

**JIS College of Engineering**  
**The Annual Quality Assurance Report (AQAR) of the IQAC**  
**1<sup>st</sup> July 2014 to 30<sup>th</sup> June 2015**

**Part – A**

**I. Details of the Institution**

|  |   |
|--|---|
| 1.1 Name of the Institution              | JIS College of Engineering  |
| 1.2 Address Line 1                       | Block A, Phase III,   |
| Address Line 2                           | Kalyani, Nadia  |
| City/Town                                | Kalyani,  |
| State                                    | West Bengal   |
| Pin Code                                 | 741235  |
| Institution e-mail address               | director_jisce@jisgroup.org   |
| Contact Nos.                             | 033 25822138  |
| Name of the Head of the Institution:     | Dr. U Bandopadhyay  |
| Tel. No. with STD Code:                  | 033 25822138  |
| Mobile:                                  | 9432012682  |
| Name of the IQAC Co-ordinator:           | Dr. Somsubhra Gupta   |
| Mobile:                                  | 9836545777  |
| IQAC e-mail address:                     | <a href="mailto:info@jisce.org">info@jisce.org</a>  |
| 1.3 NAAC Track ID (For ex. MHC0GN 18879) |   |
| 1.4 NAAC Executive Committee No. & Date: | : EC No. <b>EC/49/A&amp;A/44</b> dated <b>16<sup>th</sup> June 2009</b><br>(For Example EC/32/A&A/143 dated 3-5-2004.<br>This EC no. is available in the right corner- bottom<br>of your institution's Accreditation Certificate) |
| 1.5 Website address:                     |   |
|  | Web-link of the AQAR: <a href="http://www.jisce.org/AQAR2014-15.doc">www.jisce.org/AQAR2014-15.doc</a>  |
|  | For ex. <a href="http://www.ladykeanecollege.edu.in/AQAR2012-13.doc">http://www.ladykeanecollege.edu.in/AQAR2012-13.doc</a>   |

## 1.6 Accreditation Details

| Sl. No. | Cycle                 | Grade | CGPA | Year of Accreditation | Validity Period |
|---------|-----------------------|-------|------|-----------------------|-----------------|
| 1       | 1 <sup>st</sup> Cycle | B     | 2.72 | 2009                  | 05 years        |
| 2       | 2 <sup>nd</sup> Cycle |       |      |                       |                 |
| 3       | 3 <sup>rd</sup> Cycle |       |      |                       |                 |
| 4       | 4 <sup>th</sup> Cycle |       |      |                       |                 |

1.7 Date of Establishment of IQAC : DD/MM/YYYY : 26/06/2010

**1.8 AQAR for the year (for example 2010-11) : 2014 - 15**

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11 submitted to NAAC on 12-10-2011))

i. AQAR 25-12-2013 (dd/mm/yyyy)

ii. AQAR 20-10-2012 (dd/mm/yyyy)

iii. AQAR 15-12-2012 (dd/mm/yyyy)

iv. AQAR ..... (dd/mm/yyyy)

## 1.10 Institutional Status

University State  Central  Deemed  Private

Affiliated College Yes  No

Constituent College Yes  No

Autonomous college of UGC Yes  No

Regulatory Agency approved Institution Yes  No

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution Co-education  Men  Women

Urban  Rural  Tribal

Financial Status Grant-in-aid  UGC 2(f)  UGC 12B

Grant-in-aid + Self Financing  Totally Self-financing

1.11 Type of Faculty/Programme

Arts  Science  Commerce  Law  PEI (Phys Edu)

TEI (Edu)  Engineering  Health Science  Management

Others (Specify)

Technology

1.12 Name of the Affiliating University (*for the Colleges*) : West Bengal University of Technology

1.13 Special status conferred by Central/ State Government-- UGC/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 /anum (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 No

If yes, mention the amount

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos.  International  National  State  Institution Level

(ii) Theme ----- a. Best Practices for Quality Enhancement in the academic institution  
 b. Students' participation in quality improvement

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 Annual Quality Assurance Report
- Developing quality benchmarks for the various academic and administrative activities.
- Documenting various programmes.
- Disseminating information on various quality parameters of higher education.
- Introducing innovative methods of teaching, learning and evaluation
- Value addition of staffs and knowledge base
- Conducted International Seminar in January 2014
- Conducted National Seminar 04 numbers by ECE, EE, CSE and IT departments

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

- Conducted Remedial classes
- Introduced mentorship programme
- Introduced continuous performance evaluation
- Provided training on Personality Development and Communication Skills
- Organised Coaching Classes to prepare the students for the commercial world.
- Computerized accounting package using ERP, Payroll
- Organised GATE/ MAT/ JECA coaching
- 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
- Departmental heads are provided management training from leading management institutions

### 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 2014-15 (Plan only since ongoing):**

|   |
|---|
| ➤ Execution of Solid waste management effective disposal system of waste from college & hostels.  |
| ➤ To renovate the Electrical and water supply facilities of the college with iron removal plant and installing energy saving CFL lights.  |
| ➤ Improve infrastructure of all the departments.  |
| ➤ Re arranges the laboratory support systems and makes it more users friendly.  |
| ➤ Encourage teachers to take up Research Projects.  |
| ➤ To improve the class room facilities and creation of at least one smart class room per department.  |
| ➤ To organize seminar already sanctioned by UGC, TEQIP & AICTE.   |
| ➤ To organize conduct an International Conference on Electrical Engineering.  |
| ➤ Make internet knowledge compulsory to prepare the assignments and projects.   |
| ➤ Provide an orientation programme to students to introduce the many programmes of the college.   |
| ➤ Avail the value education hours to introduce the many programmes.   |
| ➤ Conduct training programmes in Personality development and soft skills more intensively.  |
| ➤ Make the documentation of IQAC more effective with the help of software.  |
| ➤ To introduce software support for handling examination data.  |
| ➤ Add on more number of courses under NCVT.   |
| ➤ Continue the value addition programmes as part of the curriculum: Each department may start a diploma or certificate course as part of improving the curriculum content and issue certificates. |
| ➤ Interdisciplinary programmes will be organized by way of invited talks, seminars etc. with the assistance of subject associations and various clubs functioning in the college.                 |
| ➤ To organize a workshop for +2 students in the state to inspire them in technological subjects.  |
| ➤ Human Resource Development Training for students (HRD Training)   |
| ➤ Staff Training programmes will be organized periodically to train the staff in ICT based teaching   |
| ➤ Departmental meetings be arranged every month to review the progress of the academic plan for the current year  |
| ➤ All departments will introduce at least one worthy practice to be emulated by other departments and colleges, with a definite goal and evidence of success.                                     |
| ➤ To develop Digital Library in a fully fledged facility.   |
| ➤ 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.            |
| ➤ To covert the campus into an echo friendly campus.  |

