



SELF STUDY REPORT

FOR

3rd CYCLE OF ACCREDITATION

JIS COLLEGE OF ENGINEERING (AUTONOMOUS)

BLOCK A, PHASE III, KALYANI, DIST. NADIA

741235

www.jiscollege.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

JIS College of Engineering, an institution of academic excellence was established in the year 2000 with a cherished desire to serve the cause of humanity through education. Since its modest beginning on 1st September 2000, JISCE has crossed twenty years of its journey so far. Seven undergraduate programmes are running namely Civil, Mechanical & Electrical followed by Biomedical Engineering, Electronics & Communication Engineering, Computer Science Engineering & Information Technology. We have four Post Graduate Programmes in Engineering and one in Business Administration. The JIS College of Engineering has blossomed into six value Added Centers such as British Council Centre for Communication Skills, NPTEL Centre for Value Addition, TATA Technologies Centre, CII Centre for Innovations and a Centre of Excellence, created by joint partnership with Universities of the Russian Federation. As a mission of transforming education, in 2017 JISCE made a quantum jump in the pedagogical initiative through Flipped learning-first fully Flipped Institute in India as endorsed by AICTE, MHRD, Govt. of India. The uniqueness of a Flipped learning where remember & understanding is done at home and its application, critical evaluation of concept and creating new ideas are done in a vibrant classroom. The teacher's role is elevated to that of moderator of a brainstorming session. Our in-house publication on Flipped Learning was launched by Dr Anil Sahasrabudhe, Chairman, AICTE. JISCE has a vibrant Institutional Innovation Council (5 Star ranked) and received a rank in the band 26 to 50 in ARIIA 2020 with its peripheries extended over variety of activities such as Idea Competition, Technical Symposium, IPR awareness, Start-up activities, Networking with Industry and Institute of repute. JISCE has set up Centre excellence in collaboration with Russia. The Institute has received TEQIP-II Sub-component 1.2 grant and has a vibrant R&D atmosphere with more than 400 publications in SCOPUS/WS/TR/SCI indexed journals in past 10 years, funded projects from DST, CSIR, UGC, AICTE. The Institute has also received FIST project from DST under level-0. Till date a total of 101 IPRs has been filed of which 85 are published. Out of published patents 03 designs and 01 IPR have been granted.

Vision

To generate a stimulating academic environment for higher learning and to bring about a harmonious development of personality among the students by fostering leadership values and importing high degree of professional skills.

Mission

- Our mission is to provide excellent educational infrastructure and academic ambiance conducive to higher learning by setting up centers of excellence and instill a sense of ethics and value system among the students.
- We are committed to provide opportunities to the students to develop their full potential and professional growth and to spread the light of higher education

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

1. Highly transparent Governance and Administration with well-defined decentralization of authority
2. Accreditation by NAAC and NBA
3. TEQIP-II funded Institute. The institute was rated as high performance institution in TEQIP II phases.
4. Dissemination of power and involvement all major stake holders in decision making process
5. Availability of well-defined policy for all major operational procedures along with Standard operating procedure in applicable cases. Admission to examination up to final certification entire process is automated.
6. Robust infrastructure both in terms of physical resource and human resources.
7. Equipped with modern start-of-the art digitally transformed Flipped classrooms, modern laboratories, value addition centers and number of Center of Excellence along with two well-equipped fully functional digital studio with a preview hall of 40 sitting capacity
8. In campus hostel facility for boys and girls , banking facility, Cheap Store etc..
9. Green Campus
10. The college is effectively practicing OBE. The curriculum design, pedagogy and assessment are given highest priority.
11. The Institute has put efforts in encouraging innovation and has adopted best practices/ process in teaching learning processes accordingly post of Dean Innovative learning has been created.
12. Flipped learning environment at all level and all streams with dedicated Flipped Class room
13. Video-repository for all the lectures of all the courses and that too accessible to each student through dedicated server.
14. Arrangement of Internship for the Students at abroad
15. Training beyond curriculum for skill up-gradation of students.
16. Conducive research ambience along with advanced R&D labs established with significant amount of external grant and consistent institutional support like seed grant, IPR submission and incentive
17. Vibrant Institutional Innovation Council with 5-star ranking.
18. Dedicated training programme for overall development of each students in every spheres of academic, cultural and universal human values through schemes like 'JIS Jyoti', NSS, NCC and Student Life Centres.
19. The functional MoUs and the collaborative activities are great strength of this college.

Institutional Weakness

1. Inadequate levels of participation from foreign students
2. Lesser number of Internationally faculty exchange programme
3. Solution of live industrial project as a part of UG/PG project need to be emphasized.
4. Inadequate commercialization of intellectual property generated
5. Industrial consultancy needs to be strengthened
6. Over-reliance on IT industry for placements
7. In-house Ph-D programme is awaited for approval of affiliating University.
8. Lack of interdisciplinary research.

Institutional Opportunity

1. To increase the number of PhD teachers

2. Improve peer reviewed journal publication (Scopus, citation index, impact factor, h-index)
3. Being a Startup Hub for engineering graduates
4. Explore the possibility of commercialization of patents
5. Scope for partnering with Industry to carry out research projects, outsourcing training programs and extending consultancy services.
6. Initiation of PhD programme and developing Schools in allied areas of science and technology.
7. A large section of faculty members is between 35 to 45-experienced and energetic human resource.
8. Digitally conversant faculty resources could be upgraded to next level and contribute to the International knowledge society through new innovations like 'interactive video' resources.
9. Acclimatizing with the impact of Industry 4.0 and emphasis on multidisciplinary study and research.

Institutional Challenge

1. Rural background of the Institute is not always conducive for initiating new UG/PG programme on contemporary but highly advanced topics.
2. Fast changing technologies, and educational ecosystem that is certain to place huge demands on the efforts to mobilize resources for upgrading human resources and physical infrastructure.
3. Attracting core engineering company placements catering to all domains
4. To attract greater number of international students
5. National trend of reducing interests in some of the engineering sectors.
6. Major emphasis of the Government is shifting towards innovation/product development which is making sectors of fundamental research challenging particularly in respect of getting grants.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Engineering up skilling and leading capability associated with specific domain knowledge enhancement of students are main criteria on curriculum design. Most significantly, this upgradation is accelerated periodically by addressing Local, National, Regional and Global developmental requirement. The curriculum/syllabus feedback process is transparent and quantitative in nature. Suggestion receiving from several stake holders have been considered and justified by the strong Board of Study (BOS) and Academic Council (AC) structure towards the implementation. The main backbone of syllabus originated from AICTE Model Curriculum including emerging area. Six factors are considered towards the curriculum development as follows: (i) Emerging Technology and Innovations, (ii) Developmental needs at Local, Regional, National & Global levels, (iii) Opinion of Stake holders, (iv) Suggestions from Professional bodies, (v) Review of Curriculum of National & International Universities, (vi) Standardized tests and competitive exams at end of program (GATE, GRE, IES etc.) Intellectual Competence, Social Commitment, Civic Responsibility are additional points considered towards implementation of autonomy curriculum. Curriculum design is the most significant aspects of academic quality enhancement processes of an organization. Outcomes based Curriculum Framework towards our national need (Employability/ Entrepreneurship/ Upskilling) have been implemented prominently. The concept of “**Atmanirbhar Bharat**” is also reflected in present curriculum. Title of the course, course contents, versatile electives, complete information of the course and the curricular structure is well furnished. The Course Outcome (COs), Program Outcomes (POs) and Program Specific Outcomes (PSOs) are synchronized through CO-PO & CO-PSO mapping. Percentage of new Courses and Elective course introduced is adequate in nature. The value-added courses imparting transferable and life skills introduction in curriculum is practicing.

In association, field projects / internship activities are well established in this institution through innovation aspects of curriculum. Towards the sustainability of our civilization, Environment is essential factor. It is the social responsibility of engineering graduates to contribute towards clean and green environment and environmental sustainability. Value education and professional ethics are other two key areas of modern engineering education and our curriculum provides all essential ingredients of the same.

Teaching-learning and Evaluation

Teaching Learning process is a vital parameter for OBE. Teachers always create enthusiasm, ignite passion and generate curiosity among the students. Side by side, they participate in Conferences, Seminars and Symposia, Orientation and Refresher-Courses to boost their research and teaching for effective teaching. The admission process of the Institute is managed by the admission committee which is responsible for designing admission forms and prospectus and counseling of the students at the entry level. Thereafter, Students' learning ability is identified after admission through various performances in the induction program followed by diagnostic tests on Physics-Chemistry-Mathematics-English, through a trusted third-party portal dedicated for Institute. Students learning ability in successive years are assessed through the analysis of qualifying examination score before admission to undergraduate program, communication and soft skills, behavioral traits, theory and practical class attendance, performance in Class test/ Online test/ Practical experiment etc, participation in co-curricular activities. The Internal Quality Assurance Cell conducts quality audits and conducts programmes for improving the quality of teaching. The Institute is practicing flipped learning so it is easy to identify the student and provide the guidance accordingly. Institute has world class flipped classrooms, interactive boards, language lab, smart classrooms, and E-learning resources to provide the best learning to students.

The Institute prepares effective planning for execution of all the activities following the academic calendar. This allows the teachers and the students to keep pace to their teaching and learning process.

The Evaluation process is a transparent and continuous assessment system, comprising written examinations, class seminars, and assignments. Institute has adopted IT-enabled services for an integrated end-to-end Examination Management System with unique modules and the benefits in conducting examinations with utmost security and efficiency. The overall services have been distributed in three different frameworks: Network Operating Centre (NOC), Examination Data Centre (EDC) & Central Valuation Centre (CVC). The system is robust enough to handle large amounts of data and is equipped with a proper backup disaster recovery framework. After the publication of the result, attainment of course outcomes are evaluated by the department and suggested to the concerned committee accordingly for further action.

Research, Innovations and Extension

Research and Innovations are one of the major focus areas of JIS College of Engineering. To inculcate the research ambience within the institute, JISCE has established R&D cell with defined R&D policy way back in 2009 to identify the thrust areas of research with an emphasis on quality publications in SCOPUS/WS/TR/SCI indexed Journals and conference proceedings, developing projects leading to patent filing, publications and granting. In line with Government policy the Institute has established Institutional Innovation Council for nurturing young minds towards startup and innovation. To nurture the innovative minds of two major stakeholders (i.e. faculty members and the students), the management of this institute has implemented several schemes like providing seed money, special leave with pay to carry out their research work, incentives towards research publication, financial assistance for attending conference/seminar/workshop etc.

To encourage the research and innovation activity in the premises, a number of Centers of Excellence (CoE) and innovative labs have been established. The best research practices and ideas are shared amongst faculty members, industry partners and research collaborators. A design-lab has also been established that has been recognized as CII-Centre for Innovation in 2017 for carrying out student projects and mentoring towards product development.

To nurture inquisitive mind and young innovations, a number of signature events are organized in each academic year as per the calendar activities of Institutional Innovation Council, which includes Idea Competitions, Proto-type development and exhibition (JISTech2K15- JISTech2K19), National level competitive events like Integrated Hackathon, Hardware and software Hackathon and IPR workshop etc. Selected projects under different categories are mentored towards IPR filing, publications, granting and finally towards product development which leads to startup incubation. In the past five years more than 100 IPRs have been filed, 85 published of which four received granting.

As per the guidelines of UGC and MHRD, JIS College of Engineering constitutes a Research & Publication Ethics to monitor the publication misconduct, database and research matrices.

The institute also encourages to carry out the consultancy work within the institute and extends the hand for societal activities like blood donation camp, various awareness program within the nearby areas.

Infrastructure and Learning Resources

The development and augmentation of infrastructure is an ongoing process keeping in view the needs for up gradation and addition in consonance with the changes and needs of the system. Modern gadgets and infrastructure peripheral has been added and laboratories/blocks are made available as per requirements. Various facilities like Class rooms with Projector, Flip Classrooms, Laboratories, Seminar Hall, Workshop, Digital Studio, Meeting Room, Auditorium, Library, Cafeteria, Common Rooms for boys and girls, Reprographic Centre, Recreational Spaces, Safe drinking water facilities etc. Wi-Fi facility is there in the complete campus accessible both for students and staffs.

The library system consists of Central and Departmental libraries considered as integrated knowledge resource centers with array of huge print and digital information sources of every relevant fields of academic and research activities. Library has subscribed ELSEVIER Science Direct e-Journals and IEEE Wiley e-Books. Library also provides remote access of e-resources through N-LIST programme under e-Shodh Sindhu. The Library is member of the National Digital Library of India. To provide the information on current research, library promotes the use of Shodhganga, National Science Digital Library, eGyankosha, ROAR etc. The access of Flip Learning Data, Question papers, e-books and e-journals are also provided through Digital library, Institutional e-repository of online lectures.

Various cultural events are organized in the college throughout the year. Students, specially organize Teachers day as a mark of respect to the teachers. Apart from these auspicious events like “Saraswati Puja”, “Vishwakarma Puja” are also organized.

The Institute ensures that the infrastructure facilities meet the requirements of the differently abled persons. The Institute has an established system for maintenance and utilization of computers, classrooms, equipment and laboratories in the campus.

The Institute has well furnished hostel facility with occupancy of total 400, out of which boys – 260 and girls– 140. The hostels are having dining halls, power backup, cafeteria, laundry, recreational facilities like cricket, football, volleyball, basket ball, table Tennis, badminton etc. Wi-Fi is also available 24x7 for the hostel inmates. The Institute provides medical facilities such as regular visits of the male and female doctors, and facilities for medical emergencies.

Student Support and Progression

Students are the most important stakeholders and precious elements to ensure quality of any academic institute. Utmost care is taken to nurture and nourish the students. Once they join respective programmes, they are provided with various facilities which include succoring deserving students with financial assistance from the college and assisting them to benefit from the State Govt. and Central Govt. sponsored scholarship schemes, indoor and outdoor sports facilities, and encouragement to flair in Co-Curricular activities. Many meritorious and financially weak students through various scholarship schemes prop up and complete education with glory. The Institute conducts coaching and remedial classes for aspiring students. The college has well established career counseling, entrepreneurship development and placement cells, for guiding and propelling students towards a better career and providing job opportunities through campus interviews with the support of prospective employers visiting this institution for placement of students in wide spectrum employment sectors. Institute in regular manner publishes its updated prospectus to show case pinnacle facilities for students available in the institute, information about different committees of the college, annual calendar, NSS and NCC, library facilities, sports activities, scholarship and freeship support system, and career counseling, etc. The students are encouraged to avail opportunities to excel in transmitting the recent developments in Science and Technology across world, to serve society, to capture the unseen and explore the unknown, to make college campus green and pollution free or to foster their creative spirit through versatile activities of various clubs. The institute has granted membership of students in various administrative, academic and nonacademic bodies such as Grievance and Redressal Committee, Class Review Committee, Anti-ragging Committee & Anti-ragging Squad, Student Affairs Council, Student Branch of CSI, IEI & IEEE, Library Committee, Sports Committee, IQAC of the College, and Hostel Management Committee. Along with this for the support and care of female students the college has an active Women Cell, Girls' recreation room. Active Student Council is most potential student development initiative of JISCE which brings up students' leadership quality and administrative nature to stimulate their zeal to become brilliant scholars and exceptional personalities.

Governance, Leadership and Management

JIS College of Engineering has a clearly defined organizational hierarchy and structure to support decision-making processes that are clear and consistent with its purposes. A flexible governance mechanism allows the Institution to make significant moves towards the realization of its goals stated in the Vision and Mission statement which primarily focus on the needs of society and providing quality education. The organizational structure lends itself to sustaining institutional capacity and educational effectiveness. The institution has various Authorities/ Bodies/ Committees at multiple levels for the effective functioning which have been meeting regularly without fail for decades. The Board of Governors is the highest decision-making body which formulates/ amends rules and regulations, delegates powers and responsibilities to Principal, Deans, Heads of the Departments (HODs) and various Committees.

JIS College of Engineering practices decentralized and participative management in letter and spirit in all its activities, initiatives, planning and decision making reflected in its functioning. The process of curriculum

design is a fine example of academic decentralization. Faculty members participate, through corresponding Functional Committees, in finalizing curriculum design, teaching learning methodology of common courses, examination reforms, maintenance of academic standards and student welfare. The institution also maintains very strong interaction with all its stakeholders in administrative policy making. The process of allocation of finances is transparent, need based and participative. Also, all new policies are finalized in several rounds incorporating suggestions and ensuring broad consensus.

The institution has a perspective plan for overall development comprising goals, objectives and action plans for a period of five years. Besides evolving its innovative and time-tested educational ideology, JISCE believes that education without the cultural context is incomplete and thus includes preservation and inculcation of essential values. A well-defined mechanism is in force for financial audit to have discipline and transparency in financial management. The accounts of the institution are subject to internal and external audit. IQAC has a well-developed method to ensure quality benchmarks of academic and administrative activities. The institute is committed to provide opportunities to the students to develop their full potential and professional growth and to spread the light of higher education.

Institutional Values and Best Practices

The Institute conducts Gender Equity programmes under Women's Development Cell. The ideal objective is to provide safety and security to the girl students and ensure that every girl student is guided/counseled/mentored by faculty.

The institute has undertaken the best possible initiatives for managing solid waste, liquid waste, and E-waste. The practices adopted to maintain waste-management are eco-friendly, economically sustainable and as per regulatory norms.

The Institute takes all the necessary measures towards the conservation of rainwater in the best possible ways.

The Institute is a pollution-free environment architected with Greenery. Motor vehicles are prohibited in the campus, whereas bicycles are utilized within the campus to avoid pollution. Plastic is prohibited strictly inside the campus. The institute also initiates energy conservation measures like solar energy, wheeling to the Grid, use of LED bulbs and equipment used for power efficiency.

The Institute encourages differently abled students to build their independent careers and stand for economic growth. The institute has provision for providing lift facility, scribes for examination and parking facility for the differently-abled persons.

The institute enlightens students by organizing awareness programmes workshops, training programmes regarding the importance of eco-friendly environment, Health awareness campaigns, Skill development programmes etc., are organized to contribute the local community.

The institute has a specific Code of Conduct practices that exist for all the stakeholders that are imbibed to administration of institution. The institute has special interest to bring awareness about the rich heritage and culture of our country. The institute is also offering a Course on Human Values and Professional ethics to technical graduates as part of the curriculum.

The institute is functioning as per the professional code prescribed and suggested by statutory bodies. The

institute is affiliated to Maulana Abul Kalam Azad University of Technology and approved by the AICTE. Various Committees prescribed by the Governing body, exercise their responsibilities in the institution as a whole. The Institute has best practices to ensure overall development and promote a healthy research environment, placements and Innovation.

