

# FOR 4<sup>th</sup> CYCLE OF ACCREDITATION

# **BAJAJ COLLEGE OF SCIENCE**

JAMNALAL BAJAJ MARG, CIVIL LINES, WARDHA - 442001 442001 https://jbsw.shikshamandal.org

#### Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

March 2023

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### 1. EXECUTIVE SUMMARY

#### 1.1 INTRODUCTION

Wardha was formerly the political capital of India. Father of the Nation – Mahatma Gandhi, spent the later part of his life at Wardha and guided our Freedom Movement. The first Indian Education Conference, chaired by Gandhiji, was held in our precincts in 1937. The 'Quit India' proposal was drafted in Wardha and later adopted on 8th Aug. 1942. The premises of Navbharat Vidyalaya, now recognized as the 'Gandhi Memorial Hall' of Bajaj College of Science, witnessed these historic events. We are, therefore conscious of our responsibilities that are supported unstintingly by our parent body Shiksha Mandal which has been led by eminent personalities like Shri. Kamalnayan Bajaj and Padmabhushan Shri. Rahul Bajaj.

Shiksha Mandal Wardha, the pioneer organization in Central India was established in 1914 by late Shri. Jamanalal Bajaj with the sole aim of nation building. It is currently headed by Shri. Shekhar Bajaj, Chairman, Bajaj Electricals Limited. In 2014, Shiksha Mandal celebrated its centenary in the august presence of His Excellency Shri Pranab Mukherjee, President of India. Shiksha Mandal currently runs eight educational institutes.

Bajaj College of Science, formerly Jankidevi Bajaj College of Science, was established by Shiksha Mandal on 12th June, 1962 to provide science education to the students of rural areas and to inculcate values like creativity, innovations, work culture and national integration.

Our institute is a single faculty, grant-in aid, co-educational college affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur. The notable achievements of the institute are –

- First Science College in Vidarbha Region to be awarded with academic autonomy by UGC in 2017-18.
- First institution accredited by NAAC in Vidarbha in 1999 with three stars (\*\*\*).
- Accredited by NAAC with the 'A' grade with CGPA 3.21 in third cycle.
- 'College with Potential for Excellence' (CPE) status by UGC twice.
- Selected under 'Star College Scheme' by DBT, Govt. of India (GOI) from 2013 to 2016
- Authorized partner institute of "Study in India" an initiative by MoE, GOI for the admission cycle 2019-20
- One student from Bangladesh completed her B.Sc. under Study in India.
- Selected for establishing Institution Innovation Cell (IIC) by the Innovation Cell, MoE, GOI.
- A grant of Rs. 2 Crores received from RUSA under component 9.
- 85.19 % of total classrooms are ICT and Wi-fi enabled.
- 4231 students have completed skill enhancement courses through Spoken Tutorial programme of IIT Bombay and Computer Awareness programme since 2018.
- Five students of the institute represented our country at international sports events and number of students have participated in sports competitions at national and state level.
- Padmashri Ms. Nivedita Bhide and Dr. Arvind Sahu (Scientist G, NCCS Pune) are among the notable alumni of the institute.

Vision

To contribute in building a new India through well educated, socially conscious students with good values and make such education accessible to students of this region. This is the reason our parent organization Shiksha Mandal came into being in 1914. Its credo "A century of nationalistic, value-based, quality education" expresses this vision.

#### **Mission**

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

## 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

#### **Institutional Strength**

- Legacy of 60 years of service with Gandhian thoughts, honesty, commitment, and integrity.
- Supportive and values-based culture of parent organization.
- Meritorious and experienced faculty having diverse specializations from various universities including Post Doctoral experience.
- Commitment to achieve women empowerment.
- Wide green, single faculty campus spread over 37.55-acre area.
- Enriched infrastructure and laboratories equipped with modern sophisticated instruments viz., XRD, UV-Vis Spectrophotometer, FTIR, Gel-Doc, Thermocycler.
- Adequate digital infrastructure and adoption of online platforms for ICT enabled teaching and learning.
- Library with more than 45000 books, spacious reading room and browsing center for digital access, WEB-OPAC with mobile app for students and faculty for easy access.
- Sufficient sports infrastructure and coaching which enabled students to regularly participate and win prizes in interuniversity, national and international events.
- Digitalization in administration, finance-accounts, student admission-support, examination, library, and cash less policy in governance.
- Low-cost consultancy services for material analysis for the research scholars and faculties of the region.
- Received financial support from Rashtriya Uchchatar Shiksha Abhiyan (RUSA) under component 9.
- Received funds through Department of Science and Technology (DST), GOI and Rajiv Gandhi Science and Technology Commission (RGSTC) for research projects.
- Recently Department of Science and Technology, GOI awarded prestigious FIST grant.

#### **Institutional Weakness**

Improvements required in following zones:

- Less enrolment of motivated bright students for basic science education.
- High student-teacher ratio.
- Students' poor writing skills to attempt subjective questions in examinations, lack of preparedness for competitive exams, and reluctance to join outstation placements.

- Demographic socio-economic challenges for higher education and opportunities.
- Digital illiteracy and language incompetence among students of rural background at entry level.

#### **Institutional Opportunity**

- Acquiring alternate credit earning and delivery techniques in purview of NEP 2020.
- Exploring more collaborations and partnerships with premier institutes for academics and research.
- Impetus on utilization of Institution's Innovation Council's forum for innovation, incubation, entrepreneurship, and startups.
- Increasing the involvement of alumni for the development of institute's infrastructure, facilities, internships, and placements of students.

#### **Institutional Challenge**

- Implementation of NEP 2020 in the existing system for interdisciplinary-multidisciplinary linkages in sync with Government of Maharashtra.
- Strategies to attract advanced learners and transform slow learners into advanced learners.
- Enhancing levels of experiential learning and assessment as per Bloom's taxonomy.
- Training facilities for the adaptation of a multi-lingual approach.
- Availing internship and training opportunities with respect to socioeconomic and demographic issues.
- Accumulating more resources to offer professional short-term courses.

#### 1.3 CRITERIA WISE SUMMARY

#### **Curricular Aspects**

After acquiring Academic Autonomy since 2017-18, the institute has framed Board of Studies, Academic Council and Governing Body as per UGC norms to discuss and implement all academic and administrative decisions in the interest of stakeholders and society.

- The institute ran 10 programs (1 Undergraduate, 5 Postgraduate, 2 Ph.D., 1 Diploma and 1 Certificate course), which includes 242 courses and 7 value-added courses, During the assessment period.
- Out of 7 value added courses 5 were introduced in the assessment period.
- During the last five years, the syllabus of 50% of programs has been revised.
- Currently 79.94% of the courses is having focus on employability, entrepreneurship, and skill development.
- In the assessment period 25 new courses were introduced.
- Currently, 50% of the programs is implemented with Choice Based Credit System
- The Post-graduate students undertake student projects as part of their curriculum. The undergraduate and Post-graduate student also undergoes internships and perform field projects.
- Syllabus framing is discussed during bi-annual meetings of apex bodies. Feedback of students, teachers and alumni play a critical role, and their opinions are taken into account during syllabus restructuring.

#### **Teaching-learning and Evaluation**

- Institution has implemented blended pedagogy, and efforts were made to create a student-centric curriculum.
- The UG and PG admission criteria is as per norms of the Government of Maharashtra (GoM) and parent university. Students are admitted to programmes through a transparent online process with a high enrolment and intake ratio. Institute follows reservation policy of GoM.
- Average student enrollment is 84.3%.
- Average 88.8 % seats are filled against earmarked seats of reserved categories.
- One week orientation program is organized for newly admitted students to help them acclimatize to the college culture and ease their transition from junior to senior college.
- First-year students are mandatorily enrolled in computer awareness course and the second-year students enrolled Spoken Tutorial of IIT, Mumbai initiated certificate programme, which allows them chance to engage in additional academic exploration and develop their skills.
- The institute identify and caters to the needs of advanced learners and slow learners.
- The institute organizes seminars, quizzes, project competitions, and science exhibitions for advanced learners and remedial coaching and guidance for slow learners.
- Additional support is also provided to help high-achieving students to improve their performance and help them to appear for various national level entrance examinations. Slow learners are directed to prepare and perform better in their examinations.
- Teacher-students ratio is 1:22 in UG programme and 1:7 in PG programme.
- Institute implement learning methods that are centered on the students such as participatory learning, experiential learning, ICT-enabled learning, and problem-based learning.
- Institute offers a plethora of opportunities for the acquisition of new skills through value-added courses.
- Faculty make use of various information and communications technology (ICT) tools, create e-content, and facilitate multi-modal learning. During the assessment period, pre-recorded lectures were prepared using different platforms and uploaded on YouTube channel for students. More than forty Moodle (Gnomio) LMS were developed for B.Sc. and M.Sc. programmes.
- Mentor-mentee programme of institute supports individual students' learning needs. Mentors guide students during project and practical hours. Mentors encourage students to participate in various co-curricular activities and boost the students to compete in various intra and inter university competitions. An average mentor: mentee ratio is 1:22.
- 70% of sanctioned regular faculty posts are filled of which 61.99 % are Ph.D. holders.
- Average teaching experience of faculty during the assessment period is 10.8 years.
- Students' learning levels are evaluated using internal assessments and a semester-end examination. ERP system enabled digitalization of examination system. The results are typically announced within one month and average percent of students grievances regarding evaluation is 5.78 %.
- The objectives for each course are outlined, and the outcomes (COs, PSOs, and POs) are developed and COs are mapped with POs and PSOs which are in practice and are discussed during the course sessions.
- The overall average students' passing percentage is 59.02.

#### Research, Innovations and Extension

Bajaj College of Science, Wardha has been implementing Research Promotion Policy, Consultancy Policy, Anti-plagiarism Policy and 'Code of Ethics of Research' under the banner of Research and Development Cell, Academic Council, Research Advisory Committee, Research Ethics Committee. All of these aims at creating and nurturing a research culture among teachers, research scholars, UG-PG students and leverage it for enhancing professional competence of the faculty members of the institute.

- During the assessment period, the institute received Rs. 238.66 lakhs of grant from government and non-governmental agencies like DST, UGC, RUSA, RGSTC for research projects and endowments.
- In the last five years, 5 teachers from 4 departments received research grants.
- 36.96% of the teachers are recognized as research guides.
- In the assessment period, 51 workshops and webinars were conducted on research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development, etc.
- The institution ensures implementation of its stated Code of Ethics for research through the inclusion of research ethics in the research methodology course work, presence of Ethics and Research Advisory committee and Plagiarism check through software is available for research scholars and faculties.
- In the assessment period, 52 research papers were published in the journals notified by UGC.
- One patent has been awarded, in the assessment period.
- In the assessment period 33 books and chapters in edited volumes, books and 26 papers in national and international conference proceedings were published.
- The institutional h-index in Web of Science is currently '9'.
- Rs. 1.78 lakhs of revenue was generated from consultancy throughout the assessment period.
- In the last 5 years, amount spent on developing facilities, training staff for undertaking consultancy is Rs. 0.64 lakhs.
- 63 extension and outreach programs were conducted by the institution through NSS, NCC, government and government recognised bodies during the last five years where an average 66.74% of students participated and 3 awards were won by the institution.
- During the assessment period, in all 40 collaborative activities for research, student internship and project work were carried out.
- There are 13 functional MoUs with institutions like EdCIL (India) Limited, A CPSE Under MHRD, GOI, Indian Institute of Clinical Research and Management (IICRM), Nagpur, Mahatma Gandhi Institute for Rural Industrialization, Wardha, Incubein Foundation, Business Incubation Center, RTM Nagpur University Campus, Nagpur, etc. The MoU benefitted stakeholders like teachers and students in research and collaborative work.

#### **Infrastructure and Learning Resources**

- Institute has developed adequate infrastructure and physical facilities to support the process of teaching and learning.
- Institute has a sprawling 37.55 acres of green campus with built-up area of 12233.60 sq.m. comprising of Classrooms, Laboratories, Library, Seminar Hall, Administrative office, Playgrounds, Gymnasium (Health Club), Botanical Garden, Mulberry Garden, Vermicomposting production unit, Hostel for Girls, and staff quarters.
- In the assessment period, the institution had two recognized research centres by parent university viz. Chemistry and Botany. Recently two more research centres (Microbiology and Zoology) has been recognized.
- The institute has the central instrumentation center with sophisticated analytical instruments like X-RD, FT-IR, UV-Visible Spectrophotometer, Thermocycler, Growth Chamber, Gel Documentation system, Soil analysis facility, etc.
- Institute has sports grounds and facilities for indoor and outdoor Games like Badminton, Table Tennis, Chess, Carrom, Football, Basketball, Volleyball, Softball, Baseball, Handball, Athletics, Long jump, Shotput, Kabaddi, Kho-Kho, Ball Badminton, Net Ball, Lawn Tennis, Sepak Takraw, and Archery.
- The institute has an Open Theatre 'Kala Niketan' in the campus and a 'Gandhi Memorial Hall' for organizing various cultural events.

- The institute also has gymnasium for students and staff. Yoga sessions are being organized for students and staff.
- 85.19 % classrooms are ICT and Wi-fi enabled.
- The institute has spent Rs. 123.34 lakhs for infrastructure augmentation during the assessment period from various grants.
- Institute's Dr. Damle Library is housed in 1102.624 Sq.mt. area and it is automated with LIBMAN ILMS software.
- Library has a collection of 45054 books and journals.
- Library has subscription to National Library and N- LIST of UGC-INFLIBNET for remote online access to e-books and e-journals.
- The institution has total 167 computers with latest technology and internet facilities.
- Institute has 03 computer laboratories and 02 browsing centres.
- Institute has a dedicated ICT center with 40 desktop computers to cater to the need of students and faculties.
- ICT center also has a Language laboratory for the students which includes 10 dedicated terminals.
- Institute has upgraded the internet bandwidth to 100 mbps.
- As a part of IT policy, institute ensures proper access and usage of IT facilities and takes precautions to prevent their misuse.
- Institute has Open Broadcaster Software (OBS) and EyeRIS facilities for e-content development and lecture delivery.
- On an average 77.11% expenditure was incurred on maintenance of physical facilities and academic support facilities during the assessment period.

#### **Student Support and Progression**

Bajaj College of Science, Wardha keeps students at top priority and has a well-defined mechanism for Student Support and Progression. Several Cells and Committees, comprising teachers and student representatives, monitored by the Principal, are effectively functioning to ensure the holistic development, progression, and career growth of students.

- 76.32% of students have been benefitted directly from Government scholarships during the assessment period.
- Different programmes based on soft skills, language and communication skills, life skills, and technology were organized to facilitate capacity development and skill enhancement. Impetus is also given for yoga, meditation, physical fitness, health, and hygiene.
- 58.35% of students have benefitted career guidance and coaching of competitive examinations.
- The institute has a systematic approach in the areas of student counselling and student welfare. Effective grievance redressal mechanism is in place to ensure timely redressal of students' grievances including sexual and ragging instances. Due to effective mentor mentee interaction, no cases of ragging/sexual harassment have been reported during the assessment period. An effective system supported by statutory bodies exists for student grievance redressal and prevention of sexual harassment.
- As the institute offers non-professional courses, placement opportunities are limited. Around 7.43% of students are placed in different sectors in the assessment period.
- The institution takes efforts to motivate students to acquire Higher Education and facilitates their holistic development. The institute monitors the progress of individual students by tracking their achievements throughout the year. For the year 2021-22, student progression for higher education was 30.43%.

- 37.81% of students have qualified in various state and national level examinations including IIT-JAM, NET/SET, GATE, etc.
- 31 awards were bagged for outstanding performance in sports and cultural activities at various levels.
- Students have shown significant participative role in administrative bodies viz., College Development Committee, IQAC, departmental societies, college magazine committee, NSS, NCC, Astro-Club, Sports committee, Women Cell-Internal complaints committee-Sexual Harassment Committee-Prevention, Prohibition and Grievance Redressal, Anti-ragging committee, etc.
- Institute has a Research Innovation Curriculum Hour (RICH) Club of elected and nominated student representatives entrusted with significant responsibilities, primarily involved in conducting guest lectures and scientific talks. Besides, it is involved in organising cultural festival, sports meet, annual fest, food festival, blood donation camps, and coordinates participation in cultural and sports activities.
- 24 sports and cultural events and competitions were organized by the institute in the assessment period.
- Alumni generously support in organizing capacity building programmes, webinars, resourceful talks for the benefit of the students.

#### Governance, Leadership and Management

- Bajaj College of Science is a Linguistic minority autonomous institution. The parent organization Shiksha Mandal has been recognized and awarded as the Ideal Institution by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
- During the assessment period, the Principal of Bajaj College of Science, Wardha received "The Best Principal Award" from the parent university and was also a member of the NAAC peer team.
- The institute is continuously working for providing quality education in this region. During the assessment period, the institute has added one postgraduate, two Ph.D. programs, and five value-added courses to make students more skillful.
- The institute has a well-defined, decentralized, and participatory organizational structure. Statutory bodies of the institute are regularly reconstituted in accordance with the UGC regulations and non-statutory committees are formed to execute the plans.
- Strategic plan 2017-2025 has been formulated, deployed, and being executed.
- Well-structured organogram is instrumental in the clear realization of the institution's vision and mission to all stakeholders.
- Implementation of e-governance in the areas of administration, finance and accounts, student admissions-support, and the examinations. The following software are used for this purpose: MasterSoft ERP for Office Administration, Student Admission Support, and Library; Tally ERP 9" for Finance and Account; Promarc Software for Examination and Result Data Processing.
- Institute takes care of the welfare measures of staff through financial assistance, awards and acknowledgements, career enrichment measures, and career advancement through the Staff Council, Non-teaching Association, and Credit Co-operative Society.
- 23 administrative and professional development programs were organized for the teaching and non-teaching staff during the assessment period.
- 26.39% of faculties participated in online, face-to-face FDPs offered by reputed organizations including Human Resource Development Centres.
- Financial audit is done regularly by the management's auditor, Joint Director's auditor, and CAG.
- Funds received from various agencies like UGC, CPE, and DST are utilized as per the guidelines of funding agencies.
- IQAC was instrumental in developing Infrastructure including 85% ICT-enabled classrooms and Central Instrumentation Centre for research.

#### Quality assurance initiatives of the Institution:

- Acquiring Academic Autonomy and its successful implementation
- Introduction of new post graduate program, diploma, and value added courses
- Participation in NIRF India Ranking, IIC, and Study in India.
- Institutions Innovation Council (IIC) Ranking '1 Star' in 2018-19; '2 stars' in 2020-21.
- Participation in academic audit of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

#### **Institutional Values and Best Practices**

- The Institute believes in creating holistic development of the students and organized various programmes during the assessment period to inculcate values, duties, and responsibilities of the citizens.
- Over 75% of enrolled students are girls, reflecting the institute's commitment for women empowerment. Girls not only participated in good numbers in curricular, co-curricular and extracurricular and sports but also brought laurels at International, National and State levels for which students are guided by various bodies and cells.
- To promote alternative energy sources for cheaper green energy, institute has always initiated the necessary steps which includes the replacement of all CFLs with efficient LED lighting, sensor-based lighting, regular maintenance of equipment and replacing those with the energy efficient options etc. As a cusp in the transition, two solar rooftop units of total capacity of 50 KW are installed on the campus in the year 2021.
- A dedicated green cell takes care of waste management, water conservation and green initiatives. Extension bodies have also taken significant steps to sensitize students and citizens for environmental protection through social programmes and camps on various occasions. A biodiversity garden is set up where the native trees and shrub species of plants of Vidarbha region are conserved.
- The Institute has well-defined policies and required facilities for *divyangjans* which includes scribes during exams, pedestrian friendly roads, wheelchair facility at the entrance, reserved parking, ramps on the staircases etc.
- The parent organization has instilled a culture of inclusion and a work environment in which every stakeholder feels welcomed, accepted, supported, and respected, as well as allowing everyone to actively participate in development opportunities. Providing a better environment and exposure to socioeconomically disadvantaged students has been the focus of all statutory bodies. The same root of givingness underpins the initiatives of extension activities by NSS, NCC, and CWSS.
- The institute has a code of conduct for students and staff which is monitored by the Code of Conduct committee. The Internal Complaints Committee takes care of implementing discipline policies, preventing sexual harassment, answering complaints from the aggrieved, and advising actions to be taken. The usage of the internet and reliance on digital technology is increasing at an alarming rate, and several efforts have been made to promote cyber awareness among students and staff to mitigate dangers. Students have been made aware of Research ethics time to time.
- Commemorating days of freedom fighters and National/International days are celebrated with the occurring tradition.
- There were several practices adopted to strengthen co-curricular and extra-curricular activities out of which two best practices are computer awareness course and spoken tutorial by IIT Mumbai. These two practices are made mandatory to all UG students of first year and second year to enhance their computer skills and to expose them to the advanced digital learning platforms in their disciplines.
- With our sister institute, Bajaj Science Center, which was founded in 2007 to promote science education in this region, we have been mentoring and assisting merit school kids in Wardha and surrounding areas

for various competitive exams, including science Olympiad programmes. This distinctiveness of the institute has aided in the development of the budding minds of the city at National and International platforms.

