# JIS College of Engineering The Annual Quality Assurance Report (AQAR) of the IQAC 1st July 2015 to 30th June 2016

# Part – A

## I. Details of the Institution

1.1 Name of the Institution JIS College of Engineering

1.2 AddressLine1 Block A, Phase III,

AddressLine2 Kalyani, Nadia

City/Town Kalyani,

State West Bengal

Pin Code 741235

Institution e-mail address principal\_jisce@jisgroup.org

Contact Nos. 033 25822865 Extn:27

Name of the Head of the Institution: Dr. Malay R Dave

Tel. No. with STD Code: 033 25822865 Extn:27

Mobile: 9073370505

Name of the IQAC Co-ordinator: Dr. Somsubhra Gupta

Mobile: 9836545777

IQAC e-mail address: dean\_academic.jisce@jisgroup.org

## 1.3 **NAAC** Track **ID** (For ex. MHCOGN18879)

# 1.4 NAAC Executive Committee No. & Date: :EC No. EC/49/A&A/44 dated 16<sup>th</sup> June 2009

(For Example EC/32/A&A/143 dated 3-5-2004. This EC no. is available in the right corner- bottom of your institution's Accreditation Certificate)

#### 1.5 Website address:

Web-link of the AQAR: www.jisce.org/AQAR2015-16.pdf

For ex. http://www.ladykeanecollege.edu.in/AQAR2012-13.doc

# 1.6 Accreditation Details

Sl. No.	Cyala	Cycle Grade CGPA	Crada	CGPA	CCDA	Year of	Validity
S1. NO.	Cycle	Grade	CUFA	Accreditation	Period		
1	1st Cycle	В	2.72	2009	05 years		
2	2 <sup>nd</sup> Cycle	А	3.02	2015	05 years		
3	3 <sup>rd</sup> Cycle						
4	4 <sup>th</sup> Cycle						

1.7 Date of Establishmen	t of IQAC:	DD/MM/YYYY :26/06/2010
1.8 AQAR for the year(	for example 2010-11)	: 2015 -16
•	•	tted to NAAC after the latest Assessment AQAR 2010-11 submitted to NAAC on 12-10-
i.AQAR2015-16	09-04-2017	'(dd/mm/yyyy)
ii. AQAR2014-15	28-12-2015	(dd/mm/yyyy)
**Sine last NAAC	visit in 2014 Also uplo	aded at the institutional website
1.10 Institutional Status		
University	State	Central Deemed Private
Affiliated College	Yes	No No
Constituent College	Yes	No
Autonomous college	of UGC Yes v	No
Regulatory Agency ap	proved Institution	Yes V No
(eg. AICTE, BCI, MCI	I, PCI, NCI)	
Type of Institution	Co-education $\sqrt{}$	Men Women
	Urban ✓	Rural Tribal
Financial Status	Grant-in-aid	UGC2(f) $$ UGC12B $$
	Grant-in-aid +Self Fin	ancing Totally Self-financing V

1.11 Type of Faculty/Programme	
Arts Science Commerce Law PEI	(Phys Edu)
TEI (Edu) Engineering V Health Science	Management v
Others (Specify) Technology	
1.12 Name of the Affiliating University(for the Colleges) : Mau Technology (MAKAUT) ( erstwhile West Bengal University of T	
1.13 Special status conferred by Central/State GovernmentUGC	C/CSIR/DST/DBT/ICMR
etc Autonomy by State/Central Govt. /University	
University with Potential for Excellence	UGC-CPE
DST Star Scheme	UGC-CE
UGC-Special Assistance Programme	DST-FIST
UGC-Innovative PG programmes	Any other (Specify)
UGC-COP Programmes	
2. IQAC Composition and Activities	
2.1 No. of Teachers	06
2.2 No. of Administrative/Technical staff	02
2.3 No. of students	01
2.4 No. of Management representatives	02
2.5 No. of Alumni	01
2. 6 No. of any other stakeholder and community representatives	0
2.7 No. of Employers/Industrialists	·02

2.8 No. of other External Experts	:0
2.9 Total No. of members	:14
2.10 No. of IQAC meetings held	4 /annum(Quarterly)
2.11 No. of meetings with various stakeholders: No.02	Faculty: 04
Non-Teaching Staff Students:02 Alumni:02	Others: (Management)01
2.12 Has IQAC received any funding from UGC during the year?	Yes Nov
If yes, mention the amount	
2.13 Seminars and Conferences (only quality related)	
(i) No. of Seminars/Conferences/ Workshops/Symposia organize	ed by the IQAC
Total Nos. 02 International National State	Institution Level $\sqrt{}$
(ii) Theme a. Best Practices for Quality Enhancement in to b. Students' participation in quality improvem	

2.14 Significant Activities and contributions made by IQAC

IQAC evolve mechanisms and procedures to improve the academic and administrative performance of the institution by:

- Preparing Quality Assurance Report
- Preparing Quality Benchmark
- Following up various programs with impact and outcome
- Verification of Regulation Book under autonomous structure for curriculum reforms
- Ensuring Quality in syllabus reforms and examination process by following up
- Disseminating information on various quality parameters of outcome based education.
- Introducing innovative methods of teaching, learning and evaluation
- Following up Value addition Centres and programs
- Ensurestandardizationbyregularglobalevents(Viz.InternationalSeminarin2016and Symposium in2017)
- ConductedNationalSeminar04numbersbyECE,EE,CSEandITdepartments
- Invoked inter-departmental audit

Enhance the quality of the existing programmes provided by the college such as:

- Introduced FILP learning
- Introduced Speaker's Corner, a platform for idea sharing
- Open up Value Addition Centres
- Diagnostic test & remedial classes for the weaker students
- Introduced mentorship programme
- Introduced online evaluation for class tests

- Provided training on Communication, Aptitude and Technical skill development to the students
- The process automation through ERP packages in place, staff attendance, leave application, procurement indentation is online
- Promoting Sports & Cultural activities through SLC (Student Life Centre) activities

For Institutional management capacity enhancement

- Governance development Plan in place
- Governance self-review is done periodically
- Departmentalheadsareprovidedmanagementtrainingfromleadingmanagementinstitutions

## 2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year\*

## Year 2015-16: Perspective Plan

- > Infrastructure- To complete construction of the Education block Building Civil Engineering
- > Infrastructure To modernize the laboratories of Computing and Electronics dept.
- Infrastructure To reinforce Power Backup System(Generator)
- > Teaching Learning-Review Syllabus through BOS to propagate Outcome based education
- > Teaching learning Encourage Learning Centric Environment through ICT
- > Teaching learning-Improve Quality of education and escalate function of NPTEL, QEEE live classes
- > Teaching learning-Apply for the renewal of Accredited program of the eligible department
- > Teaching Learning—Host more pedagogical program to improve teaching skill—NITTTR and other agencies
- ➤ Teaching Learning Encourage enhancement of domain knowledge of the Faculty members through Faculty and Staff Development
- > Teaching Learning—Review pattern of autonomous examination systems and go for online test with proper modalities
- Research–Encourage applying for the research and funded projects
- Research—Open incubation centre for the Core Engineering Departments and open up Innovation Centre for Core Engineering
- > Research—Host International Events and plan to continue hosting International Conference
- Research Encourage hosting workshop/seminar beyond teaching schedule
- > Research—Apply to open Ph.D. program to University and conduct Research methodology program
- ➤ Research encourage filing patent and IPR
- > Research- Encourage travel abroad however setup a committee to examine the merit of the application
- Industry—make mandatory inclusion of Industry person in all statutory committee and ensure their presence in decision making (viz. BOG, AC, BOS etc..)
- > Industry—Take up Industry projects and host Technical Symposium to show case the project works
- > Industry-Escalate Training Programs and make Industrial visit and study tour (extend to abroad)
- > Industry—Take feedback of the Industry in formulated curriculum and syllabus
- ➤ Industry—Review quality of the UG/PG projects and encourage taking Industrial problems as projects
- Industry Make Industrial visit and study tour (extend to abroad)

- ➤ Industry—Take feedback of the Industry in formulated curriculum and syllabus
- Industry—Review quality of the UG/PG projects and encourage taking Industrial problems as projects
- ➤ Governance Employ Outcome Based Education and form a Group to monitor
- ➤ Governance—Reconstitute Planning Cell and IQAC and formulate action budget plan
- ➤ Governance—Optimize and strengthen remedial program for weaker students

# Year 2014-15:

Outcome of previous plan (ATR 2014-15)

