

J B Institute of Engineering & Technology

Yenkapally (V), Moinabad (M), Ranga Reddy Dist., Hyderabad – 500075, A.P.

The Annual Quality Assurance Report (AQAR) of the Internal Quality Assurance Cell (IQAC) – NAAC

Name of the Institution : **J.B.Institute of Engineering & Technology**

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All accredited institutions shall submit the AQAR to the NAAC ***by the end of every academic year*** with emphasis on the following key result areas:

Year of Report: 2010-11

Part - A

The plan of action chalked out by the IQAC at the beginning of the year 2010- 11 towards quality enhancement and the outcome achieved by the end of year.

- It is planned to offer quality education by conducting more innovative teaching - learning methods. Special training is being given to Faculty members with the help of IIIT Hyderabad and Wipro Mission 10X Programme.
- It is decided to pay more attention to the Communication Skill improvement of students. Special periods are introduced for this purpose and a specialist motivator has been appointed on regular basis.

- It is decided to strengthen EDC cell with AICTE grant already accorded.
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- It is decided to lay more stress on the Career Oriented Program like Campus Connect of Infosys and The Great Mind Challenge (TGMC) of IBM.
- Several Seminars, Guest Lectures and Workshops on topical subjects has already been conducted and several others are in pipeline to impart knowledge beyond syllabus and enable the students to understand current Technology trends.
- Replacement of computers is on way in various laboratories of all Departments. Internet capacity have already been enhanced from 16 Mbps to 20 Mbps. Plan is there to further enhance it to 24 Mbps.
- Fiber optic backbone is almost complete for all the buildings of JBIET.
- Conducting Remedial Coaching Classes for the educationally backward students belonging to SC/ST/OBC/Minorities to create a sense of healthy competition among them are undertaken by announcing stipend to them on merit/means basis.
- Coaching classes are planned for entry in services for SC/ST/OBC& Minorities to prepare students to get gainful employment.
- Strengthening Alumni Association and Organizing Alumni meets are planned to harness resources of distinguished alumni.
- JB Research Review has already been a success. Three issues have already been published. In 2010-11 editorial committee will be enhanced by incorporating distinguished researchers from outside JBIET.
- JBIET is trying its best to boost the quality of student projects done as part of the their course work. Several student projects of JBIET are recognized nationally.

P A R T - B

1. Activities reflecting the Goals and Objectives of the institution:

The Vision, Mission & Objectives of the J.B.I.E.T are to fulfill the needs of the Society and Nation by providing Quality Education in the Technology & Management and to be Innovative in outcome based teaching methodology.

2. New Academic programmes initiated (UG & PG) :

The J.B.I.E.T. has introduced Mining Engineering from this academic year i.e. 2011-12.

3. Innovations in curricular design and transaction :

- Curriculum designed as per the University / Industrial Requirement
- Delivery of Lectures beyond class room with practicality of the subject
- Web based content delivery of handouts
- Teaching pedagogy with two way type lectures
- Mind mapping, Role Plays, Management Games, Practical Exposures, Industrial Visits, Research Surveys, Case Based Teaching Methodology
- More focus on Communication Skills, Human Skills & Technical Skills
- Mentoring Process / Mentorship with Tutor & Learner
- Train The Trainer Concepts introduced at UG & PG Levels

4. Inter-disciplinary programmes started :

At present the J.B.I.E.T has not introduced any new inter-disciplinary programmes. However we will introduce them in future, based on the specific demands.

5. Examination reforms implemented :

- **Reforms in Written Exams**
 - a) Questions are framed by making them specific in terms of objective contents & language.
 - b) Scientifically sound interpretation of answers with suitable examples.
 - c) Question Papers to be made balanced in various aspects by limiting options and by the provisions of a detailed marking schemes.
- **Reforms in Oral Examinations**

- a) Identification of the abilities & subject areas of oral expressions that have been under educational developments
- b) Comprehensive coverage of the identified abilities / subject areas of oral examinations.
- c) Improvements of objectivity in the assessment of these abilities / subject areas.

➤ **Reforms in Practical Examinations**

- a) Evaluation of proficiency in wider variety of skills by making a student to perform a number of small experiments instead of just one big one.
- b) Evaluation of both the process and product of performance.
- c) Minimizing inter & intra examiner variability in scoring through the development and use of a detailed marking schemes.