# 2. PROFILE

# 2.1 BASIC INFORMATION

Name and Address of the College	
Name	Bajaj College of Science
Address	Jamnalal Bajaj Marg, Civil Lines, Wardha - 442001
City	Wardha
State	Maharashtra
Pin	442001
Website	https://jbsw.shikshamandal.org

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal(in- charge)	Pradip Vitthalrao Tekade	07152-230515	9422556608	-	jbsciencewardha@ yahoo.co.in
IQAC / CIQA coordinator	Mamata R. Chandrakar	-	9552322775	-	mamatachandra@r ediffmail.com

Status of the Institution	
Institution Status	Grant-in-aid and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

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Recognized Minority institution		
If it is a recognized minroity institution	Yes 3 Hindi Minerity Certificate.pdf	
If Yes, Specify minority status		
Religious		
Linguistic	Hindi Linguistic Minority	
Any Other		

<b>Establishment Details</b>	
Date of Establishment, Prior to the Grant of 'Autonomy'	12-06-1962
Date of grant of 'Autonomy' to the College by UGC	11-04-2017

University to which the college is affiliated		
State	University name	Document
Maharashtra	The Rashtrasant Tukadoji Maharaj Nagpur University	View Document

Details of UGC recognition			
Under Section Date View Document			
2f of UGC	13-02-1996	<u>View Document</u>	
12B of UGC	11-09-1998	<u>View Document</u>	

•	gnition/approval by sta MCI,DCI,PCI,RCI etc	• •	bodies like	
Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
No contents				

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	Yes
If yes, date of recognition?	18-03-2010
Is the College recognized for its performance by any other governmental agency?	Yes
If yes, name of the agency	National Board of Accreditation
Date of recognition	24-04-2017

<b>Location and Are</b>	ea of Campus			
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Jamnalal Bajaj Marg, Civil Lines, Wardha - 442001	Urban	37.55	151964

# 2.2 ACADEMIC INFORMATION

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Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BSc,Science	36	HSSC/ 12th Standard	English	320	295
PG	MSc,Chemis try	24	BSc (with Chemistry as one of the subjects)	English	22	20
PG	MSc,Botany	24	BSc (with Botany as one of the subjects)	English	22	16
PG	MSc,Mathe matics	24	BSc (with Mathematics as one of the subjects)	English	22	16
PG	MSc,Microbi ology	24	BSc (with M icrobiologya s one of the subjects)	English	22	21
PG	MSc,Zoolog y	24	BSc (with Zoology as one of the subjects)	English	22	19
Doctoral (Ph.D)	PhD or DPhi 1,Chemistry	72	MSc Chemistry	English	20	3
Doctoral (Ph.D)	PhD or DPhil,Botan y	72	MSc Botany	English	20	2
Doctoral (Ph.D)	PhD or DPhi 1,Microbiolo gy	72	MSc Microbiolog y	English	20	0
Doctoral (Ph.D)	PhD or DPhi 1,Zoology	72	MSc Zoolgy	English	20	0

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	Professor				Associate Professor			<b>Assistant Professor</b>			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government		1	1	2				7			1	44
Recruited	2	0	0	2	5	2	0	7	19	5	0	24
Yet to Recruit				0				0				20
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0				0				18
Recruited	0	0	0	0	0	0	0	0	6	12	0	18
Yet to Recruit			1	0			1	0		'		0

	Non-Teaching Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				71				
Recruited	39	11	0	50				
Yet to Recruit				21				
Sanctioned by the Management/Society or Other Authorized Bodies				5				
Recruited	5	0	0	5				
Yet to Recruit				0				

Technical Staff							
	Male	Female	Others	Total			
Sanctioned by the UGC /University State Government				0			
Recruited	0	0	0	0			
Yet to Recruit				0			
Sanctioned by the Management/Society or Other Authorized Bodies				0			
Recruited	0	0	0	0			
Yet to Recruit				0			

# Qualification Details of the Teaching Staff

	Permanent Teachers									
Highest Qualificatio n	Profes	ssor		Associate Professor		Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	0	0	4	2	0	12	5	0	25
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	1	0	0	7	0	0	8
UG	0	0	0	0	0	0	0	0	0	0

	Temporary Teachers									
Highest Qualificatio n	Profes	ssor		Associate Professor		Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	1	2	0	3
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	4	11	0	15
UG	0	0	0	0	0	0	0	0	0	0

	Part Time Teachers									
Highest Qualificatio n	Profes	ssor		Associate Professor		Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	3	0	3
UG	0	0	0	0	0	0	0	0	0	0

<b>Details of Visting/Guest Faculties</b>				
Number of Visiting/Guest Faculty	Male	Female	Others	Total
engaged with the college?	0	0	0	0

 $Provide \ the \ Following \ Details \ of \ Students \ Enrolled \ in \ the \ College \ During \ the \ Current \ Academic \ Year$ 

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	168	0	0	0	168
	Female	530	0	0	0	530
	Others	0	0	0	0	0
PG	Male	20	0	0	0	20
	Female	173	0	0	0	173
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	3	0	0	0	3
	Female	4	0	0	0	4
	Others	0	0	0	0	0
Diploma	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0
Certificate / Awareness	Male	46	0	0	0	46
	Female	126	0	0	0	126
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years							
Category		Year 1	Year 2	Year 3	Year 4		
SC	Male	37	38	44	45		
	Female	100	132	83	94		
	Others	0	0	0	0		
ST	Male	9	11	6	7		
	Female	32	34	21	29		
	Others	0	0	0	0		
OBC	Male	127	137	103	93		
	Female	485	480	378	417		
	Others	0	0	0	0		
General	Male	30	37	37	51		
	Female	116	125	120	148		
	Others	0	0	0	0		
Others	Male	19	19	13	32		
	Female	78	81	55	63		
	Others	0	0	0	0		
Total	-	1033	1094	860	979		

# 2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Botany	View Document
Chemistry	View Document
Mathematics	View Document
Microbiology	View Document
Science	View Document
Zoology	View Document

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#### **Institutional preparedness for NEP**

1. Multidisciplinary/interdisciplinary:

New Educational Policy 2020 aims to address the many growing developmental imperatives of our country. It proposes the revision and revamping of all aspects of the education structure. It also emphasizes on the development of the creative potential of each individual. According to NEP 2020, a holistic and multidisciplinary education would aim to develop all capacities of human in an integrated manner and recommends the flexible and innovative curricula. The institute is actively working towards the implementation of the suggestions given in the NEP guidelines and the directions of the UGC and the parent university. The institute is planning to implement NEP 2020 with CBCS system in a phased manner. The CBCS approach provides flexibility in the curriculum, and allows students a choice of courses. To be a hub of holistic learning and to facilitate free exchange of ideas across disciplines, the Institute has decided to implement interdisciplinary and multidisciplinary education with multiple entry/exit points. Semester III and onwards students will have the option of skill enhancement courses, capability enhancement courses and discipline specific courses. The college plans to offer programs in basic disciplines and interdisciplinary areas of application such as Biological Sciences, Mathematical Sciences, Environmental Education, Commerce etc. through online mode.

2. Academic bank of credits (ABC):

The Academic Bank of Credits (ABC) is an educational digital platform created for students. Government of India plans to enable students across the nation with the Academic Bank of Credits (ABC) system under National Education Policy 2020. Bajaj College of Science is working on requirements of Academic bank of credits. As an initial stage, the institute has completed the registration of students on digilocker portal and triggering the students about the awareness of ABC and its features. Concurrently, the team, in the office of Controller of Examination are working towards execution of these facilities to the students. In near future, the institute will be working to upload students' record to the NAD portal. Faculties, as BOS members, are involved in curriculum designing and incorporate their own curricular and pedagogical approaches and revise the

syllabus as per the need. Faculties are encouraged to design courses on Moodle/Gnomio platform which supports assessments and assignments to be carried out online. The institute is offering various FOSS courses available at spoken tutorial portal of IIT Bombay mandatorily to each student of B.Sc. second year and PG students. This practice helps students to acquire additional skills which in future help them to acquire academic credits.

#### 3. Skill development:

The institute strongly believes in the overall development of each student and already steps in for this purpose. The institute is already offering Skill Enhancement programs under Spoken Tutorial Program of IIT, Mumbai to the students of Semester III. On the parallel lines, institute is also running a Computer Awareness Program and Spoken English Course for the first year undergraduate students. To make them more productive, these programs are incorporated in the timetable and are mandatory. In addition to this institute is also offering interdisciplinary skill based value added certificate and PG diploma courses. Also, the institute has established Training and Placement Cell which regularly organizes the seminars and training programs for strengthening technical and soft skills of the students to enhance their employability. The institute also has a Competitive Examination Cell which aims to prepare students for various competitive examinations including IIT JAM.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

Institute is imparting science education to UG, PG and research students. Being a science college, the medium of instruction is English. In B.Sc. I in addition to combination of three subjects, 2 papers of languages are incorporated. English language is compulsory, and students have to choose one of the language as second language. The options are Supplementary English, Marathi, Hindi. As the maximum UG and PG students are from rural areas; even if the medium of instruction is English, the faculty members are free to use trilingual (English/Hindi/Marathi ) mode of delivery for better understanding. Skill based value added courses are taught in English and regional language. The institute organizes various events and activities regularly for the students to promote art and culture. The cultural event 'Youth Fest' is organised every year to inculcate Indian culture in to them. This event

comprises of various competitions like drama, dance, singing, games, etc. to promote Indian Art and culture. These programs are mostly conducted in regional Marathi and Hindi languages. The NSS camp is organized every year and a nearby village is adopted where all the activities conducted by the students emphasizes the use of regional language and their culture. In reciprocation, our students also gain the knowledge about our villages and their rich customs. The institute publishes the college magazine incorporating the various contents written by students in Marathi, Hindi, Urdu, English and other languages without any barrier.

#### 5. Focus on Outcome based education (OBE):

All the programs offered by the institute are designed as outcomes-based education (OBE). The Programme Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (Cos) are well defined for all the programmes and courses offered by the college. The Institute has a plan to map POs, COs by addressing COs on question papers of students. Also, institute has initiated course articulation matrix by preparing POs and COs mapping with help of Bloom's taxonomy. Process is currently in preparation by keeping NEP objectives in future.

#### 6. Distance education/online education:

The institute is prepared for distance/online mode of education and currently using various applications meant for this purpose. The institute is registered for the spoken tutorial- an online initiative by IITs. Students are encouraged to enroll in courses offered by online portals such as Swayam, NPTEL etc. Skill oriented Value-added courses are offered in online and offline mode. In addition to this, faculty members have been encouraged to develop the econtent by using the LMS software like Moodle/Gnomio, edx, etc. Most of the e-contents developed by the faculty members are uploaded on popular websites and e-shiksha portal of the parent university so that it may be accessed anytime from any place. These developments proved to be very effective and helpful in COVID-19 pandemic to keep learning continued. Even after the pandemic, most of the faculty members are using online platforms for conducting quizzes, tests and submitting assignment to make online education popular. The institute is having ICT lab which is open for staff and students for online learning. Most of the classrooms are ICT enabled having the Wi-Fi facility so that offline and

online class could be conducted simultaneously. During implementation of NEP; additional credit marks has been planned to allot for online courses which would be offered through the platforms like NPTEL, SWAYAM etc.

### **Institutional Initiatives for Electoral Literacy**

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	The college has established an Electoral Literacy Club (ELC). The prime objective of the club is to sensitize the student community about the important democratic rights which includes casting votes in elections. Through this club experience-based learning of the democratic setup and mock polling activities have been conducted. Moreover, to create awareness regarding electoral procedures various activities like drawing competition, debates, elocution, essay writing competition, and other programs have also been conducted.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Yes. Student and faculty members are appointed as Co-ordinators by the college. ECL is functional.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	Electoral Literacy Club (ELC) organizes various programs on the occasion of "National Voters' Day Week" from 18th January to 25th January 2023, i.e. National Voters' Day Celebration on 25th January 2023, singing competition, Essay Writing Competition, Drawing competition, Rangoli competition, Elocution competition, etc. ELC also organizes one day Voter Awareness Camp for college students. NSS volunteers performed a street play at Amgaon Village, Dist- Wardha for New voter registration during the NSS Camp.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	Electoral Literacy Club (ELC) Celebrated "National Voters' Day" on 25th January 2023, as a part of this program an oath was taken by all the students and staff members to inculcate democratic values and foster participation in electoral processes. Our BLO Members actively participated in the new voter registration process under the guidance of the district Election Officer.
5. Extent of students above 18 years who are yet to be	As per the directives received by the Government of

enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.

Maharashtra and the Election officer of Wardha, the college takes initiative to find students who have completed 18 years of their age. An ELC conducts an Orientation program for new voters informing them how to register their name in the voter list with the help of the Voter Registration App, website and offline process to fill Form No. 6 with the help of BLO members.

# **Extended Profile**

# 1 Program

#### 1.1

### Number of programs offered year-wise for last five years

2021-22	2020-21	2019-20	2018-19	2017-18
7	7	6	6	6

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 1.2

### Number of departments offering academic programmes

Response: 9

### 2 Students

#### 2.1

#### Number of students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1034	1093	859	979	982

File Description	Do	ocument		
Institutional data in prescribed forma	t <u>Vie</u>	ew Document		

#### 2.2

#### Number of outgoing / final year students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
217	382	231	278	259

File Description	Document
Institutional data in prescribed format	View Document

#### 2.3

# Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
982	1019	809	674	364

File Description	Document
Institutional data in prescribed format	View Document

#### 2.4

#### Number of revaluation applications year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
46	0	61	112	0

# 3 Teachers

#### 3.1

#### Number of courses in all programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
242	229	219	182	95

File Description	Document
Institutional data in prescribed format	View Document

#### 3.2

#### Number of full time teachers year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
44	44	40	42	44

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 3.3

### Number of sanctioned posts year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
67	67	65	65	51

File Description	Document
Institutional data in prescribed format	View Document

### 4 Institution

#### 4.1

Number of eligible applications received for admissions to all the programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
402	443	308	391	381

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 4.2

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
99	99	99	99	99

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 4.3

Total number of classrooms and seminar halls

Response: 27

4.4

Total number of computers in the campus for academic purpose

Response: 167

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4.5

Total Expenditure excluding salary year-wise during last five years ( INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
120.19955	81.91414	90.86977	148.47994	44.18818

# 4. Quality Indicator Framework(QIF)

### **Criterion 1 - Curricular Aspects**

#### 1.1 Curriculum Design and Development

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.

#### **Response:**

After acquiring Autonomy in 2017-2018, the Institution has carefully adopted measures while formulating the syllabus of the Undergraduate, Postgraduate programmes, Certificate courses, and Postgraduate diploma for the students (Stakeholders). Currently the Institution runs 1 Undergraduate, 5 Postgraduate, and 2 Doctoral Programmes (approval of 2 departments as centre of higher learning is awaited from university). Additionally; there are a number of Certificate/Diploma Courses for students to enhance their capabilities and keep them abreast with the regional needs. The evaluation of students is done on 10 point grading credit system as per UGC norms. The UG and PG programmes are comprehensive interdisciplinary academic programmes that make students capable of handling scientific instruments of physical and biological sciences, and help them to understand the general principles of basic biological and physical sciences.

The prescribed syllabus aims at imparting subject specific practical and theoretical knowledge to students for securing employment in laboratories of government and private hospitals, software companies, private companies of local and urban areas. Laboratory and field-project-based learning reinforces research culture in the stakeholders and generates potential for self-employment through start-ups.

The curriculum has been devised carefully by each department after looking into the local as well as national needs. The syllabus formulated is comprehensive, need-based, skill oriented, that emphasizes technical and scientific skills in the stakeholders; making them capable of getting employment at local and national level and also generate entrepreneurship qualities in the stakeholders, thereby fostering their personal growth.

The outcomes of various combinations of courses are:

- Graduating students become sensitized to understand local/ national needs
- Students develop subject specific problem-solving and analytical skills.
- Students acquire the skill to use library sources for the academic enrichment
- UG and PG programme passed out students have wider career opportunities/windows in science

The syllabus is regularly reviewed and fine-tuned during bi-annual Board of Studies and general council meetings in the academic year. Syllabus revision is discussed in the Board of Studies, Local Administrative Body and Academic Council meetings chaired by experts. Prominent members from Civic society, Industries, Local and Regional Entrepreneurs, Alumni, Student Representatives and Academic Experts from local and national level are members of these important academic bodies. These experts render their important contribution of experience and expertise in the proper tuning of the curriculum. Feedback of Students, Alumni also play critical role in annual framing of syllabus and their opinions are also taken into

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account during syllabus reframing.

In addition to academics, attention is also paid for holistic development of students by enrolling them in meditation courses, gender equality courses, self employment courses, laboratory technique courses, diploma courses and online courses run by the institution in collaboration with National and Local bodies. These courses foster overall personal growth of the stakeholders, making them capable of securing better job prospects. The students enrolled in these courses may be absorbed in local institutions and industries.

Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) are clearly stated and uploaded on website of the Institution. In the beginning of new academic session, the Principal addresses the students and inform them about the vision and mission of the Institution, Curriculum, Examination and Evaluation pattern, placement mechanism of the Institution. The Institute has ICT enabled teaching-learning method in every classroom as well as laboratories.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

#### 1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

**Response:** 71.43

#### 1.1.2.1 Number of all Programmes offered by the institution during the last five years.

Response: 7

# 1.1.2.2 How many Programmes were revised out of total number of Programmes offered during the last five years

Response: 5

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

# 1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

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Response: 79.94

#### 1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development yearwise during the last five years..

2021-22	2020-21	2019-20	2018-19	2017-18
201	184	176	142	74

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

## 1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response: 10.33

1.2.1.1 How many new courses are introduced within the last five years

Response: 25

1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.

Response: 242

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

# 1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response: 71.43

#### 1.2.2.1 Number of Programmes in which CBCS / Elective course system implemented.

Response: 5

File Description	Document
Minutes of relevant Academic Council/BOS meetings	<u>View Document</u>
Institutional data in prescribed format	View Document
Link for Additional Information	View Document

#### 1.3 Curriculum Enrichment

# 1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum

#### **Response:**

Bajaj College of Science formulated a curriculum where academic excellence and crosscutting themes like Gender, Human Values, Environment and Sustainability and Professional Ethics go hand in hand. The institute always believes in the fact that a student with academic excellence should also have moral and ethical attributes. The college conducts these extracurricular activities involving students and teachers to address issues related to gender equality, human values.

#### **Human values:**

The human values are nurtured in the campus of Bajaj College of Science through various activities that are Meditation Club, Astro Club. These activities help students to imbibe human values and social awareness among them.

#### Gender:

A gender-neutral and safe environment is nurtured on the Bajaj College of Science campus. The Population Education Club, Heartfulness Relaxation Teaching indeed put emphasis on the gender equality and opportunity to all attitude. It also instils positive self-esteem and confidence in the female students so that they can take right decision in and for-their lives. Centre for Women Studies and Services (CWSS) constantly is spreading awareness among the students about the social, legal, and constitutional rights of women. It also creates awareness to prevent the exploitation based on gender. It organises events and activities for women empowerment.

