1st Cycle of Assessment and Accreditation

SELF STUDY REPORT

Submitted to

National Assessment and Accreditation Council (NAAC)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

Kukatpally, Hyderabad - 500 085, Telangana State, INDIA

VOLUME – I

September 2016

Kukatpally
Hyderabad - 500 085
Telangana State, INDIA.

Phone: 040-23156109 (O)
Fax: 040-23156112
Email: vcjntu@jntuh.ac.in
Website: www.jntuh.ac.in

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

Prof. A. Venugopal Reddy
M.Tech. Ph.D.
Vice-Chancellor

Declaration by the Head of the Institution

I certify that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

VICE-CHANCELLOR

With seal:

Place: Hyderabad
Date: 09.09.2016

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

CONTENTS

PREFACE

Jawaharlal Nehru Technological University Hyderabad (JNTUH) was established with a vision to provide advanced learning and knowledge in Engineering & Technology, Physical and Social Sciences through teaching, research, experimentation and practical training and/or by such other means as the University may deem necessary. The mission of the University is to provide the form of education that allows students to spend periods of intramural work so that upon graduation not only do they possess a range of academic learning, but also learn and acquire knowledge for the benefit of the state in particular and the country in general.

The University is among the first to initiate e-Learning Solutions and two-way HD Delivery Mechanism for teachers and students. In order to expand its academic activities globally, the University has entered into Memoranda of Understanding (MoU) with reputed educational organizations based in foreign countries in addition to National institutions and organizations with a view to sharing its expertise with the rest of the world and other national institutions. The University has been admitting a large number of students from various countries into undergraduate, postgraduate and research programmes.

The University is at present offering several undergraduate, postgraduate and Double Degree Programmes as well as many research programmes in its campus. It has at present 337 affiliated colleges offering courses in 262 postgraduate departments.

It has been continuously upgrading its campus infrastructure to meet the requirements of National and International Accreditation agencies including AICTE/UGC. The University also provides 24/7 computing facilities in all the departments of the constituent colleges and units. The University library caters to the needs of the students and research scholars continuously by providing access to learning resources.

The University has constituted an Internal Quality Assurance Cell (IQAC) to enhance the quality of technical education and research. Through Human Resources Development Centre (HRDC), the University has been organizing refresher, faculty development and orientation courses for teachers in its constituent and affiliated colleges.

The University mobilizes its own resources through self-financing courses, tuition fees from international students, consultancy and testing services, collaborative research, funds from the alumni and support from the State and Central Government agencies.

It is undertaking several community service activities such as, environmental consciousness, energy conservation, rainwater harvesting, tree plantation as well as hazardous waste management and disposal.

In all matters, the University has been scrupulously following the guidelines issued by the regulatory bodies, namely, UGC, AICTE, Pharmaceutical Council of India and Government of Telangana.

On the basis of its vision and mission, infrastructure facilities, innovations and best practices, it is in the forefront of technological universities of India for imparting quality technical education and research.

Prof. A. Venugopal Reddy
Vice-Chancellor
JNT University Hyderabad

EXECUTIVE SUMMARY

Jawaharlal Nehru Technological University, Hyderabad was established on 2nd October 1972 by the Legislature of the State of Andhra Pradesh as the first–ever Technological University in the country. It has been in the forefront during the last forty four years in providing quality technical education of relevance in the State of Andhra Pradesh. After 36 years of relentless service to the society at large, JNT University was restructured into four different Universities by the Government of Andhra Pradesh vide Government Order No. 13, dated 18th August 2008 and the Act of State Legislature No. 30, dated September 2008. Consequently this University was redesignated as Jawaharlal Nehru Technological University Hyderabad (JNTUH), Hyderabad, in place of JNTU, Hyderabad.

The University is situated at Kukatpally, Hyderabad. JNTUH has four constituent engineering colleges and four units/schools, three constituent engineering colleges are situated in rural areas of telangana. The constituent colleges and units/schools are listed below:

1. JNTUH College of Engineering, Hyderabad
2. JNTUH College of Engineering, Jagityal
3. JNTUH College of Engineering, Manthani
4. JNTUH College of Engineering, Sultanpur
5. Institute of Science & Technology
6. School of Information Technology
7. School of Management Studies
8. School of Continuing and Distance Education

The above units are offering 21 undergraduate courses in B.Tech., 49 Postgraduate courses in M.Tech., M. Pharmacy, M.Sc., MBA and MCA, Integrated 5 year Dual Degree Masters Programme in 10 disciplines with M.Tech./MBA/MS. In addition to this, MS, M.Phil and Ph.D programmes in various disciplines of Engineering, Technology, Science, Management and Humanities & Social Sciences are offered. The University has Memoranda of Understanding (MoU) with many National and International organizations, universities and institutions.

The University offers B.Tech degree programme in 24 branches, B.Pharmacy, M.Tech. degree programme in 68 disciplines, M. Pharmacy in 11 disciplines, MCA and MBA programmes in affiliated colleges. It has 337 affiliated colleges spread over the entire Telangana State. It has over 3.50 Lakhs of students on rolls.

A good number of the faculty of JNTUH have received Best Teacher awards of the state government and other awards of distinction, such as the Best Paper award, outstanding scientist award and teaching excellence awards.

To enhance their skills and knowledge the faculty members attended 792 refresher courses, 643 orientation programmes, 174 workshops, 83 interaction programmes and 522 short term courses. The faculty members have published /presented 243 technical papers in national /international journals /conferences.

Promotion of Research

The University has the Directorate of Research and Development under which Departmental Research Committees (DRCs) have been constituted to identify emerging areas of research, and monitor the progress of the research scholars. The DRC comprises of the Board of Studies (BoS) Chairperson, Head of the Department (HoD) and two senior faculty members of the department concerned.

It has recognized three research centres in affiliated colleges based on the criteria of availability of infrastructure, qualified faculty and track record of research in those colleges. The faculty members of the affiliated colleges ratified by the University as per the UGC guidelines can be supervisors / co-supervisors of research scholars.

JNTUH has been undertaking interdisciplinary research work involving the departments within and outside the University. It has been continuing collaborative research work with IICT, DMRL, DRDL, DRDO, TECUMSEH, DLRL, CITD and other organizations of national and international repute.

Industrial Consultancy

The objectives of University are to promote entrepreneurship and industrial consultancy services in different disciplines. Accordingly, JNTUH has a Bureau of Industrial Consultancy Services (BICS). It paves the way for University and industry interaction. It designs, analyses and approves the structural needs of the central and state government agencies, such as, the Hyderabad Metro and Greater Hyderabad Municipal Corporation (GHMC). The University has a Directorate of University-Industry Interaction Cell (UIIC) to address the needs of the government, the University, private and public sector industry.

National Service Scheme

The University has 113 NSS units in its 4 constituent colleges and 107 affiliated colleges. These units have been organizing numerous activities relating to the needs of the society and community building. The NSS Unit of JNTUH conducted 50 special camps, health check-up camps, youth festivals, road laying, anti-drug awareness, wealth out of waste programs. The NSS unit has been promoting the University-neighbourhood network and student engagement for the holistic development of the students.

Swachh Bharath, Harithaharam and Plantation

The University organized “Swachh Bharat Campaign”. The NSS organized a seven-day special campaign by adopting slums and took up cleanliness drive with NSS volunteers from various colleges. About 60 NSS volunteers participated every day in the campaign. From time to time, as per the directions from the state government, the NSS units are also conducting Harithaharam and participating in plantation programmes.

Academic & Planning

The Academic and Planning section of the University is headed by the Director and assisted by coordinator, Joint Registrar, Assistant Registrar and other staff. It looks after academic & planning works of entire University which includes preparation of academic calendar, constitution of Boards of Studies in various disciplines, conducts BoS meetings, revision of curriculum, syllabi and academic regulations from time to time for UG, PG and research programmes. This section monitors the functioning of academic programs in private colleges affiliated to JNTUH. It looks after the correspondence with MHRD, UGC, AICTE, PCI, DST and other agencies for recognition of undergraduate and postgraduate programmes, scholarships, projects, funds and grants.

This directorate is responsible for initiating, executing and monitoring of Memorandum of Understandings (MoUs) with national and international universities, institutions, industries and other private organizations.

It also process the issue of tender notifications, clearance of the purchases of equipment, furniture, books and other stationary requirements of various constituent colleges and units of JNTUH by conducting University purchase committee meetings and University Committee for Perspective Planning (UCPP). The Academic and Planning section of the University also looks after the overall arrangements for the conduct of University convocation and maintains the records pertaining to endowment gold medals.

The Academic and Planning section collects the data from all the units of the University and furnish the statistics to various bodies like UGC, AICTE and TSCHE etc.

Memoranda of Understanding

The University has entered into Memoranda of Understanding (MoU) with different national/ international institutes/industries for imparting technical education and promoting the courses needed by the industry. At present the University has MoU with Carnegie Mellon University of the United States of America; Asian Institute of Technology, Bangkok, Thailand; and Blekings Institute of Technology, Sweden. JNTUH has memoranda of understanding with a number of national institutes/organizations.

Admission Section

The Directorate of Admissions is headed by a Director. This section conducts entrance tests and counselling for admissions to various regular and part-time programmes including Ph.D programme. It also helps the state government by extending facilities for admission process into various courses through state entrance tests such as EAMCET, ECET, PGECET, EDCET, LAWCET conducted by the state government.

Examination and Evaluation

The University strives at an infallible conduct of the examinations and evaluation of the answer scripts. In spite of being a difficult task, as the total number of candidates appearing for the end examinations is over 4.5 Lakhs including supplementary candidates per semester.

