytical Reviews, 2019, 6 (2), pp-60-72	2019	2	Nil	Bajaj college of science Wardha
Studies on Isolation and Characterization of Plant Growth Promoting Endophytic Azospirillum from Roots of Wheat Plant (Triticum aestivum) of Semiarid Soil of Wardha District, Maharashtra.	S. S. Khandare, K. A. Dhumane, M.G. Ingale	Journal of Emerging Technologies and Innovative Research, 2019, 6 (6), pp-990-1000	2019	2	Nil	Bajaj college of science Wardha
Synthesis of RE3 (RE3 Ce3, Dy3, Eu3 and Tb3) activated Gd2SiO5 op	V.V. Shinde, Ashish Tiwari, S.J. Dhoble	Journal of Molecular Structure, 2020, 1217, 128397	2020	3	1	Bajaj college of science Wardha

toelectronics materials for lighting						
Synthesis of Dy <sub>3</sub> , Eu <sub>3</sub> and Tb <sub>3</sub> Activated Y <sub>2</sub> O <sub>3</sub> Opto electronic Phosphors for N-UV LED Applications	V. V. Shinde, S. J. Dhoble	International Journal of Innovative Technology and Exploring Engineering (IJITEE), 2020, 9 (4), pp-2068-2074	2020	3	Nil	Bajaj college of science Wardha
<a href="#">View File</a>						

### 3.4.7 – Faculty participation in Seminars/Conferences and Symposia during the year

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	13	12	Nil	Nil
Presented papers	1	6	Nil	Nil
Resource persons	1	1	Nil	16
<a href="#">View File</a>				

### 3.5 – Consultancy

#### 3.5.1 – Revenue generated from Consultancy during the year

Name of the Consultan(s) department	Name of consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
Centralized Instrumentation Centre (CIC)	XRD, FT-IR, UV Instruments	As mentioned in excel file	29800
Chemistry	Water Analysis	As mentioned in excel file	5100
Botany	Plant Identification	As mentioned in excel file	350
<a href="#">View File</a>			

#### 3.5.2 – Revenue generated from Corporate Training by the institution during the year

Name of the Consultan(s) department	Title of the programme	Agency seeking / training	Revenue generated (amount in rupees)	Number of trainees
Nil	NA	NA	0	0
<a href="#">View File</a>				

### 3.6 – Extension Activities

3.6.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Polio day	3MAH GIRLS BN NAGPUR with Civil hospital Wardha	1	5
Haemoglobin checking for cadets	NCC girls with CLT Dept of Microbiology	2	30
Constitution Day Rally	NCC/CWSS girls in association with Organised by District Education Officer, Wardha.	4	50
Free Health Checkup Camp with various medical test like T3,T4 Cancer and HIV for villagers (Amgaon (M) , tah.Seloo, dist. Wardha)	NSS Unit in association with Civil hospital, Wardha	5	75
Animal health Check up camp for villegers of Amgaon (M) , tah.Seloo, dist. Wardha.	NSS Unit in association with Jankidevi Bajaj Granim sanstha. Wardha	5	75
International Yoga Day Celebration	NSS/NCC girls Unit in association withHeart fullness yoga and meditation	8	94
Rejuvenation of Continuous Contour Trenches at Amgaon (M) , tah.Seloo, dist. Wardha	NSS/Grampamchayat Amgaon (M) , tah.Seloo, dist. Wardha	3	75
Distribution of Albendazol to Jr and senior college students	NSS/PEC, In association with Ministry for Health Family Welfare and State, Govt of India	3	100
<a href="#">View File</a>			

3.6.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Nil	Nil	Nil	Nil
<a href="#">View File</a>			

3.6.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities
Gender issues	CWSS/NCC girls Unit /Syamsiddha(Non Government organization)	Self Defence talk and Hands on training on the Basics of Karate	3	100
Swatchha bharat Abhiyan	NSS Unit with department of Zoology	Covid 19 pandemic sanitizer preparation and free distribution to unprivileged.	3	80
Swatchha bharat Abhiyan	3MAH GIRLS BN NAGPUR	Hand wash day- Promotion of personal at public places	1	32
Swatchha bharat Abhiyan	3MAH GIRLS BN NAGPUR/NCC	Gandhi Jayanti -Cleanliness drive	6	52
<a href="#">View File</a>				

**3.7 – Collaborations**

3.7.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Students performed MSc project work under the scientists of Mahatma Gandhi Institute for Rural Industrialization: MGIRI-Wardha :A National Institute under the ministry of micro and medium enterprises, Govt. Of India	1. Ms. Mamata Chandank 2. Ms. Priya Kadu (M.Sc. II students)	College	180
Students performed their MSc project work in chemistry department of our college under guidance of Dr. P.V.Tekade and Dr Akhil Nakhate	Ms. Shubhangi S. Pande Ms. Ruchita S. Raut Ms. Sonal R. Rewatkar (M.Sc. II students of Nabira Mahavidyalaya, Katol)	Nabira Mahavidyalaya, Katol.	90
Student performed	Ayushi D	National	90

work on the topic Role of Epigenetic regulators and Hedgehog signaling in covalent gene expression under the guidance of Prof. Sameer Kumar Patra, National Institute of Technology, Rourkela	Chaudhari	Institute of Technology, Rourkela, Odisha	
Student performed work on the topic Putative SH3 domain containing proteins (YgiM) role in Salmonella infection under the guidance of Dr. Vidyadevi Negi, National Institute of Technology, Rourkela, Odisha	Aaditya Vilas Bhaskarwar	National Institute of Technology, Rourkela, Odisha	90
Student performed work on the topic 'Charcoal/ Biochar formation from dried leaves' under CSIR-Summer Research Training Program.	Mr. Mohan Kapse	CSIR-SRTP	180
Student performed work on the topic "Study on active compounds from the medicinal plants used in treatment of Cystic fibrosis" under the guidance of Dr. D. Sumitha, Assistant Professor, Department of Microbiology,, St. Josephs College of Arts and	Ms. Nikita Khare	CSIR-SRTP	180
Students completed certificate course on "Spoken Tutorial" in collaboration Spoken Tutorial, Indian Institute of Technolgy, Powai,	All students of BSc -II	Self	180

