SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

DR. B. C. ROY ENGINEERING COLLEGE , DURGAPUR

JEMUA ROAD, FULJHORE
713206
www.bcrec.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Dr. B. C. Roy Engineering College, Durgapur (BCREC) is a private self-financed Durgapur based Engineering College promoted by Dr. B. C. Roy Engineering College Society imparting quality education to the students since 2000 with well set Vision and Mission**.**

The Institute is spread over 10 acres of land with good infrastructure and highly skilled professionals. All programmes of this college are approved by the All India Council for Technical Education (AICTE). The college is affiliated to Maulana Abul Kalam Azad University of Technology (MAKAUT), West Bengal (formerly known as West Bengal University of Technology (WBUT).

There are total **13 (thirteen) programs** in the Institute, **7(seven) Under Graduate Programs**, viz. B.Tech in Civil Engineering, Computer Science Engineering, Electronics & Communication Engineering, Electrical Engineering, Mechanical Engineering, Information Technology and Instrumentation and Electronics Engineering. The college offers **6 (six) Postgraduates programmes** M.Tech in Computer science and Engineering, Mechanical Engineering, Modern Communication Engineering, Power System Engineering and Master of Business Administration and Master of Computer Applications. Two of its UG programs, **Electronics & Communication Engineering (ECE) and Computer Science & Engineering (CSE) are re-accredited by NBA.** Two other UG Programs, Mechanical Engineering and Information Technology are awaiting the visit of Expert team of NBA.

The Institute is having approx. 3029 students in its roll. The Institute imparts quality education to the students to achieve sought after professionals. The Institute follows the syllabi prescribed by MAKAUT and follows a rigorous academic delivery plan integrated with ICT enabled teaching-learning processes. Adequate emphasis is given for co-curricular and extra-curricular activities. Encouragement of students' innovative ideas and entrepreneurial skills i.e. start-up culture is a major strength of the college.

The Institute has a very strong, experienced, and highly dedicated group of faculty members, with around 60 Ph.D. holders, having expertise in varying areas. The college has an active Research and Development Cell to promote research initiatives among the faculty and students.

BCREC continues to adopt innovations in academics and administration to emerge as a benchmark setter in engineering and management education in line with the Vision of the Institute.

Vision

To transform the institution into a global centre of learning through the synergic application of creativity, innovation, and discipline.

Mission

The Institute achieves its vision through the following mission statements:

- Create ideal ambience for learning and growth
- Help students inherit value-systems, be creative and agile thinkers
- Establish Discipline, Value Added Education and Training & Placement as three core values
- Building capabilities among students to lead from the front as also be a team player
- Develop a symbiotic relationship between the institution, society, and the community, for mutual betterment
- Expand the Vistas of higher learning in Technology and Management Fields, including Post Graduate Studies and Research
- Encourage global vision and integration with International Best Practices for Local, Regional and National Development

The Institute's **DISTINCTIVE CHARACTERISTICS** are reflected in the following aspects of the **Mission statement:**

a. Addressing the needs of society:

- Preference for the economically challenged and marginalized – bringing them to the mainstream.
- Transforming the self and the society.

b. The students it seeks to serve:

- Holistic Education
- Integrating Academic Excellence with Human Excellence

Academic Excellence

Training the faculty fraternity to go beyond the academic requirements and inculcate in the student's intellectual curiosity.

Human Excellence

Training the students in life skills such as Decision making, Teamwork, Value Education, and Character Formation

c. Institute's Tradition and Value Orientation

Inculcating the values of justice, love, sharing, equity, truth

QUALITY POLICY

The Institute is committed to impart quality "Education and Training" that satisfy the requirements of its students in the fields of "Engineering, Pharmacy and Management" and its aim is to be an Institute of Excellence in global terms in the field of quality technical education through continual improvement. The Institutes facilitate its faculty and support staff to update their knowledge and skill to match the dynamics of industrial and technological development.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

1. Effective leadership of the members of the Dr. B. C. Roy Engineering College Society with passion towards working for academic excellence in the college.
2. Strategically located in the heart of Durgapur city
3. Conducive environment and state-of- art Infrastructure; sprawling campus with amenities like auditorium, hostel accommodation, intercom facilities, Wi-Fi, cafeteria, 500 KVA genset and UPS for power backup and has ventilated & equipped laboratories, clean potable water. Good indoor and outdoor Sports Facilities for students and staff.
4. Learner centric and ICT enabled Teaching–Learning process, to meet the needs of the millennials.
5. Qualified, committed and experienced faculty with about 25% possessing Ph. D. degrees with very good faculty retention.
6. Consistently very good student enrolment ratio
7. Graduation rate with good placements and excellent personality development training programs; Institute has a strong Placement and Training Department which ensures that most of the eligible students are placed in good companies.
8. Career Counseling of students for competitive examinations.
9. Establishment of student professional chapters like IEEE, CSI , IE(I) etc.
10. Value added programs like Entrepreneurship Development Cell, NSS Cell, NCC Cell, etc.
11. Mentoring and Monitoring of the students on a regular basis.
12. Fully automated Central library with over 88504 volumes.
13. Faculty research publications in national and international journals/conferences along with book publications.
14. Faculty members are encouraged to organize/participate in the workshops/seminars/ Conferences etc.
15. e-Governance system through ERP.
16. CCTV monitored campus for security.
17. Nodal Centre for IIT-Bombay Spoken Tutorial Project.
18. Recognized as one of the top 100 local chapters for NPTEL. Rating of the college is "A". The rank of this college is also in TOP **10 among all over India.**
19. Recipient of the coveted "Education Excellence Award in Engineering" for consecutive two years 2019 and 2020 from renowned Bengali News Channel ZEE 24 Ghanta.
20. Two of the UG Engineering Programs, ECE and CSE are re-accredited by NBA in 2020.
21. Another two of the UG Engineering Programs, IT and ME are awaiting the visit of Expert team.

Institutional Weakness

1. Lack of funded projects and patents
2. Industry- academy relation to be improved for projects and consultancy and extension activities
3. No technology incubators to transfer the technology to industries.
4. Quality publications and Interdisciplinary and collaborative Research needs to be strengthened.
5. Limited number of PG programs in Engineering and Technology.
6. Weak placement trends in core industries of Civil, Mechanical and Electrical engineering sectors.
7. Needs to strengthen the Alumni Association.
8. University examination questions are repetitive not-in agreement with higher order thinking
9. Communication skill of about 20% students needs to be improved.
10. The College is affiliated to MAKAUT and hence has a limitation in upgrading of curriculum and running collaborative courses with Industry and foreign universities.

11. Restricted Autonomy imposes a threat to offer new programmes with employability
12. Non-availability of adequate Associate professors to meet the norm of 1:2:6.
13. Non-availability of visiting and adjunct faculty from industry.
14. International engagement in terms of student and faculty exchange programs

Institutional Opportunity

1. Having an opportunity to become Autonomous Institution enabling design of curriculum as per industry requirements
2. New avenues of getting support in terms of research grants and technology from the funding agencies as well as industries.
3. Securing IPR for innovative ideas and products emerging out of R & D projects. A systematic approach can be adopted in order to identify projects with high potential for patent application with the assistance of IPR consultant.
4. Establishing centre of Excellence in key areas like effective research, entrepreneurship development and consultancy. With the establishment of 'EDC' opportunities are available for students to become entrepreneurs.
5. Staff and student exchanges with foreign universities and leading Institutions in India
6. Admissions of overseas students; signing of MOU with Cambridge Marketing College (CMC), UK will open the door.
7. Industrial in-plant training opportunities to students and faculty which will widen the opportunities for students internship, faculty exchange and collaborative work
8. Practicing of outcome-based education in all facets of engineering discipline.
9. Alumni pool of the institution serving in the country and abroad widens the opportunity of collaboration and network building.
10. Counseling students to appear for competitive examinations like UPSC, GATE, CAT, GMAT, TOEFL, GRE etc.
11. Enhancing contributions to green initiatives for sustainable development of society

Institutional Challenge

1. Long term sustainability without compromising standards due to horizontal growth of Institution and competitions from nearby colleges and universities; Benchmarking with premier institutes will bring out the best in students and faculty.
2. Changing admission scenario in engineering and technology due to the wide availability of other professional programs.
3. Coping with rapid change in technology and the industrial requirements and improving the employability and life skills of the students are the biggest challenge for an Institution affiliated to a University.
4. Retention of qualified faculty; it is observed that on acquiring Ph.D. degree, the faculty is prone to migrate to other institutions lured by the designation of Professor. Overcoming the shortage of Associate Professors since the faculty has opportunities of being designated as Professors in other institutions on acquiring Ph.D. degree.
5. Declining supply of quality faculty, difficulty in exposing faculty to the Industrial scenario and getting them trained to train students are other challenges.
6. Maintaining the placement consistency in IT sector jobs. Economic slowdown of the IT sector is a more

frequent phenomenon than the core sector.

7. Incorporating add-on out of curriculum course modules to comply industry requirements. This is a challenge because of lack of free slots in the academic schedule and availability of qualified faculty in the emerging areas of technology.

8. To provide exposure to faculty members in premier institute in India and international universities. International students and faculty exchange programs with foreign universities; Attracting international /national faculty and the students

9. To improve consultancy work by Faculty Members to provide consultancy services to the industry

10. Securing research funding from AICTE, DST and similar organizations.

11. Attracting and retaining very good faculty members

12. To figure in the NIRF ranking and NBA accreditation for all UG programs

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

- A three tier Academic teaching-learning planning process is followed for achieving micro level planning. The **University Academic Calendar** is a broad schedule and based on the same, semester-wise **Institutional Academic Calendar** is prepared incorporating all the academic events and extra-curricular activities to be conducted during the semester which is approved by IQAC and Academic Council. Dissemination of plan and effective content delivery is ensured through **Academic Review Process** at the end of each semester. The institute has transformed the university curriculum into **OUTCOME BASED EDUCATION** supported by **PEOs, POs, PSOs and COs & POs**.

- The Action Plan specifies that all the students will have to study common courses at the first-year level and branch-specific courses including elective courses from second year onwards.

- Curriculum Enrichment is achieved through **Beyond Syllabus Activities and Value Added Courses** imparting transferable and life skills in the form of MOOCs courses through NPTEL, Coursera, etc. and programs on extra-curricular and co-curricular activities. Institute has the provision of various committee activities which contribute to sensitizing students to cross-cutting issues like Gender, Environmental Sustainability, Human Values, and Professional Ethics for the development of creative and divergent competencies.

- Institute has established a structured **Feedback System (from Students, Faculty Members, Alumnae, and the Industry)** which is collected as per the schedule and reviewed with **corrective mechanism** for improvement**.**

- All the efforts are made to provide an opportunity to the students to become competent professionals by the completion of their program of study and excel in their career opportunities.

Teaching-learning and Evaluation

- Institute strives to continually improve the efficiency and effectiveness in assessment of Teaching, Learning and Evaluation Processes. The student centric education is deployed through experiential, individual, participative and collaborative learning modes catering to the learning needs of diverse of students. Efforts are taken to identify Slow Learners and Remedial Coaching is provided for them.

- After adopting the OBE system, POs, PSOs and COs are defined for all the programs and the methodology for attainment and evaluation is established. Based on the attainment levels, add-on efforts are identified for incremental improvement.

- Traditional teaching has been replaced with more innovative and creative ways of disseminating, sharing and facilitating knowledge development in students that includes Lecture capture solution, workshops, technical seminars, group projects, industry visits, quizzes, assignments, group discussions, and so on.
- IQAC has taken steps to enhance the potential of ICT enabled teaching and learning and to maximize the use of **Learning Management System** through an indigenous software to ensure transparency in the virtual teaching-learning process.
- Many reforms are introduced in the internal assessment system and the system is made robust and transparent with clear guidelines. Standard procedures exist for examination related grievance redressal.
- Each faculty member is assigned with a batch of twenty students for Mentoring to provide counselling, guidance and monitoring for their academic progress and other issues.
- An established feedback mechanism is in-practice for the evaluation of Teaching - Learning Process and thereby necessary corrective mechanism is initiated based on the suggestions/recommendations made in IQAC and Academic Council.

Research, Innovations and Extension

- Institute is very proactive in establishing various platforms for research, innovation, and extension activities. Research culture is promoted by establishing infrastructures such as **Research and Development Cell** and **Entrepreneurship Development Cell**.
- R&D Cell help students to transfer their innovative ideas into their projects. Institute encourages faculty and students to take up in-house and collaborative research projects in their domain expertise as well as in interdisciplinary areas. At present, 27 research proposals have been submitted to different funding agencies.
- More than 10 faculty members are recognized as Ph.D. supervisors and many scholars enrolled under them have already been awarded Ph.D. degree.
- Several bodies like IEEE, CSI students' chapters are registered for conducting professional activities.
- So far, a couple of national conferences and International conferences are conducted. Faculty members are encouraged to publish papers in conferences/Journals in India and abroad and attend FDPs. Institute encourages faculty members in authorizing books, publications, newsletters and also to conduct/attend workshops, seminars, conferences etc. for updating of their technical knowledge.
- Programmes to encourage industry-academia interface are regularly conducted.
- In pursuit of its service to community and society, Institute has set up platforms such as NSS and NCC units. Students are sensitized towards cleanliness, health, environmental issues and they also participate in extension activities with NGOs to serve the neighbourhood community. The students also host Blood Donation and Organ Donation camps.
- To promote entrepreneurship amongst our students, EDC is organizing seminars/workshops with Industry people in collaboration with NEN so that students are motivated for start-ups.

Infrastructure and Learning Resources

- BCREC Society has always prioritized provision of adequate infrastructure facilities, in many instances, over and above the AICTE norms. The Institute has state-of-the-art infrastructure viz., classrooms, seminar halls, Auditorium, laboratories, Wi-Fi connectivity, Language Lab, Computer Center, a well-established Training and Placement department, health centre facilities and Hostel accommodation for boys and girls. In addition, there is also transport facility for the students.

- All classrooms, seminar halls, computer labs are equipped with ICT facilities. The laboratories have state of the art equipment which is regularly upgraded to comply with the current market trends. The computing facilities are also regularly upgraded with latest configurations.
- The Central Library is fully automated and has over 88504 volumes in the lending and reference sections. The Institution uses the digital platform for learning resources such as NPTEL, etc.
- With 1232 computers available for student usage, the student-computer ratio is well above the prescribed norms of AICTE. The Internet bandwidth is being upgraded regularly and current speed is 100 Mbps with 1:1 contention ratio.
- The spaciousness of the campus has provided opportunity to have various outdoor sporting facilities like football, basketball, tennis, volleyball, Karate, cricket net practice etc. Good facilities are also provided for indoor games and Gymnasiun for boys and girls with two dedicated trainers.
- The Institute has Estate and Campus Administration Office which manage maintenance and upkeep of infrastructural facilities through in-house and contractual maintenance.
- The vibrant environment coupled with the clean-Green campus ensures the all-round development of the students.

Student Support and Progression

- The Institute has a very good student support and progression system for holistic development of every student.
- The welfare measures include insurance coverage for all the students, facilitating the sanction of scholarships under WBFS and SWC for poor students and recommending for various Merit-cum-Means Scholarships of Central / State Governments.
- Career Counselling is offered to the students by Training & Placement Cell to help them explore various career options. Students interested in pursuing higher studies are provided guidance for competitive examinations, viz. GATE, etc. Pre-placement training sessions are organized to offer training to the students in coordination with external agency. Weak students are offered remedial coaching to compete with others in the placement selection process.
- The Institute has a well-defined student mentoring system to help each student in taking right decisions for their academic and personal growth.
- An active Alumni Association has strengthened the alumni relationship with the Institute through its yearly meetings and regular interactions. They provide guidance on career options, provide industry insights and impart knowledge on the current trends and latest technologies.
- Well-equipped recreation centre is established for physical and mental well-being of the students. The Institute has an active Student Council and various Student Chapters. Student Council comprises Cultural, Technical, Sports, and Literary Councils. Councils encourage maximum participation of students to provide an opportunity to exhibit the talent of the students.
- Students are encouraged to take part in games/sports to get relief from the academic stress.
- Feedback from the students is collected for good governance.

Governance, Leadership and Management

- The vision of the Institute emphasizes on imparting quality education and involves all its stakeholders in the decision making process. The Institute promotes decentralisation and involvement of staff in various administrative and academic activities.
- Strategic plans are framed with goals in line with the Institute's Vision and Mission statements.

Effective leadership is provided in the institution through an explicitly defined hierarchy consisting of Board of Trustees, Board of Governors, Director, HoDs, etc. The Institute has defined structure with Roles and Responsibilities at various levels of academic/ administration. The Institute practices transparent and participative governance at all levels.

- Strategic decision making at management level is available without delay as Institutional mechanism. Administrative transparency is ensured by placing organizational structure, rules, regulations and procedures pertaining to recruitment, service, promotions and grievance in Service Rule of the Institute. Adoption of e-governance in certain areas of governance has strengthened the administration of the Institute.
- A comprehensively designed **Appraisal system** for the staff members is used for annual assessment.
- Staff Welfare is ensured through tangible and intangible benefits viz. EPF, ESIC, Mediclaim, etc.
- The progress of the Institute is reviewed on regular basis for the effective implementation of Quality Policy and Plans.
- The Institution has well established Internal Quality Assurance Cell (IQAC) for accreditations and plays a major role in inculcating quality culture in the Institute.
- Financial audits are conducted every year and the Balance Sheet is available in public domain. The major source of income is tuition fees.

Institutional Values and Best Practices

Institute strongly believes in imparting value-based education where learners are nurtured with respect to gender equity, environmental consciousness, sustainable waste management practices, green initiatives, and professional ethics. The Institute has taken measures to implement a Solar Power Plant in the campus as it believes that a proper eco-system needs to be created by practice. In addition, the campus is made differently-abled friendly by providing all the necessary facilities.