#### **Professional ethics:**

Awareness about desirable ethical practices is facilitated through code of ethics of research, discussions, debates, and a strict anti-plagiarism policy. Academic ethics is implemented by a plagiarism check on submissions. The syllabus of semester VI of B.Sc. botany incorporates Lab ethics, patent act in their curriculum. The plagiarism is briefly covered under B. Sc. Botany Sem II curriculum.

#### **Environment and Sustainability:**

For environmental awareness, the college runs a regular separate course of Environmental Studies for undergraduate students of semester IV.

As per Supreme Court directions passed in 2014-2015, the course of environmental studies is compulsory for Degree Students. This course is conducted during the second year for enrolled UG Students. The course has 8 units with 45 lectures of 45 minutes each (33 hours) taught during the second year.

The aim of teaching Environmental Studies to UG students is to make them aware of the importance of Natural resources, Ecosystems, Environment pollution issues, Human population and its impact on resources and the environment and social issues.

Students are given the task of visiting local sites, conducting surveys, and writing project reports. It is a kind of fieldwork that carries 25 marks.

#### **Course details:**

Total Units–8 (33 hours)

Exam: 100 Marks (MCQ – 50 Marks; Long Questions – 25 Marks; Field Work – 25 Marks)

The Green Chemistry lays emphasis on Environment and Sustainability covered in MSc SEM II syllabus of chemistry. Similarly Environmental Chemistry of MSc Sem III and IV boosts the mindset of students to work in the field of conserving nature for future generations. Ecology of MSc Botany Sem III paper IX and BSc Sem V Botany unit V solely cover the environmental balancing and its effect on living beings.

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability Human Values and Professional Ethics into the Curriculum	View Document
Any additional information	View Document
Link for Additional Information	View Document

# 1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years.

### **Response:** 4

#### 1.3.2.1 How many new value-added courses are added within the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2	0	1	0	1

File Description	Document
List of value added courses (Data Template)	View Document
Brochure or any other document relating to value added courses	View Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

#### 1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

**Response:** 6.97

# 1.3.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
167	0	61	34	80

File Description	Document
List of students enrolled	<u>View Document</u>
Any additional information	View Document
Link for Additional Information	View Document

# 1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Response: 12.57

#### 1.3.4.1 Number of students undertaking field projects / internships / student projects

Response: 130

File Description	Document
List of programs and number of students undertaking field projects / internships / student projects (Data Template)	View Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

#### 1.4 Feedback System

# 1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni

**Response:** B. Any 3 of the above

File Description	Document	
Any additional information	View Document	
Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management	View Document	
Link for Additional Information	View Document	
URL for stakeholder feedback report	View Document	

#### 1.4.2 The feedback system of the Institution comprises of the following:

Response: A. Feedback collected, analysed and action taken and report made available on website

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File Description	Document	
Any additional information	<u>View Document</u>	
URL for stakeholder feedback report	View Document	
Link for Additional Information	View Document	

### **Criterion 2 - Teaching-learning and Evaluation**

### 2.1 Student Enrollment and Profile

### 2.1.1 Average Enrolment percentage (Average of last five years)

Response: 94.58

#### 2.1.1.1 Number of students admitted year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
402	430	368	391	381

### 2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
430	430	408	408	408

File Description	Document	
Institutional data in prescribed format (Data Template)	View Document	
Any additional information	View Document	
Link for Additional Information	View Document	

### 2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy ) during the last five years ( exclusive of supernumerary seats)

Response: 88.89

### 2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
91	90	81	89	89

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File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

### 2.2 Catering to Student Diversity

### 2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

#### **Response:**

Each student is required to attend a mandatory counselling session and receive counselling for two major sections as part of the admissions process at the Institution campus with the assistance of the Institution admission committee. Depending on their 10+2 grades and the results of the unit test, students enrolled in various disciplines are classified as slow or advanced learners. Individual class-mentors help classify students by writing reports based on what they (teachers) see and how students perform in class.

With tools like class assignments, seminars, viva-voce, and attendance, it becomes possible to get a good idea of how much students have learned.

Slow learners are those who perform poorly overall and have a low proportion of high grades in the 12th examination. The only issue is that they pick up new concepts a little slowly. They are also found out through different homework assignments, unit tests, and the final exam at the end of the semester.

#### **Programs for slow learners:**

Remedial classes are mandatory and incorporated in time table as additional coaching for students who are slow learners.

#### **Advanced learners:**

Fast/advanced students complete routine assignments and go to student seminars on current issues. They compete in events that are arranged, such as quizzes, debates, and problem-solving exercises. Students are self-motivated by the innate desire to participate in extracurricular activities, exhibitions, and cultural competitions. The Institution celebrates an "Annual Day" and organizes convocation ceremony to honour and appropriately value the academic accomplishments of the students. Students are also given the guidance and support required to adequately prepare them for national-level competitive exams like IIT-JAM, DBT-JRF, and NET/SET. Numerous students have successfully completed the short-term workshops that were held by nationally recognized institutions.

#### **Programs for Advanced learners:**

Career counselling and guidance training have been given to all M.Sc. and B.Sc. students to improve their employability prospects. NET and JAM Coaching Cell helps students pass national-level exams and

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increase their employability. Offering value-added courses helps students become more employable in a variety of fields. Student confidence has increased as a result of their internships at CSIR and INSA. Students registered for courses through the Central Government's MOOC initiative using the N-LIST or SWAYAM or NPTEL systems, allows them to pursue knowledge in accordance with their aptitude and interest.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

### 2.2.2 Student - Full time teacher ratio (Data for the latest completed academic year)

**Response:** 23.5

File Description	Document	
Any additional information	View Document	
Link for Additional Information	View Document	

### 2.3 Teaching- Learning Process

### 2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

### **Response:**

Institution provides an effective platform for students to develop the latest skills, knowledge, attitude, and values to shape their behaviour in the correct manner.

All departments conduct programmes that stimulate the creative ability of students, provide them with a platform to nurture their problem-solving skills, and ensure participatory learning.

During the year after the COVID pandemic, students have been encouraged to take part in competitions between institutions at local/regional and national levels.

- 1. Experiential Learning: Each department conducts programmes through the RICH club (a club developed by B.Sc. and M.Sc. students of Bajaj College of Science) to support students in their experiential learning. The institution imparts the following experiential learning practices to enhance the creativity and cognitive levels of the students:
- Field trips to Boregaon forests, Pachmarhi Forest by M.Sc. and B.Sc. Botany students, On-site learning opportunities were provided by visits to the mushroom farm and industry, as well as visits by Chemistry students to a chemical factory.
- Vermicomposting by Students of Zoology

- Sanitizer preparation by B.Sc. Zoology and B.Sc. Chemistry students
- Student seminars are conducted for UG students every Saturday. PG students deliver seminars every semester.
- Under the National Service Scheme, programmes such as tree plantation day, blood donation camps, and vehicle safety events gave hands-on experience to B.Sc. students in organising social work activities.
- NSS students gain learning experiences through drama and other art and theatre performances during the camp event.
- The organisation of inter-collegiate events fosters learning beyond curriculum.
- 1. **Participatory Learning:** During the post-covid year, students participate in various activities such as seminars, group discussions, projects, and skill-based add on courses.

Every Saturday, especially 2nd and 3rd year B.Sc. students are encouraged to take part in project-based activities where they can use their technical and management skills.

- Telescope making sessions are organised by the Physics Department.
- Active participation in Food-Fest by B.Sc. and M.Sc. students is organised by the Microbiology Department
- Hands on training on gel electrophoresis with support from HiMedia has been organised by the Microbiology Department.
- Drosophila culture
- 1. **Problem-solving methods:** Departments encourage students to acquire and develop problem-solving skills. For this, the institution organises expert online lectures on various topics, motivates students to join MOOCs courses, and participate in various inter-college and intra-college competitions such as:
- Problem-based assignments on a regular basis
- Tutorials as part of curriculum in Physics, Electronics, and Computer Science Department and group projects on every Saturday.
- Regular Quizzes
- Seminar presentations

File Description	Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

### 2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning process.

### **Response:**

Institution uses Information and Communication Technology (ICT) in education to support, enhance, and

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optimize the effective delivery of education. The institution has invested adequately in its information and communications technology (ICT) infrastructure, which enables faculty to take advantage of the most recent technological advances in the field of information and computer technology. Because of this, they are able to get the most out of their efforts to teach. Their lectures end up being more impactful. Students, in turn, reap the benefits of increased knowledge, which comes with a great deal of fun and accessibility.

### The following tools are used by the Institute:

#### 1. ICT enabled infrastructure and softwares:

- 1. Projectors- 20 projectors are available in different classrooms/labs
- 2. Desktops and Laptops- Arranged at Computer Lab and Faculty cabins all over the campus.
- 3. Printers- They are installed at Labs, HOD Cabins and all prominent places.
- 4. Photocopier Machines Multifunction printers are available at all prominent places in the institute. There are three Photocopier machines available in campus.
- 6. Seminar Rooms- Two seminar halls are equipped with all digital facilities.
- 7. Smart Boards Smart boards are installed in the campus.
- 8. Auditorium- It is digitally equipped with mike, projector, and cameras
- 9. Online Classes through Zoom, Google Meet, Google Classroom)
- 10. MOOC Platform (Moodle-Gnomio, NPTEL, Coursera, Swayam, Udemy, Edx)
- 11. Digital Library Resources (N-LIST)

### 2. Use of ICT By Faculty:

PowerPoint presentations- Faculties are encouraged to use power-point presentations in their teaching by using LCDs and projectors.

Seminar and Conference rooms are digitally equipped where guest lectures, expert talks and various competitions are regularly organized for students.

Video Conferencing- Students are counseled with the help of Zoom / Google meet applications.

Video lectures- Recordings of video lectures are made available to students for long-term learning and future referencing. Institution has used OBS platform to record video lectures.

Workshops- Teachers use various ICT tools for conducting workshops on latest methods such as Sigmaplot, Microsoft office, R language.

Simulation based platforms, zoological dissections

### 1. Digital library

The faculty and students of the college have access to the online resources provided by the college's digital library. There has been the implementation of LibTech and OPAC in the library. Through the N-List of INFLIBNET e-PGPathshala, which gives students access to online journals and e-books, they can find curriculum-based, interactive, and high-quality e-content in 70 different subjects from all fields.

### Language laboratory:

The institute now has a language lab-cum-computer lab with all the required computers, softwares, and other technologies. Language instructors make use of the lab to expand their pedagogical tools, including software for developing students' linguistic competencies in the areas of listening, speaking, and reading. There are dedicated computers for interactive learning in the Language Lab of the institution.

### 1. Bioinformatics and Chemoinformatics Laboratory:

Basic bioinformatics is taught in the Botany and Biotechnology Departments using the computers. Practicals in organic chemistry have made use of ChemDraw. MEGA 11, Chimera, and RoBINA have been used for basic bioinformatics in Botany Department.

File Description	Document
Any additional information	View Document
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document
Link for Additional Information	View Document

### 2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year )

Response: 23.5

#### 2.3.3.1 **Number of mentors** ??????????????????????

Response: 44

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll	View Document
Circulars pertaining to assigning mentors to mentees	View Document
Any additional information	View Document
Link for additional information	View Document

### 2.3.4 Preparation and adherence of Academic Calendar and Teaching plans by the institution

#### **Response:**

#### **Academic Calendar**

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Academic Calendar Preparation Committee is one that plans an academic calendar. It is printed, posted on bulletin boards, and archived in annual report of institution. The calendar is made available to students prior to the start of classes and contains the following information:

#### 1. Composition of Academic Calendar

First and last day of instruction, schedules of internal and external exams, preparation holidays for final examinations, and vacation periods.

The academic calendar is strictly adhered to while organizing event except unforeseen circumstances.

In the event of unanticipated circumstances outside the institution's control, the authorities makes the required changes and post them on notice boards and websites.

#### 1. Teaching Plan:

HoDs hold meetings with their respective faculties well before the beginning of the semester's course work and assign topics. A unit-by-unit teaching plan of the course created to ensure a consistent pace of instruction. Each theory subject's 'Lecture schedule' is prepared by faculty and approved by the departmenthead. The number of hours in the teaching plan is determined by the course credits and made available to students. In addition, at the beginning of the academic year, HoDs produce a calendar of academic activities such as Workshops, Conferences, and Visiting Faculty Lectures. The plan includes the following elements:

- 1. Objectives and outcomes of the course
- 2. Reading materials
- 3. Assignments and instructional questions
- 4. Model question papers
- 5. Link to the web resources

Copies of the documents are kept in the department. The faculty adheres to the academic plan and the details are recorded in the Attendance and Evaluation Records.

#### 1. Adherence to teaching plan:

Each Department accepts full responsibility for the conduct of theory and practical sessions.

### 1. Class/Activity Cancellation:

The timetable requires that the faculty members conduct all their regularly scheduled classes. Absences that are permissible but must be reported in advance to the Head of Department or Principal including those that are caused by professional duties, ailment, emergency situations or personal commitments. If a teacher is absent from class, arrangement is made for a substitute teacher, as well as provisions for additional assignments or an alternative learning activity. The faculty devotes the following days working on the topics that were assigned to them for the period.

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File Description	Document	
Upload Academic Calendar and Teaching plans for five years	<u>View Document</u>	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

### 2.4 Teacher Profile and Quality

### 2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

**Response:** 68.75

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	<u>View Document</u>
Any additional information	View Document
Link for Additional Information	View Document

# 2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 61.66

# 2.4.2.1 Number of full time teachers with *Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit.* year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
30	29	25	24	24

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

### 2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response: 10.91

### 2.4.3.1 Total experience of full-time teachers

Response: 480

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document
Link for Additional Information	View Document

### 2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Response: 30.2

# 2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
25	21	41	42	22

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

### 2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 5.2

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

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2021-22	2020-21	2019-20	2018-19	2017-18
46	00	38	112	00

File Description	Document
Number of complaints and total number of students appeared year wise	<u>View Document</u>
Any additional information	View Document
Link for Additional Information	<u>View Document</u>

# 2.5.3 IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in Examination Management System (EMS) of the Institution

### **Response:**

Our Institution has ensured a focus on holistic development of students. During autonomous tenure, the evaluation method has been consciously designed in order to bring an overall congruence in the teaching-learning and evaluation methods. Institute has taken several initiatives to change the examination procedures and processes and integrate Information Technology into the evaluation system. Under the direction of the Controller of Examinations (CoE), Office of the Controller of Examinations has initiated and carried out a number of changes and innovations. The College Examination Management has been greatly enhanced by recent changes made to the Academic Management System, including the incorporation of information technology into question paper setting, automation of examination registration, automatic generation of Hall Tickets, incorporation of information technology into the Internal Assessment Process, incorporation of information technology into valuation camp, publication of results, and automatic generation of mark lists.

### Reforms in Examination and Evaluation procedure and IT integration:

Reforms are carried out to ensure a transparent examination system. Software were used to develop smooth conduct of examination.

Reforms	Impact	
3-4 sets of question papers are maintained for each subject pe	rConfidentiality in the question paper sel-	ection
course	through setting, moderation of all sets.	
Setting the exam questions from all the units with interna	lUphold uniformity and syllabi coverage	acros
selection and paper moderation	certain course, all of the units must be s	tudied
	Implement internal choice to improve the co	ourse o
Appointment of a squad of senior faculty members from other	rStrict vigilance for the orderly administration	n of e
reputable institutions and internal faculty to oversee th	e	

semester end examinations		Answer booklets are kept private and secure	•
Establishment of Spot evaluation centre	Results announced within the timeframe spe	ecifie	
Encoding and decoding of answer booklets		Provides confidentiality and unbiased evalua	tion
Personal verification and revaluation system for those students Accountability of the evaluation prowho apply for revaluation process transparency in the evaluation			s an
Timely release of the results and the issu certificates for Supplementary examinations		eFinal-year students have more options for find further education.	nding
	D.		
File Description Document			
Any additional information View Document		<u>ocument</u>	
Link for Additional Information View Document		iment	

### 2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

#### **Response:**

The Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) for Certificate Course, PG Diploma, B.Sc., and M.Sc. programmes are stated and displayed on website of the institution. The outcomes outline the skills and competencies that will be acquired by students upon completion of the respective course or program. In the process of defining Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs), academic experts' suggestions are taken into consideration. There is at least one PSO and PO mapped to each CO.Our institution POs match its Vision and Mission. The pre-stated POs are designed to equip graduates with scientific knowledge and experimental skills, communication skills, critical thinking and problem-solving ability, environmentalconsciousness, ethics and human values, and an urge to learn.

#### Elucidation to the students about POs, PSOs, and COs:

The institution's webpage, which is distributed to each student, contains electronic versions of the POs and PSOs for each programme. The print copy of POs, PSOs and COs are provided to the students through syllabus copy. The print copies of POs, PSOs and COs are provided to the students as ready reference to enable discussion.

The PO and PSO systems are briefed to newly admitted students as part of the Student Induction Program's extensive and detailed instruction.

At the beginning of each semester, respective teachers provide an explanation of the relationship between

each course outcome and POs and PSOs. The academic and extracurricular activities at the institute are planned to be consistent with the institution's vision, mission, POs, and PSOs.

### **Elucidation to Faculty:**

Faculties are involved in structuring of POs, PSOs, and COs during drafting and revision of the syllabi. They have awareness regarding these topics. Communication of the POs, PSOs, and COs to the faculty takes place in meetings of Board of Studies.

#### Communication to other stake holders:

The alumni and employers are communicated the POs, PSOs, and COs through college website.

Below is structure of POs, PSOs, and COs for M.Sc. programme:

File Description	Document	
Upload COs for all courses (exemplars from Glossary)	View Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

#### 2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

### **Response:**

The curricula are the means by which the Program Outcomes (POs) and the Program Specific Outcomes (PSOs) are realised.

Course Outcomes (COs) are defined for each course, and then those COs are mapped to both Desired and Required Student Outcomes (POs and PSOs). The quantitative assessment of COs is performed on the basis of a set of criteria designed for performance evaluation. As a result, the accomplishment of COs is evidence that POs and PSOs objectives have been attained/achieved.

The following is a list of the various methods that are used for assessing, evaluating, and measuring POs and PSOs:

#### **Measurement of POs/PSOs:**

#### **Direct Assessment method**

Final examination marks of theory and practicals.

The following actions are required in order to carry out the direct method:

- Step 1: Assign COs to the appropriate PSO and PO.
- Step 2: Determine the average score of all the COs that have been mapped for each PSO and PO.
- Step 3: Once you have the average score of COs, measure percentage number of students showing following table performance class.
- Step 4: Identify class size of COs showing percent number of students achieving percent attainment.

Step 5: The following criteria were used to determine the levels of achievement:

Performance score class	Attainment
81-100	High
61-80	Moderate
41-60	Intermediate
21-40	Low

File Description	Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

### 2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Response: 59.02

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 216

### 2.6.3.2 Total number of final year students who appeared for the examination conducted by the Institution.

Response: 366

File Description	Document	
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document	
Any additional information	View Document	
Link for the annual report	View Document	
Link for additional information	View Document	

### 2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process		
Response: 3.53		
File Description Document		
Upload database of all currently enrolled students	View Document	
Upload any additional information	<u>View Document</u>	
Link for any additional information	View Document	

### Criterion 3 - Research, Innovations and Extension

### 3.1 Promotion of Research and Facilities

3.1.1 The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented

### **Response:**

The institution's research facilities are frequently updated and there is a well-defined policy for Promotion of Research which is uploaded on the institutional website and implemented.

### **Research Promotion Policy**

Bajaj College of Science, Wardha has implemented Research Promotion Policy which aims at creating and nurturing a research culture among teachers/ research scholars/UG-PG students and leverage it for enhancing professional competence of the faculty members of the institute. This policy promotes scientific temper among all teaching staff, build institutional funds (consultancy) and plans for facilitating participation in research activities. It also aims at ensuring the research activities of the institute adhering to rules and regulations as well as to establish standards related to safe and ethical conduct of research.