<ul> <li>Execution of Solid waste management effective disposal system of waste from college &amp; hostels.</li> </ul>	Effective disposal of Solid waste management including e-Waste in place
To renovate the Electrical and water supply facilities of the college with iron removal plant and installing energy saving CFL lights.	The Electrical supply facility with proper backup system in place. Cold and pure water supply facility in place through installation of High-End Water Purifier Machine.
Improve infrastructure of all the departments.	The modernization and removal of obsolete equipment's is a continuous process and renovated in the ongoing year
Re arranges the laboratory support systems and makes it more users friendly.	The Laboratory support system has been renovated with Technical persons and PG scholars taking active participation during lab session.
Encourage teachers to take up Research Projects.	The 2 <sup>nd</sup> set of UGC minor projects applied. The 1 <sup>st</sup> set of UGC minor project implementation status reviewed. The status of RPS project and projects funded by other agencies also reviewed. The Faculty members are encouraged to submit projects in Technical symposium.
➤ To improve the classroom facilities and creation of at least one smart class room per department.	The Lecture rooms are gradually being transformed to Smart Classrooms. Now each department have provision for audio- visual presentation in their Smart rooms / labs. However, transformation process is ongoing.
To organize seminar already sanctioned by UGC, TEQIP &AICTE.	A29aroundworkshops/seminars were organized during TEQIP 1st Phase and more 15 around were organized after getting additional grant in TEQIP. There are JIS Group funded event as well.
To organize conduct an International Conference on Electrical Engineering.	The International Conference in Non-Conventional Energy is conducted in 2014. Moreover, an International Conference on Advancement in Medical Electronics also conducted at the beginning of 2015.
Make internet knowledge compulsory to prepare the assignments and projects.	The enhancement of internet facility has been made and growing tendency of the students using internet-based learning through the systems laboratories and even using their smart phones are increasing
Provide an orientation programme to students to introduce the many programmes of the college.	The Newly entrant students Orientation program has been conducted on August 1 <sup>st</sup> Week and addressed by versatile Speakers from RKM to Skill Development professionals.

> Avail the value education hours to	The Value education and Value-added programs are
introduce the many programmes.	annexed with regular curriculum based programs.
> Conduct training programmes in	Number of Training programs are integrated with
Personality development and soft	regular curriculum programs including ICT based
skills more intensively.	programs (QEEE, BMOOC, Spoken tutorial)
> Make the documentation of IQAC	The IQAC documentation quality improvement is under
more effective with the help of	process and Lead Universities are consulted for the
software.	same.
> To introduce software support for	The Examination system is reviewed and managing
handling examination data.	examination data with process of publication of result
	has been made online through Software Development
Add an manua numban of sources under	wing of JIS Group.
> Add on more number of courses under	The programs under NCVT and other short-term courses are
NCVT.	annexed specially in the department having low admission.
➤ Continue the value addition	Curriculum based Value addition program are
programmes as part of the	implemented. E.g. QEEE Live classes and the Course
curriculum: Each department may	pack addressed by the National Teachers through Live
start a diploma or certificate course as	programs. NPTEL courses are also being encouraged
part of improving the curriculum	and over 1600 number of students enrolled for the
content and issue certificates.	NPTEL courses.
> Interdisciplinary programmes will be	The Interdisciplinary programs are organized. The
organized by way of invited talks,	International Conferences and number of workshops
seminars etc. with the assistance of	organized in this phase are interdisciplinary.
subject associations and various clubs	A PG program on NST is jointly organized by two
functioning in the college.	departments.
> Toorganizeaworkshopfor+2studentsin	Programsforthe10+2studentsareorganizedinwhichtheyc
the state to inspire them in	an display their own innovations and though. In JIS Tech
technological subjects.	Symposium there is a separate School pavilion in which
	school projects are awarded. Also, school networking is
	done in the National Seminar and as part of CEE-AMPAI
	and WBJEE events.
Human Resource Development	The students are trained in multiple skills including
Training for students (HRD Training)	communication and personality development, Aptitude
	and Technical extended up to HR by professionals from
	Industry
> Staff Training programmes will be	Staff Training programs are organized in regular interval.
organized periodically to train the staff	Admin staffs attended skill development in office work
in ICT based teaching	program through TEQIP grant
> Departmental meetings be arranged	All Statutory Committee meetings (AC, BoS, DC) occurred
every month to review the progress of	in frequent intervals.
the academic plan for the current year	The Condition Condition Condition
> All departments will introduce at least	The Good practices from the Department are shared
one worthy practice to be emulated	and provisions are made to make them a Institutional
by other departments and colleges,	practice through Academic Council (Eg the Student
with a definite goal and evidence of	attendance taken by IT Dept. / Math dept.)
success.	
> To develop Digital Library in a full-	The e-Library is already in place in which 30 PC setup is
fledged facility.	installed to facilitate the readers with IEEE IEL, INDEST
	Journals and Open Access journals.

➤ To give a training course in website up-dations to one faculty member from each department. So that the department links in the college website may be kept current and operational.	The overall e-Governance workshop under Outcome Based Education was conducted. However, more consolidated programs are under process.
To covert the campus into an echo friendly campus.	The initiatives are taken to make a Green and Echo friendly campus through various measures (E.g. hard prints are discouraged unless it is too necessary)

# ACADEMIC CALENDAR

Even	Semester	For Continuing Batch	h
1	Academic Programme Commences	January 05, 2015	
2	Celebration of International Youth Day (Birth Day of Swami Vivekananda)	January 12, 2015	
3	Inter College Cricket Tournament (JIS Group)	January 21- January 25, 20	015
4	Governing Body Meeting	January 27, 2015	
5	International Conference 'ICAME-2015'	January 29 & 30, 2015	
6	PUBLICATION OF PG RESULTS	February 6, 2015	
7	Publication of UG results (autonomous)	February 17, 2015	
8	Annual Sports	February 25, 2015	
9	First Test Slot (UG/PG)	March 2 & 3, 2015	
10	Publication of first test result	March 10, 2015	
11	Examination form submission	April 24 to May 4, 2015	
12	Second Test Slot (UG/PG)	April 28 & 29, 2015	
13	Publication of second test result & Continuous Evaluation Report Submission	May 5, 2015	
14	Special Remedial Session for slow learners	May 7 to 13, 2015	
15	Rabindranath Tagore's Birthday Celebration	May 8, 2015	
16	Teaching End	May 12, 2015	
17	Practical Examinations & Viva-Voce (All semester, UG & PG)	May 14 to 22, 2015	
18	Theory Examinations (for all UG & PG)	June 1 to 16, 2015	
19	Governing Body Meeting	June , 2015	
20	Summer Recess	June 17 to June 30, 2015	
ODD	SEMESTER		
		New Batch	<b>Continuing Batch</b>
1	Academic Programme Commences	August 3, 2015	July 1, 2015
2	Admission of new students closes	July 30, 2015	
3	Induction Program for new batch	August 3 to 10, 2015	
4	Governing Body Meeting	August, 2015	
5	Foundation Day	September 1	
6	First Test Slot	September 17 & 18, 2015	
7	Publication of first test result	September 24, 2015	
8	Mid-Semester Break	October 19 to October 26,	2015
9	Form Fill up for ODD Semester Examination under Autonomous Structure	November 6 to 13, 2015	
10	Second Test Slot	November 11 & 12, 2015	
11	Registration of newly admitted students for the session 2015-2016 ends	To be announced by the W	/BUT
12	Publication of second test result	November 18, 2015	

13	Teaching End	November 19, 2015
14	Governing Body Meeting	November, 2015
15	Practical Examinations & Viva-Voce (All semester, UG & PG)	November 20 to 30 , 2015
16	Theory Examinations (for all UG & PG)	December 3 to 22, 2015
17	Inter Semester Break	December 25, 2015 – January 04, 2016
	isitwebsites <u>www.jiscollege.ac.in/www.jisgroup.org</u> inations time to time.	forannouncementsregardingRegistration,

<sup>\*</sup> Attach the Academic Calendar of the year as Annexure.

2.16 Whet	ther the AQAR v	was placed in statuto	ry body	Yes 🗸	No
	Management [	√ Syndicate	Any	other body	
	Provide the deta	ails of the action take	en		
	Inter – depart	tmental audit and ot	her quality m	neasures plac	ced at IQAC.