The Institute believes that the best practices will have a larger impact on the students. It has a number of best practices of which two noteworthy best practices are elaborated:

- **Career Guidance Training:** In today's competitive markets, right path of career choice matching with the potential and the interest is not an easy task for the students. Career growth culture among students is to facilitate their transition from college-level education to face the challenges of the future.
- **Content beyond Curriculum**: There is often a mismatch between what is learnt in the institution and the industrial expectations from the graduate engineers. In order to bridge this gap and make students industry-ready, much emphasis is given for teaching **content beyond the regular curriculum**.
- Institute's distinctiveness performance lies in its strong learner-centric approach with which it strives to generate competent professionals and responsible global citizens who are sensitized towards the needs of the society. Institute offers the right blend of an appropriate toolset, a professional skill set and a motivated mindset for its learners to excel.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	DR. B. C. ROY ENGINEERING COLLEGE , DURGAPUR
Address	Jemua Road, Fuljhore
City	DURGAPUR
State	West Bengal
Pin	713206
Website	www.bcrec.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	Pijush Pal Roy	0343-2501353	9431506000	0343-2504059	info@bcrec.ac.in
IQAC / CIQA coordinator	Sanjay Sengupta	0343-2504106	9064179712	0343-2504121	sanjay.sengupta@bcrec.ac.in

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details	
Date of establishment of the college	21-08-2000

University to which the college is affiliated/ or which governs the college (if it is a constituent college)		
State	**University name**	**Document**
West Bengal	Maulana Abul Kalam Azad University of Technology	[View Document](#)

Details of UGC recognition		
Under Section	**Date**	**View Document**
2f of UGC		
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	**Recognition/Approval details Institution/Department programme**	**Day,Month and year(dd-mm-yyyy)**	**Validity in months**	**Remarks**
AICTE	[View Document](#)	15-06-2020	12	

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Jemua Road, Fuljhore	Rural	10.11	35686

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Civil Engineering	48	Class XII and entrance examination or diploma	English	75	68
UG	BTech,Electrical Engineering	48	Class XII and entrance examination or diploma	English	150	134
UG	BTech,Mechanical Engineering	48	Class XII and entrance examination or diploma	English	150	115
UG	BTech,Computer Science And Engineering	48	Class XII and entrance examination or diploma	English	150	137
UG	BTech,Electronics And Communication Engineering	48	Class XII and entrance examination or diploma	English	150	138
UG	BTech,Information Technology	48	Class XII and entrance examination	English	75	69
UG	BTech,Instrumentation And Electronics	48	Class XII and entrance examination or diploma	English	75	17

PG	Mtech,Electrical Engineering	24	BTech or BE and entrance examination	English	18	2
PG	Mtech,Mechanical Engineering	24	BTech or BE and entrance examination	English	18	4
PG	Mtech,Computer Science And Engineering	24	BTech or BE and entrance examination	English	18	2
PG	Mtech,Electronics And Communication Engineering	24	BTech or BE and entrance examination	English	18	1
PG	MBA,Masters In Business Administration	24	Any graduate and entrance examination	English	60	60
PG	MCA,Masters In Computer Applications	36	Any graduate and entrance examination	English	60	24

Position Details of Faculty & Staff in the College

Teaching Faculty											
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				18				37				150
Recruited	14	1	0	15	8	0	0	8	110	40	0	150
Yet to Recruit				3				29				0
Sanctioned by the Management/Society or Other Authorized Bodies				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0

Non-Teaching 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				88
Recruited	77	11	0	88
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				66
Recruited	59	7	0	66
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	14	1	0	6	0	0	21	14	0	56
M.Phil.	0	0	0	0	0	0	1	0	0	1
PG	0	0	0	2	0	0	88	26	0	116

Temporary Teachers									
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	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	0	0	0

Part Time Teachers									
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt.	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	2	1	0	3

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?	**Male**	**Female**	**Others**	**Total**
	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
PG	Male	95	29	0	0	124
	Female	88	27	0	0	115
	Others	0	0	0	0	0
UG	Male	1144	1079	0	0	2223
	Female	297	270	0	0	567
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years						
Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	22	27	30	19
	Female	3	6	5	1
	Others	0	0	0	0
ST	Male	3	3	3	4
	Female	3	2	0	1
	Others	0	0	0	0
OBC	Male	51	71	74	66
	Female	7	17	13	13
	Others	0	0	0	0
General	Male	517	505	514	589
	Female	165	169	179	181
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		771	800	818	874

Extended Profile

1 Program

1.1

Number of courses offered by the Institution across all programs during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
995	1022	986	986	1062

File Description	Document
Institutional data prescribed format	View Document

1.2

Number of programs offered year-wise for last five years

2019-20	2018-19	2017-18	2016-17	2015-16
13	13	13	13	15

2 Students

2.1

Number of students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
3029	3163	3222	3350	3376

File Description	Document
Institutional data in prescribed format	View Document

2.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
458	491	491	491	508

File Description	Document
Institutional data in prescribed format	View Document

2.3

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

2019-20	2018-19	2017-18	2016-17	2015-16
882	861	818	907	859

File Description	Document
Institutional data in prescribed format	View Document

3 Teachers

3.1

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

2019-20	2018-19	2017-18	2016-17	2015-16
168	171	192	212	210

File Description	Document
Institutional data in prescribed format	View Document

3.2

Number of sanctioned posts year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
0168	171	224	224	230

File Description	Document
Institutional data in prescribed format	View Document

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 55

4.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
1138.22	1208.96	1317.52	1484.31	1532.62

4.3

Number of Computers

Response: 1232

08-04-2021 09:43:06

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The Institution ensures effective curriculum delivery through a well planned and documented process

Response:

The institute ensures effective curriculum delivery through:

1.Planning for curriculum

2.Teaching-Learning Process

3.Effective course delivery

4.Self-Learning Initiatives

Planning for Curriculum

Dr. B.C Roy Engineering College (BCREC), affiliated to Maulana Abul Kalam Azad University of Technology (MAKAUT), follows the curriculum as specified by the university. The university regularly updates its curriculum for UG programs and PG programs which ensures that the updated curriculum meets the industry expectations required from the students in the prevailing scenario. Department Academic Councils (DACs) of each department discusses the new updated curriculum at a length to identify the curriculum gaps in the curriculum and proposes the ways to bridge /address the curriculum gaps. The Class Representatives (CRs) as a part of Students' Council also put their suggestion before the DACs. Thereafter, the suggestions of the DACs are placed before the IQAC/Academic Council of the Institute for further discussion and finalization.

Institute prepares its own semester wise Academic Calendar well in advance before commencement of semester considering on the basis of Academic Calendar of the University. Subjects are allotted to the faculty members following democratic process considering the faculty specialization, experience and workload for the forthcoming semester, after the end of the previous semester, on finalization of Curriculum Planning.

The teaching plan is prepared by the individual department under the guidance of the Head of the Department. It is ensured that the minimum contact hours for theory and laboratory as specified in the university syllabus is strictly maintained. The course coverage is periodically assessed and any related issues/discrepancies /modifications are discussed in the DAC meeting for effective curriculum delivery. The feedback of the students is regularly obtained through CRs which is an integral and indispensable part of curriculum planning and implementation.

Teaching-Learning Process

Effective curriculum delivery starts by disseminating the course objectives through course handout and lecture schedule. The day-to-day teaching learning process is driven by tutorials, guest lectures, video classes, seminars, workshops, group assignments and projects as-and-when needed apart from the regular lectures. The curriculum delivery is enhanced by the utilization of LCD equipped classrooms and laboratories.

Effective course delivery is ensured using various instructional methods and pedagogical initiatives such as lectures, tutorials, Laboratory experimental work, Project Work, Continuous Assessments (CAs 1,2,3, 4) for the theory subjects and for practical subjects (PCA 1 & PCA 2) as per University guidelines, etc. depending on the course and the situation creating the best learning environment for the students.

Class Routine Schedule provides Tutorial classes for the subjects which require hands-on experience, practical lessons, etc. Remedial classes are conducted for weak learners.

Self-Learning Initiatives

Our institute is a recognized local chapter of NPTEL. Students and faculty are encouraged to get certified in relevant NPTEL courses. Student Chapters and Entrepreneurship Cell activities inculcate self-learning in the students. Apart from R&D projects, students are also encouraged to design and develop prototype models which later can be taken up as start-ups. The institution also provides avenues for students to demonstrate their co-curricular activities through various annual technical events like Tech Fest.

File Description	Document
Upload Additional information	[View Document](#)
Link for Additional information	[View Document](#)

1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

Response:

The process of preparing the academic calendar and its adherence is mentioned below:

A tentative academic calendar for the institute is prepared following the calendar of university. Generally, the calendar is prepared semester-wise. The holidays considering Govt./University holidays and tentative dates for vacations are mentioned in the calendar. Any required changes/ reforms are included in the calendar for the present semester. The number of continuous assessments to be conducted is mentioned in the calendar following the guidelines and timeline provided by the university. Along with the internal assessments, the co-curricular and extracurricular activities are also mentioned in the calendar. While preparing the calendar of the prevailing semester, compliance of previous years' academic calendars and deviations, if any, are taken as reference.

The tentative academic calendar prepared from the Director's office is discussed in the Academic Council in presence of all the Heads of Departments as well as in IQAC and distributed for circulation for any feedback. Any Suggestion/Feedback regarding the calendar are communicated by the employees (faculty

members and staff) to the Director's office and the same are incorporated, if necessary, after due deliberations in the Academic Council/IQAC. Thereafter, the final version of the academic calendar is published and circulated. It is published at the beginning of every semester.

Along with Academic Calendar, the Activity Calendar is also prepared to conduct extra-curricular and co-curricular activities for the students as part of Mandatory Additional Requirements (MAR) of the University,

The dates mentioned in the academic calendar are generally followed by the institute. In case there are changes at the university level the same is taken care of by modifications in the academic calendar of the institute.

The academic calendar contains the dates for the following categories of activities:

1. Commencement of class
2. Orientation and Mandatory Induction programme as specified by the University
3. Extra-curricular events like NSS, NCC, Blood Donation and Organ Donation Camps
4. Co-curricular events like student chapter activities
5. Mandatory Additional Activities as per requirement of the University
6. MOOCs activities (NPTEL courses, IIT-Bombay Spoken Tutorial Project, etc.)
7. Mentoring activities like individual interaction between Faculty Mentors and Student Mentees as per guidelines of the University
8. It includes specific dates for conduction of **Continuous Evaluations - CA1, CA 2, CA 3 and CA 4 for theory subjects and PCA 1 & PCA 2 for Practical papers,** as prescribed by the University
9. End-semester examinations (Practical & Theory) for University assessments
10. Commemorative events, Holidays and Semester-break

- For continuous internal evaluation (CIE) process the institute adheres to the academic calendar prepared by it **based on the academic calendar of the affiliating University**.

- All activities of CIE are optimally completed as per the academic calendar, except in exceptional cases e.g. changes in University calendar or local events like strike, road closure impacting passage of the students and the teachers.

File Description	Document
Upload Additional information	[View Document](#)
Link for Additional information	[View Document](#)

1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years

1. **Academic council/BoS of Affiliating university**
2. **Setting of question papers for UG/PG programs**

3.Design and Development of Curriculum for Add on/ certificate/ Diploma Courses

4.Assessment /evaluation process of the affiliating University

Response: B. Any 3 of the above

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Details of participation of teachers in various bodies/activities provided as a response to the metric	<u>View Document</u>
Any additional information	<u>View Document</u>

1.2 Academic Flexibility

1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

Response: 100

1.2.1.1 **Number of Programmes in which CBCS / Elective course system implemented.**

Response: 13

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

1.2.2 Number of Add on /Certificate programs offered during the last five years

Response: 12

1.2.2.1 **How many Add on /Certificate programs are offered within the last 5 years.**

2019-20	2018-19	2017-18	2016-17	2015-16
6	5	1	0	0

File Description	Document
List of Add on /Certificate programs	[View Document](#)
Brochure or any other document relating to Add on /Certificate programs	[View Document](#)
Any additional information	[View Document](#)

1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years

Response: 8.63

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

2019-20	2018-19	2017-18	2016-17	2015-16
631	672	35	0	0

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	[View Document](#)
Any 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:

The Institution believes that integrating cross cutting issues with the curriculum would create positive effect on the students in terms of their education and societal commitment. The Institution provides a platform and propagates initiative where the amalgam of social awareness coupled with professional responsiveness gets evident through the subjects offered by the University and different creative activities relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics.

1. Gender Sensitization: Sensitizing today's youth about the gender discrimination practices around us would allow them to be more sensitive, empathetic and responsive towards them. The institute believes in creating a space where each individual is treated equally and respect. The institute holds seminars on gender issues which not only makes the students aware of the atrocities against women in the society but also helps them understand gender in the light of gender spectrum.

The Class Representatives for all the semesters are equal, where a girl CR and a boy CR take care of the class related issues. Institute has about 45% girl students in overall student population. Faculty/Staff population is well balanced with both genders. The college provides a rock-solid platform where everyone feels welcomed and encouraged without any gender discrimination. NSS, NCC, E-Cell are headed by lady faculty members and the Administrative office is headed by a lady Registrar.

2. Environment & Sustainability: Environment and Sustainability is one of the ardent issues that have been addressed by this institution with utmost care and ministration. Environment as a subject features under different subject codes for different branches in different semesters.

Regular awareness program through posters, models, PPT presentation, talks and seminars are done to create an understanding and awareness among all to protect our environment and promote an ecological balance. **'Tree plantation'** and '**Clean India- Swachh Bharat Campaign'** are the popular drives that act as the document of this synthesis apart from this the Mandatory Induction Program for the 1st year students which also provides a chance to interact with the local people, understand the local structure, background and environment. The sync of concrete and green is also noteworthy with grass-capitates playground and fringing decoration of trees.

Environmental Science is taught in all programmes as a compulsory subject. Many Projects are undertaken by final year students relating to environmental issues like climate change, water pollution, sewage treatment, air pollution, rain water harvesting, runoff modelling, flood prediction, green concrete, etc. and sustainability issues like energy conservation, environmental protection, use of natural resources etc.

3. Human Values and Professional Ethics: Human Values and Professional Ethics and & Human Rights are included in the curriculum and are taught with different subject codes for different branches, with the newest addition of the paper- **The Constitution of India.**

These papers primarily give the nuances of Human Values and Ethics and how they are to be implemented in day to day social and professional life. Lecture sessions and seminars in spirituality by monks from the different missions are conducted with live yoga sessions and reach out services.

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

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

Response: 2.97

1.3.2.1 **Number of courses that include experiential learning through project work/field**

work/internship year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
30	30	30	30	30

File Description	Document
Programme / Curriculum/ Syllabus of the courses	[View Document]()
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	[View Document]()
Any additional information	[View Document]()

1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year

Response: 27.2

1.3.3.1 **Number of students undertaking project work/field work / internships**

Response: 824

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	[View Document]()
Any additional information	[View Document]()

1.4 Feedback System

1.4.1 *Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2)Teachers 3)Employers 4)Alumni*

Response: A. All of the above

File Description	Document
Any additional information (Upload)	[View Document](#)
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	[View Document](#)
URL for stakeholder feedback report	[View Document](#)

1.4.2 Feedback process of the Institution may be classified as follows: Options:

  1.**Feedback collected, analysed and action taken and feedback available on website**
  2.**Feedback collected, analysed and action has been taken**
  3.**Feedback collected and analysed**
  4.**Feedback collected**
  5. **Feedback not collected**

Response: E. Feedback not collected

File Description	Document
Upload any additional information	[View Document](#)
URL for feedback report	[View Document](#)

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Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 77.02

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

2019-20	2018-19	2017-18	2016-17	2015-16
765	803	819	875	916

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

2019-20	2018-19	2017-18	2016-17	2015-16
1017	1092	1092	1092	1128

File Description	Document
Institutional data in prescribed format	[View Document]
Any 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: 23.66

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

2019-20	2018-19	2017-18	2016-17	2015-16
89	126	125	104	135

File Description	Document
Average percentage of seats filled against seats reserved	[View Document]
Any 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:

It is a well-acknowledged fact that in every year diversified students from different backgrounds join the institute. The ability and extent of learning of the students are highly influenced by their social and economic background as well as their personal abilities and other attributes. The institute has developed a structured mechanism for assessing the learning levels of the students and continuously monitors the same for improving their academic as well as overall performance.

Efforts to identify the students' learning levels:

- Students are made aware of the subjects and their pre-requisites by the faculty members. The initial informal interaction during Induction Programme just after the entry into the institute, coupled with continuous evaluation (through Quiz, Debate, Group Discussion, etc.) helps the teachers to assess the learning level of the students and identify and differentiate the slow learners and advanced learners in the classroom.
- The performance of the student in the first Continuous Assessment (CA1) enables the faculty members to identify the Advanced Learners and the Slow Learners.
- During the progress of semesters, the advanced learners and slow learners are identified based on their overall performance of previous semesters, orientation towards academics, feedback from subject teachers.
- Mentees' learning ability is identified by the Mentors based on their academic performance, behavior, social and psychological aspects during the individual interaction session.

Program for slow learners:

- Each mentor is assigned with a group of students per year to provide one to one counseling for overall improvement.
- The humanities department arranges the preliminary spoken English and communication classes for the benefit of students of the vernacular medium as well as for those whose proficiency in English is low.
- The different departments of BCREC conduct remedial classes and Extra laboratory classes and provide course notes for students who are slow learners. Through these classes, the basic skills of the students are improved both in Maths and English.
- Personality Development programs are conducted for students who have good technical skills but are unable to express their knowledge.

Program for Advanced learners:

- Distinction with embossing the names of the departmental toppers, i.e. Advanced Learners in the entrance of the main administrative building making visible to all.
- Best Outgoing and Best Achiever Awards for final year students of B.Tech, M.Tech, MBA, and MCA separately

- Advanced learners are encouraged to attend workshops, symposia, seminars, etc. and publish papers.
- Advanced learners are motivated to participate in technical competitions to gain knowledge of the latest developments of technology.
- Advanced learners are encouraged to be members of various student chapters like IEEE, CSI, E-Cell, etc.
- Students are encouraged to inculcate research orientation by involving them in innovative projects and research work which is time to time presented in different exhibitions of academics and industry.
- Students are encouraged to enroll themselves and get certified in MOOCs courses and courses offered through SWAYAM.
- Students are encouraged to participate in competitive examinations e.g. GATE, GRE, CAT, etc.