The University has introduced certain significant innovative reforms in the evaluation process:

1. For collecting the answer booklets immediately after the University examination, an arrangement has been made with the Logistic-Postal department for collecting the material from the colleges to University directly. This service helps the material to reach safely within 12 hours.
2. Periodic upload of the student attendance once in every month has been introduced. This helps to improve the transparency in the system, which in turn is beneficial to the parents, students and the colleges.
3. To meet various requirements of the University as well as the different government organizations, comprehensive data, which includes parental income, biometric information etc., of all the candidates enrolled in first year has been collected in online mode from the academic year 2011-12.
4. Upload of the faculty information is now made mandatory along with the student registrations for the University examinations. This data is being used to further strengthen the valuation system.
5. Valuation tracking system has been implemented in a full-fledged manner from this year onwards. This system helps to track the valuation process and progress at different spot valuation centres. It is also helpful to directly credit the remuneration to the evaluators in their respective bank accounts.
6. The consolidated University examination fee is now transferred from the colleges through on-line in place of demand drafts.
7. On-line upload of the laboratory and project work award lists, directly to the University servers has been introduced. This initiative is helpful to speed-up the results process.
8. A new initiative has been taken to send the results data to the respective college Principals in a secured mode on the day of results declaration. This data will be in turn uploaded directly to the web-site of the respective college. The advantage of this system is that the students can view the results from their respective college websites and also through University website.
9. A new initiative has been taken for shuffling the examination centres while conducting the M.Tech/M.Pharm examinations. This initiative helps to prevent malpractice and to improve the transparency in conducting the University Examinations.

Directorate of Academic Audit

The University has established this Directorate in 2009 to monitor the functioning of affiliated colleges under the jurisdiction of JNTUH. The Directorate of Academic Audit Cell conducts a comprehensive and objective assessment of institutions in terms of norms and regulations laid down annually. Procedures and formats, enabling transparency and automation of affiliation process are adopted. The emphasis on infrastructure to support practical orientation of curriculum, accountability of institutions to the society, monitoring of institutions on a continuous basis, automation for faster processing, greater awareness of requirements and norms, opportunity to colleges for improvement of academic infrastructure

are just a few of the modifications adopted towards University's continuous efforts as a regulating body.

Autonomy of Academic Departments

The University encourages autonomy of the academic departments. Academic audit procedures are followed to evaluate the performance of each department. The Head of the Department, the Chairperson of the Board of Studies, the Departmental Research Committee, the Principal/Director of the College and the Director of a Unit or Institute exercise their rights and responsibilities and privilege independently.

Directorate of University Foreign Relations

The Directorate of University Foreign Relations was established to help the foreign students to acquire information about various academic programmes offered by the University and takes care of their admission procedure and welfare. At present the University has good number of students from Iran, Iraq, Sudan, Yemen, USA, Palestine, Djibouti, Nepal, China, Somalia, Bangladesh, Nigeria, Libya, Syria, Ethiopia, Australia, Afghanistan, Saudi Arabia, Algeria, Eritrea, Ivory Coast, Omen, Canada, Bhutan, Maldives, New Zealand, Thailand, Mauritius, Zimbabwe, Tanzania, Guyana and Ghana. The students are admitted into B.Tech., M.Tech., M.Sc., MBA, M.Phil and Ph.D programmes and accommodation is provided to them in the international students hostel with all necessary facilities within the campus.

Interaction with Industry

JNTUH has established the Directorate of University–Industry Interaction to cater to the needs of the industry and strengthen the interaction and collaboration with the industry through consultancy and research projects in thrust areas. The University has entered into several MoUs with various industries for conducting academic, research and development programmes.

The Directorate coordinates with all its placement units of its constituent colleges, units and affiliated colleges. In the recent past as many as 1849 students of JNTUH belonging to all branches have been recruited to various positions in organizations like TCS, WIPRO, Infotech, L&T, VOLTAS, IBM, Indian Army, Tech Mahindra, Oracle, HCL, Amazon, Zen Technologies, and Deloitte.

Training and Placement Cell

The University has established a Training & Placement cell as part of University Industry Interaction Centre. It provides necessary career guidance and training programs to the students for placements.

Due to active collaboration with industry, several students have been placed in TCS, Wipro, Infosys and other industries.

Infrastructure and Learning Resources

JNTUH has been continuously upgrading its campus infrastructure as per AICTE/UGC norms. The University provides 24/7 computing facilities for all the departments of the constituent colleges and units. The University Library caters to the needs of all the students by providing the access to learning resources. All the constituent colleges/units have separate libraries for the immediate use of the students and faculty. The

University has been providing lab facilities, class rooms, seminar halls and teaching aids as per AICTE/UGC norms. The University provides on-line classes to its affiliated colleges. It has created e-LSDM facility to develop engineering e-content for teaching and learning, and engineering e-LABs for five engineering branches, namely, CSE, IT, ME, EEE and ECE. The University has also created infrastructure for establishment of e-STUDIO to deliver video lectures by subjects/industry experts to improve the knowledge and employability skills of the students.

Health Centre

The University has a Health Centre on the campus. The Health Centre is headed by a full-time doctor working on deputation from the Government Service and supported by a Pharmacist and staff to cater the medical needs of the students and faculty. The centre also has 4 visiting doctors with each doctor available on two days in a week. The Health centre has 2 General Wards, 4 Consultation rooms and a 6 bedded hospital. Medical facilities are also available in the constituent colleges.

Sports and Cultural Activities

The Yoga Hall, Cricket play ground, Track, Gymnasium, Basket Ball Court and facilities for indoor games are available in all the campuses of the University. The University provides healthy food and fruits, sports kits, uniform and financial incentives to students participating in these activities. The University sports council promotes and encourages all the events of games and sports.

Library as a learning Resource

The University library is student and user friendly. The library has the following holdings:

Back Volumes of Journals	:	3330
Ph.D Thesis	:	1651
M.Phil Thesis	:	140
E-Books	:	3519
E-Journals	:	30418
E-Journals databases	:	35
Donated Books	:	2505
E-Learning Tutorials	:	NPTEL
SC/ST Book Bank	:	10000
SC/ST Integrated Book Bank	:	8500
Print books	:	92630
Reference books	:	9230

In addition, the JNTUH library has a big collection of reference books in all branches as mentioned in the University syllabi. Also, the competitive examinations reference library contains a number of volumes to help the students for competitive examinations at state and central level.

Governance, Leadership and Management

Jawaharlal Nehru Technological University Hyderabad (JNTUH) was established with a vision to provide advanced learning and knowledge in Engineering & Technology, Physical and Social Sciences through teaching, research, experimentation and practical training or by such other means as the university may deem fit. The mission of the University is to provide the form of education that allows students to spend periods of intramural work so that upon graduation not only do they possess a range of academic learning, but also learn and acquire knowledge for the benefit of the state in general and the country at large.

The road map consists of ensuring autonomy and objectivity; the principles of expansion, inclusion; relevance and excellence; imparting and creating knowledge by constantly engaging young minds; proactive interaction with industry and society; constant knowledge updates for faculty/non-teaching and administrative staff, and fostering global academic and research alliances.

The governing bodies of University comprises of an Executive Council, Academic Senate, Finance Committee, Planning and Monitoring Board, Selection Committee, College Academic Committee, Boards of Studies and the University Committee for Perspective Planning. All the bodies meet regularly and assess the University requirements. The University encourages the employees to participate in decision making process at all levels. The University encourages constituent and affiliated colleges to apply for NAAC/NBA and UGC Autonomous Status. It also encourages the faculty to take up administrative and academic positions like Directors, Principals, Vice-Principals, Head of the Departments and Chairpersons of Boards of Studies, so that they may acquire leadership qualities.

Knowledge Management Strategy

The University has e-Learning Solutions and two-way HD Delivery Mechanism for teachers and students as e-learning resource known as e-LSMD. On-line classes are being conducted for interested faculty/students of the University with the help of eminent professors invited from different disciplines.

The University Perspective Plan

The perspective plan for development of JNTUH has the following items:

1. Implementation of Choice Based Credit System (CBCS) with continuous evaluation.

2. Introduction of multi-disciplinary courses and undertaking industry need research work.

3. Credit accumulation and credit transfer.

4. Increasing the global visibility of the University through MoUs and admission of international students.

5. Increasing the placements to 100% by enhancing the domain knowledge and soft skills of the students.

6. Transforming JNTUH into a world class University by adopting the best practices.

7. Encouraging e-learning and creating hot spots.

8. Enriching the knowledge of the students through guidance, training, and other support services.

Teaching and Learning

The faculty of JNTUH are encouraged to adopt Information Communication Technology (ICT) and innovative methods of teaching. The University has initiated e-Learning Solutions and two-way HD Delivery Mechanism for teachers and students.

Internationalization

The University has entered into MoU programmes with international institutes/ organizations located in foreign countries. The University encourages the faculty to organize international conferences, workshops and seminars in constituent colleges/ units by inviting eminent faculty and researchers from abroad. The University also encourages the faculty to participate in the academic programmes organized outside India.

Global Initiative for Academic Networks (GIAN)

Union Cabinet has approved a programme titled **Global Initiative for Academic Networks (GIAN)** in Higher Education aimed at tapping the talent pool of scientists and entrepreneurs internationally to encourage their engagement with the institutes of Higher Education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence. This scheme includes the participation of foreign faculty as Distinguished / Adjunct / Visiting faculty / Professors in delivering Short or Semester-long Courses.

JNTUH College of Engineering, Hyderabad is invited to take part in this program from the academic year 2015-2016. The College proposed sixteen courses and nine courses are accepted by the GIAN. Three courses have already completed successfully.

Ensuring Quality

The University has established an Internal Quality Assurance Cell (IQAC) under the Chairmanship of the Rector of the University in order to improve the quality of education and research for its enrichment in technical education.

University Resource Mobilization

The state government allocates budget to meet salary and infrastructure expenditure. In addition to this, the University mobilizes resources through the following:

1. Self-financing courses

2. Tuition fee from international students

3. Consultancy and testing services
4. Funds from the state and central agencies
5. Collaborative research
6. Support from alumni

Performance Audit

The University conducts performance audit of faculty, staff and students of all the departments once in an academic year.