**Year 2013-14:**

|   |   |
|---|---|
| To install a biogas plant and solid gas crushing unit for the effective disposal of waste from the college canteen.   | Committee being formed, they have prepared the project with physibility report. It shows that it will be uneconomic considering the amount of waste generating in the canteen. They are working with inclusion of the waste from both the hostel. |
| To renovate the Electrical and water supply facilities of the college with iron removal plant and installing energy saving CFL lights.  | CFL lights being installed in the hostels and few areas in the college and work is going for complete change over.  |
| Improve infrastructure of all the departments.  | Continuous improvement is on  |
| Re arranges the laboratory support systems and makes it more users friendly.  | Done  |
| Encourage teachers to take up Research Projects.  | Maximum thrust has been given on this. As a result 13 minor projects being sanctioned by UGC this year. 5 projects are submitted to MNRE, DST and AICTE. Workshop conducted on research project.  |
| To improve the class room facilities and creation of at least one smart class room per department.  | Already three smart classrooms been prepared and handed over to three departments. Rests will be completed within the year 2014.  |
| To organize seminar already sanctioned by UGC, TEQIP & AICTE.   | Organised all the scheduled seminars  |
| To organize conduct an International Conference on Electrical Engineering.  | Conducted International conference in the month of January 2014   |
| Make internet knowledge compulsory to prepare the assignments and projects.   | Process is going on   |
| Provide an orientation programme to the students to introduce the many programmes of the college.   | 04 Interactive sessions have been organised amongst the students to make them aware about the programmes. As a result as on date 960 students are the active members of different clubs of the college.   |
| Conduct training programmes in Personality development and soft skills more intensively.  | Personality development and soft skill training was conducted for all the student of pre-final year.  |
| Make the documentation of IQAC more effective with the help of software.  | In progress   |
| To introduce software support for handling examination data.  | It has been started of conducting on line mid semester exam and the software for handling the exam data.  |
| Add on more number of courses under NCVT.   | Periodically we are increasing the courses  |
| Continue the value addition programmes as part of the curriculum: Each department may start a diploma or certificate course as part of improving the curriculum content and issue certificates. | Bio-Medical Engineering department started a certificate course   |
| Interdisciplinary programmes will be organized by way of invited talks, seminars etc. with the assistance of subject associations and various clubs functioning in the college.                 |   |

|  |  |
|--|--|
| To organize a workshop for +2 students in the state to inspire them in technological subjects.   | Organised workshop in the month of Nov 2013 with 10+2 students of the surrounded institutes and distributed the directory of higher technical institutes prepared by us. |
| Human Resource Development Training for students (HRD Training)  | Training organised for pre-final year students on HR topics such as – Motivation, Organisational Behaviour, TQM etc.   |
| Staff Training programmes will be organized periodically to train the staff in ICT based teaching  | Conducted 02 nos. Staff development programme by British Council.  |
| Departmental meetings be arranged every month to review the progress of the academic plan for the current year   | Process is continuing  |
| All departments will introduce at least one worthy practice to be emulated by other departments and colleges, with a definite goal and evidence of success.                          | Few department have incorporated some practices which will be assessed in terms of success evidence  |
| To develop Digital Library in a fully fledged facility.  | Yet to be completed  |
| 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. | Work is on progress  |
| To covert the campus into an echo friendly campus.   | Targeted to declare the campus as Green Campus by 2018.  |

## ACADEMIC CALENDAR

| <b>JIS College of Engineering</b><br>(An Autonomous Institution)<br><b>ACADEMIC CALENDAR FOR 2013</b>  |   | <b>EVEN SEMESTER</b>  | <b>Events / Tours / Seminars to be arranged by JISCE within the year 2013</b> |
|--|---|---|---|
| <b>EVEN SEMESTER</b><br>Academic Programme Commences<br>Annual Sports<br>Inter College Cricket Tournament (JIS Group)<br>Governing Body Meeting<br>First Test Slot (UG/PG)<br>Second Test Slot (UG/PG)<br>Examination form submission (All semester)<br>Teaching End<br>Annual Fest<br>Rabindranath Tagore's Birthday Celebration<br>Practical Examinations & Viva-Voce<br>(All semester, UG & PG)<br>Theory Examinations (for all UG & PG)<br>Governing Body Meeting<br>Summer Recess | <b>For Continuing Batch</b><br>January 10, 2013<br>February 14, 2013<br>February 25 - February 28, 2013<br>March 6, 2013<br>March 18 - March 19, 2013<br>April 17 - April 18, 2013<br>April 19, 2013 - April 22, 2013<br>May 3, 2013<br>May 4, 2013<br>May 9, 2013<br>May 11 - May 17, 2013<br>May 15 - June 7, 2013<br>May 11, 2013<br>June 12 - July 12, 2013                       | <b>January :</b> Industrial Tour<br>Seminars (Departmental)<br>Mentor-Parent Meet<br>Republic day Celebration<br>Business Skill Development Programme<br><br><b>February :</b> Annual Football Tournament<br>Saraswati Puja Celebration<br>Seminars (Departmental)<br>Annual Sports<br><br><b>March :</b> Annual Fest<br>Seminars (Departmental)<br>Industrial Visit<br><br><b>April :</b> Seminars (Departmental)<br>Mentor-Parent Meet<br><br><b>May :</b> Examinations (Practical) |   |
| <b>ODD SEMESTER</b><br>Academic Programme<br>Admission of new students closes<br>Governing Body Meeting<br>First Test Slot<br>Annual Tech Quiz Contest / Tech Fest<br>Mid-Semester Break<br>Second Test Slot<br>Registration of newly admitted students for the session 2012-2013 ends<br>Annual Debate Competition<br>Form Fill up for ODD Semester Examination under Autonomous Structure<br>Teaching End  | <b>New Batch</b> <b>Continuing Batch</b><br>August 1, 2013      July 1, 2013<br>July 30, 2013<br>August 10, 2013<br>September 20 & September 23, 2013<br>September 27, 2013<br>October 10 - October 19, 2013<br>October 23 & October 24, 2013<br>October 24, 2013<br>(General & Lateral entry both)<br>October 25, 2013<br>November 11, 2013 - November 13, 2013<br>November 15, 2013 | <b>June :</b> Theory Examination<br><br><b>Effective Working Days in the Even Semester: 144</b><br><br><b>Effective Teaching Days in the Even Semester: 115</b><br><br><b>July :</b> Classes begins with orientation lectures<br>Mentor-Parent Meet<br><br><b>August :</b> Independence day celebration<br>Seminars (Departmental)<br>Industrial Visit<br><br><b>September :</b> Annual Cricket Tournament<br>Viswakarma Puja Celebration<br><br><b>October :</b> Mentor-Parent Meet  | <b>ODD SEMESTER</b>   |

*\* Attach the Academic Calendar of the year as Annexure.*

2.16 Whether the AQAR was placed in statutory body      Yes       No

Management       Syndicate       Any other body

Provide the details of the action taken

It has been placed in IQAC.