File Description	Document
Upload any additional information	[View Document](#)
Past link for additional Information	[View Document](#)

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

Response: 18:1

File Description	Document
Any 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:

Teaching-Learning is a phenomenon where both the teacher and the students are learning. The teacher is refining his/ her subject knowledge and effective teaching skills, whereas the student finds it easier to understand the subject and its application. Traditional teaching has been replaced with more innovative and creative ways of disseminating, sharing, and facilitating knowledge development in students. Institute adopts following student-centric methods which are central to the Outcome-Based Education (OBE) system. The faculty has integrated several student-centric teaching-learning processes into their regular course delivery in order to improve the attainment of Course Outcomes, Program Outcomes, and Programme Specific Outcomes.

Course Delivery Methods:

- Group discussions

- Relevant videos
- Seminars
- Mini projects
- Technical Reports/ Case studies,
- PPTs
- Real-life examples
- Simulations and experimental exercises
- Lab experimental work
- Class Assignments/Quizzes
- Introduction of flipped classroom teaching that promotes learning rather than teaching through Lecture Capture Solution which facilitates record of every lecture delivered by the faculty.

Individual learning:

- E-learning platforms like NPTEL videos, SWAYAM, Coursera, IIT Bombay - Spoken Tutorial Project, etc. are provided to facilitate independent learning wherein students can access course contents online which also bridge the gap from classroom learning, and also supplement advanced learning.
- Students are strongly encouraged to enroll and get certification for such add-on online courses for self-paced self-learning.
- Spoken Tutorial Project allows additional hands-on experiments to be performed in self-learning mode.

Experiential learning (learning through hands-on experiments)

- Student-centric learning is provided in the practical sessions.
- Lab Experiments to practically test the concepts which are theoretically learned in the Classroom
- Students write the experiment/program in their observation book and record the result, which is documented in the Record Book.
- Internships/ Vocational training usually for one month
- Group Projects – Final year projects of all branches through which experiential learning achieved
- Technical Fest & Workshops on robotics, simulation, etc
- Short Visit to nearby industries and research labs
- Students are provided seed funds/ project funding for undertaking innovative R&D projects involving the application of emerging technologies to solve engineering and social problems.

ICT based learning

- ICT based learning is promoted through web-assignment, web-quiz, etc. Analytical and presentation skills are shaped through a case study. Interest in research is inculcated through paper presentations and publications.

Participative /collaborative learning (students are engaged in a common task where they are accountable to one another)

- Competitive and Team Spirit are developed through Group Discussions, Debates, Management Games, and Panel discussions.
- Participating in intra college, state level and national level project competitions, design contests,

and various technical festivals
- Invited talks by experts from the industry and academia
- MOUs are signed with leading industries/institutes to bridge the gaps in the curriculum.

Problem-based Learning develops a student's critical thinking to come out with alternatives in a practical situation.

File Description	Document
Upload any additional information	[View Document](#)
Link for additional information	[View Document](#)

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Response:

The institute always strives to make the latest Information and Communication Technology (ICT) infrastructure available for use by its students, faculty, and technical staff members in the campus. The learning experiences of the students are enriched with the latest state-of-the-art educational technologies used by the teachers and by adequate use of the ICT enabled tools to its optimum level for making the teaching-learning process effectual.

- The institute has dedicated digital classrooms for all programs. The use of multimedia teaching aids like LCD projectors, classrooms with internet-enabled computer/laptop systems are usually in use in digital classrooms.
- The institute has multiple seminar halls and two auditoriums equipped with multimedia facilities using ICT tools. Invited talks and webinars are conducted regularly in seminar halls using ICT facilities.
- The institute encourages the teachers to use modern teaching aids.
- The program-wise class routine includes the details of the regular classes to be conducted through ICT enabled tools.
- Faculty members prepare PowerPoint Presentations (PPTs) and other materials like relevant videos and animations, etc. to deliver the lectures to create the best learning environment for the students.
- Online Examination System developed internally can be accessed by the students inside the campus through LAN as well as through the internet outside the campus.
- Group assignments are given with eliciting questions for which the learners have to be actively engaged in the library.
- Grooming Classes/communication skill classes/Mock tests are conducted with the help of ICT enabled tools to face campus interviews.
- Online resources such as DELNET, NPTEL, and SPOKEN TUTORIAL-IIT Bombay and other e-learning resources are available.
- The Audio-Visual Aids are utilized effectively by the faculty members to demonstrate the concepts to the students to enhance the learning experience.
- Massive Open Online Courses (MOOCs) are integrated into the curriculum for a choice-based credit system through which students are able to earn Honours along with their B.Tech degree in

fulfilling a minimum requirement of credits.

- Besides printed books and journals, the library subscribes to a large number of e-journals in the field of Engineering, Science, and Management with facilities for accessing online and offline databases.
- Hard disk containing web and video courses (offline) from NPTEL are accessible to faculty and students from the server installed in the library / NPTEL local chapter office in the campus.
- Google Platform is extensively used by the faculty members for sharing recorded lectures. Frequently regular class evaluations are done using this platform to check the learning level of the students.
- The institute uses the integrated academic management system of the university to manage the entire academic process. In addition to this, the institute has implemented an ICT enabled system for student admission and on-line payment of semester fees and hostel charges.
- These innovative teaching techniques help the learning experience of students effective, enjoyable, attentive, interactive and communicative.

File Description	Document
Upload any additional information	[View Document](#)
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	[View Document](#)

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

Response: 22:1

2.3.3.1 Number of mentors

Response: 140

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	[View Document](#)
mentor/mentee ratio	[View Document](#)
Circulars pertaining to assigning mentors to mentees	[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: 95.86

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	[View Document](#)
List of the faculty members authenticated by the Head of HEI	[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: 27.59

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

2019-20	2018-19	2017-18	2016-17	2015-16
60	58	52	45	42

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	[View Document](#)
Any 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: 9.7

2.4.3.1 **Total experience of full-time teachers**

Response: 1678.88

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	[View Document](#)
Any additional information	[View Document](#)

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

Response:

The institute prepares its own academic calendar well in advance before the commencement of the semester based on the Academic Calendar notified by the University. It includes specific dates for completion of syllabus coverage, the conduct of Continuous Assessments (CAs) for theory, sessional and laboratory papers. The internal assessment process is communicated to the students by the respective faculty in the first week of the semester as well as during the orientation program for the first-year students. Further, changes in schedules, patterns, methods if any, are immediately notified to the students through classroom briefing by the concerned subject teachers and the department notice board.

Till 2018, two written class tests were conducted to evaluate students internally as per the norms of the University. From 2019 onwards, as per University norms, internal assessment for theory papers is done through 4(four) Continuous Evaluations (CE).

The Institute conducts two internal Class Tests, one is a written Class Test and the other one is an Online Class test. The other two assessments are conducted through Quiz, Assignments (home + class), Viva, etc. However, no restrictions are imposed by the University on taking four written tests also.

The institute has prepared standard formats for question papers depending upon the type of the subject based on Course Outcomes (COs) for Continuous Evaluations (CE). While setting the questions, previous years' university exam questions are referred. Departmental Examination Committee members evaluate the quality of question papers and coverage of the entire COs in the CE. The first CE question paper is prepared in such a way that 2 to 3 COs are attained, Second CE another 2 to 3 COs are attained. The COs are not only attained by CE but also by assignments and tutorials.

Faculty members are trained periodically on fairness and transparency with respect to the evaluation process. The syllabus for the test is communicated to the students by the class teachers well in advance. The question papers are verified by the Head of the Department of each department for any discrepancies.

The answer scripts of the class test are evaluated and distributed within one week of the internal exams for verification of marks. It is a practice of the college to show internal examination answer books after evaluation to the students in the class for self-evaluation. Students are free to interact with the teacher to resolve grievances if any, regarding the assessment. By adopting the criteria as per the direction of affiliating University, complete transparency is maintained in the system of internal assessment which enhances the bonding between faculty members and the students. The examination system thus implemented in the Institute has total transparency.

Continuous Laboratory performance and Viva-voce are carried out for evaluation of Practical and Sessional papers.

The IQAC team checks the process of conduct of the entire evaluation process (including the level of questions, invigilation, marks allocation & attainments) and provides its recommendations for improvement on a continual basis.

File Description	Document
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, time-bound and efficient

Response:

The institute is having a well-structured mechanism to address examination related grievances in an efficient manner which is transparent and time-bound, as enumerated below.

The Central Examination Cell is headed by a faculty member as appointed by the authority and well equipped with other faculty and staff members. The Examination Cell continuously keeps in touch with the university. Centralized Roving Committee headed by the Director consisting of all Heads of the Departments, Senior Professors and Registrar monitor the total examination system during the semester examination. The college follows strictly the guidelines and rules issued by the affiliating university while conducting internal tests and semester-end examinations.

The answer scripts of all Internal Assessments are shown to the students after evaluation. If they come across any doubts, clarification is given which enables them to fare better in the future. The checked copies of the class tests are discussed with the students in the classes and in case of any problem, the subject teacher tries to resolve the same. However, if the grievance remains unresolved, a committee is formed by the Head of the Institute to address the issue.

Internal evaluation of Practical, Viva-voce, and lab copy evaluations are done in the lab only in presence of the students so that process remains transparent and grievances are minimized. The student seminars and project seminars are conducted in presence of all the students of the class and hence providing complete transparency in internal assessment.

Any malpractice during University examination is referred to the Examination Cell and is dealt with as per the guidelines of the University. The Invigilators cancel the paper and the Examination Cell mark the paper of the concerned student as "Reported Against (RA)". The above students are directed to appear before the RA Committee of the University. The aggrieved student is given an opportunity to present his case before the committee and the decision of the committee is final and binding. If the student can not substantiate his case up to the satisfaction of the Committee members, the student will have to appear for the examination once again in the next semester.

There is a rule in the University for Post Publication Scrutiny (PPS) and Post-Publication Review (PPR) after the publication of results and the students can apply through a defined process of the university. The above system facilitates the student for resolution of his/her grievance.

All the Continuous Evaluation (CE) marks for Theory, Practical and Sessional are loaded into the University portal and the students can access the same by logging into the system from their own login ids provided by the University.

Any grievances raised by the students before appearing in the university examination related to Admit Card, Registration Card etc. is dealt by Examination Cell in close coordination with the University.

The examination system thus implemented in the Institute for internal tests as well as semester examinations has resulted in transparency, time-bound, and efficient.

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

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 institute follows an outcome-based evaluation system following the guidelines of the National Board of Accreditation (NBA).

The program outcomes (POs) as identified by NBA are followed for engineering and management programmes. Program Outcomes (POs) as given by the NBA is displayed in the prominent places in all the departments and also in the website.

Program Specific Outcomes (PSOs) are identified for each program after detailed discussions and deliberations the faculty and technical staff members with stakeholders. The PSOs are also displayed in the prominent places in all the respective departments & also on the website.

University specifies the semester wise syllabus for each programme. Course Outcomes (COs) of some courses are provided by the University in the syllabi. The Institute is following the COs as specified by the University for particular courses. However, in case the COs is not specified by the university, then the same is identified following the guidelines as specified by NBA at each programme level. A brief description on writing a CO is given below.

i. The subject teacher defines the course outcomes using Bloom's Taxonomy and the same is discussed in the Departmental Academic Council in presence of the Head of the Department.

ii. After discussion/review, the COs are finalized and written for each course in every program. The COs are kept in the course file and uploaded in the website in the place of the respective department.

iii. Each Course Outcome is mapped to Program Outcomes in terms of relevance. Three levels of relevance based on the degree of correlation are used. The levels of correlation are 1 for low, 2 for medium, and 3 for high correlation.

iv. The contribution of course to each PO is expressed in terms of the average relevance of COs mapped to that particular PO. Similarly, the value computed for all the courses including first-year courses is entered for the corresponding PO and PSOs.

The agreed-upon COs form the basis for achieving POs and PSOs and thus contributing towards achieving the Mission and Vision of the Institute.

POs, PSOs, and COs are disseminated to the stakeholders through the following channels:

Digital Media

- Institute Website
- Internal ERP System

Print media

- Course file
- IQAC Audit form
- Prospectus for new admission

Outdoor Boards at prominent places

- At each department
- Inside each laboratory
- Administrative Areas

Activities/Meetings

- Orientation / Induction programme
- Presentation of the lesson plan in the first lecture
- Departmental meetings

In addition to the above, there is a continuous thrust given by the subject teacher and the mentors to make the students aware about the outcomes of any course and convince them to understand the importance of an outcome-based evaluation system.

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	[View Document](#)
Past link for Additional information	[View Document](#)

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

Response:

The academic programmes offered by the institution have a clearly stated learning outcome. It is integrated with institutional goals and objectives.

The attainment levels of the course outcomes, program outcomes and program specific outcomes are very important parameters for the outcome-based education system. This helps in creating an academic environment for achieving excellence. The efficiency and effectiveness of the process is continuously monitored, assessed and improved by taking inputs from the discussion/suggestion/decision taken in the meetings of the Department Academic Council (DAC) and in the meeting of the Academic Council of the Institute. IQAC Cell also closely monitors the assessment and attainment process.

The following methodology is used to measure the attainment of course outcomes. The attainment levels for courses are set based on the previous performance. Setting the three attainment levels helps to determine the extent of attainment of each course outcome against the set target. The attainment is measured in terms of the actual percentage of students getting the set percentage of marks or more.

Attainment of CO is calculated based on the following:

For Theory subjects:

1. Internal Evaluation (weightage 30%)

- Continuous internal assessment
- Assignments

1. External Evaluation (weightage 70%)

- University end semester theory examination

For Practical Subjects:

1. Internal Evaluation (weightage 40%)

- Lab performance
- Practical continuous assessment

1. External Evaluation (weightage 60%)

- University end semester practical examination

For calculation of CO, a threshold is considered to define the competence level (say 60%) for internal evaluation and Grade B for external evaluation. Attainment levels are decided based on the following:

Benchmark	Attainment Level	
60% of students get more than or equal to the threshold	1	
70% of students get more than or equal to the threshold	2	
80% of students get more than or equal to the threshold	3	

For each CO a target level is decided and then the level of the attainment is found out. If the attainment is

equal to or more than the target then the attainment at the CO level is achieved. The average for all COs at a course level considering the internal and external evaluation is calculated to understand whether the attainment level is reached at the course level.

Attainment of Program Outcomes and Program Specific Outcomes

At the start of the semester, the subject experts decide on the correlation of POs with COs and PSOs with POs. Once the total attainment of CO is calculated, it is used for measuring the level of attainment of POs and PSOs. If the attainment is either equal to or more than the target value, it is concluded that attainment is achieved successfully

Total attainment PO is based on:

Direct Attainment (80% weightage) and Indirect attainment (20% weightage).

Direct attainment is calculated from CO attainment based on four Continuous Assessments and Semester Examination and

Indirect attainment is calculated based on 25% Program Exit Survey + 50% Alumni survey + 25% Employer Survey.

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

2.6.3 Average pass percentage of Students during last five years

Response: 87.15

2.6.3.1 **Number of final year students who passed the university examination year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
853	752	665	779	726

2.6.3.2 **Number of final year students who appeared for the university examination year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
882	861	818	907	859

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document
Upload any additional information	View Document
Paste link for the annual report	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.13

File Description	Document
Upload database of all currently enrolled students (Data Template)	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 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: 0

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

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
List of endowments / projects with details of grants	[View Document]

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 6.55

3.1.2.1 **Number of teachers recognized as research guides**

Response: 11

File Description	Document
Institutional data in prescribed format	[View Document]
Any additional information	[View Document]

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 0

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

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

3.1.3.2 **Number of departments offering academic programes**

2019-20	2018-19	2017-18	2016-17	2015-16
9	9	9	9	9

File Description	Document
List of research projects and funding details	[View Document](#)

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Response:

The institute has created an ecosystem for innovation and other initiatives like creation and transfer of knowledge by establishing R&D Cell, IPR and Entrepreneurship Cell, Performance Appraisal System and MoU with external Agencies for creation and transfer of knowledge. The college has a **Research and Development Cel**l to motivate the faculty members and provide mechanism for submission of minor and major research proposals to various funding agencies like DRDO, DST, AICTE, DBT, etc.

Process & Systems:

1. R&D cell of the Institute consists of eminent academicians from reputed academic institutions/industry and faculty members having research inclination from inside.
2. The Cell takes every initiative to encourage the participation of students in various exhibitions and fairs, to nurture their technical expertise.
3. R&D cell takes every initiative to support and inculcate faculty members to apply for research projects to different funding agencies (Govt./Non-Govt.), tor Research Promotion Scheme (RPS) and other projects. Presently, 13 such proposals (1- conference, 3-MODROB, 5-STTP, 1-FDP, 3-RPS) have been sent to AICTE for receiving funds.
4. R&D cell conducts organization of different Faculty Development Programs (FDP), Short Term Training Program (STTP), Technical Workshops, Seminars, Industrial Visits, National and International Conferences **for creation and transfer of knowledge among the students and faculty members.**

Entrepreneurship Cell (E-cell):

The Institute has a long tradition of promoting entrepreneurship starting with founders of the Institute. The E-Cell is established in 2018 with the collaboration of Wadwani Foundation under National Entrepreneur Network (NEN) with the aim to identify and nurture the latent entrepreneurial spirit of students and

provide them opportunities to become Entrepreneur. Entrepreneur Development Cell (EDC) initiated various activities for the career enhancement of students like self-employment, start-up initiatives, etc. through various training programmes.

Performance Appraisal System:

The indicators like Publications/Patent/Books/FDP/Award Received/ Workshop/Seminar Attended/ Technologies commercialized are used to evaluate the faculty performance.

Cambridge Marketing College (CMC):

BCREC signed agreement with CMC for the following program-

a. Arrange Master-class and mentored workshop in BCREC campus with the aim to understand Contemporary Management Practices and able to apply the learning in practical scenario.