Bombay.			
Mentoring project of two students on topic Optical properties of Nanoparticles under National Initiative on Undergraduate Science (NIUS) Project	Mentor- Dr. G. V. Lakhotiya Students- Joel George (ISP, CUST, Kochi) and Sourav Mahato (NISE R, Bhubaneswar)	Homi Bhabha Centre for Science Education (HBCSE), Tata Institute of Fundamental Research, Mumbai.	180
MTTS level-O summer internship programme (Online)	Ms. Mrunal Gandole of B.Sc. II	IISER Kolkata.	22
<a href="#">View File</a>			

3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Project work and Sharing of research facilities	Project work	Mahatma Gandhi Institute for Rural Industrialization: MGIRI-Wardha :A National Institute under the ministry of micro and medium enterprises, Govt. Of India	02/09/2019	29/02/2020	02
Collaboration	Investigation on genetic diversity, local scale genetic structure and ex-situ conservation of <i>Anogeissus sericea</i> in disturbed forest patch of Gujarat, Rajasthan	Office of the chief conservative of forest and field Director, Pench Tiger reserve , Nagpur	27/02/2020	10/10/2020	01



	Vidarbha, Nagpur				
Collaborat ion- Association	ST-IIT certificate course	Spoken Tutorial, Indian Institute of Technolgy, Powai, Bombay.	01/07/2019	31/03/2020	300
Sharing of research facilities	Collaborat ive certificate course: 'Nanosense'	Centre for Materials for Electronics Technology C- MET Pune: Ministry of Electronics Information Technology (MeitY), Govt. of India Ph: 020 2589 8724	01/01/2019	09/10/2020	01
Collaborat ion- Association	Mentoring project of two students on topic Optical properties of Nanoparti cles under National Initiative on Undergrad uate Science	Dr. Rajesh Khaparde, Homi Bhabha Centre for Science Education (HBCSE), Tata Institute of Fundamental Research, Mumbai.	25/09/2019	25/03/2020	02
Summer Internship	MTTS level- O summer internship programme (Online)	IISER Kolkata.	26/05/2020	17/06/2020	01
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3.7.3 – MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Maharashtra Centre for Entrepreneurship Development (MCED), Nagpur.	13/01/2020	For Entrepreneurship training and research	1
<a href="#">View File</a>			

**CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES****4.1 – Physical Facilities**

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
23.31	66.62

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Classrooms with Wi-Fi OR LAN	Newly Added
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Existing
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
Value of the equipment purchased during the year (rs. in lakhs)	Existing
Seminar halls with ICT facilities	Newly Added
Seminar halls with ICT facilities	Existing
Classrooms with LCD facilities	Existing
Seminar Halls	Existing
Laboratories	Existing
Class rooms	Existing
Campus Area	Existing
<a href="#">View File</a>	

**4.2 – Library as a Learning Resource**

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
LIBTECH	Partially	1.0	2016

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	26759	2204932	279	166286	27038	2371218
Reference Books	1789	1164930	28	12545	1817	1177475
e-Books	97000	Nill	Nill	Nill	97000	Nill
Journals	23	65124	Nill	Nill	23	65124
e-Journals	2137	Nill	Nill	Nill	2137	Nill
Digital Database	1	5900	Nill	Nill	1	5900

CD & Video	380	Nill	10	Nill	390	Nill
Library Automation	1	5000	Nill	Nill	1	5000
Weeding (hard & soft)	Nill	Nill	Nill	Nill	Nill	Nill
Others(s pecify)	Nill	Nill	Nill	Nill	Nill	Nill
<a href="#">View File</a>						

4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
Dr. P. A. Saudagar	Short Term Course in Circuit Maker and Timer 555IC	Moodle01/	01/08/2019
<a href="#">View File</a>			

#### 4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/ GBPS)	Others
Existing	171	3	2	2	1	11	160	100	0
Added	3	0	2	0	0	0	3	0	0
<b>Total</b>	<b>174</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>11</b>	<b>163</b>	<b>100</b>	<b>0</b>

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

100 MBPS/ GBPS
----------------

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
NIL	<a href="#">NIL</a>

#### 4.4 – Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
54.02	2382442	23.31	6662327

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website)