## Part – B

### Criterion – I

#### I. Curricular Aspects

##### 1.1 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                     | 10                            | -  | 10                                  |  |
| UG                     | 10                            | -  | 10                                  |  |
| PG Diploma             |                               |  |                                     |  |
| Advanced Diploma       |                               |  |                                     |  |
| Diploma                |                               |  |                                     |  |
| Certificate            |                               |  |                                     |  |
| Others                 |                               |  |                                     |  |
| <b>Total</b>           | 20                            |  | 20                                  |  |



|                   |   |  |  |  |
|-------------------|---|--|--|--|
| Interdisciplinary | 1 |  |  |  |
| Innovative        | 1 |  |  |  |

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

| Pattern    | Number of programmes |
|------------|----------------------|
| Semester V | 20                   |
| Trimester  |                      |
| Annual     |                      |

- 1.3 Feedback from stakeholders\* (On all aspects)
- Alumni  Parents  Employers  Students
- Mode of feedback : Online  Manual  Co-operating schools (for PEI)

\* *Please provide an analysis of the feedback in the Annexure*

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

B.Tech. Programme in Information Technology:

**Programme Educational Objectives (PEO):**

- I. To prepare students to excel in graduate school or technical careers through a world-class, rigorous and competitive program
- II. To train students across the spectrum of basic and applied science, recognizing and exploiting common descriptions in disparate systems.
- III. To train students with sufficient scientific and engineering breadth to design and create novel solutions to real-life problems in engineering systems
- IV. To develop in students professional and ethical attitudes, effective communication and teamwork skills, and an ability to place science and engineering issues and solutions within the broader societal context.
- V. To provide students with an academic environment committed to excellence and innovation that contributes for developing role ready individual with leadership, professionalism, and life-long learning for professional careers.

**Programme Outcomes (PO):**

- (a) Graduates will demonstrate basic knowledge in Mathematics, Science and Engineering.
- (b) Graduates will demonstrate the ability to design, develop and test systems corresponding to real life problems under consideration including the physical models, interpret and analyze data, and report results and use experimental results for further expansion.
- (c) Graduates will demonstrate the ability to design a digital system or a computational system or a process that meets demand driven specifications and requirements.
- (d) Graduates will foster team spirit and elevate the enthusiasm in teamwork-concept of sharing in demonstrating their ability in technological solution as a part of specialized engineering and science laboratory teams, as well as on multidisciplinary design teams.
- (e) Graduates will have the ability to identify, formulate and solve service oriented architectural problems.
- (f) Graduates will demonstrate an understanding of their professional and ethical responsibilities.
- (g) Graduates will be able to communicate effectively in both verbal and written forms.
- (h) Graduates will have the confidence to apply engineering solutions in global and societal contexts.
- (i) Graduates should be capable of self-learning and clearly understand the value of lifelong learning.

- (j) Graduates will be broadly educated and will have an understanding of the impact of engineering on society and demonstrate awareness of contemporary and emergent issues.
- (k) Graduates will be familiar with state-of-the-art software tools and to analyze relevant engineering problems.

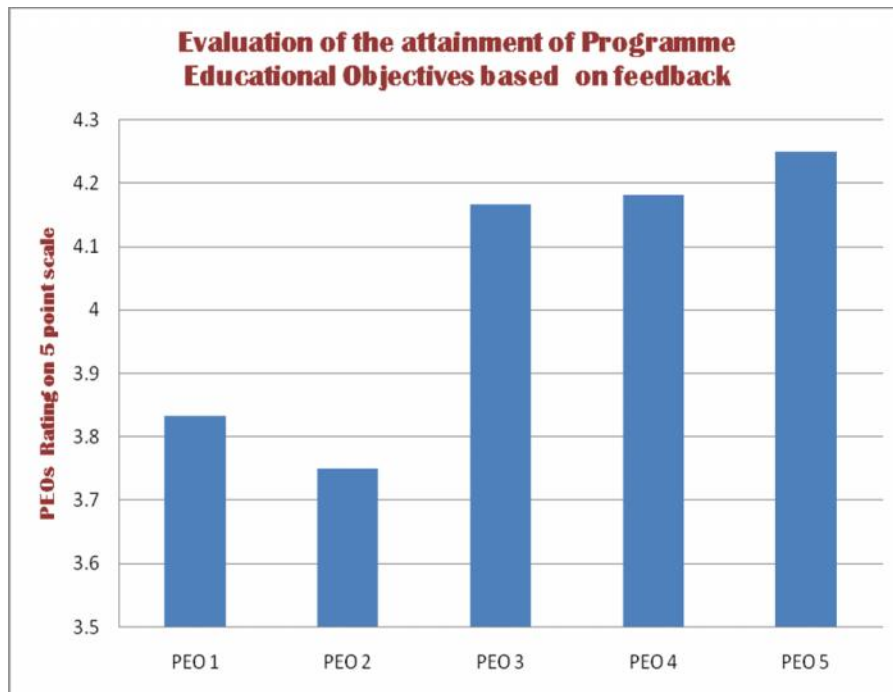
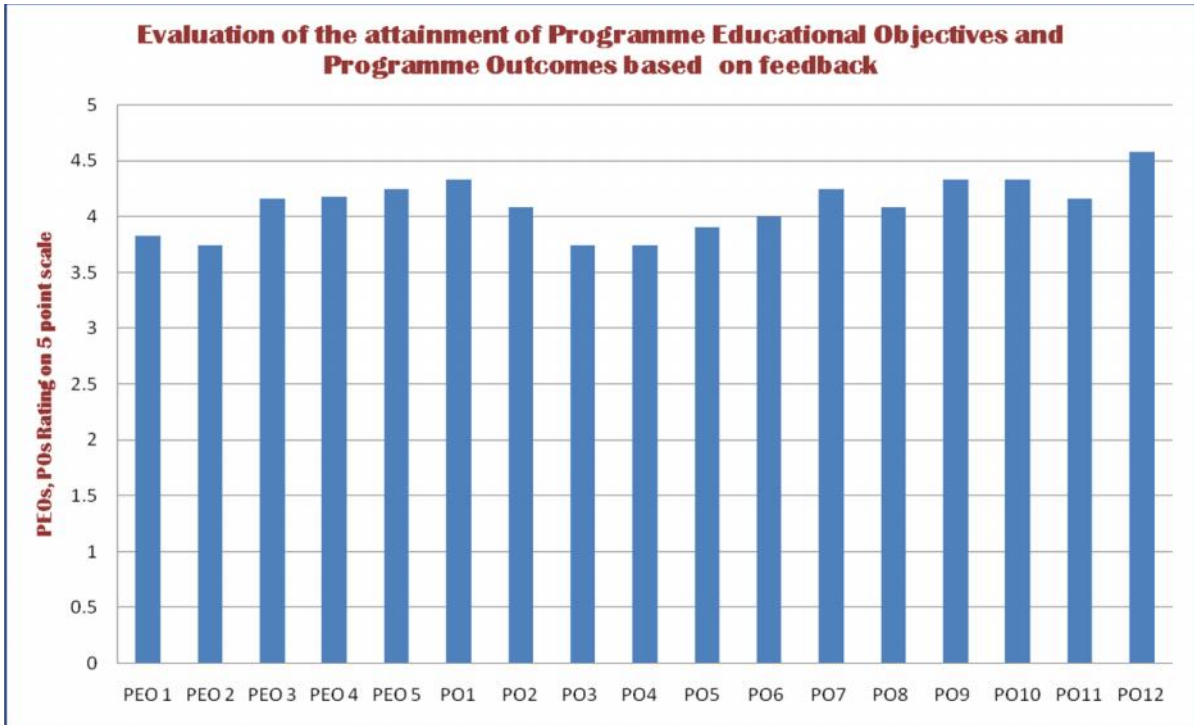
**Mapping of Programme Educational Objectives & Programme Outcomes**