Professional Development of Staff

The University deputes teaching and non-teaching staff periodically to various institutions for training and development. It organizes refreshers, faculty development and orientation courses through JNTUH HRDC. The University also provides funds for organizing seminars, workshops and conferences at national and international level. The faculty members are encouraged to pursue Ph.D under Quality Improvement Programme scheme.

Internal and External Audit

The University has established a mechanism of internal audit conducted by its finance officer and his/her team, external audit carried out by Local Fund Audit and the Accountant General.

Grievance Cell

JNTUH is the first University in Telangana to have an Ombudsman and a Grievance Redressal Committee to resolve the problems of students. The Examinations Directorate also has a Grievance Redressal Committee to resolve the examination related issues. In addition to this, the University also has a student feedback mechanism.

Innovations and the best Practices

The University promotes environmental consciousness, energy conservation, rainwater harvesting, tree plantation and hazardous waste management. The best practices are admission of foreign students through Memoranda of Understanding and implementation of on-line examinations and Electronic Distribution of Examination Papers (EDEP).

SWOC ANALYSIS

Jawaharlal Nehru Technological University was established on 2nd October, 1972. It has been in the forefront during the last forty four years in providing quality technical education of relevance in the state of Andhra Pradesh. JNT University was restructured into four different Universities, JNTU Hyderabad, JNTU Kakinada, JNTU Anantapuramu and JNAFU by the Government of Andhra Pradesh in the year 2008. Jawaharlal Nehru Technological University Hyderabad has established three new Engineering Colleges in Telangana State. The JNTUH has entered into Memoranda of Understanding (MoU) with many national and international Institutions and Universities for imparting technical education and promoting the courses needed by the industry. It has 337 affiliated colleges spread over entire Telangana State.

The University has strengths, weaknesses and opportunities. It is required to address the weaknesses to meet the needs of stakeholders and society. The University needs to address the challenges to provide the quality of technical education.

Methodology:

A SWOC analysis of the University system is carried out using the following evaluation methods:

- Students and other stakeholders feedback
- Self-appraisal of faculty
- Colleges/units annual reports
- National and international rankings

Inferences:

- Feedback from the students and other stakeholders is collected and based on their feedback, the Boards of Studies meetings are conducted to include the modifications suggested.
- The self- appraisal of faculty is useful to evaluate the role, performance and individual contributions such as academics, research publications.
- The annual report of Colleges/units gives improvement in the quality of teaching, research, conferences/workshops conducted and interaction with industry. The Best practices adopted to improve the quality of technical education can also found from the annual reports.
- The national and international rankings help to identify the weaknesses, challenges and opportunities.

Strengths:

- Good infrastructure, research facilities and good academic interaction with multi disciplinary departments.

- Centre for water resources has very good network with State and Central organizations dealing with water, land and environment.
- The University has global educational reputation.
- In some of the centres/departments more than 95% faculty are with Ph.D qualification.
- Good quality intake of students in Undergraduate Programmes.
- Most of the Postgraduate students are admitted based on GATE score.
- The curriculum reviewed and updated from time to time.
- Many of the faculty members are recognized as the Ph.D research supervisors for other Universities.
- Many of the foreign students are admitted into UG and PG programmes.
- A good number of students are admitted into prestigious foreign Universities for their higher studies and research work.
- The University has Centre of Excellence in VLSI and Embedded Systems.
- Campus is provided with Wi-Fi Internet facility.

Weaknesses:

- Core faculty strength has to be improved.
- Departmental library facilities have to be improved.
- Industry institution interaction needs to be strengthened.
- Consultancy and extension activities need improvement.
- The number of full-time scholars has to be increased.
- Collaborative approach within the department and outside the state and nation is at initial level.
- Student-staff interaction on thrust areas of research.
- Lack of qualified technical support staff.

Opportunities:

- There is enough scope for development and expansion

- Provisions to get research grant from various funding agencies, involvement of industries in the collaborative research work, availability of interdisciplinary faculty in the campus.
- Facility to attend national/ international conferences
- Recognition for the academic advancement
- A good number of core and software companies are located in and around Hyderabad which provides employment opportunities for many of our students.
- National importance research labs are in the close proximity.
- TEQIP-I and TEQIP-II funds provided to improve quality of technical education.
- There is an active Entrepreneur Development Cell which is grooming the entrepreneur skills of the students.
- There is an active school of management and school of Information technology in the same campus where collaborative approach towards industry is possible.
- Faculty members are highly motivated.
- GIAN is envisaged to catalyse the higher education institutions in the country. It provides an opportunity for the faculty members and students to meet the faculty from reputed institutions in india and abroad

Challenges:

- Patent earning level of research.
- Qualitative and quantitative expansion of the departments/units.
- Modernization of all the laboratories of departments/units.
- Having full-fledged manpower in the departments/centres.
- Motivating students towards research.
- Attracting quality students for full-time Ph.D.
- Motivation of students towards core branch employment.
- Exploring collaboration with industries of relevance.
- Research outcome should be linked to industry applications.

C. PROFILE OF THE UNIVERSITY

1. Name and Address of the University:

Name:	Jawaharlal Nehru Technological University Hyderabad (JNTUH)		
Address	Kukatpally		
City:	Hyderabad	**Pin:** 500 085	**State:** Telangana
Website:	www.jntuh.ac.in		

2. For communication:

Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Vice Chancellor	Dr. A. Venugopal Reddy	O: 23156109	9440543619	23156112	vcjntu@ jntuh.ac.in
ProVice Chancellor (s) **Rector**	Dr. N.V. Ramana Rao	O: 32422256	9849054319	23158665	pa2rector@ jntuh.ac.in
Registrar	Dr. N. Yadaiah	O: 32422253	8121240134	23158665	pa2registrar@ jntuh.ac.in
Steering Committee / IQAC Coordinator	Dr. B.N. Bhandari (DAP)	O: 23156115	9490316662	23156115	dap@jntuh.ac.in

3. Status of the University:

State University	•
State Private University	

Central University	
University under Section 3 of UGC (Deemed University)	
Institution of National Importance	
Any other (please specify)	

4. Type of University:

Unitary	
Affiliating	•

5. Source of funding:

Central Government	
State Government	•
Self-financing	
Any other (please specify)	

6 a. Date of establishment of the university: **30/09/2008**

b. Prior to the establishment of the university, was it a/an

i. **PG Centre**	**Yes**		**No**	•
ii. **Affiliated College**	**Yes**		**No**	•
iii. **Constituent College**	**Yes**		**No**	•
iv. **Autonomous College**	**Yes**		**No**	•
v. **Any other (please specify)**	**Yes**	•	**No**	

If yes, give the date of establishment: JNTU was established on 2nd October 1972 with a bill passed in the State Legislature Act No. 16 of 1972. Further as per Act No. 30 and 31 of 2008 the University was divided into four Universities as JNTUH, JNTUK, JNTUA and JNAFAU respectively (Enclosed – Annexure I) for administrative convenience.	02/09/1972

7. Date of recognition as a University by UGC or any other national agency:

Under Section		dd	mm	yyyy	Remarks
i.	**2f of UGC***				Not applicable
ii.	**12B of UGC ***	24	08	2009	JNT University Hyderabad
iii.	**3 of UGC #**				Not applicable
iv.	**Any other ^ (specify)**				--

* **Enclose certificate of recognition** (Annexure-II)

\# **Enclose notification of MHRD and UGC for all courses / programmes / campus/ campuses.**

^ **Enclose certificate of recognition by any other national agency/agencies, if any**

8. Has the University been recognized

A.	**By UGC as a University with Potential for Excellence?**	**Yes**		**No**	•
	If yes, give the date of recognition	Not applicable			
B.	**For its performance by any other governmental agency?**	**Yes**	•	**No**	
	If yes, Name of the agency			date of recognition	

NAAC - For erstwhile unified University (JNT University)	03.05.2004 with A Grade
TEQIP – I, MHRD – JNTUH College of Engineering, Hyderabad.	2006-2009
TEQIP – II, MHRD – JNTUH College of Engineering, Hyderabad.	2011-2016
TEQIP – I, MHRD – JNTUH Institute of Science & Technology.	2006-2009
TEQIP – II, MHRD – JNTUH Institute of Science & Technology.	01.10.2013
NAAC – JNTUH School of Information Technology	05.01.2013
NBA -JNTUH College of Engineering, Hyderabad	30.05.2014

9. Does the university have off-campus centres?

Yes [ ] **No** [•]

If yes, date of establishment and date of recognition

10. Does the university have off-shore campuses?

Yes [ ] **No** [•]

If yes, date of establishment and date of recognition:

11. Location of the campus and area:

Campus Details	Location	Campus area in acres	Built up area in sq. mts
i. Main campus (Jawaharlal Nehru Technological University Hyderabad has the following colleges/units and other directorates) a) JNTUH College of Engineering, Hyderabad b) Institute of Science & Technology c) School of Information Technology d) School of Management Studies	Urban	89.27	1,82,192

ii. Other campuses in the country			
a) JNTUH College of Engineering, Jagityal, Karimnagar District, Telangana	Rural	100.00	46,993
b) JNTUH College of Engineering, Manthani, Centenary colony, Kamanpur Mandal, Karimnagar District, Telangana	Rural	54.08	42,595
c) JNTUH College of Engineering, Sultanpur, Medak District, Telangana	Rural	154.00	75,780

b) If the university has more than one campus, it may submit a consolidated self-study report reflecting the activities of all the campuses.

i. Main campus - JNTUH, Kukatpally, Hyderabad, Telangana.

a) University Administration
b) University Admissions & Academic work
c) Conduct of examinations/evaluation/declaration of results of non-autonomous constituent colleges and affiliated colleges.

ii. Other campuses

a) JNTUH College of Engineering, Hyderabad, Kukatpally, Telangana.

i. College Administration

ii. College Academic Work

iii. Conduct of Examinations of College

b) JNTUH College of Engineering, Jagityal, Karimnagar District, Telangana.

i. College Administration

ii. College Academic work

iii. Conduct of Examinations of College

c) JNTUH College of Engineering, Manthani, Centenary Colony, Kamanpur Mandal, Karimnagar District, Telangana.

i. College Administration

ii. College Academic Work

iii. Conduct of Examinations of the College

d) JNTUH College of Engineering, Sultanpur, Medak District, Telangana.

i. College Administration

ii. College Academic Work

iii. Conduct of Examinations of the College.