Bajaj College of Science, Wardha has an established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, and classrooms. Bajaj College of Science strives to meet the growing needs of the institution with the support of the Planning / Purchase Committee/ Management. The college ensures optimal allocation and utilization of the available financial resources for maintenance and upkeep of different facilities by holding regular meetings of various committees constituted for this purpose and using the grants received by the college as per the requirements in the interest of students. • The HODs, faculties and non-teaching staff are given responsibility to maintain the facilities under their supervision. • They later report to the Principal regarding maintenance of infrastructure if needed. • An annual audit and stock checking of the physical, academic and support facilities is undertaken for assessment and evaluation. • A detailed report is submitted by the Heads of the Departments to the Principal for the next academic year. • The Principal discusses with the Planning Committee and presents a report regarding physical, academic and support facilities in the Governing Body for approval and implementation. Maintenance of Physical and academic facilities • Stock Checking of all the equipment, instruments, glass ware, specimens and computing devices etc. is done in all the departments annually and details are given to the College office for the further action • For any kind of maintenance or repair, the laboratory staff in-charge reports to the Head of the Department and it was forwarded to the Principal and the repair work is carried out by the concerned service person. • The instruments and equipment are maintained by the suppliers from whom they are purchased, in case of any services are required. • Maintenance Staff are responsible for maintenance related to electrical, carpentry and painting etc., of the classrooms and the entire campus throughout the year and major repair works are carried out during summer vacation. • Technical requirements and other infrastructure facilities are maintained regularly by electrical and technical maintenance team. • Fire extinguishers and First Aid Kits are maintained regularly and their refilling is done before the date of expiry. • Cleaning and maintenance of class rooms, seminar halls, laboratories, staff rooms, library and corridors are done regularly on a daily basis by the supporting staff. • Cleanliness and hygiene of wash rooms and the college campus are regularly maintained with the help of the outsourced cleaning staff. • CCTV cameras have been installed at vantage points to ensure protection to the staff the students. • Working of LCD is checked on a regular basis by the trained technicians. • All books in the library are arranged according to their category. • Damaged books are bound, scanned and digitalized in the central library. • The annual stock checking and maintenance of the library books are carried out during the summer vacation. • On request from each department, a list of required books are prepared

<http://jbsw.shikshamandal.org/wp-content/uploads/2020/11/Policy.pdf>

## CRITERION V – STUDENT SUPPORT AND PROGRESSION

### 5.1 – Student Support

#### 5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	Nil	0	0
Financial Support from Other Sources			
a) National	GOI	659	5462177
b) International	Study in India	1	9630

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5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Spoken Tutorial - IIT	22/07/2019	302	Indian Institute of Technology, Bombay
Language and communication skills	23/08/2019	240	Orell Technosystems (India) Pvt. Ltd, Kochi Web: orellsoft.com, Mob:9388814000/8451046000 Email: info@orellsoft.com
Heartfulness Relaxation: From Stress to Self-realization	20/07/2019	250	Shri Ramchandra Mission, Hyderabad - Wardha Branch
Soft Skills	23/08/2019	140	DGC Communication, Wardha
Bridge Courses	01/07/2019	362	Bajaj College of Science, Wardha
Remedial Coaching	01/07/2019	275	Bajaj College of Science, Wardha

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5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
2019	Entrance exam for M. Sc., IIT JAM	20	20	2	Nil
2019	Banking	50	50	Nil	Nil

[View File](#)

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
1	1	20

## 5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
Tata Consultancy Services, Piramal Enterprises Ltd.	66	5	NIL	Nil	Nil
<a href="#">View File</a>					

5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of programme admitted to
2019	5	B.Sc.	Zoology	Dept. of Zoology, R.T.M.N. University, Nagpur	Post Graduation in Zoology
2019	4	B.Sc.	Zoology	Bajaj College of Science, Wardha	Post Graduation in Zoology
2019	2	B.Sc.	Zoology	Vidyabharti College Seloo R.T.M. N. University, Nagpur	Post Graduation in Zoology
2019	2	B.Sc.	Zoology	Sant Gadge Baba Amravati University	Post Graduation in Zoology
2019	1	B.Sc.	Zoology	Dept of Health Science, S.P. Pune University, Pune	Post Graduation in Zoology
2019	1	B.Sc.	Zoology	Institute of Science, Nagpur	Post Graduation in Zoology
2019	1	B.Sc.	Botany	Dept. of Botany, R.T.M.N. University, Nagpur	Post Graduation in Botany
2019	1	B.Sc.	Botany	Vidyabharti College	Post Graduation in Botany

				Seloo, R.T.M.N. University, Nagpur	
2019	5	B.Sc.	Botany	Bajaj College of Science, Wardha	Post Graduation in Botany
2019	2	B.Sc	Chemistry	Department of Chemistry, S. P. Pune University, Pune	Post Graduation in Chemistry
<a href="#">View File</a>					

5.2.3 – Students qualifying in state/ national/ international level examinations during the year  
(eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
Any Other	2
Any Other	1
<a href="#">View File</a>	

5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Shiksha Mandal's Inter Collegiate Sports Meet from 7th to 9th Feb. 2020	Inter-college	102
Summer/ Winter/National (Ball Badminton) Team Coaching Camp (Handball, Archery, Ball-Badminton, Volleyball, Softball)	District level	350
Summer/ Winter/National (Ball Badminton) Team Coaching Camp (Handball, Archery, Ball-Badminton, Volleyball, Softball)	State Level	55
Summer/ Winter/National (Ball Badminton) Team Coaching Camp (Handball, Archery, Ball-Badminton, Volleyball, Softball)	National Level	12
Organised All India Essay Writing Event in collaboration with United Nations information Centre (UNIC) Bhutan and Shri Ramchandra Mission(SRCM) ,Hyderabad.	National Level	85
Celebration of 125th anniversary of Swami	College Level	220

Vivekanandji historic speech at Chicago		
Gandhi Vichar Sanskar Pariksha in collaboration with Gandhi Research Foundation, Jalgaon	National Level	9
National Essay Writing Competition conducted by NTA in collaboration with MHRD and UGC	National Level	2
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### 5.3 – Student Participation and Activities

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
Nill	NIL	Nill	Nill	Nill	NIL	NIL
<a href="#">View File</a>						