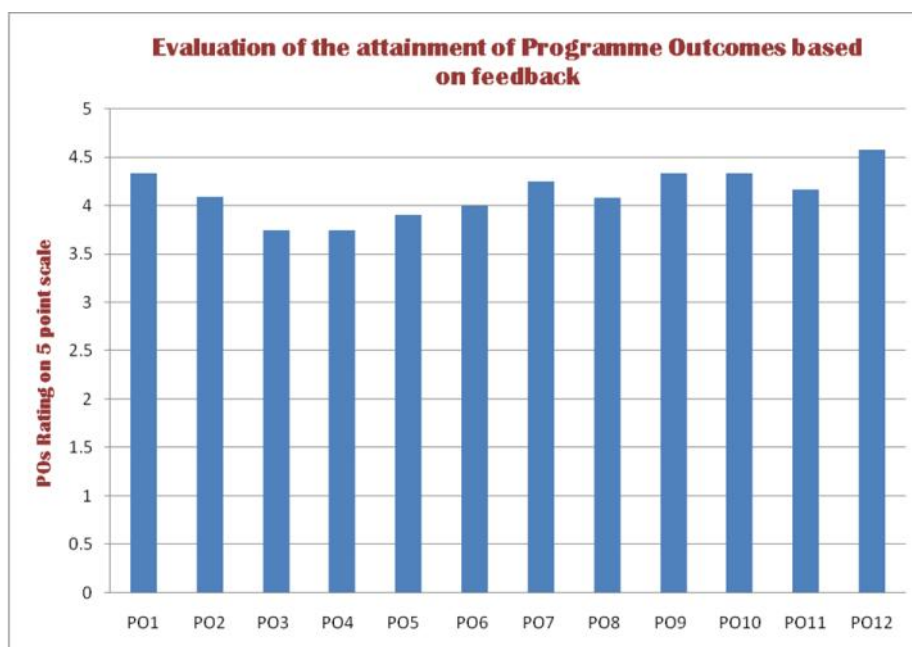
|   |     | <i>Programme Outcomes</i> |   |   |   |   |   |   |   |   |   |   |  |
|---|-----|---------------------------|---|---|---|---|---|---|---|---|---|---|--|
|   |     | a                         | b | c | d | e | f | g | h | i | j | k |  |
| <i>Programme Educational Objectives</i> | I   |                           |   |   |   |   |   |   |   |   |   |   |  |
|   | II  |                           |   |   |   |   |   |   |   |   |   |   |  |
|   | III |                           |   |   |   |   |   |   |   |   |   |   |  |
|   | IV  |                           |   |   |   |   |   |   |   |   |   |   |  |
|   | V   |                           |   |   |   |   |   |   |   |   |   |   |  |

*Following is the analysis of the Stakeholders feedback:*

| Enter Your Details:  | Whether You are an Academician (Industry Personnel/ Research Scientist/ Alumni/ Student) | Enter Expected Year of Passing/ | Vision     | Mission     | PEO 1 | PEO 2 | PEO 3 | PEO 4 | PEO 5 | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | Remarks                                   |
|--|--|---------------------------------|------------|-------------|-------|-------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|---|
|  |  |                                 | dmjsscraip | Academician | 2005  | 5     | 5     | 4     | 5     | 5   | 4   | 5   | 5   | 4   | 4   | 3   | 2   | 4   | 4    | 4    | 5    |   |
| Amarendra kumar  | Student  | 2015                            | 5          | 5           | 5     | 5     | 5     | 5     | 5     | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5   | 5    | 5    | 5    |   |
| Jayanta Dutta  | Student  | 2015                            | 4          | 4           | 3     | 4     | 5     | 5     | 5     | 4   | 5   | 5   | 5   | 5   | 4   | 5   | 4   | 5   | 5    | 5    | 5    |   |
| prince kumar singh jis college of engineering student .it 3rd year                                 | Student  | 2015                            | 4          | 4           | 4     | 4     | 4     | 4     | 4     | 4   | 4   | 3   | 3   | 4   | 4   | 4   | 4   | 4   | 3    | 5    | 5    | overall thiv department is 5 disciplined. |
| Arijit Dana Oracle India Pvt Ltd. Senior Analyst   | Industry Personnel   |                                 | 4          | 4           | 4     | 3     | 4     | 5     | 4     | 4   | 4   | 4   | 5   | 3   | 3   | 4   | 5   | 5   | 3    | 5    |      |   |
| Debanjan Ghosh, Tata Consultancy Services Ltd., Systems Engineer                                   | Alumni   | 2010                            | 3          | 4           | 3     | 4     | 3     | 3     | 4     | 4   | 3   | 3   | 3   | 4   | 4   | 5   | 3   | 3   | 3    | 3    | 4    |   |
| Name Dr. INDRAJATH SARKAR Organisation .JIS College of Engineering Designation Assistant Professor | Student  | 2015                            | 5          | 5           | 4     | 5     | 5     | 4     | 5     | 5   | 4   | 5   | 5   | 4   | 4   | 5   | 4   | 5   | 4    | 5    | 5    |   |
| Name Dr. INDRAJATH SARKAR Organisation .JIS College of Engineering Designation Assistant Professor | Academician  |                                 | 5          | 4           | 5     | 4     | 4     | 5     | 4     | 5   | 4   | 4   | 5   | 4   | 4   | 5   | 5   | 5   | 5    | 4    | 5    |   |

|   |                    |      |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |  |
|---|--------------------|------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|--|
| Soumya Bhattacharyya Narula Institute of Technology Assistant Professor   | Academician        | 2012 | 4 | 4    | 3    | 3    | 4    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3     |  |
| Arghya De, ICRA Ltd., Senior Associate Analyst  | Industry Personnel | 2011 | 1 | 2    | 4    | 2    | 3    | 5    | 3    | 5    | 5    | 2    | 4    | 5    | 5    | 4    | 5    | 4    | 5    | 3    | 5     | Vision and Mission statements are intangible and abstract in nature. Make them easy to achieve and understandable for students and teachers alike. |
| Arnab Das, Lexmark International (India) private Limited, Software Engineer   |                    | 2005 | 4 | 4    | 3    | 2    | 4    | 3    | 5    | 4    | 4    | 4    | 2    | 2    | 3    | 3    | 3    | 4    | 4    | 5    | 5     |  |
| Deba Prasanna Das Current: Undergoing MBA (Finance) from IS, Hyderabad. 2nd year student Previously: Infosys, Test Engineer | Student            | 2009 | 4 | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 5    | 3    | 2    | 5    | 4    | 5    | 5    | 4    | 5    | 5    | 4     |  |
| Expected level of attainment in 5 point scale   |                    |      | 4 | 4.08 | 3.83 | 3.75 | 4.17 | 4.18 | 4.25 | 4.33 | 4.09 | 3.75 | 3.91 | 4.00 | 4.25 | 4.08 | 4.33 | 4.33 | 4.17 | 4.58 | 4.105 |  |





