

FOR

1st CYCLE OF ACCREDITATION

JALPAIGURI GOVERNMENT ENGINEERING COLLEGE

JALPAIGURI GOVERNMENT ENGINEERING COLLEGE JALPAIGURI, WEST BENGAL, INDIA, 735102

735102 www.jgec.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

(Draft)

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Jalpaiguri Government Engineering College(JGEC) is a premier institute for quality technical education in India. Established in 1961, the college has produced many talented engineers till date. It holds the distinction of being the second oldest engineering college in West Bengal. It is an Autonomous college fully owned by the Government of West Bengal and affiliated to Maulana Abul Kalam Azad University of Technology. At present, the Institute offers six UG courses (CE, CSE, ECE, EE, IT & ME) and two PG courses (EE & ME) in the field of technology / engineering. The teaching-learning process is facilitated by regular and qualified teachers. The Institute also sets its goal to be a role model in teaching, research and personality development to create skilled human resource with a sense of responsiveness towards the society, the country and the world at large. The Institute is also included under Section 2(f) and 12(B) of the UGC. The Institute is governed by a Board of Governors (BOG) constituted as per the provisions of the All India Council for Technical Education (AICTE) and the affiliating University/State Government norms. The Governing Body consisting of eminent educationists and industrialists as members. Support provided by the Directorate of Technical Education (DTE) under Higher education department of Government of West Bengal, efficient leadership and contribution made by the faculty members, staff, stakeholders and proactive students contribute to the development of core values of the Institution. In spite of many constraints, by utilizing the available resources in best possible ways, the Institution continues to create dynamic human resources of global standards with capabilities of accepting new challenges. The vision of the Institute is to achieve Centre of Excellence in the field of Engineering & Technology for creating dynamic human resources of global standards with capabilities of accepting new challenges.

Vision

To be a provider of globally competitive, high quality technical human resources. To promote and significantly contribute towards development of technologies and innovations appropriate to sustainable economic groth and enrichment of quality of life.

Mission

To Develop itself into an institute of world class reputation and advance knowledge and educate students in the areas of technology.

- Primary mission of the Institute is to produce quality human resource with capacity to serve the fraternity in a wide variety of roles including science, engineering, teaching, research, entrepreneurship and management.
- To prepare citizens who would grow to be competent enough to contribute significantly with personal integrity and civic responsibility for the betterment of mankind throughout their careers and profession.
- To promote and significantly contribute towards development of technologies and innovations, appropriate to sustainable economic growth and development of the society through enrichment of

quality of life of the human race.

• To develop itself into an institute of world class reputation and advanced knowledge and educate students in the areas of technology.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- 1. The Institute possesses an effective and efficient mix of young, dynamic, versatile along with many experienced, research oriented faculty members with outstanding records teaching and research acumen.
- 2. Availability of innovative and flexible resource persons
- 3. Technical efficiency and expertise
- 4. Quality of stakeholders (mainly students)
- 5. Partial up-gradation through TEQUIP Phase I.
- 6. Scope for exploitation in favor of the Institution e.g. easy availability of students, lot of scope for IRG, consultancy services etc.
- 7. Availability of space for future expansion
- 8. Group cohesiveness among faculty and students.
- 9. Campus environment is free from any interference
- 10. Green and Sprawling campus with scenic landscape and perfect eco ambience.
- 11. Holistic development of students beyond class room activities, social work and community engagement.
- 12. Tracer Study reveals that our alumni are employed in good positions in different national and multinational organizations. Students passing out from the Institute have been strengthening a tremendously successful pool of alumni, who are achieving excellent heights as professionals in different academic, business and industry organizations of national and international repute.

Institutional Weakness

- 1. Insufficient number of teaching & supporting Technical Staff
- 2. Lack of fund to create basic infrastructure that supports running and upcoming programs and projects
- 3. Unable to comply with the rapidly changing technological and global market due to lack of competitive strength
- 4. Lack of emerging infrastructure such as Digital Library, Video Conferencing Class etc. to adopt new teaching learning methodologies.
- 5. Expanding opportunities for research and development and inadequacy in flexible integration and coordination of new information according to needs
- 6. No recurring/non-recurring fund is allotted for hospitalities for industry-institute interaction.
- 7. Weak communication skill due to regional mode of learning habits in schooling time, setting up stiff challenge to placement cell.
- 8. Inadequacy to develop new research out ahead of competitors for a growing market.

Institutional Opportunity

1. New developments in communication technologies(Internet, Digital Library, Video Conferencing Class room)

- 2. Collaboration with universities of repute and research organizations in India.
- 3. Location of the Institute has the potential to draw consultancy work and IRG.
- 4. Being a government institute, there is easy access to Industrial consultancies and to expedite vocational training for the students.
- 5. Alumni interaction and their participation to motivate the students for quality improvement

Institutional Challenge

- 1. Meeting up industrial and corporate demands of employable quality engineers due to diversity in demand of competing markets
- 2. Non availability of high speed internet line as an inherent threat which may invoke unwillingness of quality and reputed recruiters.
- 3. Guidelines for authorship in research publication and patent: publication of research and scholarly results
- 4. Meeting up the stiff need to implement quality research facilities and standards.
- 5. Ownership and retention of scholarly / research records applies to funded research.
- 6. To uplift the status of Entrepreneurship development.
- 7. Risk of losing faculties who are closely working with the training & placement for the betterment of the students.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

- The curriculum design and development process of the institution has been carried out keeping in view of the changing societal, global needs and employability of students.
- The curriculum for different courses is revised regularly keeping the current trends of national needs such as development of appropriate Technology, Entrepreneurial Skill Development etc.
- The Institute also ensures successful implementation of the curriculum through active participation of teachers in respective departmental meetings and by providing them expert advice to achieve the prescribed goals through innovative teaching methods such as- presentations, assignments, miniprojects, discussions, workshops, seminars, industrial visits, computer education apart from regular / traditional teaching methods.
- The Program Educational Objectives (PEOs), Program Specific Outcome (PSOs), and Course Outcome(COs) are designed in consonance with the graduate attributes of Washington Accord and National Board of Accreditation.
- The institute offers 6 UG & 2 PG programs contributing to Engineering & Technology enabled development which is needed for the country.
- The institute follows elective and open elective system in most of the academic programs. The students are given choice of electives based on the availability of resource persons. The institute has introduced inclusive courses on professional ethics & environmental science which are offered at various levels in all UG programmes.

- It is mandatory for all the students to take up value added courses, undertake projects and industrial training/Internships.
- The feedback received from the students and stakeholders are carefully analyzed, discussed and appropriate actions are initiated at various bodies including the Department Committee, Academic Council etc.
- Keeping the global market needs and to make the students more employable, the Institute arranges several short-term courses for faculty.
- The Institute through its NSS unit and other programmes provides the students experience in social, cultural and civic affairs, which has a bearing on personality development and capacity building of students.

Teaching-learning and Evaluation

- West Bengal state government regulates engineering admissions for UG in West Bengal through centralized admission procedure. Admissions are based on the entrance examinations i.e WBJEE/JELET conducted by the state government and Admissions to PG programmes are regulated by the affiliating university MAKAUT. The Institute follows rules and regulations of the State Government with regard to catering diverse needs of students like differently abled and other categories.
- As a government Institute, it recruits adequately qualified and experienced resource persons as faculty in the state.
- The teaching schedule of the institute is planned by meticulously designed Academic Calendar at the beginning of every academic session.
- Teaching-Learning and evaluation criterion deals with efforts of the Institution to serve students of different backgrounds and abilities. High demand ratio indicates popularity of the Institute in terms of its heritage, infrastructure, research focus, quality of teaching-learning, and resources.
- Interactive instructional techniques that engage students in innovative thinking and critical assessment, through the use of projects, presentations, internship and in some cases the application of ICT resources are actively considered. Effective learning is ensured with qualitative content delivery given by the concerned faculty by following conventional approach as well as all possible e-learning resources such as NPTEL Lectures, models, charts, Journals etc.
- Evaluation Process and reforms emphasize the effectiveness of teaching-learning process adopted and its awareness to all the stakeholders of the institution. Institution has full proof examination system by utilizing the available resources in best possible ways in order to maintain the quality and sanity of the examination process starting from generation of admit cards to declaration of results. Student grievances are addressed timely.
- Programme outcomes are assessed using direct/indirect methods to identify educational and operational gaps to propose action plan for further integration in the strategic planning.
- The Institute assigns a mentor to a group of students and the students are counselled by the mentor as and when needed. Poor performers who are mainly those coming from the vernacular medium are provided with Guidance and Counselling by the mentor and the concerned subject teacher.

Research, Innovations and Extension

- JGEC recognizes the importance of promoting the creative and scientific temper among its students. The Institution encourages the faculty to carry out research and to promote innovative practices for serving the community through extension activities. In this regard, JGEC has encouraged its faculty and students to establish linkages with industry and community.
- Good number of sanctioned and on-going projects in different academic departments of the institute is an indication of the research culture exhibited in JGEC. West Bengal DST has sanctioned grants for three different projects. AICTE has recently granted a MODROBS project to modernize and upgrade Power Electronics & Drives Laboratory with an amount of Rs 15.52 Lakhs. AICTE has also sanctioned grant in aid of Rs. 12.36 Lakh for personality/skill development programme for SC and ST students.
- Research Planning & Monitoring Committee evaluates progress of funded projects through subject experts as mentors for better research outcome.
- The Institution premises is Wi-Fi enabled and has well stacked library and information centre with latest Journals and online access (digital library) with access to reputed journals such as IEEE transactions, Elsevier, Springer, and national and international magazines along with research oriented books.
- Faculties and students from different academic departments are putting up ample effort to get recognized their research contributions through significant publication credentials in journals/transactions and conference proceedings of national and international repute.
- The college has good computing facilities with latest simulation softwares, high speed internet and uninterrupted power supply.
- This institute promotes faculty engagement in authoring books, publications, newsletters, organizing seminars, conferences, workshops, consultancy and training. Various Departments of the Institute organize many conferences/ seminars/ workshops/ invited lectures programmes with a focus on capacity building in terms of research and imbibing research culture among the faculty staff and students.
- This institute conducts number of extension programmes like blood donation, health checkups, NSS activities, conduct of environmental awareness workshops, teaching underprivileged, etc.

Infrastructure and Learning Resources

- The Institute is located on a sprawling campus of more than 160 acres with an academic and administrative block and a residential area covering the staff quarters and hostels.
- Infrastructure and Learning Resources criterion seeks to bring forth data on the adequacy and optimal use of the facilities available in an Institution to maintain the quality of academic and other programmes on the campus.
- The Institute campus has spacious well ventilated classrooms, seminar halls, tutorial rooms and well equipped auditorium providing the right atmosphere for teaching learning.
- JGEC is well equipped with laboratories and computing facilities with more than 500 computers spread across various Departments, Printers and Copiers are also available with power back up facilities. The Library and information centre is provided with sufficient number of books, journals, e-journals.
- Institute has the amenities like the gymnasium, provisional store, dispensary, etc. The college has two play grounds and provides good Indoor and Outdoor Sports facilities for Football Basketball, Cricket, Table Tennis, Badminton, Cricket and various indoor games in the hostels.
- The Institute has library and information center equipped with necessary infrastructural facility.

- The central library is kept open to the staff and students from 10.00 AM to 5 PM every day. LIBSYS software and its web-based online public access catalogue is accessible to everybody. The state-of-the-art Central Computing Facility is also available in the Institute.
- The campus is having several facilities like gymnasium, bank, post-office, cafeteria, etc. The Institute has 4 boys hostels and 1 girls hostels. There is a medical dispensary within the campus. The campus is that it is equipped with its own Power House which can provide supply to office, classrooms and laboratories, hostels and faculty and staff quarters. The environment friendly ambience of the campus is evident from existence of internal roads, green gardens with variety of plants and wetlands.
- The Institution is continuously putting effort to provide facilities in the campus for better teaching learning practices and student activity centers. The Institution is continuously striving to enhance its infrastructure in line with future growth.

Student Support and Progression

The Institute follows good student support system. Students are kept informed of the admission criteria, courses offered, examination schedules, availability of scholarships, fee structure etc. through Institute's website / notices / prospectus. An Academic Calendar is prepared at the beginning of the session and the activities of the Institute are carried out in accordance with the given schedule. Poor performers are counselled by the concerned subject teachers and additional guidance provided accordingly. The highlights of Student Support and Progression criterion are the efforts of an Institution to provide necessary assistance to students, to acquire meaningful experiences of learning at campus and to facilitate their holistic development.