NAAC

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	JIS COLLEGE OF ENGINEERING (AUTONOMOUS)
Address	Block A, Phase III, Kalyani, Dist. Nadia
City	Kalyani
State	West Bengal
Pin	741235
Website	www.jiscollege.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Partha Sarkar	033-25822865	9861533811	033-25808640	principal_jisce@jisgroup.org
IQAC / CIQA coordinator	Sudipta Sahana	033-25822864	9474733974	033-25822138	iqac@jiscollege.ac.in

Status of the Institution	
Institution Status	Private

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	Yes pdfresizer.com-pdf-resize.pdf
If Yes, Specify minority status	
Religious	SIKH
Linguistic	
Any Other	

Establishment Details	
Date of Establishment, Prior to the Grant of 'Autonomy'	13-07-2000
Date of grant of 'Autonomy' to the College by UGC	31-10-2011

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	16-06-2011	View Document
12B of UGC	05-12-2011	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/Approval details Institution/Department programme	Day, Month and year (dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	15-06-2020	12	

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?	Yes
If yes, name of the agency	TEQIP
Date of recognition	29-06-2011

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Block A, Phase III, Kalyani, Dist. Nadia	Urban	13.33	34205

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Computer Science And Engineering	48	Class Twelve	English	120	120
UG	BTech,Information Technology	48	Class Twelve	English	60	60
UG	BTech,Electronics And Communication	48	Class Twelve	English	120	101
UG	BTech,Electrical Engineering	48	Class Twelve	English	120	91
UG	BTech,Biomedical Engineering	48	Class Twelve	English	60	34
UG	BTech,Mechanical Engineering	48	Class Twelve	English	120	62
UG	BTech,Civil Engineering	48	Class Twelve	English	120	71
PG	Mtech,Edps	24	UG IN ENGG	English	18	7
PG	Mtech,Mcmt	24	UG IN ENGG	English	18	9
PG	Mtech,Mme	24	UG IN ENGG	English	9	6
PG	Mtech,Mcse	24	UG IN ENGG	English	18	4
PG	MBA,Mba	60	UG	English	60	37

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	17				30				171			
Recruited	14	3	0	17	17	13	0	30	113	58	0	171
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				54
Recruited	42	12	0	54
Yet to Recruit				0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				34
Recruited	27	7	0	34
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	14	3	0	10	7	0	18	3	0	55
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	7	6	0	95	55	0	163
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	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
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/LLD/DM/MCH	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
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties				
Number of Visiting/Guest Faculty engaged with the college?	Male	Female	Others	Total
	2	1	0	3

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	349	111	0	6	466
	Female	42	31	0	0	73
	Others	0	0	0	0	0
PG	Male	46	6	0	2	54
	Female	9	0	0	0	9
	Others	0	0	0	0	0
Diploma	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

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	85	90	87	111
	Female	4	6	3	5
	Others	0	0	0	0
ST	Male	3	3	7	3
	Female	0	1	2	0
	Others	0	0	0	0
OBC	Male	92	97	109	95
	Female	6	4	6	5
	Others	0	0	0	0
General	Male	310	301	362	312
	Female	92	65	126	147
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		592	567	702	678

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Biomedical Engineering	View Document
Civil Engineering	View Document
Computer Science And Engineering	View Document
Edps	View Document
Electrical Engineering	View Document
Electronics And Communication	View Document
Information Technology	View Document
Mba	View Document
Mcmt	View Document
Mcse	View Document
Mechanical Engineering	View Document
Mme	View Document

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2018-19	2017-18	2016-17	2015-16	2014-15
11	11	15	15	16
File Description		Document		
Institutional data in prescribed format		View Document		

1.2

Number of departments offering academic programmes

Response: 7

2 Students

2.1

Number of students year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2343	2393	2572	2711	2783
File Description		Document		
Institutional data in prescribed format		View Document		

2.2

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

2018-19	2017-18	2016-17	2015-16	2014-15
598	548	703	690	724
File Description		Document		
Institutional data in prescribed format		View Document		

2.3

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

2018-19	2017-18	2016-17	2015-16	2014-15
2177	2261	2398	2599	2713
File Description		Document		
Institutional data in prescribed format		View Document		

2.4

Number of revaluation applications year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
87	104	107	114	121

3 Teachers**3.1**

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

2018-19	2017-18	2016-17	2015-16	2014-15
891	759	759	680	680
File Description		Document		
Institutional data in prescribed format		View Document		

3.2

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

2018-19	2017-18	2016-17	2015-16	2014-15
206	202	208	202	204
File Description		Document		
Institutional data in prescribed format		View Document		

3.3

Number of sanctioned posts year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
206	202	208	202	204
File Description		Document		
Institutional data in prescribed format		View Document		

4 Institution**4.1****Number of eligible applications received for admissions to all the programs year-wise during last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
639	609	771	742	693
File Description		Document		
Institutional data in prescribed format		View Document		

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

2018-19	2017-18	2016-17	2015-16	2014-15
298	301	321	315	360
File Description		Document		
Institutional data in prescribed format		View Document		

4.3**Total number of classrooms and seminar halls****Response: 34****4.4****Total number of computers in the campus for academic purpose****Response: 360**

4.5

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

2018-19	2017-18	2016-17	2015-16	2014-15
1246.65011	1218.51453	1476.68235	1256.59334	1387.68954

NAAC

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

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

Response:

Concept of Curriculum Development:

Growth of Engineering Skill, Leadership Capability and Domain Specific Knowledge development among students are the main criteria of curriculum design. This process is enhanced periodically by addressing **Local, National, Regional and Global Developmental** requirement in addition to consonance with the AICTE Model Curriculum. It is further enriched by including specific courses as per extensive review of available literature on developmental needs. Inclusion of Academic and Industry professionals in the statutory bodies play a major role in development of curriculum along with suggestion from different stakeholders.

Six Factors are Considered towards the Curriculum Development:

1. Emerging Technology and Innovations
2. Developmental needs at various levels
3. Opinion of Stake holders
4. Suggestions from Professional Bodies
5. Review of Curriculum of National & International Universities
6. Standardized tests and competitive exams at end of program (GATE, GRE, IES etc.)

The most relevant citations of survey related to **Global/National/Regional** level issues address are well illustrated in following table:

Table 1: Global, National & Regional Issues Survey Citation Summary

Issue	Global	National	Regional
Climate Change	Cubasch, U. et. al., “Climate Change 2013: The Physical Science Basis”, Cambridge University Press 2013.	Saran.S, “India’s Climate Change Policy: Towards a Better Future”, Ministry of External Affairs Website, November 08, 2019.	“State of Environment Report West Bengal 2016”, West Bengal Pollution Control Board.
Economic Inequality	World Inequality Report 2018.	Chancel.L, “Indian income inequality, 1922-2015: From British Raj to	West Bengal: Poverty, Growth & Inequality, June 20, 2017.

		Billionaire Raj?”, July 2017.	
Future Health	“Research for universal health coverage: World health report 2013”, 15 August 2013.	R. Srinivisan, “Annual Report Of Department Of Health And Family Welfare 2017-18”, Health Care In India-Vision 2020 Issues And Prospects.	“Plan of Action 2011-2015”, The Chief Minister, West Bengal.
Future of the internet/Fourth Industrial Revolution	“World Economic Forum: Fourth Industrial Revolution”, WEF 2019.	“India’s Readiness for Industry 4.0”, CII, 2018.	Srija.A., “The Fourth Industrial Revolution: Realizing India's Demographic Dividend”, Centre of Sustainable Development, Azip Premji University, 2018.
Employability	“The Human Capital Report 2015”, World Economic Forum Report, 2015. World Economic Forum Report, “The Future of Jobs Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution”.	Government of India: Ministry of Labour & Development: Annual Report 2015-16. CII: India Skills Report 2015.	“Database On Labour & Employment Statistics of West Bengal -2014”, W.B Government.
Water Crisis	“Water: a shared responsibility” United Nations.	Central Water Commission: Annual Report 2015-16.	“West Bengal Drinking Water Sector. Improvement Project”, W.B Government.
Global Warming	Global Climate in 2015-2019: Climate change accelerates.	India’s Progress in Combating Climate Change, December, 2014.	“State Action Plan On Climate Change”, W.B Government.
Woman Security	“The Global Gender Gap Report 2015”.	“Report on the Status of Women in India”.	“Department of Women & Child Development and Social Welfare”. Annual Report & Publication 2015 – 2016.

Above Table depicts that POs, PSOs and COs quite clearly reflect **Local, National, Regional and Global** developmental needs which is in complete coherence with the curriculum and content of the syllabus. Attainments of POs, PSOs, COs are quantifiable and are achieved by individual programmes.

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

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

Response: 100

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

Response: 11

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

Response: 11

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

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

Response: 4.68

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
40	36	36	32	32

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

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years. Response: 12.62	
1.2.1.1 How many new courses are introduced within the last five years Response: 294	
1.2.1.2 Number of courses offered by the institution across all programmes during the last five years. Response: 2330	
File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document
1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year). Response: 100	
1.2.2.1 Number of Programmes in which CBCS / Elective course system implemented. Response: 11	

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

1.3 Curriculum Enrichment

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

Response:

Cross-cutting issues are integrated prominently in curriculum. As per the regulatory authority environmental science and human values has been incorporated into all our curriculum. Curriculum structure integrates all the essential ingredients associated with the following:

(i) Environment and Sustainability.

(ii) Human Values and Professional Ethics.

The details of the course content inclusion/exclusion related to Environment & Sustainability, Human Values and Professional Ethics into each regulation(2014,2016,2018) of the Curriculum are presented in the following table.

Environment and Sustainability :

Stream	Regulation 14 (Paper name & Code)	Regulation 16 (Paper name & Code)	Regulation 18 (Paper name & Code)
EE, ME & IT	Basic Environment & Elementary Biology (CH-401) (Basic concept of Environment: Air, Water, Land, Sound pollution, Ecology & Resources)	Environmental Science (HU 501 for EE & HU 401 for ME, IT) • Inclusion of resources categorywise, green chemistry, pollutants in detail', radiation hazards, Exclusion of material balance	Environmental Science (MC 301 for EE, ME & MC-401 for IT) • Inclusion of 'Resource part (Concise), E-Waste, Disaster management, 'Maximum Sustainable Yield' • Exclusion of green chemistry & biological

			cycles
ECE	Environmental Studies (CH-301) (Basic concept of Environment: Air, Water, Land, Sound pollution, Ecology & Resources)	Environmental Science (HU-501) Inclusion of resources categorywise, green chemistry, pollutants in detail', radiation hazards, Exclusion of material balance	Environmental Science (MC 401) • Inclusion of 'Resource part (Concise), E-Waste, Disaster management, 'Maximum Sustainable Yield' • Exclusion of green chemistry & biological cycles
CE, CSE & BME	Environment & Ecology (CH-401 for CE, CSE & CH-201 for BME) (Basic concept of Environment: Air, Water, Land, Sound pollution, Ecology & Resources)	Environmental Science (HU-401) Inclusion of resources categorywise, green chemistry, pollutants in detail', radiation hazards, Exclusion of material balance	Environmental Science (MC-501 for CE, CSE & MC-401 for BME) • Inclusion of 'Resource part (Concise), E-Waste, Disaster management, 'Maximum Sustainable Yield' • Exclusion of green chemistry & biological cycles

Human Values and Professional Ethics :

Stream	Regulation 14 (Paper name & Code)	Regulation 16 (Paper name & Code)	Regulation 18 (Paper name & Code)
EE,ME,IT,BME,CE,CSE	Values and Ethics in Profession (HU801)- EE Values & Ethics (HU501)- ME Values & Ethics on Profession (HU201)- IT, BME Values and Ethics in Profession (MC-401)- CE Values & Ethics in Profession (HU 701)- CSE	Values and Ethics in Profession (HU702) Inclusions: <ul style="list-style-type: none"> psychological theories of moral development, view of Kohlberg, Maslow's Needs hierarchy. Inclusion of Module on self development, Concept of Emotional 	Values and Ethics in Profession (HU 401) Inclusions: <ul style="list-style-type: none"> Measurement of Emotional Intelligence Service Learning, Civic Virtue, Stress and stress Management Exclusions:

(Basic concept of human values, professional ethics, societal values, effects of technological growth)	intelligence, character strengths and virtues	Character strengths and virtues
	Exclusions: Aesthetic values: Perception and enjoyment of beauty, simplicity, clarity	

The above mentioned table represents that all the cross-cutting issues are addressed by the curriculum. The regulation wise modification of syllabus is prominently visible in case of Professional Ethics, Human Values, Environment and Sustainability. It is purely justified that institute integrates crosscutting issues in curriculum and syllabus.

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

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

Response: 119

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

2018-19	2017-18	2016-17	2015-16	2014-15
32	27	25	21	14

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

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.**Response:** 56.12**1.3.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
1465	1604	1486	1290	1272

File Description	Document
List of students enrolled	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)**Response:** 25.52**1.3.4.1 Number of students undertaking field projects / internships / student projects****Response:** 598

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

1.4 Feedback System

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

Response: B. Any 3 of the above

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

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

Response: C. Feedback collected and analysed

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document
URL for stakeholder feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 75.72

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

2018-19	2017-18	2016-17	2015-16	2014-15
592	567	702	678	631

2.1.1.2 Number of sanctioned seats year wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
783	792	846	828	948

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

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

Response: 57.7

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

2018-19	2017-18	2016-17	2015-16	2014-15
170	179	184	202	182

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

2.2 Catering to Student Diversity

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

Response:

Faculty members of JIS College of Engineering are carrying out a continuous evaluation process to determine the student's ability so that students have been classified into categories of slow and advanced learners. Based on the ability of knowledge acquiring, some students are provided guidance and some students have been assigned more activities with regular attention.

Students' learning ability is identified after admission through various performances in the induction program followed by diagnostic tests on Basic Science and Humanity subjects, through a trusted third-party portal dedicated to the Institute. Students learning ability in successive years done through the analysis of qualifying examination score before admission to undergraduate program, communication and soft skills, behavioral traits, theory and practical class attendance, performance in Class test/ Online test/ Practical experiment etc, participation in co-curricular activities. Activities of slow learners are done by taking more care by the mentors. He discusses the things with parents and teachers to motivate them with contemporary examples to learn engineering. They paired with brighter students in group activities to create a healthy and conducive environment to improve their pace and arrange extra remedial classes, lecture and soft skill training. Advanced learners are motivated to work with slow learners in practical hours, splitting them for group activities, mapping them for projects based on their choice of topic, mapping them for extra-curricular (through Mandatory Additional Requirement (MAR)) and co-curricular activities (through Massive Open Online Courses (MOOCs)), digital content, quiz competitions through online platform, promoting them to take part at various places viz. Inter college / State level /National Level competitions, guiding topic selection to complete NPTEL/SWAYAM online courses, leadership in group activity for assignment/Project task and providing the Course beyond Curriculum training. The Institute offers several opportunities for advanced learners to augment their talent and meet their learning needs by awarding the bright UG students for attendance, score in semester, best performance in co-curricular and extracurricular activities. Institution exposes advanced learners (5 from each department /year) to international internships by sponsoring 100% expenses for the duration. Students are encouraged to make research contributions through paper publication at National and International conferences under mentor's guidance; The Institute organizes technical symposium and conferences for students to take part as participants or organizing members. Earn while you learn provision has been made for UG, PG students for part time jobs from Institute's project to learn state of the art techniques of Industry. Peer learning provided to help the slow learners in their class and juniors of the class. In this learning method, senior students share their learning to juniors for skill awareness and upgradation. Furthermore, the Institute motivates students to participate in seminars, group discussions to develop active learning, public participation and social skills among them at the global needs. The Institute also encourages students to go for innovation to solve local problems and entrepreneurship with the opportunities to earn while they learn.

File Description	Document
Any additional information	View Document

2.2.2 Student - Full time teacher ratio (Data for the latest completed academic year)**Response:** 11:1**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 JIS College of Engineering, the concept of Flipped learning, project-based learning and experiential learning etc. have been used to implement the student centric methods for enhancing their learning experiences.

The Flipped learning activities are divided into three parts: Pre-Class, In-Class and Post-Class.

Pre-Class:

Students are allowed to go through online resources prepared by the faculty members before attending the class as pre class activities.

In-Class :

- On attending classes students are asked relevant questions by the instructor to bring the attention on the subject topic.
- Students respond to the Instructor and peer group members,
- Instructor reviews student responses,
- Instructor divide the student in small group of three persons,
- Students discuss their thinking and answers with their peers in the form of group discussion , Students then commit again to an individual answer,
- The instructor again reviews responses and decides whether more explanation is needed before moving on to the next concept

Post-Class :

- PPT preparation on the topic discussed in the class
- 3 minutes of Video prepared at digital studio based the assignment given in the class

Project Based Learning and Innovative Activities:

According to AICTE guidelines in the year 2018, all courses follow project-based learning in every semester. Every semester students' have been assigned to project class on semester subject and innovative work through small group division. Subject faculty members are assigned to project class for prototype realization of the innovative idea cultivated through the knowledge acquired from the subject. The faculty members are also the guide to the students in the process of preparation of projects in Hackathons and for the development of new product/ Business Plan/ registration of start-up.

Objective of project classes are:

- Understanding the skills required through the survey on specifications, input and output characteristics of related products already developed, research articles and Intellectual properties.
- Develop effective communication, cooperation with other team members including planning, time management, leadership and peer discussion.
- Personal growth (increase self-esteem and self-confidence)
- Professional growth (publish IPR, research articles, startup initiatives)
- Increase responsibility for own learning
- Reflective practices (reviewing and planning for the future improvement).

Following are the listed outcomes:

- Ability to perform group activities,
- Focus on self-reliant learning,
- Improve self-assessment and time planning,
- Demonstrate project work through oral and written expression skills.
- Improve academic performance and greater persistence in the study.

Experiential learning:

Beyond the traditional ways of experiential learning, the faculty members/alumni share their learning experience to educate students to be aware about the current industry needs. Faculty members deliver experiential content to students through demonstration with visual aids, periodical industrial visit experiences, presenting relevant research papers, analyzing case studies and conducting quizzes on relevant topics to make them industry ready.

Faculty members motivate students to participate in seminars/conferences to present the papers on contemporary topics of industry visit followed by project done on relevant topic to enrich their learning experience.

File Description	Document
Any additional information	View Document

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

Response:

Institute strives to invite all best methods and tools for effective teaching and learning. Faculty members were encouraged to participate in different training to use ICT tools for effective learning of students. Before 2014 few smart classes were equipped with ICT tools.

ICT enabled teaching practiced through Wi-Fi enabled classrooms, interactive smart boards, language lab, FLIP classrooms with E-learning resources, virtual classroom links the guest lecture of eminent persons to develop the core knowledge in the subject. The institution adopts digital pedagogy in line with emerging trends to enhance the teaching-learning process. After the implementation of flipped learning in the Institute, the number of FLIP classrooms increased with ICT facilities. At present almost 100% faculty members upload their subject content digitally and share the link to students for pre-class activity.

Digital content sharing by faculty members to the students before the class enables questions from the student at the in-class activity. Group discussion during the in-class activity requires internet search for more digital resources. Faculty members take the help of internet resources for audio visual demonstration to the students' queries. All faculty members of the institute are now taking classes, giving assignments with deadlines, taking tests through the Learning Management System. Regular practical sessions, 3 minutes video assignment to students, online test through google form, use of LCD projectors for seminars and workshops, productive use of educational videos, accessibility of non-print material for students, online courseware for students.

Digital studio in the institute is updated with Apple computer, Movie camera, acoustic design, good microphone for better audio quality. Students are allotted slots to appear in the digital studio for video assignment submission. Communication skills training is provided to students during language lab sessions. In the Institute, the online courseware, lecture talks, motivational talks, educational videos, webinars and web references have been uploaded to support the teaching-learning process in digital mode. All the departments provide online instructional materials to the students for easy follow-up/ understanding the concepts on the Institute website. Learning resources in the form of text and video and useful websites are made available in the Institute website, which serve as a ready link to access the portals of information and gain knowledge.

Faculty members of the Institute have adopted digital mode through the Learning Management Software (LMS) Google classroom, CANVAS, Microsoft Team for class lecture delivery, student's assessment, conference meeting conduction etc.

Below are the list of examples of ICT enabled tools for effective teaching and learning processes.

Infrastructure at Institute level for ICT

Digital Studio - 2

ICT LABS: 4

Smart Classrooms: 8

Flip Classroom:15

Interactive White Boards or Smart Boards: 10

A desktop computer to access online resources

General ICT tools for teaching and learning Available in Institute

- A projector with interactive whiteboard functionality.
- Computers
- Laptops
- Internet Connectivity
- Wifi access for document sharing and device connectivity.
- Audio Systems
- Recording hardware/software for podcasting e.g. microphone, headphone and speakers
- Printer
- Scanner

File Description	Document
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document

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

Response: 24:1

2.3.3.1 Number of mentors

Response: 97

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

2.3.4 Preparation and adherence of Academic Calendar and Teaching plans by the institution**Response:**

Institute is providing academic calendar for academic flexibility to their stake holders, particularly the students and the faculty members for Outcomes Based Education. The Institute prepares academic calendar that includes uploading of routine, conduction of two class test examinations, submission of class test examinations, Conduction of Practical examinations and commencement of Semester End Examinations along with the vacation period before the commencement of each semester. These information also published on the Institute website for easy access of stakeholder. Based on the academic calendar prepared by the institutes, departments prepare the academic calendar for the smooth functioning of co-curricular as well as extra-curricular activities i.e. conduction of seminar, Innovative Idea competition, Parent Teacher Meeting, etc planned in the semesters. This displayed on the notice board of respective departments. Each subject teacher prepares their own course material based on the prescribed syllabus given by the institute, which distributes to the students for reference as per academic calendar. Total number of teaching days is fixed i.e. 90 days. Monthly review meeting conducted as per the Academic Calendar; in case of emergencies the date of the said meeting extended till 10th of the respective month. Holiday of the Institute is fixed as per the Academic Calendar. Each department should organize at least one National Conference in a year. Submission of Lesson plan, evaluation of end semester examination answer script, etc are followed as per the academic calendar. Students can appear for the university examination, only if he/she attains a minimum of 75 percentage attendance on each subject. Monthly attendances publish as per the scheduled date in the academic calendar in order to aware the students about their attendance status. The assignments are given within a set of timeframes. The students have to complete them within the time given to adhere to the institute's timeline. The average obtained from both class test examinations has been calculated to attain the final internal marks of the individual student. These marks are also used to decide the methodologies of teaching for slow learners and identify their learning ability of the concerned subject before going to attempt external examination. As part of the continuous internal evaluation, the assignments given to the students and the semester end examination involve course outcomes to achieve the Program Outcomes. Remedial classes organized from departmental initiatives before each semester end examination. Courses beyond curriculum, innovative competition etc. help the students to attain knowledge beyond the syllabus, as majority of these topics are not covered by the exams conducted by the autonomous framework following the institute's guidelines. In the semester gap industry oriented training provided to the students to know the current advancement of industrial progress.