BCREC Journal:

The academic journal of BCREC has been revived with a new name "**BCREC Engineering Science Transaction"(BEST)**. First online issue of this journal published in January-2020.

Innovation Laboratory:

The institute built "Texas Instruments Innovation Lab" with collaboration of Texas Instruments and setup "**Advance VLSI Design and Reconfigurable Computing Lab**" with collaboration of CoreEL with modern simulation tools and equipment for carrying research activities.

Financial Support system:

The Institute allocates a substantial amount every year towards R&D including STTPs, National /International Conference/Symposiums, and Project Competitions/ Exhibitions etc.

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

3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

Response: 52

3.2.2.1 **Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
22	15	9	4	2

File Description	Document
Report of the event	[View Document](#)
List of workshops/seminars during last 5 years	[View Document](#)
Any additional information	[View Document](#)

3.3 Research Publications and Awards

3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

Response: 1.45

3.3.1.1 **How many Ph.Ds registered per eligible teacher within last five years**

Response: 16

3.3.1.2 **Number of teachers recognized as guides during the last five years**

Response: 11

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	[View Document](#)
Any additional information	[View Document](#)
URL to the research page on HEI website	[View Document](#)

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

Response: 0.9

3.3.2.1 **Number of research papers in the Journals notified on UGC website during the last five years.**

2019-20	2018-19	2017-18	2016-17	2015-16
38	35	39	31	28

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

3.3.3 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

Response: 0.5

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

2019-20	2018-19	2017-18	2016-17	2015-16
29	15	22	20	09

File Description	Document
List books and chapters edited volumes/ books published	View Document
Any additional information	View Document

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

The institute's vision envisages offering sustainable livelihoods, enhance the well-being of neighbourhood community through knowledge, innovation and transformative actions and developing ethical and socially responsible engineers who contribute to society and work in harmony with nature. Conforming to the vision, the institute encourages NSS wing of the Institute which has been functional since last decade with a mandate to carry out extension activities in pursuit of its service to community and society. There have been multifarious activities in the Institute involving the students with the objective of sensitizing about various social issues and strengthening community participation for the holistic development.

1) Various initiatives taken to sensitize students towards social issues are:

Issues related to Environment and Sustainability is taken care of in the Engineering curriculum through courses such as Environmental Science.

Institute is proactive in sensitizing and promoting gender equality. **Women's Day, Yoga Day**, etc. are also celebrated as part of Gender sensitization programmes.

The Institute, in its outreach programmes, always gives priority to the needs of the marginalized people especially women and children from the under privileged sections of society.

The beneficiaries of Massive **Charity Drives** involving both cash as well as gifts (clothes, food and student materials) were **Missionaries of Charity** and **Bibekananda Bani Prachaar Samity.**

2) Various activities undertaken to engage faculty, students and staff in the neighbourhood community are:

Cleanliness

In keeping with the **Swacchh Bharat initiatives** all across the country, since 2017, students voluntarily carried out Swacchh Bharat cleanliness drives within and around the college campus.

Environment

Institute is striving hard to inculcate environment consciousness among students, faculty and staff members. Multiple times, **tree plantation drive** was taken up by NSS team in last three years. This year, on **World Environment Day** amidst pandemic situation, tree plantation drive was organized.

E-Waste collection is carried out through e-waste Re-cycle bins placed at campus.

2nd Battalion, NDRF under the banner of NSS conducted multiple workshops for creating awareness and preparedness for **Disaster Management**. The last programme was held on 27th September, 2019.

Campaigns on "**No to Plastic**" has been carried out by the students in the campus.

Helmet Awareness Week is conducted every year to create awareness about the importance of wearing helmet by two wheelers.

Health

In keeping with the Swasth Bharat initiatives, students too reached out to villagers in Dashirbad, Durgapur in 2017 as part of **Outreach Programme**.

Over the last 3 years specifically, there have been **Voluntary Blood Donation Drives**. More than 100 students and faculty donated blood. In 2018, **Thalassemia Awareness Workshop** was organized in collaboration with the Thalassemia Management Forum, Durgapur Chapter.

For the last two years in 2018 and 2019, **Voluntary Organ Donation Awareness Programmes** in association with the Mission Hospital Durgapur and NGOs were organized.

3) Learning of the students from above Extension Activities:

  ○ Build up involvement and fostering attitude to contribute towards societal issues and community

problems.

- Develop a sense of social responsibility and interest in environment-related issues.
- Cater to students' holistic development

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

3.4.2 Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years

Response: 1

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

2019-20	2018-19	2017-18	2016-17	2015-16
0	1	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]

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

Response: 49

3.4.3.1 **Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
15	17	7	6	4

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

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 6.03

3.4.4.1 **Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
670	80	64	47	72

File Description	Document
Report 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

3.5 Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

Response: 191

3.5.1.1 **Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
69	56	28	20	18

File Description	Document
e-copies of related Document	View Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document
Any additional information	View Document

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 7

3.5.2.1 **Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
4	1	0	1	1

File Description	Document
e-Copies of the MoUs with institution/ industry/corporate houses	View Document
Details of functional MoUs with institutions of national, international importance, other universities 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 is located on 10.11 acres of land with 35686 sq. m. build-up area and has adequate physical infrastructure to accommodate all departments for conducting its teaching-learning process. It has well equipped 48 classrooms (9 smart classrooms), tutorial rooms, seminar halls, laboratories, Language Lab, staff rooms, toilets, administrative area, etc. and all supportive aids/facilities as per the AICTE requirements to cater for the academic needs of the students. The institute ensures the optimal utilization of available infrastructure by effective participatory planning. The time table committee plans well in advance and arranges for the required infrastructure before the commencement of the session.

A. Classrooms

1. Each classroom is designed and maintained as per AICTE norms with respect to carpet area, lighting, ventilation, furniture, etc. to have a conducive ambience.
2. All departments are having classrooms having ICT enabled with projector facility. The entire campus is Wi-Fi enabled.
3. Classrooms are spacious and airy for any kind of interaction among the students for group discussion, debate, etc.

B. Laboratories

1. Each laboratory/workshop with the appropriate layout is designed and maintained as per AICTE norms with respect to carpet area, lighting, ventilation, and furniture & fixture.
2. Every lab has a lab instructors/ technical assistant, who provides constant support and ensures maintenance of the laboratories.
3. Laboratories are well equipped with adequate number of experimental set-ups, computers & peripherals.
4. Special care is taken to ensure that the students conduct all the experiments as per the University syllabus. A few experiments beyond the curriculum are also conducted.
5. In addition, R&D labs with appropriate equipment help the faculty members/students to carry out research activities to a great extent.
6. Apart from that, Industry tie-up laboratories like Texas Instruments Innovation Lab in collaboration with Texas Instrument, USA, and VLSI lab in tie-up with Xilinx, USA, in order to provide the students hands-on experience and wide exposure.
7. Every equipment in the lab is bar-coded and the records of the same are maintained.

C. Computing equipment and IT Facilities

1. There are 1349 desktops in working condition, around 16 laptops, printers, scanners and servers in adequate numbers for computation and related purpose.

2. Uninterrupted power supply (UPS) is made available. There are five generators with a total capacity of 246 KVA for power back-up power supply.

3. The Institute provides internet connectivity of bandwidth 80 Mbps (1:1) with 45 access points for Wi-Fi facility all over the campus. Two dedicated Central Computer Centre with 257 desktops is provided in A J C Bhawan for Training & Placement activities, online examination, browsing & accessing e-resources.

4. Online MOOC courses through Swayam are made available to students. Online NPTEL-FDP courses through Swayam are made available to faculty members.

Other facilities:

- All departments have dedicated seminar halls.
- Two Auditoriums, one an open-air and another vibrant and modern with state-of-the-art facilities to carry out extra-curricular activities.
- More than 7 MOUs are signed to bridge the gap between industry and academia for effective teaching-learning.

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, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

Response:

A sound mind coupled with a strong physique is the key to success. The institute utilizes lot of its resources to provide an environment to its students where they are encouraged to indulge in sports and extra-curricular activities. The Institute has created both infrastructural and instructional facilities in Games and Sports for both indoor and outdoor games to bring about all round development for the students.

Large playing fields support a wide variety of games. There are also dedicated spaces for Indoor sport. Outdoor facilities include a 200-metre athletic track and courts for Basketball, Volleyball, Handball, and Throw Ball. The institute also has a large indoor gymnasium facility. The Institute has appointed full-time qualified Sports Personnel (04) to train and guide students in various sports. Expert training is provided in various sports events such as Basketball, Yoga, Football, Volleyball, Cricket, Yoga and Gymnasium. The Institute teams have been proving their excellence in various Inter and Intra–Institutional, University, National level competitions.

Many entertaining events all-round the year at the Dulal Mitra Auditorium, Nazrul Manch (an Open-Air Auditorium), Einstein Hall and the Playgrounds are arranged as part of cultural activities to give the students an opportunity to show case their talent besides giving them a reinvigorating break from academics. Students with a passion for music and dance are encouraged to perform during Cultural Fest.

Photography club brings together students to organize nature walks and other such events like Debate Club, Quiz Club, etc..

Availability of Sports Facilities:

The Institute has varied games/sports facilities within its premises which are as given below:

1.   The Institute has two well-maintained **Badminton** courts, **Basketball** ground and **volleyball courts** with playing facilities. The girl students participated in intra-college tournaments. The boys have participated at inter-college (university) level so far.

2.   The Institute has a **cricket** ground and a well maintained **football** ground with Day-Night facilities to conduct matches. Institute is selected as the venue to conduct inter-college football tournament by the University.

3.   The Institute has two fully equipped **gymnasiums** for both boys and girls within the college premises and has both male and female Instructors to train them respectively.

4.   The Institute facilitates both male and female students to practice **Karate** sessions regularly within the college premises.

5.   The Institute has five indoor playing facilities for **Table Tennis** in hostels and Recreation Point for both male and female students.

6.   **Yoga** sessions are carried out regularly for both boys & girls by a permanent Yoga teacher.

The students have represented the Institute at the national level in Karate and won several tournaments and matches in cricket and football for outstanding performance.

Cultural & Tech Fest conducted by Student Council

Horizon is a three-day annual Tech-Fest of the Institute held every year. In the Tech Fest, many technical events are conducted for the students with enthusiasm and magnetism. The Cultural Fest held once in a year provides a fabulous opportunity for the students to exhibit their talent in music, dance, band, etc. with uniqueness and magnanimity.

File Description	Document
Upload any additional information	[View Document](#)
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: 29.09

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 16

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	[View Document](#)
Paste link for additional information	[View Document](#)

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

Response: 17.4

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

2019-20	2018-19	2017-18	2016-17	2015-16
87.85	92.85	179.91	381.62	494.37

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	[View Document](#)
Upload audited utilization statements	[View Document](#)
Upload 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:

The Central Library of the Institute occupies a very important place in the campus. It supports study, teaching-learning process and research activities. It provides a learning space for the students (UG & PG), staff and faculty members. It is housed in a sprawling three storied building with carpet area 1091.16 sq. m. It has a total collection of over 88504 volumes of books.

Library Automation

Library automation is extremely important in this age of technology. Due to tremendous growth in the different fields of knowledge, there is need for access to the desired literature. The Institute has also taken

initiative to move its library towards paperless functioning through the use of automated library management software. It is difficult to have access to the desired literature with manually operated devices. Library automation is the use of automatic and semi automatic data processing machines to perform such traditional activities as acquisition, cataloguing and circulation.

Library Networking [Intranet and Internet]

The Central Library is **fully automated** with Integrated Library Management Software, LIBSYS 4, and Version LSEASE (Rel. 6.1) used for Circulation, Procurement, Online Public Access Catalogue (OPAC) and Project Reports. All the library documents are bar-coded and books are issued to users by reading the barcode of the document. The holdings include the books and Journals, syllabus, question papers and Project reports. The users of the Library can access publications of all major publishers like Elsevier, Springer, ASCE, IEEE etc. The users can access around 13,000 E-books and 11,611 International journals. The user has access to around 18,100 journals for which only abstract is available.

The Central Library is also a member of DELNET (Developing Library Network), a major resource sharing library network in India, which gives access to E-Books and 5000 full text E-journals both National and International.

The Central Library is also a member of NDL which has a collection of more than 6 lakh e-books which the students and staff are making use of.

Wi-Fi facility is available for accessing library resources. E-resources are accessible throughout the campus by means of network connectivity.

Besides printed books and journals, the Central Library subscribes to large number of e-journals in the field of Engineering, Science and Management. It also comprises of an Electronic Library with facilities for accessing online and offline databases. Library organizes book fairs every year in the Institute.

The library has a unique feature in the form of Book Bank Section which provides the required number of text books to every student at the beginning of each semester.

The Institute conducts library stock verification at the end of every year and identifies the books to be weeded out because of obsolescence in syllabus or physical damage. Such books are removed from the library after approval from the BOG. New books are added in sufficient numbers as and when syllabus changes or new courses are introduced and also to replace the weeded out /damaged books.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for Additional Information	[View Document](#)

4.2.2 The institution has subscription for the following e-resources

    1. e-journals

2. e-ShodhSindhu
3. Shodhganga Membership
4. e-books
5. Databases
6. Remote access to e-resources

Response: B. Any 3 of the above

File Description	Document
Upload any additional information	[View Document](#)
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (Data Template)	[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: 13.21

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)**

2019-20	2018-19	2017-18	2016-17	2015-16
11.59	12.42	11.54	9.90	20.58

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template)	[View Document](#)
Audited statements of accounts	[View Document](#)
Any additional information	[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 last completed academic year

Response: 2.97

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

Response: 95

File Description	Document
Details of library usage by teachers and students	[View Document](#)
Any additional information	[View Document](#)

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

The use of technology is a way of life at the Institute. IT infrastructure facilities are created taking into consideration the requirements of all the stakeholders.

Institute has a high-speed internet connection or connectivity having a Wi-Fi setup with 45 access points strategically located across the campus. Wi-Fi is authentication driven and is with restrictions as per user level for maximum security. Students can avail the Wi-Fi facility from 10.00 am to 5.30 pm with a common User-Id. Faculty members are given individual User-Id and password for round the clock access.

Internet facility is provided in all the classrooms, laboratories, offices, departments, and hostels through Wi-Fi. Wherever high-speed connectivity is required wired connection through Ethernet/optical cable LAN services is provided.

Internet connectivity of bandwidth 100 Mbps (1:1) is provided by M/S SANHATI, 50Mbps is provided by M/S JIO and 40 Mbps is provided by AIRTEL.

The institution has a policy for periodical upgradation of the computer systems. The operating system of all the computer systems in the campus is governed by Microsoft Campus Licensing Agreement. According to this agreement, all the computer systems in the campus are automatically upgraded to the latest operating system released by Microsoft.

A dedicated computer center with more than 300 desktops is provided in A J C Bose Bhawan for browsing and accessing e-resources besides computer labs in each department. The Institute has an Internet registered domain name **bcrec.ac.in**, use of it provides its own e-mail facility, to staff and students.

Students are provided with ample opportunities to work on open-source solutions with a high-speed internet connection. Majority of the classrooms are ICT-enabled and portable LCD projectors are provided for other classrooms. Video conferencing facility is available in the seminar halls of the departments.

Library is fully automated and KOHA provides a very user-friendly interface for searching documents in the library and their issue-status. Library facilitates Web – OPAC remote access to users.

In order to ensure safety and security of data, a licensed Sophos firewall with web and application filters are used.

The IT facilities in the Institute is summarized as follows:

Name of Internet provider	SANHATI, JIO, AIRTEL respectively
Available Bandwidth	100, 50, 40 MBPS each
Access speed	1.77 MBPS / per computer roughly
Wi-Fi availability	YES
Availability of internet in labs, class rooms, offices & library	YES
Institute own e-mail facility to faculty/students	YES
Security/privacy of e-mail/internet users	YES

The growth of IT infrastructure in the last five years is tabulated below:

	2015-16	**2016-17**	**2017-18**	**2018-19**	**2019-20**	
Number of Computers (in working Condition)	890	947	1082	1192	1232	
Laptops	12	12	14	15	16	
Servers	4	4	4	4	4	
Wi-Fi	35	35	35	39	39	
Access points	35	35	35	42	45	
Open source software	20	20	20	20	20	
Licensed software	93	93	93	93	93	
Online conduct of examination with System	200	270	300	350	500	
Printers (in working condition)	54	54	57	60	62	

File Description	Document
Paste link for additional information	[View Document](#)

4.3.2 Student - Computer ratio (Data for the latest completed academic year)

Response: 2:1

File Description	Document
Upload any additional information	[View Document](#)
Student – computer ratio	[View Document](#)

4.3.3 Bandwidth of internet connection in the Institution

Response: A. ?50 MBPS

File Description	Document
Upload any additional Information	[View Document](#)
Details of available bandwidth of internet connection in the Institution	[View Document](#)

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

Response: 4.94

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

2019-20	2018-19	2017-18	2016-17	2015-16
86.96	70.37	57.26	49.99	53.93

File Description	Document
Upload any additional information	[View Document](#)
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	[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 Institute continuously strives to meet the growing needs of the twenty first century academic world making available adequate physical infrastructure and constantly upgrading facilities in order to provide a good teaching learning environment. Academic Council/IQAC convenes regular meetings to assess the infrastructural facilities and requirements. In order to ensure maintenance and optimum utilization, various systems and procedures are established so as to benefit all the stakeholders. The institute is a much sought after venue for conducting various public examinations due to its infrastructural facilities.

The College has well established procedure of maintaining and utilizing academic and support facilities.

Physical Facilities:

Classrooms, Tutorial rooms and Seminar halls:

Before commencement of each semester, Head of the Department inspect the class rooms and tutorial rooms to check out the adequacy of furniture, working of projectors, tube lights, fans, etc. and make sure all the facilities are available in good condition for the students. The college is having in-house Maintenance team and Annual Maintenance Contract with agencies to carry out repairs and maintenance work. Separate class rooms, tutorial rooms and seminar halls are allotted exclusively as per the requirements. Central Routine Coordinator along with deputed coordinator of the departments prepare times tables in consultation with each other and display them on the notice board. All the classrooms are provided with LCD projectors and students and faculty members can utilize them for their presentations.