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

Incorporation of Technological priorities at International, National and regional level is done after a thorough review of curriculum. Experts from industry and universities are involved in the development of curriculum as members of Board of Studies. The members meet regularly in BoS meeting and make changes in the curriculum depending on the need from Industry. The inputs from Alumni and industry are taken into consideration while revising the existing curriculum. Normally a maximum of 20% courses undergo major changes. In recent revision in most of the departmental programmes 10% of the courses underwent major revision and rest with minor revision.

Frequency of BOS meeting in the departments during transitional phase of autonomy is at least once in a semester.

1.5 Any new Department/Centre introduced during the year. If yes, give details. : No

## Criterion – II

### 2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

| Total | Asst. Professors | Associate Professors | Professors | Others |
|-------|------------------|----------------------|------------|--------|
| 248   | 219              |                      | 29         |        |

2.2 No. of permanent faculty with Ph.D.

44

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

| Asst. Professors |   | Associate Professors |   | Professors |   | Others |   | Total |   |
|------------------|---|----------------------|---|------------|---|--------|---|-------|---|
| R                | V | R                    | V | R          | V | R      | V | R     | V |
| 11               |   |                      |   | 03         |   |        |   | 14    |   |

2.4 No. of Guest and Visiting faculty and Temporary faculty

07

-

-

2.5 Faculty participation in conferences and symposia:

| No. of Faculty   | International level | National level                 | State level |
|------------------|---------------------|--------------------------------|-------------|
| Attended         | 02                  | 53+24=77                       | 00          |
| Presented papers | 02                  | 31 (included in attended list) | 00          |
| Resource Persons | NA                  | -                              | 00          |

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

- ✓ **Preparation of Objective Driven Teaching Plan.**
  - A detailed lesson plan in accordance with the learning objective is in place. **The lesson Plan has been done with curriculum content analysis.** Academic Record it in the register kept in the department and Teacher's Diary. Under the semester system design the syllabus so as to finish it in 4months.
- ✓ **Continuous evaluation diary maintained by our Faculty Members which contain**
  - Tutorial hours with the names of the students
  - Administrative, curricular and co-curricular activities
  - Study Objective
  - Lesson Plan
  - The topic and the class engaged
  - Teaching methods
  - Questions & results of the surprise test
- ✓ **Evaluation of teachers** by students are conducted periodically through online systems and intimated personally.
- ✓ **Internal academic audit** is being conducted.
- ✓ **Documentation** of various activities and maintenance of the existing files up-to-date. They may be submitted for internal audit.

➤ **Learner Centric Methods Of Teaching**

To make students’ involved in the teaching learning process, innovative teaching techniques in addition to the traditional lecture method must be evolved. The faculty members will employ learner centric techniques such as web related assignments, peer teaching, discussion method, experiential learning, use of audio-visual aids, case study, projects, surveys, Quiz etc in the delivery of academic programmes.

➤ **Human Resource Development Training for students (HRD Training)**

With the cooperation of different associations and clubs, a course spread over a year at flexible time schedule will be organized to build up competence and skill for students. A committee consisting of the co-coordinator of the concerned co-curricular programme will monitor the programmes. The course consists of **Life Guidance Programme, Career Awareness, Personality Development and Leadership Training and Communication Skill.**

➤ **Mentoring**

Each member of the departments is attached to Mentorship programme. Each member of the teaching faculty is entrusted with the task of mentoring 10 to 15 students. They are responsible for academic and personal mentoring. This is to strengthen the bonds of appreciation and affection that exists between teachers and students. Interaction with students and counseling them help in their personal development. Tutors may keep the progress of the students in the Teacher’s diary. This method ensures one to one assistance provided to the students.

➤ **Training for ICT enabled teaching and learning**

Teacher Training programmes organized periodically to train the staff in ICT based teaching. The students encouraged to prepare slides, transparency sheets and power point presentations as part of their assignments and project presentations. This makes the teaching –learning process a two way process, involving both the teachers and learners. Conducted workshop for teachers on “Semester Systems, Grading, Choice Based Credit System and Continuous Performance Evaluation”.

2.7 Total No. of actual teaching days  
during this academic year

|     |
|-----|
| 230 |
|-----|

2.8 Examination/ Evaluation Reforms initiated by  
the Institution (for example: Open Book Examination, Bar Coding,  
Double Valuation, Photocopy, Online Multiple Choice Questions)

|  |
|--|
|  |
|--|

- Continuous Performance Evaluation (weekly basis)
- Class tests. Already converted to online with MCQ pattern.
- Semester Evaluation

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

|     |     |     |
|-----|-----|-----|
| 120 | 120 | 120 |
|-----|-----|-----|

- All Departmental Committee members are part of BOS.
- 8-technolgoical 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 are applicable to UG autonomy as Academic autonomy was availed from the commencement of each and every PG courses.

2.10 Average percentage of attendance of students

|    |
|----|
| 75 |
|----|

2.11 Course/Programme wise distribution of pass percentage :

| Title of the Programme | Total no. of students appeared | Division      |     |      |       |        |
|------------------------|--------------------------------|---------------|-----|------|-------|--------|
|                        |                                | Distinction % | I % | II % | III % | Pass % |
| CSE                    | 128                            | 9.37%         | 128 | 0    | 0     | 100%   |
| IT                     | 72                             | 9.72%         | 69  | 0    | 0     | 100%   |
| ECE                    | 121                            | 23.14%        | 121 | 0    | 0     | 100%   |
| EIE                    | 59                             | 10.16%        | 54  | 0    | 0     | 100%   |
| EE                     | 96                             | 14.58%        | 96  | 0    | 0     | 100%   |
| BME                    | 29                             | 10.34%        | 29  | 0    | 0     | 100%   |
| ME                     | 61                             | 13.11%        | 61  | 0    | 0     | 100%   |
| MCNT                   | 4                              | 100%          | 4   | 0    | 0     | 100%   |
| EDPS                   | 14                             | 64.28%        | 14  | 0    | 0     | 100%   |
| SE-IT                  | 6                              | 33.33%        | 2   | 0    | 0     | 100%   |
| MCSE                   | 17                             | 94.11%        | 16  | 0    | 0     | 100%   |
| MAEIE                  | 5                              | 40.00%        | 2   | 0    | 0     | 100%   |
| MBI                    | 1                              | 100%          | 1   | 0    | 0     | 100%   |
| MCA                    | 52                             | 34.61%        | 52  | 0    | 0     | 100%   |
| BCA                    | ■                              | 12.12%        | ■   | 0    | 0     | 94.28% |
| MBA                    | 34                             | NIL           | 21  | 0    | 0     | 88%    |
| BBA                    | 22                             | NIL           | 10  | 0    | 0     | 100%   |