12. Provide information on the following: In case of multi-campus University, please provide campus-wise information.

- **Auditorium/seminar complex with infrastructural facilities:**

S. No.	Name	Name of the Auditorium / Seminar Hall	Seating capacity (Seats) & Plinth Area (Sqm)
1	Main campus - JNTUH, Kukatpally, Hyderabad	a) J.N. Auditorium with Audio, Visual system	a) 1050 & 3307
		b) UGC Auditorium with Audio, Visual system	b) 250 & 610
2	JNTUH College of Engineering, Hyderabad	c) Seminar Halls – 2 No's	c) 150 & 125
3	JNTUH College of Engineering, Jagityal	d) Seminar Halls – 2 No's	d) 150 & 120
4	JNTUH College of Engineering, Manthani	e) Seminar Halls – 1 No	e) 250 & 200

- **Sports facilities : Playground, Swimming Pool, and Gymnasium**

S. No	Campus Detail	Name of the facility
1	JNTUH Kukatpally campus, Kukatpally, Hyderabad	a) Outdoor facilities like Cricket ground, Football, Basket ball court, Volleyball, Badminton court b) Indoor facilities like Table tennis, Caroms, Chess, Gymnasium

2	JNTUH College of Engineering, Hyderabad	
3	JNTUH College of Engineering, Jagityal	a) Sports facilities like Volley Ball Court, Foot Ball Court, Basket Ball Court, Cricket Ground , Shuttle Badminton (Boys & Girls Hostels), Through Ball Court, Gym in Boys Hostel, Gym in Girls Hostel
4	JNTUH College of Engineering, Manthani	a) Indoor facilities like Caroms, Chess and Table Tennis
5	JNTUH College of Engineering, Sultanpur	a) Outdoor facilities like Volley Ball Court, Cricket Ground, Shuttle and ball Badminton (Boys and Girls Hostels), Throw Ball Court, Gym Boys, Gym for Girls. b) Indoor facilities like Table tennis, Caroms and Chess

- **Hostel facilities**

S. No	Campus Details	Hostel detail	Occupancy	Facilities
1	JNTUH Kukatpally campus Kukatpally, Hyderabad	Not applicable	Not applicable	Not applicable (Administrative block)
2	(i)JNTUH College of Engineering, Kukatpally, Hyderabad (ii) Institute of Science and technology (iii) School of Information Technology (5-Boys Hostels – capacity: 1300) (3-Girls Hostels – capacity: 982)	Boys Hostel – Godavari	200	TV Hall, Dining Hall, Gymnasium room, Computer Room, Reading Room
		Boys Hostel – Krishna	150	
		Boys Hostel – Manjeera	530	
		Boys Hostel – Kinnera	420	
		Girls Hostel – Kamala Nehru	450	
		Girls Hostel – Saraswathi	232	
		Girls Hostel – Gayathri	300	
		International Students Hostel (Family	60	Single Bed room tenements

		accommodation)		
3	JNTUH College of Engineering, Jagityal (1 Boys Hostels and one Girls Hostel –capacity: 1200)	Boys Hostel	650	TV Hall, Dining Hall, Gymnasium room, Computer Room, Reading Room
		Girls Hostel	550	
4	JNTUH College of Engineering, Manthani (1 Boys Hostels and one Girls Hostel – capacity: 1006)	Boys Hostel	606	TV Hall, Dining Hall, Gymnasium room, Computer Room, Reading Room
		Girls Hostel	400	
5	JNTUH College of Engineering, Sultanpur (5-Boys Hostels-capacity: 800) (3-Girls Hostels – capacity: 480)	Boys Hostel	380	TV Hall, Dining Hall, Gymnasium room, Computer Room, Reading Room
		Girls Hostel	270	

• **Working women's hostel**	No
Number of hostels	--
Number of inmates	--
Facilities	--
• **Residential facilities for faculty and non-teaching:**	Yes

S. No	Type of Residence	JNTUH Campus & JNTUH CEH	JNTUH CE Jagityal	JNTUH CE Manthani	JNTUH CE Sultanpur
1	VC Lodge and Office	1	-	-	-
2	Rector Quarters	1	-	-	-

3	Register Quarters	1	-	-	-
4	Directors / Principal Quarters	4	1	-	1
5	A1 Staff Quarters	16	-	-	-
6	A2 Staff Quarters	16	-	-	-
7	A3 Staff Quarters	20	15	-	12
8	B1 Staff Quarters	16	-	-	-
9	B2 Staff Quarters	20	-	-	-
10	B3 Staff Quarters	20	15	-	12
11	B4 Staff Quarters	20	-	-	-
12	B5 Staff Quarters	20	-	-	-
13	C1 Staff Quarters	16	-	-	12
14	Research Scholars Quarters - 1	24	-	-	-
15	Research Scholars Quarters - 2	24	-	-	-
16	Attendants Quarters	17	-	-	9

- **Cafeteria : Canteen** Yes

Type of Facility	**JNTUH Campus & JNTUH CEH**	**JNTUH CE Jagityal**	**JNTUH CE Manthani**	**JNTUH CE Sultanpur**
University / College Canteen	1	1	1	1

- **Health centre – Nature of facilities available – inpatient, outpatient, ambulance, emergency care facility, etc.:** Yes

  The University has a Health Centre on the campus with ambulance facility. The Health Centre is headed by a full-time doctor working on deputation from the Government Service and supported by a Pharmacist and staff to cater the medical needs of the students and faculty. The centre also has 4 visiting doctors with each doctor available on two days in a week. The Health centre has 2 General Wards, 4 Consultation rooms and

a 6 bedded hospital. Medical facilities are also available in the constituent colleges.	

- **Facilities like banking, post office, book shops, etc. :**

S. No	Type of Facility	JNTUH Campus & JNTUH CEH	JNTUH CE Jagityal	JNTUH CE Manthani	JNTUH CE Sultanpur
1	Bank	2	1	-	1
2	Post Office	1	-	-	1

- **Transport facilities to cater to the needs of the students and staff:**

S. No	Type of Facility	JNTUH Campus & JNTUH CEH	JNTUH CE Jagityal	JNTUH CE Manthani	JNTUH CE Sultanpur
1	Buses – Own	-	-	0	1
2	Buses – Hired	-	-	1	3

• **Facilities for persons with disabilities :**	Yes
• **Animal house :**	No
• **Incinerator for laboratories :**	Yes
• **Power house :**	Yes

S. No	Type of Facility	J N T U H Campus & J N T U H CEH	JNTUH CE Jagityal	JNTUH CE Manthani	JNTUH CE Sultanpur
1	Power house	1	1	1	1
2.	Solar power plant	-	-	-	1

- **Waste management facility :** Yes

S. No	Type of Facility	J N T U H Campus & J N T U H CEH	JNTUH CE Jagityal	JNTUH CE Manthani	JNTUH CE Sultanpur
1	Waste management facility – STP	1	-	-	1
2	Waste management facility – Solid Waste Incinerator	1	-	-	-

13. Number of institutions affiliated to the university

Type of colleges	Total	Permanent	Temporary
Arts, Science and Commerce	--	--	--
Law	--	--	--
Medicine	--	--	--
Engineering	**224**	**--**	**224**
Education	**--**	**--**	**--**
Management	**23**	**--**	**23**
Others (specify and provide details) **Pharmacy**	**90**	**--**	**90**

14. Does the University Act provide for conferment of autonomy (as recognized by the UGC) to its affiliated institutions? If yes, give the number of autonomous colleges under the jurisdiction of the University

Yes		No	•	Number	

15. Furnish the following information

Particulars	Number	Number of Students
a. University Departments		

• Undergraduate	21	2787
• Post graduate	49	949
• Integrated Double Degree programs	10	143
• Research centres on the campus	22	--
b. Constituent colleges/Units	Constt. Colleges – 4 and Acad. Units - 3	3879
c. Affiliated colleges	337 including Autonomous Affiliated Colleges	83160 (62131+21029)
d. Colleges under 2(f)	--	--
e. Colleges under 2(f) and 12B	2 Constituent and 37 Affiliated Colleges	30026
f. NAAC accredited colleges (NBA)	NAAC – 11 (JNTUH CEH, SIT and 9 Affiliated Colleges)	7544
	NBA – 23 (JNTUH CEH, JNTUH SIT and 21 Affiliated Colleges.	17444
g. Colleges with Potential for Excellence (UGC)	0	0
h. Autonomous colleges	Constituent: 3 and Affiliated: 18	18288
i. Colleges with Postgraduate Departments	Constituent Colleges/Units 5 and Affiliated Colleges 262	24498
j. Colleges with Research Departments	27 Constituent College units	3879
k. University recognized Research Institutes/Centres	3	4259

University Colleges/Unit with Research Departments:

JNTUH College of Engineering, Hyderabad:

1. Department of Civil Engineering
2. Department of Electrical & Electronics Engineering
3. Department of Mechanical Engineering
4. Department of Electronics & Communication Engineering
5. Department of Computer Science & Engineering
6. Department of Metallurgical Engineering
7. Department of Humanities & Social Sciences
8. Department of Mathematics
9. Department of Physics
10. Department of Chemistry
11. Centre for Energy
12. Centre for Transportation Engineering

Institute of Science & Technology:

1. Centre for Biotechnology
2. Centre for Chemical Sciences & Technology
3. Centre for Environmental Sciences
4. Centre for Nano Science & Technology
5. Centre for Pharmaceutical Sciences
6. Centre for Spatial Information Technology
7. Centre for Water Resources
8. Centre for Earth & Atmospheric Weather Modification Technologies

School of Information Technology:

1. Computer Science & Engineering

School of Management Studies:

1. Management Science

JNTUH College of Engineering, Jagityal:

1. Department of Mechanical Engineering
2. Department of Electrical & Electronics Engineering
3. Department of Electronics & Communication Engineering
4. Department of Computer Science & Engineering
5. Department of Information Technology

University Recognized Research Centres:

1. VNR-Vignana Jyothi Institute of Engg. & Technology
2. Gokaraju Rangaraju Institute of Engg. & Technology
3. Sreenidhi Institute of Science and Technology

16. Does the university conform to the specification of Degrees as enlisted by the UGC?

Yes	•	No	

If the university uses any other nomenclatures, please specify

17. Academic programmes offered by the university departments at present, under the following categories:

Programmes	Number
UG	21
PG (Engg. + Sciences)	49
M. Phil	25
Ph.D	25
Integrated Ph.D	0
Certificate	0
Diploma	0
PG Diploma	8

Any other (Integrated Double degree programmes)	14
MS	25
Total	167

LIST OF COURSES AND SPECIALISATION FOR THE AY 2015-2016

College/Unit-wise Information:

JNTUH College of Engineering, Kukatpally, Hyderabad.

S. No.	Mode	Programmes Offered	Branch/Specialization	Intake	Students admitted in AY 2015-16
1.	Regular – UG programme – 4 Years	B.Tech.	Civil Engineering	60	66
2.		B.Tech	Electrical & Electronics Engineering	60	56
3.		B.Tech	Mechanical Engineering	60	57
4.		B.Tech	Electronics & Communication Engg.	60	58
5.		B.Tech	Computer Science & Engineering.	60	62
6.		B.Tech	Metallurgical Engineering	60	58
7.		B.Tech	Chemical Engineering	60	54
8.	Regular – Integrated Double Degree programme – 5 Years	B.Tech.+ M.Tech	Civil Engineering	18	17
9.		B.Tech.+ M.Tech	Electrical & Electronics Engineering	18	15
10.		B.Tech. + M.Tech.	Mechanical Engineering	18	17
11.		B.Tech. + M.Tech.	Electronics & Communication Engineering	18	18
12.		B.Tech. + M.Tech.	Computer Science & Engineering	18	19
13.		B.Tech.+ M.B.A	Civil Engineering	12	10
14.		B.Tech.+	Electrical & Electronics	12	13

		M.B.A	Engineering		
15.		B.Tech.+ M.B.A	Mechanical Engineering	12	12
16.		B.Tech.+ M.B.A	Electronics & Communication Engineering	12	11
17.		B.Tech.+ M.B.A	Computer Science & Engineering	12	11
18.	MoU Courses – Integrated Double Degree Masters' Programme (IDDMP) and International Integrated Double Degree Masters' Programme (IIDDMP) – 5 Years programme	IDDMP (B.Tech. + M.Tech.)	Electronics & Communication Engineering	30	26
19.		IDDMP (B.Tech. + M.Tech.)	Computer Science & Engineering	15	15
20.		IDDMP (B.Tech. + M.Tech.)	Software Engineering	15	15
21.		IIDDMP (B.Tech. + M.Tech.)	Computer Science & Engineering	10	5
22.	Regular – PG Programme – 2 Years	M.Tech (CIVIL)	Structural Engineering	25	23
23.		M.Tech (CIVIL)	Transportation Engineering	25	20
24.		M.Tech (CIVIL)	Geo-Tech. Engineering	25	18
25.		M.Tech (EEE)	Power Electronics	25	19
26.		M.Tech (EEE)	Electrical Power Engineering	25	20
27.		M.Tech (Mech. Engg.)	Advanced Manufacturing Systems	25	21
28.		M.Tech. (Mech. Engg.)	Thermal Engineering	25	22
29.		M.Tech. (Mech. Engg.)	Engineering Design	25	20

30.		M.Tech (ECE)	Digital Systems & Computer Electronics	25	18
31.		M.Tech (ECE)	Systems & Signal Processing	25	18
32.		M.Tech (ECE)	Embedded Systems	25	23
33.		M.Tech (CSE)	Computer Science	25	18
34.		M.Tech (CSE)	Computer Science & Information Engg.	25	17
35.		M.Tech (Met)	Metallurgy	25	19
36.		M.Tech (Mech. Engg.)	Energy Systems	25	17
37.		M.Sc. Mathematics	Applied Mathematics	25	13
38.		M.Tech (Mech. Engg.)	Mechatronics	30	11
39.	Regular – PG Programme – 3 Years	MCA (3 Yrs.)	Offered in the Dept. of CSE	30	24
40.	Part-Time Post Graduate Programme– 3 Years	M.Tech. (Civil)	Structural Engg.	30	30
41.		M.Tech. (EEE)	Electrical Power Engg.	30	23
42.		M.Tech. (Mech. Engg.)	Advanced Manufacturing Systems	30	15
43.		M.Tech. (Mech. Engg.)	Engineering Design	30	19
44.		M.Tech. (CSE)	Computer Science	30	17
45.		M.Tech. (Mech.)	Industrial Metallurgy	30	15

JNTUH College of Engineering, Jagityal, Karimnagar Dist.

1.	Regular UG Programme – 4 Yrs.	B.Tech.	Mechanical Engineering	60	58
2.		B.Tech.	Electrical and Electronics Engineering	60	56
3.		B.Tech.	Electronics and Communication Engineering	60	55
4.		B.Tech.	Computer Science and	60	54

			Engineering		
5.		B.Tech.	Information Technology	60	55
6.	Regular PG Programme-2 Years	M.Tech (Mech)	Engineering Design	25	18
7.		M.Tech (EEE)	Power Systems	25	13
8.		M.Tech (ECE)	Digital Systems and Computer Electronics	25	16
9.		M.Tech (CSE)	Computer Science and Engineering	25	16
10.		M.Tech (IT)	Information Technology	25	16
JNTUH College of Engineering, Manthani, Karimnagar Dist.					
1.	Regular UG Programme – 4 Yrs.	B.Tech.	Civil Engineering	60	53
2.		B.Tech.	Mechanical Engineering	60	59
3.		B.Tech.	Electrical & Electronics Engineering	60	55
4.		B.Tech.	Computer Science and Engineering	60	57
5.		B.Tech.	Mining Engineering	30	29
JNTUH College of Engineering, Sultanpur, Medak Dist.					
1.	Regular UG Programme – 4 Yrs.	B.Tech.	Civil and Environmental Engineering	60	60
2.		B.Tech.	Mechanical Engineering (Material Science and Nano Technology)	60	57
3.		B.Tech.	Electronics & Communication Engineering	60	55
4.		B.Tech.	Computer Science and Engineering	60	57
Institute of Science & Technology, JNTUH, Hyderabad					
1.	Regular PG Programme – 2 Yrs.	M.Tech.	Bio-Technology	25	17
2.		M.Tech.	Spatial Information Technology	25	16
3.		M.Tech.	Environmental Management	25	19
4.		M.Tech.	Environmental Geomatics	25	15
5.		M.Tech.	Geo-Informatics & Surveying Technology	25	10
6.		M.Tech.	Chemical Technology	25	16
7.		M.Tech.	Bio-Chemical Engineering	25	4
8.		M.Tech.	Nano Technology	25	13
9.		M.Tech.	Nano Electronics and Photonics	25	8
10.		M.Tech.	Water and Environmental Technology	25	19

11.		M. Pharm.	Pharmaceutical Analysis & Quality Assurance	18	18
12.		M. Pharm.	Pharmacognosy	18	13
13.		M. Pharm.	Pharmaceutics	18	18
14.		M.Sc.	Biotechnology	25	14
15.		M.Sc.	Microbiology	25	16
16.		M.Sc.	Organic Chemistry	25	16
17.		M.Sc.	Analytical Chemistry	25	12
18.		M.Sc.	Environmental Biotechnology	25	0
19.		M.Sc.	Environmental Science and Technology	25	0
20.		M.Sc.	Geo-Spatial Science and Technology	25	0
21.		M.Sc.	Water and Environmental Technology	25	0
22.		M.Sc.	Satellite Meteorology and Weather Informatics	25	0
23.		M.Sc.	Nano Technology	0	0
24.	Part-Time PG Programme – 3 Yrs.	M. Tech	Biotechnology	30	15
25.		M. Tech	Environmental Management	30	21
26.		M. Tech	Biopharmaceutical Technology	30	0
27.		M. Tech	Water and Environmental Technology	30	0
28.		M. Tech	Remote Sensing and GIS	30	0

School of Information Technology

1.	Regular PG Programme – 2 Yrs.	M. Tech	Computer Science	25	18
2.		M. Tech	Software Engineering	25	18
3.		M. Tech	Computer Networks and Information Security	25	21
4.		M. Tech	Bio-informatics	25	25
5.	Regular PG Programme – 3 Yrs.	MCA	Master of Computer Applications (3 years)	30	28

School of Management Studies					
1.	Regular PG Programme – 2 Yrs.	MBA	Management	40	28

School of Continuing & Distance Education

1.	Regular PG Dip. Programme 1 Yr.	Chemical Engg.	Industrial Safety	30	15
2.		Environmental Engg.	Industrial Hygiene and Occupational Health	30	0
3.		Pharmacy	Pharmaceutical Quality Assurance & Regulatory Affairs	100	17
4.		Management Studied	Supply Chain Management	100	0
5.		Environmental Engg.	Industrial Waste Management	100	0
6.		Civil Engg.	Construction Management	100	0
7.		Civil Engg.	Pavement Construction and Maintenance	100	0
8.		Water Resources	Disaster Management	100	0