Laboratory and Workshop Facilities:

Adequate laboratory facilities exist for carrying out all the experiments as per curriculum. Any equipment for R & D work is also procured as and when required. Each Laboratory is managed and maintained by a Faculty in-charge and Technical Assistant. Annual proposals for purchase of new equipments, repair and maintenance of available equipments are prepared by the concerned lab incharges and submitted to Head of the Department. The Head of the institution after receiving the proposals from all the Head of the Departments calls the Purchase Order Committee meeting for their approval and purchases / repairs and maintenance. After purchase and installation, the details of new purchases are recorded in the stock registers of respective Labs. Testing & calibration of equipment and devices are also performed on regular basis to ensure the working and accuracy of available equipments in the laboratories. Equipment rendered obsolete on account of change in syllabus, process, or technology is phased out either by replacing it with new equipment or transferring it to other institutes who can utilize these equipments productively. Central Routine Committee conducts meetings for finalization of Class Schedule of the all departments before the commencement of each semester so as to finalize the schedule of courses for both theory and labs and the Time Tables of each department are prepared accordingly for best utilization of resources.

Computers:

Each department has its own computing laboratories fully equipped with latest computer systems, printers, relevant license soft wares and internet connectivity for the benefit of the students. All the faculty members are provided with Desk top with internet connectivity. Computing, Wi-Fi and Internet facilities are checked routinely by the office of the system administration and any repairs and maintenance will be carried out as and when required through AMC service provider. Upgradation of hardware and software is done periodically. Most of the labs are utilized exclusively by the students of the department for their lab activities and project works. Whole campus is Wi-Fi enabled and staff members and students use the facility for accessing the internet.

Academic Facilities:

Library:

The Central Library with over 17000 titles and 62000 volumes and subscription to 4 data bases offers an

excellent environment for academic pursuits. The Central Library Committee recommends the purchase of new editions, number of volumes based on strength of students. In the annual meeting of the Central Library Committee, Librarian presents these recommendations and finalizes the purchases. Printed journals and magazines are kept in the reference section where the students can read and take photocopies. Computer and internet facility is also available in the library which is utilized by the students and staff for browsing e-journals and online databases. Each department has its own departmental library with a limited number of titles and volumes for the benefit of faculty members who utilize this facility for their research work.

Computer Centers:

Apart from the computer labs for conducting scheduled classes as per curriculum, the college has established Central Computer Centre for general use of students from all disciplines.

Support Facilities:

Sports Complex:

Central Sports Facility for in-door and out-door games is available in the campus for students of the college. The campus is having In-door game facilities for Table Tennis, Caroms, Chess, Gym equipment, etc. and Playgrounds for out-door games Like - Cricket, Football, Tennis, Volleyball, etc. Professor In-charge of Games & Sports is responsible for purchase and maintenance of sports equipments, and organizing Inter and Intra college events annually. Student and staff members of the college utilizes this facility to participate in the inter college games and sport events held annually and also to represent the college in inter-college sports competition. Institution provides various other services / facilities for the students and staff members which are as follows:

• Reverse Osmosis Water Treatment Plant and water coolers for clean and portable drinking water.

• Fire fighting and Fire Alarm System for fire safety.

• Banking and ATM facility for financial transactions.

• Canteens for Vegetarian and Non-Vegetarian food.

• Auditorium for conducting events.

• Medical Unit in collaboration with The Mission Hospital for any medical emergency.

• Security personnel for campus security and safety.

• Pest control for keeping away rodents.

• Campus Plumber & electrician for repairs and maintenance work.

• 320 KVA and 62.5 KVA generators for uninterrupted power supply.

• System Administrator for addressing internet and networking problems.

• Students' Council to carryout out any student activities.

File Description	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: 2.72

5.1.1.1 **Number of students benefited by scholarships and freeships provided by the Government year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
126	105	84	74	44

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	[View Document](#)
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	[View Document](#)

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

Response: 12.16

5.1.2.1 **Total number of students benefited by scholarships, freeships, etc provided by the institution / non- government agencies year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
382	410	395	377	395

File Description	Document
Upload any additional information	[View Document](#)
Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)	[View Document](#)

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5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

    1.**Soft skills**
    2.**Language and communication skills**
    3.**Life skills (Yoga, physical fitness, health and hygiene)**
    4.**ICT/computing skills**

Response: C. 2 of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Response: 0

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**

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

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 has a transparent mechanism for timely 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

File Description	Document
Upload any additional information	
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	
Details of student grievances including sexual harassment and ragging cases	

5.2 Student Progression

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

Response: 30.82

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

2019-20	2018-19	2017-18	2016-17	2015-16
261	272	260	338	205

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

5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 2.49

5.2.2.1 **Number of outgoing student progression to higher education during last five years**

Response: 22

File Description	Document
Upload supporting data for student/alumni	[View Document](#)
Details of student progression to higher education (Data Template)	[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/ Civil Services/State government examinations, etc.)

Response: 14.49

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**

2019-20	2018-19	2017-18	2016-17	2015-16
44	20	17	16	3

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

2019-20	2018-19	2017-18	2016-17	2015-16
191	112	116	127	70

File Description	Document
Upload supporting data for the same	[View Document](#)
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	[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: 82

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

2019-20	2018-19	2017-18	2016-17	2015-16
24	25	18	15	0

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year	[View Document](#)
e-copies of award letters and certificates	[View Document](#)
Any additional information	[View Document](#)

5.3.2 Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities following duly established processes and norms (student council, students representation on various bodies)

Response:

Students constitute a major stakeholder in the institutional growth. Utilization of the support and ideas of the students is the paramount requirement for the prosperity and well-being of the institute. BCREC always strives to build a relation of mutual respect and inculcate a sense of pride amongst the students for their own institute.

Institute has a **Students' Council,** which is constituted with the students of all years of the college and the council act as three different bodies - (1) Student Academic Council, (2) Student Social & Cultural Council and (3) Student Administrative Council. The Chairperson is Dean (Students' Welfare & Alumni) and three faculty advisors co-ordinate with the students. The members of the Council participate in brain storming sessions and formal meetings called for formulating strategies for the overall curricular, co-curricular and extra-curricular development of the students.

 (1) Functions of Academic Council:

The Student Academic Council (represented by 5-6 students) get the feedback on teaching-learning processes like teaching, course content, study material, practical sessions from the departments, pertaining to quality improvement. Class Representatives (CRs - one male student and another female student) assigned from each programme communicate the same to the faculty advisors and the chairperson who puts up the suggestions of the Council in the Academic Council/IQAC of the Institute.

Student Academic Council meets once in a semester to discuss about the improvements to be made in the library facilities and recommends books, journals to be procured which is put up before IQAC.

Various events/ activities like technical workshops, Technical Fest, invited talks, skills/knowledge enhancement programmes etc. are conducted in alliance with respective professional bodies such as CSI, IEEE under the banner of Student Chapters.

(2) Functions of the Administrative Council:

Administrative Council looks after the feedback on Hostels and Amenities, Anti-Ragging initiatives, Alumni Association, Grievance Redressal, NSS etc.

Student feedback on amenities: Dean (Students' Welfare & Alumni) addresses the problems pertaining to classroom, infrastructure, library, food, water, hygiene, etc. to redress the students' grievances. He refers to the administrative authorities for the improvement of the quality of students' life in the Institute.

Anti-Ragging committee: Nomination of student and parents as Member of Anti-Ragging committee promotes an ambience conducive for the Institute to be a ragging-free campus.

Internal Complaints Committee: Girl Students' representation facilitates to investigation into the information against the complaints launched, if any.

(3) Social and Cultural Council (represented by 5-6 students) promotes and encourages the involvement of students in organizing various sports, social initiatives and community outreach programmes and recreational activities of the college in coordination with faculty mentors like Annual Sports, Cultural Fest, Freshers' Welcome, Farewell, etc.

(4) NSS: Institute has set up NSS to sensitize students towards societal issues and community services, activities of which is mainly carried out by the students.

(5) Alumni Association: Alumni Association is in place to strengthen the relationship amongst alumni.

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 in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 2.6

5.3.3.1 **Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
3	3	3	2	2

File Description	Document
Upload any additional information	[View Document](#)
Report of the event	[View Document](#)
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	[View Document](#)

5.4 Alumni Engagement

5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

The Institute has played a pivotal role in shaping the careers of students into technocrats, leaders, entrepreneurs, researchers and global managers. With the objective to nurture a bond with alma mater, to enhance employment opportunities and to create a networking platform to share and influence the success stories of alumni, Alumni Association was formed in the Institute and it was registered in 2007. Since its inception, the Alumni association has provided enormous support to the institute in fulfilling its goals. Alumni Association has provided adhesive bonding among the alumni members and the present students fostering a spirit of loyalty towards the institute and helping to promote its welfare activities, thereby benefiting the students of the institute. The Alumni Association helps in holding interactive sessions to motivate current students about the employability and educational opportunities abroad. The Alumni share their opinions in social networks, blogs and forums. The Alumni provide feedback on competencies gained during their course and provide valuable information to improve curriculum on a continual basis. The Alumni Association helps in building a network of the alumni and helps the Institute in being in touch with the corporate world.

Aims and objectives:

The principal objectives of the Alumni Association are:

- To provide a platform for establishment of a relationship and a link among ex-students and current students of the institute to share their experiences, feelings and interests.
- To have an opportunity for social and professional networking among alumni members.
- To work as ambassadors of the institute and help its students in their career development activities by organizing visits to local industries.
- To utilize the rich experience of ex-students of the institute for the benefit and progress of the

current students, to promote campus interviews and placements by utilizing their contacts in various industries.

- To play a key role to bridge the gap between academia and the industry.

To maintain the cordial relationship between all the stakeholders, the BCREC Alumni meet for the current year was organized on 22nd December, 2019. The meet was conducted throughout the entire day which comprised of various cultural events complemented with interaction between the alumni, the present batches of students and faculty members to generate innovative ideas for grooming the current students, explore job opportunities in various sectors followed by discussion on recent trends in technology and industry etc. During the interaction, few alumni shared memories and experiences during their stay at the Institute. Although financial support was not contributed by the alumni till date but they have immensely contributed to support the college in various aspects enumerated below:

Contributions from Alumni:

- **Expert Speakers**

- **Experience sharing**

- **Curriculum enrichment**

- **Service the Institute as Faculty Members**

- **Helping the IQAC as active members for quality enhancement**

- **Facilitator for campus recruitment through the HR of their respective companies**.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

5.4.2 Alumni contribution during the last five years (INR in lakhs)

Response: C. 3 Lakhs - 4 Lakhs

File Description	Document
Upload any additional information	[View Document](#)
Link for any additional information	[View Document](#)

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of and in tune with the vision and mission of the institution

Response:

Dr. B. C. Roy Engineering College, Durgapur, popularly known as BCREC, was set up on 21st August, 2000 is a self-financed Engineering Degree and Management Institute registered under Societies of West Bengal Act XXVI of 1961 and governed by the administration of Dr. B. C. Roy Engineering College Society. Born of a vision of a group of Durgapur based philanthropic entrepreneurs, the institute is dedicated to the memory of Dr. Bidhan Chandra Roy, the architect of modern West Bengal and BCREC management is deeply committed to gradually excel the college as one of the premier Institute of Engineering and Management Education in Eastern India and to impart quality education in grooming the students and transforming them as dynamic leaders of tomorrow.

The governance of the Institute is reflective of an effective leadership in tune with the Vision and Mission statements The Vision and Mission of the institute are prepared taking into consideration the views of all the stakeholders namely management, faculty, students, parents, alumni, and industry persons. The Institute strongly believes in transparency, participative leadership, delegation of powers at various levels and decentralization of its operations. This reflects in the delegation of the necessary authorities and responsibilities.

The Members of the Board of the Governors of the Institute have been constituted as per the guidelines of AICTE. It comprises of members from Management, Academic Institutions, Industry, Statutory bodies and representatives from faculty. Apart from this, an Academic Council is also constituted with Director as Chairman, Deans, HODs and Registrar as members. All the academic and administrative issues like budget, recruitment, purchases, admissions, promotions, conferences, variation in intake etc., are discussed and approved in the meeting and thereafter implemented and communicated through circular/meeting to all the teachers/staffs and students of the Institute. To promote efficient governance and progress of the Institute, Board of Governance (BOG) meetings are conducted once in every three months; Academic Council Meetings are held on a bi-monthly basis and IQAC meetings are held once in a semester.

To ensure the quality and imbibe the culture of excellence, IQAC has developed the Perspective Plan aligning with vision and mission of the Institute. Faculty opinions and participation is given due weightage by their participation in various committees like Anti-ragging, Accreditation, IQAC, Research, Examination, Placement, Women Safety and Grievance Redressal Committee/ Internal Complaint Committee (ICC) and so on are constituted to ensure the value addition which lead to the holistic development of the students which in turn provides a direction towards the achievement of the Mission and Vision of the institute.

In addition, Student Council meeting are held once in a month to brief the students on important decisions, to consider their suggestions and also to address the grievances, if any. Similarly, faculty interaction meetings are held once in a month to discuss academic issues and to take everyone into confidence in all the important academic decisions.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management

Response:

Decentralization in Working & Participative Management

Decentralization and Participative Management is ingrained in the administrative functioning of the Institute. Participative management is an open form of management where the employees are actively involved in the conceptualization as well as implementation of various academic and administrative responsibilities. Hence, this form of management represents collective decision making which involves the Director, Deans, Heads of the Departments, Registrar and the faculty members and the Laboratory Assistants. The faculty and staff are treated as facilitators who deal directly with the students and meet their needs. There is a structured delegation of authority that encourages the academic leadership among the faculty members who are also empowered to put up suggestions on academic/administrative/co-curricular/extra-curricular activities in the Departmental Academic Meetings.

The Institute has decentralised its operations and has delegated authority at various levels to ensure good governance. Any major decision is placed before the BOG, Academic Council and IQAC before implementation. Issues concerning with students are discussed in the Student Council meeting, their suggestions are taken into confidence. Suggestions from all stakeholders are also considered following transparency and fairness.

Case study

Globalization has brought in a clear shift from education as transmission of expert knowledge to education as building learner competencies. Keeping in pace, Dr. B.C. Roy Engineering too have set their priorities as being a prime aide in employment generation for their students. A few comprehensive strategic changes over the last two years have redefined the performance standards at BCREC. Strategically, a new team, comprising of six senior and experienced professors, were inducted at the Campus level to monitor the training and placement activities since July, 2018 alongside the Training & Placement Team of Kolkata.

The key responsibilities of the Campus team was clearly delineated as

- Assessing the pre-placement training needs of the students
- Facilitating the training processes so as to make them industry ready.
- Assisting the Kolkata Training & Placement Officer to seamlessly roll-out the recruitment drives.

A co-ordinating team with faculty representatives from each department was constituted to execute the process at the micro-level. The Co-ordinating Team was earmarked to report to the Campus team and maintain a close liaison with the students on the other hand.

The Campus team had refurbished the complete training process making a few vital changes **with three distinct components Aptitude, Technical and Verbal & Soft Skills.**

The Campus team had refurbished the complete training process making a few vital changes. A special target based strategy was further introduced for the Kolkata TPO team to ensure a steady inflow of opportunities for all the years round for all the branches; as a result there was a 300 percent increase over last year in the number of jobs offered **in the Core Profile jobs** for the pass-out batch of B.Tech 2019. The placement seasons for MBA 2019 too saw a diverse mix of companies spread across various domains and functions, offering niche roles to them, recording an all-time high placement.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

The Institute has a well defined structure for strategic planning and overall management of resources. The Institute has prepared its own set of Strategic Plans to fulfil academic development of the institute, extra-curricular activities, sports, culture and defined targets for the utilization of infrastructural facilities of the institute. These targets have been set with extensive consultation with all stakeholders, staff, faculty, alumni, management and the industry.

Strategic Development Plan is drawn in light of the institutional vision and mission. Major thrust areas and actions are identified in the Strategic Development Plans. Excellence in academics, research and training and placement will automatically lead the college becoming a **Centre of Excellence**, which is the ultimate goal of the Strategic Plan. In order to attain this goal, the Institute has set into motion the committed academic and administrative community and focus on catapulting the 20-year-old college into the top notch position in the State of West Bengal and also at the national level.

In order to achieve this, the Institute has formulated a three-point equation, or the "**Three Es"** of

- **Equity**
- **Excellence and**
- **Employability**.

Equity in education and Excellence in academics will together lead to exceptional levels of Employability. Thus, the entire Strategic Plan is oriented towards the "**Three Es".**

The Strategic Plan 2019-2024 is phased at four levels:

1. Improving the teaching/learning experience in the campus;
2. Strengthening the academic and research domains of the Institute;
3. Extensive training and career guidance in order to improve the employability quotient of the students.
4. Focus on renewable energy by introducing Solar Power Plant

One activity of the **Strategic Plan** of the institute was installation of **Solar Power Plant** since solar power generation has several advantages over other forms of electricity generation. Renewable energy sources are clean, inexhaustible and increasingly competitive energy. The 30 KWp Roof Top On-Grid Solar Power Plant has since been successfully installed in Vidyasagar Bhawan earmarked for the 1st year classes in the year of 2019 during 1st phase to maintain the eco-friendly environment of the campus.

The plant has capacity of **30KWp** with latest inverter technology. The plant is designed and erected by Aparajita Solar Ltd, Kolkata. The total cost of plant is Rs. **13, 14, 855/-.**

The solar system consists of 80 numbers of Solar Photovoltaic Modules, module mounting structure, Array Junction Box, 30KVA Supporting String Inverter, Inverter LT Panel, AC Distribution Board. The solar PV modules have more than 80% efficiency, compliance of IES standard and MNRE approved. The inverter is with advanced technology which gives reliable power output with maximum efficiency greater than 98.2 %.

The system is on load grid-connected system. The plant is fully automated of advanced online communicating system with data logger and modem system of Aparajita Solar portal.

After installation, the electric power is feed to WBSEDCL through net metering system. The plant is fully equipped with protective switchgear and personal safety. The plant regularly controls, analyzed and maintained by electricians and wiremen.