# Part – B

# Criterion - I

# I. Curricular Aspects

Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	-	-	-	-
PG	4	-	4	
UG	7	-	7	
PG Diploma				
Advanced Diploma				
Diploma				
Certificate				
Others				
Total	11		11	
Interdisciplinary				
Innovative				

(i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options
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(ii) Pattern of programmes:

Pattern	Number of programmes
Semester <b>√</b>	19
Trimester	
Annual	

Feedback from stakeholders* (On all aspects)	Alumni 🗸	Parents v	Employers v	Students
-	Online	Manual v	Co-operating scho	ols (for PEI)
* Please provide an analysis of the fe	edback in the Annexur	re		

(Illustrative: https://jiscollege.ac.in/academic-feedback.php)

Based upon the following PEO-PO the analysis of Feedback has been provided in the following:

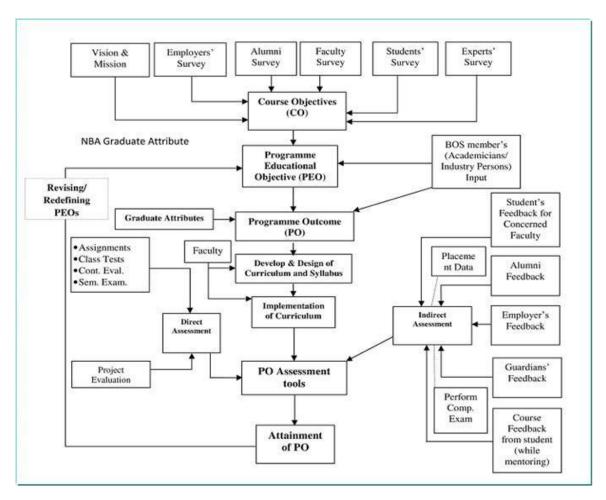


Diagram 2: Stakeholders' Feedback at Outcome based education Framework

Whether there is any revision / update of regulation or syllabi, if yes, mention their salient 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 in several 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.

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) synchronization creation through CO-PO mappings is defined perfectly. 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 a social responsibility for an Engineering to contribute innovation towards the improvement of our environment. In association with the human value and professional ethics are mandatory parts of a student to become a complete engineer. Curriculum structure integrates all the essential ingredients.

Any new Department/Centre introduced during the year. If yes, give details. : No new department. However, the following Centre is opened:

- Centre for Quality Enhancement in Engineering Education (QEEE): this centre is TEQIP
  funded to conduct live classes for the Students by the National Teachers. This lab is according to
  the framework of MHRD and resourced by IIT Chennai. QEEE Course Pack in selected subjects
  are attended by the students across the Disciplines.
- Collaborative Learning and Innovation Centre (CLIC): This centre is initiated through collaboration with Tata Technologies for enhancement of professional skills in the core engineering Section. The students with the background of Civil, Mechanical and Electrical Engineering background were benefited through the range of activities from Industrial training to Industrial visit.

## Criterion - II

# I. Teaching, Learning and Evaluation

1.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
202	162	20	20	

1.2 No. of permanent faculty with Ph.D.

52	
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1.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst.		Associa	ite	Profes	sors	Others	1	Total	
Profes	sors	Profess	ors						
R	V	R	V	R	V	R	V	R	V
11				03				14	

1.4 No. of Guest and Visiting faculty and Temporary faculty

11	-	-
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1.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	38	16	6
Presented papers	34	08	-
Resource Persons	NA	-	5

1.6 Innovative processes adopted by the institution in Teaching and Learning:

# • Teaching \_Learning Process and co-curricular

- The Institute under Autonomous Structure adopted ICT based learning from the inception of the Autonomy. Previously, Audio Visual Teaching Aids were used selectively.
- IIT Bombay Remote Centre, Resource Center and IIT Chennai resourced QEEE Centre were established.
- In the recent past, the Institution made a paradigm shift in teaching —learning by introducing "Flipped Learning" mandatorily.
- NPTEL Centre coordinated by IIT Kharagpur has been established.
- The Spoken tutorials are launched.. coordinated by IIT Bombay

#### • Skill Development and Communication Initiative

- The British Council Centre of Communication has been launched. The BCL membership is in place and efforts are on to launch "APTIS" module in the quest of betterment of communication skill.
- Number of Value addition Centers has been established to boost both the domain knowledge, skills and encouraging innovation

- The Collaborative Learning and Innovation Centre (CLIC) by the Tata Technologies has been setup and students of core engineering are trained with State-of the Art Tools 'public speaking' ability.
- "Speaker's Corner" is an initiative to provide the students platform to share their ideas and also to improve on their

#### Research and Innovation

- The number of research projects through funding agencies multiples under autonomy. Innovations are encouraged to the extent under autonomous Framework.
- The Projects from Regulatory Bodies (like AICTE MODROB-RPS, UGC minor project) as well as from other agencies DST, CSIR were granted only under autonomous structure.
- CII innovation Centre has been setup. Number of workable patent are filed and expected to be commercialized after patents are granted
- Number of Value addition Centers has been established to boost both the domain knowledge, skills and encouraging innovation
- The Collaborative Learning and Innovation Centre (CLIC) by the Tata Technologies has been setup and students are trained with State-of the ArtTools

1.7	Total No. of actual teaching days	[	
		230	
	during this academic year		
1.8	Examination/ Evaluation Reforms initiated by		
	the Institution (for example: Open Book Examination	, Bar Coding,	
	Double Valuation Photocopy Online Multiple Choice	ea Quactions)	

#### • Examination Reforms

- The examination reforms took place under autonomous structure. This is different than MAKAUT structure
- A portion of the paper setting and evaluation of scripts is done externally from lead Universities
   / Institutions.
- Mandatory review of results by the BoE before results publication
- Results are also available online
- On-line Class tests have been conducted.
- Continuous Performance Evaluation is made effective.

Efforts are on to conduct Flipped / Digital Evaluation and assessment

1.9 No. of faculty members involved in curriculum restructuring/ revision/ syllabus development as member of Board of Study / Faculty / Curriculum Development workshop

- All Departmental Committee members are part of BOS.
- 8-teachnological disciplines each having a DC team-size around 15. All of them are member of BOS in addition to Expert members from University and Industry.
- All of them attended curriculum workshop organized at various times after obtaining autonomy (viz. NITTTR pedagogical workshop etc..), associated with restructuring / revision of syllabus.

- All the above information is applicable to UG autonomy as Academic autonomy was availed from the commencement of each and every PG courses.
- 1.10 Average percentage of attendance of students

75

## 1.11 Course/Programme wise distribution of pass percentage: 2016 Pass out Batch

Title of the Programme	Total no. of students					Division
Trogramme	appeared	Distinction %	Ι %	II %	III %	Pass %
BME	20	40%	20			100%
CE	144	30%	143			99.3%
CSE	97	32%	97			100%
ECE	114	40%	112			98.2%
EE	106	31%	104			98.1%
EIE	25	28%	24			96%
IT	27	30%	27			100%
ME	140	22%	138			98.5%
AEIE	3	67%	3			100%
MCSE	4	75%	4			100%
MCNT	8	88%	8			100%
EDPS	7	86%	7			100%
ITSE	1	100%	1			100%
MME	2	50%	2			100%

## 1.12 How does IQAC Contribute / Monitor / Evaluate the Teaching & Learning processes:

Course-coverage is monitored by HOD and reports the same to the Principal. Wherever, a deviation is observed, the HOD seeks clarification from the faculty member concerned and connect Mentor. Special remedial class work is planned. The evaluation procedure for both theory and lab exams are kept transparent. The teacher issues answer scripts of the periodical tests to students and internal lab examinations with his / her comments. Discrepancies reported by any student are verified and necessary action is taken before the marks statement is finalized. When a student feels dissatisfied with marks allotted, he / she may seek the intervention of the HOD. If the problem remains unaddressed, then the student may bring it to the attention of the principal. The mentoring

programme and Continuous evaluation system continuously with regular academic process.

First year students are given Hand Book containing:

Academic Calendar, Class & Examination Schedules, Syllabus etc

The following information is given at the college website and Notice Boards,

- Statement of Vision and Mission
- Rules and regulations
- Anti-Ragging Declarations and college facilities against ragging
- Necessary contact person's name with phone numbers.
- Events schedules

# 1.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	
UGC – Faculty Improvement Programme	
HRD programmes	04
Orientation programmes	01
Faculty exchange programme	
Staff training conducted by the university	03
Staff training conducted by other institutions	05
Summer / Winter schools, Workshops, etc.	10
Others (Seminars) International Conference: 1 International Symposium: 1	10

# 1.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	36			
Technical Staff	40			

## Criterion – III

# III Research, Consultancy and Extension

Initiatives of the IQAC in Sensitizing / Promoting Research Climate in the institution:

Enhancement of R&D and institutional consultancy activities:

Area: Number of research projects by the faculty individually, jointly, and collaboratively. Expected outcome of each project

- Submission of maximum no. of projects to the funding authorities throughout the year with a projected plan along with budget
- Getting DSIR certification for getting project funding from funding agencies like DBT.
- Setting up various MOUs with reputed Industries and emphasis to be given on solving live problems of the Industry as R&D problem.
- Mini-projects/Innovative experiments need to be introduced at each of UG level practical course with an objective to nurture the innovative mindset of the students and produce future generation researchers.
- To make some of the PG projects interdisciplinary in nature. Where, active participation and knowledge sharing across the departments become possible.
- Annual R&D news may be published to highlight achievements in various sectors of research and development across the discipline.