- Students are encouraged to participate in extracurricular and co-curricular activities by providing necessary financial support in the form of travel and accommodation allowances.
- Students are also provided with ample opportunities to nurture their creativity and develop a wholesome personality through active student clubs like literary club, Music and dance club, photography club, and other student clubs.
- Departments also have professional society chapters like ASME Chapter, ISTE Chapter, NSS Unit, Robotics Club, CSI Chapter and IEI chapters to their credit.
- Institute has registered Alumni association and organizes alumni meets annually. Alumni association also organizes expert lectures, debates and interactions for the benefit of the students.
- Training and placement cell provides pre-placement guidance to the students for placement activities. The cell coordinates industrial training (especially in summer)/ internship and placement activities.
- Poor but meritorious students are provided with financial aid both for accommodation and fee waivers and scholarships. Besides this, the Government as per the existing regulations offers scholarships and freeship to them.
- The institute conducts soft-skill development, career counseling, and personal enhancement sessions for the students by experts. For the overall development of students the institute encourages student participation in co-curricular and extra-curricular activities by providing the required support.
- The student representatives are the members of anti-ragging committee and hostel committee.
- Department encourages students to participate in national and international level events.. Students of the Institute have demonstrated outstanding performance in various Zonal, University, State and National sports events several times in the recent past.

Governance, Leadership and Management

The Institute is fully owned by Government of West Bengal. And it is an autonomous institute. It also has the Board of Governors constituted as per UGC & AICTE guidelines, which is the administrative body of the Institution. The Board consists of eminent educationists, eminent industrialists and the management members. The Board of Governors advises and monitors the functioning of the Institution. The Institute has been making sincere efforts to attain its mission and objectives of providing quality education through a well-defined organizational structure. However, more strategic planning and a well framed monitoring system need to be evolved for optimum utilisation of the resources.

- Governance, Leadership and Management criterion helps gather data on the policies and practices of an Institution in the matter of planning human resources, training, performance appraisal, financial management and the overall role of leadership in Institution building. The vision and mission statements of the Institute clearly address the needs of the society and the student needs to serve and disseminate knowledge.
- The Principal of the Institution in consultation with Heads of the Departments and functional in-charges formulates the policies & plans and submits the same for the approval of the management on regular basis.
- Administrative & Academic responsibility is distributed at various levels of decentralized organizational set up.
- The Institute established an Internal Quality Assurance Cell (IQAC). The net outcomes of these aspects leads to rise in pass percentage, enhancement of campus placements, and improvement in quality of publications and attainment of PhD degrees, obtaining research projects from external funding agencies etc.
- The Management of our college is assisted by the Principal, registrar and Heads of the Departments. The management actively takes parts in the working of institution and to oversee the day-to-day working of the college.
- The Management looks after infrastructure and financial expenditure and provides the fund for different developmental activities taking place in the campus. The HODs of various departments will identify and address the needs of the departments.
- Also day-to-day activities of the departments will be discussed with Principal and HODs of academic departments.

Institutional Values and Best Practices

Institutional and Best Practices criterion focuses on the innovative efforts of an institution that help in its academic excellence. An innovative practice could be a pathway created to further the interest of the students and the Institution, for internal quality assurance, inclusive practices and stakeholder participation. Innovations and best practices serve to enhance quality and add value.

- The Institution combines technology and need of socio-economic demands to identify and implement innovations and best practices to differentiate it among the institutes in the state by adding value in its educational services.
- The Institution is continuously striving not only to improve the key aspects namely "curricular aspects, teaching-learning evaluation, research, consultancy, infrastructure, learning resources, student support,

student progression, governance and leadership but also by offering social services through NSS activities, including blood donation camps, community development etc.

• The college always intents to follow best practices for students and staffs such as – employability enhancement program and soft-skill development program for students at no cost, student mentoring; various schemes aiming at faculty development.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	JALPAIGURI GOVERNMENT ENGINEERING COLLEGE
Address	Jalpaiguri Government ENgineering College Jalpaiguri, West Bengal, INDIA, 735102
City	Jalpaiguri
State	West Bengal
Pin	735102
Website	www.jgec.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Amitava Ray	03561-255131	9434381078	03561-25614 3	principal@jgec.ac.i n
Professor	Pradip Kumar Saha	03561-255132	9832443022	03561-25513 7	pksahaee@gmail.c om

Status of the Institution	
Institution Status	Government

Type of Institution			
By Gender	Co-education		
By Shift	Day		

Recognized Minority institution			
If it is a recognized minroity institution	No		
	·		

Establishment Details			
	Date of Establishment, Prior to the Grant of	07-08-1961	

'Autonomy'	
Date of grant of 'Autonomy' to the College by UGC	03-01-2012

University to which the college is affiliated				
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	03-01-2012	View Document		
12B of UGC	03-01-2012	View Document		

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)					
Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks	
AICTE	View Document	25-04-2019	12	Extension Approved	

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	Jalpaiguri Government ENgineering College Jalpaiguri, West Bengal, INDIA, 735102	Rural	168	8000	

2.2 ACADEMIC INFORMATION

Details of Pro	ogrammes Offe	red by the Col	lege (Give Dat	a for Current	Academic year)
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Civil Engineering	48	Higher Secondary	English	60	55
UG	BTech,Electr ical Engineering	48	Higher Seconday	English	60	58
UG	BTech,Mech anical Engineering	48	Higher Secondary	English	60	55
UG	BTech,Electr onics And C ommunicatio n Engineering	48	Higher Secondary	English	60	60
UG	BTech,Comp uter Science And Engineering	48	Higher Secondary	English	60	60
UG	BTech,Infor mation Technology	48	Higher Secondary	English	60	54
PG	Mtech,Electr ical Engineering	24	B.Tech	English	15	12
PG	Mtech,Mech anical Engineering	24	B.Tech	English	15	6

Position Details of Faculty & Staff in the College

				Te	aching	g Faculty	y					
	Prof	essor			Associate Professor			Assistant Professor				
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government		1	1	19				36				55
Recruited	7	0	0	7	10	1	0	11	36	5	0	41
Yet to Recruit				12				25				14
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0				0	J			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	7			188
Recruited	61	6	0	67
Yet to Recruit				121
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

		Technical St	aff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				55
Recruited	15	1	0	16
Yet to Recruit				39
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

Qualification Details of the Teaching Staff

]	Perman	ent Teach	iers				
Highest Qualificatio n	Professor		Assoc	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.	7	0	0	7	1	0	5	0	0	20
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	2	0	0	20	9	0	31

			r	Гетрог	ary Teach	iers				
Highest Qualificatio n	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 Qualificatio n	Professor io		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	1	0	0	1
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	13	5	0	18

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	318	0	0	0	318
	Female	38	0	0	0	38
	Others	0	0	0	0	0
PG	Male	16	0	0	0	16
	Female	3	0	0	0	3
	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	64	55	56	70
	Female	10	8	3	6
	Others	0	0	0	0
ST	Male	21	18	15	17
	Female	3	4	4	1
	Others	0	0	0	0
OBC	Male	0	1	11	19
	Female	0	0	1	0
	Others	0	0	0	0
General	Male	239	234	225	226
	Female	27	18	30	24
	Others	0	0	0	0
Others	Male	10	11	9	8
	Female	1	1	0	1
	Others	0	0	0	0
Total		375	350	354	372

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Civil Engineering	View Document
Computer Science And Engineering	View Document
Electrical Engineering	View Document
Electronics And Communication Engineering	View Document
Information Technology	View Document
Mechanical Engineering	View Document

3. Extended Profile

3.1 Program

Number of programs offered year-wise for last five years

2018-19	2017-18	2016-17		2015-16	2014-15	
8	8	8		8	8	
File Descripti	ion		Document			
Institutional I	Data in Prescribed For	rmat	View Document			

3.2 Students

Number of students year-wise during the last five years

2018-19	2017-18	2016-17		2015-16	2014-15
1705	1673	1666		1658	1648
File Description			Document		
Institutional Data in Prescribed Format			View]	Document	

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

2018-19	2017-18	2016-17		2015-16	2014-15
461	440	450		431	448
File Description			Docum	nent	
Institutional Data in Prescribed Format			View]	Document	

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

2018-19	2017-18	2016-17		2015-16	2014-15
1705	1673	1666		1658	1648
File Description			Document		
Institutional Data in Prescribed Format			View]	Document	

Number of revaluation applications year-w	vise during the last 5 years
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2018-19	2017-18	2016-17	2015-16	2014-15
119	125	128	138	141

3.3 Teachers

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

2018-19	2017-18	2016-17		2015-16	2014-15
441	483	483		483	483
File Description			Document		
Institutional Data in Prescribed Format			View	Document	

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

2018-19	2017-18	2016-17	2015-16	2014-15
59	55	51	51	50
File Description			Document	
Institutional Data in Prescribed Format			View Document	

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

2018-19	2017-18	2016 17		2015-16	2014-15
2010-19	2017-18	2016-17		2013-10	2014-13
110	110	110		110	110
File Description			Docum	nent	
Institutional Data in Prescribed Format		View]	Document		

3.4 Institution

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

2018-19	2017-18	2016-17	2015-16	2014-15
130000	117000	150000	150000	170000

File Description	Document
Institutional Data in Prescribed Format	View Document

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

2018-19	2017-18	2016-17		2015-16	2014-15
102	102	102		102	102
File Description			Document		
Institutional Data in Prescribed Format			View	<u>Document</u>	

Total number of classrooms and seminar halls

Response: 36

Total number of computers in the campus for academic purpose

Response: 721

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

2018-19	2017-18	2016-17	2015-16	2014-15
150.82290	255.46655	302.82693	98.48345	249.52264

<u>4. Quality Indicator Framework(QIF)</u>

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed /adopted have relevance to the local/ national / regional/global developmental needs with learning objectives including program outcomes, program specific outcomes and course outcomes of all the program offered by the Institution

Response:

Jalpaiguri Government Engineering College was established in 1961 to cater to the technical educational need of North Bengal region in the state of West Bengal. Till 1961, people of North Bengal used to travel to other parts of the state for technical education. Establishment of the institute helped North Bengal region in the state of West Bengal to pursue technical education at its locality. The Institute offers engineering programs relevant to the need of the state of West Bengal. Today, several thousand engineers working in different parts of India and aborad are alumni of Jalpaiguri Government Engineering College (JGEC). We feel that JGEC has played an instrumental role in human resource development in the state of West Bengal and contributing to national objective of increasing Gross Enrollment Ratio (GER).

JGEC has a systematic process for design, development and validation of curricula. The curricula developed/adopted have relevance to the regional/national/global developmental needs with well-defined and informed learning objectives and outcomes at programme and course level.

The institution after , framing of curricula and the expected outcomes for different courses are decided by applying the internationally recognized and expected attributes of the graduates in engineering.

Before starting a new programme, a preliminary meeting is held to assess the feasibility of the programme, which is followed by formation of the Board of Studies (BoS). Board of Studies consists of both external members and internal faculty. External Members of Boards of Studies include academic and industry experts, who contribute dynamically in updating the curricula on periodic basis within the ambit of regulatory guidelines. This ensures that the programmes offered take care of industry requirements thereby assuring employability.

After identifying the requirements of changes in different parts of curricula by Board of Studies, the same is forwarded to the Syllabus committee to make final structure and detail content of the syllabus and then it is presented to Academic Council for final approval. JGEC complies with all guidelines of the Statutory Regulatory Authorities (SRAs) like University Grants Commission (UGC),), All India Council for Technical Education (AICTE) in developing/restructuring curricula for the respective academic programmes offered in its constituent units. JGEC has revised curriculum of UG and PG programs.

JGEC has defined program outcomes, program specific outcomes and course outcomes for all its programs and collect feedback on course outcomes at the end of semester from students as an initiative for continual improvement. In order to have right mix of curriculum, pedagogy and assessment to achieve the desired outcomes, curriculum development and approval involves deliberations at various levels through Syllabus committee.