5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

The Education Act, 1998 recognizes that Student Council is an increasingly common feature in colleges. It should be formed with lead role of students of a college and the involvement of Board of Management in supporting the establishment and ongoing development of the Student Council. Bajaj College of Science, Wardha has an active Student Council which comprises of Chairman of Student Council, Principal, Dr. Om Mahodaya and a teacher in charge, student representation from each head, e.g. NSS, NCC, CWSS, PEC, Extracurricular and academics and a teacher in charge of respective committee. The establishment of a Student Council gives students an opportunity to develop communication, organizational and planning skill and leadership quality which will be of benefit to them in their future lives. The aims and objectives of the Student Council are to promote the development of the college and the welfare of its students. The functions and activities of a Student Council are: • To enhance communication between students, management, staff and parents. • To promote an environment conducive to educational and personal development. • To support the management and staff in the development of the college. • To represent the views of the students on matters of general concern to them. • To assist or mentor first year students and promote friendship and respect among pupils. • To contribute in the development of college policy. • To assist in college sporting and cultural activities. As the college is affiliated to RTM Nagpur University, Nagpur, college has to abide by the rules and regulations of the University regarding the formation of Students' Council. In the academic session 2019-20, though university has announced students' election to form students' council at college level on Sept. 14, 2019, due to state assembly elections held in the month of Oct. 2019, University has to postpone the elections till Nov. 30, 2019 by its letter no. 218 dated Aug. 28, 2019 and thereafter no fresh directions were received to conduct students' election to form students' council from University.

### 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?



No

5.4.2 – No. of registered Alumni:

0

5.4.3 – Alumni contribution during the year (in Rupees) :

1121

5.4.4 – Meetings/activities organized by Alumni Association :

The alumni association of Bajaj College of Science, Wardha has performed following activities during the session 2019-20. 1) Tree plantation was done in the college campus (30/09/2019) 2) Rally was being carried out on the eve of Gandhi Jayanti. (2/10/ 2019) 3) Corona virus awareness program was arranged in the college. (06/03/2020) It was decided to conduct regular quarterly meetings of alumni association. More alumni interaction programs shall be organized in the future. In carrying out the above mentioned activities, Principal Dr. Om Mahodaya inspired all of us. I am also thankful to the executive committee members for their kind cooperation and guidance.

## **CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 – Institutional Vision and Leadership**

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Being autonomous institution, the decentralization and participative management either in academic or administrative work is unavoidable. On-going practices of decentralization and participative management during the last year is on its right place. The two major practices are given below A. Examination decentralization and participation B. Administrative decentralization and participation A. Examination decentralization and participation: To conduct all the Examination related work, the person is appointed as the "Director of Examination and Valuation" who monitor all the required activities on day to day basis. He/she controls all the Examination and Valuation related works and its correspondence with viz. Question paper setters, valuers and Moderators etc. In consultation with the Principal of the college, the director office implements meticulous plan for the Deployment of examination timetables in order to conduct Examination, Valuation and thereby declaration of results in time. Besides, all the Heads of various departments act as a chairman of respective subjects with the participation of remaining faculties as a member of BOS. These are accountable for framing the curriculum, pattern of question papers and assigning outsourced or in-housed faculties for various activities like setting, valuation and moderation. Thus, this practice clearly shows the decentralization and participative management. B. Administrative Decentralization and participation Besides, the academics and curricula, the Principal of the college needs to administer number of activities in the institute. They may be co-curricular and extracurricular events such as conduction of popular conferences and seminars for faculties and students, programmes on women empowerment, gender sensitization, cleanliness etc., the extension activities like National Service Scheme (NSS), National Cadet Corps (NCC), Centre for Women Studies and Services (CWSS), Population Education Club (PEC), societies and clubs like Astro Club etc. All such activities are conducted by the Conveners appointed therein, under whose guidance the members from teaching and nonteaching staff are deployed. Furthermore, field trips, display of academic achievements, debates, discussion are organized. There are co-curricular activities such as establishment and formation of faculty wise

academic societies and clubs such as Chemical Society, Botanical Society, Zoological Society, Microbiology Society, Language Laboratory and Language Club etc. Moreover, many healthy practices are worth mentioning such as organization of Competitive Examination and Training and Placement cell which conduct interdepartmental quizzes, interdisciplinary seminar competitions, Mock-Examinations for practice etc. The success outcomes of such practice is viewed, assessed and judged during future in-campus recruitment drives. New benchmarks are formed each time. Another evidence of success is that these all extracurricular as well as co-curricular activities are always seen to be enthusiastically participated by all teaching, non-teaching and students of the institution.

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

## 6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Teaching and Learning	1) Every faculty is assigned particular units of curriculum of respective subject to monitor the level of completion of curriculum in stipulated time. 2) Regular remedial classes for each subject is made compulsory and incorporated in time table for slow learners. 3) Feedback of depth of understanding subject is regularly collected from students through classroom tests. 4) Some selected practicals of certain subjects are modified into projects to have the assimilation of basic science approach. 5) MOODLE as LMS is used by some of the departments and exploring the possibilities of blended teaching and learning if needed in pandemic situation.
Research and Development	Purchase of Research instruments against the grant received from RUSA, CPE, DBT etc. is always preferred along with the regular instruments required by each department. For Ex. FTIR, XRD, PCR are available in Centralized Instrumentation Centre (CIC) for various stake holders. 2) Research committee is framed which regularly conducts meeting under the guidance of Principal, Head of Department and Internal Quality Assurance Cell (IQAC), where the various agenda with respect to publication of research papers, guidance to PhD. scholars, and all other issues related to MOU, collaboration and consultancy is discussed. 3) Assignment of Projects to Second and Final year UG students. 4)