File Description	Document
Upload Academic Calendar and Teaching plans for five years	View Document

2.4 Teacher Profile and Quality**2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years**

Response: 100

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

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

Response: 25.14

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

2018-19	2017-18	2016-17	2015-16	2014-15
48	47	57	52	53

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

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

Response: 5.61

2.4.3.1 Total experience of full-time teachers

Response: 1155

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

2.5 Evaluation Process and Reforms

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

Response: 24.8**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
23	26	23	24	28

File Description	Document
Institutional data in prescribed format (Data Template)	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: 2.19****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
87	104	107	114	121

File Description	Document
Number of complaints and total number of students appeared year wise	View Document

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

JIS College of Engineering has been continuously carrying out reforms in its examination procedure through integration of IT enabled services in all the procedures and processes of the examination. Institute has adopted semester patterns of examination with a continuous evaluation system for all the programmes (both UG & PG). Inclusion of evaluation components, like project from 1st semester, assignment, seminar, presentation etc. provides a dynamic continuous evaluation system. Digital evaluation system has been successfully implemented for examinations. An integrated end-to-end Examination Management System with unique modules benefits the institute in conducting examinations with utmost security and efficiency. The system is robust enough to handle large amounts of data and is equipped with a proper backup disaster

recovery plan.

The overall services have been distributed in three different frameworks: Network Operating Centre (NOC), Examination Data Centre (EDC) & Central Valuation Centre (CVC). The system is robust enough to handle large amounts of data and is equipped with a proper backup disaster recovery plan.

#Activity Details#

1.1 NOC Activities

- **Examination Management**

- Controller of Examination (CoE) verification for uploaded marks
- Internal and External examiner mapping

- **Secured Question Paper Generation and Delivery**

- Uploading of question papers using automatic, manual and direct upload methods
- Encryption of question papers with secure code
- 12 digit security key delivery via system/ email/ SMS
- Secure delivery of question papers for printing in encrypted format

- **Result Processing and Publishing**

- Internal and external marks approval
- Grade point averaging
- Result moderation
- Result analysis using integrated business intelligence
- Analysis of grades
- Results publication at the e-Gov portal
- Communication of the result to the students via email/ SMS

- **Master Data Management**

- Student, colleges, course, faculty and examination data management
- User management – user creation, assigning roles and privileges
- Management of master data for the complete system such as defining fee headers, course structure, batch allocation for college etc

1.2 EDC Activities

- **Downloading and Printing of Question Papers**

- Decryption of the question papers
- Printing of question papers
- Distribution of question papers to the examination halls

- **Marks Uploading**

- Direct uploading of practical and internal marks

1.3 CVC Activities

- **Answer Sheet Scanning**

- Bar-coding/OMR recognition of roll numbers
- Automatic dummy number allocation
- Digitization of the answer scripts
- Quality check of scanned answer sheets
- Storing the scanned answer sheets in database servers

- **Digital Evaluation of Scanned Answer Scripts**

- Answer scripts allocation to the evaluators along with answer keys
- Allocation to multiple evaluators

- Paper evaluation report submission
- Payment claim process management
- Evaluator attendance management
- Re-evaluation process management

2.System Overview

There are three different layers provided under this solution for all types of functionalities as mentioned below.

CoE Section Layer

- 1.Examination Management
- 2.Program, Batch and Course Management
- 3.Faculty Data Management
- 4.Student Data Management
- 5.Question Paper System (Moderation, Uploading & Printing)
- 6.Online Evaluation Management
- 7.Internal and External marks management
- 8.Result Process and Publication
- 9.Authentication Management

Faculty Layer

- 1.Question Paper Submission
- 2.Answer Script Evaluation
- 3.Marks Uploading

Students Layer

- 1.Profile management

2.Examination / Revaluation Application

3.Result View/Download

E-governance has been successfully implemented in the institute and benefits the institutes as follows:

- Online entry of students' attendance and attendance approval through HoD portal help to reduce the errors and saves a lot of time.
- Online filling of examination /revaluation forms, online payment of examination fees and downloading of Admit Cards through the student portal helps the students and institute in saving time and saving the paper.
- Paper setters, moderators, examiners, head examiners and reviewers are allocated from the panel of examiners for every subject prior to the examination on collecting the information from the departments, considering eligibility norms of the affiliating University. This maintain security and system is more transparent
- Login credentials of examiners, head examiners and reviewers are created for the digital evaluation.
- All the moderated question papers are uploaded in the portal with secure code.
- On each day of examination, 12 digit security keys are delivered via system/ email/ SMS to CoE for downloading of question paper indent reports along with the question papers for that day only. It helps in avoiding leakage of question papers and saves a lot of stationery and physical movements.
- Day-wise and stream-wise student attendance sheets and the report of conducted examinations are downloaded through the CoE portal.
- All the answer scripts are scanned and auto generated dummy numbers are allocated for each scanned answer script and stored in a database server to prevent disclosure of identity of students; thereby bias/malpractice of any kind is prevented and the examiner can check the question paper at any his/her suitable time.
- Scheme of evaluation along with solutions are made available to the examiners prior to the commencement of evaluation in order maintain uniformity in the evaluation process.
- Both internal and external marks are submitted by the respective examiner through their examiner's login credentials.
- Online evaluation marks are transferred for result processing.
- Results are published online and an auto generated message is communicated to the students via email/ SMS for notification of result publication.
- Students can apply for review of the answer script through the student portal.

- Based on the received review applications, the scanned answer scripts are allocated to pre-assigned Reviewers for online re-evaluation of answer scripts.

File Description	Document
Link for Additional Information	View Document

2.6 Student Performance and Learning Outcomes

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

Response:

Effective implementation of learning of any programme and course depends on the attainment of POs and COs. The institute has developed its COs based on the POs as defined by the regulatory body. For all the undergraduate and postgraduate programmes, the COs has been drafted by a group of faculty members assigned for course development in specific subjects. Course Outcome (COs) statements for every course have been defined, that describe the competencies gained by the student through the course. Cos of each course approved by BOS followed by Academic Council and informed to the BOG meeting. Every CO is aligned to one or more POs, and is measured at the end of the course, through various assessments, designed specifically to effectively measure the CO and contribute to the PO that it is mapped to. The number of COs for a course may have about not more than four to five COs. Some courses may have as few as three COs. While defining the COs, we need to ensure that they are not an abridged version of the course content, but instead, through every CO, we attempt to specifically address one or more POs through the course content and its assessments. The strength of the mapping is dependent on the course coordinator and this component necessitates the need to have the CO-PO mapping together with its strength. The COs are thus in keeping with the prime motto of the college i.e. empowering students and preparing them to be catalysts of change. All the departments have group brainstorming sessions to draw up the programme outcomes of the various programmes. Departments prepare a course file with details of the course objectives, course outcomes, modules, assessment and teaching tools, reference material, total number of teaching hours and credits at the beginning of the academic year. COs of the different courses are first presented in the BOS meeting and the minutes forwarded to the Academic Council for approval in presence of the Principal.

Programme and course outcomes are described to the first year students at the commencement of the programme through orientation program. It is available on the Institute website as well as the department websites. Soft Copy of Curriculum and Learning Outcomes of Programs and Courses are uploaded on the Institution website for reference. These are kept in prominent locations viz. classroom Department office, Laboratories, campus corridors, lab manual, course file and Department library of the campus for stakeholders and public view. Each department is communicated to employers and Alumni by sending mail and during the Alumni Meeting to see the attainment of POs . During the class committee meeting and faculty meeting POs are reviewed among the students and staff members. COs along with lesson plans are printed and issued to the students during the first class and during the discussion of the course, the outcomes of the course are also focused. During the commencement of each unit and after the completion

of the unit, the course outcomes are reviewed.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document
Link for Additional Information	View Document

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

Response:

In the Institute, each department have formulated the curriculum by considering the POs of the corresponding program to ensure mapping of all POs of the curriculum. The COs of each course have framed and mapped with corresponding POs.

To practice the Outcome Based Education in the Institute, the attainment of Course Outcome(CO) is evaluated through several Direct and Indirect assessment tools. The result of attainment of CO is used to evaluate the attainment of Program Specific Outcome(PSO) and Programme Outcome(PO).

CO Assessment Processes:

The assessment is done through more than one processes carried out by the department, that identify, collect, and prepare data to evaluate the attainment of Course Outcomes (COs).

Followings are the methods to find attainment of the COs:

- Student's knowledge and skills from their performance in the continuous internal assessment tests
- Classroom and laboratory assignments
- semester examinations
- seminars

These methods postulate a sampling of what students know and provide durable evidence of student learning.

CO attainment has been measured based on Cumulative Internal Examinations and semester end examination.

Assessment of attainment for PO and PSO are carried out through Direct attainment and Indirect attainment. Direct attainment is obtained through Semester End Examination (SEE), Cumulative Internal Examinations (CIE), like, class test, slot test, assignment, presentation, report.

Indirect attainment is obtained through various surveys as follows:

- Alumni survey

- Exit (final year students) feedback
- Parents feedback
- Employers feedback
- Current student feedback about OBE

Measuring CO attainment through Cumulative Internal Examinations (CIE)

CO attainments are measured considering assignments, class test, slot test through CIE.

CO attainment is obtained through Cumulative Internal Examination (CIE) and Semester End Examination (SEE).

Attainment Level of courses is set as below by the program:

- Target level 1: 50% students must score 60% and above
- Target level 2: 70% students must score 60% and above
- Target level 3: 80% students must score 60% and above

Overall CO attainment is obtained considering 40% credit from CIE and 60% from SEE,ie,

- Overall CO attainment=40% credit from CIE + 60% from SEE.
- Overall PO & PSO attainment:
- Overall PO attainment = (80% of Direct attainment) + (20% of Indirect Attainment)

The survey asks former students about their employment and further education, perceptions of institutional emphases, estimated gains in knowledge and skills, involvement as undergraduate students, and continuing involvement with the Institute. This is helpful to see the attainment of the POs.

Employer surveys are conducted for finding out whether the knowledge, skill and attitude learned from this institution is adequately satisfying their expectation or not.

Exit batch survey is important to understand the impact of training/knowledge they have gathered throughout graduation years and based on its strength and weakness of various value added courses, pre-placement training and other issue are imparted

File Description	Document
Any additional information	View Document

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

Response: 98.03

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

Response: 598

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

Response: 610

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

2.7 Student Satisfaction Survey**2.7.1 Online student satisfaction survey regarding teaching learning process**

Response: 3.23

File Description	Document
Upload database of all currently enrolled students	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

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

Response:

Research and Innovations are one of the key focus areas of the Institute. Institutional research facilities are frequently and consistently upgraded based in the industrial needs and societal impacts to meet the objectives set in the Institutional R&D policy. Some notable developments in this regard is, increase in number of Center of Excellence (CoE) from only 2 in 2014 to 7 in last five years, beyond one research laboratory in each department. Feather on the cap is creation of one CoE in association with Russian Federation in 2017.

The R&D policy is well defined and focused on promotion of research through a number of initiatives like providing seed money, financial assistance, special leave for carrying out research activities, incentive for quality publications etc. The R&D policy was approved by Board of Governors in 2009 and subsequently amended on 2015 and 2018 and is available in the Institutional website (<https://jiscollege.ac.in/pdf/Research-Policy.pdf>)

Research activities have been further enriched through the development of world class infrastructure such as Centralized instrumental center equipped with a High-performance Cluster Computing system (HPC), Particle Size Analyzer, UV Vis Spectrophotometer, Spin Coater, Semiconductor Characterization System (SCS-4200), state of the art software like Quantum ATK, VASP-4.8, Gaussian 16, SILVACO and so forth. In addition, a number of unique and specialized equipments are integrated into the research facilities such as 3D printer, Robots, CNC machine, and so on. Such equipment have promoted and sensitized a culture of cooperative and complimentary research among various departments of the Institute to explore the advanced and cutting-edge technologies.

The Innovation Cell of the Institute was established in 2015 under the banner of R&D Cell to encourage the Research & Innovation activity among the teachers & students and the same was transformed into Institutional Innovation Council under the guidelines of MHRD Innovation Cell in 2018. Apart from this one senior faculty member has been nominated in the National Incubation and Start up policy of MHRD Innovation Cell and two senior faculty members have been endorsed as MHRD-Innovation Ambassador.

Apart from these the institute has established one high-end Design-Laboratory which was recognized as CII-Centre for Innovation in 2017 to provide day to day research activities of the students as well as faculty members. Both Centralized Instrumental Center and Design Laboratories are upgraded on a regular basis considering the impact of Industry 4.0; in fact, one Industry 4.0 lab has been set up in 2019.

Some of the best implementation of research facilities are evident through a series of signature events were organized in past few years. These initiatives include Hackathon, Idea Competitions, Proto-type development and exhibition (JISTech2K15-JISTech2K20) where students show their talents and innovative minds exploring such research facilities. Selected projects under different categories are mentored towards IPR filing, publications, granting and finally towards product development which leads to startup incubation. Furthermore, Innovation and incubation activities of the Institute has been recognized

by MSME, Govt. of India as a host Institute for exploring incubation and startup prospects of the students and the society at large.

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

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

Response: 15.02

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
20.33047	16.24964	14.45174	12.86114	11.21142

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
Any additional information	View Document

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

Response: 0

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

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

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

3.2 Resource Mobilization for Research**3.2.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)****Response:** 156.59**3.2.1.1 Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)**

2018-19	2017-18	2016-17	2015-16	2014-15
61.07557	18.88235	9.54043	0	67.09

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

3.2.2 Percentage of teachers having research projects during the last five years**Response:** 9.39**3.2.2.1 Number of teachers having research projects during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
5	14	25	26	26

File Description	Document
Names of teachers having research projects	View Document
Any additional information	View Document
Link for additional information	View Document

3.2.3 Percentage of teachers recognised as research guides

Response: 5.83

3.2.3.1 Number of teachers recognized as research guides

Response: 12

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document

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

Response: 105

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

2018-19	2017-18	2016-17	2015-16	2014-15
8	6	9	9	9

3.2.4.2 Number of departments offering academic programmes

2018-19	2017-18	2016-17	2015-16	2014-15
7	7	8	8	9

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

3.3 Innovation Ecosystem

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

Response:

The institute has taken active initiatives in creating an ecosystem for nurturing innovative minds by inculcating a spirit of ideation to prototype development, promotion of patenting and licensing and finally do active research and collaboration for translating domain expertise into products or technologies. Considering the relevance of innovation towards the 'Make in India' movement for igniting innovative minds, the Institute has established Innovation Cell in 2015 and after metamorphosis in 2018 it is renamed as Institutional Innovation Council (IIC). Major objective of this council is to foster a culture of innovation, develop entrepreneurial spirit providing appropriate incubation facilities and thereby forming an ecosystem of innovation. The Council consistently organizes a number of Leadership talks, awareness about patent, granting and copyright generation along with all prescribed activities of Ministry of Education-Innovation Cell. The IIC of the Institute has received **4 Star** ranking in 2018-19 and **5 Star** ranking in 2019-20.

To nurture innovative minds a number of facilities have been created in past five years on different thematic areas, which includes a dedicated Design Lab equipped with 3D printer to provide exposure towards additive manufacturing & new product development, robotics and automation facilities, centre for renewal energy and so forth. In addition separate clusters and rooms have been created so that students can incubate their product through suitable mentoring system. Every year selected students are invited by CII, BCII to showcase their achievements and promotion towards industrial mentorship. The Innovation activities of the Institute have been recognized through ARIIA ranking 2019-20 (among first 50 self-financed Institute). The Institute has been selected as MSME host Institution for exploring incubation and startup prospects of the students and the nearby society.

The Institute has its defined process for inculcating the power of creativity, imagination and materialization through formation of vertical project group. It is a unique feature wherein each project group is formed with students from different years of various departments in pyramidal structure with one faculty mentor at the top. Primary objective of this initiative is to materialize the concept into product development and related customization.

Creation and achievements of young innovators are exhibited through annual technical symposium which is organized in a very systematic way from idea competition to prototype exhibition. Selected projects are

fully funded for patenting to examination and granting and necessary mentorship. The event is annexed with Hackathon, Coding Competitions, App-Development contests, Robotics Arena etc.

Both vertical project group formation and technical symposium is a systematic approach to open up new frontiers to the young innovators about the method of transferring theoretical concepts into solution of complex scientific and engineering challenges through project and facilitation of technology transfer for commercialization.

As an outcome of this dynamism, the Institute has filed more than 100 IPRs, two Copyrights in past 5 years out of which 85 has been published and 4 granted. One major achievement is creation of one Startup Company entitled 'JInnovation Pvt. Ltd'. The Institute has produced some notable entrepreneurs who have established their own signature in the industrial front.

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

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

Response: 12

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

2018-19	2017-18	2016-17	2015-16	2014-15
2	5	2	2	1

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

3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of

Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee**Response:** B. 3 of the above

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

3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/supervisors provided at 3.2.3 metric) during the last five years**Response:** 0

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

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

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

3.4.3 Number of research papers per teachers in the Journals notified on UGC website during the last five years**Response:** 0.4

3.4.3.1 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
20	18	13	19	12

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

3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years**Response:** 0.32

3.4.4.1 Total number of books and chapters in edited volumes/books published and papers in

national/ international conference proceedings year-wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
21	23	4	9	8

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

3.4.5 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed**Response:** 2.19

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

3.4.6 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution**Response:** 8.5

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

3.5 Consultancy**3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).****Response:** 0**3.5.1.1 Total amount generated from consultancy and corporate training 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 consultants and revenue generated by them	View Document
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View Document
Any additional information	View Document

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

Response: 0

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

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

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

3.6 Extension Activities

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

Response:

The Institute has taken special attention to address the societal needs and development of the neighbouring community. Students being one the major stake holders plays pivotal role in implementing Institutional initiatives for overall growth of the society. All these extension activities are carried out by some vibrant clubs viz. Community Connect, Environment Club, NSS/NCC; which in turn leads to holistic development of every student. The Institute has adopted five villages under Unnat Bharat Abhiyan (UBA) of Govt. of India and looking after overall community development of those rural areas. Over the years students are actively participating in series of awareness drives and sensitization programme on various social issues.

NSS team and NCC cadets [41 Bengal Battalion] of the Institute the Institute had organized various activities in the past five years collaboratively or individually which have created immense impact on the students' behaviour and attitude towards the society at large. Community Connect and Environment clubs had organized many awareness programmes for the development of the society and child education along with various external organizations like Kalyani Municipality, University of Kalyani, JNM Hospital, Lions Clubs, Kalyani. These programs had made the students responsive about maintaining proper hygiene to improve the child health of the slum area, to conserve water for our future use etc. Blood donation camps were also organized with the collaboration of the nearby Hospital of the kalyani area such as JNM Hospital, SNR Carnival Hospital, Sushrut Hospital etc. [<https://jiscollege.ac.in/naacssr2020/pdf/3.6.3.pdf>]. Environment friendly programmes such as Tree plantation, Go Green activity, Cleanliness Drive (Swachh Bharat Abhiyan), Environment Day celebration, Jal Diwas are organized by the Institute through its different wings in calendar year. Through these programmes students made conscious about the importance of nature and how human beings are continuously degrading nature for their own purpose and interest.