File Description	Document
Any additional information	View Document

1.1.2 Percentage of programs where syllabus revision was carried out during the last five years

Response: 100

1.1.2.1 How many programs were revised out of total number of programs offered during the last five years

Response: 8

1.1.2.2 Number of all programs offered by the institution during the last five years

Response:	8	

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years	View Document
Any additional information	View Document

1.1.3 Average percentage of courses having focus on Employability/ Entrepreneurship/ Skill development during the last five years

Response: 100

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
441	483	483	483	483

File Description	Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs
offered during last five years

Response: 92.97

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

Response: 410

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

Response: 441

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented

Response: 100

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

Response: 8

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

1.3 Curriculum Enrichment

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

Response:

Human Values and Professional Ethics course is an integral part of B.Tech. curriculum. Students of B.Tech. programs study human values and professional ethics course in their 1st and 2nd semesters. This course is introduce to appreciate the essential complementarily between 'Values' and 'Skills' to ensure

sustained happiness and prosperity, which are the core aspirations of all human beings. To facilitate the development of a Holistic perspective among students towards life and profession as well as towards happiness and prosperity based on a correct understanding of the Human reality and the rest of existence. Such a holistic perspective forms the basis of Universal Human Values and movement towards valuebased living in a natural way To highlight plausible implications of such a Holistic understanding in terms of ethical human conduct, trustful and mutually fulfilling human behavior and mutually enriching interaction with Nature.

Undergraduate. students study environmental science in their first semester. They study cause & effects of present environmental crisis, importance of natural resources including biological diversity, pollution hazards, and possible solutions of present crisis. The courses like Solid And Hazardous Waste Management, Climate Change and Adaptation solar energy and wind energy, Energy conservation, Renewable Energy Sources and Technology, Power Electronics for Renewable Energy, Advanced Energy Storage Technology, etc provides a solution to move towards sustainable growth and development. The institute takes initiatives to grow awareness on gender equity among students and teachers.

File Description	Document
Any additional information	View Document

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

Response: 99

1.3.2.1 Number of value-added courses are added within the last five years

Response: 99

File Description	Document
List of value added courses	View Document

1.3.3 Average percentage of students enrolled in the courses under 1.3.2 above

Response: 100

1.3.3.1 Number of students enrolled in value-added courses imparting transferable and life skills offered year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1705	1673	1666	1658	1648

Response: 24.63

1.3.4.1 Number of students undertaking field projects or internships

Response: 420

File Description	Document
List of programs and number of students undertaking field projects / internships	View Document
Any additional information	View Document

1.4 Feedback System

 1.4.1 Structured feedback received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni 5) Parents for design and review of syllabus Semester wise /year-wise A. Any 4 of above B. Any 3 of above C. Any 2 of above 					
			D. Any 1 of above		
			Response: D. Any 1 of above		
File Description	Document				
Any additional information View Document					
1.4.2 Feedback processes of the institution may be classified as follows:					

A. Feedback collected, analysed and action taken and feedback available on website

B. Feedback collected, analysed and action has been taken

- C. Feedback collected and analysed
- **D. Feedback collected**

Response: C. Feedback collected and analysed

File Description	Document
Any additional information	View Document
URL for feedback report	View Document



Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 0.08

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15	
0	01	0	05	01	

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

2.1.2 Demand Ratio(Average of last five years)

Response: 367.69

2.1.2.1 Number of seats available year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
390	390	390	390	390

File Description	Document
Demand Ratio (Average of Last five years)	View Document

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 85.1

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

2018-19	2017-18	2016-17	2015-16	2014-15
98	85	78	94	79

File Description	Document
Average percentage of seats filled against seats reserved	View Document

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

All constituent units of the institute begin the academic year for fresh students with an orientation/induction programme. The college understands the need of the parents as well and hence, invites parents and students to the Orientation program to familiarize them with the college, its rules and regulations, facilities and various departmental faculties.Lateral entry students are admitted to the second year (3rd semester) directly through JELET after their diploma in polytechnic colleges.

In case of slow learners, faculty members from constituent units continuously monitor the performance of students under their Teacher- guardianship program. Tutorial classes and extra classes are conducted for weak students. Students organise workshops for weaker students especially in subjects like C programming, MATLAB etc. Adequate opportunities are available for the weak students to clear their backlogs in terms of make-up exam and supplementary exam.

Faculty members help the students who want to appear for any competitive exams. Specialized coaching is provided to such students aspirant for GATE. At JGEC, advanced learners are encouraged to

File Description	Document	
link for additional information	View Document	

2.2.2 Student - Full time teacher ratio		
Response: 28.9		
File Description	Document	
Any additional information	View Document	

Response: 0.53

2.2.3.1 Number of differently abled students on rolls

Response: 9	
File Description	Document
Institutional data in prescribed format	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:

In the four-year engineering programme, there are practical courses, besides a Project in the final semester. The examination comprises two components, the internal assessment component for 30% and the end of semester examination accounting for the rest.

For the Internal assessment, there are two class tests spread evenly over the entire period of the semester.

The class tests generally commences once in every one and half month of that semester. The time table for the class tests is given at least a week ahead of commencement of tests. The tests are conducted by the respective academic department The end semester examinations commence after the 2nd class test.

Practical exposure to students is an important part of engineering teaching to help students nurture critical thinking, creativity and scientific temper. While the library is open till late in the night, the laboratories of the institute are open to desiring students. The student can do experiments and seek the advice from a faculty member for validation and further guidance.

JGEC encourges student centric methods such as experiential learning, participative learning and problem solving methodologies is adopted so as to build competency.

Experimental Learning:

Students are supposed to carry out intensive laboratory experiments on respective departmental course works, sessionals on design and project works and they need to do **industrial training** as part of the curriculum. Along with the normal academic activities, post graduate Students are deployed in UG laboratory and class room teaching.

Participative Learning:

As part of program are encourage to take part in community based extension activities and outreach programs. This would give them opportunity for **participative learning.** Students are encouraged to carry

out **group projects** to provide an opportunity for participative learning.

Problem solving methodologies:

In all academic departments, teachers use **problem based and case based learning methods** to elicit **critical thinking** among students. Students of technical programs are required to do compulsory **problem based project work**.

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

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 86.44

2.3.2.1 Number of teachers using ICT

Response: 51

File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	View Document
Provide link for webpage describing the "LMS/ Academic management system"	View Document

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 33.43

2.3.3.1 Number of mentors

Response: 51

File Description	Document
Any additional information	View Document

2.3.4 Preparation and adherence to Academic Calendar and Teaching plans by the institution

Response:

As per the university regulations, the college must have 90 working days per semester. With this in mind, a calendar is prepared to give dates of reopening, holidays and dates for other events such as foundation day, Sports days, college technical festival, etc. This is printed and given to all faculty and students at the beginning of the academic year. In a typical 4 year engineering programme, there are about 40 theory courses and 14 sessional/ practical courses. Also the calendar is attached with the college website and the college portal for digital convenience and for easier access. The timetable, examinations are planned as per the calendar and there will usually be a complete adherence to it. However, in the case of unanticipated circumstances, the curriculum is completed by engaging lecture and lab sessions beyond college hours to compensate the lag.

2.4 Teacher Profile and Quality

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

Response: 48.36

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 36.01

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
22	21	19	17	17

File Description	Document
List of number of full time teachers with PhD and number of full time teachers for 5 years	View Document
Any additional information	View Document

2.4.3 Teaching experience per full time teacher in number of years

Response: 11.41

2.4.3.1 Total experience of full-time teachers

Response: 673

2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 7.52

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	2	0	1	1

File Description	Document	
Institutional data in prescribed format	View Document	
e-copies of award letters (scanned or soft copy)	View Document	

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 0

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0
			1	
ile Descriptio	n		Document	

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the

declaration of results during the last five years

Response: 70.4

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

2018-19	2017-18	2016-17	2015-16	2014-15
76	74	67	65	70

File Description	Document
List of programs and date of last semester and date of declaration of result	View Document

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

Response: 0.06

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

2018-19	2017-18	2016-17	2015-16	2014-15	
1	2	2	0	0	

File Description	Document
Any additional information	View Document

2.5.3 Average percentage of applications for revaluation leading to change in marks during the last five years

Response: 20.25

2.5.3.1 Number of applications for revaluation leading to change in marks year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
17	23	31	25	37

2.5.4 Positive impact of reforms on the examination procedures and processes including IT integration and continuous internal assessment on the examination management system

Response:

JGEC has developed a comprehensive evaluation system comprising of formative and summative assessments.

For the effective implementation of the reforms advised by the Autonomous Body/University, the college has an exclusive Examination Cell headed by the Controller of Examination for overseeing the conduct of examinations. Question papers are set by different faculty and handed over to the Examination Cell for ensuring smooth conduct of the examination and evaluation. The results are analysed and reviewed by the HoD so as to plan and execute corrective actions, if any.

The effective implementation of the Semester examinations are ensured by way of display of examination timetable, appointment of eligible internal supervisors, invigilators. Result processing is done using software and published on website. The Institute is in the process of implementing "Student Life Cycle Management" to automate the entire process.

2.5.5 Status of automation of Examination division along with approved Examination Manual A. 100% automation of entire division & implementation of Examination Management System (EMS)

B. Only student registration, Hall ticket issue & Result Processing

C. Only student registration and result processing

D. Only result processing

Response: B. Only student registration, Hall ticket issue & Result Processing

File Description	Document
Current manual of examination automation system and Annual reports of examination including the present status of automation	<u>View Document</u>
Current Manual of examination automation system	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

Institute has defined program outcomes, program specific outcomes and course outcomes for all undergraduate and post graduate programs offered by academic departments. POs, PSOs and COs are displayed on website and the same has been communicated to teachers and students.

Internal Assessment (IA) and Semester end/final year examinations are based on course objectives/outcomes. In addition, JGEC has developed feedback mechanism to obtain student feedback on program and course outcomes. The feedback obtained is analyzed and necessary action is taken based on recommendations of department academic cell constituted by IQAC to monitor academic progress.

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

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

Attainment of program outcomes, program specific outcomes and course outcomes are evaluated in the form of formative and summative assessments. Institute also has a mechanism to obtain feedback from students on attainment of program and course outcomes.

Student feedback is the major aspect for analyzing the teaching learning process. At the end of each semester students' feedback is collected in standardized format with questions based on course outcomes (CO), program outcomes (PO) and program specific outcomes (PSO). The score obtained on 5 point scale is analyzed in detail and any score below 4 is discussed in detail for the plausible reasons. The remarks from students are also analyzed in detail and a corrective action plan is designed to be implemented in the next academic session.

Assessment is one or more processes which is carried out by the institution, that identify, collect and prepare data to evaluate the achievement of course outcomes and program outcomes. Attainment is the action or fact of achieving a standard result towards accomplishment of desired goals. Primarily attainment is the standard of academic attainment as observed by test and/or examination result. Assessment methods are categorized into two as direct method and indirect method to access CO's and PO's. The direct methods display the student's knowledge and skills from their performance in the continuous internal assessment tests, semester examinations and supporting activities such as seminars, assignments, case study, group discussion, online quiz, mini project etc., These methods provide a sampling of what students know and/or can do and provide strong evidence of student learning. The indirect method done through surveys and interviews, it asks the stakeholders to reflect their views on student's learning. The institute assesses opinions or thoughts about graduate's knowledge or skills by different stakeholders.

CO assessment methods are employed Direct assessment method and indirect assessment method are? considered for 80% and 20% weightages respectively. Internal test assessment and end semester examination assessment are considered with the weightage of 20% and 80% respectively for the direct

assessment of CO.

CO assessment methods are employed Direct assessment method and indirect assessment method are considered for 80% and 20% weightages respectively. Internal test assessment and end semester examination assessment are considered with the weightage of 20% and 80% respectively for the direct assessment of CO.

Procedure for Attainment of Program Outcomes At the end of the each programme, the PO/PSO assessment is done from the CO attainment of all curriculum components. As per NBA guidelines, program can appropriately define the attainment level. The attainment level may be set by the particular program or commonly by the institution. The attainment can be made as best the choice by the institution or the program by analyzing the students knowledge. This can be achieved by using different supporting activities. This attainment is mainly for the purpose of making an esteemed engineer with good analytical, practical and theoretical knowledge about the program by attaining the PEO's and PSO's of the program and the institution.