	For PG Students 20 weightage of marks in research project is assigned in qualifying examination.
Human Resource Management	The HR management is jointly handled by Principal, HODs and Management. The selection of personals for both teaching and administration is meticulous as per the norms of University and Government of Maharashtra. Institution at their own level conducts the test exam and demonstration in particular for selection of teaching faculty. The incorporation of methods of screening besides the interview helps in selection of good personals at both the level teaching and non teaching of the Institution. Such transparent methods of selection through HR management have always proven the employment of deserved candidate in Institution.
Industry Interaction / Collaboration	Our Institute although situated in semi-urban region, have the collaboration with nearby Industries/institutions at their best level like BARC, C-MET, NCCS, CCF, MGIRI, Lloyds Steel, Ankur Seeds etc. This helps us in getting internship for our students and job avenues for our Students.
Curriculum Development	This is the essence of knowledge domain to be imparted to the students. This became important for us being autonomous. 1) Cohesiveness of job potentially by incorporating skill oriented features. 2) Identifying the usage of skill and knowledge in research areas. 3) 20 input in curriculum is made mandatory through the observations of requirements in NGOs, Industries and Research Institute. Individual Board of Studies of each department having members from industry/RD, alumnus, academician, from university, besides the departmental staff. Care is taken for the students of respective years to take it as interesting rather than burden. To avoid the jeopardized situation, ICT arrangement is being made to conduct relevant meeting of BOS online.
Examination and Evaluation	Students are continuously examined through unit tests, assignments, college terminal examination, before the final qualifying examination. Director of Board of Examination and

Evaluation is appointed to take proper initiatives. 1) Question papers are set by panel decided by BOS Moderation of question papers is carried out by academicians as moderators. 2) Evaluation process is carried out through spot valuation center. 3) Proper mechanism is set to keep transparency and to avoid discrepancies by adopting open access of answer books after valuation and moderation to students. The timely management of setting, valuation during examination is followed to help timely result. Again the new module of assessment of student for the examination is being planned.

Library, ICT and Physical Infrastructure / Instrumentation

Library has a rich collection of 26759 books, 1789 Reference books, 26 National Journals, 03 International Journals, Magazines, Newspapers etc. Open access to the PG students and students secured 1st class is provided. Library is automated with LibTech and having INFLIBNET N- LIST facility. It is kept open during evening at the time of examination period. Library Reading Hall Capacity is 150 Students. Book bank facility to the poor students is established and also a special arrangement has been made for backward physically disabled students. The adequate physical infrastructure is available in campus. Certain additions however have been made with respect to housing more number of students in campus and laboratory facilities. ICT : The college has ICT center where 50 PCs with internet connection, additional soft skill provisions are made through ICT center.

Admission of Students

The admission to the institution is carried out as per the directions from university and Government of Maharashtra. As the institution has minority status, 50 seats are reserved in the minority quota. Students are admitted through proper merit list and quota reserved as per the directions of Government of Maharashtra. Admission committee looks after the complete process of admission. Admission to the PG course is governed by the university through centralized admission process. The institute is enrolled in 'Study in India' project governed by HRD Ministry. Students are provided with proper information through prospectus

counselor committee to students. Due to emergence of COVID-19 in the month of February/March we adopted online admission procedure for academic session 2020-21.

6.2.2 – Implementation of e-governance in areas of operations:

E-governance area	Details
<p>Planning and Development</p>	<p>Bajaj college of Science partially adopts e- governance along with traditional working, wherever it's feasible. The development process is always displayed on institute website. Besides, future course of action in term of planning with respect to academic and non academic activities are made aware to stakeholders through Institute website. To keep planning and development unaffected during covid-19 the efforts from our end are continuously being made.</p>
<p>Administration</p>	<p>Institute admin office has a CMS software system through which students are provided documents like T.C., bonafide Certificate etc to them. Library independently work through requisite software i.e. Acquisition, Circulation, serial control, administration, Membership etc by CMS. Money transactions for the admission purpose is entire online like NETF/RTGS, swipe Machine etc.</p>
<p>Finance and Accounts</p>	<p>Finance and account section on CMS systems through online. Suppliers are delivered money against bill produced via RTGS/NEFT mode through bank, but never through cash or sometime cheque. Collection of fees related to students is through online mode i.e NEFT/RTGS, Swipe Machine etc. To maintain all financial documents like Ledger book, Cashbook, bank statements on e- format i.e. pdf, excel, word etc.</p>
<p>Student Admission and Support</p>	<p>All admission and Examination related Advertisements, Notices, merit list and updated information available on institute website. use of e-mail, text messages made used to inform students from time to time Institute admin office provides all necessary certificate and documents to students through a CMS software system on the demand of students. Institute continues touch with students through website, Notices from respective departments and some social platform like facebook,</p>

whatsapp and e-mails and personally through Guardian faculty. Care is being taken to not to affect students and their parents with respect to admission and support during existing pandemic situation.

### 6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2020	NA	NIL	NA	Nil
<a href="#">View File</a>				

6.3.2 – Number of professional development / administrative training programmes organized by the Colleges for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2020	Online Faculty Development Program (FDP) on Jmol Application in association with Spoken Tutorial of IIT Bombay	NA	08/05/2020	14/05/2020	255	Nil
<a href="#">View File</a>						

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
SWAYAM ARPIT Oline Refresher Course in Chemistry for Higher Education organized by MHRD authorized	6	01/09/2019	31/12/2020	120

Teaching Center od Shri Guru tegh Bahdur Khalsa College, Uni.of Delhi			
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6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
27	27	55	55

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
All Welfare Schemes of Maharashtra Government, UGC and Credit Co-operative Society	All Welfare Schemes of Maharashtra Government, UGC and Credit Co-operative Society.	Social Welfare Schemes comprising of all types of scholarships flown by the Govt. of Maharashtra. A heart fullness and relaxation technique (HRF) for the betterment of students is being conducted.