File Description	Document
Upload any additional information	[View Document](#)
strategic Plan and deployment documents on the website	[View Document](#)
Paste link for additional information	[View Document](#)

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

Response:

Organogram of the Institution

The Institute is constituted by a team of philanthropic entrepreneurs and is governed by the administration of Dr. B. C. Roy Engineering College Society with an aim of imparting quality higher education and to boost promotion of Engineering, Management and Technology education in Durgapur. The College has an

internal organizational structure that has evolved over 20 years. The Institute is managed by the Board of Governors (BOG). The Institute has decentralized its operations and has delegated authority at various levels to ensure good governance. The Director is the academic and administrative head who monitors the overall functioning and growth of the Institute. The involvement of the effective leadership is achieved through the well-defined system and organizational structure.

Administrative bodies:

1. Board of Governors (BOG)

Board of Governors has the advantage of having experience in both the educational and corporate environment enabling to design and implement a system that bridges the gap between academics and industry requirements. BOG meetings are conducted once in every 3 months.

2. Academic Council (AC) and Internal Quality Assurance Cell (IQAC)

The Statutory bodies of the College are the **Academic Council (AC)** and **Internal Quality Assurance Cell (IQAC)** framed as per norms of AICTE. These bodies play an important role in framing policies and its execution.

3. Major functions of the Director

- Act as the Member-Secretary of the BOG and implement the approved policies and decisions of the BOG including budget in consultation with the BCREC Society.
- Act as the Chairman of the Academic Council/IQAC and constitute sub-committees for delegation of responsibilities and coordinate for smooth implementation of policies with respect to academics, research and development activities, students' activities and resolution of matters in the day to day running of the Institute and compliance with the requirements of various Statutory Bodies.

4. Major functions of the Registrar and Deans:

- Assist the Director in all activities of Academic-Administration of the Institute.
- Assist the Director in all students' activities viz. academic, welfare, examination, scholarship, amenities, etc. and ensure staff/student discipline and good work practices.

5. Major functions of the HODs :

- Head of the departments are responsible for the day to day academic activities and assuring quality in teaching and learning process and administrative functions of the department and monitor various students' activities.

6. Rules, Procedures, Recruitment and Promotional Policies:

i) Service rules: The institute follows the Service Rules according to the norms of the University and Government of West Bengal. Service Rule is disseminated among staffs.

ii) Recruitment: The Institute follows the recruitment procedure as laid down in the Service Rule.

iii) Promotional policy is followed as per norms of the AICTE in case of faculty members and Government of West Bengal for non-faculty members.

iv) Grievance Redressal Mechanism: Grievance Redressal committee, Anti-harassment /Internal complain committee, SC/ST Committee is responsible to sort out the issues/complaints raised by women staff and Girls students.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)
Link to Organogram of the Institution webpage	[View Document](#)

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: B. 3 of the above

File Description	Document
Screen shots of user interfaces	[View Document](#)
ERP (Enterprise Resource Planning) Document	[View Document](#)
Details of implementation of e-governance in areas of operation, Administration etc	[View Document](#)
Any additional information	[View Document](#)

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

Progress of an organization depends on its employees. The Institute has effective welfare schemes for the benefit of its teaching and non-teaching staff. Welfare measures of the employees and staffs are inevitable for the seamless functioning and the growth of any organization. Being a self-financed institution under the Societies Act, the Institute has effective welfare schemes which are implemented for the benefit of its various teaching and non-teaching staffs. **Institute believes that one can give her best when he/she is happy with work. This in turn has a positive impact on the student community.**

1) Welfare Schemes for Teaching Staff:

Sponsorship Fee Reimbursement for STTP/Workshop/ Professional Membership/Paper Publications: Considering rapid changes in technology and industry expectations, the Institute encourages its teachers in acquiring the latest skills by deputing them for various programs/ conferences and reimbursing the registration fees.

Incentives for Higher Studies: In order to keep pace with the latest trends in technology and industry, the Institute encourages the teachers by providing Special Leave/Study Leaves to pursue Project/Doctoral/Post-Doctoral research.

Empowering teachers with personal computation facility: The Institute provides Desktops and wi-fi facilities to every faculty/staff member and encourages them to use modern teaching aids.

2) Welfare Schemes for Non-Teaching staff:

- **Sponsorship/Fee Reimbursement for Workshop/Training**
- **Special training for soft skills**

3) General Welfare Schemes for all staff:

- **Leaves:** The Institute provides various leaves to facilitate all its employees. as per the institute policy.
- **Dearness Allowance and House Rent Allowance:** The employees are entitled to Dearness Allowance @ 75% and House Rent Allowance @ 15%, as per the policy of the college.
- **Employee's Provident fund:** Employee's Provident Fund (EPF) is a retirement benefit scheme provided by the institution for the benefit of all its employees.
- **Gratuity:** All employees are eligible for Gratuity after completion of continuous service of minimum 5 years and is governed by the Gratuity Act in force.
- **ESIC Scheme:** ESIC facility is provided to all its employees having Gross Salary less than or equal to Rs 21,000/- per month.
- **Medical Insurance:** The Institute provides Medical Insurance of Rs 1,50,000/- to all its employees covered under Group Medical Benefit Scheme.
- **In Campus Medical Assistance:** The Institute has tied up with The Mission Hospital-Durgapur to provide medical advice to all the staff members.
- **Counselling Centre:** Institute has a professional counsellor to address stress and depression of students and Staff.
- **Transport Facility:** All teaching and non-teaching staffs are eligible to avail the transport facility of the Institute.
- **Canteen Facility:** The Institute offers canteen and cafeteria facility to provide quality foods to all its employees.
- **In Campus Accommodation**
- **ATM Facilities**
- **Recreational Activities:** A dedicated team of teaching and non-teaching staffs promote recreational activities.
- **Sports and Gym facility** is available to maintain a healthy and balanced life.
- **Health Awareness Programs** like blood donation, organ donation, etc is conducted in every semester.

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

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: 1.19

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**

2019-20	2018-19	2017-18	2016-17	2015-16
10	0	0	0	0

File Description	Document
Upload any additional information	
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	

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

Response: 1

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**

2019-20	2018-19	2017-18	2016-17	2015-16
1	1	1	1	1

File Description	Document
Upload any additional information	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	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: 10.75

6.3.4.1 **Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years**

2019-20	2018-19	2017-18	2016-17	2015-16
70	14	3	5	0

File Description	Document
Upload any additional information	View Document
IQAC report summary	View Document
Details of teachers attending professional development programmes during the last five years	View Document

6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

Response:

A systematic and effective Performance Appraisal System of the Institute provides teaching and non-teaching staff with eloquent appraisals that encourages professional learning and growth. The process is designed to explore the individual professional skill and progress of an employee as well as participation in various academic/administrative activities which in turn leads to the overall development of the Institute. Performance Appraisal System is implemented for both teaching and non-teaching staff. The Appraisal System for performance review is conducted by the Appraisal Committee of the Institute comprising of senior academicians/technocrats duly appointed by the Director and the Society.
The implementation of the Performance Appraisal Procedure is as follows:
Appraisal System for Teaching Staff
•   At the beginning of each academic year, all teaching employees sit with their HODs to agree with a Goal Sheet where each Key Performance Area (KPA) in their respective work domain is discussed, agreed and documented.

• A structured "Self-Appraisal Form" is given to each faculty member for evaluation purpose, wherein he/she provides the details of his/her performance and participation in all the activities assigned to him/her by the department/institute. The concerned HOD gives their remarks on the performance of the faculty member.

• The Primary Key Performance Area (KPA) for faculty members as per their academic-administration work load involves Teaching, Research, Publications, External Revenue generation and Administrative Support Work and Students' development for campus recruitment process.

• Academic Involvement of faculty is evaluated based on the courses taught and their difficulty level, conduct of Beyond Syllabus Activities, innovation in teaching, Contribution towards Learning Resources Development at Institute, UG/PG projects guidance, Efforts for Lab Work/Tutorials, etc.
• Student Development component accommodates Performance of students in Continuous Evaluations and Semester Examinations in the relevant subjects. Mentoring and Grooming of students for placement.
• Institutional Development component takes care of faculty efforts for the overall development of the Institute. It includes points for organization and participation in conferences, STTPs, FDPs etc.

Criteria for Appraisal System for Teaching Staff

• Name of the Faculty Member:
• Department:
• Scores of Assessment: 100   Cut-Off Marks: 70
• Date:

Criteria	Allotted Marks
1. PowerPoint Presentation & Question-Answers on PPT	15
2. Subject Knowledge & Skill	30
3. Ability to deliver lectures & Communication Skills	20
4. Research Contribution/Paper Publication/Newsletter	20
5. Engagement in other departmental/institutional activities (MAR, MOOCs, Exam, Placement, NBA, NAAC, NIRF)	15
Total:	100

• Remarks :

• Signature of Experts:
(Internal & Outside)

Appraisal System for Non-Teaching Staff
• Design of Performance Appraisal form for Non-Teaching staff is based on the qualitative and quantitative responses towards performance parameters.

• The Primary Key Performance Area (KPA) for Non-Teaching employees is the job assignment given by the Department/Institute from time to time.

• Performance Review is conducted at the end of an academic year. Wherever there is scope for improvement, it is communicated to the concerned staff through their reporting officers.

File Description	Document
Upload any additional information	[View Document](#)
Paste 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:

The Institute has a system of internal as well as external audit. Internal audit helps the institute to follow a systematic approach to evaluate and enhance the effectiveness of financial processes. It reviews and approves information and compliance with policies and SOPs. Internal audit is an ongoing continuous process and the institute has its own internal audit mechanism. The Books of Accounts of the Institute are audited by the Internal Audit team. As per stipulated provisions of the Income Tax Act, statutory audit is conducted once in a year by the External Auditors

Following procedure is maintained:

1. Before the commencement of every financial year, Director submits proposals received from the concerned departments regarding budget allocation for the next financial year under specified head of accounts.

2. Director reviews the previous years' actual expenses of the departments and the requirements of the present year as projected by the departments and thereafter in consultation with Management, a consolidated budget is prepared.

3. The consolidated budget is thereafter approved by the BOG.

4. The budget includes Revenue expenses and Capital expenses which is monitored by the Accounts Department as per authorization of the Management.

A. Internal Audit

The team of Qualified Internal Auditors conducts a thorough check and verification of all financial transactions with the supporting documents and approval of proper authority for each transaction. The expenses incurred under different heads are thoroughly checked by verifying the bills and vouchers.

On such verification, any error or omission and commission, pointed out by the audit team are immediately corrected /rectified and precautionary steps are taken to avoid recurrence of such errors in future. Thereafter, the financial transactions are accounted in Tally.ERP -9 by the college.

B. External Audit

All the financial transactions of the college are audited by an external agency. The external Audit is conducted in accordance with the Auditing standards as per the provisions of the Government rules and

regulations.

Audit procedures:

1. **Source of income verification:**

   1. Auditors cross-verify the fee collections with approved list of students as per approved fee structure of the University.
   2. Other incomes are cross verified with the Receipts issued.
   3. Fee amount receivable and amount received are reconciled.
   4. Checking of Grants received, if any

2**. Expenses Vouching**:

i   Auditor vouch payment with the approved supporting.

ii.   Correctness of Classification Revenue and Capital Expenditure.

iii.   Reconciliation of bank accounts and checking the bank confirmations.

iv.   Salary payments with the Salary Statement Sheet

v.   Checking of statutory dues payment like TDS, Professional Tax, ESIC and PF before the due dates.

vi.   Calculation of depreciation of fixed assets.

vii.   Any other statutory compliance verification required as per Income Tax Act.

3. Audit observations/objections on any discrepancies are settled within the specified time schedule under the directions of the Statutory Auditors.

4.   "**Audit Report**" is prepared by the Statutory Auditors on the basis of signed Income & Expenditure Statement and Balance Sheet

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropers during the last five years (not covered in Criterion III)

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)

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	View Document
Any additional information	View Document
Annual statements of accounts	View Document

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

Response:

The College being a private self-financed is not in receipt of any financial grant/aid from the Central/ State Governments. The main source of **revenue** generation is the tuition fees collected from the students as per the fee structure mandated by the State Government.

The fund velocity is critical to the growth of the Organization. The institution has a mechanism to ensure adequate budgetary provisions for academic and administrative activities and to monitor the effective, efficient and optimal use of financial resources. The annual budget is prepared according to the need and requirements of the departments taking into consideration the annual intake of students, laboratory and infrastructure developmental expenses, requirements of latest technologies, additional faculty and staff requirements and other routine expenditure like salary, increment, promotions, etc.

The College has a well-defined organization set up, headed by the Director who has financial and administrative powers. Before the commencement of the financial year, HODs of respective department submit proposals regarding expenditure corresponding to the projected income for an academic year which is scrutinized by the Director and thereafter a consolidated budget is placed before the Management for approval. Director apprises the departments of the allocation so that re-appropriation of budget outlays are avoided or kept to the minimum. Departments avail the financial resources within the given limit. The institution maintains a reserve corpus fund which is used as matching grants for developmental purposes.

The funds are utilized for approved academic expenses and administrative expenses as per the norms. Major proportion of funds is allocated for remuneration to the teaching professionals and administrative staff members. For optimal utilization of financial resources, expenditures are prioritised as follows:

1. To conduct Induction-cum-Orientation Programs for the students, workshops, FDPs, training programs that ensures quality education.
2. Adequate funds are utilized for development and maintenance of infrastructure of the Institute towards upkeep of the fixed assets, repairs & maintenance of classrooms, laboratories and

administrative areas etc.

3. Funds are also allocated towards security, fire fighting charges, water proofing, AMC charges, etc. for regular upkeep of the campus,

4. To conduct student activities like technical competitions, cultural activities, literary events, seminars, workshops, placements, study notes and study material printing etc.

5. University expenditure towards Registration fees, Examination fees, etc.

6. Funds are allocated to encourage research and development activities and for enhancing library facilities like subscriptions to Books/ Journals/ Periodicals/ Magazines

Purchases are made with the recommendations of duly constituted Purchase Committee with Director, Registrar, Representative of Finance & Accounts department, HOD and representative from Purchase and Stores department.

The amounts withdrawn from the banks follow a systematic mechanism of obtaining the approval at various levels.

If any expenditure is made beyond sanctioned budget, it gets ratified in a special meeting. Any financial crunch is managed by deferred expenditure.

The financial statement, Income and Expenditure details are available through Profit and Loss Account, Balance Sheet and Ledgers, and duly audited by Statutory Auditors.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

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

Response:

The Internal Quality Assurance Cell (IQAC) is established in the institution to maintain and enhance quality of education. The prime task of IQAC is to develop a system for conscious, consistent and catalytic improvement in the performance of institution. The quality assurance processes, with regard to academics, administrative, are the integral part of the institutional policy. IQAC fosters a number of activities to make everyone aware of the quality assurance strategies and processes.

Two IQAC initiatives which have contributed significantly in quality improvements are given in brief.

Title of Practice: Implementation of an Effective Mandatory Induction Programme

Objective: As per the proposal initiated by IQAC, **Mandatory Induction Programme** for the first year

students was introduced to create manpower who will possess strong technical knowledge and skill, have leadership qualities and be a team player, capable of coming up with innovative solutions and be alive to societal and community concerns as an Engineer. The aim is to help the students evolve into well rounded individuals, process of which starts from the very first year.

Process:

1. In order to make students aware regarding the latest technology trends in industry, eminent industry experts are invited to deliver talks in the campus such that the students can be benefitted to the fullest extent to upgrade and enrich their knowledge base.
2. English and Computer Proficiency assessment courses are conducted by the In-house faculty members to assess a student's employability quotient.
3. Visits to neighborhood places like nearby schools, villages are conducted for the first year students to get them accustomed to different environments and to work in a team.
4. NGO Workshops are also organized and lecture sessions are organized on Values & Ethics for the first year students to enlighten them to understand their responsibilities towards the Society.

Title of Practice: Introduction of MOOCs courses as part of Beyond Curriculum

Objective: The **Massive Open Online Courses (MOOCs)** was introduced as part of beyond curriculum activities to create the excellent opportunities for the students to enrich their knowledge base and skill set for employability where the rate expertise of world famous experts from academics and industry are available, as per suggestion of IQAC.

Process:

1. The MOOCs comprises of two parts: one is theoretical and another is practical subjects.
2. The majority of the theoretical subjects are covered under SWAYAM-NPTEL coordinating Institute like IIT Madras and Practical and Lab are covered by Spoken Tutorial Project - A unique initiative by IIT Bombay.
3. Both the programs are running successfully in the Institute and presently, BCREC is a Nodal Centre for IIT-Bombay and an active Local Chapter of SWAYAM-NPTEL for IIT-Kharagpur.

Based on the recommendations of the IQAC, the merits and areas of improvement for Mandatory Induction Programme and MOOCs is highlighted for further action.

File Description	Document
Upload any additional information	[View Document](#)
Paste 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:

Institute has developed a well planned and robust teaching learning process which is continuously improved through implementing the suggestions and guidelines as provided by IQAC. Institute reviews its teaching-learning process, structures and methodologies of operations and learning outcomes once in a semester through IQAC. In addition, teaching-learning process is reviewed in the meetings of Academic Council, Department Academic Committee (DAC) meetings in presence of CRs, Faculty interaction meetings and appropriate measures are taken at regular intervals of time.

Following are the two examples to enhance Teaching- Learning process:

1. ICT Initiatives

- Use of Digital Classrooms
- Conduct of online class test through in-house software (OES)s
- Conduct of MOOCs courses on beyond Curriculum courses through NPTEL
- Conduct of online classes through digital mode

It was suggested by the IQAC members to maximize the use of ICT resources in every department of the Institute. More emphasis was given to utilize the digital classrooms which are enabled with LCD projectors with internet connection and digital contents to enhance the teaching-learning process. The departmental routines corresponding to different programs are designed in such a manner so as to include the conduct of regular classes through ICT mode. Faculty members can demonstrate PPT, share recorded lectures and other subject materials to deliver their lectures in a more lucid and interactive manner through the ICT enabled digital class rooms.