Area: Research papers publication

- Emphasis on interdisciplinary research work.
- Motivate young faculty members more on R&D publication in good quality journals.
- Involve, PG students in the process of publication.

Area: Organization of in-house seminar conferences

- 1 National, 2 Regional, 4 Institutional Seminar should be organized per department per annum.
- At least 1 International Conference should be organized per annum

Area: Patenting of R&D work

- More patent proposal to be submitted.
- R&D cell may organize one workshop on issues related to patenting, which will highlight the entire process of patenting R&D achievements and related rules.

Area: State of the R&D software

☐ Procurement of more quality R&D centric software packages of	lepending on the availability of
funding.	

Area: Qualification up gradation (National/International)

- Support paper publication only in SCI indexed journals.
- Motivate young faculty members in PhD enrolment.
- The Institute has been already selected as the centre for conducting PhD course work. Proper utilization of this opportunity as well as develop a perfect platform for quality up gradation from the Institute itself.

Area: Subject knowledge and research competence up gradation (National/International) and Participation in seminars, conference, workshop (National/International)

- Emphasis on larger participation of faculty members in seminar/conference within the Country.
- Special emphasis on paper presentation and Invited talk rather than only participation.

Area: Institutional Management Capacity enhancement

- Motivate more senior faculty members in events related to Management Capacity Enhancement.
- Motivate middle level faculty members in participating workshops on 'Outcome based system'.
  - The number of research projects through funding agencies multiples under autonomy. Innovations are encouraged to the extent under autonomous Framework.
  - The Projects from Regulatory Bodies (like AICTE MODROB-RPS, UGC minor project) as well as from other agencies DST, CSIR were granted only under autonomous structure.
  - CII innovation Centre has been setup. Number of workable patents are filed and expected to be commercialized after patents are granted
  - Number of Value addition Centers has been established to boost both the domain knowledge,
     skills and encouraging innovation.

The Collaborative Learning and Innovation Centre (CLIC) by the Tata Technologies has been setup and students are trained with State-of the Art Tools.

Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number		7		
Outlay in Rs. Lakhs		100		

Note: UGC major projects are not applied yet.

# List of funded projects

Sl. No	Title of the Project	Granting Authority	Letter No.	Amount of Grant	Principal Investigator or equivalent
1	Carrier Award for Young Teachers (CAYT)	AICTE	AICTE (CAYT) 11-45/RIFD/CAYT/POL- I/2014-15 dt. 16.03.2015	-	Dr. Biswarup Neogy
2	Design & Development of a Cardiac parameter Monitoring System using common mobile phone for affordable patient care	AICTE (RPS)	AICTE (RPS) 20/AICTE/RIFD/RPS (Policy-1)32/2013-14	10,55,000/-	PI: Dr. Meghmala Dutta & Dr. Somsubhra Gupta
3	Produce the knowledge-based database of electromyography (EMG) signal to enrich the interpretation technique for different human arm movement.	AICTE (RPS)	AICTE (RPS) 20/AICTE/RIFD/RPS(Policy-IV)24/2012-13 dt. March 16, 2014		Dr. Biswarup Neogi
4	Solar Photovoltaic hybridization with usual grid to compensate peak load demand at JIS College of Engineering Kalyani.	AICTE (RPS)	AICTE (RPS) 20/AICTE/RIFD/RPS(Policy-IV)24/2012-13 dt. March 16, 2014	8,00,000/-	Rakesh Naskar
5	Natural language processor incorporating auto- debugger under the framework of machine intelligence.	AICTE (RPS)	AICTE (RPS) No: 20/AICTE/RIFD/RPS (POLICY-1) 33/2013-14		Dr. Somsubhra Gupta
6	'In silico design of novel molecular spintronic devices through nonequilibrium Green's function technique'	CSIR	CSIR [letter No. 03(1256)/12/EMR-II Dated:06-11-2012]		Dr. Sabyasachi Sen
7	TEQIP-II Grant Sub Comp. 1.2	MHRD	NPIU		Institutional

# Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number		24		
Outlay in Rs. Lakhs		INR 72,09,000		

# List of funded projects

Sl. No	Title of the Project	Granting Authority	Letter No.	Amount of Grant	Principal Investigator or equivalent
1	UGC Minor Project	UGC	PSW -190/14-15(ERO) dt. 03.02.2015	Rs. 4,70,000/-	ECE (Moumita Pal)
2	UGC Minor Project	UGC	PSW -191/14-15(ERO)dt. 03.02.2015	Rs. 4,00,000/-	BME (Souvik Das)
3	UGC Minor Project	UGC	PSW -192/14-15(ERO) dt. 03.02.2015	Rs.80,000/-	ECE (Anirban Patra)
4	UGC Minor Project	UGC	PSW -193/14-15(ERO) dt. 03.02.2015	Rs. 4,75,000/-	ECE (Swastika Chakraborty)
5	UGC Minor Project	UGC	PSW -194/14-15(ERO) dt. 03.02.2015	Rs. 5,00,000/-	ECE (Dr. Biswarup Neogi)
6	UGC Minor Project	UGC	PSW -195/14-15(ERO) dt. 03.02.2015	Rs. 4,95,000/-	ECE (Dr. Indranath Sarkar)
7	UGC Minor Project	UGC	PSW -196/14-15(ERO) dt. 03.02.2015	Rs. 4,20,000/-	IT (prolay Ghosh)
8	UGC Minor Project	UGC	PSW -197/14-15(ERO) dt. 03.02.2015	Rs. 2,85,000/-	IT( Suparna Dasgupta)
9	UGC Minor Project	UGC	PSW -198/14-15(ERO) dt. 03.02.2015	Rs. 3,00,000/-	IT (Debasree Mitra)
10	UGC Minor Project	UGC	PSW -199/14-15(ERO) dt. 03.02.2015	Rs. 1,50,000/-	IT (Soham Sengupta)
11	UGC Minor Project	UGC	PSW -200/14-15(ERO) dt. 03.02.2015	Rs. 4,20,000/-	EIE (Sayanti Chattopadhyay)
12	UGC Minor Project	UGC	PSW-182/13-14 dt 02-09- 2014	Rs. 4,70,000/-	BME (Dr. Meghamala Dutta)
13	UGC Minor Project	UGC	PSW-183/13-14 dt 02-09- 2014	Rs. 2,50,000/-	Chem (Tanmoy Dutta)
14	UGC Minor Project	UGC	PSW-184/13-14 dt 02-09- 2014	Rs. 2,60,000/-	Chem( Dr. Mahuya Das)
15	UGC Minor Project	UGC	PSW-185/13-14 dt 02-09- 2014	Rs. 3,38,000/-	CA (Dr. Subhranil Som)
16	UGC Minor Project	UGC	PSW-186/13-14 dt 02-09- 2014	Rs. 4,00,000/-	CSE (Satrughna Singha)
17	UGC Minor Project	UGC	PSW-187/13-14 dt 02-09- 2014	Rs. 3,06,000/-	CSE(Sumanta Chatterjee)
18	UGC Minor Project	UGC	PSW-188/13-14 dt 02-09- 2014	Rs. 2,05,000/-	Chem (Trina Dutta)
19	UGC Minor Project	UGC	PSW-189/13-14 dt 02-09- 2014	Rs. 4,70,000/-	Physics(Dr. Swagata Bhattacharjee)
20	UGC Minor Project	UGC	PSW-190/13-14 dt 02-09- 2014	Rs. 4,70,000/-	Physics(Dr. Sabyasachi Sen)
21	UGC Minor Project	UGC	PSW-191/13-14 dt 02-09- 2014	Rs. 3,75,000/-	BME (Dr. Sandip Bag)

22	UGC Minor Project	UGC	PSW-192/13-14 dt 02-09- 2014	2,60,000/-	CSE (Monalisa Dey)
23	UGC Minor Project	UGC	Published in UGC website dated 09/09/2016, letter not yet received	Rs. 190,000/-	BME (Mr. Rupak Bhattacharjee)
24	UGC Minor	UGC	Published in UGC website	Rs. 3,75,000/-	BME (Mr. Santanu
	Project		dated 09/09/2016, letter not yet received		Mondal )