6. Candidates qualified : NET / SLET /GATE etc.

No. of the candidates qualified in

NET	-	One
FET (Faculty Eligibility Test by JNTU, Hyderabad)	-	27 Faculty
Faculty Ratified by University	-	106
GATE	-	93

7. Initiative towards faculty development programme :

- The JBIET is having membership with various professional bodies like CII, FAPCCI, HMA, NHRD, AIMS, ISTE, CSI, IEEE,JKC,SAC, BAJA, IITH, MCIT etc. Faculties are encouraged to attend and participate the various FDP, Workshops, TTT (Train The Trainer) programmes at Regional, National & International Levels.
- In House & Out House Faculty Development Programmes organized by JBIET in Association with Wipro Mission 10X on “High Impact Teaching Skills” in two phases during the month of June & September 2011.

8. Total no. of seminars / workshops conducted :

- Seminars / Workshops - 21

- Guest Lectures - 33
- Paper Presentation At National Level- 01

9. **Research Projects**
- a) Newly implemented : 05
 - b) Completed: 01

10. Patents generated, if any : - **One**

11 New collaborative research programmes :

Research collaboration in the field of Research Student exchange and organization of Research Workshops specially “International Crime Detection & Prevention using computers” (ICDP 2011) is in pace with KINGSTON UNIVERSITY, Kingston Upon Avon, United Kingdom.

12. Research grants received from various agencies:

- a) AICTE –Grant-in –aid under MODROB scheme (Low Power VLSI System Design)for the academic year 2008-2009.

Received amount of Rs.10,00,000/- (Ten Lakhs only) for the year 2008-2009.

Rs.13,00,000/-(Thirteen lakhs only) for the year 2009-2010

- b) AICTE –Grant-in –aid under Entrepreneurship Development Cell (EDC) scheme for the academic year 2010-2011.

Received amount of Rs.6,00,000/-

13. Details of research scholars:

No. of staff members registered for Phd. department wise.

Mechanical	-	3 Nos.
BioTechnology	-	1 No.
ECE	-	2 Nos.
EEE	-	5 Nos.
IT	-	4 Nos.
CSE	-	6 Nos.
Bio Medical	-	1 Nos.

Civil	-	3 Nos.
Physics		-2 Nos.
MBA	-	5 Nos.
MCA	-	Nil

14. Citation index of faculty members and impact factor:

- Dr. Uday Kiran, Professor, Mechanical Dept. Impact Factor is 7/3,
- Dr. S. Vathsal published Technical paper in European Journal of Scientific Research w.r.t. Computer & Electrical Engineering.
- Mr. Narendra Phani Kumar published Book “Principle of Nano Technology” 1st Edition released in 2009 & 2nd Edition in 2010.
- Ms. M. Sujatha published paper in Chemical Technology Journal , Vol. 6, Issue -1 of 2011.
- Dr.Niraj Upadhayaya, Prof & Head of CSE Paper Published -40, Referred -200.
- Dr.Smriti Agarwal, Assoc.Prof IT, Published Paper – 6 Nos, Referred -24.

15. Honors / Awards to the faculty:

- Dr. S. Vathsal, EEE Dept. honored as “*Jewel of India Award*” by Indian Solidarity Council.
- Dr. S. Vathsal, EEE Dept. honored as “*Vidya Ratan Award*” by the Economic for Health & Educational Growth.
- Dr. S. Vathsal, EEE Dept. honored as “*Rajiv Gandhi Educationalist Award*” Indian Solidarity Council.
- Dr. G. Jagmohan Das, Civil Dept, JNTU Alumni Technical Symposium-2010, JNTU 1st Silver Jubilee of Water Resource Centre-2010.
- Dr. Niraj Upadhyaya, CSE Dept. “*Elected as Fellow of Institute of Engineers*”
- Dr. Niraj Upadhyaya, CSE Dept. “*Appointed as Chief Mentor of NGO NIRMAAN*”
- Dr. Niraj Upadhyaya, CSE Dept. “*Elected as Secretary of Broad Cast Engineering Society of India, Hyderabad Chapter*”.
- High impact learning skills was awarded to 13 teachers of ECE,IT & CSE.

- Dr.SumagnaPatnaik appointed as a reviewer for reviewing papers for ICIT (International Conference on information and Technology), 2010

16. Internal resources generated:

- Nil -

17. Details of departments getting SAP, COSIST (ASSIST)/DST.FIST, etc. and assistance / recognition:

- Nil -

18. Community Services:

JBIET offers various services to the underprivileged sections of the Society:

- Blood Donation Camps organized in association with blood banks
- Distribution of Fruits, Toys, Cloths to the Orphan Centre
- Distribution of Books, Stationery & other school items at Yenkapally village
- Educational Development , Sanitary, Medical services to the poor village peoples in the rural areas.
- Staff, Students & Alumni have financially supported the Blood Cancer patients.
- Students volunteering in NGO's Social Service Activities
- One student has won 2010 Education contribution award from NGO, Sikha.
- Visiting & Counseling to the old age Home & Orphan Centre.