Laboratories of Chemistry, Botany, Microbiology and Zoology departments are recognized as a place for higher learning and research by Rashtrasant Tukdoji Maharaj Nagpur University Nagpur for Ph.D. programs. 17 faculty members are recognised guides for Ph.D., thereby encouraging research activities amongst students and staff. To develop a research culture at campus, few centres with sufficient infrastructure and facilities such as Central Instrumentation Centre, RICH Club, MoE's Institution Innovation Council, Astro Club Lab, Animal Cell Culture Lab, Zoology and Botany Museum, Plant Tissue Culture Laboratory, Botanical Garden, Vermicompost Production Unit and Mulberry Garden have been established. The facilities in these centres and departments are regularly upgraded in terms of instruments through DBT-STAR college scheme, RUSA Grant, UGC-CPE grants etc. Apart from these, faculty members apply for and have received grants for their projects from government funding agencies like DST and Rajiv Gandhi Science and Technology Commission, Nagpur University, Nagpur to pursue research. Institute regularly organizes various seminars, workshops and conferences which provides a platform for interaction, motivation and keeping up with current trends of research. As an output of above all, research work of faculty members and students have been published in the peer-reviewed SCI and UGC-Care listed Journals. MoU's and Collaboration with industries partners for internships, projects as well as research are encouraged.

#### **Milestones and Output:**

During the assessment period:

- 12 Ph.D. degrees have been awarded from Research Centres of the College.
- 52 Scopus/Web of Science indexed/ UGC notified research papers and 33 books/chapters in edited volumes/books and 26 papers in National and International Conferences were published.
- Institutional h-index in Web of Science is currently 9.
- One Patent has been awarded.
- 51 Seminars/Workshops/Endowment/Invited Lectures were conducted on Research Methodology,

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Intellectual Property Rights (IPR), Entrepreneurship and skills development etc.

• Institute has received the grant of 2.386 crore rupees from various funding agencies.

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	
Any additional information	<u>View Document</u>
URL of Policy document on promotion of research uploaded on website	View Document

### 3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

### Response: 0

### 3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

File Description	Document
List of teachers receiving grant and details of grant received	View Document

# 3.1.3 Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years

#### **Response:** 0

### 3.1.3.1 The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

File Description	Document
List of teachers and their international fellowship details	View Document

### 3.2 Resource Mobilization for Research

3.2.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 24.44

3.2.1.1 Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
0	3	21.44	0	0

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by government and non-government	View Document
Any additional information	View Document

### 3.2.2 Percentage of teachers having research projects during the last five years

**Response:** 1.87

### 3.2.2.1 Number of teachers having research projects during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
0	1	3	0	0

File Description	Document
Names of teachers having research projects	View Document

### 3.2.3 Percentage of teachers recognised as research guides

Response: 38.64

### 3.2.3.1 Number of teachers recognized as research guides

Response: 17

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Any additional information	<u>View Document</u>
Link for additional information	View Document

# 3.2.4 Average percentage of departments having Research projects funded by government and non-government agencies during the last five years

**Response:** 15.56

### 3.2.4.1 Number of departments having Research projects funded by government and non-government agencies during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
4	3	0	0	0

### 3.2.4.2 Number of departments offering academic programes

2021-22	2020-21	2019-20	2018-19	2017-18
9	9	9	9	9

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Any additional information	<u>View Document</u>
Paste link to funding agency website	View Document

### 3.3 Innovation Ecosystem

# 3.3.1 Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

### **Response:**

Bajaj College of Science, Wardha has established 'Research and Development Cell' under the banner of which number of ecosystems on the campus are developed to boost the research culture among teachers/research scholars/UG-PG students and to serve for the societal needs. The following facilities are created at the campus as the innovation ecosystems:

### • Central Instrumentation Center (CIC)

The central instrumentation facility with sophisticated instruments was established in 2017. This facility is for in house as well as nearby region academic institutes. CIC also organizes training/workshop on the use and application of advanced analytical techniques.

### • Workshop and Instrumentation Centre at Department of Physics

The center provides students, an environment and motivation to execute their ideas. Project activities like fabrication of low-cost circuits, demonstrative models based on concepts in physics were executed in the center.

#### Astro Club

The Astro Club is involved in activities related with astronomy and sky observations. Fabrication of a low-cost 3-inch refracting telescope and an 8-inch reflecting telescope (Dopson Mount) by the students is an important and appreciable achievement.

#### • Plant Tissue Culture Facility

Department of Botany developed a plant tissue culture facility in 2015 comprised of an aseptic culture room, an inoculation room, a media preparation room, and a sterilizing equipment to create plants of superior quality by Micropropagation.

#### • Botanical Garden

Our institution has a dedicated botanical garden. We are growing phytogeographic, endemic, medicinal, decorative, native, and exotic species. It is designed to meet the requirements of students, academics, environmental studies researchers and society.

#### • Botanical Museum

The Department of Botany maintains a collection of approximately 1296 specimens documenting the vegetation of Wardha district to record the past and present plants.

### • Animal Tissue Culture Laboratory

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An Animal Tissue Culture laboratory is located in the department of zoology where students perform practicals and project works related to animal cell culture. Mostly primary cell lines are cultured and practices related with it are performed.

### Zoology Museum

The Zoology Museum contains more than 500 specimen samples of different animal phylums along with various osteological specimens. The museum is well maintained and school students of surrounding schools visit the museum quite often. The specimens of the museum are also used for studying the phylums in the undergraduate and post graduate classes.

### • Vermicompost Production Unit and Mulberry Garden

Department of Zoology maintains a Vermicompost production unit and Mulberry Garden in the campus. The generated vermicompost is distributed among the staff to be used for the gardening purposes of the institute. Mulberry plants are nurtured and leaves are utilized for feeding the silkworms and nanoparticle synthesis.

### • Research Innovation Curricular Hours (RICH) Club

The main objective of RICH Club is to strengthen academic ecosystem so as to motivate students to think on novel ideas. RICH Club was inaugurated in 2022 under which various students' activities are driven to inculcate innovative qualities.

### • Institution's Innovation Cell (IIC)

The institute has established Institution's Innovation Cell (IIC) of Ministry of Education, Government of India to systematically foster the culture of innovation, to engage faculty and students in various innovation and entrepreneurship related activities.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

### 3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development during the last five years.

### Response: 41

# 3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
15	8	4	8	6

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	<u>View Document</u>
Any additional information	View Document

#### 3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee

**Response:** B. 3 of the above

File Description	Document
Any additional information	View Document
Link for additional information	View Document

### 3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/supervisors provided at 3.2.3 metric) during the last five years

Response: 0.41

3.4.2.1 How many Ph.Ds are registered within last 5 years

Response: 7

3.4.2.2 Number of teachers recognized as guides during the last five years

Response: 17

File Description	Document
List of PhD scholars and their details like name of the guide, title of thesis, year of award etc	View Document
URL to the research page on HEI web site	View Document

# 3.4.3 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response: 1.14

### 3.4.3.1 Number of research papers in the Journals notified on UGC website during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
14	10	8	10	7

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

### 3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years

Response: 0.82

### 3.4.4.1 Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
16	3	8	5	3

File Description	Document
List books and chapters in edited volumes / books published	View Document

### 3.4.5 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

**Response:** 3.86

File Description	Document
Bibliometrics of the publications during the last five years	View Document
Any additional information	View Document

### 3.4.6 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - hindex of the Institution

Response: 9	
File Description	Document
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document
Any additional information	View Document

### 3.5 Consultancy

### 3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

**Response:** 1.78

### 3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
0.322	0.217	0.464	0.5475	0.2285

File Description	Document
List of consultants and revenue generated by them	View Document
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View Document
Any additional information	View Document

### 3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).

**Response:** 0.64

### 3.5.2.1 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
0.18529	0.05769	0.17205	0.05902	0.1652

File Description	Document
List of facilities and staff available for undertaking consultancy	View Document
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	View Document
Any additional information	View Document

### 3.6 Extension Activities

### 3.6.1 Extension activities are carried out in the neighbourhood community, sensitising students to social issues, for their holistic development, and impact thereof during the last five years

### **Response:**

Extension activities help students to understand the community and social issues by providing opportunities to work with them.

Students learn about the challenges of society, possible solutions, strategic planning, leadership, and teamwork through their work.

Institute provides an interactive platform to students with society in the form of various units, which are as follows:

- National Service Scheme (NSS)
- National Cadet Corps- Boys unit
- National Cadet Corps- Girls unit
- Centre for Women Studies and Services (CWSS)
- Population Education Club(PEC)

The summary of social interests handled by volunteers, programmes organized for it and values incorporated is as follows:

#### 1. Ignorance towards hygiene ---

Hygiene is a hot topic these days. It's not just about health and safety, but also about culture and society.

### Programmes conducted to promote personal hygiene:

- Cleanliness drive camp (NCC/NSS/PEC/CWSS)
- "Swatchata Abhiyaan" (NSS/CWSS/PEC/NCC)
- Cleaning public parks -NCC
- Street play on cleanliness -NCC
- Sanitizer distribution programme

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#### Values Assimilated:

- Personal hygiene
- Social awareness

### 2. Social responsibility ---

Social responsibility is an ethical framework which suggests that an entity, be it an organization or individual, has an obligation to act for the benefit of society at large.

### **Programmes conducted:**

- Sanitizer Preparation and Distribution. NSS
- 'Arogya setu' assistance to the public.
- Gandhi Jayanti celebration (NSS/NCC/PEC/CWSS)
- Fit India campaign at home (NCC)
- CCT making for water harvesting

### Values Emphasised:

- Social awareness
- Working as a unit of social system
- Understanding social issues
- Civic responsibility

### 3. Gender equality and women's safety ---

Noticeable crimes against women happen all around us like violence, femicide, rape and honourkilling. We believe that equality and safety are vital to the health of our society. We work to ensure that women feel safe, empowered, and respected in their everyday lives through various platforms.

#### **Programmes conducted:**

- Women empowerment programmes (CWSS)
- Guest lecture on women empowerment (CWSS)
- Self defense programme
- International women's day celebration.

#### **Values Incorporated:**

- Understanding women's problem
- Develop a sense of equality
- Social responsibility
- Leadership

#### 4. Awareness about communicable diseases ---

Some sections of society havethe least concern regarding the mode of spread of communicable

diseases. This leads to financial burden as well as health hazards on the entire community.

### **Programs conducted:**

- AIDS awareness programme (NCC)
- International Yoga Day celebration
- COVID-19 awareness -NSS
- Health check-up camp.

#### **Values Inculcated:**

- Social responsibility
- Health awareness
- Problem solving capability

### 5. Leadership ---

Leadership is about the art of motivating, influencing and directing people so that they work together to achieve the goals of a team or broader organization. While organizing extracurricular programmes students take responsibility for various events.

### **Programmes conducted:**

• Programmes conducted by students.

### Values incorporated:

- Teamwork
- Social responsibility
- Hygiene in public places

#### 6. Environmental issues and deforestation ---

### **Programmes conducted by students:**

- Tree plantation programme
- Rejuvenation of continuous contour trenches (CCT)
- Street play on 'Swatch Bharat Abhiyaan.'

### Values incorporated:

- Identifying the environmental problems
- Finding simple solutions
- Importance of environment and resources

File Description	Document	
Upload Any additional information	<u>View Document</u>	
Paste link for additional information	View Document	

# 3.6.2 Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years

#### **Response:** 0

### 3.6.2.1 Total number of awards and recognition received for extension activities from Government/Government recognised bodies year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	View Document
Any additional information	View Document

# 3.6.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

### Response: 48

### 3.6.3.1 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
15	6	7	6	14

File Description	Document
Reports of the event organized	<u>View Document</u>
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document
Any additional information	View Document

### 3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

**Response:** 66.76

# 3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
656	392	763	462	967

File Description	Document
Reports of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document
Any additional information	View Document

### 3.7 Collaboration

### 3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on \_the-job training/ project work

**Response:** 8

# 3.7.1.1 Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

2021-22	2020-21	2019-20	2018-19	2017-18
6	5	8	9	12

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document
Any additional information	View Document

# 3.7.2 Number of functional MoUs with institutions of national, international importance, other institutions, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)

### **Response:** 9

### 3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
4	2	1	1	1

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other Institutions etc during the last five years	View Document
Any additional information	View Document

### **Criterion 4 - Infrastructure and Learning Resources**

### 4.1 Physical Facilities

4.1.1 The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

### **Response:**

The Institute has developed adequate infrastructure and physical facilities to support the process of teaching and learning by getting various grants viz., UGC (CPE), DBT-Star, RUSA, DST, etc. The management also takes keen interest in creation and enhancement of infrastructure in the institution by providing financial grants. Existing infrastructure facilitates and promotes a good teaching and learning environment.

Institute has a sprawling 37.55 acres of green campus with built-up area of 12233.60 Sq. m comprising of Classrooms, Laboratories, Library, Seminar Hall, Playgrounds, Gymnasium (Health club), Botanical garden, Mulberry garden, Vermicomposting production unit and Administrative office.

Institute has 27 well-furnished classrooms which are adequate for the students' strength. Out of these, 23 classrooms are equipped with the ICT facilities.

Institute has departments of Botany, Bio-technology, Chemistry, Electronics, Zoology, Microbiology, Physics, Mathematics, Computer science, Languages and Physical education each having their separate infrastructure.

Departments have laboratories, computers with internet facilities, departmental library, Staff room etc. Each laboratory of the college is equipped with enough experimental setups as prescribed in curriculum. All the departments have safety facilities (fire extinguisher etc.)

The institution has four research centers (Departments of Botany, Chemistry, Microbiology and Zoology) recognized by RTM Nagpur University, Nagpur.

#### **Central Instrumentation Center:**

The institute has the centralized instrumentation center with sophisticated analytical instruments like X-RD, FT-IR, UV-Visible Spectrophotometer, PCR, Growth Chamber, Gel Documentation system, Soil analysis kit, Flame photometer, Soxhlet' apparatus to serve research needs and provide consultancies to the researchers of nearby areas.

#### **ICT Enabled Infrastructure:**

The institution has total 167 computers with latest technology and internet facilities for academic and research purpose. Institute has adequate and well-furnished administrative building with 17 network computers of latest configuration. College has a dedicated ICT center to cater to the need of students and faculties. This center has 40 desktop computers of latest configuration, which are connected in high-speed LAN. This center also has a Language Laboratory for the students which include 10 dedicated terminals. The institute has high speed Wi-Fi enabled campus with leased line connection of Rail wire and BSNL.

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The institute has a historic building 'Gandhi Memorial Hall' existing since pre-independence, Seminar hall, RUSA supported classrooms which are used to conduct various activities like conferences, workshops, seminars etc. Institute also has one conference room for meetings, group discussions and presentations.

The institute also has a separate office of Controller of Examination (COE) including spot valuation center having desktops with internet connection and photocopiers.

The institute has an Internal Quality Assurance Cell located in the center of premises.

The institute has a centralized library building built across 1102.624 Sq.mt. area.

#### **Additional Facilities:**

The institute campus has adequate number of washrooms/ restrooms for teachers and students. For Divyangjans, ramps, wheelchairs and washrooms are available in the campus.

The institute has hostel facilities for both Girls and Boys, 05 staff quarters and a well-maintained guest house with all necessary facilities/ amenities.

File Description	Document
Upload Any additional information	View Document
Paste link for additional information	View Document

### 4.1.2 The institution has adequate facilities for cultural activities, yoga, games and sports (indoor & outdoor); (gymnasium, yoga centre, auditorium, etc.,)

### **Response:**

To promote interest of students in sports and cultural events, the college has developed adequate facilities during the last five years. Institute encourages students by providing adequate budget and resources.

#### **Facilities for sport activities:**

College has sports grounds and facilities for following Indoor and Outdoor Games:

**Indoor games:** Badminton, Table Tennis, Chess, Carrom

**Outdoor Games:** Football, Basketball, Volleyball, Softball, Baseball, Handball, Athletics, Long Jump, Shotput, Kabaddi, Kho-Kho, Ball Badminton, Net Ball, Lawn Tennis, Sepak Takraw, Archery.

For outdoor games, institute provides following standard sized courts:

One football court with a measurement of 116m x 75m

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One Basket Ball court with a measurement of 28m x 15m

Two Volleyball courts with a measurement of 12m x 9m

One Softball court with a measurement of 60m x 60m

One Baseball court

Two Handball courts with a measurement of 40m x 20m

One Athletics running track of 200m

One Kabaddi court with a measurement of 13m x 10m

One Kho-Kho court with a measurement of 25m x 14m

Two Ball badminton courts with a measurement of 24m x 12m each

One Archery court with a measurement of 90m x 30m

One Tennis court with a measurement of 90m x 30m

One Netball court with a measurement of 30.5m x 15.25m

The sports infrastructure is used optimally from 7.00 am to 7.00 p.m.

The college also has a Gymnasium equipped with Multi gym unit, Mechanical jogger, belt vibrator, bench press, adjustable bench, abdominal board with ladder, smith machine, leg extension and leg curl, wrist conditioner, dumbbells, rebounder exerciser, rowing arm cycle, massage roller etc. for students and teachers. The Gymnasium facilities are available for students and staff.

#### Facilities for the promotion of Cultural Activities and Yoga:

The institute has an Open Theatre 'Kala Niketan' in the campus and a 'Gandhi Memorial Hall' for organizing various cultural events. The institute has PA system, amplifiers, mixers, wired and wireless microphones, loud speakers, and various allied equipment for cultural programs. Every year students organize cultural events like Annual gathering, Fresher's Day and Farewell programs as well as other programs and various competitions.

The students of the institute are encouraged to participate in various intercollegiate events, they also won prizes in many of them.

Committees are formed to organize the various programmes to develop extracurricular skills in the students. Institute also publishes annual magazine 'VIGYANIKA.' Students' magazine committee looks after the magazine activity. Adequate funds are provided by the institution for organizing the cultural activities and participation in various events.

Yoga sessions are organized for students and staff. Every year International Yoga Day is celebrated.

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'Gandhi Memorial Hall' is also used to organize various extracurricular activities such as National Conferences, Workshops, Guest Lectures, Seminars, Welcome functions, Farewell functions, Parents' meetings, Alumni meetings etc.

File Description	Document
Upload any additional information	<u>View Document</u>
Geotagged pictures	<u>View Document</u>
Paste link for additional information	View Document

### 4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

**Response:** 85.19

### 4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 23

File Description	Document
Upload any additional information	<u>View Document</u>
Institutional data in prescribed format	View Document
Paste link for additional information	View Document

## 4.1.4 Average percentage of expenditure for infrastructure augmentation excluding salary during the last five years (INR in Lakhs)

Response: 22.89

### 4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
35.38572	32.95422	18.14071	36.86764	00

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File Description	Document
Upload Details of Expenditure, excluding salary during the last five years	View Document
Upload audited utilization statements	<u>View Document</u>
Upload any additional information	View Document
Link for any additional information	View Document

### 4.2 Library as a Learning Resource

### 4.2.1 Library is automated using Integrated Library Management System (ILMS)

### **Response:**

Bajaj College of Science Library (Dr. Damle Library) is committed to fulfilling its mission by acquiring the requisite information and documents to cater to the needs of its borrowers to help them in achieving excellence in teaching and learning. Library is housed in 1102.624 Sq.mt. area. Library has Reading Room, Reference Section, Rare books section, Issue Counter, Stack Rooms, and Bound Volume Room. Library also has LAN, Internet, INFLIBNET, Reprography facilities.

The capacity of reading room is to accommodate 150 readers at a time.

The library is fully automated since 2008 with the LibTECH software and updated with LIBMAN ILMS software since 2021.

Library provides open access to its documents for its members. Bibliographic details of these documents can be searched online through the Online Public Access Catalogue (WebOPAC). Link of WebOPAC is available at the website.

Presently Library has a collection of 45054 books. Books recommended by the staff and students are purchased on a priority basis.

Books in the library are arranged according to Dewey Decimal Classification Scheme (DDC 22nd edition). Maximum 02 books can be issued at a time by the UG students. Research scholars and PG students can issue a maximum 04 books at a time.

This access to the books is for 10 days and the students can renew it if required.

To ensure the smooth functioning of Library, a library committee has been formed under the chairmanship of the Principal, the Librarian as a member secretary, and heads or coordinators of the UG-PG departments as members. Meetings of the library committee are held regularly to streamline the functioning of the library.

Library follows a refined and transparent book selection policy for collection of the books.

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Books on other subjects like biographies, autobiographies, novels, etc. are also purchased.