In addition the NCC wing of the Institute celebrates days of national pride including Independence day, Republic Day, National Integrity day, Gandhi birth day and other patriotic events within its premises. The Institute also organizes programmes on 'World Yoga Day', 'World Youth Day' to celebrate the power of youth in building the new India.

Every year during Puja, Food the Community connect club of the Institute arranges distribution of food and garments to the local blind school, backward people and Old age Home in nearby location [<https://jiscollege.ac.in/naacssr2020/pdf/3.6.3.pdf>].

As an outcome of these events, majority of the students were made aware about the needs of the society and how they can address these needs of the people. Through such initiatives local people are get acquainted with the basics of health and hygiene like viral infections, epidemics and fundamental precautionary measures. Furthermore, people are also made aware about the conservation of energy. All latest social issues of state/national/global are addressed through these initiatives so that maximum students become responsive to the global challenges.

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

3.6.2 Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years**Response: 1****3.6.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.**

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

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

3.6.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years**Response: 185****3.6.3.1 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
38	41	49	25	32

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

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

Response: 100

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

2018-19	2017-18	2016-17	2015-16	2014-15
2343	2393	2572	2711	2783

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

3.7 Collaboration

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

Response: 0

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

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

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

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

Response: 24**3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
3	7	3	10	1

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

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

JISCE, Kalyani campus spread over 10.3 acres of land. Of the total, the built-up area is approx 32374.9 Sq. m and area 13354.6 sq. m for the hostel. The remaining area is used for support facilities like playground, canteen, temple, parking, green garden, etc.

At JISCE major emphasis has been given to a teaching-learning process which includes interaction and direct contact between the students and teachers in the classroom, laboratories, and tutorial sessions. The institute is having well-furnished ICT enabled classrooms, state-of-art laboratories, and excellent computing facilities for nurturing teaching-learning and research.

Classrooms:

JISCE has 80 classrooms to cater to the needs of UG and PG programs. All the classrooms are ICT enabled with Wi-Fi connectivity available on the campus. Out of 80 classrooms, 15 rooms are state-of-art (Flip Class rooms) classrooms and 8 rooms are smart classrooms. The Institute also has an exclusive room for NPTEL courses apart from the class and laboratories.

Laboratories:

Institute is having 70 laboratories to cater hands-on training for UG and PG students. Additionally, few specialized laboratories are also been developed to provide inter-disciplinary facilities for research works. The Institute also has extended teaching-learning facilities which consist of Tata technologies Lab, IIT Remote center, Nanoscience lab, CAD-CAM lab, 3D printing Lab, Skill Development Centre. The Institute also has 11 rooms for the Centre of Excellence which has been included in the classrooms. Apart from these facilities, the Institute has 8 dedicated rooms for research work with all facilities. Institute has 2 Drawing halls, 2 mechanical workshops, and 2 smart language laboratories.

Computing facility:

In the present scenario, computing equipment has become the backbone network for all academic activities. Institute has established IT infrastructure which has been widely spread across the academic building, laboratories, library, and hostels using a high-speed robust network with access to the internet through multiple access points. As per the requirement of the regulatory/statutory bodies, the Institute required 500 numbers of computer systems. But the Institute has 1000 computer systems. Institute also has a central computing facility (computer center) for the students. All computers are connected to the internet over high-speed cables facility 1:3 availability of computers to students.

Institute provides uninterrupted access to information and network services with 200 Mbps internet bandwidth and over 100 Wi-Fi access points. Security solutions from through Sonic wall NSA used to secure campus IT facilities. Large data storage system is available for the needs of the stakeholder for

storage of the academic data. Institute is having wide verities of the paid software licenses for both academic and research.

Additional facilities:

Beyond the requirement of the regulatory/statutory bodies, Institute has 2 digital studios along with a mini plex with a seating capacity of 22 persons. The studio has the facility for recording and projection with a quality sound system. The studio also has the facility of editing equipped with a hi-end Mac machine with editing software.



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

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

Response:

Cultural activities:

Besides the learning Institution has many opportunities and facilities for the students to engage themselves in a multitude of extracurricular activities. Different cultural events such as 'Kabi Pranam', 'Bijoya Sammaloni', 'Cultural feast', 'JIS Idol', 'Fashion Show' etc. have been organized by the cultural committee. Institute has ample rooms beyond the requirement of regulatory bodies that are used for purpose of cultural activities. Some of the extra facilities are like we have dedicated room such as Music room with sets of musical instruments are available, Drama room, Dance room, and Art & literature room, as well as a multipurpose hall, is available for other club activities.

Yoga center:

To build strength, awareness, and harmony in both bodies and mind 'Yoga' is encouraged by the Institute. A specific Yoga cum Prayer room is there which can accommodate 40-50 numbers of students. There is a dedicated Yoga trainer who teaches Yoga every day and the schedule has been properly announced to all the students in the academic calendar.

Games and Sports:

The sports center serves as a vital and integral part of student life on campus. A dedicated Sports Instructor is there to look after the sports and game. The facilities, provided by the Institute, to promote interest in sports include:

Indoor Games:

The Institute has dedicated space for indoor facilities for both boys and girls. Indoor sports rooms having 75 sq. m areas comprises of 2 TT tables, 4 Carom boards, 1 Snooker board, and 8 chess boards, along with this separate rooms are available in Boys and Girls hostel consists of 1 TT table and 2 carom boards each.

Outdoor Games:

The Institution has a big open multipurpose sports ground of around 14,760 sq. m. which comprises of football ground with goalposts, cricket pitch, volleyball ground, 200m round track for Athletics where 100-200-400-1500 m race, relay race, Long jump, Shot put, Javelin throw, Discuss throw, etc. are being conducted under the supervision of the Sports Instructor.

- Two open Badminton courts are available on the campus and one each at Boys and Girls Hostel. Besides specific spaces for Basketball court is also available.
- Adequate numbers of sports materials like Footballs, full Cricket kits including pitch mat and practice net, Volleyballs, Badminton rackets, Javelins, Discuss, Shot put balls, Hockey kits, etc. are available.

Gymnasium:

There are one modern Gymnasium and one open-air Gymnasium with fully equipped weight loss machines helping our student get fit as well as stay fit during the post-class hour. A permanent specialist trainer is available to encourage the students. It is accommodated with modern equipment like:

Equipment	Item numbers
Treadmills	2
Crossing/ chilling Pulley	2
Bench press	5
High Pulley	3
Large leg Press	2
Twister	2
Parallel bar	2
Leg rising	1
Preacher curl	2
Dumbbells	Comprises of different weights

Auditorium

Institute has 2 modern spacious Auditorium with audiovisual facilities.

- Dr. BC Roy Auditorium, having 350 seating capacities (341.88 sq. m)
- MBA Auditorium, having 250 seating capacities (156.26 sq. m)

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

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 34

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

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

Response: 15.83

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

2018-19	2017-18	2016-17	2015-16	2014-15
113.44	167.17	168.22	281.34	313.20

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

4.2 Library as a Learning Resource

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

Response:

Automation:

The library system consists of Central and departmental libraries considered as integrated Knowledge Resource Centers with an array of print and digital information sources of every relevant field of academic and research activities. Central Library began the process of automation in 2004, with barcode technology using a fully automated process with commercial ILMS, LIBSYS version 4.0. In 2017, the College introduced web-based library management software, LibManTM to improve and streamline the library operations in a more effective and efficient manner. The software is extensively used for all library activities, like cataloging, circulation, Web OPAC, generating all the reports of the Library.

Presently all the library books are circulated with the help of barcode technology. With the LibManTM, the library provides WebOPAC (Web-based Online Public Access Catalog) facility to its clients and users can search the library collection remotely.

Link for OPAC <http://122.252.249.26:92/forms/frmdashboard.aspx>

LibManTM Offers

- Well Integrated Modules
- No Duplicate Entry
- User-Friendly data entry forms
- Single/Common/Centralized Database for Cluster of Libraries(Main /Departmental)
- Common Search Interface for a cluster of libraries (Web OPAC)
- Automatic updating of Client Software (Data entry program)
- Multi-Lingual / UNICODE Compliant database supports 15 Regional languages
- Copy Status display in real-time
- Member-Specific data accessible over Internet/ Intranet
- Member dues/ fine/due date/ circulation transactions made available over Intranet/Internet

Value-added services such as Current Awareness Services (CAS) and Selective Dissemination of Information (SDI) service are also provided. MARC21 (Machine Readable Catalogue) interface is available with AACR2 format for information browsing and searching.

Along with subscribed e-resources Library also provides remote access to e-resources through the **N-LIST program** under Shodh Sindhu(in 22 databases). The Library is a member of the **NDLI**. It also provides access and encourages the use of other Government of India initiatives under the **National Mission on Education through Information and Communication Technology** (NMEICT) project.

Access to Flip Learning Data, previous years Question papers, e-books, and e-journals are also provided through the JISCE Digital library.

The library has initiated the RFID technology for faster user services and automated footfall count.

Digitization Facility:

The Central Library is equipped with a modern, high-speed scanner, FUJITSU SCANSNAP SV600 for document scanning which follows the copyright act.

Key features:

The scanner has a high speed, continuous scanning facility (A3 page scanning in three seconds) with auto scan, autofocus, and auto-cropping features. Wi-Fi and IP connectivity enabled scanning facility with the customizable user interface are available. The Scanner

- Minimize unevenness in image quality with “VI technology”
- Automatically cropping of several documents with “Multiple Document Detection”
- Shorten operating time with “Page Turning Detection”
- Correct distortion and curviness of books with “Book Image Correction”
- Various functions for making our daily work easier and simpler

The library has developed an Institutional repository intranet portal that contains the list of publications (which do not fall under the copyright act) of faculty members and Ph.D. thesis in a browsable and searchable format.

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

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

Response: B. Any 3 of the above

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

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

Response: 9.7**4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)**

2018-19	2017-18	2016-17	2015-16	2014-15
14.60	1.18	10.13	8.35	14.25

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

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year**Response: 1.18****4.2.4.1 Number of teachers and students using library per day over last one year**

Response: 30

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

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

Yes, the Institute has an IT policy covering all major areas like Wi-Fi, cybersecurity, etc. which is updated or amended whenever required as per the need of the institute. Institution tries to have upgradation IT facilities as per the requirement by regulatory norms as well as industry. The institution is regularly upgrading its infrastructure covering Wi-Fi, cybersecurity, software upgradation, ERP system, ICT enabled teaching-learning. Formal IT policy has been approved by the academic council and the Board of

Governess (BoG).

The acceptable use policies are applicable to Employees, Students, Vendors, and Visitors. Institutes have framed various policies like Procurement, Installation of Hardware, networks, and software. Website Hosting and Database Usage policy has its method and hierarchy which is followed systematically. Certain violations of IT policy by any member may even result in disciplinary action against the offender by institution authorities.

The institution provides 3 to 5 % of the annual budget for upgradation of IT facilities which are audited as per the balance sheet and changes in the system as follows:

1. Previous accreditation the campus has been enabled with an internet bandwidth of 50 Mbps but now we upgrade the bandwidth with RAILTEL 50Mbps (1:1), and Alliance Broadband 50 Mbps (1:1) Leased line. The total Bandwidth is 100 Mbps.
2. The number of Wi-Fi routers are also increased with high configuration after previous accreditation and Wi-Fi network facility were deployed across the campus & hostels. Students and faculty members get maximum benefits to access internets to do their project and research works.
3. Previous accreditation the institute has Cyberoam 100ing firewall but now institutes upgrade with high-end features firewall sonic wall NSA 4600 with all licensing features which increased cybersecurity.
4. Previously we have 700 pcs with Pentium IV and i3 processor with 1/2 GB RAM 160/320 GB Hard Disk but now the institute has upgraded 1000 PCs with i3,i5, and i7 processor, 4/ 8 GB RAM, and 1 TB Hard Disk for better performance. We have also upgraded our servers with 64GB RAM and a minimum of 4 TB Hard disk.
5. Institutes installed CCTV across the campus covering all areas of the college and also in the Boys and girls hostels for providing better security.
6. Institute recently developed a digital studio with the latest technology multimedia device i.e. Apple Mac pc, sound mixer, video cameras, projectors, and 5 in 1 surrounded sound systems.

Information of the upgradation is stated in a table form:-

Sl No.	Particulars	Previous Accreditation	Present Status
1.	Bandwidth	50 MBPS	100 MBPS
2.	Wi-Fi Router	30	100
3.	Firewall	Cyberoam100iNG	Sonic wall NSA 4600 with all licensing facility
4.	Computer	Pentium IV and i3 Processor, with 1 and 2 GB Ram 160/320 GB Hard disk	I3,i5, and i7 processor, 4 to 8 GB Ram and 500 GB/1 TB HDD
5.	CCTV	NA	Yes

6.	Digital Studio	NA	Yes
File Description		Document	
Upload any additional information		View Document	
Paste link for additional information		View Document	

4.3.2 Student - Computer ratio (Data for the latest completed academic year)**Response:** 3:1

File Description		Document	
Upload any additional information		View Document	
Student - computer ratio		View Document	

4.3.3 Bandwidth of internet connection in the Institution.**Response:** 750 MBPS

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

4.3.4 Institution has the following Facilities for e-content development

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

Response: A. All of the above

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

4.4 Maintenance of Campus Infrastructure

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

Response: 3.99

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
76.12	42.93	41.35	51.79	47.45

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

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

Response:

1.Introduction:

Institute owns and operates an extensive infrastructure to deliver its teaching, learning, and research programs. The Institute has an established system for maintenance and utilization of computers, classrooms, equipment, and laboratories on the campus. This document provides a management framework and an outline on the allocation of responsibilities to ensure effective use and maintenance of existing infrastructure facilities. Diagrammatic representations of a procedure for the maintenance of various infrastructural facilities are presented in this document.

2. Maintenance of Physical Facilities:

The physical facilities are maintained by the Institution's engineering section, which comprises competent civil engineers and electrical engineers. The services of plumbers, electricians, and computer analysts are available round the clock on campus. An electrical engineer is responsible for the uninterrupted power supply and maintenance of equipment like generator sets, general lighting, power distribution system, solar panels, etc. Maintenance of water plumbing plants, sewage, and drainage is undertaken by the plumber.

The Administrative Officer with a team of members headed by the site engineer monitors the

maintenance and cleanliness of the buildings, classrooms, labs, furniture, campus. Housekeeping services are outsourced on an annual contract basis and are made available during the daytime on all days.

2.1. Maintenance and utilization of Classrooms, Furniture:

Classrooms with furniture, teaching aids are maintained by the respective department staff and attendants and supervised by the respective Head of the Department. The Heads of Departments report to the administration periodically for all the maintenance works. Minor repairs are registered in a maintenance logbook maintained in the office and are attended on a priority basis. The maintenance in relation to civil work and furniture has been performed under the supervision of the site engineer.

Students optimally utilize all classrooms during the day-long working hours and are also mentored to upkeep the furniture. The classrooms have been utilized as per the class schedule of a particular semester.

2.2. Electrical Maintenance:

There is an Electrical Team under the Maintenance department headed by the site engineer which maintains all electrical properties including DG sets, Power supply System. This team maintains a log of all major equipment. They have a Maintenance Logbook. The team does preventive maintenance and periodical health check as per the laid down schedule and also takes up repair on the breakdown. The team is supplied with an inventory of spares and tools to look after routine repair. Regular and periodical maintenance is carried out for Transformers, Lifts, Solar Panel, Air Conditioner, UPS, and other Electrical and Electronics appliances.

2.3. Maintenance and utilization of Sports and Games Facility

The sports equipment, fitness equipment, ground, and various courts on Campus are supervised and maintained by the Physical Instructor. Expensive equipment in the fitness center is maintained through a Maintenance Contract.

Students are using various sport and games facilities under the supervision of the games instructor.

2.4. Maintenance and Utilisation of Library and Library Resources

The library staff is clearly instructed in the care and handling of library documents, particularly during processing, shelving, and conveyance of documents. The following steps need to be taken:

- Bound volumes are not to be sorted out from their fore-edges, as this process weakens the binding. Thus, shelves are not fully packed.
- Dust will not be allowed to deposit on the documents because the collection of dust causes staining of documents and promote chemical and biological problems. Cleaning using the vacuum is done as and when required.
- Proper pest management is done to minimize the problems caused by insects. Proper cleaning, fumigation, and exposure to sunlight to the documents are done to reduce the effect of insects in the library. Repellants are used to save materials from Rats.

The library of the institute has been used by the students and faculties regularly. The library has maintained a separate logbook for the reading room both for students and faculties.

2.5. Maintenance of Campus Cleanliness

Cleaning of the campus areas and hostels is performed daily in the morning before the regular classes begin with the help of the outsourced housekeeping team. Toilets are cleaned thrice daily. The whole campus area is maintained by the housekeeping supervisor who will be reporting the completion of work to the maintenance department.

3. Maintenance of Laboratories:

The faculty in charge of a Lab is responsible for the maintenance of all the equipment facilities in the Lab. Respective Lab Technicians are trained on the Lab equipment. Normally the institute has a policy that while buying any equipment for Lab in the purchase order itself there is a clause that the supplier trains the Lab technician and supplies documents (User, Repair Manual) and Tools/Spares.

The Heads of Departments report to the administration periodically for all the maintenance works. Stock registers, asset registers, logbooks, tools and plant registers are maintained by the respective laboratories to report entries and defects arising for rectification. All major repairs are identified and external expertise sought for maintenance of equipment wherever necessary with the permission of the authority.

Standard operating procedures for all high-end equipment are made available to the users. In-campus users register in the logbooks and are responsible for the safe handling of the equipment. Breakage and repair if any, are reported to the Head of Department.

Concerned Lab I/c maintain a preventive maintenance schedule for equipment and utilities and accordingly maintenance and spare replacement is carried out and recorded in a register. In addition, the complaints/suggestions on equipment and utility are recorded in the complaint register for equipment and utilities. Based on this also, maintenance is taken up.

In Campus, the Computer Centre and its support staff maintain the ICT facilities including computers and servers. There are two system administrators for looking after this facility. The annual maintenance includes the required software installation, antivirus, and up-gradation. To minimize e-waste, electronic gadgets like projectors, computers, printers, photocopiers are serviced and reused.

4. Maintaining Computers and IT related equipment:

System Administrator along with technicians and instructors who are responsible for repair and maintenance of equipment and computers including network related issues and surveillance system.

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

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 19.15

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

2018-19	2017-18	2016-17	2015-16	2014-15
497	536	510	491	395

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

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

Response: 0

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

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

File Description	Document
Upload any additional information	View Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document
Institutional data in prescribed format	View Document

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

Response: C. 2 of the above

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

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

Response: 32.28

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

2018-19	2017-18	2016-17	2015-16	2014-15
975	1362	672	527	482

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

5.1.5 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies

2. Organisation wide awareness and undertakings on policies with zero tolerance
3. Mechanisms for submission of online/offline students' grievances
4. Timely redressal of the grievances through appropriate committees

Response: B. 3 of the above

File Description	Document
Upload any additional information	View 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: 9.36

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
70	66	57	46	60

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

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

Response: 3.18

5.2.2.1 Number of outgoing student progressing to higher education.

Response: 19

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

5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 0

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

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

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

2018-19	2017-18	2016-17	2015-16	2014-15
118	99	102	91	87

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

Response: 0

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

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

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

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

Response:

JIS College of Engineering has a **Student Council** to nurture students' leadership quality and administrative nature to stimulate their zeal to create brilliant scholars and exceptional personalities. The institutional toppers are appointed as the executive members of the Student Council.

Students Council Member:

President: Mr. Amartya Bhattacharyya, CSE 4th Year, JISCE

Vice President: Ms. Sadrita Basu, EE 3rd Year, JISCE

General Secretary: Mr. Debasish Ghosh, ME 3rd Year, JISCE

Four distinct domains of **Student Council** are **A. Academic B. Administrative** and **C. Extra Curricular D. Sports.**

A. Academic Domain:

Student members in **IQAC** propel the quality policies formulated and adapted by the institution among the student fraternity and express views while formulation of quality policy.