19. Teachers and officers newly recruited:

- 45 Teaching faculties appointed in various cadres in different departments of JBIET.

20. Teaching – Non-Teaching staff ratio: 5:1

21. Improvements in the library services:

Total No. of Volumes Added : 1580 (55398 Total)
Total No. of Titles Added : 200 (8960 Total)
Total No. of Projects Added : 300+
Total No. of CDs/Software added : 200+

22. **New books / journals subscribed and their cost:** 200/15, Rs.2.5 Lakhs

23. **Courses in which student assessment of teachers is introduced and the action taken on student feedback:**

JBIET is taking the Students Feed back during the mid/end of the semester, and precautionary / actionary measures are put into the practices.

24. **Unit cost of education:**

Unit cost of UG Convenor quota Rs. 35,130/- per student per year

Unit cost of UG B Category quota Rs.99130/- per student per year

Unit cost of PG Convenor quota Rs. 55,000/- per student per year

25. **Computerization of administration and the process of admission and examination results,**

Issue of certificates:

- Administration - Office Automation is in the process
- Admission - Online process for web based counseling done by the Govt. of A.P. for convenor quota
 - manual / through JBIET website for B category seats
- Examination Results - JNT University Hyderabad through their web portals & updates on the college website.
- Certificate issued by the JNTUH through JBIET

26. **Increase in the infrastructural facilities:**

- Additional floor area is added to the existing area
- New building is allocated to the B-Tech programmes with floor area **10,13,847 Sqm.**
- New labs set up for CSE & IT Labs.
- Upgradation of existing labs in CSE & EEE Labs.
- Old computer systems are shifted to IT workshops.
- Communication & Soft Skills lab setup with modern equipments
- EDC cell setup with required facilities.

27. Technology upgradation:

- Linux systems were upgraded to Kernel 3.0
- IT audit was performed by KPMG
- Quick Heal is updated as Anti Virus for Window system
- Software packages like Pspice, Power Gis, Power Net, Power Trans are introduced for power system technology upgradation.

28. Computer and internet access and training to teachers and students:

- All the labs in the different departments are connected with broad band internet connectivity.
- Separate net connection is provided to the faculty in the staff room & also in the rooms of Heads of Departments.
- Wi fi connection is provided in the main building.
- Digital library is equipped with modern facility, internet connectivity with provision for usage by 50 + students

29. Financial aid to students:

- Fee concession for meritorious students by the Management
- Govt. Scholarship to the reservation category students
- For Financially/Economically poor students, JBIET Management provides high concession in regular fee.

30. Support from the Alumni Association and its Activities:

- Alumni Association helps in providing LIVE projects, placements in their companies / sometimes referral to other companies.
- Arranging Guest Lectures from the Alumni on general / subject topics
- Arranging one meeting in a year with the Alumni Association.

31. Support from the Parent-Teacher Association and its Activities:

- The college is organizing one meeting every year with the Parents Teachers interact about the regularity of the students, discipline, academic/non-academic performance with the parents.
- Two way type of interaction with the parents to generate new ideas about the strengthening of the academic / non-academic activities.
- Some times parents are coming forward in helping placements through their contacts.
- Intimation about the behavior, attendance & other in-disciplinary matter about the students will be informed through College Management System (CMS)

32. Health Services:

- Free Medical / Health Check is provided by the Management to the staff &the students in Bhaskar Medical Hospital situated in college campus.

33. Performance in sports activities:

- Various teams of JBIET have participated in different sports and won various competitions at the Inter college / University level / District level.

34. Incentives to outstanding sportspersons:

- As on today, Management is providing the basic requirements & sports items to the interesting students.

35. Student achievements and awards:

- 7 students from UG & PG programmes of JBIET secured University Ranks (Ranks of 1,2,6,7. Etc)
- Mechanical students of third year designed and developed a Racing Car and won the 2nd prize at the National level with a cash prize of Rs. 40,000/-
- Four students of civil engineering presented paper at fourth International Conference on Environmental Impact and water resources at Singapore.
- Papers presented by various students from different branches and won prizes.
- 200+ students got placed through On campus & Off Campus Interviews for the year 2010-11.

36. Activities of the Guidance and Counseling Cell:

- Students are under the guidance of mentor (Faculty)
- Regular / Frequent counseling with the students by faculty on various aspects like ragging, academic affairs, morale boosting, career development, community services.