The library is Wi-Fi-enabled and has 11 computers to browse online contents.

Library also has Reprographic facilities, LED TV, LED Projector and CCTV cameras.

Library has subscription to National Library and Information Services Infrastructure for Scholarly Content (N- LIST) of UGC-INFLIBNET for remote online access to e-books and e-journals.

The college has also registered for National Digital Library of India Club (NDLI club) for Local and /or Remote access to library resources.

File Description	Document	
Upload any additional information	View Document	
Paste Link for additional information	View Document	

### 4.2.2 Institution has access to the following: 1. e-journals 2. e-ShodhSindhu 3. Shodhganga Membership 4. e-books 5. Databases 6. Remote access to e-resources

**Response:** A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Details of subscriptions like e-journals, e-books , e-ShodhSindhu, Shodhganga Membership etc	View Document

### 4.2.3 Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

**Response:** 2.97

# 4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
3.37	3.10	2.37	3.19	2.80

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File Description	Document
Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years	View Document
Audited statements of accounts	View Document

### 4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year

Response: 14.84

### 4.2.4.1 Number of teachers and students using library per day over last one year

Response: 160

File Description	Document
Details of library usage by teachers and students	View Document

### 4.3 IT Infrastructure

### **4.3.1** Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updating its IT facilities

#### **Response:**

- The institute is continuously taking efforts to improve the IT infrastructure and to make it available for the students and faculty members so that they can be well acquainted with the state-of-the art technologies to use them regularly.
- IT facilities are updated by increasing the number of computers, printers, LCD projectors, etc. Institute has also upgraded the college website; online admission process of both UG and PG.
- College has 03 computer labs and 02 browsing centres.
- College has developed a dedicated ICT center to cater to the need of students and faculties. This center has 40 desktop computers of latest configuration, which are connected in high-speed LAN. This center also has the facility of Language laboratory for students.
- In the academic year 2021-22, total number of computers for students' use was 167 with a Student-Computer ratio **6:1**.
- The college has upgraded the internet connection bandwidth to 100 MBPS.
- The college has total 07 independent internet connections with 100 MBPS bandwidth which covers administrative office, Principal's office, COE office, library, classroom area, RUSA classroom, ICT lab, and various departments viz; Mathematics, Electronics, Computer Science, Life Science complex (Botany and Zoology), Microbiology, Biotechnology, Physics, Chemistry. All the departments of the college are equipped with computers, printers, scanners, LAN, and Wi-Fi connectivity.
- College Library is fully automated since 2008 with the Libtech software and updated with LIBMAN ILMS software in 2021 with Web OPAC.

- Library has a subscription of e-books, and e-journals via NLIST through INFLIBNET.
- Question papers, projects and thesis are availed through a digital repository in the college library. The college has also registered for National Digital Library of India Club (NDLI club) for Local and /or Remote access to library resources.
- Institute uses Moodle as a Learning Management System for online classes.
- Budgetary provision for IT facilities is made by the institute every year.
- As a part of IT policy, college ensures proper access and proper usage of IT facilities and also takes precautionary measures to prevent their misuse.
- CCTV surveillance systems have been installed at various key areas within the college campus.
- Institute also ensures the cyber security and all the confidential data of the college viz; data of examination section, accounts section, other student related data are protected by passwords.
- The college has local cyber security in the form of Antivirus protection (Quick Heal).
- The IT policy also takes care of management of E-waste.
- E-waste such as unused or damaged Printers, Computers or other instruments/equipment are scrapped out through the well-established practice.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

# $\textbf{4.3.2 Student - Computer \ ratio\ (Data\ for\ the\ latest\ completed\ academic\ year)}$

**Response:** 6.19

File Description	Document
Student - computer ratio	<u>View Document</u>

#### 4.3.3 Bandwidth of internet connection in the Institution.

**Response:** ?50 MBPS

File Description	Document
Upload any additional information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

# 4.3.4 Institution has the following Facilities for e-content development

- 1. Media centre
- 2. Audio visual centre
- 3. Lecture Capturing System(LCS)
- 4. Mixing equipments and softwares for editing

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<b>Response:</b>	C.	2 of	the	above

File Description	Document
Upload Additional information	View Document
Institutional data in prescribed format	View Document
Link for Additional information	View Document

# 4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Response: 77.11

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
84.81683	48.95992	72.72906	111.61230	44.18818

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts	View Document

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

#### **Response:**

The Institution 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 and 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 is 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 vacations.
- 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 daily 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 persons.
- 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 and procured for the next academic year.
- A nominal penalty is levied for delay in returning the library books or losing them.
- The playground is cleaned and all the courts are marked before the start of the academic year and the national and university level tournaments.
- One hardware technician takes care of the maintenance and service of the computers.
- Use of the college campus for government requirements to conduct various competitive exams such as NEET, MPSC during holidays and weekends is approved by the consent of the principal.

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Sensor-based LED lights have been installed in the institute at select places to ensure the energy conservation.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

# **Criterion 5 - Student Support and Progression**

# **5.1 Student Support**

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

Response: 76.33

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2021-22	2020-21	2019-20	2018-19	2017-18
828	848	660	751	692

File Description	Document
upload self attested letter with the list of students sanctioned scholarships	View Document
Upload any additional information	<u>View Document</u>
Institutional data in prescribed format	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution and non-government agencies during the last five years

**Response:** 0

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability 1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology

**Response:** A. All of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations as offered by the Institution during the last five years.

Response: 58.35

5.1.4.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1310	354	550	275	398

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

- 5.1.5 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

**Response:** A. All of the above

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File Description	Document
Upload any additional information	<u>View Document</u>
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document

# **5.2 Student Progression**

# 5.2.1 Average percentage of placement of outgoing students during the last five years

**Response:** 5.03

# 5.2.1.1 Number of outgoing students placed year - wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
20	20	10	7	10

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document

# 5.2.2 Percentage of student progression to higher education (previous graduating batch).

Response: 29.03

# 5.2.2.1 Number of outgoing student progressing to higher education.

Response: 63

 File Description
 Document

 Upload supporting data for student/alumni
 View Document

 Details of student progression to higher education
 View Document

 Any additional information
 View Document

# 5.2.3 Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/

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# **Civil Services/State government examinations, etc.)**

Response: 35.27

# 5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, *etc.*)) year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
11	05	04	06	03

# 5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: IIT/JAM/ NET / SLET/ GATE/ GMAT/CAT,GRE/ TOEFL/ Civil Services/ State government examinations) year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
28	18	12	11	14

File Description	Document
Upload supporting data for student/alumni	<u>View Document</u>
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document
Any additional information	View Document

# 5.3 Student Participation and Activities

5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

**Response:** 17

5.3.1.1 Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
3	00	7	4	3

File Description	Document
Number of awards/medals for outstanding performance in sports/ cultural activities at interuniversity / state / national / international level during the last five years	View Document
e-copies of award letters and certificates	<u>View Document</u>
Any additional information	View Document

# 5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

## **Response:**

Student Council and representatives play an active role in the academic and administrative bodies of the institution. The roles and responsibilities of the student council are earmarked for them at the time of assigning posts. The student council has a crucial role in planning, structuring, and executing various academic, co-curricular and extra-curricular activities of the institute. The student council of the institute consists of Secretaries of the Research Innovation Curriculum Hours (RICH) Club and Coordinators of Sports, NSS and NCC. They are assisted by the members of different clubs and associations. The student council is mentored by the Principal and the Heads of the departments. The student council meets to plan and organise activities and programmes of the college with the guidance of teachers and administrative team. It represents the students in the academic and administrative bodies of the institution. The council encourages a cordial relationship amongst management, teachers, student body and other stakeholders.

Student council is to be formed as per the directions of affiliated University but from the last three years there were no directions floated by RTM Nagpur University, hence Student Council in the college has been given an alternative name RICH Club (Research Innovation Curriculum Hours). The objective of RICH Club is to strengthen academic ecosystem among the students and to motivate them to think on novel ideas. The activities under this banner are carried out by the students for the benefit of the students to inculcate innovative qualities among the students. These activities include workshops, seminars, quizzes, debates, group-discussions, organizing talks of eminent speakers, etc. These activities are carried out in collaboration with the respective departments. In all, 37 (UG and PG) students are selected as functional group members in the core body of RICH, one from each class. Apart from the RICH Club, students are actively involved in the administrative bodies of College Development Committee (CDC), Internal Quality Assurance Cell (IQAC), and different departmental societies like, Botanical Society, Chemical Society, Microbiology and Biotechnology Society, Zoological Society, etc. Students have sizable representation in college committees as in college magazine committee, NSS, NCC, Astro-Club, Sports committee, Women Cell-Internal complaints committee-Sexual Harassment Committee-Prevention, Prohibition and Grievance Redressal, Anti-ragging committee, etc. The Student Council, by its representation on key committees, plays an important role in helping the institute management for providing better facilities and inclusive academic environment to its stakeholders.

The important events planned and organized by the student council are College Annual Fest, Teachers'

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Day, Freshers', Farewells, etc. The Student Council ensures students' participation and involvement in observing important national and international days. Subject Associations promote students to take part in various academic and co-curricular activities. Students' representatives conduct various departmental levels academic and co-curricular activities like, guest lecture of eminent person from academics and industry. Industrial visits and field visits, workshops, seminars, and different competitions are also organized by Subject associations for students in their respective departments. They are also involved in career-oriented programs like career counselling, community outreach events, entrepreneurship program, etc.

File Description	Document
Upload any additional information	View Document
Paste link for Additional Information	View Document

# 5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

# Response: 1.4

# 5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
3	1	2	0	1

File Description	Document
Upload any additional information	View Document
Report of the event	View Document
Number of sports and cultural events / competitions organised per year	View Document

# 5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

## **Response:**

Alumni Association of Bajaj College of Science, Wardha acts as a bridge to help alumni of the institution to maintain connections with fellow graduates. The objective is to interact with the alumni, plan future

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activities, discuss alumni contributions to the college, etc. Alumni Association is a great community which endeavours to impart, collaborate and share collective experience. It plays a key role in society and environment to be a better place. It provides opportunities for the students like internships and training to connect students with the professional world. The association often organizes social events, conducts social welfare activities like blood donation camp, health awareness programs, tree plantation, cleanliness drive, etc. to inform the members about the statutes of the institution.

Contribution: Alumni has generously supported in organizing Capacity Building Programmes, webinars, resourceful talks for the benefit of the students of the college.

#### **Lectures:**

Organization of Lectures has been a regular activity of the Alumni Association. Lectures on different topics are delivered by distinguished alumni of the institute to share their varied experiences. These lectures intend to utilize the substantial contribution of our alumni in the academic enrichment of the college. The programme also offers opportunities for the outgoing students to interact with our renowned alumni in diverse fields and emulate their models.

### **Career Guidance and Placement Services:**

Our Alumni Association members who hold administrative positions conduct career guidance programmes and offer placement services to the students to help achieve their career goals.

It has been discussed to conduct regular quarterly meetings of alumni association. The institute is in constant touch with our valuable alumni, and they are always positive and willing to contribute and work with us in all possible manner.

File Description	Document	
Any additional information	<u>View Document</u>	
Link for additional information	View Document	

# 5.4.2 Alumni financial contribution during the last five years (in INR).

**Response:** E. <2 Lakhs

# Criterion 6 - Governance, Leadership and Management

# 6.1 Institutional Vision and Leadership

# 6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution

# **Response:**

The institute is committed to providing the best science education and to produce well-educated, socially conscious students with good values. To execute its vision and mission, institution always believes in participatory management which enables to decentralize maximum academic and administrative work. The parent management is always in the harmony with the policies framed with the common consent of the principal and staff. The principal is an executive head of the institution and leader for all academic and administrative processes of the college. The principal is an Ex-officio member of Governing Body, Academic Council and College Development Committee. The policies are executed by the principal in consultation with all heads of department, conveners and coordinators, and the office superintendent.

The principal shoulders the following responsibilities:

- Administrative responsibility
- Financial responsibility
- Supervise curricular, co-curricular, and extracurricular activities
- Promoting Research activities
- Development and maintenance of Infrastructure
- Monitor the process of examination
- Act as a link between staff and management,
- Act as a bridge between institute, affiliating university, government and UGC.
- Acts as a liaison between the institute and the community.

For execution of these academic and administrative responsibilities, various statutory and non-statutory committees have been formed involving heads of the departments, teaching staff and office staff. As the institute is autonomous, the principal assists in the Governing body, chairs Academic Council, and finance committee. The policy of management, e-governance, and decisions of the principal are implemented by the heads of the department. Conveners and coordinators of various cells and committees are entrusted with the responsibility to carry out curricular, co-curricular, and extra-curricular activities. College Development Committee also ensures and approves the various decisions of the institute.

#### 1. Administrative Governance: -

Management, Principal, Heads of the Departments and IQAC work in harmony to ensure smooth administration.

Management, Principal, Teaching, and Non-teaching representatives ensure administrative governance through College Development Committee.

Principal chairs the Finance Committee and the decisions of the finance committee are executed through heads of the departments.

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# 2. Academic governance: -

The Academic Council with the support of heads of the departments and Board of Studies (BoS) governs the academic functioning of the College. Academic Council and BoS meet periodically for curriculum redesigning and ensure effective academic discharge through the faculties. Representation of teachers in Boards of Studies, Research Promotion Committee and Board of Examination ensure teachers' participation in making academic decisions.

## **Perspective Plan: -**

- The institute has a pro-active and visionary Management having well-defined goals and a perspective plan for the development of the institute.
- These plans are designed as short-term and long-term goals for building infrastructure, enhancing additional facilities, and introducing new courses in undergraduate and postgraduate programmes.
- Promotion of research culture and publication of research papers to a greater extent.
- Research collaborations with national laboratories.
- Networking with UGC, DST, DBT, RUSA and parent university.
- Mobilization of resources.
- Administrative reforms

File Description	Document
Link for additional information	View Document

# 6.1.2 The effective leadership is reflected in various institutional practices such as decentralization and participative management.

#### **Response:**

Being an autonomous institution, decentralization and participative management in academic and administrative work is an essential aspect.

The two major practices are given below:

- A. Administrative decentralization and participation
- B. Examination decentralization and participation

## **Administrative Decentralization and participation:**

Departmental responsibilities like teaching-learning and financial mobilization are executed by the staff. Heads of the department monitor upgradation of curriculum, timely completion of syllabus, purchase of required instruments and chemicals.

Besides the academics and curriculum, the principal of the institute needs to administer a number of activities in the institute. To conduct various co-curricular and extracurricular events such as organization

of conferences and seminars for faculties and students, there are programs 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), departmental societies like Chemical Society, Botanical Society, Zoological Society, Microbiology Society and clubs like RICH Club and Astro Club are in force. Various college committees are formed consisting of convenors and members from teaching and non-teaching staff are deployed. Students are also involved as members of some of the committees. The Conveners, Coordinators, and members are at liberty to plan and execute these activities.

# **Examination decentralization and participation:**

To conduct all the examination-related work, one of the faculties is appointed as the "Director, Board of Examinations and Evaluation (Controller of Examinations)" who monitors all the required activities related to the examination. He/she controls all the examination-related works and their correspondence with question paper setters, evaluators, moderators, etc. In consultation with the principal of the institute, the director's office implements a meticulous plan for the deployment of the examination timetable in order to conduct the examination, evaluation, and thereby declaration of results well in time.

Moreover, the heads of various departments act as the chairpersons of respective BoS with the participation of faculties as the members. They are responsible for framing and updating the curriculum, question paper patterns, and assigning external and internal faculties for various examination related activities like question paper setting, evaluation, and moderation.

File Description	Document
Link for strategic plan and deployment documents on the website	View Document
Link for additional information	View Document

# **6.2** Strategy Development and Deployment

# 6.2.1 The institutional Strategic / Perspective plan is effectively deployed

#### **Response:**

As a post-accreditation initiative, the faculties are kept updated on the compliances received from the NAAC and accordingly the strategic plan has been framed.

The college received Autonomous status from 2017-18. Focusing on the compliances and quality development of the college, following aspects were taken care of:

• Looking into the students' strength and to provide better learning atmosphere and to enhance higher learning facilities, emphasis has been given to infrastructure development in the following areas - Library building expansion, Girl's hostel expansion, Chemistry and Physics Laboratory Renovation, Central Computer facility, Central Instrumentation Center (CIC), ICT Laboratory, ICT

Enabled Classroom, and Classroom Expansion.

- As per the demand, started PG programme in Mathematics.
- Started new skill-oriented certificate courses.
- As per the demand, introduced competitive examination cell.
- Training and placement cell is working with a wider approach so that a maximum number of students can get placement opportunities.
- Increased Collaborations with industries and research laboratories/other higher education institutions.
- Online admission process implemented.
- Digitization in administration, finance, and library.
- Amplified use of non-conventional energy sources.
- Recognition of laboratory as higher learning and research centers in Zoology and Microbiology.

## One activity successfully implemented:

Emphasis has been given to infrastructure development in the following areas - Library building expansion, Girl's hostel expansion, Chemistry and Physics Laboratory Renovation, Central Instrumentation Center (CIC), ICT Laboratory, ICT Enabled Classroom, Classroom Expansion.

- To accommodate more students in the library, expanded library building.
- As the strength of girl students is comparatively higher, which come from nearby areas for study, the institute makes necessary arrangements to accommodate them on the campus by providing a hostel facility. The institute expanded the hostel facility.
- Renovated Chemistry and Physics buildings.
- Information and Communication Technology (ICT) laboratory has been established for the students and faculties where they can freely access computers with internet facilities for their studies and online registrations, admissions, and application purposes.
- ICT enabled classrooms: The institute has implemented Wi-Fi enabled and smart classroom facilities by increasing and upgrading the LCD projectors. All the classrooms are also upgraded with 'EyeRIS', Interactive Whiteboard Technology, and touch interactive projection system.
- As more programs have been introduced, increased the number of classrooms.
- Central Instrumentation Center (CIC): As per the recommendation of NAAC peer team, during their visit in December 2016, the Central Instrumentation Centre has been established in the year 2017 with an objective of providing a central facility of latest and advanced analytical techniques for research. It houses several highly sophisticated and modern analytical equipment offering its users, a wide range of analytical methods/techniques for analysis/testing/characterization enabling them to keep pace with developments taking place globally, publish their research findings in peerreviewed journals and through their concerted efforts contribute to the upliftment of the society at large. One of the role of CIC is to promote research culture in the nearby rural region of Wardha District where researchers and faculties face lack of facilities for characterization in material science. The facility is also extended as consultancy services to external organizations on minimum chargeable basis.

File Description	Document
Link for Strategic Plan and deployment documents on the website	View Document

# 6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules and procedures, etc.

### **Response:**

As per the rules of autonomous college, the statutory and non-statutory committees, as well as other committees are framed.

The principal, the head of the institution, is responsible for administrative and academic activities. Principal is empowered and responsible to implement the policies and decisions of the statutory bodies, management, and higher bodies. IQAC plans and supervises activities for the development in collaboration with the principal. Being a grant-in-aid college, the university /state government norms are strictly followed for the appointment of staff and promotions. The selection, recruitment, and promotion of the staff of self-financed programs are as per the policy of management.

The institute has been continuously working towards the best teaching-learning plan, research, student support and welfare measures, etc.

These committees are chaired by the principal, coordinators, and members (teaching and non-teaching staff) to execute the work. In some of the committees, students are also active members. The institute also has a College Development Committee (CDC) and Staff Council for the review and planning of policies for college development. The committees are revised after two or three years. The committees execute their work as per the guidelines in-force.

## **Institute Organogram:**

The institute is governed by parent organization Shiksha Mandal, founded in 1914 that runs 8 institutions. Consequently, the authorities of Shiksha Mandal are on the apex body of the institute. Apex body consists of president of Shiksha Mandal, chairman, secretary, and distinguished members. Principal is the head of the institution; under the chairmanship of principal, various statutory and non-statutory committees are framed.

Following committees are in force: Governing Body, Academic Council, Finance Committee, Board of Studies (BoS), College Development Committee (CDC), Staff Council, IQAC, Examination Cell, Academic Committee, Admission Committee, Research and Academic Relevance Committee, Purchase and Budget Requisition Committee, Prospectus Committee, Timetable Committee, and Internal Examination Committee.