List of courses offered in all the Affiliated College of JNTUH (Annexure – III)

18. Number of working days during the last academic year: 220

19. Number of teaching days during the past four academic years

2011-12	2012-13	2013-14	2014-15
180	180	180	180

('Teaching days' means days on which classes were engaged. Examination days are not to be included)

20. Does the university have a department of Teacher Education?	**Yes**		**No**	•
If yes,				Not applicable
a. Year of establishment				(dd/mm/yyyy)
b. NCTE recognition details (if applicable) Notification No.:				(dd/mm/yyyy)

c	**Is the department opting for assessment and accreditation separately?**	**Yes**		**No**	•
21.	**Does the university have a teaching department of Physical Education?**	**Yes**		**No**	•
	If yes,	Not applicable			
a.	**Year of establishment**	(dd/mm/yyyy)			
b.	**NCTE recognition details (if applicable) Notification No.:**	(dd/mm/yyyy)			
c	**Is the department opting for assessment and accreditation separately?**	**Yes**		**No**	•
22.	**In the case of Private and Deemed Universities, please indicate whether professional programmes are being offered?**	**Yes**		**No**	•
	If yes, please enclose approval / recognition details issued by the statutory body governing the programme.	Not applicable			

23. Has the university been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon.

After division of JNTU in 2008, the JNTUH got eligibility for NAAC in Cycle – 1 in the academic year 2013-14. School of Information Technology and JNTUH College of Engineering, Hyderabad have been accredited by NAAC and NBA respectively.

Further, TEQIP Committee visited JNTUH College of Engineering, Hyderabad and sanctioned grants for three years i.e. 2006-2009. The College also received funds under TEQIP during the period 2011-2016.

Institute of Science & Technology JNTUH, also received grant under TEQIP during 2006-2009, and also received grant under TEQIP – II for the academic years 2013-14, 2014-15, 2015-16.

24. Number of positions in the university

Positions	Teaching faculty			Non-teaching staff	Technical staff
	Professor	Associate Professor	Assistant Professor		
Sanctioned by the UGC/ University/ State Government	78	107	224	402	72
Recruited	37	51	116	143	42
Vacancies	41	56	108	259	30
Number of persons working on contractual basis	--	--	296*	886**	

* Persons are working on adhoc basis. Some contractual faculty are handling class work for self financing courses.

** Persons are working on outsourcing basis

25. Qualifications of the teaching staff

Highest Qualification	Professors		Associate Professors		Assistant Professors		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.	--	--	--	--	--	--	--
Ph.D.	68	26	11	12	15	15	147
CEH	48	18	2	9	4	7	88
CEJ	4	0	3	1	9	2	19
CEM	2	0	1	0	1	1	5
CES	2	0	1	0	0	0	3
IST	5	6	2	1	1	5	20
SIT	4	2	1	0	0	0	7
SMS	3	0	0	1	0	0	4
Univ. Library	0	0	1	0	0	0	1
M.Phil.	0	0	0	0	1	0	1
CEH	0	0	0	0	1	0	1
CEJ	0	0	0	0	0	0	0
CEM	0	0	0	0	0	0	0
CES	0	0	0	0	0	0	0

IST	0	0	0	0	0	0	0
SIT	0	0	0	0	0	0	0
SMS	0	0	0	0	0	0	0
PG	0	0	13	6	21	23	63
CEH	0	0	3	4	5	12	24
CEJ	0	0	5	2	10	7	24
CEM	0	0	0	0	0	0	0
CES	0	0	1	0	3	0	4
IST	0	0	1	0	1	0	2
SIT	0	0	3	0	2	2	7
SMS	0	0	0	0	0	1	1
Univ. Library	0	0	0	0	0	1	1
Adhoc teachers							
Ph.D.	0	0	0	0	5	1	6
CEH	0	0	0	0	3	0	3
CEJ	0	0	0	0	0	0	0
CEM	0	0	0	0	0	0	0
CES	0	0	0	0	1	1	02
IST	0	0	0	0	0	0	0
SIT	0	0	0	0	0	0	0
SMS	0	0	0	0	1	0	1
M.Phil.	0	0	0	0	3	1	4
CEH	0	0	0	0	0	1	1
CEJ	0	0	0	0	2	0	0
CEM	0	0	0	0	0	0	0
CES	0	0	0	0	0	0	0
IST	0	0	0	0	0	0	0
SIT	0	0	0	0	0	0	0
SMS	0	0	0	0	1	0	1
PG	0	0	0	0	126	44	170
CEH	0	0	0	0	25	18	43
CEJ	0	0	0	0	22	6	28
CEM	0	0	0	0	58	7	65
CES	0	0	0	0	16	10	26
IST	0	0	0	0	0	0	0
SIT	0	0	0	0	4	2	6
SMS	0	0	0	0	1	1	2
UG	0	0	0	0	2	7	9
CEH	0	0	0	0	2	7	9
Part-time teachers							
Ph.D.	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0

26. Emeritus, Adjunct and Visiting Professors.

	Emeritus	Adjunct	Visiting
	1	0	31

27. Chairs instituted by the university:

	Chairs
School / Department	**No**

28. Students enrolled in the university departments during the current academic year, with the following details:

Students	College / School	UG		PG		Integrated Masters		M. Phil.		Ph.D.		Integrated Ph.D.		D. Lit. / D.Sc.		Certificate		Diploma		PG Diploma	
		*M	*F	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
From the state where the university is located		1059	807	456	362	74	64	0	0	30	25	0	0	0	0	0	0	0	0	24	8
	CEH	214	162	172	117	74	64					0	0	0	0	0	0	0	0	0	0
	CEJ	152	149	44	40	0	0					0	0	0	0	0	0	0	0	0	0
	CEM	148	100	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	CES	136	94	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	IST	0	0	114	100	0	0	0	0	30	25	0	0	0	0	0	0	0	0	0	0
	SIT	0	0	111	93	0	0					0	0	0	0	0	0	0	0	0	0
	SMS	0	0	15	12	0	0					0	0	0	0	0	0	0	0	0	0
	SCDE																			24	8
From other states of India		15	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	CEH	10	3	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	CEJ	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	CEM	5	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	CES	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	IST	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	SIT	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	SMS	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	SCDE	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
NRI students		5	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	CEH	5	2	1	0	3	0					0	0	0	0	0	0	0	0	0	0
	CEJ	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	CE	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0

	M																				
	CES	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	IST	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	SIT	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	SMS	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	SCDE	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
Foreign students		10	5	2	1	2	0	0	0	0	1	0	0	0	0	86	22	0	0	0	0
	CEH	10	5	2	1	2										86	22				
	CEJ	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	CEM	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	CES	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	IST	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	SIT	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	SMS	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
	SCDE	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0
Total		1089	817	459	363	79	64	0	0	30	26	0	0	0	0	86	22	0	0	24	8

No. of students admitted for the academic year 2015-16 = 3067

Total no. of students on rolls including all years = 10265

29. 'Unit cost' of education = Rs. 1,20,107/-

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

(a)	**including the salary component =**	Rs. 18001.71 (Rupees in Lakhs) /10265 = Rs. 1,75,369/
(b)	**excluding the salary component =**	Rs. 12329.32 (Rupees in Lakhs)/10265 = Rs. 1,20,107/-

30. Academic Staff College

Year of establishment		2000
Number of programmes conducted (with duration) during 2011-2014		
1.	**UGC Orientation (Four weeks duration)**	23
2.	**UGC Refresher (Three weeks duration)**	41

3.	**UGC Short-term courses (One week duration)**	21
4.	**UGC Summer/Winter Schools**	4
5.	**Interaction programs**	4
6.	**Outreach programs**	5
7.	**University's own programmes**	52

31.	**Does the university offer Distance Education Programmes (DEP)?**	**Yes**	•	**No**		
	If yes, indicate the number of programmes offered				08 **(PG Diploma Courses)**	
	Are they recognized by the Distance Education Council?				**Yes, (Please See the Annexure - IV)**	
32.	**Does the university have a provision for external registration of students?**	**Yes**	•	**No**		
	If yes, how many students avail of this provision annually?				Ph.D scholars: 600 (2014-15)	

33. Is the university applying for Accreditation or Re-Assessment? If Accreditation, name the cycle.

Accreditation :	**Cycle 1**	•	**Cycle 2**		**Cycle 3**		**Cycle 4**	
Re-Assessment:								

34. Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Cycle 1:	**(dd/mm/yyyy)**	**Accreditation outcome/Result**	Not Applicable
Cycle 2:	**(dd/mm/yyyy)**	**Accreditation outcome/Result**	-do-
Cycle 3:	**(dd/mm/yyyy)**	**Accreditation outcome/Result**	-do-
Cycle 4:	**(dd/mm/yyyy)**	**Accreditation outcome/Result**	-do-

Kindly enclose copy of accreditation certificate(s) and peer team report(s)

35. Does the university provide the list of accredited institutions under its jurisdiction on its website? Provide details of the number of accredited affiliated / constituent / autonomous colleges under the university.	Yes (Enclosed Annex. V)

36. Date of establishment of Internal Quality Assurance Cell (IQAC) and dates of submission of Annual Quality Assurance Reports (AQAR).

IQAC	22/03/2016
AQAR	(i) …… (dd/mm/yyyy)
	(ii) …… (dd/mm/yyyy)
	(iii) …… (dd/mm/yyyy)
	(iv) …… (dd/mm/yyyy)

37. Any other relevant data, the university would like to include (not exceeding one page).

- Interaction with institutes and industries at national and international level. Fostering alliances with 19 collaborative programmes at the national and international level and have started Integrated Dual Degree programmes such as B.Tech + M.Tech, M.Sc., and MBA.