# Details on research publications

	International	National	Others
Peer Review Journals	45	1	
Non-Peer Review Journals			
e-Journals			
Conference proceedings			

Details on Impact factor of publi	ications:			
Range	verage	h-index	Nos. in	SCOPUS
Research funds sanctioned and re	eceived from	various funding ager	ncies, industry	and other
Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	-		ı	-
Minor Projects	-	=	ı	-
Interdisciplinary Projects	-	-	-	-
Industry sponsored				
Projects sponsored by the University/ College	1 year	JIS College of Engineering	1292300/-	1286114
Students research projects (other than compulsory by the University)		0		
Any other(Specify)				
Total				
No. of books published i) With	i ISBN No. iout ISBN No		rs in Edited Bo	oks 3

No. of University Departments receiving funds from

	UGC-SAI		CAS		DST-FIST		
	DPE		L		DBT Schei	me/funds	
For colleges	Autonomy	٧	СРЕ		DBT Star S	Scheme	
INSPIRE			CE		Any Other	(specify)	
_	enerated through cons	·	- tion				
Level	International N	ational		State	University	College	
Number							
Sponsoring							
agencies							
No. of coll	aborations ages created during the	Internation	nal 1	Nationa	3	Any other 4	
Total buda	et for research for cur	rant waar in		) Lace (10	M Lace under		
Total budg	et for research for cur	ieni yeai in	iakiis. 100	Lacs (10	O Lacs under		
TEQIP)							
From Fund	ling agency V						
From Man	agement of University	//College	٧				
Total	100 Lacs						
No. of pat	ents received this year	Type	of Patent			mber	
		National		Applied		9	
				Granted Applied		-	
		Internation	onal	Granted			
		C	:.1:1	Applied			
		Commer	cialised	Grante			

No. of research awards/recognitions received by faculty and research fellows Of the institute in the year

	Total	International	National	State	University	Dist	College		
	3		3						
who are Ph and students	D. Gui registe	the Institution ides red under them		stitution	- -				
No. of Rese	arch scl	holars receiving	g the Fellov	vships (	Newly enroll	ed + ex	xisting one	s)	
JRF		SRF	1	Project	Fellows		Any other		
No. of stude	nts Part	icipated in NSS	S events:						
				Univer	sity level	4034	State leve	el	
				Nation	al level		Internatio	nal level	
No. of stude	nts part	icipated in NC	C events:						
				Unive	rsity level	367	State leve	el	
				Nation	nal level		Internation	onal level	1
No. of Awa	rds won	in NSS:			_				
				Univer	sity level	-	State leve	:1	
				Nation	al level		Internatio	nal level	
No. of Awaı	rds won	in NCC:			_				
				Univer	sity level		State leve	:1	
				Nation	al level	1	Internatio	nal level	
No. of Exte	nsion ac	etivities organiz	zed						
Univers			College fo	rum [	11		(Club activ	vities)	
NCC	•	5	NSS	_ 	10		other		

Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- Special emphasis on Club Activities under autonomous framework
- Different clubs viz. Engineering Modeling Club, Science Club, Literature Club, Photography Club setup after obtaining Autonomy.
- Corporate Social responsibility (CSR) programs through Community Connect Club are a regular practice.
- Various Sports and Cultural tournaments conduction and participation by the students is a regular activity after obtaining autonomy.

## Institutional Social Responsibility:

- Visit to Oldage home and program through Community Connect Club
- Visit to Orphanage Home
- Visit to School and donate accessories

# **Criterion - IV**

# 4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	17.5			
Class rooms	67	7 smart rooms		
Laboratories	70			
Seminar Halls	2			
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	7			
Value of the equipment purchased during the year (Rs. in Lakhs)	27			
Others				

<sup>\*\*</sup> QEEE Server and IBM server, ECG machine etc..in RPS.

## 4.2 Computerization of administration and library:

Electronic resources:

E-Books:

Central Library-JISCE subscribed 640 e-books package of IEEE-Wiley. In College campus all around it is visible in IEEE's website. Users may download, print and read.

#### **E-Journals:**

Being a self-supported member of the AICTE-INDEST Consortium (Since January, 2007), online access facility to IEEE/IEE Electronics Library (IEL Online) The IEEE ASPP provides access to IEEE's core collection of technology journals. With peer-reviewed publications concentrating on theoretical and experimental papers, as well as practical applications in research, design, and specification, ASPP offers valuable research on a variety of topics. which includes:

179 IEEE online society-sponsored journals, transactions, and magazines

Institutional Digital Repository: JIS College of Engineering:

Link is: http://172.17.80.5:8080/jspui/

JIS College of Engineering, Central library setup a repository to management of e-resource. Repository has following category of documents:

Conference Proceeding Course Material E-Books E-Journals Faculty Publication Lecture Note

NPTEL Wireless Communication Online Course Video Lectures-IIT Delhi-NPTEL Question Papers
Tutorials Video Lectures

1700 document has been digitized and uploaded into digital library. It should be accessible to around the college campus.

#### **Library Automation:**

The integrated library management software (LibSys) was procured in 2004. The preparation of database for books, loose issues of journals (retro-conversion) and membership (or users database) using this software has already being completed. The addition of books and other learning materials are being entered regularly in to the system to make the library database comprehensive and up-to-date. The charging and discharging of books to faculty members and students are being done using this system is continued. The library has already procured and installed high-end IBM computer server with redundant power supply for smooth operation of the library management system (LibSys) and safe archival of library database. This state-of-the-art server increases the database security. As a result, it reduces the chance of system failure leading to loss of data.

#### 4.3 Library services:

At present, the library has more than **88,042** copies of books, **6,080 titles** and 2,900CD-ROMs in its collection besides it subscribes 121 (108+13) printed journals.

Course	Acad emic Year	Subject	Numb er of titles	Number of volumes	Nationa I Journals (Printed )	International Journals (Printed)	E- Journal s
B.TECH IN:  CSE, IT, EE,	2016	Computer science & Information Technology	1262	14,150	108	1 3	208 Title in IEEE
EIE, ECE, ME, BME,CE		Computer Application (CA)	227 213	4,460 9,138			Member of AICTE
M.TECH IN:		Electrical engineering Electronics & Instrumentation	195	5,163			INDEST Consorti um and

EDPS,	engineering				subsc
MCNT,	Electronics &	606	9,075		
MCSE, SE	Communication				
	Engineering				

	Chemistry, Bio-science	368	4,811	
MCA &	& EVS engineering			
MBA	Mechanical engineering	517	8,249	
DEE	Civil Engineering	105	4,508	
	Humanities	210	2,725	
	Mathematics	358	5,269	
	Physics	195	5,619	
	Management	1310	10,088	
	M.Tech	490	4,096	
	Electrical Diploma	24	691	
	TOTAL	6,080	88,042	

#### 4.4 Technology up gradation(overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart- ments	Others
Existing	800	12	50 mbps railtel	Yes	Yes		CSE/ IT/CA	ECE/ EE/ EIE
Added	50							
Total	850							

# 4.5 Computer, Internet access, training to teachers and students and any other programme for technology up gradation (Networking, e-Governance etc.)

Number of computing systems with different computational environment viz. Client Sever, N-computing, Cloud etc.

Internet connection of 50mbps(Railtel) and emergency admin connection through BSNL

Training to teachers through live classes in Smart Classrooms via IIT-NMEICTISTE workshops in the summer and winter. JISCE is an remote centre(RC-1335)

Design Lab certification to the students via online exam under IIT-MHRD framework

 Technology up-gradation in various operations like payroll management, biometric employee attendance, material requisition etc.

Technology up-gradation in research viz. Solar Light installation via RPS project

Wi-fi enabled audio visual Project presentation Lab for skill enhancement

- State of art Language Lab

4.6 Amount spent on maintenance in lakhs: (2014-15)

i) ICT 10.67

ii) Campus Infrastructure and facilities 6.01

iii) Equipments 15.93

iv) Others

**Total:** 32.62

# Criterion - V

# 5. Student Support and Progression

- 5.1 Contribution of IQAC in enhancing awareness about Student Support Services
  - Students representative In IQAC
  - IQACinstrumentalinformulationofStudentsLifeCentre.Atotalof11clubactivities are there for the students
  - Sports Club , Science Club, Engineering Modelling Club, Mathematics Club are few illustration.
  - Internal Quality Assurance Cell formulated the appraisal through stakeholders feedback in assessing students support.
- 5.2 Efforts made by the institution for tracking the progression
  - Monitoring and evaluation
  - Mentoring
  - Appraisal
  - Feedback
  - Continuous performance evaluation
- 5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
2681		-	-

(b) No. of students outside the state

336

(c) No. of international students

25

Men	N	O	%	Women	N	О	%				
	22	55	84.11		42	26	15.88	3			
			Last Ye	ar					This Yea	r	
General	SC	ST	OBC	Physically Challenged	Total	Genera	al SC	ST	OBC	Physically Challenged	Total
397	95	1	105		598	352	42	3	74		471
201	1 15				20	15 16					

2014-15 2015-16

Demand ratio Dropout %

- 5.4 Details of students support mechanism for coaching for competitive examinations (Ifany)
  - GATE Coaching for the student
  - Coaching for GMAT/CAT
  - Aptitude training by Professional House for Competitive exams.