File Description	Document
Link for Additional Information	View Document

2.6.3 Average pass percentage of Students		
Response: 96.88		
2.6.3.1 Total number of final year students who passed the examination conducted by Institution.		
Response: 434		
2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution		
Response: 448		
File Description	Document	
List of programs and number of students passed and appeared in the final year examination	View Document	
Link for annual report	View Document	

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution has a well defined policy for promotion of research and the same is uploaded on the institutional website

Response: Yes

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

3.1.2 The institution provides seed money to its teachers for research (average per year)

Response: 0

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

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

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

Response: 1

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	1

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers.	View Document

3.1.4 Institution has the following facilities

- **1.Central Instrumentation Centre**
- 2. Animal House/Green House / Museum
- **3.** Central Fabrication facility
- 4. Media laboratory/Business Lab/Studios
- 5. Research / Statistical Databases
- A. Any four facilities exist
- **B.** Three of the facilities exist
- C. Two of the facilities exist
- **D.** One of the facilities exist

Response: C. Two of the facilities exist

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

3.2 Resource Mobilization for Research

3.2.1 Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 71.43

3.2.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
27.88	43.548	0	0	0

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

3.2.2 Number of research centres recognised by University and National/ International Bodies

Response: 0

3.2.2.1 Number of research centres recognised by University and National/ International Bodies

File Description	Document
Names of research centres	View Document

3.2.3 Percentage of teachers recognised as research guides

Response: 17.31

3.2.3.1 Number of teachers recognised as research guides

Response: 9

3.2.3.2 Number of full time teachers worked in the institution during the last 5 years

Response: 52

File Description	Document
Details of teachers recognized as research guide	View Document

3.2.4 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 0.48

3.2.4.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 5

File Description	Document
Supporting document from Funding Agency	View Document
link to funding agency website	View Document

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

Response:

The institution is running six UG Programmes and two PG Programmes, it has initiated to establish Research Laboratories and UG Project labs in various departments in the emerging areas of technology. PG and UG projects are being carried out in the campus.

The faculties are encouraged to present papers at National and International conferences and also publish in reputed journals.

Electrical, Mechanical, Civil, Computer Science, Electronics & Communication and Information Technology Departments are actively carrying out Research and consulting activities. The institution has been continually inviting experts from Academic, Research and Industries and arranging lectures benefitting the students and faculty.

FDPs, workshops and conferences are being regularly conducted inviting academician, researchers from R & D and Industries to show the knowledge.

As JGEC grows in its strength, we are committed to train and nurture our students from being employees to becoming employers and help the country in our own little humble way by joining the mission of the government of India to reduce unemployment.

3.3.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry - Academia Innovative practices during the last five years

Response: 3

3.3.2.1 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2	0	1	0	0

File Description	Document
Report of the event	View Document
List of workshops/seminars during the last 5 years	View Document

3.3.3 Number of awards for innovation won by institution/ teachers/ research scholars/students

during the last five years

Response: 25

3.3.3.1 Total number of awards for innovation won by institution/teachers/research scholars/students yearwise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
9	10	4	0	2

File Description	Document	
List of innovation and award details	View Document	
e- copies of award letters	View Document	

3.3.4 Number of start-ups incubated on campus during the last five years

Response: 2

3.3.4.1 Total number of start-ups incubated on campus year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2	0	0	0	0

File Description	Document
List of startups details like name of startup, nature, year of commencement etc	View Document

3.4 Research Publications and Awards

3.4.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: No	
File Description	Document
Institutional data in prescribed format	View Document

3.4.2 The institution provides incentives to teachers who receive state, national and international recognition/awards

Response: No

3.4.3 Number of Patents published/awarded during the last five years

Response: 0

3.4.3.1 Total number of Patents published/awarded year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
List of patents and year it was awarded	View Document

3.4.4 Number of Ph.D.s awarded per teacher during the last five years

Response: 0.89

3.4.4.1 How many Ph.Ds are awarded within last 5 years

Response: 8

3.4.4.2 Total number of teachers recognised as guides during the last 5 years

Response: 9

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document

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

Response: 2.26

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

2018-19	2017-18	2016-17	2015-16	2014-15
32	22	20	20	26

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

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

Response: 2.2

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

2018-19	2017-18	2016-17	2015-16	2014-15
31	24	15	24	23

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

3.4.7 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Response:

File Description	Document
Any additional information	View Document

3.4.8 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Response:

3.5 Consultancy

3.5.1 Institution has a policy on consultancy including revenue sharing between the institution and the individual

Response: Yes

File Description	Document
Soft copy of the Consultancy Policy	View Document
URL of the consultancy policy document	View Document

3.5.2 Revenue generated from consultancy during the last five years

Response: 303.53

3.5.2.1 Total amount generated from consultancy year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
62.39555	69.2147	58.52995	40.03025	73.36375

File Description	Document
List of consultants and revenue generated by them	View Document

3.5.3 Revenue generated from corporate training by the institution during the last five years

Response: 42.99

3.5.3.1 Total amount generated from corporate training by the institution year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
0	42.99060	0	0	0

File Description	Document
List of teacher consultants and revenue generated by them	View Document
Any additional information	View Document

3.6 Extension Activities

3.6.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

The core aim of education is to foster all round development of the students and the major strength of this Institute is its ability to ensure holistic development of students to make them enlightened citizens. It provides equal opportunity to disseminate knowledge and quality education to all sections of society. It aims to maintain modern outlook with contemporary developments without compromising moral values. Knowledge and quality based education is provided to the students by inculcating moral values, scientific temper and employing state of the art technologies. It aims to pursue excellence towards creating manpower with high degree of intellectual, professional and cultural development to meet the National and Global challenges. The Institute is conscious of its role in campus connection, wellbeing of its neighborhood and has initiated a number of community development activities under NSS - cell of the institute headed by a senior faculty member.

National Service Scheme provides the students an opportunity to understand the community; identify its needs and problems as well as the solutions in which they can be involved by assuming social and civic responsibilities. NSS also provides students with the opportunity to apply their education in finding practical solutions to the problems faced by the individuals and the community at large. NSS aims at arousing social consciousness of the youth with an overall objective of personality development through community service. NSS enables students to participate in various programs of social service and National development, to help the community.

For this purpose, JGEC aims to strike a balance between the knowledge gain in the four walls of classroom set up and the learning activities essentially to take place outside a typical pen and pencil classroom experience by organizing extension activities in the neighborhood community. Students get the opportunity to do what they learn in class through experiential education. Community activities enable students to acquire life skills and knowledge. Students become more aware of issues in the community and develop a sense of responsibility to address those issues. This helps the students for deeper understanding of self and their involvement in the community. The Institute is committed to students' participation in various social activities by ensuring consistent encouragement and motivation.

File Description	Document
link for additional information	View Document

3.6.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 6

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

2018-19 2017-18 2016-17 2015-16 2014-	-15
5 1 0 0 0	

File Description	Document
Number of awards for extension activities in last 5 years	View Document
e-copy of the award letters	View Document

3.6.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 6

3.6.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2	1	2	1	0

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

3.6.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 83

3.6.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. yearwise during the last five years

2018-19 2017-1	8 2016-17	2015-16	2014-15
1400 1350	1400	1380	1400

File Description	Document
Average percentage of students participating in extension activities with Government or NGO etc	View Document

3.7 Collaboration

3.7.1 Number	of Collaborative ac	tivities for rese	arch, faculty exchange,	student exchange per yea	
Response: 1					
3.7.1.1 Total nuwise during the		ve activities for	research, faculty exchan	ge, student exchange year-	
2018-19	2017-18	2016-17	2015-16	2014-15	
1	4	0	0	0	
File Descriptio	on		Document		
Copies of collaboration			View Document	View Document	
Any additional information			View Document		

3.7.2 Number of linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the last five years

Response: 9

3.7.2.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1	1	4	2	1

File Description	Document
e-copies of linkage related Document	View Document
Details of linkages with institutions/industries for internship	View Document
Any additional information	View Document

3.7.3 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 5

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

2018-19	2017-18	2016-17	2015-16	2014-15
1	4	0	0	0

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc

Response:

The College is situated on a sprawling of lush green campus. Physical and Academic infrastructure and resources are instrumental in creating an ambience for enhancing productivity of the Institute community. The Institute has provided adequate infrastructure facilities, including sufficient classrooms and lecture halls plus laboratories and other facilities, with a total built up area of 23340 sqm (planned). JGEC has taken initiatives to invest substantially towards improving the classrooms, laboratory infrastructure, books and journals and online resources for teaching, learning and research.

Class rooms/ Drawing halls: The Institute has 63 spacious class rooms with proper Infrastructure.

• The Institute has well equipped laboratories, most of them equipped with adequate laboratory equipment. Every department has dedicated laboratories. Most of the laboratories are equipped with sufficient number of required experimental setups. These labs are also utilized for students to do their projects during and beyond working hours.

Auditoriums & Seminar Hall: The Institute has 8 Seminar Halls and 2 auditoriums. These halls are regularly used for conducting seminars at the college, state and National level. The students of UG & PG are regularly promoted for active involvement in paper presentations, group discussions and participation in professional society activities.

Tutorial rooms: Sufficient number of tutorial rooms are available for special remedial classes for slow learning and needy students.

Technology Enabled learning facility: The Institute has ICT Classrooms (Smart Class rooms/ Seminar Halls) where the provision of OHPs, Multimedia learning, Wi-Fi connectivity and internet access is available.

Central library: Availability of good number of reference books and journals are the salient features of central library of this Institute.

Specialized Facilities and equipments available for Teaching, Learning and Research: To promote better teaching and learning, the Institute has facilities like LCD projectors, and also audio visual equipment through which webinars can be conducted. The college is having a digital library with 95Mbs internet and Wi-Fi facility, which is being effectively used by the students and faculty for their academic and research activity.

Teachers are provided with computers to access academic resources for teaching. The Institute has been continually and constantly upgrading the infrastructure on the campus keeping in pace with increasing demand and requirements of the constituent units. The Institute strives its utmost to meet the additional requirements.

Resources are shared across departments whenever needed.Playground and sports facilities are accessible to all the students.

Sl. No.	Type of Rooms	Number of Rooms	Size (in sq. m)/ capacity of each room
1.	Class Rooms	28	1529 sq. m
2.	Tutorial rooms	8	1529 sq. m
3.	Laboratories	45	4849 sq. m
4.	Drawing Halls	3	378 sq. m
5.	Computer Centres	3	450
6.	Central Examination Facility	1	2000sq ft.
7.	Auditorium	2	

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

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

Response:

The College is encouraging and providing facilities for students to participate in outdoor games like Foot Ball, Volley Ball, and Cricket, Indoor Games like Chess and Caroms. The College has always created a mark in the field of sports. The college has since long time, been participating in various inter College and University level tournaments, National level competitions.

Outdoor Games: A spacious play grounds are available for outdoor games like:

Cricket Practice: The Ground has 65 Mts. Circle and Ground Level at Zero Level

Volley Ball Court: The Institution has Two Volley Ball Courts confirming standards. Students use the same in the evening hours.

Basket Ball Court: There are two basket ball courts confirming to standards are available to enable teams to avail the facilities in evening hours.

Indoor Games: Facilities for the indoor games like Badminton, Table Tennis, Chess, Caroms etc, are also provided to students in the college campus.

Auditorium: The College is having modern, well equipped auditorium for workshops and seminars. The seating capacity of the hall is about 400.

Cultural Activities: College has many clubs such as Coder's club, Nature's club, Music, Dance club,

Photography Club, Trekking Clubs, National service scheme, through which these clubs organize various activities throughout the year.

Every year an art exhibition is conducted to render the students an opportunity to express in the form of art. A display of the exhibits, including photographs, paper quelling art, canvas painting, pencil sketching, sculpture, rangoli, abstract paintings is arranged.

The students are organizing & participating in many cultural activities like group songs, dance, arts etc., during Annual day celebrations held every year during **SRISTI/ JECLET.** The Institute has also been regularly participating in the zonal and inter zonal youth festivals.