Distinction: above 75%      1st Class: above 60%

| Title of the Programme | Total no. of students appeared | Division      |     |      |       |        |
|------------------------|--------------------------------|---------------|-----|------|-------|--------|
|                        |                                | Distinction % | I % | II % | III % | Pass % |
| CSE                    | 89                             | 29.54%        | 88  | 0    | 0     | 98.87% |
| IT                     | 47                             | 20.00%        | 45  | 0    | 0     | 95.74% |
| ECE                    | 90                             | 33.33%        | 90  | 0    | 0     | 100%   |
| EIE                    | 47                             | 19.14%        | 47  | 0    | 0     | 100%   |
| EE                     | 67                             | 15.62%        | 64  | 0    | 0     | 95.52% |
| BME                    | 08                             | 62.50%        | 08  | 0    | 0     | 100%   |
| ME                     | 42                             | 19.51%        | 41  | 0    | 0     | 97.61% |
| MCNT                   | 06                             |               | 06  | 0    | 0     | 100%   |
| EDPS                   | 17                             |               | 17  | 0    | 0     | 100%   |
| SE-IT                  | 05                             |               | 05  | 0    | 0     | 100%   |
| MCSE                   | 17                             |               | 17  | 0    | 0     | 100%   |
| MAEIE                  | 10                             |               | 10  | 0    | 0     | 100%   |
| MBI                    | 03                             |               | 03  | 0    | 0     | 100%   |
| M.Tech.(ME)            | 01                             |               | 01  | 0    | 0     | 100%   |
| MCA                    |                                |               |     |      |       |        |
| BCA                    | Result Not published           |               |     |      |       |        |
| MBA                    | Result Not published           |               |     |      |       |        |
| BBA                    | 17                             |               |     |      |       | 94.11  |

Distinction: above 75%      1st Class: above 60%

M.TECH, MBA - DGPA: Not shown in the result sheet under autonomous structure, so % is not possible for distinction

2.12 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 also 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 still 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,

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

### 2.13 Initiatives undertaken towards faculty development

| <i>Faculty / Staff Development Programmes</i>  | <i>Number of faculty benefitted</i> |
|--|-------------------------------------|
| Refresher courses                              | 06                                  |
| UGC – Faculty Improvement Programme            |                                     |
| HRD programmes                                 | 04                                  |
| Orientation programmes                         | 07                                  |
| Faculty exchange programme                     |                                     |
| Staff training conducted by the university     | 06                                  |
| Staff training conducted by other institutions | 15                                  |
| Summer / Winter schools, Workshops, etc.       | 10                                  |
| Others   |                                     |

### 2.14 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

### 3. Research, Consultancy and Extension

#### 3.1 Initiatives of the IQAC in Sensitizing / Promoting Research Climate in the institution

Research is the key-factor in the Institutional identity and overall grading and rating of the Institute. Innovative research gives recognition to one institute. On the contrary, the institute which are weak in research become dependent on outside supply of the knowledge and their ranking and recognition goes down substantially.

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

To fulfil the initiative the following benchmarking are done:

- Number of highly cited researchers in the Institute
- Academic performance per faculty
- Journal published in nature
- Total articles in reputed journals
- Number of books published
- Number of citations ...etc
- H-index of Institute and individual faculty member

#### 3.2 Details regarding major projects

|                     | Completed | Ongoing | Sanctioned | Submitted |
|---------------------|-----------|---------|------------|-----------|
| Number              |           |         |            |           |
| Outlay in Rs. Lakhs |           |         |            |           |

Note: UGC major projects are not applied yet.

#### 3.3 Details regarding minor projects

|                     | Completed | Ongoing | Sanctioned | Submitted |
|---------------------|-----------|---------|------------|-----------|
| Number              |           |         |            |           |
| Outlay in Rs. Lakhs |           |         |            |           |

UGC minor projects (11 in nos) are reportedly sanctioned.

#### 3.4 Details on research publications

|                          | International | National | Others |
|--------------------------|---------------|----------|--------|
| Peer Review Journals     | 178           | 661      |        |
| Non-Peer Review Journals |               |          |        |
| e-Journals               |               |          |        |

|                        |     |     |  |
|------------------------|-----|-----|--|
| Conference proceedings | 267 | 245 |  |
|------------------------|-----|-----|--|

3.5 Details on Impact factor of publications:

Range  Average  h-index  Nos. in SCOPUS

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

| Nature of the Project  | Duration Year | Name of the funding Agency | Total grant sanctioned  | Received               |
|--|---------------|----------------------------|-------------------------|------------------------|
| Major projects   | -             | --                         | -                       | -                      |
| Minor Projects   | -             | -                          | -                       | -                      |
| Interdisciplinary Projects   | 2011<br>2013  | DST<br>CSIR                | 4.20 Lacs<br>18.22 Lacs | 4.2 Lacs<br>5.108 Lacs |
| Industry sponsored   |               |                            |                         |                        |
| Projects sponsored by the University/ College                                  | 2013          | IE(I)                      |                         | Completed 2014         |
| Students research projects<br><i>(other than compulsory by the University)</i> |               |                            |                         |                        |
| Any other(Specify)   | 2013          | AICTE -RPS-EE              | 8 Lacs                  | 7 Lacs                 |
|  | 2013          | AICTE-RPS-IT               | 2.6 Lacs                | 2.6 Lacs               |
|  | 2013          | AICTE-RPS-BME              | 10.55 Lacs              | 8 Lacs                 |
|  | 2013          | AICTE-RPS-ECE              | 11.33 Lacs              | 8 Lacs                 |
|  | 2013          | AICTE-MODROB-CSE           | 8.9 Lacs                | 7.9 Lacs               |
| Total  |               |                            |                         |                        |

3.7 No. of books published i) With ISBN No.  Chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

UGC-SAP  CAS  DST-FIST   
DPE  DBT Scheme/funds

3.9 For colleges Autonomy  CPE  DBT Star Scheme   
INSPIRE  CE  Any Other (specify)

3.10 Revenue generated through consultancy

3.11 No. of conferences organized by the Institution

| Level               | International                                | National         | State | University | College |
|---------------------|--|------------------|-------|------------|---------|
| Number              | 01   | 01               |       |            |         |
| Sponsoring agencies | ICONCE-2014<br>TEQIP<br>IEEE Kolkata Section | N3CD-13<br>TEQIP |       |            |         |