**6.4 – Financial Management and Resource Mobilization**

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

Various grant-in aid and non-grant graduate and postgraduate science programmes (courses) are run by the college. Internal Auditor appointed by the parent organization Shiksha Mandal carries out audit of annual budget on regular basis. The grant received from UGC and RUSA to the college through various projects is disbursed properly and the Utilization Certificate for the same is submitted within due date. As the Joint Director, Higher Education, Nagpur conducts External Audit of the grant-in -aid colleges as per their audit plan and time-table, the college has conducted the same in the academic session 2010-11. Next audit from JD is awaited. The audit of grants specially from RUSA was carried out by Comptroller Auditor General (CAG) and was done in 2019-20. The report of this audit is available in the college. The deficiencies in the budget are resolved by the college within time.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
NIL	0	NA

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6.4.3 – Total corpus fund generated

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**6.5 – Internal Quality Assurance System**

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority

Academic	No	NA	Yes	IQAC
Administrative	No	NA	Yes	IQAC

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

Suggestions from parents as a stakeholders is always welcomed in parent-teacher meet organized annually against which possible activities are implemented. Suggestions: Campus may be made more green. Activity: Tree plantation at the hands of parents organized. Suggestions: The capacity of girls hostel should be increased. To improve prevailing conditions of washrooms and drinking water facility. Activity: Girls hostel is expanded to house more girls (almost double). Cleanliness as being outsourced to agency, washrooms are being properly maintained. Filters are deployed for drinking water. 3. Suggestions: Library timings should be increased. Activity: Library is kept open in the morning hours before the college starts and in evening after the closure of college.

6.5.3 – Development programmes for support staff (at least three)

1. Training for administrative and office management softwares. 2. Credit-society loan facilities made more feasible. 3. In-house training for staff to enhance their computer skills.

6.5.4 – Post Accreditation initiative(s) (mention at least three)

1 a. As a post-accreditation initiatives, the faculties are kept updated against the compliances received from NAAC after the accreditation process in which timely submission of AQAR data through IQAC is being carried out. b. The process of recruitment of staffs against the vacancies is initiated. 2. A separate well accommodating building structure is made to house Life-sciences departments. Moreover, two more ICT enabled classrooms are constructed. 3. Initiative is taken for commencing new masters programme and certificate courses.

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	Yes
c) ISO certification	No
d) NBA or any other quality audit	No

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2019	Bridge course for BSc Semester I students to revise the basic concepts that are important to learn BSc syllabus effectively	26/06/2019	01/07/2019	31/07/2019	299
2019	Introduction	26/06/2019	01/07/2019	30/04/2020	699



	of projects and seminars in the UG curriculum so as to develop research aptitude and presentation skills amongst the Students				
2019	Remedial classes for slow learners to reduce dropout rate	26/07/2019	01/07/2019	30/04/2020	350
2019	Guidance for competitive exams like IIT JAM, IBPS exams to advanced learners for enhancing students progression and placement activity.	25/07/2019	01/08/2019	30/11/2019	150
2019	Extending therecommendations of NAAC peer team during 3rdcycle for college development:Starting the construction ofnew building for Chemistry and Physics departments, Addition of instruments in Central instrumentati onFacility.	12/07/2019	15/07/2019	30/04/2020	849
2019	Completing all the essential formalities	25/08/2019	02/09/2019	15/06/2020	40

	to start two new postgraduate courses M.Sc. Maths and M.Sc. Computer Science				
2020	Planning of online activities to be conducted during Covid19 lockdown	14/03/2020	16/03/2020	15/08/2020	849

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## CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

### 7.1 – Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Self Defence Programme for Girls	11/01/2020	11/01/2020	100	Nil
NCC Girls Battalion	01/07/2019	30/04/2020	20	Nil

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources
We have replaced energy consuming light sources with low wattage LED tube lights and done an inhouse energy audit for the same whose report is submitted to IQAC. In this academic year, we have replaced CFL bulbs with LEDs and given more emphasis on green energy initiatives. We are always looking to purchase 5 star rating equipments to save the energy. Solar panels installation is being delayed because of some technical hurdles and is expected to be done in the next academic session.

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	3
Provision for lift	No	Nil
Ramp/Rails	Yes	3
Braille Software/facilities	No	Nil
Rest Rooms	Yes	Nil
Scribes for examination	Yes	Nil
Special skill development for	No	Nil

differently abled students

#### 7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2020	1	1	08/08/2019	10	Distribution of Albendazole to all students on National Deworming Day.	Medication against Helminthic infections	80

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#### 7.1.5 – Human Values and Professional Ethics

Title	Date of publication	Follow up(max 100 words)
Code of Conduct for Students	17/06/2019	Published on the college Website: <a href="http://jbsw.shikshamandal.org/wp-content/uploads/2020/06/Students-code-of-Conduct.pdf">http://jbsw.shikshamandal.org/wp-content/uploads/2020/06/Students-code-of-Conduct.pdf</a>

#### 7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
World Population Day	11/07/2019	11/07/2019	150

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#### 7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

Waste generation in the college is obvious as teachers and students use things which become out dated soon. The waste generated is in the form of used papers, plastics, electronic waste, solid waste, broken glassware, etc. As the campus of Bajaj College of Science, Wardha, is extensive and consists of ample trees and shrubs to make the campus green and fresh. Thus, the fallen plant foliage i.e. leaves and branches accompanied with the growth of weeds generates solid litter waste whose management is to be done time to time. The main producers of solid waste in campus include, canteen waste, hostel kitchen waste, laboratory waste, and staff quarters. The college administration and staffs take stringent efforts to keep the campus eco-friendly and management of waste is the key aspect in our minds as waste management is important for an eco-friendly campus. Most of the dry waste in campus is stored at a transfer station within the campus. The wet waste developed in canteen and hostel are collected inside by the vendor at specified points by a contract vendor from municipality or the waste is dumped in compost pits for manure generation. Various methods of waste disposal are adopted by the college, accordingly. The E-waste generated in the

campus is stored in the warehouse, and its management is a serious issue. We are trying to find some local solutions to this issue. Efforts are taken to minimize the use of plastic inside and outside the campus by the awareness programmes. The plastic waste generated is segregated separately and sold to the vendor for recycling at the end of the session. Solid waste such as damaged furniture, paper waste, etc. are sold directly to the vendors who recycle them. The chemical wastes generated in the laboratories are neutralized by water. The biodegradable waste such as plant litter, waste papers, fallen leaves and branches, are dumped in the compost pits, for manure preparation. This activity provides with a rich nutrient manure after a span of 4-6 months. Waste water generated from washing, urinals, bathrooms, is disposed off in the soak pits. The college administration looks to improve the methods of waste management from time to time as per the requirement.