For student support and facilities, various committees like NSS, NCC, CWSS, PEC, extracurricular activities, competitive examination, cocurricular, training and placement, institutional innovation council, magazine designing, teacher-parent, anti-ragging, and website publishing have been framed.

File Description	Document
Link to Organogram of the Institution webpage	<u>View Document</u>

# 6.2.3 Implementation of e-governance in areas of operation

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

**Response:** A. All of the above

File Description	Document	
Screen shots of user interfaces	View Document	
Institutional data in prescribed format	View Document	
ERP (Enterprise Resource Planning) Document	View Document	
Link for additional information	View Document	

# **6.3 Faculty Empowerment Strategies**

# 6.3.1 The institution has effective welfare measures for teaching and non-teaching staff and avenues for career development/ progression

# **Response:**

The best possible efforts are being taken to give staff a comfortable workplace so that holistic development of staff is assured. The institution takes care of administrative, academic, and financial development of all the staff by establishing teaching and non-teaching councils and societies.

- **Staff Council:** The Staff Council is established by the teaching staff and is headed by the Principal as Chairman wherein issues related to the administration and policies are discussed. The issues cropped up at the moment are always resolved with a common consent. In case of any discrepancies, the guidance of management is sought. The faculty is felicitated by the council for her/his achievements and on superannuation. The new appointees are introduced to the staff through this council in the meeting in order to make them familiar and comfortable.
- Non-teaching Association: The separate organization is available (Jankidevi Bajaj College of Science, Non-Teaching union affiliated to Vidarbha Vibhagiya Mahavidhyalay in Shikshetar Karmachari Sanghatna). Their regular meetings are organized through this association to resolve the issues, if any. The successful and meritorious wards of the staff are felicitated to motivate them.
- Cooperative society: A cooperative society has been established to help the staff financially. The loan facility is also available to cope with the emergency situations. Regular interest is provided against the deposits to all the members.
- **Group insurance:** Group insurance facility is available for all the staff members.

- **Provident Fund:** DCPS/ NPS/ GPF and regular contribution towards the Employee Provident Fund by the management.
- Facility of maternity leave and paternity leave.
- Free Covid-Vaccine Drive for the staff and their family members was organized in the institute.

### • For career development:

Institute organizes training programs for teaching and non-teaching staff. Faculties are encouraged to attend orientation programmes, refresher courses, FDPs, workshops and conferences by granting duty leave. Research Promotion Committee looks after the research facilities and encourages the staff to carry out research. The library has enriched collections of books and journals. All the laboratories have been enriched with sophisticated instrumentation. The facility of Central Instrumentation Center is available on the campus which is equipped with state-of-the-art instruments for research and higher studies freely accessible to staff. They can access internet and Wi-Fi facility, ICT facilities, Laboratories and Library facilities of the Institution.

#### General:

- Dedicated space is provided to the staff in each department.
- Residential quarters for the teaching and non-teaching staff are available on the campus.
- Sports facility, gymnasium, parking, and canteen facilities for the staff are also available.
- Provision of water coolers with purifiers and first aid box.

File Description	Document	
Link for additional information	<u>View Document</u>	

# 6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years.

Response: 2.29

# 6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	1	4

File Description	Document	
Institutional data in prescribed format	View Document	
Link for additional information	View Document	

# 6.3.3 Average number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the last five years.

**Response:** 4.6

# 6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
11	6	4	1	1

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document
Reports of Academic Staff College or similar centers	View Document
Institutional data in prescribed format	View Document
Link for additional information	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course ).

Response: 25.05

# 6.3.4.1 Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
18	24	11	0	1

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View Document
IQAC report summary	View Document
Institutional data in prescribed format	View Document
Link for additional information	View Document

# 6.4 Financial Management and Resource Mobilization

# 6.4.1 Institution conducts internal and external financial audits regularly

# **Response:**

Various grant-in-aid and self-financed graduate and postgraduate science programmes are run by the institute. An internal auditor appointed by the parent organization –Shiksha Mandal, carries out annual audit on regular basis.

Joint Director, Higher Education, Nagpur, the divisional head of grant-in aid colleges conducts external audit as per their audit plan and timetable.

The grants received from UGC and DST to the institute through various projects are utilized properly and the utilization certificates for the same are submitted within due date to the respective authorities.

External audit of UGC-CPE and RUSA grant is also done through CAG.

The discrepancies in all the budgets are resolved immediately by the institute within stipulated time.

File Description	Document
Link for additional information	View Document

# 6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years (not covered in Criterion III and V) (INR in Lakhs)

#### **Response:** 0

# 6.4.2.1 Total Grants received from non-government bodies, individuals, Philanthropers year-wise during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

File Description	Document	
Institutional data in prescribed format	View Document	
Any additional information	<u>View Document</u>	
Annual statements of accounts	View Document	
Link for additional information	View Document	

## 6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

### **Response:**

The fees of the grant—in—aid courses are regulated as per the university norms. The scholarship policy is stringently followed. As per the scheme, scholarship-awarded students are exempted from college fees as their fees are borne by the Government. The fund raised through the fees is utilized for various expenditures with proper planning. It contains various recurring and non-recurring expenditures. The funds for additional expenses are provided by the parent organization Shiksha Mandal. The Budget of proposed expenses of the college is passed annually by College Development Committee (CDC), whereas the budget of grants under autonomy is passed by the finance committee and governing body. The planning of expenditure is carried out in consultation with all the heads of the departments through discussions in regular meetings. Laboratory maintenance fund is disbursed to each department as per students' strengths. Every department proposes a budget of recurring and non-recurring expenses based on the availability and need of resources.

The university-approved self-financed graduate and post-graduate programmes are also run by the institute. The fee-structure of these programmes is regulated by the affiliating university. The students of these programmes are also eligible to avail the scholarship schemes of the Government of India (GOI). The budget of expenses and planning of expenditure is made in consultation with all the heads of the departments through discussions in the meeting. The amount is used for teachers' remuneration, contingencies, recurring and non-recurring expenditure of self-financed programmes. A budget is prepared by the coordinator of respective programmes for recurring and non-recurring expenses.

The institute receives grants from UGC and Government through various schemes such as UGC's XII five-year plan, additional assistance, CPE, BSR, Building fund, Major and Minor Research Projects, DST, and University. The Purchase Committee is established at the institute level which approves the purchase proposals from various departments.

Tenders and quotations are called for the purchase from various firms and suppliers. A comparative statement is prepared for these quotations and the final order is placed only after undergoing the comparative study regarding the standard of quality and reasonable prices. An audit of every purchase is carried out. All the utilization certificates are sent to the concerned authority within due dates.

# **6.5 Internal Quality Assurance System**

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle) Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

# **Response:**

As a post-accreditation initiative, the faculties are kept updated about the compliances received from the NAAC after the accreditation process.

The submission of AQAR data is being carried out timely through the IQAC.

The institute received an Autonomous status during the year 2017-18. Focusing at the compliances following aspects were taken care of in the last five years:

- To provide better learning atmosphere and enhance the higher learning facilities, following infrastructure facilities have been expanded- viz. Library building, Girl's hostel, Chemistry and Physics Laboratory Renovation, ICT Laboratory, Central Instrumentation Centre (CIC), and ICT Enabled Classrooms.
- As per the need of the stakeholders, introduced PG programme in Mathematics.
- New skill-oriented certificate courses and PG diploma course have been introduced.
- Increased collaborations with industries, research laboratories, and other higher education institutions.
- Started online admission process.
- Digitalization in administration, finance, and library.
- To promote use of non-conventional energy, 50 kW solar plants have been installed in the campus.
- The process of introducing more doctoral programmes i.e. started Ph.D. in Zoology and Microbiology.
- Institution's Innovation Council (IIC) of MoE, Govt. of India has been established in the institute to inculcate incubation culture among the students and faculties.
- The syllabus is regularly modified and updated as per the local and global needs.

Two practices institutionalized as a result of IQAC initiatives are as follows:

### 1.ICT enabled classrooms:

Switching from several VPN connections to the latest 100 MBPS internet connections linearly, Wi-Fi enabled, and smart classrooms were the successful initiatives of IQAC in providing quality education to the students.

#### Practice:

The institute started implementing this by increasing and upgrading the LCD projectors. These projectors are permanently installed in the classrooms so that faculties can use ICT tools for the efficient delivery of

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lectures. Moreover, 100 MBPS internet connections are made available to each classroom, and classrooms are upgraded to smart classrooms by providing Wi-Fi connections and 'EyeRIS', Interactive Whiteboard Technology, and touch interactive projection system. The faculty members were trained for the efficient use of these devices for delivering their lectures. This practice was very helpful during the difficult times of COVID-19 pandemic and used by most of the faculty members for capturing lectures and effective teaching. In general, these initiatives by IQAC transformed the learning experience from traditional imaginative learning to experienced or observational learning.

#### 2. Central Instrumentation Centre (CIC):

A Central Instrumentation Center (CIC) with sophisticated instruments was established in the year 2017 with the prime objective to enhance and support research and development facilities for students, research scholars, faculties, and other researchers. One of the roles of CIC is to promote research culture and provide facilities for the characterization of research materials. Since its inception, this facility is being used by undergraduate, postgraduate, doctoral students and faculty members, and industry persons for R&D purposes. The facility is also extended as consultancy services to external organizations on minimum chargeable basis. This facility is also used for organizing workshops.

CIC Web Tab: https://jbsw.shikshamandal.org/central-instrumentation-center/

File Description	Document
Link for additional information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities ( For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives )

#### **Response:**

The institution follows following processes to review its teaching-learning process and learning outcomes at periodic intervals through student and teacher feedback on curriculum, student's representation in College Development Committee (CDC), briefing to the IQAC external PEER team committee, and by an audit of affiliating university. The details of the same are as follows:

1. The timetable is prepared by the college timetable committee. The timetable is distributed to the respective departments. Timetable and workload distribution of the department is done by the respective heads. The departmental teaching plan is made by staff and a review of teaching-learning is taken by the heads of the department from time to time. The departmental teaching plan is also reviewed by the principal and management from time to time.

During the lockdown period, because of the COVID-19 pandemic, teaching has been carried out through online mode and is moulded from time to time as per the need, i.e., video lectures, recorded lectures via OBS, Zoom meetings, etc. Learning outcome is also analysed through attendance, tests, quizzes, and assignments using popular LMS. Once the offline mode has been resumed, some of the courses are being continued in blended mode.

Student-teacher feedback on the curriculum is collected, analysed, and used for curriculum designing.

At the same time, the student representative has been given the opportunity to express his/her views on teaching-learning as well as other facilities in the meeting of the College Development Committee. His/her remarks are considered for the development of the institute.

Internal Audit: The IQAC briefs about all the teaching-learning programmes, its outcome as well as all the college activities to the external PEER team of IQAC.

External Audit: For the effective teaching-learning process and analysis of learning outcomes, institution applies to the affiliating university for the academic audit. The committee visits the institute and gives the affiliation of the respective courses periodically.

## 2. ST-IIT (Spoken Tutorial of IIT Bombay):

Acquiring additional skills or having knowledge of state-of-the-art technology is an essential part of learning for everyone. The Internal Quality Assurance Cell (IQAC) is well aware of this fact and initiated learning facilities in the form of Spoken Tutorials of IIT Bombay for the students to acquire software knowledge that is available online. This activity was made mandatory for the students of B.Sc. Second year and it has been included in the college timetable.

Every student has to visit the Information and Communication Technology (ICT) centre of the college during the allotted schedule and learn the online courses by watching videos available online at the Spoken tutorial portal. Faculty members are entrusted with the responsibility to make sure that the students take benefit of it. Since the year 2018, 2413 students, including 1460 girl students were encouraged to learn new software along with their regular studies.

#### **Reforms:**

Communication English and computer awareness courses have been started for students of B.Sc. first year.

The institute is continuously taking efforts to improve the IT infrastructure and to make it available for the students and faculty members so that they can be well acquainted with the state-of-the-art technologies and use them regularly.

IT facilities are updated by increasing the number of computers, printers, LCD projectors, etc. Institute has also updated the college website and upgraded the online admission process of both UG and PG programmes.

The college has 03 computer labs and 02 browsing centres.

The college has developed a dedicated ICT centre to cater to the needs of the students and faculties.

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This centre has 45 desktop computers of the latest configuration, which are connected to high-speed LAN. This centre also has the facility of a language laboratory for students.

In addition to above mentioned two activities, the following initiatives have been taken to enhance the teaching-learning process:

- Online teaching, ICT-enable teaching, and use of LMS like Moodle/Gnomio.
- PG programme in Mathematics has been introduced.
- Skill-oriented certificate courses and PG Diploma has been introduced.
- Faculty participation in orientation/refresher programs by HRDCs and online portals like SWAYAM and NPTEL.
- Faculty Development Programs have been organized for the teachers.
- Programs on computer skills have been organized for non-teaching staff.
- Group project-based learning was introduced for the B.Sc. final year and postgraduate students.
- Student-centric learning methods were enhanced by strengthening internships, field works, exhibitions, workshops, and laboratory experiments.
- Infrastructure expansion has been undertaken i.e. Girl's hostel expansion, classroom expansion, Physics and Chemistry laboratory renovation.
- Central Instrumentation Center (CIC) has been established for promoting and facilitating research and development.

File Description	Document
Link for additional information	<u>View Document</u>

# **6.5.3** Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
- 2. Collaborative quality initiatives with other institution(s)
- 3. Participation in NIRF
- **4.**Any other quality audit recognized by state, national or international agencies (ISO Certification)

**Response:** All of the above

File Description	Document	
Upload e-copies of the accreditations and certifications	View Document	
Institutional data in prescribed format	View Document	
Paste web link of Annual reports of Institution	View Document	
Link for additional information	View Document	

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Self	Study	Report	of	Bajaj	College	of	Science

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# **Criterion 7 - Institutional Values and Best Practices**

# 7.1 Institutional Values and Social Responsibilities

# 7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

# **Response:**

#### Gender equity & sensitization in curricular and co-curricular activities:

To address gender equity, the institute has taken significant efforts to empower women so that men and women can both fully engage as equal participants in a productive life. Female staff and girl students are involved in the important committees/bodies which prevent biased decision-making, opportunities, and resource access from being skewed in favour of males.

The institute has organized sufficient training programmes, seminars, workshops, and other events to address gender equity and sensitization to attain this goal.

#### **Achievements in Co-curricular:**

During 2017-2022, girls have not only secured the top ranks in most of the academic programmes but also were the winners in intra and intercollegiate competitions. Girls have also been motivated to participate in National/International competitions/conferences and were the winners for the paper/poster competitions in many events. Girls have been taking the full advantage of the competitive examination cell and qualified in many competitive exams including Joint Admission test for M.Sc. (JAM)/NET/SET/GATE.

# **Sensitization through Extracurricular Bodies:**

### **Centre for Women Studies and Services (CWSS)**

The center is motivated with the study of different social problems related to women viz. Women empowerment, Men-Women equality, Women Safety, Superstitions in women, contribution of youths in developing India, pollution, protection and preservation of environment and water, the problems of senior citizens and the remedies to solve it. Students of the center select any two topics and study thoroughly throughout the year to prepare the projects. The projects are evaluated, and incentive marks are added in the marksheet. Center also conducts guest lectures on several topics.

# **Sports**

Sports department of the institute plays a key role in gender sensitization. As the institute has more girls than boys, the sports department has organized training sessions and provided best opportunities for girls. Girls have not only participated in more than 15 categories of sports but also made us feel proud by representing and securing ranks at National and International events.

## **NCC and NSS Participation:**

The institute has a separate NCC girls' wing which motivates the girls to fulfill their wish of serving the

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nation. This wing trains the cadets in military subjects, civil-defense, first aid, social services and educates them about unity and integrity through various programmes. Participation of girls in the NSS programme is dominant through which they develop leadership and communication skills. Students learn about how to live well despite a lack of resources.

Students gained knowledge in special camps from villagers and provided services.

## **Facilities for Women:**

By creating an internal grievance cell, placing enough CCTV cameras, and providing round-the-clock security, the institute has taken many steps to improve safety and security on the campus. Girls hostel located within the campus has also been assigned a female warden. All female staff members and students have the freedom and security to travel around the campus. The doors to laboratories and staff rooms have glass panes fitted at eye level. To offer students' medical treatment, preliminary medical aid is available in every department.

Student counseling is offered by the counselors through different cells including Women's cell from time to time. Additionally, the Training & Placement cell conducts guest lectures of females for students who need career advice.

File Description	Document
Specific facilities provided for women in terms of: a.Safety and security b.Counselling c.Common Rooms d. Day care center for young children e. Any other relevant information	View Document
Annual gender sensitization action plan	View Document

# 7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

- 1. Solar energy
- 2. Biogas plant
- 3. Wheeling to the Grid
- 4. Sensor-based energy conservation
- 5. Use of LED bulbs/ power efficient equipment

**Response:** A. 4 or All of the above

File Description	Document
Geotagged Photographs	<u>View Document</u>

# 7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

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- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

# **Response:**

# 1. Solid Waste Management

- · Classrooms and academic spaces have waste bins. Colour-coded labeled bins segregate dry and wet waste in the cafeteria, corridors, grounds, and open areas.
- · Plastic, glass and scrap material are disposed through Wardha Nagar Parishad's authorized waste collection centers.
- · Vermicomposting unit treats wet and garden-waste. The compost generated is utilized in Botanical Garden and by faculties for their home gardens.
- The biodegradable waste plant litter, waste papers, fallen leaves and branches are dumped in the compost pit and covered with a layer of dung, which after a period of 4-5 months is converted to organic manure. This manure is used as fertilizer for plants in the Botanical Garden and campus.
- The college has reduced the use of paper substantially through digitization. Use of One-side blank pages, E-communication, "Learning Management System" (Moodle) has reduced the usage of paper.

## 2. Liquid Waste Management

As water is a depleting resource, wastewater is managed as follows:

- A Chemical Waste Treatment Plant (CWTP) has been installed in the Department of Chemistry which treats the liquid waste from the laboratories. The treated water serves to flush systems.
- Proper drainage facility is available to manage the liquid waste of washrooms. Wastewater, generated from washing, urinals, bathrooms, is disposed of in the soak pits.

# 3. Biomedical waste Management

- · Glass waste and other non-hazardous material are collected in separate strong containers.
- · Microbial waste is autoclaved before disposal. Waste from Biotechnology laboratory, Microbiology laboratory and Plant Tissue Culture Laboratory are autoclaved and sterilized before disposal.

# 4. E-waste Management

Effective maintenance of IT infrastructure ensures the increased lifespan of electronic equipment. E-waste management is monitored by the Computer Science and Electronics department.

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- Obsolete electronic and electrical equipment are handed over to vendors.
- · Printer cartridges are reused by refilling the toner.

# 5. Waste Recycling System

- The office waste papers, old answer sheets of all departments are crushed and sent for recycling.
- The wet-waste developed in the canteen and hostel is dumped in compost pits for manure generation.
- The biodegradable waste plant litter, waste papers, fallen leaves and branches are dumped in the compost pit, and covered with a layer of dung, which after a period of 4-5 months is converted into organic manure. This manure is used as fertilizer for plants in Botanical Garden and campus.

## 6. Hazardous chemicals and radioactive waste management

Effective mechanisms are devised to prevent ignitability, reactivity, and toxicity of hazardous chemicals.

· Chemistry laboratory has fume-hood for gas exhaust and safety.

Most of the chemical waste is generated from the Chemistry department, hence a chemical waste treatment plant has been constructed near the department for the safe disposal of lab chemicals. Treatment of lab chemical waste mainly depending on types of waste. Chemical waste is mainly categorized in Inorganic and Organic waste. Lab waste, before going into the regular sewer system is treated to remove chemical intoxicants from it.