3.12 No. of faculty served as experts, chairpersons or resource persons

3.13 No. of collaborations International  National  Any other

3.14 No. of linkages created during this year

3.15 Total budget for research for current year in lakhs: 64 Lacs (36.5 Lacs under TEQIP)

From Funding agency  From Management of University/College

Total

3.16 No. of patents received this year

| Type of Patent |         | Number |
|----------------|---------|--------|
| National       | Applied | 05     |
|                | Granted |        |
| International  | Applied |        |
|                | Granted |        |
| Commercialised | Applied |        |
|                | Granted |        |

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

| Total | International | National | State | University | Dist | College |
|-------|---------------|----------|-------|------------|------|---------|
| 2     |               | 2        |       |            |      |         |

3.18 No. of faculty from the Institution who are Ph. D. Guides   
and students registered under them

3.19 No. of Ph.D. awarded by faculty from the Institution

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF  SRF  Project Fellows  Any other

3.21 No. of students Participated in NSS events:

|                  |                                  |                     |                      |
|------------------|----------------------------------|---------------------|----------------------|
| University level | <input type="text" value="648"/> | State level         | <input type="text"/> |
| National level   | <input type="text"/>             | International level | <input type="text"/> |

3.22 No. of students participated in NCC events:

|                  |                                 |                     |                      |
|------------------|---------------------------------|---------------------|----------------------|
| University level | <input type="text" value="43"/> | State level         | <input type="text"/> |
| National level   | <input type="text"/>            | International level | <input type="text"/> |

3.23 No. of Awards won in NSS:

|                  |                      |                     |                      |
|------------------|----------------------|---------------------|----------------------|
| University level | <input type="text"/> | State level         | <input type="text"/> |
| National level   | <input type="text"/> | International level | <input type="text"/> |

3.24 No. of Awards won in NCC:

|                  |                      |                     |                      |
|------------------|----------------------|---------------------|----------------------|
| University level | <input type="text"/> | State level         | <input type="text"/> |
| National level   | <input type="text"/> | International level | <input type="text"/> |

3.25 No. of Extension activities organized

|                  |                                |               |                                 |                   |                      |
|------------------|--------------------------------|---------------|---------------------------------|-------------------|----------------------|
| University forum | <input type="text"/>           | College forum | <input type="text" value="11"/> | (Club activities) |                      |
| NCC              | <input type="text" value="2"/> | NSS           | <input type="text" value="2"/>  | Any other         | <input type="text"/> |

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

- Hosting social re-union for the elderly people from old age home
- Making wheel chair and lift provision for differently able people
- Donation of Clothes to the needy people through community connect
- Efforts are on to provide books and excursive books to Primary School in the nearby locality as suggested by TEQIP performance Auditor

## 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  | 55       | 5 smart rooms |                |       |
| Laboratories   | 63       |               |                |       |
| 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   |          |               |                |       |

\*\* QEEE Server and IBM server, ECG machine etc..in RPS. (procurement in ME,CE not known)

#### 4.2 Computerization of administration and library :

| Facilities  | Status                     |
|---|----------------------------|
| OPAC  | Yes                        |
| Digital Resources   | Intranet through the space |
| Electronic Resource Management package for e-journals                 | IEL                        |
| Federated searching tools to search articles in multiple databases    | Yes                        |
| Library Website   | College Website            |
| In-house/remote access to e-publications                              | Yes                        |
| Library automation  | Yes                        |
| Total number of computers for public access                           | 10                         |
| Total numbers of printers for public access                           | 01                         |
| Internet band width / speed   | 50 mbps                    |
| Institutional Repository  | Yes                        |
| Content management system for e-learning                              | Yes                        |
| Participation in Resource sharing networks/consortia (like Inflibnet) | INDEST Consortium          |

#### 4.3 Library services:

|                 | Existing (rs) |         | Newly added |         | Total |         |
|-----------------|---------------|---------|-------------|---------|-------|---------|
|                 | No.           | Value   | No.         | Value   | No.   | Value   |
| Text Books      | 83000         | 1.68 cr | 10000       | 15 lacs | 83000 | 1.83 cr |
| Reference Books | 6009          | 18 lacs | 500         | 2 lacs  | 6509  | 20 lac  |
| e-Books         | 641           | 619400  | -           | -       | 641   | 619400  |
| Journals        | 108           | 600400  | -           | -       | 108   | 600400  |
| e-Journals      | 200           | 617952  | -           | -       | 200   | 617952  |

|                  |      |        |  |  |      |        |
|------------------|------|--------|--|--|------|--------|
| Digital Database | -    | -      |  |  |      |        |
| CD & Video       | 2900 | 5 lacs |  |  | 2900 | 5 lacs |
| Others (specify) |      |        |  |  |      |        |

#### 4.4 Technology up gradation (overall)

|          | Total Computers | Computer Labs | Internet           | Browsing Centres | Computer Centres | Office | Departments   | Others             |
|----------|-----------------|---------------|--------------------|------------------|------------------|--------|---------------|--------------------|
| Existing | 800             | 12            | 50 mbps<br>railtel | Yes              | Yes              |        | CSE/<br>IT/CA | ECE/<br>EE/<br>EIE |
| Added    | 50              |               |                    |                  |                  |        |               |                    |
| Total    | 850             |               |                    |                  |                  |        |               |                    |

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

- Number of computing systems with different computational environment viz. Client Sever, N-computing, Cloud etc.
- Internet connection of 50 mbps (Railtel) and emergency admin connection through BSNL
- Training to teachers through live classes in Smart Classrooms via IIT-NMEICT ISTE 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: (2013-14)

|  |                |
|--|----------------|
| i) ICT                                   | 24.41          |
| ii) Campus Infrastructure and facilities | 10.6           |
| iii) Equipments                          | 250.52         |
| iv) Others                               | 1613.85        |
| <b>Total :</b>                           | <b>1899.38</b> |

## Criterion – V

### 5. Student Support and Progression

#### 5.1 Contribution of IQAC in enhancing awareness about Student Support Services

- Students representative In IQAC
- IQAC instrumental in formulation of Students Life Centre. A total of 11 club activities 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 |
|------|-----|--------|--------|
| 2875 | 561 | -      | -      |

#### (b) No. of students outside the state

283

#### (c) No. of international students

15

|     |      |    |       |     |    |
|-----|------|----|-------|-----|----|
| Men | No   | %  | Women | No  | %  |
|     | 2681 | 78 |       | 755 | 22 |

| Last Year |    |    |     |                       |       | This Year |    |    |     |                       |       |
|-----------|----|----|-----|-----------------------|-------|-----------|----|----|-----|-----------------------|-------|
| General   | SC | ST | OBC | Physically Challenged | Total | General   | SC | ST | OBC | Physically Challenged | Total |
| 731       | 03 | 67 | 128 |                       | 929   | 725       | 07 | 77 | 136 |                       | 945   |
| 2012-13   |    |    |     |                       |       | 2013-14   |    |    |     |                       |       |

Demand ratio

Dropout %



5.4 Details of student support mechanism for coaching for competitive examinations (If any)

- GATE Coaching for the student
- Finishing school to produce role ready Engineer
- Aptitude training by Professional House for Competitive exams.