## 7.2 – Best Practices

### 7.2.1 – Describe at least two institutional best practices

Shiksha Mandal's Bajaj College of Science, Wardha Best Practices (2019-20)  
 College has taken initiatives and efforts for many activities out of which few practices which had more impact over the students are enlisted:

- Computer Awareness programme for new entrants
- Additional subject tutorials (Remedial Classes)
- General Knowledge Test (For all students)
- Nurturing the best minds of the school going kids of the Wardha district at Bajaj Science Center, Wardha
- Blended mode of online teaching and evaluation through learning management systems (MOODLE and google classrooms).
- Research based pedagogy tools through UG Students' projects
- Free coaching and guidance to students for various competitive exams like JAM, NGPE, NET/SET etc.
- Workshop for the fabrication of low-cost experiments by undergraduate students.
- Heartfulness: Stress management meditation programme
- Language laboratory for English training.
- COVID 19 Awareness programmes through NSS platform.
- Implementation of Spoken Tutorial Programme for all students (IIT Powai Initiative)
- Consultancy services of materials' characterization instrumentation at low cost
- Plant a tree on birthday movement: Go green
- Distribution of Bird feeders made in the college to save birds during hot summer.
- Training programme for Mahila Bachat Gat to prepare Biofertilizers

Best Practice 1  
 1. Title of the Programme: Heartfulness Meditation: From Stress to Self-realization  
 2. Goal: ? Students value character awareness and become good human beings (affective) ? Students develop correct thinking, right understanding and an honest approach to life. (Cognitive) ? Students learn to meditate and understand the same as a comprehensive practice to navigate their lives (psychomotor) ? Practice! Experience!  
 3. Context: The current education ecosystem lacks in providing students with opportunities to solve real-world problems and acquire relevant practical and soft skills. When we shift our focus to the global stage in education, a revolution is underway, as a result of strengths like Emotional Intelligence, Social Intelligence and communication being valued more highly than IQ in the workplace. In fact, research by Daniel Goleman and others shows that success in a career requires Emotional Intelligence more than anything else. As he says, "If you look at IQ alone, it predicts about 6 to 10 percent of career success." During the last 70 years, there have been many scientific and medical studies that show both relaxation and meditation having a significant impact on Emotional Intelligence, Social Intelligence, overall well-being, neuroplasticity, brain development and hence heightened learning ability. One recent reference that summarizes many of the key studies is 'The Science of Meditation' by Daniel Goleman and Richard Davidson, two of the key researchers in this field of mind-body medicine. Education, personal character and meditation are important, but independent parts of a person's life, though they are very much interlinked. Meditation helps build a contemplative mind. Education helps us to act upon such a contemplative mind. Acting upon our

decisions and learning from life helps to build our character. Meditation is one of the most effective ways to strengthen a student's character while they are being educated. Through meditative practice, we tend to accept who we are - and through the experience of meditation - appreciate who we can become. The programme is designed to familiarize students with meditation assuming that such a practice will enthuse them to lead meaningful and contemplative lives. It is a well-known saying that "Our Children are Our Future". These children, under the current system of education, are largely being nourished by their lecturers. The result-oriented, examination-based education system puts a lot of pressure on students to focus only on academic results, leading to a stressful life. While students develop well and become subject-matter experts, most of them lack the basic life skills. There is little time to focus on values and morals. A slow downfall in the moral standards of today's youth is quite visible in our current society. HELP: 'Heartfulness - Experience of Life's Potential.' imparts the Heartfulness methods to students through a 16-week certificate course. 4. The Practice: This programme was run compulsorily by the college for the development of the entrants (B.Sc. I students) on Saturday. Sessions were engaged by the team of external experts for 1h. Batch of 50 students were made and was given a fixed window in the time-table. Students were engaged for 16 weeks and some assignments were also given to them to improve their thought process. Program Outline ? Heartfulness Meditation ? Rejuvenation ? Connecting with the Inner Self ? The Science behind Meditation: Habits and Change ? The Art behind Meditation: Observation and Diary Writing ? The Heart Behind Meditation: Experience and Evolution ? Live Light, Live Right ? The Power of Pause ? Designing your Destiny 1, Designing your Destiny 2 ? Participations in the Competitions to boost the confidence 5. Evidence of Success: The impact of this programme is observed to: - Improve Concentration and focus on students. - 'Centred Students': where 'centeredness' is defined as a person who is self-confident, emotionally stable and well balanced. - Well managed stress, leading to a joyful and happy presence. - Respect for each other. 6. Problems Encountered and Resources Required: Most of the students are taking the sessions regularly but few students found it time consuming because of their other interests. Managing 16 weeks is challenging in case of National holidays on Saturdays. Otherwise, this programme has overall a good impact over the students. Best Practice 2 1. Title of the practice: Computer Awareness Course 2. Goal: • To impart basic knowledge of computers to all the new entrants of B.Sc. First Year students of the college. • To make them confident and skillful in handling the computers to perform the computer-based tasks related to their academic and day-to-day work. • To acquaint and make them familiar with recent trends in the Internet World. 3. Context: Today's techno savvy world demands that the students should make use of varied online and technical resources to access tons of information related to their academics apart from the traditional methods of learning. However, most of the students of our college are from rural background, as such most of them lack this exposure to computers and recent trends in E-world. College has always strived for its students for their betterment in every possible way. As a part of this initiative, the Computer Awareness course was designed and introduced from the academic year of 2017-18 for all the students of the college. The course is designed in such a way so that it aims at learning the skills rather than mere conceptual knowledge. 4. The Practice: There are two variants of this course. The one variant is specifically developed for the Computer Science students which consists of advanced concepts related to Indian IT Act, Cyber Awareness, Internet technologies, etc., and the other variant of the course is developed for rest of the students that aims at providing basic computer skills which are required by students in their student life like introduction to Fundamentals of computers, Working with MS Word and Internet. During the first semester, all the students of Biology stream participate in the course and in the second semester, students from Mathematics stream including the Computer Science