File Description	Document
The Description	Document
Any additional information	View Document
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

Response: 27.78

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 10

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 60.72

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
41.13697	234.03028	275.68928	31.09949	154.89625

File Description	Document
Audited utilization statements	View Document

4.2 Library as a Learning Resource

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

Response:

JGEC It started its function with a vision to serve the information needs of its users and to promote a continuous learning atmosphere with holding various Text Book, Reference Books, eBooks, Journals, Magazines, E-Journals, Subject PPT's,

Subject Animations, Project Reports, Tutorials, Question Papers and NPTEL Video Lessons related to engineering and allied subjects. Central Library provides abundant information and intellectual requirements to the students and faculty with a user friendly approach. It offers a fully integrated and peaceful environment for conducting academic study.

Library

codeLibr
RFman
men
Yes
;
Publis
3192

List of online National/ International Journals subscribed

1.ASCE,

2.ASME,

3.IEL,

4. SPRINGERLINK,

5.MCGRAW HILL,

6.ASTM

· E- Library facilities

Туре	Available
e-Books Volumes	113
e-Books Titles	476
Library Management Software	1
Name of the ILMS software	: LIBSYS LS EASE Version 4
• Nature of automation (fully or partially)	: Partially
• Version	: Version 4
• Year of automation	: 2007
File Description	Document
Any additional information	View Document
link for additional information	View Document

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resource for library enrichment

Response:

As the Institute age is 67 years which is also the age of the library, has in possession of very old books by internationally renowned authors. These books are not to be found in other institutes. The rare books collection includes many Precious books. It also has a very good collection of Indian Standards and British Standards, bound Volumes of journals. It has a collection of around one lakh books, e-journal, e-books and e-ShodhSindhu since it is an old institution. It has excellent collection of Book Bank Books which are utilized by SC/ST students.

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

4.2.3 Does the institution have the following

1.e-journals
 2.e-ShodhSindhu
 3.Shodhganga Membership

4.e-books 5.Databases	
Any 4 of the above	
Any 3 of the above	
Any 2 of the above	
Any 1 of the above	
Response: Any 3 of the above	
File Description	Document
Details of subscriptions like e-journals,e- ShodhSindhu,Shodhganga Membership etc	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 11.99

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
0	8.93010	9.14510	23.07395	18.81736

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	<u>View Document</u>

4.2.5 Availability of remote access to e-resources of the library

Response: Yes

4.2.6 Percentage per day usage of library by teachers and students

Response: 34.01

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

Response: 600

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

The college has internet connectivity covering the entire campus. The Wi-fi facility has been provided to college building, and also in some portion of the campus and hostels. Few class rooms (smart class rooms) are ICT enabled with a computer, LCD facility, LAN and internet connectivity for enhancing teaching learning process. Most of the laboratories are provided with internet connectivity and computing systems to access worldwide web and e-learning materials. Seminar halls are equipped with multimedia facilities.

Video Conferencing facilities are available for interaction with Industry experts and academicians. For example NPTEL courses are being organized through video conferencing. Faculty development Programmes are also arranged using video conferencing. Invited talks and webinars are conducted in seminar halls using ICT facilities.

Hi-speed internet connectivity is provided to the faculty members, students and research scholars through local area network/Wi-Fi. Departments in the constituent units are connected through LAN. Institute ensures the use of computer and related resources in an environmentally responsible manner. JGEC promotes the use of Information and Communication Technology (ICT) for managing academic activities.

257		1200 xx 2007 Not 1Gbp	done
31.05.2017	31.05.2017 Up gradation of existing network	2007 Not	done
31.05.2017	31.05.2017 Up gradation of existing network	2007 Not	done
	Up gradation of existing network	Not	done
	network		
Gbps	1Gbps	1Gbr	os
Total number of com	puter available in the	Stude	nt-Co
nstitution in working con	dition		
558		3:1	
in the Institution (Lease	e line)		
	Institution in working con	institution in working condition	Institution in working condition 558 3:1

IT Facilities available

35 MBPS - 50 MBPS

20 MBPS - 35 MBPS

5 MBPS - 20 MBPS

Response: ?50 MBPS

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: No

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document

4.4 Maintenance of Campus Infrastructure

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

Response: 39.28

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

2018-19	2017-18	2016-17	2015-16	2014-15
109.68593	21.43627	27.13765	67.38396	94.62639

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts.	View Document
Any additional information	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:

PWD-West Bengal takes care of construction, renovation and maintenance of physical facilities such as college building, classrooms, auditoriums, seminar halls, laboratories, library, hostels, staff quarters, play ground, roads in the college campus. PWD office is situated inside the college premises to facilitate the services assigned to them. Facilities such as computers, laboratory equipments, office stationeries etc. are procured, and maintained by specific bodies/ committees of the institute such as CPC (Central Purchase Committee), Sports Committee, etc. which review and monitor the purchases. Budget and fund allocation by the government decides the purchase and maintenance activities of the institution.Purchase of items, maintenance services require approval from the Directorate of Technical Education, under Higher Education Department, Govt. of West Bengal. After approval from DTE, CPC monitors the purchase and maintenance activities. Principal, after taking the consent of Accounts Officer issues purchase order or work order.

Request for maintenance and repairs is raised via different departmental and sectional heads. On receipt of complaint or request for repair, junior engineer sends an electrician, plumber and carpenter to site for maintenance work/repair. The maintenance of the laboratories and the classrooms allotted to the departments are taken care by the respective departments involving PWD. Budget for maintenance as well as up-gradation of the classroom and laboratory facilities are projected by the respective department annually.

Most of the lab equipment's are maintained by various service providers. Some of the sophisticated instruments of the academic departments and centralized facilities AC, water filtration units, photo copier, generator etc. are under annual maintenance contract (AMC). The cleaning of the classrooms, laboratories, hostels, institute premises and residential areas, Maintenance of IT infrastructure & Wi-Fi are outsourced. Equipment in Gymnasium at sports complex is maintained by outsourced vendors on AMC.

Support of local vendors is taken on regular basis for repair and maintenance of various assets of the institute.

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 the last five years

Response: 16.56

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

2018-19	2017-18	2016-17	2015-16	2014-15
281	276	270	276	280

File Description	Document
Upload self attested letter with the list of students sanctioned scholarships	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document
Any additional information	View Document

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 4.22

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
73	70	65	76	68

File Description	Document
Any additional information	View Document

5.1.3 Number of capability enhancement and development schemes -

Document
View Document
View Document

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

Response: 8.47

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

2018-19	2017-18	2016-17	2015-16	2014-15
250	100	90	190	80

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

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during

the last five years

Response: 25.15

5.1.5.1 Number of students attending VET year-wise during the last five years

2018-19	2017-18	2016-17	2	2015-16	2014-15	
420	420	420	2	420	420	
File Description	1		Docume	ent		

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes

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

5.2 Student Progression

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

Response: 33.29

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

2018-19	2017-18	2016-17	2015-16	2014-15
222	91	120	173	138

File Description	Document
Details of student placement during the last five	View Document
years	

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

Response: 5.42

5.2.2.1 Number of outgoing students progressing to higher education

Response: 25

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document
Any additional information	View Document

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 9.61

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
15	12	11	13	9

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

2018-19	2017-18	2016-17	2015-16	2014-15
164	137	98	112	123

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	View Document

5.3 Student Participation and Activities

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

Response: 20

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

2018-19	2017-18	2016-17	2015-16	2014-15
5	5	5	5	0
File Descript	ion	E	ocument	
Number of awards/medals for outstanding				

Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years

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

Response:

Students of JGEC have the active participation in different Administrative Activities of the college and different Committees so that College Authority can share their views and take decision accordingly. Though Participation of students in some committees is mandatory and statutory as per AICTE Norms, still college feels the participation of students is essential for smooth governess of the college and successful implementation of the reforms. Some such identified activities/ committees are given below which have Student Representatives as members:

1. Anti-Ragging Committee:

As Anti-Ragging Guideline of UGC & AICTE, General Secretary and Assistant General Secretary of Students Union are theMembers ofAnti-ragging Committee. They regularly attend the meetings of the committee and share their opinion as representative of the students.

1. Anti Ragging Squad:

As Anti-Ragging Guideline of UGC & AICTE, General Secretary of Students Union are the Members of Anti-ragging Committee and regularly attends the meetings of the committee and share their opinion as representative of the students.

1. Hostel Anti-Ragging Committee:

Each Hostel forms their own Hostel Anti-Ragging Committee and submit the same to the College Authority. It is also widely circulated among the students so that the victim can contacts the members of the Hostel Anti-Ragging Committee as and when requires.

1. Hostel Mess Committee:

Each Hostel has own Hostel Mess Committee in which each wing of the Hostel has the student representative. The Superintendent and Assistant Superintendent are also the members of the said committee. One student representative acts as the secretary of the committee for a certain period. They monitors the smooth running of the hostels and local administration of the hostels and ensures rules and regulations in the hostels.

1. Mess Purchase Committee:

College has a Joint Mess Purchase Committee in which all Superintendents and Assistant Superintendents and one student- Representative from each Hostel are the members. Assistant proctor acts as Coordinator of the committee. The Committee invites Tenders and looks afterall mess related purchases of the hostels.

1. Disciplinary Committee:

General Secretary of Students Union acts asaMembers of Disciplinary Committee and participate in the meetings as student representatives.

1. Students Union:

It has the 48 members who are either selected or elected from each year of each departments. Twoof the members act as General Secretary and Assistant General Secretary of Students Union. Principal acts as President of Students' Union.

1. Sport Committee:

Sport Committee of the college is constituted with student members and a student memberacts as Secretary. Committee also has a Teacher Advisor.

- 1. Cultural Committee
- 2. Social Committee
- 3. Various Clubs
- Magazine Clubs
- Drama Clubs
- Dance Club
- Coders Club
- Sristi etc.

1. Alumni related Activities

2. Campus Interview

3. Publication of the Newsletter

4. Designing of various Certificates

- 5. Designing of Degree Certificate
- 6. Organising committee of Different Festivals
- 7. Organising Committee of Seminar, Short Term Courses and Conferences

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

5.3.3 Average number of sports and cultural activities / competitions organised at the institution level per year

Response: 3.8

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4	3	4	4	4

File Description	Document
Report of the event	View Document
Number of sports and cultural activities / competitions organised per year	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

The Jalpaiguri Government Engineering College Alumni Association got registration on 22nd day of April 2010 from Registrar of Societies West Bengal Act XXVI of 1961 vide No:-S/L/70053 of 2010-11. The Alumni Association functions from College Administrative Building. Various activities of Alumni Association: Alumni Association's activities, till date, are broadly categorised in following divisions: a. Organization of various value-based seminars, workshops and programs b. Creation of platform for scholarship to students of JGEC c. Various student centric value-based activities to enhance JGEC experiences, including supporting Centre For Innovation d. Building a Convention Centre, Kanchenjunga,

inside JGEC campus Purpose of various activities of Alumni Association: a. Organization of various valuebased seminars & workshops: Seminars, workshops, etc are organized on career development, technological advancement and social issues. Themes of various seminars are chosen with a vision to create value for society and educational system. Various reputed persons from reputed national institutes and industry are invited to share thoughts to enhance vision of students and people from various spheres of society. These seminars and workshops create opportunity for students of JGEC to learn different aspects of technology, management and society. These help them to broaden their intellect and sharpen their skills. It helps them to prepare themselves for professional life, as well as reminds them about their social responsibilities. b. Creation of platform for scholarship to students of JGEC: Alumni Association invites established persons related to JGEC and ex-students of JGEC to promote scholarship for students of JGEC. These scholarships are given to economically challenged and meritorious students of JGEC. The purpose of these scholarships are to help students understand how an achiever can struggle to pursue his dream through education for realization of his dream and thus to benefit a society . c. Student centric value-based activities: Alumni Association organizes various student centric value-based activities, like promotion of sporting events, Clean Hostel Drive, technological model competition, etc. The whole purpose is to motivate students to engage in activities which can enhance their leadership abilities and positive attitude towards society. d. Building a convention centre inside JGEC campus: Alumni Association has started construction of a Convention Centre, called Kanchenjunga. Alumni Association has procured a piece of private land to build Kanchenjunga inside premises of JGEC Campus. The convention centre will comprise of seminar and conference hall, meeting room, knowledge sharing room, reading room with library, guest rooms, etc. It will be centre of innovation for students of JGEC. It will be place for industry and institute interaction which will help in student development.