No. of students beneficiaries

446

5.5 No. of students qualified in these examinations

NET	SET/SLET	GATE	2	CAT	
IAS/IPS etc	State PSC	UPSC		Others	4

- 5.6 Details of student counselling and career guidance
  - Students counseling are done in multiple platforms viz. departments through mentorship programme
  - Domain Specific training
  - Aptitude training as Career guidance via Placement Cell
  - Via TEQIP Equity Action Programme etc.

No. of students benefitted

546

## 5.7 Details of campus placement

	On campus					
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed			
40	621	426	122			

- 5.8 Details of gender sensitization programmes
  - Gender sensitization is taken into account in right from admission to equity action plan so as to ensure a balanced ratio between male-female.
  - Institutional Women Cell is instrumental in hosting awareness programme
  - The equity factor is evident at objective of the institution in treating everyone equally

# 5.9 Students Activities

5.9.1	No. of students participated in Sports, Games and other events					
	(Cricket, Tech Symposiu	ım, other	Tech Fest, AICT	E Hackatl	hon, NPTEL)	
	State / University level	200	National level	15	International level	
	No. of students participa	ated in cu	ıltural events			
	(College events, Book F	air)				
	State/University level	73	National level	5	International level	35
5.9.2	No. of medals /awards v	won by st	tudents in Sports,	Games an	d other events Sports	:
State/	University level	10	National level	-	International level	_
Cultuı	ral: State/University level	25	National level	-	International level	4

Year	Name of the award/ medal	Team / Individual	inter-university / state / National/ International	Name of the event	Name of the student
					JISCE Cricket
2015-2016	Winner	Team	Inter-University	Cricket Premier League 2016	Team
				KCEM Challengers Cricket	JISCE Cricket
2015-2016	Winner	Team	Inter-University	Tournament 2016	Team
				BBIT CHAMPION'S TROPHY	JISCE Cricket
2015-2016	Runner Up	Team	Inter-University	2016	Team
				3RD SARDAR JODH SINGH	
		_		CHALLENGERS TROPHY	JISCE Cricket
2015-2016	Runner Up	Team	Inter-University	2019	Team
				IDEAL INSTITUTE OF	
2015 2016	2.1	T 11 1 1	T . TT	ENGINEERING Inter College	Aslam Hossain
2015-2016	2nd	Individual	Inter-University	Sports Meet 2016: Run 1600M	Molla
				IDEAL INSTITUTE OF	
2015 2016	24	To diesi des al	T I I	ENGINEERING Inter College	Vivek Kumar
2015-2016	2nd	Individual	Inter-University	Sports Meet 2016: Long Jump	Vivek Kumar
				IDEAL INSTITUTE OF	
				ENGINEERING Inter College Sports Meet 2016: Throwing	
2015-2016	3rd	Individual	Inter-University	Discus	Pradip Ghosh
2013-2010	Siu	marviduai	inter-Oniversity	GIS Map making Competition:	Fraulp Gliosii
				Education camp & Study Tour	
2015-2016	3rd	Individual	International	2016 AIT, Thailand	Tuhin Dutta
2013-2010	Sitt	marviduai	memational	GPS Pack Rat Game: Education	Tullii Dutta
				camp & Study Tour 2016 AIT,	SubhamSenGupt
2015-2016	2nd	Individual	International	Thailand	a
2013-2010	Ziid	marviduai	memational	Aamar Durga Puja Photography	a
2015-2016	1st	Individual	Inter-University	Contest 2016	Koustav Das
2010 2010	150	11101 ( 10001	inter emversity	STCET: Inter College Football	JISCE Football
2015-2016	Runner Up	Team	Inter-University	Tournament 2016	Team
		2 4 11122		STCET: Inter College Cricket	JISCE Cricket
2015-2016	Winner	Team	Inter-University	Tournament 2016	Team
		2 0 0 0 0 0		KCEM Challengers Football	JISCE Football
2015-2016	Winner	Team	Inter-University	Tournament 2016	Team
			•	Solo Vocal Competition:	
				Education camp & Study Tour	
2015-2016	3rd	Individual	International	2016 AIT, Thailand	Md. Arif Alam
				Dance Competition: Education	
				camp & Study Tour 2016 AIT,	
2015-2016	3rd	Individual	International	Thailand	TithiSingha Roy
				JAGRITI 2016: Eastern Vocal	Subham Kumar
2015-2016	1st	Individual	Inter-University	Solo Competition	Mahanty
				NITMAS Impulse 16: Drama	Aroma
2015-2016	1st	Individual	Inter-University	Competition	Mukherjee
				NITMAS Impulse 16: Solo	
2015-2016	1st	Individual	Inter-University	Song Competition	Soumita Mondal
				NITMAS Impulse 16: Drama	
2015-2016	2nd	Individual	Inter-University	Competition	Madhura Sur
				NITMAS Impulse 16: Musical	
2015-2016	1st	Individual	Inter-University	Instruments	Arpan Hazra
				IDEAL Institute of Engineering	
201 <u>5-2016</u>	1st	Individual	Inter-University	:Inter College Cultural Meet	Durba Santara

				2016	
2015 2016	21	To disside al	Total Hairraite	IDEAL Institute of Engineering :Inter College Cultural Meet	Carabanita Maita
2015-2016	3rd	Individual	Inter-University	2016	Sucharita Maity
2015-2016	2nd	Individual	Inter-University	IDEAL Institute of Engineering :Inter College Cultural Meet 2016	Subham Kumar Mahanty
2015-2016	1st	Individual	Inter-University	JISTech2k16:Wall Magazine Competition	Pritam Bhattacharaya
2015-2016	2nd	Individual	Inter-University	JISTech2k16: Sand Art Competition	Pronoy Mondal
2015-2016	1st	Individual	Inter-University	JISTech2k16:Video Making Competition	Rajeev Kumar Singh
2015-2016	2nd	Individual	Inter-University	JISTech2k16: Gamezone	Partha Adhikary
2015-2016	2nd	Individual	Inter-University	JISTech2k16:Travel vlog Contest	Aatish Raj
2015-2016	2nd	Individual	Inter-University	JISTech2k16: Poetry Competition	Rajesh Pachhal
2015-2016	1st	Individual	Inter-University	JISTech2k16:Photography Competition	Abhishek Chatterjee
2015-2016	3rd	Individual	Inter-University	JISTech2k16:TechTalk Competition	Anandarup Ghosh
2015-2016	2nd	Individual	Inter-University	JISTech2k16: Creative Art Competition	Ananta Mandal
2015-2016	1st	Individual	Inter-University	JISTech2k16:Photography Competition	Aroma Mukherjee
2015-2016	3rd	Individual	Inter-University	JISTech2k16: Poetry Competition	Arunima Jana
2015-2016	1st	Individual	Inter-University	JISTech2k16: Hand Craft Competition	NabanitaGhosh
2015-2016	1st	Individual	Inter-University	JISTech2k16: Debate Competition	AnanyaBhowmik
2015-2016	1st	Individual	Inter-University	JISTech2k16: Wall Magazine Competition	Rama Basak
2015-2016	2nd	Individual	Inter-University	JIS Tech 2k16: Sand Art Competition	Pooja Das
2015-2016	2nd	Individual	Inter-University	JISTech2k16: Gamezone	Geetanjali Saha

# 5.10 Scholarships and FinancialSupport

	Number of students	Amount (in lacs)
Financial support from institution	67	22.75
Financial support from government	491	210.53
Financial support from other sources	0	0
Number of students who received International/ National recognitions (TEQIP scholarship –world bank)	Included in G	ovt. support

# 5.11 Student organised /initiatives

Fairs	: State/University level	2	National level	International level	
Exhibitio	on: State/University level	4	National level	International level	
5.12 No	o. of social initiatives unde	ertaken by	the students		
5.13 Maj	or grievances of students	(if any) re	dressed:		

## Criterion - VI

# 6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

#### Vision

Our Vision is 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.