Students/Faculty members can enroll for MOOCs courses through NPTEL using ICT platform to avail quality learning from IITs in diverse fields of Engineering.

Facility for centralized online tests is developed in-house and the tests conducted through the software e.g. Online Examination System (OES). The system can be accessed through the LAN inside the Campus as well as through the internet outside the Campus.

Google and other digital Platforms are invariantly and extensively used to conduct online classes to benefit the students during the pandemic situation. Frequently regular class evaluations and assignments were designed using these platforms to validate the learning levels of the students.

2. Initiatives for E-management of different units of the Institution through ERP software

IQAC suggested that e-management should be implemented in different units of the Institute Campus to facilitate its students, faculty and staff members. In order to accomplish this, ERP was recommended as a solution for the automation of all the units, Library, Accounts and Finance, Internal Stores and Purchase etc. of the Institute.

Biometric devices are already implemented to capture the attendance of the staff members and generate

attendance records more effectively. The Library Management System (LMS) module has also been successfully implemented. It comprises of an Electronic Library to facilitate both online and offline database accesses to all the students, faculty and staff members. More emphasis was thereafter given to integrate the Fees Collection and the Admission process to streamline the process from Admission enrollment to Fees Collection on ERP software which at present is also successfully running in the Institute making IQAC to record incremental improvement in various activities.

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

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 intitiatives with other institution(s)**
3. **Participation in NIRF**
4. **any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)**

Response: A. All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution	View Document
Upload any additional information	View Document
Paste web link of Annual reports of Institution	View Document

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 Sensitization is a critical issue which needs to be addressed at various levels. The Institute also organizes programs and events at regular intervals in order to spread awareness about the issue. It is recognized that gender discrimination is a part of gender sensitization. Gender equity is attained by conducting programs like seminars, debates, group discussions for both boys and girls on a single platform. In a move to create increased awareness among students towards gender issues, awareness campaigns on gender sensitization are regularly organized for the students of the Institute. The very aim of gender sensitization program is to bring definite orientation in the thinking practices and approach of individuals concerning gender. The program deals with issues pertaining to the relationship between men and women, struggles with discrimination, sexual harassment, new forums for justice.

The Institute ensures that the prescribed curriculum has a thrust on promoting value based education, women empowerment, gender sensitization, biological aspects of genders., socialization of men and women, etc. It caters to the needs of Society.

Women empowerment is a key issue in today's world. The institute has constituted various committees since 2014-15 with senior female faculty/staff members like **Anti-harassment Committee, Women Redressal Cell and Internal Complaint Committee (ICC),** as per rules and regulations of Statutory Authorities like AICTE, MHRD, etc. These committees are formed

1. to promote gender equity and also to deal with related issues of safety and security of girl students and female faculty/staff members of the Institute and

2. to suitably redress the grievances of lady students/faculty members on gender sensitization and attempts to resolve them in a time bound manner and provide proper guidance/counselling.

Counseling of girl students is conducted in a regular manner by the lady faculty members of the above mentioned Committees. Classes related to gender, women's rights and women empowerment are taken for students by the departmental faculty members, NSS, and the Women's Cell.

In collaboration with police officials of local area, Durgapur and the Burdwan district, **Awareness programme on women's empowerment and gender sensitivity, cyber-crime and self-defense** was conducted in the college premises on 4th February, 2020 and BCREC female collectives whole-heartedly participated in the programme.

The Institute follows "**No Discrimination Policy**" for the students in class rooms, in laboratories, in allocation of projects and mini-projects as well as for the staff members in various posts of departmental forums. The entire college activity functions with co-existence and performance of all the students and the faculty members without any discrimination.

Various committees constituted during last few years are well represented by women faculty for example, Welfare Association, Alumni Committee, IQAC, Library, Training & Placement and Cultural Function committee.

In addition, the Institute has also engaged a lady in highest administrative post, i.e. Registrar of the Institute in the year 2015.

Various cultural activities are conducted regularly by the students as well as faculty member without any gender discrimination. For example, women's day celebration, national festivals are celebrated by one and all.

File Description	Document
Link for 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](#)
Link for 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	[View Document](#)
Any other relevant information	[View Document](#)

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)

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

Response:

The very good location of the Institute inspires inhabitants to remain eco-friendly. Devoid of congested city environment, the staff and students enjoy the nature intimately on this campus. The institute has taken conscious efforts to enhance and nurture the eco-friendly environment and always strives for sustainable environment in the campus. A dedicated team of gardeners and sweepers take care of lawns, gardens and planting maintenance to maintain the green environment in the campus in a regular manner. All possibilities of enriching environment are constantly explored and implemented in planned way. The Institute has taken all initiatives in line with the Swachha Bharat Abhiyan to sensitize its student and staff through different activities e.g. seminar, webinar, NSS cell etc.

Waste Management mechanisms followed by the Institute are as follows:

Solid Waste:

- Initiated drives to reduce the usage of plastics in the campus
- Prohibited the use of Styrofoam in the campus
- The solid waste at the canteen and hostel is segregated at source using green and blue dustbins. Organic waste is collected in green dustbin and non-degradable waste is collected in blue dustbins. Collection and pickup of waste is done by Housekeeping staff. Durgapur municipality collects the solid wastes for further disposals.
- Institute has taken initiatives for implementing a composting plant inside the campus for converting the organic and gardening wastes to produce good quality manure which will be used for in-house gardening and also distributed among the staff and the students to promote the waste management practice. A committee is formed to implement the same. However, the initiatives got delayed due to pandemic situation.
- Awareness and sensitization among students about the reduction, proper disposal and reuse of waste are done through displays at different part of the campus.

Liquid Waste:

All waste water lines from toilets, bathrooms etc. are connected to the septic tank. The waste from the septic tank is discharged into underground sewage system of the institute. The sewage system finally discharges the sewage into municipal sewage system.

E-waste:

The minimization of e-waste is given high priority. Technical staffs regularly maintain the electronic devices. There is a common practice of reutilization of electronic devices after repair or correction to reduce the e-waste production.

- The e- wastes like non-functional computers, monitors, printers, keyboards, mouse's etc are collected and are disposed to the scrap dealer based upon the highest bidding.
- The cartridges of laser printers are reused through refilling by the vendors from outside the college campus.
- The batteries of UPS are recharged / repaired / exchanged by the suppliers.
- Institute now have taken a policy for using LCD monitors for all new procurements which will help in reducing e-waste.

- It is planned to install E-waste bin in the BCREC campus, to sensitize students and staff on careful disposal and management of electronic waste.

File Description	Document
Any other relevant information	[View Document](#)
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	[View Document](#)
Link for 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: D.1 of the above

File Description	Document
Geotagged photographs / videos of the facilities	[View Document](#)
Any other relevant information	[View Document](#)

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](#)
Any other relevant documents	[View Document](#)

7.1.6 Quality audits on environment and energy 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: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	[View Document](#)
Certification by the auditing agency	[View Document](#)
Certificates of the awards received	[View 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. **Disabled-friendly washrooms**
3. **Signage including tactile path, lights, display boards and signposts**
4. **Assistive technology and facilities for persons with disabilities (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: B. 3 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:

Dr. B. C. Roy Engineering College (BCREC) is well known for its endeavour towards academic excellence but also because of its HR policies of empathy, societal consciousness, and harmonious relationship with its ambient culture and sensitivities.

Culturally, BCREC has always been a melting pot. Not only are our students from different parts of India, but our Faculty and Staff Members are, as well. We celebrate each other's' festivals, music, and art. Posters and banners reflect diversities in languages; College bands reflect diversities in musical preferences. We wish each other on our respective religious and social occasions. Typically, our **Orientation Programs** have some artistic offering from every section of our students' home states! BCREC celebrates traditional occasions and birth anniversaries of stalwarts with appropriate cultural fervour in the campus through cultural programs, speeches, and talk sessions. In a salute to our traditional spiritual norms of mental and physical wellbeing, BCREC also holds regular Yoga Camps and Workshops for its collective in campus. **National Yoga Day** is also observed with enthusiastic participation from all.

Regional concerns are factored in for policy framing. Holidays and vacations are formulated keeping in mind regional occasions. A student from a particular region of the country is encouraged to discuss about his/her life experiences with others and share festivals along with special food brought from home.

Linguistic differences are assimilated by ensuring a common professional language during working hours - **English.** However, care is taken to ensure no one, Teacher, Staff, or Student, is made to feel marginalized because of any linguistic insufficiency. The Office culture is to support and encourage before censuring.

Communal divides are rare in BCREC. Castes, Creeds, and Religions melt into each other as the BCREC collective mingle to work, play or celebrate. BCREC has a robust and long-standing commitment to its social responsibilities. The NSS Cell of the college, operational since 2007, has undertaken many a socially responsible drive in the areas of charity initiatives towards the underprivileged in society.

Socio-Economic divides are undoubtedly existent. Not everyone belongs to the same social or economic strata. However, while at work, these divides blur as we become BCRECians joined together for a common cause on a common platform. Our goals homogenize us. Our economics are directly proportional to the organization's.

The other inclusivity credentials that BCREC celebrates are a conscious sensitization to 'different / differently-abled' persons. LGBTQ is commonly and routinely discussed as normal and acceptable. Differently-abled students, staff, or teachers are supported with ramps, lift facilities, even special assisting staff members designated. Group Discussions on LGBTQ Awareness, Rights, and Empowerment are made normal, accepted topics of discourse in the Soft Skills Sessions, for every student. This is done to remove, at the very outset of hostel life, misgivings and apprehensions among students, and encouraging sensitization and inclusivity of approach towards campus life.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	[View Document](#)
Link for 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:

Dr. B. C. Roy Engineering College (BCREC) is fully aware of its noble role as shapers and influencers in the creation of India's generation next. Our college building keeps a copy of the Constitution Preamble in its Lobby. It is framed and put up in the pride of place to ensure the expression of the value BCREC Collective puts on it.

The end goal of all education is to create the country's future citizens. BCREC is well aware of its constitutional roles and responsibilities. There is no law greater than that enshrined in our constitution. We, at BCREC, are committed to the philosophy espoused by the Indian Constitution, in word and spirit. All special occasions are commenced with inaugural speeches that mention and laud our forefathers' vision document.

On Constitution Day, BCREC Collective renews its pledge to the Constitution by repeating aloud, word for word, the Preamble. Students are reminded and tasked to exhibit assignments/projects enshrining constitutional values as part of their Values and Ethics classes embedded in their curricula. BCREC is a responsible organization that vows its allegiance to the most important religion in a democracy - the Constitution.

Some specific instances where BCREC has proactively promoted awareness of one's constitutional roles and responsibilities may be enumerated as follows:

- On the Republic Day and Independence Day "**New India Pledges taking ceremony**" by all present.
- As part of the curriculum as well as a non-credit offering, teachers at BCREC engage students in The Constitution of India/Essence of Indian Knowledge & Traditions.
- An on-line Poster Competition by the student collectives of BCREC on **The Fundamental Rights and Duties of Indian Citizens** was organized during the lockdown period.
- In keeping with the values and ethics of Community Service, BCREC routinely conducts **Swacch Bharat** and **Swasth Bharat Abhiyaans**.
- In association with NGOs, **Organ Donation Pledge Workshops** are organized in every year under National Service Scheme (NSS) to acquaint the students of BCREC with the pressing need for more individuals to become Organ Donors.
- As an Engineering College, BCREC celebrates every year **Engineers' Day** with debates, projects, and models on sustainable development and eco-friendly models of economic growth.
- During the lockdown period, even a webinar was organized on **"Environmental Protection in Retrospect"** by a renowned academician of IIT-K who is incidentally the Chairman of the Board of Governors of BCREC.
- **World Environment Day** is celebrated by all at BCREC with great enthusiasm by planting trees to keep the campus green.
- Promoting Entrepreneurial Initiatives and Capabilities through a robust **E-Cell** and its incubation centers. BCREC in its association with **National Entrepreneurship Network (NEN)** conducts regular seminars/workshops with stalwarts of Industry/Academia to enable our students to not be job seekers but also, job creators.

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	View Document
Link for 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: B. 3 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
Any other relevant information	View Document

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

Response:

National and International commemorative days, events and festivals are celebrated in the Institute with great enthusiasm every year in a variety of ways. Thoughts of great Indian personalities are indoctrinated among the students through the celebration of different days. Different commemorative days are also regularly posted in the Face Book and Instagram pages of the Institute.

Republic Day

Students and staff of the institute assemble on 26 January on the occasion of Republic Day and attend flag hoisting followed by a systematic parade by NCC student cadets and higher authorities address the students and staff on Fundamental Duties and Rights. "**New India**" pledge is taken by total BCREC collectives.

Independence Day

Independence Day is celebrated on 15 August in BCREC campus through flag hoisting and other ways in the similar manner like Republic Day.

Gandhi Jayanti

Gandhi Jayanti is celebrated on 2nd October in a unique manner at BCREC in remembrance of Mahatma Gandhi. Remembering his principles, BCREC NSS volunteers keep alive the spirit of the Father of our Nation through their tributes.

Constitution Day

Constitution Day of India is celebrated every year to raise awareness about the adoption of the Indian constitution.

Swami Vivekanada Birth Anniversary

The Youth Day is celebrated on the 12th January by celebrating Swami Vivekanada's Birth Anniversary. Speeches are given by the higher authorities on Vivekananda's teachings which continue to inspire millions of people across the world.

Gurudev Rabindranath Tagore Birth Anniversary

Birth anniversary of Kabiguru Rabindra Nath Tagore, is celebrated with a small function at Rabindra Kanan on the 25th of Baisakha. A small tribute is given through music, recitation and short speeches.

Birth & Death Anniversary Day of Dr. B.C. Roy

The Institute organizes a memorial service to pay homage to the great visionary, Dr. B. C.Roy on 1st July every year.

Teachers Day

Students organize teacher's day celebration on 5th September in the commemoration of the birth anniversary of Dr. Sarvapally Radhakrishnan. They invite teachers from all the departments and honour them by offering flowers, gifts, greeting cards and organizing some cultural activities dedicating it to the teachers.

NSS Day: The NSS wing of the institute celebrates the NSS day on 24th September. Different programs are organized and performed by the students on the same day.

Engineers' Day

BCREC celebrates Engineers' Day on the 15 September every year as a tribute to the greatest Indian Engineer, Bharat Ratna Mokshagundam Visvesvaraya.

Institute celebrates **World Environment Day** on the 5th June by plantation of trees in the campus to keep the campus green.

Matri Bhasha Diwas is celebrated on every 21st February. Various facets of Bengali language are showcased in the form of essay, debate, drama, singing events etc.

Remembrance Day of Dulal Mitra beloved late President of the BCREC Society

The Institute commemorates the death anniversary of a great personality, Late Dulal Mitra, beloved President of BCREC Society; whole BCREC collectives offer tributes to the departed soul.

File Description	Document
Link for Geotagged photographs of some of the events	View Document
Link for any other relevant information	View Document
Link for 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:

Best Practice 1

Title of the Practice

Career Guidance Training

Objectives of the Practice

In today's ever-changing dynamism, Career Guidance to the students is the most vital aspect of college education so that the students can serve the needs of the ever-changing and dynamic market needs. BCREC provides career guidance to the students in following aspects.

1. Exploring various career options
2. Developing self-confidence and self-reliance
3. Creating interest for higher studies
4. Promoting entrepreneurship
5. Promoting a culture among students for lifelong learning

The Context

In today's competitive markets, right path of career choice matching with the potential and the interest is

not an easy task for the students. To keep the students career-focused and make them aware about the industry and social needs, career guidance through different training processes is most essential. The need of the hour is also to induce a habit among the students for lifelong learning and make them employable / industry ready.

The Practice

These goals are achieved through the following activities of Training and Placement Department as well as the individual departments of specialization in the Institute:

1. Students are trained on Communication & Presentation Skills (using language lab) imparted by the faculty members of English Department.

2. Specific training on technical skills like Aptitude test, Programming skills, etc. is provided to the students by hiring Professional Agencies as many jobs require some degree of skill with words and numbers.

3. Soft Skills Training Program.

4. At the individual department level, Career Guidance is provided to the students to help them explore various career options.

5. Mock Tests, Mock Interviews and Personality Development training program by the Campus T&P team members are held on continuous basis to achieve higher rate of placement.

6. To create awareness about the opportunities / challenges in various engineering / application / management sectors, resource persons from industries are invited to deliver technical talks and to impart knowledge on the current trends and latest technologies.

7. To make student more enthusiastic and boost their self confidence, alumni are also invited to address them and guide them through the career options.

8. Guidance on competitive examinations e.g. GATE and different public service commission examinations is also given at the department level.

9. Students are encouraged to participate in technical contests, carry out project work, undergo internships and also organize various technical fests and social activities to enhance their knowledge through experience.

10. Seminars/Workshops are organized by individual department/students' chapters in collaboration with renowned industries highlighting the importance of education in the industry are conducted.

Constraints faced during students' career guidance:

There is a serious lack of awareness amongst students, their parents, and even teachers which creates difficulty while giving career guidance. There is a serious mismatch between skill building and available jobs. Awareness of career counseling is really low among the students, this leads to hesitation among the students to venture for career counseling in the first place.

Evidence of Success

The performance of the practice is reflected in the campus placement of the students. The total placement scenario has been changed and the placement percentage has taken an upward trend year-by-year. Moreover, students started understanding that they are to be industry-ready and a larger section of the students get inclined to jobs of different flavor beyond specific technical skill sets.

To add to this, career guidance is helping the students to understand their inclination towards higher studies. Although the success rate is not commendable, however, this kind of preparation helps them to face tough technical interviews as well their confidence increases many-fold on attempting public service examinations. This is evident from the fact that several students are qualifying for the public service commission examinations just after passing out.

Problems Encountered and Resources Required

The problems encountered in implementing the practice are as follows:

1. Finding out right type of professional agencies who can provide training and skill sets to the students as per market demand.

2. Difficulty in convincing students for regularly attending the training programs by the professional agencies for facing tests/interviews.