Class Review Committee constituted by Faculty members as mentor and student as representative to assist institutions in the process of academic plan implementation and progress of every course.

The **Student Council** consists of three student representatives. Under the council specific clubs are being constituted. Each club has an individual working committee of students including President, Secretary and Joint Secretary. In **Science Club** the students transmit the recent developments in Science and Technology over the world. **Computer Society Club** provides potential resources for assisting learners and by their peers share recent breakthroughs. **Engineering & Modeling Club** guides outstanding students in their creative engineering model design.

Students in the Library **Committee** provide their opinion in the procurement of textbooks, journals and other learning materials.

NPTEL Local Chapter e-Learning Centre with active students in various designations from each department drives the activities under the flagship of **SWAYAM NPTEL, INTERNSHALA**.

The **Student Branch of Computer Society of India** actively organizes various programmes to reach higher cognitive levels and to enlighten and inspire their peers involving each departmental student.

The **Student Branch of IEI** leads, organizes programs to bring benefit to the students through their batchmates and increase their confidence and provide a nice experience.

IEEE Student Branch vibrantly organizes various technical events.

B. Administrative

Students are active at the **Anti-ragging Committee, Mentoring for Ragging Prevention & Anti-ragging Squad** to prohibit ragging in JISCE as well as in Girls' and Boys' Hostel.

In **Hostel & Canteen Management Committee**, hostellers are involved in every aspect related to smooth run of hostels, canteens through various internal working committees.

Women Cell, JISCE aims to enlighten the girl students and employees about their legal right and to strive towards the empowerment of the women. Girl students are important stake and committee members of this Women Cell.

C. Extra Curricular

Community Connect Club with active involvement of students across streams serves the society whenever needed. **Photography and Trekking Club** where students capture the unseen and explore the unknown. In the **Environmental & Educational Club** students make college campus green and pollution free. **Art and Literary Society** and **Music Club** foster and nurture the creative spirit of the students.

D. Sports Council is formed by the student members along with faculty mentors in coordination with the Student Sports Convener & Secretary and performs important sports activities.

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

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

Response: 5.6

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

2018-19	2017-18	2016-17	2015-16	2014-15
7	5	5	6	5

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

5.4 Alumni Engagement

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

Response:

The Alumni Association of JISCE was officially registered on 4th February, 2013 under West Bengal Societies Registration Act, 1961 with Registration No: S/211707 of 2012-13 and has been functioning since then. In various committees which support the welfare of the institution, we get the alumni as expert members and advisors. Major areas of contribution by the alumni are noted below:

- **Career Guidance** – Pre-placement talk hosted by alumni is beneficial to the students for choosing the career path because as super seniors they always provide their valuable suggestions which are to be utilized in their respective areas of study. Domain specific guidance given to respective batches help them acquire the knowledge, information, skills, and experience necessary to identify career options and pursue that.

- **Placement Support** – The strong alumni network is one of the major sources of placement opportunities to the students. Job hunts under various roles from the companies across nation and globe are now increasingly being informed to the prospective students through this association. Conduction of Mock Interview for students is a phenomenal activity by the prestigious alumni as a part of brush up session for placement support.
- **Networking & Mentoring** – Association with alumni has gradually become strong day by day through social media as well as physical alumni meet at college premises. The established alumni of this institute benefit us by mentoring the students socially, academically and professionally in their areas of expertise and thus bridging academics with industry. They are an important stakeholder for achieving the solution to the challenges faced by the institute and also in achieving its vision and mission.
- **Academic & Extra-academic Support** – Few distinguished alumni play an active role in modification & up-gradation of the curriculum-syllabus of various courses of most of the UG/PG programs as per the requirements of the industry. Their expert domain views in developing new study programs in the curriculum of their respective departments are noteworthy. Alumni here contribute as a guest lecturer, advisor in committees, industry experts and cooperative partners in projects with the institute. They also contribute towards various developmental activities of the institution. In the field of industry research, alumni can open doors for the university to enter into industry networks either in India or abroad in the spirit of collaborative working.
- **Entrepreneurial Assistance** – Many of the alumni of this institution are now entrepreneurs and are in touch with their alma mater for nurturing the fresh minds towards start-ups. The alumni who are established entrepreneur involve themselves voluntarily in supporting and providing the knowledge, infrastructural support to the institute for propelling the entrepreneurial journey of the continuing UG students or PG students.

Leveraging the alumni community is always a win-win for both our institution and the alumni. Our functional alumni network holds Annual Alumni Meet that assures strong bonds between prestigious alumni, present students and the Institute thus creating a network which ensures their engagement with their alma mater in the various development activities.

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

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

Response: E. <2 Lakhs

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

NAAC

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

The institute's perception was, is and will be that the best way to advance society is by fostering quality education. The journey became more prominent since the institute achieved its Autonomy in 2011. The Institute's focus and core ideology is reflected in its Vision, and Mission which was revised in 2014-15, as described below:

Vision

“To generate a stimulating academic environment for higher learning and to bring about a harmonious development of personality among the students by fostering leadership values and importing high degree of professional skills”

Mission

- Our mission is to provide excellent educational infrastructure and academic ambiance conducive to higher learning by setting up centres of excellence and instill a sense of ethics and value system among the students.
- We are committed to provide opportunities to the students to develop their full potential and professional growth and to spread the light of higher education.

The overall administration is supervised by the Board of Governors (BOG) which is integrated in a synchronous and flexible manner with Internal Quality Assurance Cell (IQAC), Planning Cell, Academic Council (AC) and Board of Studies (BOS). They play a significant role in bringing evolutionary reforms for higher learning, better skilling and personality development of students. The Institute believes in promoting a culture of the delegation of powers through strategic policies. The Principal of the Institute is assisted by Deans, HODs, Administrative Head, and coordinators of various cells/committees in decision-making process of the Institute.

Being an autonomous institution, the perspective plan is prepared considering the realization of its vision which focuses on student development through significant emphasis on academics, research, innovation, entrepreneurship, social responsibility and globalization. The focus is to provide an education that

combines interactive study and the excitement of discovery inculcating innovation. The institute utilizes its privilege of Curriculum and syllabus design in regular intervals as per the changing industry needs which results in the incorporation of modern interdisciplinary subjects under the careful guidance of academic and industry experts. Digital transformation and project-based learning have aided the initiatives of enhancing professional skills and a sense of leadership. With the intellectual stimulation of a diverse campus community, professional ethics is embedded within budding engineers. Effective governance and quality education is reflected in NBA Accreditation of various departments.

The faculties are actively involved in decision-making process. All the Head of the Departments are members of the Academic Council where major academic/administrative decisions are addressed. Many senior faculty members occupy pivotal administrative positions like the Registrar, Deans, Controller of Examinations, Placement Officer, Hostel Wardens, etc., and are also members of various decision making bodies. Almost 90% of the faculty members participate through corresponding functional committees, in finalizing syllabus, examination reforms, new laboratory equipment for holistic student welfare. Senior faculty members head all such Academic/Administrative committees. Such participation brings transparency to governance and inherently encourages team-work.

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

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

Response:

The institution has a decentralized and transparent mechanism in management, administration, financial and academic affairs as it seeks to develop in each member of its community the ability and passion to work wisely, creatively, and effectively for the betterment of mankind.

The process of curriculum design is a fine example of academic decentralization

- Faculty members in association with the syllabus committee create the draft curriculum and syllabus where suggestions from academic peers, campus recruiters, students and alumni are considered.
- The Board of Studies of each department has a large representation of departmental faculties, where the proposed changes in curriculum and syllabus are analyzed in presence of external academic and industry experts. Finally, recommendations of BOS are ratified in the Academic Council and submitted to BOG for final approval.
- During the last 5 years, the curriculum and syllabus have been revised 3 times with an average

revision of 52% of the contents.

Regarding administrative decentralization, the senior faculty at the helm of policymaking continuously engages the faculty members. HODs are the chair of BOS and part of the academic council to develop a road map for departmental and institutional development. Faculties can propose modernization or requisition of new equipment as per the industry needs or newly introduced courses which are reflected in the total budget. The Student-Faculty mentorship contributes to all student-related policy changes by actively mobilizing opinions and feedbacks.

The finance allocation process is transparent, need-based and participative. Financial autonomy is shared up to a certain extent as approved by the Board of Governors on 30.08.2014. Without any concurrence of the governing body,

- The principal of the institute can spend up to Rs. 10000
- HODs/Deans can spend up to Rs. 5000 from a contingency fund.
- A faculty can purchase a book costing up to Rs. 1500.

Participative management is reflected in the active functioning of a number of committees identifying possibilities, planning, organizing, implementing and monitoring all the activities of the institution. Every department has Program coordinators at UG and PG levels. Departmental decisions are taken by well-structured committees dedicated to departmental academics, research, accreditation, seminar/workshop conduction, laboratory, routine, attendance monitoring, placement guidance, etc. Even student members participate in IQAC, anti-Ragging committee and various co-curricular and extracurricular clubs.

Case Study:

One of the prominent examples of decentralization and participative management practiced in the institute is the functioning of the Purchase Committee. It follows an existing SOP on purchase management. The committee has members from the administration, department and stores. Every department populates the list of equipment or consumables for the upcoming semester with the active participation of faculties and staff who identify the requirements of laboratories and new books. The committee prepares comparative statements from vendors, process approvals and initiates purchase orders. After purchase, all equipment is demonstrated by vendors in front of faculty members and staff to explore new operations or judge any defect in the delivered product. Only after faculty and staff satisfaction, purchase bills are cleared which shows the depth of participative management in the institute.

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

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

The institution prepares a perspective plan for a period of five years. The salient points of the '2014 -2019 plan were the following:

- 1.Modernization of the teaching-learning system through Digital Transformation
- 2.Revision of curriculum as per industry requirements
- 3.Implementation of the skill development program for students.
- 4.Enhancing the number of Centers of Excellence to strengthen relations with reputed institutions.
- 5.Growth of Consultancy works.
- 6.Collaboration with foreign universities to initiate international internships.
- 7.Organizing more International Conferences.
- 8.Regularizing Orientation program (twice a year) and Refreshers courses for teachers
- 9.Improvement in community engagement and outreach programs.

The entire plan was deployed in the following way:

For Digital Transformation of the teaching-learning system and skill development,

- 1.Since 2017 innovative Flipped Learning system has been implemented
- 2.26 ICT Enabled Smart Classroom was established
- 3.The curriculum was revised in the year 2016 and 2018
- 4.Creatrix campus management system was incorporated for academic and administrative digitization.
- 5.Training on Course-beyond-curriculum was organized in semester break on emerging topics

Under Research initiatives,

- 1.Centre Of Excellence formed with Russian collaboration in 2017.
- 2.Institutional Innovation Council (IIC-JISCE) was established in 2018 to promote innovation

Under Industry Initiatives

- 1.TATA Technology lab and 3D Printing Lab was erected with industry support
- 2.A number of Consultancy works were undertaken.

For Internationalization

1. Six Interdisciplinary International Conferences and a number of workshops organized
2. Student Exchange Program initiated with MIPT, Russia and AIT, Bangkok

For HR development

Orientation programs, FDP and Staff Training programs were organized in regular intervals using grants received under TEQIP.

Regarding Community engagement, five nearby villages have been adopted under the 'Unnat Bharat Abhiyaan' scheme for their upliftment.

Other activities were,

1. E-Library with 30 PCs installed for accessing Journals and other learning resources.
2. Value addition centres like British Council Centre, QEEE lab established
3. NPTEL local chapter was formed for co-curricular development

Activity: Digital Transformation of Teaching Learning System

In the continuous pursuit of quality improvement in teaching learning system and academic digitization, IQAC proposed a radical transformation in existing class rooms into smart digital class rooms for practicing student centric flipped learning system in the meeting dated 14th December 2016. IQAC conducted a number of brainstorming sessions with HODs and senior faculties to plan the implementation. Accordingly two officials from higher management were sent to Turkey and Australia who are pioneers in Flipped learning on global platform. Henceforth all estimates were prepared for phase wise erection of the wifi enabled classrooms with interactive boards, sound system and digital studio for recording digital contents. The whole proposition was approved in the Board of Governors meeting on 18th March 2017. It took nearly 7 months to complete first 6 smart class rooms. During that time extensive faculty development programs were conducted. The use of the smart class rooms was officially started from December 2017. In the next two phases 20 more smart classes were erected within 2018. The whole experience was shared with the entire country through an International Conference in AICTE auditorium, New Delhi.

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

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

Response:

The board of governors is the apex body in the institute. It is responsible for defining the role and mission of the institute and, thereby setting the strategic directions for the desired achievements. The board of governors has the responsibility to administer institutional performance. All its decision and policies are made for the best interest of the institution.

The Principal heads the Institutional planning cell that aid and advice in planning all schemes related to the institution. He is supported by a team of Deans (Academics, Research, Innovative Learnings and Student Affairs), HODs, Registrar and Administrative Officer. Functions of academic administration, policy formulation, and implementation are carried out by Deans, who are supported by HODs.

Service Rules:

For the service conditions and rules, the college follows rules and regulation laid down by the Board of Governors. For attracting and retaining good faculty and staff members institution keeps reviewing service rules in sync with government norms. Some of the salient features of the service rules are –

Appointment:

Scale of Pay and Qualification of Teachers:

1. The scale of pay of emoluments of different categories of teachers of the college shall be such as the Board of Governors may determine considering the AICTE norms.
2. The minimum qualification for appointment to the posts of different categories of teachers of the college shall be such as may be determined by the Board of Governors considering the AICTE and UGC norms.

Composition of the selection committee for recruitment of teachers Professor, Associate Professor & Assistant Professor:

1. The Chairman of the BOG or his nominee will chair the selection committee.
2. The Dean of the faculty concerned
3. One subject expert nominated by Trust.
4. Two subject expert nominated by the BOG / Director.
5. Head of the Department concerned

Leave Rule

There are five categories of leave entitled by the fulltime confirmed staff of the College:

1. Casual Leave (12 days p.a.)
2. Earned Leave (8 days for Vacation staff / 30 days for Non Vacation staff)
3. Medical Leave (10 days p.a.)
4. Maternity Leave (3 months, twice in service period)
5. Study Leave (Confirmed faculty, after putting in 3 full years of service)

All the staff of the college are of two types –

1. Vacational staff – All the faculties and teaching staff
2. Nonvacational staff - Director, Principals, HOD's, Registrar, Accounts, Store, TPO etc.

1. Staff in Probation: Only Casual Leave as in 12 days per year
2. Adhoc/Contract Appointment: Only Casual Leave as in 12 days per year

Procedures for Promotion:

To improve the organizational and functional effectiveness, all promotions are made to be subject to completion of minimum qualifying period and other requirements such as employee's current academic performance, their research work, number of publications, commitment of the staff to the improvement of the institution etc.

The institute devotes attention, time and effort at resolving the Grievances of the staff within the framework of the guidelines and the terms of institutional policy.

File Description	Document
Any additional information	View Document
Link for additional information	View Document
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

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

Response: B. 3 of the above

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

6.3 Faculty Empowerment Strategies

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

Response:

Our institution has effective welfare measures for teaching and nonteaching staff. Apart from attracting and selecting talented and competent people, it is also intensely focused on empowering and retaining the talent. JISCE emphasizes Professional development as one of the important attributes for Teaching and Non-Teaching staff and frames policies to enhance the same.

Welfare measures for staffs

- Duty leaves to staff members to attend various Training Programmes/ Orientation/Refresher/Workshop/Seminar/Exam subject to the existing Government rules
- Gratuities as per Government welfare schemes and measures
- Group Medical Insurance
- Provident fund (50% Contributions from Management, wherever applicable)
- Medical benefit
- ESI Facility (for those who coming under the purview as per rules)
- Hostel Facility for teachers on demand

Avenues for career development/progression

Career development schemes have been framed by the institution to improve knowledge and professional skills of faculties which is vital for carrying out modern teaching, research and administrative activities.

- Faculty Development Programs (FDP) programs arranged in every semester on various advanced pedagogies, digital blended teaching learning, flipped learning and so on.
- Half day leave per week is granted to the faculty members cumulative up to 2 days per month
- Seed Money offered to faculties for initiating a new project work leading to innovation
- Financial support provided to faculties as registration fee for participating in National or International Conferences, Workshops, FDPs.
- Financial assistance is given to faculties for professional society membership.
- On duty leave is granted to the faculty for presenting the research papers in the International Conferences/ Seminar / Symposium.
- On duty leave is granted for appearing in course work examination for PhD / comprehensive examination
- Duty leaves for attending various Training Programmes/ Orientation Programme/Refresher Courses/Seminar/Exam subject to the existing Government rules
- Programs conducted on Major / Minor Research Projects.

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

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
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

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

Response: 47.8

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

2018-19	2017-18	2016-17	2015-16	2014-15
48	50	53	47	41

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

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development

Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 15.17

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

2018-19	2017-18	2016-17	2015-16	2014-15
42	20	21	31	41

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

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

JIS College of Engineering conducts both independent external audit (statutory audit) as well as internal audit. JIS College of Engineering categorically reiterates that it has carried out internal and external audits in a timely manner with no serious financial irregularity ever reported.

The timelines for the same are rigorously adhered to and executed with the necessary due diligence. Whereas statutory audit is done once in a year, internal audit is executed on a half yearly basis. Internal audits streamline all transactions and check the compliance level across the hierarchy. Internal audit is more focused on the authenticity of financial transactions and monitoring of tax and other regulatory compliances which is conducted by M/S **Subhendu Dutta & Co, Cost Accountant**, FRN No: 100863, 66 Malanga Lane, Kolkata 700012 for the year 2014-15, 2015-16 and 2016-17 and **DPC & Associates, Cost Accountants**, FRN No: 001147, 3 Kapitalita Lane, 1ST Floor, Kolkata 700012 for the year 2017-18 and 2018-19.

M/s. Bandyopadhyay Associates, Chartered Accountants of 350 (370/6) Pearapore Road, P.O-Sheoraphuli, Dost- Hooghly, Pin-712223 West Bengal is appointed which conduct the external audit in accordance with Generally Accepted Auditing Principles as prescribed by relevant regulatory authorities. They conduct the

audit procedures to obtain reasonable assurance about whether the financial statements are free from material misstatement and give a true and fair view of the state of affairs at the year-end.

The external auditors also review the status of procedural and transactional compliance in all financial transactions of JIS College of Engineering largely conducted through ERP.

File Description	Document
Link for additional information	View Document

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

Response: 0

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

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

File Description	Document
Institutional data in prescribed format	View Document

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

Response:

Institute mobilize funds through its major contribution from Students Fees & Hostel Fees. To balance the expenses of deficit if any, Interest from Deposits, Fees from External exam conducted by external Authorities and if required Bank loans are also availed. The institute follows the strategies listed below to mobilize resources and utilizes the fund for its activities in a systematic manner.

1. By a collection of tuition fees from Indian students through account transfer or demand draft or online transfer.
2. By getting funds as a beneficiary of the Technical Education Quality Improvement Program [TEQIP]. Out of TEQIP II projects, a total grant of Rs. 600 Lakhs has been received during the assessment period.
3. By getting 12 (B) status from the University Grants Commission (UGC).

4. By disbursement of Salary with perquisites and benefits to the faculty and staff members, Expenditure towards the cost of Infrastructure development and augmentation.
5. By utilizing an additional major fund for updating of the academic facility by new procurement of Laboratory equipment and Purchasing consumables for laboratory use
6. By purchase of library books, journals, subscriptions for e-journal and e-books, holding seminars and workshops for faculties and students, expenditure towards Research & Development facility.
7. By disbursing funds for the maintenance of academic support and physical support facilities, maintenance of hostel facility.
8. By disbursing funds for holding student cultural, sports and other activities
9. By expenditure for other recurring expenditures like electricity, internet, security, registration and affiliation and other running expenses.
10. By promoting consultancy services that develop collaborations and brand building.
11. By encouraging faculty members to apply for funding from various Government agencies which will help to improve the research output, infrastructure landscape by acquiring modern equipment and overheads to the Institute.
12. By translating the patents and other IPR generated by the Institute into commercial products.
13. By facilitating incubation/start-ups with the CII Innovation Lab empowering innovation and incubation ecosystem using the experience gained from IPR and Entrepreneurship Development cell.
14. By establishing the Centre of Excellence, to utilize the infrastructure available and expertise from the faculty.
15. By offering new programs or interdisciplinary courses in emerging areas, which are in sync with the industry requirements
16. By offering value-added courses through MOOC Programmes.
17. By exploring the avenues available through MOU's signed with foreign universities through international internship programs.
18. By attracting students from foreign countries, which facilitates additional resources in foreign currency.
19. By creating corpus from Alumni contributions and mobilizing funds through interest earned on corpus fund.
20. By establishing more student chapters and clubs and drive their activities through sponsorship/enrolment etc.
21. By conducting Short term courses, workshops and training programs for people from Industry, Academics and Students to bridge the gap and knowledge transfer.