File Description	Document
Link for Additional Information	View Document

5.4.2 Alumni contribution during the last five years(INR in Lakhs)	
? 15 Lakhs	

10Lakhs - 15 Lakhs

5 Lakhs - 10 Lakhs

2 Lakhs - 5 Lakhs

Response: 5 Lakhs - 10 Lakhs

File Description	Document
Any additional information	View Document
Alumni association audited statements	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 10

5.4.3.1 Number	of Alumni Associa	tion /Chapters mee	etings held year-wise du	uring the last five years	
2018-19	2017-18	2016-17	2015-16	2014-15	
2	2	2	2	2	
File Descriptio	n		Document		
Report of the ev	vent		View Document		
Number of Alumni Association / Chapters meetings conducted during the last five years		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 an effective leadership in tune with the vision and mission of the institution

Response:

In line with the vision of the college, i.e., "To be a provider of globally competitive, high quality technical human resources & to promote and significantly contribute towards development of technologies and innovations appropriate to sustainable economic growth and enrichment of quality of life", the 'provider' is committed towards continual improvement, sustained growth and development of culture for quality. The leadership of the college is guided by the principle of sound judgment, effective communication and setting standards and benchmarks in quality education and administration, always striving to excel for stakeholder / student satisfaction. The Organization structure incorporates various bodies viz. Governing Body, Financial Management Committee, Academic Council, Board of studies and Grievance cell. The Governing Body meet at least quarterly in a year. The finance committee meets at least twice a year. The college encourages participatory management by involving the stake holders at all levels. Through departmental meetings, coordination committee meetings, Board of Studies meetings, the College facilitates the internal sharing of ideas in a democratic manner, encouraging maximum participation from faculty members.

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

6.1.2 The institution practices decentralization and participative management

Response:

Yes. The department heads have both academic and managerial autonomy. To ensure smooth functioning of operational and academic activities the Head of the Institution shall be supported by different HOD's and various committees. Principal is given financial powers as per state Government Orders. As far as academic aspects are concerned, the Head of Departments are permitted to take routine decisions in accordance with the situations and exigency and get it ratified by the Principal later. Major decisions are usually taken after brainstorming session in the meeting of the Heads of the Departments and by consensus. Once a decision is taken, the implementation is done by a succession of officers.

File Description	Document	
Link for Additional Information	View Document	

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Response:

The Institution is committed to obtain maximum funds from Central and State Government funding agencies to improve its Research and Development (R&D) facilities. Through the funding the existing labs will be modernized to cater the needs of changing environment in technology for improving students' quality. The Board of Governors was interested in filling up faculty vacancies through the Government Recruitment Process. The quality of faculty members is enhanced by motivating them to attend programs like FDPs, Conferences, Seminars and Industry oriented programs outside. Creating an environment to access national and international journals through digital media. The tests conducted to the students to be designed to measure technical and critical thinking of skills. Special attention will be given for disadvantaged and rural students to increase transition rate. Syllabus revision will be made in phase with the changing technology and adopting Outcome Based Education (OBE). All the departments are motivated to involve in revenue generating activities such as consultancies and testing.

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:

Board of Governors Composition:

Subject to the existing provision in the bye-laws of respective college and rules laid down by the state government/parent university, the Governing Body is the authority for the following:

- Guide the college while fulfilling the objectives for which the college has been granted autonomous status.
- Institute scholarships, fellowships, studentships, medals, prizes and certificates on the recommendations of the Academic Council
- Approve new programmes of study leading to degrees and/or diplomas.
- All recruitments of Teaching Faculty/Principal shall be made by the Governing Body/state government as applicable in accordance with the policies laid down by the UGC and State Government from time to time.
- To approve annual budget of the college before submitting the same at the UGC.

Academic Council:

Functions of the Academic Council:

(a) Scrutinize and approve the proposals with or without modification of the Boards of Studies with regard to courses of study, academic regulations, curricula, syllabi and modifications thereof, instructional and

evaluation arrangements, methods, procedures relevant thereto etc., provided that where the Academic Council differs on any proposal, it shall have the right to return the matter for reconsideration to the Board of Studies concerned or reject it, after giving reasons to do so.

(b) Make regulations regarding the admission of students to different programmes of study in the college keeping in view the policy of the Government.

(c) Make regulations for sports, extra-curricular activities, and proper maintenance and functioning of the playgrounds and hostels.

(d) Recommend to the Governing Body proposals for institution of new programmes of study.

(e) Recommend to the Governing Body institution of scholarships, studentships, fellowships, prizes and medals, and to frame regulations for the award of the same.

(f) Advise the Governing Body on suggestions(s) pertaining to academic affairs made by it.

Principal:

Being the member secretary of BOG principal involves in implementing the devised strategic planning for the development of the institution and conducts meetings periodically. The Progress made by the institution will be reported to the BOG Members which reviews the progress and functioning of the institution and suggest the remedial measures wherever needed in accordance with the Good Governance.

- Academic and administrative management of the institution
- Monitoring and Evaluation of academic and research activities
- Promotion of industry institution interaction and R & D activities
- Providing consultancy services and improving placement rates
- Participation in policy planning at state level for development of technical education
- Managing the Quality Management System of the Institution

Head of the Department:

- Academic and administrative management of the department
- Approval of teaching plans
- Continuing education activities
- Procuring Equipments for the departments and for the development of research
- Interaction with industry and society
- Monitoring Record of attendance and Record of Class work
- Policy planning, Monitoring and Evaluation and Promotional activities both at departmental and institutional level
- Teaching, Research and research guidance
- Consultancy services
- Design and development of new programmes
- Students' counseling and interaction
- Administration both at departmental and institutional levels
- Participating in Curriculum development and developing resource materials

File Description	Document
Link to Organogram of the Institution webpage	View Document
Link for Additional Information	View Document

6.2.3 Implementation of e-governance in areas of o	peration
1. Planning and Development	
2. Administration	
3. Finance and Accounts	
4. Student Admission and Support	
5. Examination	
All 5 of the above	
Any 4 of the above	
Any 3 of the above	
Any 2 of the above	
Response: Any 4 of the above	
File Description	Document
The Description	Document
Details of implementation of e-governance in areas	<u>View Document</u>
Details of implementation of e-governance in areas of operation Planning and	
Details of implementation of e-governance in areas	

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

The college implements planned actions as per the strategic/perspective plan. Decisions are taken in different bodies such as Board of Governors (BOG), Financial Management Committee (FMC) and Academic Council(AC). Decisions were taken during meetings of which were effectively implemented in due course. All the departments share a monthly report covering all the activities of their departments with the Head of the Institutions which is then shared with the leadership. Quarterly reviews happen for all departments where they present their achievements and shortcomings to the Head of the Institution and the leadership.

12.15. Anti Sexual Harassment committee13.16. Faculty Council14.17. SC/ST committee	
10. Library committee 11. Grievance committee	
9. Student Affairs committee	
8. Disciplinary committee	
7. Central Purchase Committee	
6.Building & Works Committee	
5. Autonomous Finance Committee	
3.Board of Studies 4.Finance Committee	
2. Academic Council Board of studies	
1. Board of Governors	

6.3 Faculty Empowerment Strategies

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

Response:

Teachers are recruited through Public Service Commission, West Bengal. Teachers are allowed to acquire higher qualification through Quality Improvement Programme(QIP) and they are allowed for QIP. Non-teaching staff are encouraged to acquire additional skills and qualifications. Welfare measures for teaching and non-teaching staff may be summarized as follows:

- Health Insurance
- Leave Travel Concession
- General Provident Fund
- Festival advance
- Maternity leave
- Medical leave
- leave salary- encashment of earned leave
- Earned leave
- Casual leave
- Summer, Puja and winter vacation
- Gratuity Pension Benefits
- QIP

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: 0

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc during the last five years	View Document

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: 1.4

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

2018-19	2017-18	2016-17	2015-16	2014-15
2	2	1	1	1

File Description	Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	<u>View Document</u>

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 8.68

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2018-19	2017-18	2016-17		2015-16	2014-15	
5	4	4		5	5	
File Descrint	ion		Docun	nent		
File Descript	ion		Docun	nent		
Details of tea	chers attending profe			nent Document		
Details of tea						

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

The Institution follows faculty appraisal methodology as per orders of Government of West Bengal No: 492-Edn(T)/5P-01/13 dated 19.11.2015. It comprises, a self assessment(SAR) based on the work load, quality of work, qualifications, pass percentage of the classes the incumbent has taught, research publications etc. Another section of assessment is done by the HOD, mostly relying on the faculty's regularity, returning the test sheets in time, his research activities, his attitude to work as a team etc. and his involvement in the development of the Institute. Obviously different weightages are given to each aspect. The marks obtained, together with the credit given by various parameters considered as per AICTE norms for career advancement scheme. The said SAR was checked by the Reporting Officer (Principal) and forwarded to Higher Education Department for final approval. Entire process is done in Online Portal.

File Description	Document
Link for Additional Information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Jalpaiguri Government Engineering College is a fully Government owned Engineering College. At the start of each financial year, College collects the requirements from all academic departments and sections of the college and final budget report of the college which is sent to the Higher Education Department of the Government of West Bengal to include the said requirement in the Annual Budget of the Department. The Annual Budget of the College is also endorsed by the Financial Management Committee(FMC) and Governing Body of the college.

Throughout the year, college receives the Funds and Grants from the Government at different heads. Those

head-wise funds are utilized as per requirement and all transactions are done through treasury. For all financial transaction college follows the process of e-transaction to make all transactions transparent. Also all purchases are done as per the existing norms of the Government of West Bengal. For centralized Procurement, College has Central Purchase Committee. For all procurements, e-Tender process is followed. After completing all formalities all bills are sent to the treasuries for the e-clearance of the bill. After through checking, all bills are processed.

The Accountant General (Audit), West Bengal is responsible for the conduct of the Audit of the different Departments and Offices of the State Government and prepares the Annual Audit Report of the State Government.

Though the Officers of the office of the Accountant General (Audit), West Bengal periodically visit the college for the purpose of the Audit, they do not come to the college every year. If any discrepancy noted by the Auditors, the said anomalies are included in the observation of the report which are addressed by the college, If explanations are found convincing, those anomalies are withdrawn from the report with proper mention in the report of the next visit.

Sometime, the Higher Education Department, Government of West Bengal also send the Internal Audit Team to the college who also carry out the inspection of stock and other accounts of the college thoroughly and prepare the audit report for the college.

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

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

Response: 0

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

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Details of Funds / Grants received from non- government bodies during the last five years	View Document

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

Response:

To ensure sustainability of the reforms institutions has Corpus fund, Staff Development fund, Depreciation fund and Maintenance fund. Creation and utilization of the same is in accordance with Government order.

Corpus fund has the source from:

Contributions/donations/grants by Industry, Association, Foundation Trusts, or any other organization in India or abroad. Alumni, faculty, Staff, Student, Well-wishers of the Institute Matching or other grants etc., sanctioned by the State Government/Government of India. Savings from Tuition Fee and interest accrued thereon. 50% savings from Development and other fees, if any, collected from the students. 50% of institute's share of net income from Institute-industry interaction leading to internal revenue generation activities.

Utilization :

It is kept separate from the normal grants from the Government and the otherThis fund should be used for development of institute such as renewal of existing infrastructure, creation of new one etc. that are Capital expenditure in nature which are at times not covered through Government Funding, if necessary a part of the interest accrual may be utilized for operational expenditure of the institute as a budgeted expenditure with the approval of the Board of Governors.

Staff Development fund has the source from:

Full amount of institutions share of net income from continuing education programme, 50% of institute's share of net income from III relating to IRG activities.50% of the institutions share out of IRG from consultancy services. Residual portion of institutions income from Development and other fees, if any and Full amount of institute's share of net income, from non-formal Networking activities.

Utilization:

It will be utilized for critical Staff Development activities including Faculty and Staff up gradation not covered by Government Grant and as may be specified by the BOG.

Depreciation fund has:

25% of the institutions share of net income from consultancy services upto 50% of the IRG by rational utilization of available facilities like Academic space, Play ground, Seminar Conference halt, Equipment etc., Upto 50% of the savings from Block Grant and sanctioned Budgeted expenditure (non-plan). The BOG of the institute also consider depositing in this Fund a fixed percentage of non-plan budget of the institute keeping last three years' average provision for "Equipment" in view.50% of institute's share of net income from calibration testing training courses for target groups etc.

Utilization:

It is utilized for removing obsolescence equipment replacement purposes and as decided by the BOG.