3. Difficulty in motivating students for higher studies and public service examinations for which attending classes beyond the regular class hours is a requirement

4. Difficulty in making student understand about the fact the instead of short term goals, long term goals are more effective.

Although there are various problems, the institute has been able to implement the practice effectively through decentralizing the training and placement activities and mobilising its technical and non-technical resources in an efficient manner.

Best Practice 2

Title of the Practice

Content beyond Curriculum

Objectives of the Practice

The main objective of the practice of **Content beyond Curriculum** is to help students in following aspects.

1. To groom the students in a progressive environment to become competent professionals.
2. To create excellent opportunity for students to acquire necessary skill sets and develops self-confidence / self-reliance to face various competitive and professional examinations for employability.

3. To enable the students to learn self-learning, team-building, leadership and management skills, innovation and creativity.
4. To diversify the programme contents and to establish greater relevance to socio-economic problems of the Society.
5. To inculcate democratic, moral, social and spiritual values in the minds of the learners.

The Context

Since the industry is continuously evolving and technology is ever emerging, mere learning the curriculum is insufficient. There is often a mismatch between what is learnt in the institution and the industrial expectations from the graduate engineers. In order to bridge this gap and make students industry-ready, much emphasis is given for teaching content beyond the regular curriculum which includes branch specific value added courses and hands-on placement training.

The Practice

While applying for accreditation for NBA in the year 2015, the institute adopted its own methodology for introducing the practice of content beyond curriculum. Initially academic contents beyond the curriculum were introduced for four programs.

Starting academic year 2018-2019, institute decided to introduce the choice based credit system (CBCS) following AICTE model curriculum for all B.Tech programs as specified by the university. Under this scheme from the academic year 2018-2019 onwards students became eligible for Honours degree by collecting minimum 20 extra credit points, as per mandate of the University through online courses (MOOCs).

The institute has also preferred SWAYM-NPTEL for implementing the CBCS as the institute is a NPTEL local chapter.

As per Mandatory Additional Requirement (MAR) of the university, a concept of mandatorily accumulating some points through a basket of activities for professional development as well as to inculcate the values in the students has also been introduced from 2019.

Constraints of the Practice

1. Committed faculty members are required to clarify doubts of the students participating in MOOCs courses. This requires continuous up gradation of knowledge of faculty through FDP programs.
2. It has been observed that students enmasse generally prefer some particular course; other courses are chosen by a few. Breaking this chain as well motivating the students for different set of courses is quite challenging.
3. Individual counselling and guiding takes time and awareness programmes and training had to be organized for the stakeholders.

Evidence of Success

The practice is successfully implemented through constant monitoring by the MOOCs and MAR coordinators and motivating students by the mentors. Following are some of the achievements:

1. Several students of 2018-2022 batch participated in the soft skill development, ethics and programming skills.
2. For MAR activities all students are actively participating. Almost all pass-out students of 2019 and 2020 have completed the minimum requirements.
3. In July-October 2019 NPTEL session (for MAR and CBCS), out of total 952 registered candidates 600 passed successfully (63%) with 11 toppers in different subjects.
4. Felicitation at the institute level is done every year for the successful NPTEL participants having Gold, Elite and Silver tags along with the course toppers. In September 2019, 20 Gold, 147 Elite and 67 Silver tagged candidates are felicitated along with 14 toppers.
5. As a nodal center of NPTEL, the institute has been recognized as an ACTIVE and one of the top 100 local chapters. Rating of the college is "A" which is based on performance in NPTEL Online certification courses in July-October 2019.

Problems Encountered and Resources Required

The challenges encountered in implementing the practice are as follows:

1. Motivating students for CBCS is quite difficult. In many cases during the 1st year, students start participation in CBCS, however with further progress of semesters they lose interest in many cases.
2. Individual counselling takes time and the faculty members faces challenges to find sufficient time for individual guidance.
3. Although there is a basket of MAR activities, however it is difficult to diversify students for all such activities. It becomes a challenge for the mentors to convince the students that more than the minimum points will enhance their professional and socio-economic capabilities as it is not linked to credit requirements.

File Description	Document
Link for Best practices in the Institutional web site	[View Document](#)
Link for any other relevant information	[View Document](#)

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:

"Setting New Benchmarks in Sustainable Quality Education"

Dr. B. C. Roy Engineering College, Durgapur, the flagship Unit of Dr. B. C. Roy Group of Institutions, is celebrating two decades of its meaningful contribution in the promotion of higher technical education with a focus on sustainable growth projectile and to provide **excellence in quality and meaningful education** to the students. The institution has grown steadily over the years from a single Unit to a Group

of Institutions under its umbrella creating multiple job opportunities. BCREC, Durgapur along with other eminent colleges of Dr. B.C. Roy Group of Institutions is the confluence of minds, dreams, hopes & ambition and is leading the way for technological advancements in the country in its own unique way. Being located in the industrial hub of Durgapur, Dr. B. C. Roy Group of Institutions has a unique opportunity for Industry-Institute Partnership.

The unwavering commitment to quality in all aspects of education including infrastructure, academics and administration has won the Institute respect and accolades from all spheres of the society. With a focus on research that drives innovation, the Institute endeavours to continuously create new epicentres of growth.

The institute boasts of an impeccable placement record in top companies and have received several awards and accolades for their service in the field of Education. Recently, two of the Engineering Courses have been awarded the coveted **NBA Accreditation** being recognized with this prestigious ranking for the second time.

BCREC's Alumni Association is one of its major strengths and that is portrayed by the quality faculty that BCREC nurtures. The fact that BCREC Durgapur has been acknowledged as **"The Best Emerging Engineering College in India.."** within a decade's time has come about not by chance but through design in the vision, the hard work, consolidation and the ability to inspire those who teach and those have come to learn, by the people at the helm of affairs.

The institute has been in the news for a highly **successful global tie-up** to encourage value added education. Dr. B. C. Roy Engineering College has recently signed a historic MoU with Cambridge Marketing College , UK to further strengthen its global connectivity and presence.

BCREC today is a reliable name in the field of education, research and training due to the untiring efforts of the **teaching fraternity** here. Our Faculty constantly upgrade their knowledge and expertise by taking up periodic training in new technologies, participating in Seminars and Faculty Career Development Initiatives (FDP's) or virtual simulations, MOOCs and we have a dedicated Research and Development Cell. BCREC actively promotes Research and Projects through collaborative platform like IEI (India), IEEE, Xplore, MAKAUT- Incubation Centre and have earned appreciation at National and International Forum. The Promotion of employees and Team Work form a part of various committees in this noble

institution. The faculty of the institution builds positive employer brands, and performance management strategies that help our employees develop expertise that maximizes their potential, and human approaches to the delivery of HRD initiatives. The academic attainments of the faculty are evidenced by their high standards of erudition & commitment, notwithstanding the Institutions of repute they come from. (Super -Number of Ph.D. holders in BCREC is 58 and most of the teachers have done their M.Tech. from IITs, NITs, IEST, Jadavpur University, Calcutta University and the like.) Each and every Department has a pool of Technical Assistants dedicated to individual labs. Support Managers and each member of the staff, are all valued contributors in this journey for excellence and essential for **employee retention**.

This institution is a unique combination of strict discipline as well as a friendly ambience, where all employees get ample opportunity to explore their inner potential on one side and development of physical and social attributes on the other. Play grounds and multi-gyms in all the campuses are always full of enthusiastic participants in mornings and evenings not only among students but employees as well. Employees also have ample scope to play Basket Ball, Volley Ball, Soccer, Cricket as well as practice Yoga and Karate. Gymnasia, of course, are very popular as always.

The teaching excellence at BCREC Durgapur, is inspirational for the young minds. The Wi-Fi enabled campus has integrated technology into its teaching learning process with virtual learning platform in times of crisis. In the environment of pandemic due to COVID 2019, the Institute is building a new platform to provide video lectures, assignments, feedback mechanism uploaded in the website and e- learning modules are being utilized by the faculty members when chalk-and–board teaching is not possible. Numerous Webinars on various **beyond syllabus topics** and Online events on Extra-curricular activities are smoothly planned for the next generation learning. A dedicated Entrepreneurship Cell provides an environment that fosters and nurtures entrepreneurship and start-up projects based on students' innovative ideas.

Healthcare is an utmost priority where dedicated Medical Units with doctors and paramedical staff are for students and employees. They operate on the basis of a unique tie-up with **'The Mission Hospital'**, Durgapur. Along with that, Employee Group Family Floater Medical Insurance is provided to all employee and staff.

Our USP is our student composition, students who are diverse, self motivated and go-getters. The institute grooms students to effortlessly face the challenges of corporate world and also become better human being so that they contribute to the cause of our Society, once they pass out of campus. Students are trained to work as a team, think and build a positive attitude raising the bar for **sustainable growth and excellence** even further. The organization is poised to take its place among the frontline institutions of Eastern India in its field by 2025 when it will be celebrating its Silver Jubilee.

Let us open up the horizon so that the students can dream and sore the skies with belief that "**Sky is Not the Limit**".

File Description	Document
Link for appropriate web in the Institutional website	[View Document](#)
Link for any other relevant information	[View Document](#)

5. CONCLUSION

Additional Information :

1. The institution has been a recipient of numerous awards since its inception.
2. Good rating by NPTEL consistently.
3. Secured 12th place among the top Engineering Colleges of Excellence in India by Competition Success Review.
4. Ranked 68 and 43 among the top 100 private colleges of India by Data Quest and Higher Education Review respectively.
5. Outstanding Engineering Institute.
6. Best Teacher Award received by two faculty members for their outstanding contributions in academics and research by MAKAUT in consecutive two years 2017 and 2018.
7. Excellent Engineering college in West Bengal, the eastern part of India
8. Bestowed Excellence Award by Zee 24 Ghanta in 2018, 2019 and 2020
9. A pool of Ph.D. awardees amongst the faculty members is honored.
10. Learning Management System through an indigenous software is being implemented for deep learning and to inculcate research culture amongst the students and the faculty members.
11. One PG program, Master in Business Administration (MBA) and another UG program, Electrical Engineering (EE) will be applying for NBA accreditation shortly in 2020.
12. College will apply for the NIRF ranking in 2020.
13. The Institute enjoys a solid reputation among the student community, particularly those with a passion for engineering. This Institution is renowned for academic performance since its inception.
14. The Institution has an active Entrepreneur Development Cell which organizes a number of events to promote awareness of entrepreneurship. The Institute inculcates social consciousness among its students through active forums such as NSS, NCC, etc.
15. Students Chapters/Technical clubs of all the departments, Tomorrow's Engineers club, Software Development club, Robotics lab, UAV lab, Tinkering lab conducts regular interactive workshops, seminars, and competitions and provides immense opportunity for the students to practice the principles on a real-time application.
16. Horizon, a tech-fest is a yearly event conducted every year to bring out and showcase the talents of the students on various key Engineering Disciplines. The annual cultural festival provides facilities to the students to compete, display and prove their excellence in extra-curricular activities.
17. The Institute is well-positioned in the University in Sports. This Institute acted as host in Inter-College Cricket Tournament and Inter-Collegiate Volleyball Tournament organized by MAKAUT.

Concluding Remarks :

Dr. B. C. Roy Engineering College, Durgapur (popularly known as BCREC) stands as a synonym for quality education in the city of Durgapur. BCREC was established in 2000 by great visionaries to impart quality education to all the sections of society.

The Institute provides quality education in Engineering and Management streams in the Durgapurregion. The Institute has a very strong, experienced and highly dedicated group of faculty members, having expertise in varying areas. An ever-consistent faculty-student ratio is maintained between the number of teachers and that of students. Most of the faculty members are engaged in higher research, with a few even having reputation of

coining popular technical books in the market. The annual rate of research publications in the department is highly impressive. A steadily disciplined but friendly liaison is maintained with students. The teaching-learning process is at its best with highly sophisticated laboratories under able care of learned group of Technical Assistants. The Institute offers a number of elective papers to the students of final year to acquaint them with the latest technologies. Students do multi-dimensional real-time projects in final year to gain practical exposure of the maximum level. Special care is taken for enhancing the level of soft skills, communication skills of students using expertise of departmental faculty as well as invited external agencies.

There are many best practices being followed in the Institute, as a result the Institute has made a name for itself in the region.The vision of the Institute is to become a leading institution in Engineering and Management education and all efforts are being made to achieve the vision in the near future.

Dr. B. C. Roy Engineering College, Durgapur, has scaled a rapid growth in terms of quality and quantity since its inception in 2000 with support of vision of the management and governance.The thrust in academic excellence and holistic growth of the students remain the prime focus of the institute. The Institute promises to itself to do every possible thing to quench its thirst to reach the apex of academic excellence.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification

1.1.3	**Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years**
	
	    1. **Academic council/BoS of Affiliating university**
	    2. **Setting of question papers for UG/PG programs**
	    3. **Design and Development of Curriculum for Add on/ certificate/ Diploma Courses**
	    4. **Assessment /evaluation process of the affiliating University**
	
	    Answer before DVV Verification : A. All of the above
	    Answer After DVV Verification: B. Any 3 of the above
	Remark : Observation accepted, edited accordingly.

1.4.2	**Feedback process of the Institution may be classified as follows:**
	
	Options:
	
	    1. **Feedback collected, analysed and action taken and feedback available on website**
	    2. **Feedback collected, analysed and action has been taken**
	    3. **Feedback collected and analysed**
	    4. **Feedback collected**
	    5. **Feedback not collected**
	
	    Answer before DVV Verification : A. Feedback collected, analysed and action taken and feedback available on website
	    Answer After DVV Verification: E. Feedback not collected
	Remark : Observation accepted, filled feedback forms not provided hence input has been edited.

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: 	2019-20	2018-19	2017-18	2016-17	2015-16
---	---	---	---	---
771	800	818	874	916 | Answer After DVV Verification : | 2019-20	2018-19	2017-18	2016-17	2015-16
---	---	---	---	---
765	803	819	875	916	 2.1.1.2. **Number of sanctioned seats year wise during last five years** Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
1017	1092	1092	1092	1128

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
1017	1092	1092	1092	1128

Remark : Input edited as per provided document by HEI.

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)** 2.4.2.1. **Number of full time teachers with *Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt.* year wise during the last five years** Answer before DVV Verification: table1 Answer After DVV Verification : table2 Remark : Number edited as per provided PhD certificates and DVV not considered provisional certificate.

table1:

2019-20	2018-19	2017-18	2016-17	2015-16
60	58	49	50	46

table2:

2019-20	2018-19	2017-18	2016-17	2015-16
60	58	52	45	42

3.1.3	**Percentage of departments having Research projects funded by government and non government agencies during the last five years** 3.1.3.1. **Number of departments having Research projects funded by government and non-government agencies during the last five years** Answer before DVV Verification: table3 Answer After DVV Verification : table4 3.1.3.2. **Number of departments offering academic programes**

table3:

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

table4:

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
9	9	9	9	9

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
9	9	9	9	9

Remark : Observation accepted, edited accordingly.

3.3.3	**Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years**

3.3.3.1. 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:

2019-20	2018-19	2017-18	2016-17	2015-16
60	47	48	45	39

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
29	15	22	20	09

Remark : Observation accepted, considered only publications with affiliation of the HEI and excluded publications with ISSN numbers. Edited according to ISBN/ EISBN number.

3.4.2	**Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years**

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
3	7	2	0	1

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	1	0	0	0

Remark : Edited according to the provided document by HEI

| 3.4.4 | **Average percentage of students participating in extension activities at 3.4.3. above during last five years**

3.4.4.1. **Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
3364	2045	628	121	196

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
670	80	64	47	72

Remark : Observation accepted, 1)only those documents considered with marked attendance. 2)Documents Without photographs with caption and date is not considered. |

| 4.2.2 | **The institution has subscription for the following e-resources**

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: B. Any 3 of the above
Remark : Observation accepted, edited accordingly. |

| 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:

2019-20	2018-19	2017-18	2016-17	2015-16
24.22	29.40	24.44	31.18	20.58

Answer After DVV Verification :

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------| |

11.59	12.42	11.54	9.90	20.58

Remark : Observation accepted, edited accordingly.

4.2.4	**Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the last completed academic year** 4.2.4.1. Number of teachers and students using library per day over last one year Answer before DVV Verification : 145 Answer after DVV Verification: 95 Remark : Input edited as per provided data by HEI.

5.1.3	**Capacity building and skills enhancement initiatives taken by the institution include the following** 1. **Soft skills** 2. **Language and communication skills** 3. **Life skills (Yoga, physical fitness, health and hygiene)** 4. **ICT/computing skills** Answer before DVV Verification : B. 3 of the above Answer After DVV Verification: C. 2 of the above Remark : Observation accepted, edited accordingly.

5.1.4	**Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years** 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** Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
625	1333	802	700	60

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark : Observation accepted, edited accordingly.

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:

2019-20	2018-19	2017-18	2016-17	2015-16
267	279	265	338	205

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
261	272	260	338	205

Remark : Observation accepted, edited accordingly to the given document by HEI

5.3.3 — **Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)**

5.3.3.1. **Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
13	9	9	9	9

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
3	3	3	2	2

Remark : Input edited as per provided document by HEI. Event should not be split into activities.

6.4.2 — **Funds / Grants received from non-government bodies, individuals, philanthropers during the last five years (not covered in Criterion III)**

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
4.65	0.53	0.69	1.19	0.49

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark : Observation accepted, The sponsorship amount for cultural events is not considered.

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** Answer before DVV Verification : C. 2 of the above Answer After DVV Verification: D.1 of the above Remark : Input edited as HEI has provided rain water harvesting details.
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 : Any 4 or All of the above Answer After DVV Verification: B. 3 of the above Remark : Observation accepted, edited accordingly.

2.Extended Profile Deviations

ID	Extended Questions
1.1	**Number of full time teachers year-wise during the last five years** Answer before DVV Verification:
1.2	**Number of sanctioned posts year-wise during last five years** Answer before DVV Verification:

1.1 — Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
173	179	192	212	210

1.1 — Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
168	171	192	212	210

1.2 — Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
168	171	224	224	230

1.2 — Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
0168	171	224	224	230