22. By exploring funding from Corporate / International Foundations/ NGO's etc.

File Description	Document
Link for additional information	View Document

6.5 Internal Quality Assurance System

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

Response:

As per the guidelines of NAAC, an Internal Quality Assurance Cell (IQAC) has been established in the year 2010, to ensure the quality measure and its continuous improvements. The IQAC is involved in developing the quality assurance strategies in the following areas like curriculum planning & development, teaching-learning, faculty development program, student activities, industry-institute interaction, research & innovation activities advances and enhances the learning possibilities through foreign collaborations, etc.

Two significant practices institutionalized during the last five years are:

1. Alignment of the curriculum with industry requirements: Since the academic year of 2012-13, the IQAC of the institute has taken a major role in the curriculum planning and development process across all the programs in regular intervals as per the demand of the industry. The outcome analysis and feedback from all the stockholders are initiated from the IQAC to upgrade and update the curriculum. The IQAC has made it mandatory to keep industry person(s) in all the departmental BoS and the suggestions from them must be discussed in the IQAC meeting for the up-gradation of the next curriculum. In the last five years, three times the entire curriculums of almost all the programs have been revised based on suggestions from industrial experts. During this period many new courses have been introduced, new topics have been added in many courses. The various emerging and interdisciplinary areas are considered during this curriculum up-gradation process. In the last five years at least 51% up-gradation and inclusion of 701 new courses have been noted by IQAC across the various programs at the institute. The IQAC has made it compulsory for all faculty members to attend regular faculty development programs on various aspects of pedagogical aspects and emerging areas during January 1 -15 and July 1 -15 every year conducted within the institute or outside the institute.

2. Academic Audits: The IQAC of the institute conducts regular audits on the following areas-

- Teaching-Learning Process
- Learning Outcomes, Course Outcomes, and Program Outcomes
- Students' Performance in semester-end examination
- Students' participation in projects, internships, entrepreneurship programs

- Faculty Participation in the seminar, workshop, conference, FDP organization/ attended
- Faculty Participation in research, publication, and consultancy

This entire academic audit process has been carried out in two steps,

Step 1- Internal Academic Audit and

Step 2- External Academic Audit.

Internal Academic Audit: Since the establishment of IQAC, the periodic internal academic audit organized by the institute. There are around 23 numbers of experienced faculty members identified by the IQAC for this internal audit process. The internal audit is carried out every semester.

External Academic Audit: Further to reinforce the quality system, a regular external academic audit is initiated for all the departments and the institute since the academic session-2016. Every year's external academic audit is conducted. This audit consists of observations with respect to the best academic practices of the departments and advises areas for improvement. Finally, a summary of the audit is made and is placed for an action plan to be recommended to improve the quality of academic activities.

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 and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

One of the main functions of the IQAC is to analyze the teaching-learning process, structures & methodologies of operations and measures the learning outcomes at periodic intervals. The IQAC is dedicated to adopting the learner-centric approach in teaching-learning progression and a periodic review on the methodology is always initiated. Institutional IQAC offers support and guidance to the faculty regarding the current pedagogical trends across the world. To achieve learning outcomes, the IQAC periodically analyses the teaching-learning process and recommends regular development, up-gradation, and addition of the necessary teaching methodology, techniques, and infrastructure.

To implement the curriculum and syllabus effectively, the institute has made a paradigm shift in teaching-learning since the last NAAC cycle. A pedagogical change from conventional teaching-learning to project-based learning (PBL) to modern start-of-the-art flipped learning has been implemented over the last five years. This has been adopted through various stages gradually over the years. 2015-16 sessions, PBL has been implemented in all the programs, where the project has been made a mandatory course from 1st

semester. Along with PBL, the digital pedagogy in the form of flipped learning has been started in 2017 and gradually implemented for all the programs and for all the students till 2019.

Reviewing Year	Teaching Learning Process, Structure, and Methodology
2014	IQAC suggested practicing the full-fledged Outcome-based Education (OBE) in all the departments and it has been decided that at the end of each semester course-wise outcome analysis will be done. IQAC also suggested implementing project-based learning (PBL) strategies from 1st year itself.
2015	IQAC reviews the PBL across the department. It has been advised to strengthen the PBL practice for the 2nd and 3rd year students. All the departments are advised to compare the outcome of each course with the last academic year's performance.
2016	IQAC inform about the modern state of the art digital teaching-learning methodology to all the members, HoI and HoDs. Different kinds of digital pedagogies practicing across the world have been discussed in the meetings.
2017	The digital pedagogy and blended learnings has been initiated in all the departments. Percentage of blending has been decided by course coordinator along with head of the departments.
2017	The core team has visited Australia and Turkey to know more about digital pedagogy and flipped learning. Flipped learning has introduced phase-wise for all the programs.
2018	New infrastructure, classrooms & digital studio has been established. All HoD's have asked to measure the course outcomes.
2019	Practicing of flipped learning for all the years and for all the courses.

This process is explained through the following 2 examples.

Example 1: Implementation of outcome-based education and measure the learning outcomes

To improve the teaching-learning process and to keep an eye on the learning outcomes, the IQAC employed Outcome-based Education (OBE) and planned continuous internal assessment strategies for monitoring the Pos and PSOs. Each department of the institute has prepared course outcomes, program-specific outcomes, and program outcomes. The IQAC has prepared an academic policy that includes

policies for the conduction of theory courses, practical courses, continuous evaluation, and monitoring of academics. The plans for the attainment of COs, POs, and PSOs are prepared and communicated to teachers for implementation.

Evaluation of learning outcomes in terms of CO and PO attainment:

A departmental committee dedicated to Quality improvement collects the subject wise outcome attainment from every faculty, which is based on the continuous as well as end semester evaluation after every semester end. The team analyzes the data and calculates the PO attainment from those subjects of that semester for all students and submits the results to IQAC for further analysis through HOD and departmental representative of IQAC.

Average PO Attainment Values for passed out batches (on a scale of 3)

Name of Department	Name of Program	2014-15	2015-16	2016-17	2017-18	2018-19
BME	BTECH	1.79	1.88	1.94	2.01	2.11
CE	BTECH	1.8	1.85	1.88	1.91	1.99
CSE	BTECH	2.21	2.23	2.26	2.33	2.47
ECE	BTECH	2.32	2.23	2.24	2.25	2.03
EE	BTECH	1.72	1.76	1.75	1.76	1.78
ME	BTECH	1.65	1.82	1.92	1.35	1.52
IT	BTECH	1.82	1.89	1.96	2.01	2.09

Reports on the progress of the teaching-learning process and their outcomes are generated periodically for records and useful in accreditation visits by internal or external audit teams. Comprehensive average PO attainment from all program outcomes and program-specific outcomes recorded from the direct and indirect assessment of Course outcomes derived through program articulation matrix has been demonstrated as a sample data analyzed by IQAC.

Example 2: Adoption of digital pedagogy in the form of Flipped Learning

Because of the collaboration with the various foreign institute and universities over the past few years, it was projected that there was a need for introducing the usage of new technology for the teaching-learning process. Taking this into account, the IQAC has taken initiative to adopt digital pedagogy in the form of flipped learning since 2016-17 academic sessions.

Process: In flipped learning, knowledge transfer to students take place prior to class through the creation and transfer of the digital contents prepared by an instructor with his own short video clip at the beginning giving a brief summary of the digital content and its importance – all made available through a learning management system (LMS).

Structures & methodologies of operations: The lower-level cognitive tasks generally involve watching, remembering, and understanding the basic concepts from the digital contents provided by the teacher are done at home. Students can access the contents whenever they want, wherever they want, as many times as

they want. The students' learning is much more personalized and flexible. Therefore, when the students are in class, they can concentrate on higher-level cognitive tasks that are facilitated by their instructor, and this transforms a class into a dynamic and interactive group learning. The instructor guides the students as they apply concepts and engage creatively in the subject matter.

Learning outcomes: To measure the learning outcomes in every lesson, ten parameters are designed which are based on the top ten skills announced by the World Economic Forum every year.

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

6.5.3 Quality assurance initiatives of the institution include:

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

Response: 2 of the above

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

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response:

The institution shows gender sensitivity in providing the following facilities:

a) Safety and Security:

The institution gives priority for gender equality and also provides safety and security to the students. Following is the mandatory committee for safety and security:

Internal Complaint Committee (ICC):

The composition of the ICC is as per the norms of UGC. Principal is the Chairperson of the committee, Registrar, one legal advisor, all lady staff members and two staff members are the members of this committee.

Besides, the following are also the vital parts of the drive for Safety and Security:

- Lady caretaker and Matron are appointed for Girls' hostels.
- Security Personals are engaged for 24X7 in three shifts for the campus and Hostels.
- CCTV cameras are installed in suitable places in the campus and hostels.
- Emergency contact numbers are displayed all through the campus.

Also the Women Development Cell (WC) strives hard for the women safety, development and for the uplift of women in Engineering and Society. It works for the benefit of women serving in the institute as teaching faculty, women students and supporting staff.

b) Counseling:

There is a Dedicated Counseling Unit in the Girls' Hostel where a dedicated counsellor and some senior lady faculty members visit in suitable intervals (Every Saturday) and meet with the students regarding different issues. Sessions with parents are also conducted whenever it is felt necessary. Even if there is any holiday on any Saturday, the designated faculty members keep themselves available over phone and keep in touch with the hostel warden. The issues addressed are maladjustment, academic performance anxiety, decision making, under performance, stress and strain, relationship crisis, several feminine issues, absenteeism, mal practice, lower self-esteem, emotional instability etc.

c) Common Room:

Separate common rooms are available for boys and girls. The students utilize these for having common discussions and playing indoor games during the recess. Facilities of different indoor games are available in the Girls' Common Room, viz. carom, billiard, Chess, Table Tennis etc. One Sanitary Pad Vending

Machine is installed in the Girls' Common Room (and the other in the Girls' Hostel).

d) Day Care Center:

One day care centre is present in the Girls' Hostel which is opposite to the main entrance of the college. One lady care taker is present in the Day care center to look after the young children of the staff members during the office hours.

e) Presence of girl students in every project group

The institute practices Project Based Learning and as per the instruction given the project groups are formed in such a way that every group must contain at least one girl student. Also under the paper code MC 281, the groups are formed in the same way. In addition to that there is a separate Girls' Battalion of the NCC unit of the institute.

Relevant Weblinks:

- **Photographs of the facilities provided for women:**
<https://jiscollege.ac.in/naacssr2020/pdf/7.1.1.3.pdf>
- **Women Cell Annual Report:** <https://jiscollege.ac.in/naacssr2020/pdf/7.1.1.1.2.pdf>

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

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

Response: D. 1 of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document

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

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

Response:

The Institution provides the facilities for the management of the following types of wastes:

1. Solid Waste Management:

The institute in association with Kalyani Municipality maintains a regular process of Solid Waste Management at the college campus. Sufficient numbers of pairs of dustbins (e.g. green & red) are available at the college campus which collects biodegradable and non-biodegradable materials separately. A huge amount of canteen wastes are generated and used for biogas generation. Bio-degradable solid waste materials are also used for composting purposes.

Maximum waste generated is recycled and reused by the help of Kalyani Municipality. For the same, the housekeeping staff are well trained. The different forms of waste generated in the campus e.g. Kitchen waste, Paper waste, Dry-organic waste (leaves) are collected in separate color dustbins. The waste that is generated from the canteen is food waste and vegetable peels which are mostly used for biogas generation.

The college also generates a huge amount of Garden waste which is mostly in the form of leaves which are deposited in a separate chamber and composted to form manure to use in organic farming. Non-biodegradable solid waste materials are collected by Kalyani Municipality in suitable intervals.

The unnecessary papers (old question papers, answer scripts etc.) and broken furniture are, however, sold out to the third parties.

2. Liquid Waste Management:

The liquid wastes generated in the campus include Sewage, and canteen effluent waste which is treated in the institute. The entire treated water is used for watering the gardens and lawns maintained in the campus.

The sludge settled through the treatment is removed and dried on drying beds to be used as manure for the trees and plants in the campus.

The laboratory waste water does not contain hazardous chemicals and periodical monitoring is done by the maintenance team.

3. Biomedical Waste Management: N/A**4. E-waste Management:**

E-Wastes are collected from different departments in the form of desktops, laptops, printers etc. and are initially dumped in the designated rooms. These are then handed over to the scrap merchants in due course of time.

5. Waste Recycling System:

The waste that is generated from the canteen is food waste and vegetable peels are mostly used for biogas generation. The Garden waste which is mostly in the form of leaves which are deposited in a separate chamber and composted to form manure and used for organic farming.

The Sewage and canteen effluent waste is treated and used for watering the gardens and lawns maintained in the campus. The sludge settled through the treatment is processed to prepare manure for the gardens.

6. Hazardous Chemical Waste Management: N/A

File Description	Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Geotagged photographs of the facilities	View Document
Any other relevant information	View Document

7.1.4 Water conservation facilities available in the Institution:

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

Response: D.1 of the above

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

7.1.5 Green campus initiatives include:

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

Response: B. 3 of the above

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

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

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

Response: C. 2 of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	View Document
Certificates of the awards received	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

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

Response: A. Any 4 or all of the above

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

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

Response:

The Institution has its distinct demographic location and located at the cross-road of three districts of West

Bengal, well connected with North East India, Bihar, Jharkhand and neighboring countries. This has certainly encouraged to the development of a multi-diversified environment and co-existence of heterogeneous culture. The Institute strongly believes in the theme of 'unity in diversity' and existence of 'we' in the premises of the College. This conviction is nurtured through a number of initiatives throughout the year that inculcates an ambiance of tolerance and harmony. A galaxy of events that unifies cultural, regional, linguistic, communal, socioeconomic and other diversities is organized in every year.

Tolerance, integrity, cultural, linguistic, and socio-economic harmony are best achieved through the celebration of rituals like Swaraswati Puja, Holi, Shivratti, Buddha Purnima, Poila Baisakh, Rath Yatra, Rakhi Purnima, Janmashthami, Eid al-Fitr, Eid ul Zuha, Vijaya Sammilani, Diwali, Guru Nanak Gurpurab, Christmas Day and Founder's day at Institution level. Students and faculty members are consistently motivated towards the cultural and regional heritage of the Nation through the celebration of National Youth Day, Netaji Jayanti, Republic Day, Dr. B.R. Ambedkar Birthday, Rabindra Jayanti, Independence Day, Gandhi Jayanti, National Integrity day and so forth.

The Institute has taken special care on sensitizing and ambience of crosspollination of communal, socioeconomic, regional and linguistic diversities through a number of club activities. Students and teachers across the departments actively participate in events organized by these clubs on regular basis. Social issues like enrichment of socially and economically weak people are organized by community connect club. Events like Blood donation camp, Candle Procession for Pulwama martyrs, Vivek Yatra, Foundation Day walk, integrates students across diverse background towards National harmony and Integrity. Events Mock parliament, debate competition, extempore presentation, documentary preparation on societal issues nourishes the culture of tolerance and perseverance. Cultural Fest is organized every year, which is a perfect platform of sharing and mixing cross-cultural activities. Cultural programs are even organized with International Institutes of repute such as MIPT, Russia, AIT, Bangkok which provides an International platform for sharing of thoughts and culture.

The advent of Induction programme and its focus on 'Universal Human Values' has been another milestone towards harmonizing students across state, culture, language to an unified relationship brotherhood and self-realization. This environment is further sensitized through awareness on societal stigma such as development of nearby slums and awareness drives on health, hygiene, and environmental issues in the rural background of Kalyani. Students are integral part of each of these events which makes them responsible in every sphere of social awareness and cultural harmony.

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

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

Response:

Constitution of India and coherence with constitutional values, rights and duties are one of the major focuses of the Institution. Adherence to the Constitutional rights and duties is maintained through several initiatives such inclusion of separate mandatory course through 'Constitution of India' & "Professional Ethics" for all students at undergraduate level in their semester studies. Important outcomes of this course are to ensure students have constitutional knowledge and they understand the responsibilities of engineers. As per AICTE guidelines, the Student Induction Programme is conducted for the first year UG students starting from 2018-19. 50% of this 3-weeks programme consists of lectures, videos and practical sessions on "Universal Human Values". About 10% of the faculty members have been imparted training through a FDP specially designed and sponsored by AICTE.

Apart from working towards academic excellence, the institute strives to develop students as responsible citizens of this country. Through various programs and practices, students & employees are sensitized about various constitutional obligations. Faculty members & students enthusiastically involve in all the programs arranged for driving these obligations. Special Lectures and seminars are conducted for students and staff to provide the information of constitutional obligations: values, rights, duties and responsibilities of citizens by the Institute. National days are celebrated in the Institutions like Republic Day, Independence Day, Teacher's Day, Women's Day Engineer's Day, Constitutional Day, Voter's Day for the benefits of staff and students. Lectures are also arranged for the students and staff on current issues like Electoral Reforms in Indian Politics, relevance of human values and ethics among engineering graduates, life sketch of national idols like Dr. B. R. Ambadekar, Fundamental Rights and duties enshrined in Indian Constitution etc.

Students are motivated to donate and help needy persons and they are also advised to act as responsible citizens of India. NSS unit of the institute arranges health camps, blood donation camps, Swachatha Abhiyan, literacy drives, social responsibilities awareness rallies, national integration, and social harmony rallies, etc. In all these activities students involve as volunteers and display their duties and responsibilities towards society.

Given below are a few specific programs initiated/arranged by the institute in recent past:

Unnat Bharat Abhiyan (UBA)

Adaptation of five villages namely, Jaydebbati, Kate Belia, Krishnapur, Raghunathpur and Saguna, under Chakdah Block around Kalyani under the UBA and working for the development of these villages through active involvement of students. Special drives to propagate the merits of Social Entrepreneurship among students, Awareness campaign on Environment, and Climate Change.

Blood Donation Camp

Blood donation camps in the campus at frequent intervals in which students and faculty members actively participate. For instance, in each calendar year blood donation camp held twice.

Societal Responsibility

During recent Covid-19 Pandemic college student and staff with help of management took an initiative to distribute free mask, sanitizer and food packets to needy people for a prolonged time. Sanitizing Tunnel was placed in local markets and College-gate, Safe-Home option at the College Hostel was provided to the local administration for safety of the people.

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

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

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

Response: C. 2 of the above

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

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

Response:

The Institute organizes National and International commemorative events and festivals like Republic Day, International Women's Day, Environment Day, World Environment Day, Independence Day, Teacher's Day, Swatch Bharat Abhiyan, International Yoga Day & Samvidhan Divas.

Our country is known for its philosophy and diverse religious society. To appreciate our culture and religions, the management, Principal, students, faculty and other staff members collaborate among themselves and celebrate various memorable occasions in the institute. National days namely Independence Day and Republic Day are celebrated by hoisting of National flag and organizing parade by the NCC cadets along with the band. The management and Principal address the gathering by sharing the

importance of great freedom fighters namely Mahatma Gandhi, Nehru, Subhash Chandra Bose, etc. The Institute, as a responsible social entity is committed to sharing its patriotism and awareness to the next generation.

Every year on 5th September, Teacher's day, the birth anniversary of Dr. Sarvepalli Radha Krishnan, the second president of India is celebrated in the institute. The Institute creates an awareness amongst the students regarding the importance of Dr. Radha Krishnan as an Academic Philosopher, Diplomat, scholar, and an Ideal Teacher. The teacher's community organizes a gathering in the auditorium, felicitates the teachers, conducts cultural events, and appreciates the teachers for their services.