37. Placement services provided to students:

- 200+ students got placed through On campus & Off Campus Interviews for the year 2010-11.
- Recruiters like, WIPRO, DELL, INFOSYS, GOOGLE, AMAZON, VISHAL SURGICAL SYSTEMS, PEES MEDICAL SYSTEM etc.

38. Development programmes for non-teaching staff:

- Regular training is provided to the non-teaching staff on office automation, library and online services to the staff and students.
- Organized various activities for non-teaching staff on accounting systems (manually & Computerised), Software upgradation, compliance reports to AICTE etc.

39. Best practices of the institution:

- Highly focused on practicality of the subjects
- Two types of teaching methodology
- Case based teaching practices
- Role play activities
- Management / Team building games
- Leadership skills exercises
- Mock project presentations
- Mock Interviews
- Students / Parents Feedback process
- On The Job Training
- Membership with professional bodies(CII, HMA, NHRD, FAPCCI, ISTE, CSE, JKC etc.)
- Regular Home Assignments

- Industry Visits
40. **Linkages developed with National / International, academic / research bodies:**
- Membership with professional bodies (CII, HMA, NHRD, FAPCCI, ISTE, CSE, JKC, AIMS etc.)
 - Dr. S. Vathsal presented a paper on “Renewable Energy Sources” in India International Energy Summit in VNIT, Nagpur, Jan. 2011
41. **Any other relevant information:**
- JBIET has got AUTONOMOUS status from JNTUH during September, 2011.
 - Conducts annually **National Level Technical Symposium “INFOQUEST”**

PART – C

PLANS OF THE INSTITUTION FOR THE NEXT ACADEMIC YEAR 2011-12

- It is planned to offer quality education by conducting more innovative teaching- learning methods under implementation. Several faculty members are already trained with the help of Wipro Mission 10X and IIT Hyderabad, and they will percolate this training to other faculty members in 2011-12 to make the adaptation of innovative teaching –learning methods easier.
- It is decided to pay more attention to the Communication Skills of the students. A motivator has been appointed for this purpose and a lab has been established. It is planned to provide 200 hours training to all passing out students in Communication Skills during 2011-12.
- Placement will be further strengthened, as newly recruited HR managers will be deployed to augment Training and Placement Facilities during 2011-12.
- In 2011-12 JBIET will strengthen its Industry Oriented Training Programme for students like Campus-Connect for Infosys, The Great Mind Challenge (TGMC) for IBM and Mission 10X for Wipro.

- JBIET has signed an MOU with iCarnegie, powered by Carnegie Mellon University USA, a globally leading institute in Robotics, Computer Science and Artificial Intelligence, has tied up with Technophilia Systems Private Limited (TSPL), a national leader in Robotic Education. The tie up will result in the launch of the first of its kind Centre for Robotics and Embedded Systems Excellence (CRESE) in JBIET.
- Industry Institute Interaction cell will organize several events at JBIET during 2011-12, calling eminent Industry experts to inform students about Industry expectations.
- To conduct Remedial Coaching Classes for the educationally backward students belonging to SC/ST/OBC/Minorities. JBIET will continue to provide stipend to few students on the basis of Merit / Financial criterion.
- To modernize and renovate laboratories of all departments to meet changing Industry needs with time.
- Coaching classes will be started for entry in services for SC/ST/OBC& Minorities to prepare students to get gainful employment.
- In 2011-12 JBIET will start the process of thinking in terms of Implementing Choice based Credit System.
- Conduct of National Seminars on current technological topics.
- Giving current Alumni Association a purpose and seeking the help of distinguished Alumni.
- To further sensitize the professional student bodies of IEEE / ISTE / CSI/ IETE/ IE.
- To incorporate distinguished outsiders in JB Research Review and acquire ISSN number for the same.

- To conduct internal Academic Audit more often than before, in view of further assessing and augmenting the quality in the coming year.
- To invite External Academic Audit Committee and seek their advice.
- To continue games hours and library hours.
- To contribute articles to national and international journals.
- All the above are in addition to the regular activities.
- As part of Autonomy, JBIET will conduct its own examinations and complete the Valuation Process and declare the Results from 2011-12 onwards.
- JBIET will device its own Course Structure and Syllabus Contents to keep pace with the Industry needs from 2011-12 onwards.
- JBIET will get the Autonomy from UGC in 2011-12, as already the application has been submitted under 2(f) and 12 (B) of UGC.

Prof. Rajesh Pershad

Dr.V.V.Rao

Name & Signature of the Coordinator, IQAC

Name & Signature of the Chairperson, IQAC