File Description	Document
Geotagged photographs of the facilities	View Document

## 7.1.4 Water conservation facilities available in the Institution:

- 1. Rain water harvesting
- 2. Borewell /Open well recharge
- 3. Construction of tanks and bunds
- 4. Waste water recycling
- 5. Maintenance of water bodies and distribution system in the campus

**Response:** C. 2 of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Link for any additional information	View Document

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# 7.1.5 Green campus initiatives include:

- 1. Restricted entry of automobiles
- 2. Use of Bicycles/ Battery powered vehicles
- 3. Pedestrian Friendly pathways
- 4. Ban on use of Plastic
- 5. landscaping with trees and plants

**Response:** B. 3 of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document

# 7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

- 1. Green audit
- 2. Energy audit
- 3. Environment audit
- 4. Clean and green campus recognitions / awards
- 5. Beyond the campus environmental promotion activities

**Response:** D.1 of the above

File Description	Document
Any other relevant information	View Document

# 7.1.7 The Institution has disabled-friendly, barrier free environment

- 1. Built environment with ramps/lifts for easy access to classrooms.
- 2. Divyangjan friendly washrooms
- 3. Signage including tactile path, lights, display boards and signposts
- 4. Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
- 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

**Response:** C. 2 of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document

# 7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

# **Response:**

Institute provides access to education for all by strictly following the prevailing policies and rules of the government. A significant number of admitted students travel to the institute from the interior of the Wardha district for low-cost values-based education.

To infuse a feeling of unity and togetherness, irrespective of their gender and socio-economic background, the institute ensures equal opportunity to all the students in year-long academic sessions for which different committees' function for different roles throughout the year. In particular, the committees constituted in the campus like Grievance Redressal Cell, Anti Sexual Harassment Cell, Internal Compliance Committee, SC/ST Cell, Anti-Ragging Cell, Discipline Committee and Staff Council ensure justice, equality, and inclusiveness of all stakeholders in the campus. There are some special provisions for the admissions through sports and *Divyangjan* quota.

Counseling during the admission process and student induction programme for new entrants help to overcome regional, social, and cultural differences among students. Various policies of institution viz. code of conduct, *Divyangjan*, Gender Equity, and Community Extension Activities are formal efforts to foster inclusiveness.

Every year the institute publishes an annual magazine "Vigyanika" consisting of articles, poems and short stories, sketches contributed by the students. There are several beneficial uses of the college magazine. The fact that it awakens students' innate creative abilities and encourages them to develop good reading and writing habits is what matters the most. Additionally, it broadens their knowledge frontiers and aids their intellectual development. Along with staff editors, the magazine committee is made up of the three sections in English, Hindi, and Marathi. The magazine committee asks students to submit their writings. The editorial board decides which ones are appropriate for publication. This provides the other students a chance to be motivated by what their peers have accomplished. It also depicts the institute's extracurricular, co-curricular, and academic activities.

Articles in the magazine are accepted for publication in three languages ?i.e. Marathi, Hindi and English. The magazine has also been awarded a certificate of appreciation by RTM Nagpur University.

To instill values, NSS and NCC units have organized special camps, awareness programs, various cultural events, guest lectures such as street plays, eradicating superstitions, skill-oriented training programmes, health awareness programmes etc. For showcasing the extra-curricular talent through cultural programs

and competitions, annual gatherings of students have been organized in which students presented traditional and folk dances, songs of Maharashtra's rich cultural traditions. There were also events showcasing tradition from various states and regions. Institute has also participated in Ek Bharat Shrestha Bharat programme by Govt. of India. Along with all above efforts, language subjects of B.Sc. programme refine the human senses and broaden the student's general lookout pertaining to culture and harmony.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Any other relevant information	View Document

# 7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

# **Response:**

Institute is committed to upholding social justice as a value enriched in the Indian Constitution through the careful application of admission requirements at the entry point and government scholarship, fellowship, and free-ship programmes. The teaching and non-teaching staff bear an attitude sustaining the spirit of inclusion in all their dealings with each other as well as with the students. Students are motivated during the Principal's address for their duties as a citizen on the National holidays viz. Independence Day, Republic Day, Gandhi Jayanti, Constitution Day, etc. Moreover, students' induction program (SIP) is conducted at the commencement of every session to emphasize the significance of constitutional obligations and the responsibilities as a citizen.

The sapling plantation campaign, which ties to our fundamental requirements for good food and clean air, is one of the initiatives on World Environment Day. Students along with their parents and staff of the college join hands for the green campus in this programme.

Extension bodies CWSS, PEC, NSS and NCC have organized the awareness programmes throughout the year to inculcate values, duties, and responsibilities of the citizens. To name a few awareness events Ahimsa Rally, World Peace Day, World Population Day, World Anti-Tobacco Day, Road Safety Rally, Voter Awareness Campaign etc. To add values with respect to hygiene, the institute has conducted cleanliness programmes from time to time. To understand the principle and praxis of righteous life in the context of the nation as professed by Mahatma Gandhi, Gandhi Research Foundation, an International Institute organized Gandhi Vichar Sanskar Pariksha where students were motivated to participate. Students were also enrolled to join the series of special certificate programmes run in association with 'Heartfulness' whose goal was to make students aware of values to become good human beings. Programme was intended to develop rational thinking, right understanding and honest approach to life by learning to meditate and understand the same as a comprehensive practice to navigate their lives (Psychomotor). Intermittently students were encouraged to participate in debate/skit/elocution intercollegiate competitions notified by extracurricular cells. Institute has also motivated students to participate in various essay competitions by Vivekanand Kendra, events by Gandhi Vichar Parishad,

### ASPEN.

During the lockdown period, students were encouraged to take part in virtual events viz. debate competitions and other activities related to social equality.

The lockdown did not stop the institute's NSS unit, and they have contributed by raising awareness about COVID-19 through videos, quizzes, and other means. The task of training volunteers and ensuring that pupils had completed the social awareness activities in and around Wardha city has been delegated to coordinators. After the COVID-19 pandemic lockdown, NSS volunteers took enormous efforts to get involved in many different activities. One team was involved in preparing sanitizers which were distributed to the departments and office. Additionally, it was also sent to other colleges of the parent organization. NSS volunteers also took part in distributing meals to low-income families. They also taught their neighbours how to use the "Arogya Setu" app and other smartphone features.

File Description	Document
• Details of activities that inculcate values; necessary to render students in to responsible citizens	View Document
Any other relevant information	View Document

# 7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The Code of Conduct is displayed on the website
- 2. There is a committee to monitor adherence to the Code of Conduct
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
- 4. Annual awareness programmes on Code of Conduct are organized

**Response:** A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View Document
Code of ethics policy document	View Document

# 7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

#### **Response:**

The international and national festivals/days, birth and death anniversaries of our national leaders are commemorated in the institute with the culture and tradition adopted since its establishment in 1962. By unfurling and hoisting the national flag, singing the national anthem, and performing other patriotic songs, Independence Day, Republic Day are celebrated as national holidays. These occasions also include some events organized on patriotism by the Cultural Committee and NCC wing of the college. Constitution Day also known as 'Samvidhan Divas', is celebrated in the college on 26th November to commemorate the adoption of the Constitution of India where all staff gather and read the preamble. Various befitting activities are planned and organized on 2nd October (Gandhi Jayanti) and 30th January (Martyr's Day) every year to honour and imbibe the values/virtues like patriotism, non-violence, truthfulness, resilience, and cleanliness that our Father of the Nation so diligently preached, professed and practiced in his private as well as public life. Birth and death anniversaries of our inspiration Jamnalal ji Bajaj and Mata Jankidevi Bajaj are observed along with the rituals. Every year on September 5th, the college celebrates Dr. Sarvapalli Radhakrishnan's birth anniversary as "Teachers Day." Students greet and felicitate the teachers and express their gratitude by presenting them with greetings that they themselves prepare. Selfgovernance is also observed on this day where students take the complete charge of the college. In addition to these, institute also organizes events to highlight the message associated with various national and international days, such as World Environment Day on 5th June, International Yoga Day (21st June), International Women's Day, International Tiger's day, World Population Day, International Hindi Diwas, World Peace Day, Vaachan Prerna Din, World AIDS Eradication Day, Flag Day, Vijay Divas, National Mathematics Day, National Youth Day, National Voters Day, Marathi Bhasha Diwas, National Science Day. These celebrations are organized by different departments or extension bodies of the institute.

File Description	Document
Geotagged photographs of some of the events	View Document
Any other relevant information	View Document
Annual report of the celebrations and commemorative events for the last five years	View Document

# 7.2 Best Practices

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Response	•
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**Best Practice 1** 

### Title:

Spoken Tutorial of IIT Mumbai: Learning Free and Open-Source Software (FOSS) online.

## **Objectives:**

• To empower the students with new software skills besides regular academic curriculum.

- To expose the students to market driven learning ecosystems.
- To make students acquainted with the state-of-the-art technologies.
- · To prepare students ready for global competitions.
- To expose students to the best available e-learning platforms.
- To prepare students to acquire additional credits along with regular curriculum as per the need of NEP 2020.

#### The Context:

In the present scenario, acquiring additional skills or having knowledge of state-of-the art technology is the essential part of learning for everyone. The number of online learning opportunities, including learning management systems and massively open online courses, has increased dramatically over time. As per the need of new education policy (NEP), online courses should replace some traditional physical courses in the near future and allow students to learn from Internationally recognized online platforms.

Most of the students of the institute are from nearby rural areas where they may not have facilities and resources for acquiring computing skills with reference to their subject interest without language barrier as these courses are available in many Indian languages. It is the utmost responsibility of a higher educational institution to provide such facilities for the overall development of the students.

Anyone who shows interest in the subject, regardless of age, location, or other considerations, can benefit from these courses and modules because they are not targeted at any specific audience.

#### The Practice:

Believing the importance of ICT, the institute has started providing learning facilities in the form of Spoken Tutorial of IIT Mumbai, to the students to acquire software knowledge which is available online.

The Spoken Tutorial project is the initiative of the "Talk to a Teacher" project of the National Mission on Education through Information and Communication Technology, launched by Ministry of Education (previously MHRD), Govt of India where one can find a variety of tutorials on various Free and Open-Source Software (FOSS) in several Indian regional languages. ST is a 10-minute-long audio-video tutorial created using the screencast methodology where the face of the person creating the video is not captured, rather the students are shown the lesson to learn. The spoken part of ST is dubbed into all Indian languages and one can use ST to learn a topic, called a tutorial. This distinguishes ST from the rest of the other video tutorials available online. It can be used in offline mode as well and hence is useful to those who do not have access to the Internet.

The institute incorporated this activity in the college timetable from the academic session 2017 and made it mandatory for the students of second year B. Sc. and M. Sc. students. The ICT Center of the college has all the facilities required for online courses. The faculty members of the institute have been entrusted with the responsibility of each batch of maximum 20 students so that each learner is given attention and their query may be quickly resolved. The faculty member selects the required FOSS from the vast courses available on Spoken Tutorial portal and encourages students of allotted batches to join the course. Faculty enrolls the

students to the portal. This begins the journey of online learning for the newly enrolled students. The students have to attend the sessions/modules of Spoken Tutorial classes as per the time-table slot mentioned in the master time-table of the institute. The ICT center helps in overcoming technical difficulties in accessing the course. Attendance of the students is also maintained at the ICT center by the concerned faculty. Slow learners are also encouraged to access the recordings in off lectures. At the end of the semester, the online test is conducted in the ICT center by IIT Mumbai and additional certificates are awarded to the successful students besides their participation certificate. Students enroll for the other course in the next semester and follow the same procedure. Thus, during one academic session students get the exposure to learn two courses.

#### **Evidence of Success:**

After its implementation in academic session 2017-2018, till now 2458 students have benefited through 89 training sessions. The learner, after completing the training, received a participation certificate from IIT Mumbai. The students qualified in the online test received additional completion certificates. All these certificates are available on the spoken tutorial portal. The training has enabled the students to understand the subject practically through simulations. Students have gained skills to implement it. The training related to skill enhancement was helpful for the students to design some modules based on sensors and processing units.

#### **Problems Encountered:**

Most of our students live in rural areas and frequently have the problem of power cut and absence of internet connectivity and data pack bring the limitation to spare their off timings for more online courses which they could do at home. The learning experience is completely different for students when they switch from traditional classroom training with a face-to-face instructor to computer-based instruction in a virtual classroom. They struggle to adjust to the online learning environment due to their reluctance to change, whereas it takes some time for them to get used to courses and computer-based learning techniques. Traditional-minded students struggle to adjust, but they must accept the new learning environment with an open mind and heart.

#### **Resources Required:**

To provide the IT facility to our students, the college has a dedicated ICT Centre which caters to the need of online learning. This center has 45 desktop computers having 100 MBPS internet along with A/V aid. Looking at the requirements, this needs to be strengthened. Students would be better prepared for online classes with more and more exposure to such courses if they could be made aware of the advantages of the course and even talked about them with their classmates.

**Notes: Nil** 

Other Attachments: Annual Reports of five years, Letter of association

Statistics WebLink: https://spoken-tutorial.org/statistics/training/?training\_planner\_academic\_state=21& training\_planner\_\_academic\_\_city=321&training\_planner\_\_academic\_\_institution\_type=1&training\_plan ner academic institution name=Bajaj+&department=&course type=&course foss=&sem start date after=&sem\_start\_date\_before=&lang=------&status=1

#### **Best Practice 2**

#### 1. Title of the Practice: Computer Awareness Course

#### 2. Objectives of the Practice:

This course was designed to fulfill the following objectives:

- The primary aim of the Computer Awareness Course is to inculcate skills related to basic computer handling in all the B.Sc. first year students at the institute.
- 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 them and make them familiar with recent trends in the Internet World.

#### 3. The Context:

Today's techno-savvy and digital world demands that the students should make use of varied online and technical resources to access a variety of information related to their academics apart from the traditional methods of learning. However, most of the students of our college are from rural backgrounds, and as such most of them lack this exposure to computers and recent trends in the E-world.

Our college has consistently striven for its undergraduates for their improvement in every way. As a part of this drive, the Computer Awareness Course was planned and presented since the academic year of 2017-18 for every B.Sc. first year college student. The course is planned in such a manner that the goal that it targets is mastering the abilities rather than having simple reasonable information.

#### 4. The Practice:

This course is run in two variants. The first variant is specifically developed for the students opting for Computer Science as one of their subjects. The contents range from basics of PPT creation and handling, Indian IT Act, Cyber Awareness to Internet technologies, etc., that gives them a basic understanding of net enabled technologies and how to browse the digital ocean of information safely.

The second variant of this course is developed for the rest of the students and aims at providing basic computer skills which are required by students like computer fundamentals, working with MS Word and basic Internet usage capabilities.

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 this course. Every batch is allotted one session per week during which they are taught practically. The emphasis is more on learning by doing. The details of year wise enrolment of the students to the course comprising of both the variants are as follows:

SN	١.	Academic Session	Total number of students enrolled for the course	
1.		2017 – 18	317	

<b>2</b> .	2018 – 19	329	
3.	2019 - 20	193	
4.	2020 - 21	353	
5.	2021 – 22	279	

At the end of semester, they need to appear for a final exam comprising multiple choice questions and a viable assessment. Prior to the Covid-19 pandemic, the final exam was conducted in offline mode but post-pandemic, the exam is now conducted through the Moodle LMS. For the academic session 2021-22, the course was conducted in blended learning mode where the students were taught practically in offline mode and at the same time the e-resources like study materials, access to pre-recorded video lectures were provided through the Moodle LMS. At the end the exam was conducted through the same Moodle site to which they were previously enrolled for the course. The online access to the e-resources and exam was conducted through the Gnomio site https://firstyearbcsw2021.gnomio.com/user/index.php?id=13. From the academic session 2021 – 22 onwards, the course was shifted to and provided through a dedicated Gnomio site https://mmwcst.gnomio.com/user/index.php?id=2 for the same.

#### 5. Evidence of Success:

It was observed that whatever skills were acquired by our students from this course, have helped them radically in their academics. The effects of this mandatory course that we have started since the 2017-18 session could be seen then. A marked improvement has been found in their knowledge of computers and the way they use computers effectively for their work. The course helps them to become self-dependent when it comes to computer-related needs.

For instance, students all alone make their e-tasks, project reports, presentations, articles, and papers, etc. for which they previously used to rely on others. Another marked improvement observed among them was the better use of internet-based assets. Now they alone are capable of carrying out a variety of web-based tasks on their own or with very little guidance from others. Moreover, this course crucially contributed in the best way to enshrine them in cyberspace which is the present need. This has likewise inspired them to get to know the information on on-going patterns in innovation.

#### 6. Problems Encountered and Resources Required:

- Because of the poor exposure to computers and language issues, few students need more time to grasp the technology.
- · Most common problem encountered is the fear of students regarding the use of computers, which however, is eliminated by itself as they become familiar with those. Sometimes students find it difficult to remember the technical jargon.
- Difficult to give more attention to weak students by providing them with the extra window as students lack the facilities to practice at their home.
- · Due to openness and language issues, few learners need more opportunity to get a hand on technological innovation.
- · Practice is a significant issue as few students lack electronic devices at their place

File Description	Document
Best practices in the Institutional web site	<u>View Document</u>

#### 7.3 Institutional Distinctiveness

### 7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

#### **Response:**

#### **Facilitating Young Minds of Wardha District for Science Education**

The Institute has been mentoring a sister institute Bajaj Science Education Center since 2017 located nearby the institute where around 500 school students across Wardha district are getting trained for experiential learning practices in science and mathematics. Bajaj Science Education Center was established in 2007 to promote basic science education among school students in Wardha district. It is a place for children to learn science through exploration and play. The goal is to inspire curiosity in their minds and to inculcate a sense of excitement in studying science. The center strives to nurture creativity and innovation through hands-on experimentation, which is largely missing in school curricula. It does this through laboratory sessions held in five laboratories, each dedicated to a different branch of science. Every year, the center facilitates about 500 school students of Wardha city in carrying out concept-oriented experiments and demonstrations, which stimulate their curiosity and introduces them to the methods of science. Students are encouraged to ask questions, explain concepts, and undertake projects - all of which help them to learn. Some of them are trained to participate in National-level competitive examinations and other competitions. The Center has its own academic and administrative structure with permanent staff. Dr. Govinda Lakhotiya of the Department of Physics served as an honorary director from November 2017-May 2022 for the academic planning of the center. Presently, Dr. Saikat Biswas of the Department of Zoology is serving as the honorary director of the center. Faculties of the college mentored students for their projects and competitive examinations at the National level.

#### Role of Bajaj College of Science:

#### 1. Facilitating Academic inputs:

During 2017-2022, the yearly academic plan of the institute was meticulously framed and executed by an honorary director (appointed by the college) that includes the organization of regular sessions, workshops, teacher's training programmes, science shows, science exhibition, school level competitions, public outreach programmes etc.

#### 2. Mentoring Laboratories:

The laboratories of the center are mentored by the faculties of the college where the mentors discuss and contribute to the academic plan for each grade with the appointed teachers of the center in five different laboratories.

#### 3. Guiding Students for projects:

Dr Homi Bhabha Balvaidyanik Competition is a prestigious competition of the state at the school level where students are challenged for theory, practicals and projects. In its third phase, students need to undertake a project on the given topic and work for a couple of months under the guidance of faculties of the college. One of the students in 8th grade has published his project work in the International Journal of High School.

#### 4. Training students for the International Junior Science Olympiad programme:

The 8th and 9th-grade students are trained in different topics in science for the International Junior Science Olympiad programme. In 2022, one of the students reached the second stage of this programme and was the only student from the Vidarbha region.

**Associated Faculties:** Prof. Pradeep Tekade, Dr. Saikat Biswas, Dr. Dhiraj Naik, Mr. Nakul Barwat, Dr. Akhil Nakhate, Dr. Mahejabeen Haque, Dr. Abhimanyu Maheshwari, Dr. Mangesh Yerpude, Dr. Parvez Saudagar.

#### 5. Training school teachers of Vidarbha Region:

Teachers' training programmes were organized to train the school teachers where trainers were invited from New Delhi (Anveshika), Chennai (Association of Mathematics Teachers of India) and Bangalore (Teacher Trainer of Royal Society of Chemistry).

#### 6. Connecting students with science educators and scientists across the country:

Science Educators and scientists were invited for the guest talks/workshops/science shows.

#### 7. Organizing Educational Tours

Educational tours to agricultural farms, plant nurseries and Raman Science Center were scheduled under the mentorship of Dr. D.D. Naik, Department of Botany. Students also visited the museum of the Department of Zoology of the college.