students participate and learn from this course. Every batch is allotted one session per week during which they are taught practically. The emphasis is more on learning by doing. At the end of the semester, students have to appear for a final exam consisting of theory paper consisting of multiple-choice questions and a practical examination.

5. Evidence of success: It has been observed that whatever skills that are acquired by our students from this course has helped them radically in their academics. The effects of this mandatory course that we have started form 2017-18 session could be seen since then. A marked improvement has been found about their knowledge of computers and the way they use computers effectively for their work. The course is helping them to become self-dependent when it comes to computer related needs. For example, students on their own create their e-assignments, project reports, presentations, articles and papers, etc., for which they used to depend on others previously. Internet related skills help them for accessing various online resources effectively. Furthermore, they gain vital inputs on how to safeguard and secure themselves in this cyberspace which is today's need. This training has also helped them to adopt the effective learning management system. This has also motivated them to get acquainted with the knowledge of recent trends in technology.

6. Problems encountered and resources required:

- Because of the poor exposure and language issues, few students need more time to grasp the technology.
- Practice is the major issue as few students don't have electronic gadgets at their place.
- Because of the demographic difficulties, we could not implement online courses and examinations.
- Most common problem encountered is the fear of students regarding the use of computers, which however, is eliminated by itself as they become familiar to those.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

<http://jbsw.shikshamandal.org/wp-content/uploads/2020/09/Best-Practices-2019-20.pdf>

### 7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

Bajaj College of Science, Wardha Institution Distinctiveness College is mentoring a sister institute Bajaj Science Center located nearby to the institute where around 500 school students are coming to learn science by doing experiments. About Bajaj Science Center: Bajaj Science Center was established in 2007 to promote basic science education among students. Leading industrialist Shri. Rahul Bajaj is the president of this institute and Prof. C.K.Desai is the main architect to establish this institute. It is different from a routine school or a college laboratory and also from a normal museum. Bajaj Science Center houses all experiments from the regular curriculum and a good number of other experiments which will stimulate the curiosity of the students. Apart from these experiments, the center also works on simple science demonstrations to convince that the science is logical sequence of thought and not magic at all. Keen and careful observations, drawing the inferences, estimate and measure the error, design a new experiment or new method by minimizing the errors these are the qualities which get developed while doing concept-oriented experiments. The students learn happily through the combination of innovation, exploration and learning by doing. Students are encouraged to ask every query and doubt to the co-explorer teacher as well as friends which encourages dialogue amongst them. Dialogue helps learning and helps understanding of the subject content. Most educationalists say, there should be a paradigm change in education, what is it exactly? The science education that the students get through experimentation and dialogue in Bajaj Science Center is definitely one of the correct ways to find a solution. Center

facilitates about 1000 students from different schools in the region from 5th standard to 12th standard. Students are admitted through entrance test on merit basis. Center consists of six laboratories (Physics, Chemistry, Mathematics, Biology, Electronics and Computers, Astronomy) and also have a separate library. Each laboratory is well equipped with a number of experiments and pedagogy tools and is enough to generate scientific temperament amongst students. Students are entertained to adopt a self-learning mode with the help of subject experts. Center is also associated with Homi Bhabha centre for science education (HBCSE), Mumbai, the apex national institution working in the field of science education. Center is also one of the three examination centers of Maharashtra for the well known Homi Bhabha Balvaidnyanik Competition. It also trains the students for the International Olympiad programme. Role of Bajaj College of Science: Bajaj College of Science facilitates the center for all kinds of scientific inputs. Since 2007, faculties of Bajaj College of Science often visit the place to deliver some sessions. Management of the center took advice from time to time for the infrastructural development. Faculties were also involved in the laboratory set up. Currently, college is playing an active role in nurturing all kinds of activities in the center. Involvement of Faculties and UG students as mentors and interns respectively resonates the scientific temperament.

Provide the weblink of the institution

<http://jbsw.shikshamandal.org/wp-content/uploads/2020/04/Institute-Distinctiveness.pdf>

#### **8.Future Plans of Actions for Next Academic Year**

To organize National Project Competition in continuation with Scintillation Series. To apply for NSQF grant to start new Skill oriented certificate courses. To organize Workshop /seminars on subject themes. To start PG in Mathematics. To conduct IITSpoken tutorials. To enhance collaborative research and take initiative for inter-institutional research. To set up MoU/ Linkages with renowned research institutes. To revise syllabus, exam pattern etc for B.Sc. I and M.Sc. I under autonomy. To construct new Physics and Chemistry Laboratory. To enhance the number of smart classrooms. To introduce digital systems for important academic and administrative works like online lectures, webinars, admissions etc. To make the campus environment friendly by opting non-conventional source of energy.