Maintenance fund:

This institute has:

Upto 25% of the institution's share of net income from consultancy, Upto 50% of the revenue generated by rational utilization of available facilities in the institute, Upto 50% of the Savings from Block Grant and sanctioned Budgeted expenditure (non-plan). 50% of institutes share of net income from calibration and testing, training courses for target groups etc., The BOG of the institute is considering depositing a fixed percentage of the non-plan budget of the institute keeping last three years average expenditure on "Maintenance".

Utilisation:

It's meant for usual and regular maintenance of Equipment and Facilities of the institute and as decided by the BOG.

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 primary aim of IQAC is to develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution and to promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.

IQAC uses mechanisms and procedures for

a) Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks;

b) Relevant and quality academic/ research programmes;

c) Equitable access to and affordability of academic programmes for various sections of society;

d) Optimization and integration of modern methods of teaching and learning;

e) The credibility of assessment and evaluation process;

f) Ensuring the adequacy, maintenance and proper allocation of support structure and services;

g) Sharing of research findings and networking with other institutions in India and abroad.

Functions Some of the functions expected of the IQAC are:

a) Development and application of quality benchmarks

b) Parameters for various academic and administrative activities of the institution;

c) Facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process;

d) Collection and analysis of feedback from all stakeholders on quality-related institutional processes;

e) Dissemination of information on various quality parameters to all stakeholders;

f) Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles;

g) Documentation of the various programmes/activities leading to quality improvement;

h) Acting as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices;

i) Development and maintenance of institutional database through MIS for the purpose of maintaining /enhancing the institutional quality;

k) Periodical conduct of Academic and Administrative Audit and its follow-up

1) Preparation and submission of the Annual Quality Assurance Report (AQAR) as per guidelines and parameters of NAAC.

Benefits IQAC will facilitate / contribute to

a) Ensure clarity and focus in institutional functioning towards quality enhancement;

b) Ensure internalization of the quality culture; b) Ensure enhancement and coordination among various activities of the institution and institutionalize all good practices;

c) Provide a sound basis for decision-making to improve institutional functioning;

d) Act as a dynamic system for quality changes in HEIs;

e) Build an organized methodology of documentation and internal communication.

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

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

- The seminars and workshops conducted for the faculty
- Taking seminars compulsory for PG students
- Examining students by conducting internal tests assessments
- Holding extra classes for course completion on time.
- Arrangement of remedial classes, doubt clearing classes for slow learners
- Establishment of research cell in order to encourage research activities
- Appointment of part time faculty to teaching posts lying vacant in the department
- Automation and digitalization of library
- Provision of Wi-fi facility and smart classes
- Increased usage of ICT tools in teaching learning process
- Preparation of course plan at the beginning of every session

Methodologies of operations:

IQAC collects feedback from students in a specially designed format questionnaires annually. Feed back is collected on curricular aspects, teaching learning methods, faculty programs and institutional programs. Steps are taken to improve over all performance of the college by analyzing the feedback from the students. The Academic Council consisting of the principal, the vice principal and a senior faculty in a central body that plans monitors and reviews teaching learning and other activities of the institution. The suggestion/complain box are placed in every sections such as Science, Arts, commerce, Education and also in some important occasions to get the feedback of the students. Suggestions are considered while framing policies related to the institution. The staff council meeting is held in the beginning of the session to discuss the plan for the session. A daily teaching diary of each faculty members, signed by the Head of the institution is maintained by the teachers and presented every month to the principal for the record.

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

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 1.4

2018-19	2017-18	2016-17	2015-16	2014-15
2	2	1	1	1
File Description	n		Document	
Number of qual promoting quali	ity initiatives by IQ. ty culture	AC per year for	View Document	
QAC link			View Document	
- •	-	(AQAR) to NA	AC; Feedback collec	ted, analysed and used for
improve 2. Academ 3. Particip 4. ISO Cer	ements nic Administrative A pation in NIRF rtification any other quality a pove pove pove	Audit (AAA) an	AC; Feedback collec	
improve 2. Academ 3. Particip 4. ISO Cer 5. NBA or Any 4 of the ab Any 3 of the ab Any 2 of the ab	ements hic Administrative is pation in NIRF rtification any other quality is pove pove pove pove 1 of the above	Audit (AAA) an		
improve 2. Academ 3. Particip 4. ISO Cer 5. NBA or Any 4 of the ab Any 3 of the ab Any 2 of the ab Any 1 of the ab Response: Any File Description	ements hic Administrative is pation in NIRF rtification any other quality is pove pove pove pove 1 of the above	Audit (AAA) an audit	d initiation of follow	

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

6.5.5 Incremental improvements made during the preceding five years *(in case of first cycle)* Post accreditation quality initiatives *(second and subsequent cycles)*

Response:

For the past five years the institution was dedicated to develop infrastructure as well as academic

excellence. Construction of new Library and Auditorium, new hostel under state funds are now undergoing in the campus. An MoU for ICT incubation center is signed. Curriculum and Syllabus has been updated at UG and PG level programmes. Digital Library was established for easy accessibility of Journals and online study. Academic Qualification of the teaching staff as well as the non-teaching staff have been improved and strive to achieve all teachers qualified with Ph.D. Students admitted under GATE stipend were given to induce the best students with research capability. Some Research equipments were bought through government sponsored research funding to ensure the quality of research and publications for students as well as staff. The same research facility is also available for students of nearby institutions and staff. Consultancy works are carried out in different fields.

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 4

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1	1	1	0	1

File Description	Document
List of gender equity promotion programs organized by the institution	View Document

7.1.2 Institution shows gender sensitivity in providing facilities such as

- a) Safety and Security
- b) Counselling
- c) Common Room

Response:

1. Safety and Security: Precautions have been taken in the campus, canteen, library, sports area to monitor the movement of students and ensure safety of the students. Closed circuit cameras are installed at few places in the campus.

2. Counselling:JGEC mentors carries out regular counseling to the female students in groups and at individual level. Special counseling facility is also provided from training & placement cell and RED CROSS Society.

3. Common Room : Dedicated Common Room for female students with resting facilities have been created. House keeping people are engaged to clean the common room. As JGEC is inJalpaiguri students from poor and rural background get admitted here in a large number. Moreover, guardians who cannot afford rented house, we allow them to stay in the hostel. The college administration is very sensitive to the safety, security and well being of these students. So far we have not received any sexual harassment report in the college during the last five years. There are anti -sexual harassment cell and Grievances redressal cell in the college. JGEC has provided ladies toilet in the college building.

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

7.1.3 Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 4.54

7.1.3.1 Annual power requirement met by renewable energy sources (in KWH)

Response: 42000

7.1.3.2 Total annual power requirement (in KWH)

Response: 925500

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document
Any additional information	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 22.5

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 90000

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 400000

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document
Any additional information	View Document

7.1.5 Waste Management steps including:

- Solid waste management
- Liquid waste management
- E-waste management

Response:

JGEC is committed to minimize the environmental impact. Over the years, recycling scheme has included office stationery, electronics, laboratory material and furniture.

- Solid waste: An area has been identified for solid waste. Dust bins are placed in various places of the campus and in the hostel premises for collection of solid waste.
- Liquid waste: JGEC adheres to a strict protocol of liquid waste disposal in its laboratories. Any glassware used in the laboratory is rinsed with minimum water and placed in the liquid waste container. The liquid waste is segregated into organic and inorganic waste. Inorganic waste such as concentrated acidic or alkaline solutions are neutralized before disposal. Sodium bi-carbonate or Calcium oxide (lime) is used for the neutralization process so that the neutralized liquid contains no harmful substance.
- E-waste: JGEC has optimized its inventory of computers through reassembling, modification and upgradation by faculty members and students of Computer Science Engineering and Information Technology. This has been a critical endeavour towards E-waste management ensuring that no discarded computers or printers are lying idle in the office premises. This E-waste drive has also benefitted the social commitment programme.

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Initiatives have been taken to conserve water in the Campus, and few buildings will be selected to collect the rain water and recharge the underground water lable. The water will also be supplied and used. Students will be trained to be conscious about environmental issues and be responsible citizens, through the compulsory core course on Environment Education and the variety of NSS and extension activities. Adequate care will be take on Hygiene and Safety issues . Use of KMnO4 (Potassium Permanganate) in water and in production plants and general awareness on hygiene and safety, makes people and the surrounding community and villages healthier.

7.1.7 Green Practices

- Students, staff using
- a) Bicycles
- b) Public Transport
- c) Pedestrian friendly roads
- Plastic-free campus
- Paperless office
- Green landscaping with trees and plants

Response:

JGEC is always working towards clean and green campus.

- Transport: JGEC is residential and offer accommodation to both students and faculty at subsidized rates. Currently, over 60% of the student population avail of the hostel facilities available on campus, 40% live in the vicinity of the campus.. There is 40% students use bicycle. Most of the Faculty& staff members stay in the campus and prefer to use bi-cycle.
- Walkways and Pedestrian Friendly Roads: The campus areas have been designed with the concept of open spaces including roads, jogging trailsetc.. The natural landscape has been preserved while accommodating the demand to use these areas for cultural program, student activities and recreation. JGEC campus has adequate parking facilities.
- Paperless Office: A culture of reuse and recycling has been actively advocated throughout the campus. Several initiatives have been implemented to significantly limit paper traffic such as cashless transactions, notice, circular, office order through email etc.
- Plastic recycling: Solid waste is segregated into biodegradable and non-biodegradable waste. The collection of non-biodegradable waste is collected by Community Garbage disposal agents for recycling.

Plantation: JGEC takes initiatives to protect existing plant and trees in and around the campus. JGEC NSS club and Nature club are working on the plantation drives. Now students are aware of the use of green plants in reducing environmental pollution and maintaining ecological balance.

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 0.07

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component yearwise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
0.15	0.15	0.15	0.15	0

File Description	Document
Green audit report	View Document
Details of expenditure on green initiatives and waste management during the last five years	View Document
Any additional information	View Document

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

 Physical facilities Provision for lift Ramp / Rails Braille Software/facilities Rest Rooms Scribes for examination Special skill development for differently abl Any other similar facility (Specify) 	ed students
A. 7 and more of the above	
B. At least 6 of the above	
C. At least 4 of the above	
D. At least 2 of the above	
Response: D. At least 2 of the above	
File Description	Document
Resources available in the institution for Divyangjan	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 6

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1	2	1	1	1

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document
Any additional information	View Document

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Response: 5

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15	
1	1	1	1	1	
ile Description	1	Do	ocument		

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes			
File Description	Document		
Any additional information	View Document		
URL to Handbook on code of conduct for students and teachers, manuals and brochures on human values and professional ethics	View Document		

7.1.13 Display of core values in the institution and on its website			
Response: Yes			
File Description	Document		
Provide URL of website that displays core values	View Document		

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	View Document
Any additional information	View Document

7.1.15 The institution offers a course on Human Values and professional ethics Response: Yes File Description Document Provide link to Courses on Human Values and professional ethics on Institutional website View Document

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Any additional information	View Document
Provide URL of supporting documents to prove institution functions as per professional code	View Document

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Response: 2

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

2018-19 20	017-18	2016-17	2015-16	2014-15
1 1		0	0	0

File Description	Document
List of activities conducted for promotion of universal values	View Document
Any additional information	View Document

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

Institution organizes national festivals and birth / death anniversaries of the great Indian personalities Institution celebrates National Festivals and Births Anniversaries of great Indian personalities every year as follows:

Republic day celebration-26th January

Since its inception in 1961, JGEC celebrates Independence Day on 26th January by hoisting the National Flag in the morning in front of the administrative building. Principal addresses the students, faculty & staff members of the Institute and highlagts the historical background, present condition of Nation and future developmental plan to build the nation.

Independence Day Celebration-15th August

Since its inception in 1961, JGEC celebrates Independence Day on 15th August by hoisting the National Flag in the morning in front of the administrative building. Principal's speech reflects the historical background, present condition of Nation and future plan to build the nation.

Teachers' Day Celebration-5th September

Every year JGEC celebrate Teachers Day on 5th September, in honour of Dr Sarvepalli Radhakrishnan, who was born on September 5, 1888. Dr. Radhakrishnan was of the opinion that "teachers should be the best minds in the country". When he became the second president of India in 1962, his students were eager to celebrate his birthday as 'Radhakrishnan Day'. He refused their idea by saying "Instead of celebrating my birthday, it would be my proud privilege if September 5 is observed as Teachers' Day." Ever since then, his birthday is observed as Teachers' Day all over the country.