#### 8. Promoting science education through Webinars/Seminars and Science Shows:

During the lockdown, the center had started a series of virtual weekend science activities where the experts working in the field of science education across the country were invited for some popular talks/demonstrations on interesting topics in science. This programme was broadcast through our social media platforms and was accessible to all science lovers across the globe. To date, 3838-weekend science talks have been broadcast through the youtube channel and have touched many global screens. Details of the sessions can be accessed through the link: https://docs.google.com/presentation/d/1KLCzkhMAnnaIWZ0NenPGTPSV8HkvLrO 2ZIJDLQT\_3Tw/edit?usp=sharing

#### 9. Facilitating Astronomy Lovers:

With the help of Astro Club of the college, several programmes are arranged in the center for students and parents on astronomical events like annular solar eclipses, lunar eclipses, zero shadow day, planet conjunction etc. Dr. Sudhir Tiple, Faculty Incharge of Astro Club provides his services in guiding the

teacher at the center for sky-watching events.

#### 10. Booklet on 75 Indian Scientists:

With the help of the faculties of the college, a compendium of 75 Indian scientists, mathematicians, technologists and engineers to commemorate 75 years of India's independence has been released by Bajaj Science Education Center, Wardha. This collection provides a glimpse of how Indians have contributed to advances in science, technology, engineering, and mathematics (STEM) through the ages. The objective of bringing out this compendium is to make students proud of these countrymen and countrywomen. Booklets have been distributed to the science educators associated with the center across the country and can be made available on request to science lovers in lieu of its printing cost.

#### 11. Assistance in mentoring ZP Schools:

The Center is mentoring 14 Adarsha Shalas of Zila Parishad (ZP) through regular visits to the school and teacher-training programmes in collaboration with the Bajaj group's JBGVS. Five offline Teachers' training programmes on different topics for *ZP Aadarsha Shala* of Wardha district have been conducted where faculties of the college have shared their expertise of teaching with the teachers of ZP schools.

Website: www.bajajsciencecenter.co.in

YouTube Channel: https://www.youtube.com/BajajScienceCenterWardha

Facebook page: www.facebook.com/BSCWARDHA

File Description	Document	
Any other relevant information	View Document	
Appropriate web in the Institutional website	View Document	

#### 5. CONCLUSION

#### **Additional Information:**

The institute is continuously thriving to achieve its goal and for the betterment of the students. The institute is providing quality education in conjunction with social and moral values with tirelessly efforts by management and faculty.

The highlights of our institute are –

- Offers 12 academic programmes including a Grant-in-aid and self-financed undergraduate B.Sc. programme, five self-funded P.G. programmes in science (Chemistry, Botany, Microbiology, Zoology, Mathematics) and four Ph.D. programmes in Botany, Chemistry, Microbiology and Zoology.
- Well-developed infrastructure in the form of more than 85% ICT and Wi-Fi enabled classrooms, well equipped laboratories, dedicated ICT Lab, Central Instrumentation Centre with state-of-the-art research equipment, Language Laboratory.
- Library with more than 45000 books and journals, spacious reading room and browsing center for digital access, WEB-OPAC with mobile app for students and faculty for easy access.
- Sufficient sports infrastructure and coaching which enabled students to regularly participate and win prizes in inter-university, national and international events.
- To address the need of outstation girl students the institute has built spacious Girls' hostel, *Jankidevi Kanya Chatravas*, inside the campus with an intake capacity of 55.
- Faculties have been awarded with funds for the research projects through Department of Science and Technology (DST) and Rajiv Gandhi Science and Technology Commission (RGSTC).
- Received prestigious FIST grant by Department of Science and Technology, GOI.
- Presently, 900 students are availing quality education at undergraduate, post-graduate and doctoral levels in the institute
- One PG Diploma and six certificate courses are being offered.
- Conducting national level conference "*Innervate*", for faculty and research scholars which has received funds from UGC and RUSA and state level seminar competition "*Scintillation*" for students every alternate year.
- Guidance to students for various competitive examinations (IIT-JAM,NET/SET, etc.)
- Regularly conducting the webinars on Life Sciences, Mathematical Sciences, Startup programmes, Entrepreneurship, IPR, etc.
- The Institute has been visited by many eminent personilities like Padma Shri Late Dr. T. Padmanabhan, Padma Shri Dr. Ravindra Kolhe, Dr. Shekhar Mande (Former DG, CSIR), Dr. Bharat Kale (Director, C-MET, Pune).

### **Concluding Remarks:**

We, at Bajaj College of Science, Wardha ensure value-based quality education which motivates and empowers our stakeholders to be lifelong learners adding values to the society. Our education think-tank expects that the institute should meet the individual requirements. At our institute, education isn't just the quantum of information that's put into an individual's brain. We want all our students to achieve their full potential and eventuality. Our task is to make it possible, and our mission is to give a platform for the same. We are committed to the success of all students by the delivery of an enriching, student centered, balanced, and

interesting programmes. Faculties in our institute are well qualified and are highly committed to supporting literacy experience through quality instruction and guidance. Our team works to impart differentiated support to the students for their specific requirements in both academics and society. We believe that the purpose of science education is to solve problems of society at large and make the world a better and happy place to live in. Bajaj College of Science gives important significance to co-curricular and extracurricular activities for the overall development of the students. We do give high preference and precedence to the safety of the students. We are open to the society for fruitful mutual participation and the valuable suggestions. We are eager to jointly work with our parent community in supporting their ward in their education. We always strive to make strong parent-teacher-alumni relationships which is veritably important for the academic success of our students. We truly have a kaleidoscopic academy with a probative and involved community, devoted and largely skilful staff, excellent resources and structures and the most wonderful students to work with. The institute has been regularly conducting the webinars for students and faculties on various aspects of Life Sciences, Mathematical Sciences, Start-up programmes, Entrepreneurship, IPR, etc. We're veritably sure that with the help of all the stakeholders and with their perennial nonstop support, we will be able to take our institute to the coming proudest position of excellence. Our commitment to our community is to lead with enthusiasm and passion to enable us to reach our pretensions.

### **6.ANNEXURE**

#### 1.Metrics Level Deviations

1.111611163	Level Deviation	IS						
Metric ID	Sub Questions an	d Answers	before and	after DVV	Verification			
1.1.2	Percentage of Pr	ogrammes	where syll	abus revisi	on was car	ried out during the last five years.		
1.1.3	1.1.2.1. Number of all Programmes offered by the institution during the last five years.  Answer before DVV Verification: 10 Answer after DVV Verification: 7 1.1.2.2. How many Programmes were revised out of total number of Programmes offered during the last five years Answer before DVV Verification: 5  Average percentage of courses having focus on employability/ entrepreneurship/ skill							
	1.1.3.1. Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years  Answer before DVV Verification:							
	2021-22	2020-21	2019-20	2018-19	2017-18	-		
	201	184	176	142	74			
	Answer Af	ter DVV V	erification:					
	2021-22	2020-21	2019-20	2018-19	2017-18			
	201	184	176	142	74			
1.2.1	Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.  1.2.1.1. How many new courses are introduced within the last five years     Answer before DVV Verification: 25     Answer after DVV Verification: 25 1.2.1.2. Number of courses offered by the institution across all programmes during the last five years.  Answer before DVV Verification: 242							
1.2.2	Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).  1.2.2.1. Number of Programmes in which CBCS / Elective course system implemented.  Answer before DVV Verification: 5  Answer after DVV Verification: 5							
1.3.2	Number of value-added courses for imparting transferable and life skills offered during last five years.  1.3.2.1. How many new value-added courses are added within the last five years							

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
3	0	1	0	1

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
2	0	1	0	1

Remark: Revised values as per supporting data attached

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

### 1.3.3.1. Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
167	0	61	34	80

#### Answer After DVV Verification:

. 1115 ( ) 01 1 11 001 2					
2021-22	2020-21	2019-20	2018-19	2017-18	
167	0	61	34	80	

# Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

#### 1.3.4.1. Number of students undertaking field projects / internships / student projects

Answer before DVV Verification: 133 Answer after DVV Verification: 130

### 1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from

#### 1) Students, 2) Teachers, 3) Employers,

#### 4) Alumni

Answer before DVV Verification: B. Any 3 of the above Answer After DVV Verification: B. Any 3 of the above

#### 1.4.2 The feedback system of the Institution comprises of the following:

Answer before DVV Verification : A. Feedback collected, analysed and action taken and report made available on website

Answer After DVV Verification: A. Feedback collected, analysed and action taken and report

#### made available on website

#### 2.1.1 Average Enrolment percentage (Average of last five years)

#### 2.1.1.1. Number of students admitted year-wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1034	1093	859	979	982

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
402	430	368	391	381

#### 2.1.1.2. Number of sanctioned seats year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1220	1178	1156	1156	1156

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
430	430	408	408	408

Remark: DVV input as per attached supporting documents by HEI during clarification

# Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

### 2.1.2.1. Number of actual students admitted from the reserved categories year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
89	89	81	90	91

#### Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
91	90	81	89	89

### 2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year )

#### 

4.2	-	_	_		ers with Ph rs (conside			-	perspeciality t)
	Superspec	ciality/L		year wise	rs with <i>Ph.I</i> during the			3	
		21-22	2020-21	2019-20	2018-19	2017-18			
	31		30	25	25	25			
	Ans	swer Af	ter DVV Vo	erification :					
		21-22	2020-21	2019-20	2018-19	2017-18			
	30	l	29	25	24	24			
2.5.1	Ans	swer bef swer afte	fore DVV V er DVV Ve	Verification rification: 4	: 497 180	nester-end	year- en	_ d examina	tion till the
2.5.1	Average of declaration 2.5.1.1 declaration	swer bef swer afto number on of ro . Numb on of re	fore DVV Ver DVV Ver of days fresults year of days sults year	Verification rification: 4  om the date of	: 497 80 e of last sen g the last f ate of last s g the last fi	ive years emester-er			tion till the nation till th
2.5.1	Average of declaration  2.5.1.1  declaration  Ans	swer bef swer afto number on of ro . Numb on of re	fore DVV Ver DVV Ver of days fresults year	Verification rification: 4  om the date of	: 497 80 e of last sen g the last f ate of last s g the last fi	ive years emester-er			
2.5.1	Average of declaration  2.5.1.1  declaration  Ans	number on of ro . Numb on of re swer bef	fore DVV Ver DVV Ver of days fresults year of days sults year of the fore DVV V	Verification rification: 4  om the data  wise during the data  wise during Verification	: 497 80 e of last sen g the last f ate of last s g the last fi	ive years emester-en ve years			
2.5.1	Ans Ans Ans Average in declaration Ans 2.5.1.1 declaration Ans 20.	number on of ro . Numb on of re swer bet	fore DVV Ver DVV Ver DVV Ver DVV Ver of days fresults year of days sults year of DVV Ver DVV V	Verification rification: 4  om the data wise during verification 2019-20  41	e of last seng the last fact of last seng the last find th	ive years emester-enve years			
2.5.1	Ans	number on of ro . Numb on of re swer bet	of days fresults year of days sults year of DVV V	Verification rification: 4  om the data wise during verification 2019-20  41	e of last seng the last fact of last seng the last find th	ive years emester-enve years			
2.5.1	Ans	number on of reswer before swer before 21-22	fore DVV Ver D	verification rification: 4  om the data wise during verification 2019-20  41  erification :	e of last seng the last find t	emester-enve years  2017-18  22			

2021-22	2020-21	2019-20	2018-19	2017-18
46	00	38	112	00

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
46	00	38	112	00

- 3.2.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)
  - 3.2.1.1. Total Grants from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
52.26	58.802	17.26521	110.3311	0

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
0	3	21.44	0	0

Remark: Revised values as per admissible supporting documents

- 3.2.2 Percentage of teachers having research projects during the last five years
  - 3.2.2.1. Number of teachers having research projects during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
5	3	1	0	0

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
0	1	3	0	0

Remark: Revision as per admissible supporting documents.

- 3.2.4 Average percentage of departments having Research projects funded by government and nongovernment agencies during the last five years
  - 3.2.4.1. Number of departments having Research projects funded by government and non-government agencies during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
4	3	1	0	0

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
4	3	0	0	0

3.2.4.2. Number of departments offering academic programes

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18	
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- Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development during the last five years.
  - 3.3.2.1. Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
19	9	8	8	7

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
15	8	4	8	6

Remark: Revised values as per supporting data attached

- 3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following:
  - 1. Inclusion of research ethics in the research methodology course work
  - 2. Presence of Ethics committee
  - 3. Plagiarism check through software
  - 4. Research Advisory Committee

Answer before DVV Verification: A. All of the above Answer After DVV Verification: B. 3 of the above Remark: Revised input as per attached supporting data

### Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/supervisors provided at 3.2.3 metric) during the last five years

3.4.2.1. How many Ph.Ds are registered within last 5 years

Answer before DVV Verification: 18
Answer after DVV Verification: 7

3.4.2.2. Number of teachers recognized as guides during the last five years

Answer before DVV Verification: 17

# Number of research papers per teachers in the Journals notified on UGC website during the last five years

3.4.3.1. Number of research papers in the Journals notified on UGC website during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
15	12	8	10	7

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
14	10	8	10	7

Remark: Revised values as per supporting document provided

### Number of books and chapters in edited volumes / books published per teacher during the last five years

## 3.4.4.1. Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year-wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
20	4	12	13	10

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
16	3	8	5	3

Remark: Revised values considering Calendar year publications (Jan to Dec), therefore excluding 2022 publications and ISSNs publications.

### Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years

#### 3.6.2.1. Total number of awards and recognition received for extension activities from

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Government/ Government recognised bodies year-wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1	0	1	0	1

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

Remark: Revised values as per lack of mandatory supporting documents

- Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years
  - 3.6.3.1. Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
18	9	13	7	16

Answer After DVV Verification:

2021-22	2020-21		2018-19	2017-18
15	6	7	6	14

- Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years
  - 3.6.4.1. Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
656	392	763	462	967

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
656	392	763	462	967

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

# 3.7.1.1. Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
6	5	8	9	12

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
6	5	8	9	12

- Number of functional MoUs with institutions of national, international importance, other institutions, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)
  - 3.7.2.1. Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
6	3	1	2	1

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
4	2	1	1	1

- 4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)
  - 4.1.3.1. Number of classrooms and seminar halls with ICT facilities

Answer before DVV Verification: 23 Answer after DVV Verification: 23

- 4.2.2 **Institution has access to the following:** 
  - 1. e-journals
  - 2. e-ShodhSindhu
  - 3. Shodhganga Membership
  - 4. e-books
  - 5. Databases

#### 6. Remote access to e-resources

Answer before DVV Verification: A. Any 4 or more of the above Answer After DVV Verification: A. Any 4 or more of the above

4.2.3 Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

### 4.2.3.1. Annual expenditure of purchase of books/e-books and subscription to journals/e-journals year wise during last five years (INR in Lakhs)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
3.37	3.10	2.37	3.19	2.80

#### Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
3.37	3.10	2.37	3.19	2.80

- Following Capacity development and skills enhancement activities are organised for improving students capability
  - 1. Soft skills
  - 2. Language and communication skills
  - 3. Life skills (Yoga, physical fitness, health and hygiene)
  - 4. Awareness of trends in technology

Answer before DVV Verification : A. All of the above Answer After DVV Verification: A. All of the above

#### 5.2.1 Average percentage of placement of outgoing students during the last five years

#### 5.2.1.1. Number of outgoing students placed year - wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
32	25	16	10	12

#### Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
20	20	10	7	10

#### 5.2.2 Percentage of student progression to higher education (previous graduating batch).

5.2.2.1. Number of outgoing student progressing to higher education.

Answer before DVV Verification: 63 Answer after DVV Verification: 63

- 5.2.3 Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)
  - 5.2.3.1. Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, *etc.*)) year-wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
12	05	04	07	03

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
11	05	04	06	03

5.2.3.2. Number of students appearing in state/ national/ international level examinations (eg: IIT/JAM/ NET / SLET/ GATE/ GMAT/CAT,GRE/ TOEFL/ Civil Services/ State government examinations) year-wise during last five years

Answer before DVV Verification:

2021-22 2020-21 2019-20	2018-19 2017-18
-------------------------	-----------------

- Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.
  - 5.3.1.1. Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
05	00	13	03	10

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
3	00	7	4	3

Remark: Revised valued excluding participation certificates

5.3.3 Average number of sports and cultural events / competitions organised by the institution per

year

5.3.3.1. Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
05	03	06	04	06

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
3	1	2	0	1

- 6.2.3 **Implementation of e-governance in areas of operation** 
  - 1. Administration
  - 2. Finance and Accounts
  - 3. Student Admission and Support
  - 4. Examination

Answer before DVV Verification : A. All of the above Answer After DVV Verification: A. All of the above

- 6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years.
  - 6.3.2.1. Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	1	4

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	1	4

- Average number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the last five years.
  - 6.3.3.1. Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years

Answer	before	DVV	Verif	ication:
$\Delta$ IISWCI	DOIDE	D v v	v Ci i i	icalion.

- 1			
- 1			
- 1			
- 1			
- 1			

2021-22	2020-21	2019-20	2018-19	2017-18
11	6	4	1	1

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
11	6	4	1	1

- Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).
  - 6.3.4.1. Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
18	26	12	2	1

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
18	24	11	0	1

- Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years (not covered in Criterion III and V) (INR in Lakhs)
  - 6.4.2.1. Total Grants received from non-government bodies, individuals, Philanthropers yearwise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
0.16	0.08	0.10	0.10	0.10

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

Remark: HEI has opted out of this metrics

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

	1. Colon anguay
	1. Solar energy
	2. Biogas plant
	3. Wheeling to the Grid
	4. Sensor-based energy conservation
	5. Use of LED bulbs/ power efficient equipment
	Answer before DVV Verification : A. 4 or All of the above
	Answer After DVV Verification: A. 4 or All of the above
7.1.4	Water conservation facilities available in the Institution:
/.1.7	water conservation racinties available in the Institution.
	1. Rain water harvesting
	2. Borewell /Open well recharge
	3. Construction of tanks and bunds
	4. Waste water recycling
	5. Maintenance of water bodies and distribution system in the campus
	3. Maintenance of water bodies and distribution system in the campus
	Answer before DVV Verification : A. Any 4 or all of the above
	Answer After DVV Verification: C. 2 of the above
	Remark: Revised values as per attached data
	remark Techsed values as per anaenea ana
7.1.5	Green campus initiatives include:
	1. Restricted entry of automobiles
	2. Use of Bicycles/ Battery powered vehicles
	3. Pedestrian Friendly pathways
	4. Ban on use of Plastic
	5. landscaping with trees and plants
	Answer before DVV Verification: A. Any 4 or All of the above
	Answer After DVV Verification: B. 3 of the above
	Remark: Revised values as per attached supporting documents
	Remark : Revised values as per attached supporting documents
7.1.7	The Institution has disabled-friendly, barrier free environment
	1. Built environment with ramps/lifts for easy access to classrooms.
	2. Divyangjan friendly washrooms
	3. Signage including tactile path, lights, display boards and signposts
	4. Assistive technology and facilities for Divyangjan accessible website, screen-reading
	software, mechanized equipment
	5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of
	reading material, screen reading
	Answer before DVV Verification : B. 3 of the above
	Answer After DVV Verification: C. 2 of the above

### **2.**Extended Profile Deviations

ID	Extended Questions
1.1	Number of programs offered year-wise for last five years

#### Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
10	9	8	8	8

#### Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
7	7	6	6	6

#### 2.1 Number of students year-wise during last five years

#### Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1033	1094	860	979	982

#### Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1034	1093	859	979	982

#### 3.2 Number of full time teachers year-wise during the last five years

#### Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
46	46	41	42	44

#### Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
44	44	40	42	44

### 4.1 Number of eligible applications received for admissions to all the programs year-wise during last five years

#### Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
526	849	1140	1330	1140

#### Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
402	443	308	391	381

### 4.2 Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

Answer before	DVV.	Verification:
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2021-22	2020-21	2019-20	2018-19	2017-18
99	99	99	99	99

#### Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
99	99	99	99	99

#### 4.3 Total number of classrooms and seminar halls

Answer before DVV Verification: 27 Answer after DVV Verification: 27

#### 4.4 Total number of computers in the campus for academic purpose

Answer before DVV Verification: 167 Answer after DVV Verification: 167