6.2 Does the Institution has a Management Information System

Yes. The following activity heads are maintained through MIS:

- 1. Accounts and financial works
- 2. Store and material requisition
- 3. Staff attendance biometric and leave approval
- 4. Library and information science (through libsys)
- 6.3 Quality improvement strategies adopted by the institution for each of the following:
  - 6.3.1 Curriculum Development
  - 5. Institutional objective must be reflected indepartmental programme educational objective (PEO).
  - 6. Stakeholders(student,guardian,alumni,employer)feedbackmustbetakenand analysed before framing out the syllabus.
  - 7. TheBOSofalltechnologicaldepartmentsmusttakeintoaccounttheInstitutional Vision, Mission and objective and frame the Curriculum accordingly.
  - 8. The credit range has been suggested
  - There should be a balance between professional core, professional elective
    and free electives with basic science, engineering science and humanities
    subjects.
  - 10. Curriculum must be outcome based
  - 11. Attainment parameters and measurement of outcome has to be given immense importance.

#### 6.3.2 Teaching and Learning

Improving existing teaching method by adopting a mix of new techniques-

- 1. Lecture method- interactive technique-case study- tv commercials
- 2. Simulation problem based learning
- 3. Groupdiscussion-pictureprompt-individualpresentation-tournament-role play
- 4. Assignment
- 5. Workshops
- 6. Brainstorming
- 7. Learning by doing –web based instruction etc..

#### 6.3.3 Examination and Evaluation

The following reforms has been made—

- Class tests has been conducted online
- Each course syllabus has been parted in to Section A, Section-B. One part is set internally and another part externally from lead Universities/institutions of the state in the case of UG.
- In PG, half of the papers are set externally and remaining half internally from the lead Universities/Institutions.
- Evaluation and result declaration time line is set with in 1 month.

Maintaining Evaluation standard has been given high priority

#### 6.3.4 Research and Development

Research is the key factor in the institutional identity and overall grading and rating of the institution. Innovative research gives recognition to an institute. On the contrary, institute which are weak in research become dependent on the outside supply of the knowledge. Faculty members of JISCE shall involve in conduction and publication of quality research.

- To facilitate improvement in research quality
- To publicize programme strengths to attract top students, faculty and funding
- To identify potential research collaborators
- To make more rational and strategic resource allocation decision.

Following research bench marking criterion has been introduced:

- Number of highly cited researchers in the institute
- Academic performance per faculty
- Total article sin reputed journals
- Number of citations
- H-index of institute and individual faculty members
- International collaborations

#### 6.3.5 Library, ICT and physical infrastructure /instrumentation

#### Recommendation for library includes:

- Online library management systems.
- Enough reading time beyond official hour.
- Consistent inclusion of quality Books and Journals from time to time.
- Reseal able number of titles with volumes.
- Subscription to high-end e-journal repository like IEEEIEL or Springer link to aid researchers.
- Opening up e-library segment and gradually converting it to digital library
- Lecture videos and web lecture repositories.
- Availability of the text books in the Book bank section.
- Grow reading culture of text and reference books.

#### Recommendation for infrastructure:

- Procurement of equipments in traditional engineering in a regular interval. Keeping focus on modernization and removal of obsolescence
- Computing departments will have enough resources in terms of High end equipments like Server, internet Servers, PCs ETC.. Timely upgradation of the same.
- Regular incorporation of instrument tool kit in electronics and allied fields.
- Incorporation of equipments/instruments through research projects RPS etc.
- For quality and standard of utilization with a slogan "Lab to land", implemented successfully through are search project in which Solar lights are successfully installed.

#### 6.3.6 Human Resource Management

#### Recommendations are as follows:

- Identify people intended towards teaching, training and learning and to setting the benchmark for best performance from them.
- Encourage strong Faculty and Staff development Plan so as to train them strongly in domain knowledge and pedagogical aspects.
- Identifying people have strong research potential and scholarly attitude and encourage them to attract funding agencies and apply research projects
- Encourage hosting International and National Conference so as to enhance reputation of the institution.
- Identify people with leadership skills
- Groom them with administrative responsibilities.
- Find people with strong co-curricular/extra-curricular skills and encourage them to organize sports/social cultural events etc.

#### 6.3.7 Faculty and Staff recruitment

By following the recruitment policy of the JIS Group to which the Institution belongs. There are steps like paper advertisements, conducting interviews by the eminent professors from lead universities/institutions etc.

## 6.3.8 Industry Interaction / Collaboration

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
   Etc.

Students successfully achiever prize in Industrial events like SOA(TCS), Transition(CTS), Aspiration(Infy)etc..

#### 6.3.9 Admission of Students

Being a Engineering College in the State and autonomous institution affiliated to State University, it strictly adhere to admission policies of WBJEE Board through JEE(main), WBJEE, AMPAI and other statutory provisions.

6.4 Welfare schemes for

Teaching	Fast track increment/ promotion
Non teaching	Same
Students	Recognition / Prize for the achievements

6.5 Total corpus fund generated

Rs. 21.0502227

6.6 Whether annual financial audit has been done

es	٧	No	

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

Audit Type	External		Internal	
	Yes / No	Agency	Yes / No	Authority
Academic	Yes	Advisor, NIT Agartala		
Administrative	Yes	Performance & statutory audit		

6.8 Does the University/ Autonomous College declares results within 30days?
For UG Programmes Yes V No
For PG Programmes Yes V No 6.9 What efforts are made by the University/Autonomous College for Examination Reforms?
Setting half of the papers externally from lead university/institution, Maintaining high standard in evaluations, conducting online class tests, introducing continuous performance evaluations and declaration of semester result within one month
6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges
Providing valuable suggestion/advise through University representative in statutory committees like Board, Academic Council etc.
6.11 Activities and support from the Alumni Association
<ul> <li>Alumni Association meeting held</li> <li>Alumni meet conducted</li> <li>Alumni' Day out programme" organized recently.</li> <li>Alumni archive and Alumni chapter in top major cities proposed.</li> </ul>
6.12 Activities and support from the Parent – Teacher Association
<ul> <li>Parent are the important stakeholders</li> <li>IQAC plan to incorporate more views from the parent in terms of their wards education.</li> <li>Appraisal/indirect assessment from the Guardian are proposed by IQAC since they are the financer and they make investment in child education</li> </ul>
6.13 Development programmes for support staff
Staff development programme frequency enhanced under autonomous framework

- Sr. Admin staffs are sent in different state for skill up-gradation

Administrative and technical staffs were provided BCL training

Technical staffs are provided with SDT

## 6.14 Initiatives taken by the institution to make the campus eco-friendly

JISCE has the responsibility of conducting Green-Audit on yearly basis and take effective measures to protect and preserve green atmosphere in the college campus.

The recommendations from IQAC cell are:

- 1. To make the college campus greenery by planting more sapling.
- 2. Make the campus as plastic free zone
- 3. To take initiative to keep the campus clean.
- 4. To give botanical name of eachplant/tree
- 5. To plant flower trees

Since inception importance is given for development of eco – friendly atmosphere in the campus by the management and allocation of certain amount is present in annual budget. Hence, a separate green audit does not arise until now. However, the following explanation highlights the commitment of the institution towards eco-friendly campus.

nıg	nlights the commitment of the institution towards eco-friendly campus.
	College is covered with over greenery and bigtrees.
	Nearly 6 acres of lawn and play ground equipped with water sprinkling system.
	Over 2000 plants in pots spreading overall departments.
	Bio-manure is prepared in the campus using bio-waste provided out of trees and plants.
	Organic waste of the campus is converted in to fertilizer com post with in the campus.
	College maintaining a nursery with samplings.
	Establishment of Eco-park is planned in near future.
	-

# **Criterion - VII**

# 7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

The innovations created mainly to uplift standard in quality of education:

- Mandatory Curriculum content analysis, lesson and session Plan for each courses by the teachers
- Practice outcome based teaching methodologies
- Stress on active, interactive and self learning
- Model based and real-world problem based teaching.

Four patent applications were filed. Research innovation include

- More interdisciplinary works
- Attract more PG student to research by encouraging them to attend Conferences
- 7.2 Provide the Action Taken Report (ATR)based on the plan of action decided upon at the beginning of the year

Based on the plan submitted in the 2014-15 (mentioned in the Section 2.15, following are the Action taken report.