No. of students beneficiaries

800

5.5 No. of students qualified in these examinations

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

5.6 Details of student counselling and career guidance

- Students counselling are done in multiple platforms viz. departments through mentorship programme
- At Career guidance via Placement Cell
- Via TEQIP Equity Action Programme etc.

No. of students benefitted

1500

5.7 Details of campus placement

| <i>On campus</i>                |                                 |                           | <i>Off Campus</i>         |
|---------------------------------|---------------------------------|---------------------------|---------------------------|
| Number of Organizations Visited | Number of Students Participated | Number of Students Placed | Number of Students Placed |
| 33                              | 573                             | 375                       | 124                       |

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

State / University level

150

National level

International level

No. of students participated in cultural events

State/ University level  National level  International level

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports : State/ University level  National level  International level

Cultural: State/ University level  National level  International level

#### 5.10 Scholarships and Financial Support

|  | Number of students | Amount (in lacs) |
|--|--------------------|------------------|
| Financial support from institution   | 13                 | 2.45             |
| Financial support from government  | 42                 | 126              |
| Financial support from other sources   | 71                 | 14.2             |
| Number of students who received International/ National recognitions (TEQIP scholarship –world bank) | 46                 | 46               |

#### 5.11 Student organised / initiatives

Fairs : State/ University level  National level  International level

Exhibition: State/ University level  National level  International level

5.12 No. of social initiatives undertaken by the students

5.13 Major grievances of students (if any) redressed: \_\_\_\_\_

## 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 ambience 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 in departmental programme educational objective (PEO).
6. Stakeholders (student, guardian, alumni, employer) feedback must be taken and analysed before framing out the syllabus.
7. The BOS of all technological departments must take into account the Institutional Vision, Mission and objective and frame the Curriculum accordingly.
8. The credit range has been suggested
9. 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 emphasize.
12. Direct and indirect assessment tools are to be used.

### 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. Group discussion- picture prompt- individual presentation-tournament –role play
4. Assignment
5. Workshops
6. Brain storming
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 timeline is set within 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 benchmarking criterion has been introduced:

- Number o highly cited researchers in the institute
- Academic performance per faculty
- Total articles in reputed journals
- Number of citations
- H-index of institute and individual faculty members
- International collaborations
- Number of patents granted and files... so on.

### 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.
- Resealable number of titles with volumes.
- Subscription to high-end e-journal repository like IEEE IEL 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 up gradation 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 a research 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 achieve 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. 948246.45/-

6.6 Whether annual financial audit has been done

Yes

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,<br>NIT Agartala         |          |           |
| Administrative | Yes      | Performance &<br>statutory audit |          |           |

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes      Yes  No

For PG Programmes      Yes  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

- Alumni Association meeting held
- Alumni meet conducted
- Alumni 'Day out programme" organized recently.
- Alumni archive and Alumni chapter in top major cities proposed.

6.12 Activities and support from the Parent – Teacher Association

- Parent are the important stakeholders
- IQAC plan to incorporate more views from the parent in terms of their wards education.
- Appraisal / indirect assessment from the Guardian are proposed by IQAC since they are the financier and they make investment in child education

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
  - Technical staffs are provided with SDT
  - Administrative and technical staffs were provided BCL training

#### 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 each plant/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.

- College is covered with over greenery and big trees.
- Nearly 6 acres of lawn and play ground equipped with water sprinkling system.
- Over 2000 plants in pots spreading over all departments.
- Bio- manure is prepared in the campus using bio – waste provided out of trees and plants.
- Organic waste of the campus is converted into fertilizer compost within 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.

|  |
|--|
| <p>The innovations created mainly to uplift standard in quality of education:</p> <ul style="list-style-type: none"> <li>- Mandatory Curriculum content analysis, lesson and session Plan for each courses by the teachers</li> <li>- Practise outcome based teaching methodologies</li> <li>- Stress on active, interactive and self learning</li> <li>- Model based and real-world problem based teaching.</li> </ul> <p>Four patent applications were filed.</p> <p>Research innovation include</p> <ul style="list-style-type: none"> <li>- more interdisciplinary works</li> <li>- attract more PG student to research by encouraging them to attend Conferences</li> </ul> |
|--|

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 2013-14 (mentioned in the Section 2.15, following are the Action taken report.

|   |
|---|
| Committee being formed, they have prepared the project with feasibility report. It shows that it will be uneconomic considering the amount of waste generating in the canteen. They are working with inclusion of the waste from both the hostel. |
| CFL lights being installed in the hostels and few areas in the college and work is going for complete change over.  |
| Continuous improvement is on  |
| Done  |
| Maximum thrust has been given on this. As a result 13 minor projects being sanctioned by UGC this year. 5 projects are submitted to MNRE, DST and AICTE. Workshop conducted on research project.  |
| Already three smart classrooms been prepared and handed over to three departments. Rests will be completed within the year 2014.  |
| Organised all the scheduled seminars  |
| Conducted International conference in the month of January 2014   |
| Process is going on   |
| 04 Interactive sessions have been organised amongst the students to make them aware about the programmes. As a result as on date 960 students are the active members of different clubs of the college.   |
| Personality development and soft skill training was conducted for all the student of pre-final year.  |
| In progress   |
| It has been started of conducting on line mid semester exam and the software for handling the exam data.  |
| Periodically we are increasing the courses  |
| Bio-Medical Engineering department started a certificate course   |
|   |

|  |
|--|
| Organised workshop in the month of Nov 2013 with 10+2 students of the surrounded institutes and distributed the directory of higher technical institutes prepared by us. |
| Training organised for pre-final year students on HR topics such as – Motivation, Organisational Behaviour, TQM etc.   |
| Conducted 02 nos. Staff development programme by British Council.  |
| Process is continuing  |
| Few department have incorporated some practices which will be assessed in terms of success evidence  |
| Yet to be completed  |
| Work is on progress  |
| Targeted to declare the campus as Green Campus by 2018.  |

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  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

|   |
|---|
| <b>Teaching Learning Process</b>  |
| ➤ 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 stakeholders feedback from Students, Guardian, Faculty, Alumni, Employer, Board.   |
| <b>Infrastructure development and Civil works:</b>  |
| ➤ 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   |
| <b>Faculty Development Programme</b>  |
| ➤ 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   |
| <b>Research and Development</b>   |
| ➤ 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   |
| <b>Industry Institute partnership</b>   |
| ➤ 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 departments  |

|  |
|--|
| ➤ To 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  |
| <b>Others</b>  |
| ➤ 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 ICT based learning like ICTE, QEEE, NMEICT programmes hosted by MHRD-IIT. |

Name \_\_\_\_\_

Name \_\_\_\_\_

\_\_\_\_\_  
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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