- The University has been assigned the task of conducting the unique and prestigious state level entrance examinations such as EAMCET, ECET for more than fifteen consecutive years based on the excellent performance of the University. The University also undertakes confidential works of competitive examinations of State Government.

- The University has come out with an innovative method of Electronic Distribution of Examination Papers (EDEP). It eliminates leakage of question papers.

- The UGC has established Academic Staff College now renamed as UGC-Human Resources Development Centre (UGC-HRDC) in the campus, which caters to the needs of staff by providing training through Orientation/Refresher/Short Term Courses, Seminars, and Workshops to improve their knowledge and skills.

D. CRITERIA-WISE INPUTS

CRITERION I: CURRICULAR ASPECTS

1.1 Curriculum Design and Development

1.1.1 How is the institutional vision and mission reflected in the academic programmes of the university?

The University offers various academic programmes in Engineering, Applied Sciences, Pharmacy and Management to develop, enhance, and improve the quality of human resources. The courses offered by the University are highly relevant to the needs of the Industry and the society and reach the expectations of stakeholders. The latest requirements of Research & Development (R&D), Industry, Government and Society are suitably incorporated in the curriculum design and development and are reviewed once in two/three years to excel in teaching programmes. The curricula are designed to improve the employment potential nationally and internationally.

The University also provides adequate library facilities with latest books and journals and Computer laboratories to the faculty and students to achieve excellence in teaching and research.

Several Memoranda of Understandings (MoUs) have been signed nationally and internationally, such as, with Central Institute of Tool Design, Hyderabad, Blekinge Institute of Technology, Sweden and Asian Institute of Technology Bangkok to make our students acceptable at a global level.

The University also provides opportunity for the faculty and students to organise/participate conferences, workshops and seminars in emerging areas.

1.1.2 Does the university follow a systematic process in the design and development of the curriculum? If yes, give details of the process (need, assessment, feedback, etc.).

The University has constituted Boards of Studies (BoS) for each Department at Under Graduate (UG) and Post Graduate (PG) levels consisting of experts from Government, industry and eminent academic institutions, such as, IIT's NIT's, other Universities, colleges and alumni. Normally two out of every five members in each board are external experts. In all the other academic committees about 45% external members are involved at the discretion of the Vice-Chancellor.

The Boards of Studies decide on the curriculum and contents of the syllabi based on the feedback from the stakeholders, such as R&D establishments, industry, academia, alumni and society. The proposed curriculum is discussed at length in periodic meetings of the respective Boards of Studies to prepare the final draft. The final draft is placed before the Academic Senate for approval.

1.1.3 How are the following aspects ensured through curriculum design and development?

*** Employability :**

The University offers various courses in the employment relevant areas in Engineering/Technology and Sciences useful for the development of the society. To ensure that the offered programmes are suitable to the needs of industry, experts from relevant industries and other R &D organisations are included in the Boards of Studies. Feedback from the stakeholders is collected to include their suggestions in the new curriculum. Courses to enhance communication skills are included in curriculum to increase the employability. Internships and live projects are also undertaken by students to enhance employability.

∗ Innovation :

The University introduced Choice Based Credit System (CBCS) for Postgraduate and Undergraduate programmes in all the constituent and affiliated colleges. The University designed self-learning system through e-Learning systems developed by Centre for Innovative Technologies and conduct e-classes through online mode are also conducted by the University.

The University has developed lecture contents (e-LSDM) of all courses offered in B.Tech. and placed the courses on-line for the benefit of students of constituent and affiliated colleges. This is in addition to NPTEL courses already available on-line.

The University has also established an Entrepreneurship Development Cell (EDC) to train the students in their respective fields of study. Guest lectures, Workshops, Seminars and visits to Industries/Institutions are organized on regular basis. The Entrepreneurship Development Cell helps in developing entrepreneurship skills among the students through their interaction with Industries, Institutes/Alumni and Research organizations.

∗ Research:

The University encourages the faculty and students to pursue value addition research in emerging areas by involving local industry located in Hyderabad Metropolitan area specialized with Pharma, Defence R&D, Biotechnology, Aerospace and IT. Effective interaction with them has enabled our research scholars and M.Tech. /M. Pharm. / M.Sc. students to undertake live research projects for win-win scenarios.

1.1.4 To what extent does the university use the guidelines of the regulatory bodies for developing and/or restructuring the curricula? Has the university been instrumental in leading any curricular reform which has created a national impact?

The University follows the guidelines issued by the regulatory bodies like UGC, AICTE, Pharmaceutical Council of India and Government while designing the curricula. The University included subjects like Environmental Studies and Disaster Management, based on the guidelines issued by Government. Based on the UGC and State Government's suggestion, a subject named "Gender Sensitization" has been prescribed in all the Under Graduate courses. The guidelines of UGC/AICTE are followed for apportioning the curriculum content into basic sciences, humanities, core engineering, etc. Ninety percent of curriculum of the University matches with the model curricula developed by UGC/AICTE.

1.1.5 Does the university interact with industry, research bodies and the civil society in the curriculum revision process? If so, how has the university benefitted through interactions with the stakeholders?

Yes, experts from industries, Research & Development organisations and other reputed academic institutes are invited during Boards of Studies meetings. The feedback from industry, research organisations and members of civil society is considered while designing the curriculum. This will provide meaningful interaction between academicians and other stakeholders. While organising workshops and conferences, the academicians get an opportunity to interact with the experts concerned and this will help in the modification of curriculum accordingly.

1.1.6 Give details of how the university facilitates the introduction of new programmes of studies in its affiliated colleges.

The affiliated colleges of the University are encouraged to propose new courses relevant to the societal needs through BOS meetings as per the norms and guidelines of UGC, AICTE, State and Central Governments. For example a course in Gender Sensitization was introduced in B.Tech/ B.Pharm at second year second semester level after conducting two workshops inviting all teachers and considering their suggestions on how this course ought to be taught in the classroom effectively.

1.1.7 Does the university encourage its colleges to provide additional skill-oriented programmes relevant to regional needs? Cite instances (not applicable for unitary universities).

Yes, the University encourages and offers skill oriented programmes. For the

development of Science and Technology, Government of India established an Entrepreneurship Development Cell (EDC) in the University in December 2002 with an initial grant of 10.42 Lakhs. The EDC organizes Entrepreneurship awareness camps, and Entrepreneurship development programmes to various sections of society. The University offers various certificate courses through distance education.

The University also encourages and conducts faculty development programmes, refresher courses, orientation courses for faculty, student orientation programmes, management development programmes, workshops, conferences of national and international repute.

For example, JNTUH in collaboration with NASSCOM and Telangana Academy of Skills and Knowledge has reoriented the curriculum in Data Analytics of Cyber Security with effect from January 2016 in the curriculum of B.Tech in Computer Science and Engineering, Information Technology for third year second semester, fourth year first and second semesters and made it more practice oriented.

1.2 Academic Flexibility

1.2.1 Furnish the inventory for the following:

- **Programmes taught on campus:**

LIST OF COURSES & SPECIALISATION FOR THE ACADEMIC YEAR 2015-16

1. JNTUH COLLEGE OF ENGINEERING (JNTUH CEH), KUKATPALLY, HYDERABAD.

S. No.	Name of the courses	Branch/Specialization	Level
1.	B.Tech.	Civil Engineering	UG
2.	B.Tech	Electrical & Electronics Engineering	UG
3.	B.Tech	Mechanical Engineering	UG
4.	B.Tech	Electronics & Communication Engg.	UG
5.	B.Tech	Computer Science & Engineering.	UG
6.	B.Tech	Metallurgical Engineering	UG
7.	B.Tech	Chemical Engineering	UG
8.	5 Yrs B.Tech. +M.Tech. Integrated Double Degree Programme. (IDP)	Civil Engineering	UG & PG
9.	5 Yrs B.Tech. +M.Tech. (IDP)	Electrical & Electronics Engineering	UG & PG
10.	5 Yrs B.Tech. +M.Tech. (IDP)	Mechanical Engineering	UG & PG

11.	5 Yrs B.Tech. +M.Tech.	Electronics & Communication Engg.	UG & PG
12.	5 Yrs B.Tech. +M.Tech.	Computer Science & Engineering.	UG & PG
13.	5 Yrs B.Tech. +M.B.A	Civil Engineering	UG & PG
14.	5 Yrs B.Tech. +M.B.A	Electrical & Electronics Engineering	UG & PG
15.	5 Yrs B.Tech. +M.B.A	Mechanical Engineering	UG & PG
16.	5 Yrs B.Tech. +M.B.A	Electronics & Communication Engg.	UG & PG
17.	5 Yrs B.Tech. +M.B.A	Computer Science & Engineering.	UG & PG
18.	B.Tech. +M.Tech. Integrated Double Degree Programme. (IDDMP)	Telecommunication Systems	UG & PG
19.	B.Tech. +M.Tech. (IDDMP)	Computer Science & Engineering.	UG & PG
20.	B.Tech. +M.Tech. (IDDMP)	Software Engg.	UG & PG
21.	B.Tech. +M.Tech. International Integrated Double Degree Programme. (IIDDMP)	Computer Science & Engineering.	UG & PG
22.	M.Tech (CIVIL)	Structural Engineering	PG
23.	M.Tech (CIVIL)	Transportation Engineering	PG
24.	M.Tech (CIVIL)	Geo-Tech. Engineering	PG
25.	M.Tech (EEE)	Power Electronics	PG
26.	M.Tech (EEE)	Electrical Power Engineering	PG
27.	M.Tech (Mech. Engg.)	Advanced Manufacturing Systems	PG
28.	M.Tech. (Mech. Engg.)	Thermal Engineering	PG
29.	M.Tech (Mech. Engg.)	Engineering Design	PG
30.	M.Tech (ECE)	Digital Systems & Computer Electronics	PG
31.	M.Tech (ECE)	Systems & Signal Processing	PG
32.	M.Tech (ECE)	Embedded Systems	PG
33.	M.Tech (CSE)	Computer Science	PG
34.	M.Tech (CSE)	Computer Science & Information Engg.	PG