15th September of every year is celebrated as Engineers' day on the occasion of Birth Anniversary of Sir Mokshagundam Visvesvaraya as a remarkable tribute to the greatest Indian Engineer. The engineering departments organize lectures on emerging trends in their respective areas of research and development.

The Institute celebrates Traditional Days like Basonto Utsav, Bijoyasammilani to promote unity in diversity every year. It shows respect towards all religious festivals. All the faculty and students come in Ethnic attire and have a great gathering to exhibit all the cultural festivals on the college campus. Every department represents selected festivals and everyone displays traditional wear to their best accordingly. Students are highly motivated to participate in various cultural activities.

Dr. A.P.J. Abdul Kalam's birth anniversary is celebrated as World Students Day on 15th October every year as declared by the United Nations Organization (UNO). All the students gather and organize quiz competitions, talent exhibits, and presentations in their respective areas of knowledge.

The International Day of Yoga is celebrated annually on 21st June. Yoga is organized on the college premises for strengthening physical, mental and spirituality among students, faculty, and staff. Different yoga postures like Bhadrasana, Bhujangasana, Shashankaasana, Trikonasana, Uttanaasana and Pranayama end with Meditation.

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

7.2 Best Practices

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

Response:

BEST PRACTICE - 1

1. Title of the Practice

Centre for Innovation, Incubation and Entrepreneurship (IIPC)

2. Objectives of the Practice

- To facilitate Innovation through Research and collaboration for translating domain expertise into products or technologies.
- To Foster entrepreneurial spirit, promote startups by providing appropriate incubation facilities, offer consultancy services and improve industry institute interaction.

3. The Context

- Envisages creating products and technologies that address the societal needs and also nurture the innovative minds.
- Create an ecosystem for innovation and entrepreneurship through incubation support, facilitation of technology transfer for commercialization by multidisciplinary approach.
- Provide the opportunity for students to use their learning to solve complex engineering challenges, through projects. Transform prototypes and proof of concepts into Product/Technology/Service across the campus through JIS TechFest.

4. The Practice

The Industry Institute Partnership cell (IIPC) is instrumental in keeping strong bonding with Industry. Few illustrations are Microsoft faculty Connection, IBM TGMC, Infosys Campus Connect, collaboration with Texas Instruments etc.

Recommendations are:

- Direct involvement of industry personnel in framing out autonomous curriculum syllabus to make role-ready, industry ready engineers. - Industry personnel in Board of Studies of the departments
- Industry representative in Academic Council - Industrial training/ visits for the students with faculty coordinators
- Industry sponsored projects / electives
- Industry sponsored research
- Skill orientation programme of the students directly by the Industry experts. - Industry members in maintaining quality / standard i.e. In IQAC

5. Evidence of Success

- Became a hub for entrepreneurial activities across the state. Build strong network of Mentors/Advisors across the verticals.
- Provides necessary infrastructure support to incubate to progress in their ideas.
- Facilitates interaction between industry, institution and funding agencies to transform concept to commercialization Leverage schemes of the Government bodies towards promoting entrepreneurship.

Industry Exposure / Visit and Internship organized b the IIPC over the years:

	2014-15	2015-16	2016-17	2017-18	2018-19
Industry Exposure / Visit	3	8	10	13	18
Internship	89	157	160	178	270

6. Problems Encountered and Resources Required

Encouraging students to be a part of the session after the regular academic activities was the only issue. But with more students showing promise of being a part of the event after a few interactive sessions, we hope that the issue is as expected, only short lived.

7. Notes (Optional):

By organizing different activities by the IIPC a good culture developed that helped in initiating good number of IPRs and startups.

BEST PRACTICE - 2

1. Title of the Practice

Igniting Young Minds with the Spirit of Innovation

2. Objectives of the Practice

The Institute has developed innovation cell as a part of R&D cell way back in 2015 and through metamorphosis as per MHRD directive the same is now Institutional Innovation Council. Major objectives of this council are

- To nurture creative thinking, self-thinking and design thinking skills of each student.
- To provide an opportunity for apply their theoretical understanding in solution of complex scientific and engineering challenges through project.
- Promotion of idea generation starting from very 1st year, mentoring them towards prototype to product development leading to technology transfer for commercialization through multidisciplinary approach.
- To create product and technologies that directly addresses societal issues.
- To enhance Industry Institute interaction and solution of live industrial problems.
- To provide financial and intellectual support towards patenting to granting and finally leading towards startup creation through appropriate incubation.

3. The Context

i) Bridging the gap between knowing and doing:

A number of reports have predicted that more than 65% of engineering students graduating per year are not

employable of there is notable gap between information acquired and skill required in the Industry front. Hence, it is the need of the hour that students apply their learning into development of complex engineering projects which would make them ready for the future.

ii) Building the future of the Nation: Self-reliant India

Leaving aside the age old convention of job-seeker we need a paradigm shift in students' perception from very 1st year. They would be exposed towards self-thinking, ideation, prototype development, mentored towards licensing and product development there by igniting the spirit of entrepreneurship skills.

iii) Working for the Mankind: To make students socially responsible by solving problems that directly address burning societal issues related to health, water and energy.

iv) Impact of Industry 4.0: To make students ready with skills that a machine and automation can do i.e. imagination, creativity, collaboration.

4. The Practice

'Igniting young minds with the spirit of innovation' is practiced through a number of number of initiatives. One dedicated design lab has been established with dedicated faculty mentor. The design lab is equipped with facilities of carrying out UG and PG level project works. This lab has been recognized as Centre of Excellence by CII. Every year selected students are invited by CII, BCII to showcase their achievements and promotion towards industrial mentorship. Annual technical symposium JISTech2K15 to JISTech2K20, JISCE Integrated Hackathon, JISCE software Hackathon has been a clear reflection of implementing ideas into prototypes and showcasing the same to experts. Coding Competition-Code fluenza, App development competition, JISCE Business Plan Competition, Robotics competition are some more notable initiatives in this regards.

To bridge the gap between studying and realizing project papers have been added in curriculum of all departments from very 1st year starting from the year 2018.

Leadership talk, awareness about patent, GI and copyright generation are carried as an activity of Institutional Innovation Council as MIC drive, IIC driven and self-driven activities.

Providing industry exposure to the students through industry visits and projects having significant industry requirements.

Selected projects from technical symposium are provided with full financial support for IPR filing to granting.

One Centre of excellence has been created with MIPT, Russia for collaborative research work involving teachers and students of either country.

Keeping in mind the facts of Industry 4.0 latest labs on cutting edge technologies has been established one of them is 3D printing facilities. This facility is unique as it provides an exposure towards additive manufacturing & new product development. It helps students to materialize their novel ideas into reality and also can act as a basic infrastructure of product development and startup creation. Area of application is multidisciplinary where teachers and students from electrical, mechanical, biomedical can work together.

Vertical project group concept is another unique feature of this practice where in each project group is formed of 4 students from 1st year, 3 students from 2nd year, 3 students from 3rd year, 2 from final year with faculty mentor at the top. The objective is that

- Knowledge and skills would flow across generation of students from the faculty mentor.
- Within the group they can act as peer enhancing their skills for working in a group
- Developing leadership skills
- A project undertaken should not have its natural death with students passing out, rather the concept undertaken would be completed and finally that can lead towards product development and related customization.
- These groups can act as budding startups.
- Groups could be with inter-departmental students also which would further enhance the quality of project through crosspollination of ideas.

Constraints:

Time management: To adjust with regular pattern of traditional examination system and prepare for that, sometimes it is difficult for the students to decide over the priority. In this context guidance from faculty mentor is very crucial.

Societal impact: To motivate students towards a career of entrepreneur which is some time difficult due to socio economic issues.

5. Evidence of Success

- i) The Innovation Council of JISCE has ranked 4 star in 2018-19 and 5 star in 2019-20.
- ii) One startup company entitled 'JINNOAVTION' has been created involving teachers and students.
- iii) More than 100 IPRs have been filed in past 5 years, 85 published out of which 4 received granting till date.
- iv) Three projects received crowd funding for further development (in 2019-20)
- v) The Institute has produced some notable entrepreneurs who have established their own signature in the industrial front namely, Mr. Joydeep Mondal, MD & CEO of AAKAR Innovation, Mr. Kanad Chatterjee 2005, CEO AwsomU (Online Retail Brand), Managing Director - Acrossinfinity Inc., Digital Marketing Manager -TCS (alumnus JISCE) and so forth.
- vi) 3D printing facilities are across departments. One interdisciplinary project of Civil Engineering, Electrical Engineering and Computer Science and Engineering developed with 3D printing system received 1st prize in IIT-KGP Technical symposium.
- vi) Sturdy growth in number of students' publications in past three years.

6. Problems Encountered and Resources Required

'Igniting young minds with the spirit of innovation' is not just cluster of words any incumbent has to

realize the basic philosophy behind this. Hence, it is always difficult to make every students understand the philosophy of focusing of skills of innovations leaving behind the traditional booking system of education. The problem is pronounced in 1st year when students transform from school education to college education and the change in mindset from preparing for examinations to learning for application-analysis-evaluation and creation. Herein the role of faculty mentors are very important as any misunderstanding might deviate major focus of this practice.

Implementing vertical project group with interdisciplinary students-coordinating is not always easy as it requires the involvement of a number of departments. Coordination, monitoring and evaluation needs higher level participation from all.

Finally, the key is creativity, collaboration and communication with this the practice of inculcating an ambience of innovation would really ignite all young minds of the Institute.

7. Notes (Optional): The endeavor is unique and certainly help in igniting power of imagination and hidden potential of innovation into skills, thereby creating some future ready, self thinking generations who can fulfill the dream of 'Atrmanirbhar Bharat' and contribute in the building of new India.

File Description	Document
Best practices in the Institutional web site	View Document

7.3 Institutional Distinctiveness

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

Response:

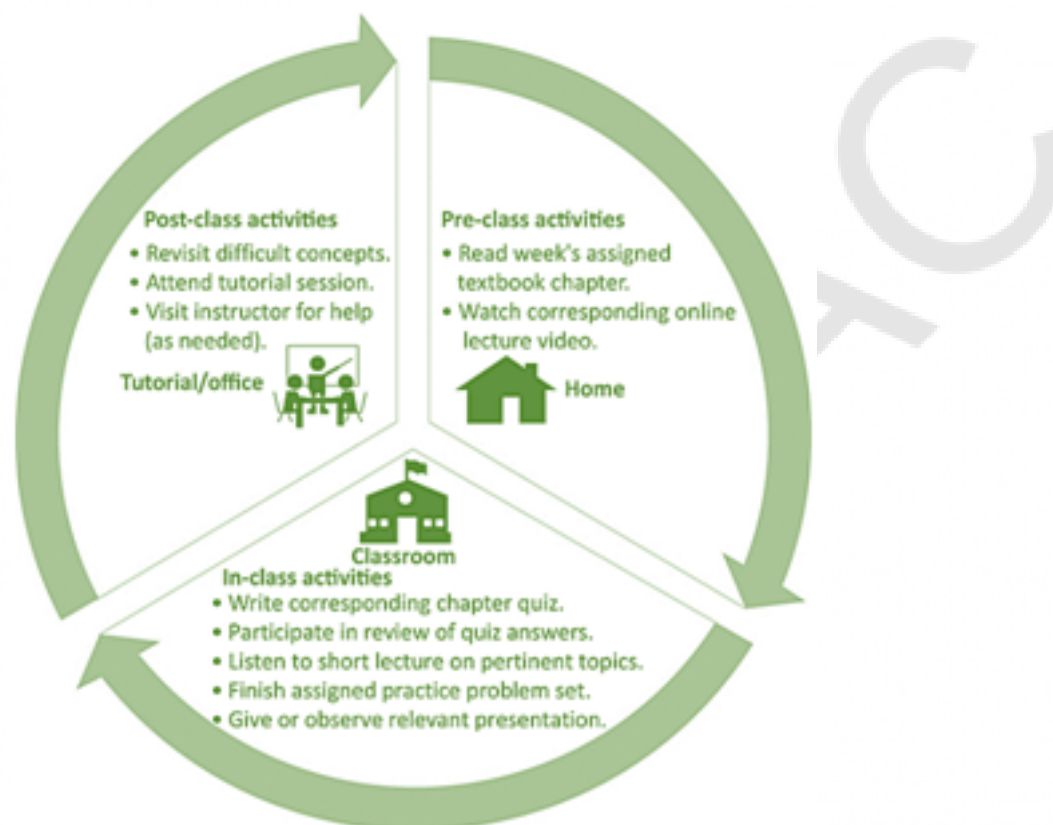
Title of distinctiveness: Implementation of Digital Pedagogy in the form of Flipped Learning

A recent survey has pointed out that 64 per cent of fresh Indian graduates are not acceptable to the industry as these students are not equipped to apply their learning in most cases. Even though the new generation of Indian students are digitally native, in most cases, teaching and learning methodologies have not been able to keep pace with the times. The Institution made a paradigm shift in teaching-learning process by introducing "*Flipped Learning*" and got recognition for being the pioneer institution in India to initiate full-scale Flipped Learning in Engineering education.

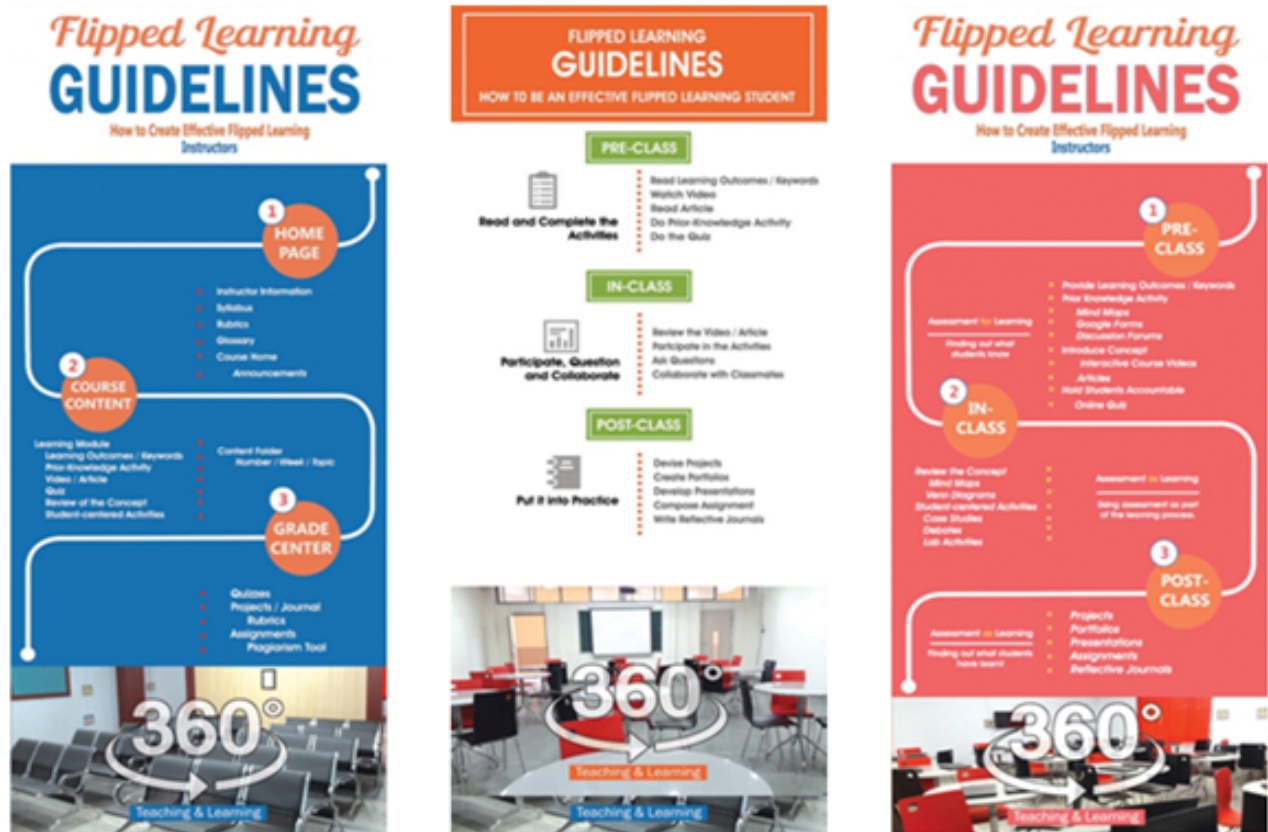
Traditionally, in class, a teacher will disseminate knowledge to the students. The students are expected to take notes, ask questions, and then remember and understand this knowledge. After the class or lecture while the students are working along, they are expected to use this knowledge in higher cognitive activities that involve them applying, analyzing and evaluating. In this traditional approach, contents plays the main role, not application. This is not the effective environment for the learning, and it is not the best use of instructor or the students' time. More importantly, it is certainly not the way in which students will be

asked to work when they enter the employment market.

The flipped learning approach overcome this weakness by *flipping the stages of learning*. In flipped learning, knowledge transfer to students takes place prior to class through creation and transfer of the digital contents takes place prior to class through creation and transfer of the digital contents such as topic related to videos PDFs, flowcharts, animations, interviews, notes etc. prepared by the instructor with his own short video clip at the beginning giving a brief summary of the digital content and its importance– all made available through a learning management system (LMS). The lower-level cognitive tasks generally involve watching, remembering and understanding digital contents, questions in a discussion forum, and sharing ideas or posting and answering and put into the hands of the students through their devices.



Flipped Learning bridges the gap between students' ability to consume information and their ability to apply the information that they have consumed in a coherent and intelligent way. In Flipped Learning at the institute, the knowledge is transferred to students before the class through supporting material digitally available well in advance. Students carry out lower-level cognitive tasks, such as understanding and remembering, on their own before coming to class. Once in class, students can concentrate on higher-level and more complicated tasks such as applying, analyzing, and critically evaluating the concepts. In the classroom, students are offered a dynamic interactive group learning environment and an indirect instruction space in which a teacher's role is elevated to that of a moderator in a live brainstorming session.



To cultivate more deeply engaged learning experiences for students when the instructor is present to coach and guide them. Emphasis is on higher order thinking skills and application to complex problems. The entire teaching-learning process becomes student-centric. Continuous assessment based on certain performance indicators aligned to Education 4.0 is also another advantage of this practice. In this pedagogy, direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter. The class to class continuous evaluation based on top ten parameters proposed by world economic forum is in place for flipped class assessments.

After several introductory sessions and workshops, both with faculty and students, an informed decision was taken by the management to bring about this concept at the institute. Huge infrastructural development has been made at the institute during the past four years. 24 brand-new classrooms with laptops, internets, state-of-the art smart boards and cafeteria like sitting arrangement to practice full-fledge flipped classes. A fully functional digital studio has established both for students and faculty to record digital contents at their leisure.

At the institute the flipped learning generally practiced in the following 6-steps:

(i) Plan: Figure out which lesson in particular you want to flip. Outline the key learning outcomes and a lesson plan.

(ii) Record: Instead of teaching this lesson in-person, make a video. A screencast works. Make sure it contains all the key elements you'd mention in the classroom.

(iii) Share: Send the video to your students. Make it engaging and clear. Explain that the video's content will be fully discussed in class.

(iv) Change: Now that your students have viewed your lesson, they're prepared to actually go more in-depth than ever before.

(v) Group: An effective way to discuss the topic is to separate into groups where students are given a task to perform. Solve a problem, make a video, prepare small projects etc.

(vi) Regroup: Get the class back together to share the individual group's work with everyone. Ask questions, dive deeper than ever before.

After the six steps, Review, Revise, and Repeat!

Some other strategies also used at institute during the conduction of flipped classes:

- Active learning: Allow students to apply concepts in class where they can ask peers or instructors for feedback and clarification.
- Peer instruction: Students can teach each other by explaining concepts or working on small problems.
- Collaborative learning: Increase student engagement, enhance student understanding, and promote collective intelligence.
- Problem-based learning: Class time can be spent working on problems
- Discussions or debate: Give students the opportunity to articulate their thoughts on the spot in support of their opinions.

The initiatives have been appreciated by Dr. Francisco Marmolejo, Chief of Global Initiative- World Bank, Dr. Cesare Onestini, Mission Head, European Union in India, and Professor Anil Sahasrabuddhe, Chairman-AICTE, Prof. Rajiv Kumar, Member Secretary- AICTE.