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

JGEC maintains complete transparency in its financial, academic, administrative and auxiliary functions;

the following are the few means which shows the means of transparency:

- JGEC is autonomous college under MAKAUT. It runs autonomy under the rules laid down by the University
- Since it is an autonomous college, JGEC has four statutory boady. One of the statutory body is Financial Management Committee
- All academics, financial and administrative issues discuss in the BOG.
- Admission is an online process which is strictly on the basis of merit in accordance to the JEE & government reservation policies.
- There are various committee to run the academics, administrative and financial functions of the college.
- Important notices regarding college are regularly posted in the college website to ensure complete transparency in all its functioning.
- The institute maintains transparency in its financial, academic, administrative and auxiliary functions.
- It has proper system outline taking care of ethical and human values responsible for transparency.
- The institute's financial transaction Audits are being carried out yearly by external auditor except the fund provided by the West-Bengal Govt. which is audited by AG Bengal.
- JGEC ensures all the financial transactions, reports and documents are completed with integrity.
- Institute presents timely and accurate information to the University community, alumni etc as well as state government.

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

1. Title of the Practice

Creation of "JYOTI – A Ray of Hope" is a a free night education centre in Jalpaiguri Government Engineering College where social commitment becomes an attitude, a challenge and a way of life, an essential constituent in the profile of a JGEC Graduate

2. Objectives of the Practice

The objectives of this initiative are:

- To explore the social responsibility and commitment.
- To encourage faculty and students a spirit of solidarity with the oppressed, those in need and the under-privileged.
- To foster among faculty and students spontaneous and joyous contribution to the society.
- To promote and appreciate the role of social involvement as an ingredient of personal growth and maturity.

3. The Context

The life and struggles of the Dangapara & Patkata villages around the campus of JGEC presented situational challenges and opportunities to create among faculty and students of the college an empathy with these villagers:

- 1. Villagers are struggling for bread and butters
- 2. Children are not getting academic environment
- 3. Exploitation of school students by tuition providers
- 4. The low rate of adult literacy
- 5.Lack of guidance and counseling for the youth of the villages career guidance as well as personal counseling
- 6. Lack of access to clean drinking water and general unhygienic situations in the villages.

4. The Practice

Based on the surveys, student and faculty of JGEC came up with the following interventions:

1. **Tutorial Classes** in the evening at all the campuses for the students of classes five to twelve and JEE coaching will be conducted entirely by the faculty and student volunteers

2. Community counseling

The free services will be provided by the students and faculty of JGEC include individual and group counseling, marriage and family counseling, psychological, personality, and intellectual evaluations and medication management helping them cope with stress, depression, substance abuse and violence; assist couples having marital problems, parents having trouble dealing with their children and children and adolescents faced with family difficulties and peer pressure.

The programme will also help in social outreach activities through community interaction, mobilization and awareness on various issues such as health, hygiene, education, child labor, alcoholism, substance abuse, domestic violence, sustainable agriculture, science & development, career and livelihoods.

5. Evidence of Success

- 1.JYOTI classes were started on 22th March 2010 with a student strength of 80 and now it has reached around 150. Presently, the children of class 4 to class 10 are enrolled in JYOTI and the classes are held 4 times a week between 5.30 pm to 7.30 pm in college building itself with 5 rooms.
- 2. Apart from this, guidance for Polytechnic entrance is also provided. There is a Hindi section of JYOTI since neighboring tea garden students mostly study in Hindi-schools.

6. Problems Encountered and Resources Required

Since JGEC is managing children with the help of students and faculty members, a proper security mechanism is required to control and monitor the system.

7. Other information relevant for adopting/ implementing the Best Practice

Finding resources is always a constraint. However, the sense of societal responsibility and pride have

imbibed among the students and faculty members which help to raise fund to execute the program like sports events and other competitions like Sit and Draw competition, Recitation competition etc. They celebrate various observation-days like Teachers-Day, Birth day of Rabindranath Tagore, Rakshyabandhan day etc.

BEST PRACTICE-2

2. Title of the Practice

'Creating and Sustaining an Eco-Friendly Campus in the management of energy sources and consumption, preservation of flora and fauna, waste management etc..

1. Objectives of the Practice

The objectives of this initiative are:

- To create an ambiance and learning environment that advances a civil and sustainable society.
- To ensure green initiatives for sustainable living.
- To encouraging JGEC community to pilot and promote sustainable solutions through teaching, research and extension activities that tackle live issues of the campus and its adjacent communities.
- To protect natural and existing species in the campus to ensure their survival and growth.
- Harnessing the traditional practices of local communities and involving them in the conservation and sustainable use of these resources.

2. The Context

• Accessibility: A campus covering 165 acres create spaces for academic, residential and recreational areas that blended in with the landscape while being also accessible and eco-friendly.

3. The Practice

The uniqueness of JGEC is that it demonstrates green environment. The Master Plan of the College has been designed to ensure and sustain a harmonious blend of human and environmental well-being.

JGEC has undertaken various initiatives to setting up an Eco-Friendly campus:

- Forestry and conservation of biodiversity: In its endeavour for conservation of healthy ecosystems, JGEC has embarked on a plantation drive. Marginal strips of unused land are used for a small kitchen garden, and for planting bananas, papayas and other plants.
- Grid connected roof top solar photo voltaic power projects: JGEC has embarked upon roof-top solar installations with an installed capacity of 25 Kilowatts.
- Water conservation and supply management: The College has invested enormous resources to ensure sustainable water management and use.

4. Evidence of Success

Success in the creation of an Eco-Friendly Campus is seen in the following:

1. Efforts for Carbon neutrality

 \cdot We practice simple measures like using two sides of paper for printing, using waste paper for rough work, using the lights/fans only when needed, switching off lights in unused rooms etc.

 \cdot In the website scanned copies of question papers are uploaded for the benefit of the students.

 \cdot Every building in the campus is surrounded by trees and lawns.

 \cdot Cigarettes and tobacco products are strictly banned within the campus. "Blue line campaign" has been organized in the campus

• Vehicular movements are restricted inside the campus except a few VIP cars.

 \cdot A number of trees has been planted in the campus

Student and faculty members use bi cycle in the campus.

b. Plantation

• Efforts are made to protect existing plant and trees in and around the campus. JGEC NSS club and Nature club takes initiatives to execute the plantation drives.

 \cdot MAR has been included in the syllabi to inspire and teach them to take the responsibility of the society. Now students are aware of the use of green plants in reducing environmental pollution and maintaining ecological balance.

 \cdot We have nurtured a tradition to felicitate guests by giving a sapling to promote environmental consciousness.

• Planting trees is an integral part of the activity of the Nature club and NSS of the college.

c. Waste management

 \cdot A separate area named **Waste Management Zone** has been created in the campus.

Dry and wet waste is segregated. Old newspaper is outsourced

d.Grid connected roof top solar photo voltaic power project:

• The 25 kilowatt project is operational

e. Energy Saving and Conservation

b. LED lights have been installed in places where energy consumption is high.

c. Master switches have been installed in all the classrooms and floors and they are labeled so that, only those required can be switched on.

d. The staff and students switch off the fans and lights when not required. All the air conditioners are maintained at or above 24 degree Celsius temperature.

e Energy Saving Stickers with the following captions are posted in Every classroom.by the Nature club

DO NOT LITTER SAVE ELECTRICITY SAVE WATER SAVE OUR EARTH

Problems Encountered and Resources Required

While the opportunities to explore eco-friendly possibilities are evident, actions devoted to conservation for a green campus are expensive and managing plantaion is also difficult. Fund is required to execute this practice.

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

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

Title of the practice: FFS, HFS, & scholarships to the deserving students by the college and alumni association

Objectives of the practice

The aim of these activities is to provide support to the needy students joining various courses of the college that there are many students coming from the rural areas with low economic back ground. Their parents are unable to provide them a sustained financial support. So, the noble objectives of the practice are as follows:

• To extend financial aid to the poor students, especially from the rural areas and assure them from discontinuation of their studies owing to poverty.

• To provide financial support to all the deserving poor students without any discrimination of caste, creed or gender.

•To promote the sense of 'equality' among the students

• To inculcate the human values and a 'sense of social responsibility' among the students.

The expected outcome is that the students should be able to complete their graduation with good marks. The beneficiaries should treat the needy when they are placed in the society with the principle of 'lend a helping hand without discrimination.'

The context:

The task is challenging and it takes time to design and its implementation.

• A committees has been formed to collect the data required for this study

After many awareness sittings with the all concerned, like faculty, staff, Govt. guidelines etc. the eligibility criterion for the financial assistance.

• After comprehensive deliberations with students and faculty members, it is decided to extend the benefit to all the poor students, without any

discrimination of caste, creed or gender as per West Bengal Govt Guidelines.

• Verification of the financial backwardness of the aspirants was yet another challenge.

• The authority has insisted on strict adherence to the rules framed.

There are many scholarship program like Swami Vivekananda merit cum mean scholarship, FFS & HFS etc. To assist the meritorious students belonging to economically backward families in the State of West Bengal to pursue higher studies, the Government of West Bengal has introduced the Swami Vivekananda Merit Cum Means Scholarship Scheme. This scheme provides scholarships to students for pursuing higher studies at educational institutions based in West Bengal.

The scheme benefits students of under Graduate level in Engineering. The scholarships are sanctioned to deserving students on merit-cum-means criteria.

Govt of West Bengal has come up with a scheme about awarding of Half-tuition fee waiver or Halffreeship and Full-tuition fee waiver or Full-freeship to students belonging to specific income-brackets who become eligible for the same; by virtue of their admission into Government Engineering Colleges among the selected candidates through the counseling conducted by the WBJEEB.The waiver is limited to the Tuition fee only for all the Institutions concerned. All other fees except tuition fees will have to be borne by the beneficiary.

TFW is tuition fee waiver. This scheme has been implemented by the Govt. for meritorious and economically backward students for admission in to universities / university departments, government colleges.

Apart from the above mentioned scheme, other scholarship scheme are availabl like alumni association, OBC scholarships etc

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Link for Additional Information	View Document

5. CONCLUSION

Additional Information :

Established on 7 August 1961, the Jalpaiguri Government Engineering College is the fifth oldest of all technical institutions (centrally and state funded) besides the Indian Institute of Engineering Science and Technology (1856, Formerly Bengal Engineering and Science University), Indian Institute of Technology, Kharagpur (1951), Jadavpur University (1955) and National Institute of Technology, Durgapur (1960, Formerly REC Durgapur) in the state of West Bengal. JGEC Central Building In the Initial years JGEC was under the University of Calcutta. For the period between 1963 and 1999, the college was affiliated to the University of North Bengal ,which handed over the rich mantle of technical excellence to the West Bengal University Of Technology, Founded under the West Bengal University Of Technology Act, 2000.

In 2012, the institute was granted complete autonomy by the University Grants Commission, India, thus giving it the freedom to set its own curriculum and manage its own finances. With affiliation to the West Bengal University Of Technology, the institute is now an autonomous engineering college under The Government of West Bengal.

Concluding Remarks :

The 58 years existence of JGEC produced Eminent Engineers, Scientists, Industrialists, entrepreneurs, and Officers who are well known for excellence in their services. Alumni of JGEC spread over the world and excel in their profession by their expertise, attitude and commitment. JGEC takes utmost care and impart quality education needed to adapt its graduates in a rapidly changing Technological advancements. JGEC always conscious about not to lag behind in creating state of the art Infra structural facilities and updates its curriculum on par with top ranking Institutions. The commitment from the mix of experienced and young faculty and staff drives the young students to acquire essential and relevant knowledge, skill and behavior to a globally recognized level. Many of the JGEC Students get admitted for Higher Studies in USA, Australia, Europe and other Asian Countries. The Teaching Learning Process practiced in JGEC campus not only makes the students technologically competent but also enables them to lead a dignified human life. Generous Contribution of JGEC alumni towards financial support for needy students, and career guidance make JGEC alumni Association a special. JGEC remains a dream Institution for many parents and students. JGEC is tirelessly striving for the realization of its vision and confident in effecting socio economic transformation of the rural and weaker sections in the near future.