Execution of Solid waste management effective disposal system of waste from college& hostels.	Effective disposal of Solid waste management including e-Waste in place
> To renovate the Electrical and water supply facilities of the college with iron removal plant and installing energy saving CFL lights.	The Electrical supply facility with proper backup system in place. Cold and pure water supply facility in place through installation of High End Water Purifier Machine.
Improve infrastructure of all the departments.	The modernization and removal of obsolete equipments is a continuous process and renovated in the ongoing year
Re arranges the laboratory support systems and makes it more users friendly.	The Laboratory support system has been renovated with Technical persons and PG scholars taking active participation during lab session.
Encourage teachers to take up Research Projects.	The 2 <sup>nd</sup> set of UGC minor projects applied. The 1 <sup>st</sup> set of UGC minor project implementation status reviewed. The status of RPS project and projects funded by other agencies also reviewed. The Faculty members are encouraged to submit projects in Technical symposium.
To improve the class room facilities and creation of at least one smart class room per department.	The Lecture rooms are gradually being transformed to Smart Classrooms. Now each department have provision for audiovisual presentation in their Smart rooms / labs. However, transformation process is ongoing.
To organize seminar already sanctioned by UGC, TEQIP &AICTE.	A29 around workshops/seminars were organized during TEQIP 1st Phase and more 15 around were organized after getting additional grant in TEQIP. There are JIS Group funded event as well.
To organize conduct an International Conference on Electrical Engineering.	The International Conference in Non Conventional Energy is conducted in 2014. Moreover, an International Conference on Advancement in Medical Electronics also conducted at the beginning of 2015.

>	Make internet knowledge compulsory to	The enhancement of internet facility has been made and
	prepare the assignments and projects.	growing tendency of the students using internet-based
		learning through the systems laboratories and even using their
		smart phones are increasing
>	Provide an orientation programme to	The Newly entrant students Orientation program has been
	students to introduce the many	conducted in August 1st Week and addressed by versatile
	programmes of the college.	Speakers from RKM to Skill Development professionals.
	Avail the value education hours to	The Value education and Value-added programs are annexed
	introduce the many programmes.	with regular curriculum-based programs.
	Conduct training programmes in	Number of Training programs are integrated with regular
	Personality development and soft skills	curriculum programs including ICT based programs (QEEE,
	more intensively.	BMOOC, Spoken tutorial)
>	Make the documentation of IQAC more	The IQAC documentation quality improvement is under process
	effective with the help of software.	and Lead Universities are consulted for the same.
>	To introduce software support for	The Examination system is reviewed and managing examination
	handling examination data.	data with process of publication of result has been made online
		through Software Development wing of JIS Group.
>	Add on more number of courses under	The programs under NCVT and other short-term courses are
	NCVT.	annexed specially in the department having low admission.
>	Continue the value addition programmes	Curriculum based Value addition programare implemented.
	as part of the curriculum: Each	E.g. QEEE Live classes and the Course pack addressed by the
	department may start a diploma or	National Teachers through Live programs. NPTEL courses are
	certificate course as part of improving the	also being encouraged and over 1600 number of students
	curriculum content and issue certificates.	enrolled for the NPTEL courses.
	Interdisciplinary programmes will be organized by way of invited talks,	The Interdisciplinary programs are organized. The International
		Conferences and number of workshops organized in this phase
	seminars etc. with the assistance of	are interdisciplinary.
	subject associations and various clubs	A PG program on NST is jointly organized by two departments.
	functioning in the college.	
>	To organize a workshop for +2 students in	Programsforthe10+2studentsareorganizedinwhichtheycan
	the state to inspire them in technological	display their own innovations and though. In JIS Tech
	subjects.	Symposium there is a separate School pavilion in which school
		projects are awarded. Also school networking is done in the
		National Seminar and as part of CEE-AMPAI and WBJEE events.
>	Human Resource Development Training	The students are trained in multiple skills including
	for students (HRD Training)	communication and personality development, Aptitude and
		Technical extended upto HR by professionals from Industry
>	Staff Training programmes will be	Staff Training programs are organized in regular interval. Admin
	organized periodically to train the staff in	staffs attended skill development in office work program
	ICT based teaching	through TEQIP grant
>	Departmental meetings be arranged	All Statutory Committee meetings (AC, BoS, DC) occurred in
	every month to review the progress of	frequent intervals.
	the academic plan for the current year	oquatita interventi
	All departments will introduce at least	The Good practices from the Department are shared and
	one worthy practice to be emulated by	
		provisions are made to make them a Institutional practice
	other departments and colleges, with a	through Academic Council(Eg the Student attendance taken
	definite goal and evidence of success.	by IT Dept. / Math dept.)
	To develop Digital Library in a full-fledged	The e-Library is already in place in which 30 PC setup is installed
	facility.	to facilitate the readers with IEEE IEL, INDEST Journals and Open
		Access journals.
>	To give a training course in website up-	The overall e-Governance workshop under Outcome Based
	dations to one faculty member from each	Education was conducted. However, more consolidated
	department. So that the department links	programs are under process.
	in the college website may be kept	
L	Current and operational.	
>	To covert the campus into an echo	The initiatives are taken to make a Green and Echo friendly

friendly campus.	campus through various measures (E.g. hard prints are discouraged unless it is too necessary)

7.3 Give two Best Practices of the institution(please see the format in the NAAC Self-study Manuals)

Two best practices in the Institution under the autonomous framework are:

- Mentorship Programme
- Continuous performance Evaluation

\*Provide the details in annexure (annexure need to be numbered as i, ii, iii)

7.4 Contribution to environmental awareness /protection

Following are the contribution:

- \* Energy conservation
- Use of renewable energy
- \* Water harvesting
- \* Check dam construction
- \* Efforts for Carbon neutrality
- \* Plantation
- \* Hazardous waste management
- \* e-waste management
- \* any other

7.5	Whether environmental audit was conducted?	Yes	٧	No	

7.6 Any other relevant information the institution wishes to add.(for example SWOT Analysis)

SWOT Analysis is exclusively conducted and taken into consideration during in each annual Plan. The process started during first accreditation in NAAC and also during joining TEQIP Phase II

# 8. Plans of institution for next year

Teacl	hing Learning Process
>	To make Curriculum content analysis mandatory for all faculties in all disciplines
	To encourage Learning centric environment and practice active leaning
>	To put emphasis on Model based learning/problem based learning with specific outcome
	Making Curriculum content analysis mandatory for all faculties in all disciplines
>	To put cross-disciplinary academic audit between similar departments
	To enhance stake holders feedback from Students, Guardian, Faculty, Alumni, Employer, Board.

Board. **Infrastructure development and Civil works:** To complete the construction of a separate Civil Engineering wing and start conduction of programme in this new venue To setup new Annex building beside the CMS building in a row for the Department of Electronics and related courses viz. Instrumentation and Biomedical Engineering in multi-storied pattern To expand Computer Science and Engineering in the Institutional main building **Faculty Development Programme** To conduct advanced module of pedagogical training for all faculty members of NITTTR To encourage enrollment of more M.Tech. Faculty member for Ph.D. degree Pacify faculty training in subject domain (Core, electronics, computing) Increase number of training programme for technical and administrative staffs **Research and Development** To continue trend of hosting International conference like previous consecutive two years To escalate seed grant for faculty research To escalate minor amount funding in Students innovative project To establish link with other Industries under the Group for seed grant against transfer of knowledge so as to attract the other funding agencies. Status verification of research supervision by the empanelled faculty members To apply more major research project with high value and specific objective. To establish link with National Knowledge Network(NKN) To open up a Knowledge Incubation Centre To apply for transformation of some of the high end laboratory to Research Centre Like AICTE MODROB/RPS apply in various project schemes under UGC To enhance more patenting of technologies **Industry Institute partnership** To initiate industry sponsored R&D by collaborating with Group Industry / Local Industry and thereby attracting the funding agencies To reflect more the views of the Industry representative of the BOS of various departmentsTo increase number of Guest lecture by the Industry people To invite alumni's in departmental programme to share their experience with students To initiate collaborative academic programmes with industry To enhance joint activities with industry **Others** > To apply for short –term courses To escalate Design Lab so as to make students role-ready To encourage National and international live classes, webinars and other ICTbased learning like ICTE, QEEE, NMEICT programmes hosted by MHRD-IIT. Name Dr. Somsubhra Gupta Name Dr. Malay R Dave

Signature of the Coordinator, IQAC

Signature of the Chairperson, IQAC

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## **Annexure I**

## **Abbreviations:**

CAS - Career Advanced Scheme

CAT - Common Admission Test

CBCS - Choice Based Credit System

CE - Centre for Excellence

COP - Career Oriented Programme

CPE - College with Potential for Excellence

DPE - Department with Potential for Excellence

GATE - Graduate Aptitude Test

NET - National Eligibility Test

PEI - Physical Education Institution

SAP - Special Assistance Programme

SF - Self Financing

SLET - State Level Eligibility Test

TEI - Teacher Education Institution

UPE - University with Potential Excellence

UPSC - Union Public Service Commission

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