Highlights:

- India's first fully Flipped Institute as declared by MHRD, AICTE, Govt. of India.
- State of the art practice of Digital Pedagogy: Special Jury award by FICCI in 2019.
- Only Engineering Institution in Eastern Region having Digital Studio.

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

NAAC

5. CONCLUSION

Additional Information :

The Institute profusely makes its existence relevant through its benevolent existence in overall social, economic, cultural growth of the nearby locality, society, region, state and the Country in general. It is creating generations of high-end socially responsible global citizen who is not only contributing to the growth of the National but also development of the entire human civilization. The Institute is deeply focused on holistic development of each student along with profound skill set and thereby creating generations ready to fulfil the dream of 'Atmanirvar Bharat'. Students and JISCE has contributed significantly during lockdown, caused by COVID19 from creation and distribution of CORONA protective gloves for front line fighters, synthesis of herbal sanitizer and distributed the same to nearby locality just before the complete lockdown. In addition, adoption and taking complete care of Kalyani Markets, proving 'safe home option in need' to local administration has also been signature of the Institute during the fight against the evil of pandemic. Students here are compassionate and environment friendly, each student in past few years have one tree on their own-contributing towards the greenery of Green Campus of JISCE. Therefore, its not just books, pen and internet its mother nature who is also taking part in overall development of each student of JISCE. The responsibility of each teacher and student of JISCE is to continue with this legacy and take a role in formation of new India. The contribution of JISCE towards academics, reserach and society at large has been recognized by a number of awards and achievements.

- NIRF ranking witinin rank-band 251-300 in 2020,
- ARIIA ranking within rank-band 26-50 (self-finance Institution)
- 1st Private Autonomous Engineering Institution in West Bengal conferred 2nd cycle of Autonomy by UGC.
- Three STARS Ranking by QS.
- Five STARS Awarded Institutional Innovation Council (Ministry of Education, Govt. of India).
- First Fully Flipped Institution in INDIA endorsed by AICTE, MHRD, The World Bank Group, UNESCO, NPIU and Microsoft.
- FICCI Jury award in 2019 for Academic Excellence,
- QS E-LEAD certification for excellence in imparting digital education.
- Host Institution under MSME, Govt. of INDIA.
- Research Centre of MAKAUT, West Bengal.

Concluding Remarks :

JISCE started with the philosophy of 'Equal Education for Everyone', has grown by leaps and bounds in two decades i.e. 20 years. The institute understands and appreciates the importance (and role) of 'continuous assessment' and 'accreditation process', which helps us to strive for overall improvement of the system for the stakeholders. Being **ISO 9001:2015** certified, the institute has well-defined systems and processes critical for necessary quality assurance.

The emphasis in sustaining quality academic ambiance has been reflected through a number of accolades by apex bodies including **NBA** accreditation of all eligible programmes way back in 2007 and its renewal in subsequent years in applicable cases. Similarly UGC has conferred **Autonomous status** way back in 2011 as the 1st Self Financing Engineering Institute in West Bengal and renewal in 2017.

One of the signatures of the quality education is of course well defined industry oriented curriculum blended with emerging technological trends, education-4.0-infrastructure, notable students' achievements, with profound alumni base.

The institute has a desired ecosystem for research & innovation. There are good numbers of faculty with some doctorate degrees from premier institutes. These faculty members have rich experience in their respective fields. Continuous efforts on part of our faculty has borne fruit in terms of getting various projects and grants over the last many years, including some of the substantial ones like TEQIP-II.

The institute can rightfully boast of having some of the latest equipment in its laboratories that also needs to get reflected in student growth. Provision of other supporting infrastructure like well-equipped library, computers, Wi-Fi etc. facilitate our efforts towards academic excellence.

Lately, the enthusiasm and hard work of faculty and staff has also been recognised by the results of NIRF 2020 ranking whereby we have made a humble start by getting a rank in the bracket of 251-300. The 'vigour' needs more impetus to help us derive other benefits like more projects, more grants, more publications, more consultancy and better visibility.

The management has always supported and given a free hand to the administrators to decide the course, and this has helped us steer our ship successfully so long.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.1.2	<p>Percentage of Programmes where syllabus revision was carried out during the last five years.</p> <p>1.1.2.1. Number of all Programmes offered by the institution during the last five years. Answer before DVV Verification : 12 Answer after DVV Verification: 11</p> <p>1.1.2.2. How many Programmes were revised out of total number of Programmes offered during the last five years Answer before DVV Verification : 12 Answer after DVV Verification: 11</p> <p>Remark : Revised with respect to 1.1</p>																				
1.1.3	<p>Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years</p> <p>1.1.3.1. Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years.. Answer before DVV Verification:</p> <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>798</td><td>716</td><td>716</td><td>635</td><td>635</td></tr></table> <p>Answer After DVV Verification :</p> <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>40</td><td>36</td><td>36</td><td>32</td><td>32</td></tr></table> <p>Remark : Basic / fundamental courses cannot be considered as leading to employability.</p>	2018-19	2017-18	2016-17	2015-16	2014-15	798	716	716	635	635	2018-19	2017-18	2016-17	2015-16	2014-15	40	36	36	32	32
2018-19	2017-18	2016-17	2015-16	2014-15																	
798	716	716	635	635																	
2018-19	2017-18	2016-17	2015-16	2014-15																	
40	36	36	32	32																	
1.2.1	<p>Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.</p> <p>1.2.1.1. How many new courses are introduced within the last five years Answer before DVV Verification : 546 Answer after DVV Verification: 294</p> <p>1.2.1.2. Number of courses offered by the institution across all programmes during the last five years. Answer before DVV Verification : 2330 Answer after DVV Verification: 2330</p> <p>Remark : Revised considering the relevant courses.</p>																				
1.2.2	Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course																				

system has been implemented (Data for the latest completed academic year).

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

Answer before DVV Verification : 12

Answer after DVV Verification: 11

Remark : Revised w.r.t 1.1

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
67	46	35	31	25

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
32	27	25	21	14

Remark : Revised considering the relevant value-added courses. Regular courses as per curriculum are excluded.

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
1926	1907	2057	2015	2783

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
1465	1604	1486	1290	1272

Remark : Updated as per metric no. 1.3.2

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

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

Answer before DVV Verification : 1804

Answer after DVV Verification: 598

	Remark : As per the Curriculum.																				
1.4.1	<p>Structured feedback for design and review of syllabus – semester-wise / year-wise is received from</p> <p>1) Students, 2) Teachers, 3) Employers,</p> <p>4) Alumni</p> <p>Answer before DVV Verification : A. All 4 of the above Answer After DVV Verification: B. Any 3 of the above Remark : Most of the question in the questionnaire are common to all stake holders and employer feedback does not contain the seal of the company.</p>																				
1.4.2	<p>The feedback system of the Institution comprises of the following :</p> <p>Answer before DVV Verification : A. Feedback collected, analysed and action taken and report made available on website Answer After DVV Verification: C. Feedback collected and analysed Remark : As per action taken report the feedback parameter and the action taken are not reflected in the questionnaire given for feedback.</p>																				
2.1.2	<p>Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)</p> <p>2.1.2.1. Number of actual students admitted from the reserved categories year wise during last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <tr> <td>2018-19</td> <td>2017-18</td> <td>2016-17</td> <td>2015-16</td> <td>2014-15</td> </tr> <tr> <td>190</td> <td>201</td> <td>214</td> <td>219</td> <td>195</td> </tr> </table> <p>Answer After DVV Verification :</p> <table border="1"> <tr> <td>2018-19</td> <td>2017-18</td> <td>2016-17</td> <td>2015-16</td> <td>2014-15</td> </tr> <tr> <td>170</td> <td>179</td> <td>184</td> <td>202</td> <td>182</td> </tr> </table> <p>Remark : Only the seats filled against the quota are counted here.</p>	2018-19	2017-18	2016-17	2015-16	2014-15	190	201	214	219	195	2018-19	2017-18	2016-17	2015-16	2014-15	170	179	184	202	182
2018-19	2017-18	2016-17	2015-16	2014-15																	
190	201	214	219	195																	
2018-19	2017-18	2016-17	2015-16	2014-15																	
170	179	184	202	182																	
2.3.3	<p>Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)</p> <p>2.3.3.1. Number of mentors Answer before DVV Verification : 184 Answer after DVV Verification: 97</p>																				

Remark : Updated as per the supporting documents of minutes of the meeting of various departments.

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

2.4.3.1. Total experience of full-time teachers

Answer before DVV Verification : 1273

Answer after DVV Verification: 1155

Remark : Considered the teachers who are currently working in the HEI.

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
26	4	17	2	8

Answer After DVV Verification :

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

Remark : Awards without any financial support not considered.

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
80.41757	39.19731	127.25465	105.64	172.73

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
61.07557	18.88235	9.54043	0	67.09

Remark : There is no documents for receiving the documents from TEQIP, Swami Vivekananda

Chair etc.

3.2.2 Percentage of teachers having research projects during the last five years**3.2.2.1. Number of teachers having research projects during the last five years**

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
8	15	28	30	29

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
5	14	25	26	26

Remark : Updated as per the metric 3.2.1

3.2.3 Percentage of teachers recognised as research guides**3.2.3.1. Number of teachers recognized as research guides**

Answer before DVV Verification : 14

Answer after DVV Verification: 12

Remark : Updated as per the metric 3.2.1

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
14	20	14	20	15

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
2	5	2	2	1

Remark : Considered only entrepreneurship programmes and IPR programmes.

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following:**1. Inclusion of research ethics in the research methodology course work**

2. Presence of Ethics committee**3. Plagiarism check through software****4. Research Advisory Committee**

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: B. 3 of the above

Remark : No proofs provided for Serial No 3.

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

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

Answer before DVV Verification : 14

Answer after DVV Verification: 0

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

Answer before DVV Verification : 14

Answer after DVV Verification: 0

Remark : HEI has opted out

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
102	93	65	94	62

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
20	18	13	19	12

Remark : HEI has not provided UGC CARE link.

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

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

Answer before DVV Verification:

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

24	30	5	10	8
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Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
21	23	4	9	8

Remark : Books with ISBN number only considered

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
19.02828	18.46852	20.60621	11.05586	20.42841

Answer After DVV Verification :

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

Remark : The revenue generated for conducting workshops, letting out the facilities for conduct of exams or training , testing and student / faculty training cannot be considered as consultancy and corporate training revenue.

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
23.05325	32.55544	79.44766	0	4.755000
0	0	0		

Answer After DVV Verification :

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

Remark : The amount spent on development cannot be considered in this metric.

3.6.2

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
9	8	6	1	0

Answer After DVV Verification :

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

Remark : Revised as per the supporting certificate attached.

3.6.3

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
41	44	53	32	40

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
38	41	49	25	32

Remark : Programmes conducted by the institution through collaboration with NSS and other organisation only considered

3.6.4

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
11278	12990	13213	12324	5109

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
2343	2393	2572	2711	2783

Remark : Total number students cannot exceed the number of students year-wise in the institution.

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
315	204	176	169	96

Answer After DVV Verification :

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

Remark : Permission letter, internship completion, project certificate, visit documents etc., cannot be considered as collaboration documents.

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
3	8	5	12	1

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
3	7	3	10	1

Remark : MOU with commercial establishments for placement trainings and recruitment cannot be considered.

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

4.1.3.1. Number of classrooms and seminar halls with ICT facilities

Answer before DVV Verification : 88

Answer after DVV Verification: 34

Remark : HEI has not provided geo tagged photos of all the classrooms with ICT enabled. Only samples are given. Revised w.r.t 4.3

4.2.2

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

Answer before DVV Verification : A. Any 4 or more of the above

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

Remark : HEI has not provided supporting documents for Sl. No. 2, 3 & 5

4.2.3

Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)**4.2.3.1. Annual expenditure of purchase of books/e-books and subscription to journals/e-journals year wise during last five years (INR in Lakhs)**

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
17.10	19.64	17.06	17.51	45.01

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
14.60	1.18	10.13	8.35	14.25

Remark : As per supporting document given in extended profile 4.5 under schedule 15.

4.2.4

Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year**4.2.4.1. Number of teachers and students using library per day over last one year**

Answer before DVV Verification : 486

Answer after DVV Verification: 30

Remark : Gate register only up to page 6 looks to be valid beyond that the documents have no signatures and looks like same person written all the entries without signature.

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
1205	78	90	67	52

Answer After DVV Verification :

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

Remark : This expenditure is not reflected in the Audited Income and Expenditure statement. 50% exam fee payment for NPTEL cannot be considered. No valid proof provided for the payments.

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability

1. Soft skills

2. Language and communication skills

3. Life skills (Yoga, physical fitness, health and hygiene)

4. Awareness of trends in technology

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: C. 2 of the above

Remark : HEI has not provided valid supporting documents for Sl. No. 2 & 3.

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

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

Answer before DVV Verification:

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

1594	1926	1149	992	953
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Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
975	1362	672	527	482

Remark : Authenticated reports only considered. Accepted relevant programs only.

5.1.5	<p>The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases</p> <p>1. Implementation of guidelines of statutory/regulatory bodies 2. Organisation wide awareness and undertakings on policies with zero tolerance 3. Mechanisms for submission of online/offline students’ grievances 4. Timely redressal of the grievances through appropriate committees</p> <p>Answer before DVV Verification : A. All of the above Answer After DVV Verification: B. 3 of the above Remark : HEI has not provided valid supporting documents for Sl. No. 2.</p>																				
5.2.1	<p>Average percentage of placement of outgoing students during the last five years</p> <p>5.2.1.1. Number of outgoing students placed year - wise during the last five years. Answer before DVV Verification:</p> <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>523</td><td>441</td><td>551</td><td>426</td><td>564</td></tr></table> <p>Answer After DVV Verification :</p> <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>70</td><td>66</td><td>57</td><td>46</td><td>60</td></tr></table> <p>Remark : Updated as per sample offer letters.</p>	2018-19	2017-18	2016-17	2015-16	2014-15	523	441	551	426	564	2018-19	2017-18	2016-17	2015-16	2014-15	70	66	57	46	60
2018-19	2017-18	2016-17	2015-16	2014-15																	
523	441	551	426	564																	
2018-19	2017-18	2016-17	2015-16	2014-15																	
70	66	57	46	60																	
5.2.2	<p>Percentage of student progression to higher education (previous graduating batch).</p> <p>5.2.2.1. Number of outgoing student progressing to higher education. Answer before DVV Verification : 53 Answer after DVV Verification: 19</p> <p>Remark : Based on the sample ID cards attached.</p>																				
5.2.3	<p>Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/</p>																				

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
23	10	12	6	4

Answer After DVV Verification :

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
118	99	102	91	87

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
118	99	102	91	87

Remark : Opted out of the metric

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
47	49	46	39	32

Answer After DVV Verification :

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

Remark : None of the certificates pertaining to outstanding performance in sports/cultural activities at inter-university/state/national / international level. All are inter college level and International study tour cannot be considered.

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
36	35	32	31	27

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
7	5	5	6	5

Remark : One event with different activities would be counted only once & only relevant events considered.

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

Answer before DVV Verification : A. ? 15 Lakhs

Answer After DVV Verification: E. <2 Lakhs

Remark : Miscellaneous income cannot be considered as alumni contribution.

6.2.3 Implementation of e-governance in areas of operation

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

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: B. 3 of the above

Remark : The screen shot shows admission and support to JIS group of Institutions.

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
153	110	103	102	95

Answer After DVV Verification :

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

Remark : The amount spent on training and development cannot be taken as financial support to attend conferences / workshops and towards membership fee of professional bodies. There is no proof for financial support or Professional membership payment.

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
49	51	55	47	47

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
48	50	53	47	41

Remark : Considered only the relevant programs.

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
177	186	166	144	181

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
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42	20	21	31	41
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Remark : Revised excluding programmes less than a week and one faculty counted only once in a year.

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

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

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
2	2.5	5	3	4

Answer After DVV Verification :

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

Remark : Opted out by the HEI

6.5.3 Quality assurance initiatives of the institution include:

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

Answer before DVV Verification : All of the above

Answer After DVV Verification: 2 of the above

Remark : HEI has not provided any supporting documents for Sl. No. 2 and NIRF is of for 2020, beyond the assessment year.

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

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

	<p>Answer before DVV Verification : A. 4 or All of the above</p> <p>Answer After DVV Verification: D. 1 of the above</p> <p>Remark : As per supporting documents only use of LED may be considered. Experimental setup and street light and small biogas plant cannot be considered as alternate sources of energy.</p>
7.1.4	<p>Water conservation facilities available in the Institution:</p> <ol style="list-style-type: none"> 1. Rain water harvesting 2. Borewell /Open well recharge 3. Construction of tanks and bunds 4. Waste water recycling 5. Maintenance of water bodies and distribution system in the campus <p>Answer before DVV Verification : A. Any 4 or all of the above</p> <p>Answer After DVV Verification: D.1 of the above</p> <p>Remark : Only sl. no. 1 is considered.</p>
7.1.5	<p>Green campus initiatives include:</p> <ol style="list-style-type: none"> 1. Restricted entry of automobiles 2. Use of Bicycles/ Battery powered vehicles 3. Pedestrian Friendly pathways 4. Ban on use of Plastic 5. landscaping with trees and plants <p>Answer before DVV Verification : A. Any 4 or All of the above</p> <p>Answer After DVV Verification: B. 3 of the above</p> <p>Remark : Sl. No. 3, 4 & 5 are considered.</p>
7.1.6	<p>Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:</p> <ol style="list-style-type: none"> 1. Green audit 2. Energy audit 3. Environment audit 4. Clean and green campus recognitions / awards 5. Beyond the campus environmental promotion activities <p>Answer before DVV Verification : A. Any 4 or all of the above</p> <p>Answer After DVV Verification: C. 2 of the above</p> <p>Remark : The recognition awards are not from recognized body so only Sl. No. 5 is considered.</p>
7.1.10	<p>The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.</p> <ol style="list-style-type: none"> 1. The Code of Conduct is displayed on the website 2. There is a committee to monitor adherence to the Code of Conduct 3. Institution organizes professional ethics programmes for students, teachers,

administrators and other staff**4. Annual awareness programmes on Code of Conduct are organized**

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: C. 2 of the above

Remark : No supporting documents for sl. No. 2 & 3.

2.Extended Profile Deviations

ID	Extended Questions																				
1.1	<p>Number of programs offered year-wise for last five years</p> <p>Answer before DVV Verification:</p> <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>12</td><td>11</td><td>15</td><td>15</td><td>16</td></tr></table> <p>Answer After DVV Verification:</p> <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>11</td><td>11</td><td>15</td><td>15</td><td>16</td></tr></table>	2018-19	2017-18	2016-17	2015-16	2014-15	12	11	15	15	16	2018-19	2017-18	2016-17	2015-16	2014-15	11	11	15	15	16
2018-19	2017-18	2016-17	2015-16	2014-15																	
12	11	15	15	16																	
2018-19	2017-18	2016-17	2015-16	2014-15																	
11	11	15	15	16																	
1.2	<p>Number of departments offering academic programmes</p> <p>Answer before DVV Verification : 8</p> <p>Answer after DVV Verification : 7</p>																				
2.3	<p>Number of students appeared in the examination conducted by the Institution, year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>4359</td><td>4522</td><td>4797</td><td>5198</td><td>5426</td></tr></table> <p>Answer After DVV Verification:</p> <table><tr><td>2018-19</td><td>2017-18</td><td>2016-17</td><td>2015-16</td><td>2014-15</td></tr><tr><td>2177</td><td>2261</td><td>2398</td><td>2599</td><td>2713</td></tr></table>	2018-19	2017-18	2016-17	2015-16	2014-15	4359	4522	4797	5198	5426	2018-19	2017-18	2016-17	2015-16	2014-15	2177	2261	2398	2599	2713
2018-19	2017-18	2016-17	2015-16	2014-15																	
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2018-19	2017-18	2016-17	2015-16	2014-15																	
2177	2261	2398	2599	2713																	
3.3	<p>Total number of classrooms and seminar halls</p> <p>Answer before DVV Verification : 88</p> <p>Answer after DVV Verification : 34</p>																				
3.4	<p>Total number of computers in the campus for academic purpose</p> <p>Answer before DVV Verification : 902</p> <p>Answer after DVV Verification : 360</p>																				