35.	M.Tech (Met)	Metallurgy	PG
36.	M.Tech (Mech. Engg.)	Energy Systems	PG
37.	M.Sc. Mathematics	Applied Mathematics	PG
38.	MCA	Offered in Dept. of CSE	PG
39.	M.Tech (Mech. Engg.)	Mechatronics	PG
40.	M.Tech. (Civil)	Structural Engg.	PG
41.	M.Tech. (EEE)	Electrical Power Engg.	PG
42.	M.Tech. (Mech. Engg.)	Advanced Manufacturing Systems	PG
43.	M.Tech. (Mech. Engg.)	Engineering Design	PG
44.	M.Tech. (CSE)	Computer Science	PG
45.	M.Tech. (Mech.)	Industrial Metallurgy	PG

2. JNTUH COLLEGE OF ENGINEERING, JAGITYAL, KARIMNAGAR DIST.

S. No.	Name of the course	Branch/Specialization	Level
1.	B.Tech	Mechanical Engineering	UG
2.	B.Tech	Electrical and Electronics Engineering	UG
3.	B.Tech	Electronics and Communication Engineering	UG
4.	B.Tech	Computer Science and Engineering	UG
5.	B.Tech	Information Technology	UG
6.	M.Tech	Engineering Design	PG
7.	M.Tech	Power Systems	PG
8.	M.Tech	Digital Systems and Computer Electronics	PG
9.	M.Tech	Computer Science and Engineering	PG
10.	M.Tech	Information Technology	PG

3. JNTUH COLLEGE OF ENGINEERING, MANTHANI, KARIMNAGAR DIST.

S. No.	Name of the course	Branch/Specialization	Level
1	B.Tech	Civil Engineering	UG
2	B.Tech	Mechanical Engineering	UG
3	B.Tech	Electrical & Electronics Engineering	UG
4	B.Tech	Computer Science and Engineering	UG
5	B.Tech	Mining Engineering	UG

4. JNTUH COLLEGE OF ENGINEERING, SULTANPUR, MEDAK DIST.

S. No.	Name of the course	Department	Level
1.	B.Tech	Civil and Environmental Engineering	UG

2.	B.Tech	Mechanical Engineering (Material Science and Nano Technology)	UG
3.	B.Tech	ECE Electronics & Communication Engineering	UG
4.	B.Tech	Computer Science and Engineering	UG

5. INSTITUTE OF SCIENCE AND TECHNOLOGY (IST), JNTUH

S. No.	Name of the course	Specialization	Level
1.	M.Tech.	Bio-Technology	PG
2.	M.Tech.	Spatial Information Technology	PG
3.	M.Tech.	Environmental Management	PG
4.	M.Tech.	Environmental Geomatics	PG
5.	M.Tech.	Geo-Informatics & Surveying Technology	PG
6.	M. Tech	Chemical Technology	PG
7.	M. Tech	Bio-Chemical Engineering	PG
8.	M. Tech	Nano Technology	PG
9.	M.Tech	Nano Electronics and Photonics	PG
10.	M. Tech	Water and Environmental Technology	PG
11.	M . Pharmacy	Pharmaceutical Analysis & Quality Assurance	PG
12.	M . Pharmacy	Pharmacognosy	PG
13.	M . Pharmacy	Pharmaceutics	PG
14.	M.Sc.	Biotechnology	PG
15.	M.Sc.	Microbiology	PG
16.	M.Sc.	Organic Chemistry	PG
17.	M.Sc.	Analytical Chemistry	PG

18.	M.Sc.	Environmental Biotechnology	PG
19.	M.Sc.	Environmental Science and Technology	PG
20.	M.Sc.	Geo-Spatial Science and Technology	PG
21.	M.Sc.	Water and Environmental Technology	PG
22.	M.Sc.	Satellite Meteorology and Weather Informatics	PG
23.	M.Sc.	Nano Technology	PG

6. SCHOOL OF INFORMATION TECHNOLOGY (SIT), JNTUH

S. No.	Name of the course	Specialization	Level
1.	M.Tech	Computer Science	PG
2.	M.Tech	Software Engineering	PG
3.	M.Tech	Computer Networks and Information Security	PG
4.	M.Tech	Bio-informatics	PG
5.	MCA	Master of Computer Applications	PG

7. SCHOOL OF MANAGEMENT STUDIES (SMS), JNTUH

S. No.	Name of the course	Department	Level
1.	MBA	Management Science	PG

8. SCHOOL OF CONTINUING & DISTANCE EDUCATION (SCDE), JNTUH

S. No.	Name of the course	Department	Level
1.	P.G. Diploma in Industrial Safety	Chemical Engg.	P.G. Diploma
2.	P.G. Diploma in Industrial Hygiene and Occupational Health	Environmental Engg.	P.G. Diploma
3.	P.G. Diploma in Pharmaceutical Quality Assurance & Regulatory Affairs	Pharmacy	P.G. Diploma

4.	P.G. Diploma in Supply Chain Management	School of Management Studies	P.G. Diploma
5.	P.G. Diploma in Industrial Waste Management	Environmental Engg.	P.G. Diploma
6.	P.G. Diploma in Construction Management	Civil Engg.	P.G. Diploma
7.	P.G. Diploma in Pavement Construction and Maintenance	Civil Engg.	P.G. Diploma
8.	P.G. Diploma in Disaster Management	Water Resources	P.G. Diploma

* **Overseas programmes offered on campus**

- MSIT Program (2 year)

  MSIT is a novel programme started in 2001 in collaboration with Carnegie Mellon University, U.S.A. Learning by doing and case study method is the mode of teaching learning adopted.

- M. Sc/M. Tech. (Networking and Security) with CIT (Ireland) & University of West Minister (UK)

- MBA program with Central Michigan University, USA.

- Five years Integrated Double Degree Masters Program (IDDMP) in collaboration with Blekinge Institute of Technology, Sweden. The following specializations are offered in PG programme with BTH.

  * Radio Communication
  * Signal processing
  * Telecommunication Systems
  * Software Engineering
  * Structural Mechanics

- International Collaboration with Asian Institute of Technology, Bangkok for International Integrated Double Degree Masters Programme (IIDDMP) in the following branches

U.G. field of study at JNTUH (7 Semesters)	**Field of Study for Master of Engineering at AIT (3 Semesters)**
Civil Engineering	a. Structural Engineering b. Construction Engineering and Infrastructure management (CEIM) c. Remote Sensing and Geographical Information Systems (RS & GIS) d. Environmental Engineering and Management (EEM)

ECE	a. Telecommunications b. Micro Electronics c. Information and Communication Technologies d. Embedded Systems
EEE	a. Micro Electronics b. Energy c. Nano Technology d. Mechatronics (Robotics) e. Manufacturing Engineering Design
CSE	a. Computer Science. b. Information Management c. Global Navigation System (GNS) and Geographic Information System (GIS)
	International Collaboration with US Flight Academy for four years B.Tech. (Aviation Engineering)

- **Programmes available for colleges to choose from**

B.Tech.	Regular four year course
B.Tech. and M.Tech./MBA Integrated Double Degree programme	Regular five years programme
B. Pharmacy	Regular four year course
M.Tech.	Regular two year course
M. Pharmacy	Regular two year course
MBA	Regular two year course
MCA	Regular three year course
M.Sc.	Regular two year course
B.Tech. (3 ½ Years At JNTUH) and M.S (1 ½ Year at BTH, Sweden) Integrated Double Degree Masters Programme (IDDMP)	Regular five years programme (MoU)
B.Tech. (3 ½ Years At JNTUH) and M.S (1 ½	Regular five years programme(MoU)

Year at AIT, Bangkok) International Integrated Double Degree Masters Programme (IIDDMP)	
Master of Applied Management	Regular five and half years programme (for affiliated colleges)
Pharma-D	Regular six years course
M. Phil	3 years (minimum duration)
Ph.D.	3 years (minimum duration)

1.2.2 Give details on the following provisions with reference to academic flexibility

a) Core / Elective options :

The University implemented the curriculum as per the guidelines of the UGC/AICTE considering the societal need and industry requirement. In order to provide more academic flexibility for a student, the Choice Based Credit System (CBCS) has been introduced in the constituent and affiliated colleges for UG and PG programmes. The University has implemented the Choice Based Credit System as per the guidelines of the UGC/AICTE.

b) Enrichment courses

JNTUH introduced courses on soft skills, spoken english, communication skills, computer skills, and research methods with a view to developing skills and offer career training for the students. Laboratory courses to improve communication skills are included in first and third year B.Tech course structure.

c) Courses offered in modular form

Taken care as per the norms of the UGC/AICTE.

d) Credit accumulation and transfer facility

By a credit unit the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week.

	I Year		Semester	
	Periods + Tutorial per week	Credits	Periods / Week	Credits
Theory	03+01	06	04	04
	02	04	--	--
Practical	03	04	03	02
Drawing	02+03	06	03 06	02 04
Mini Project	--	--	--	02
Comprehensive Viva Voce	--	--	--	02
Seminar	--	--	06	02
Project	--	--	15	10

For award of degree a student has to obtain a minimum total number of credits as specified in the Academic Regulations. The University provides credit transfer facility, if the student is transferred from one University/institute to another University/institute. The student need not appear for the exam in the same subject(s) has gone through, subject to the equivalency of the subject to be approved by the Board of Studies in the concerned subject in the University/Institute. The CBCS system will further facilitate credit transfer and student mobility.

e) Lateral and vertical mobility within and across programmes, courses and disciplines :

The diploma completed candidates (lateral entry) are eligible to take admission into second year B.Tech of respective branch after qualifying the Engineering Common Entrance Test (ECET) conducted by Telangana State Council of Higher Education (TSCHE) as per norms.

1.2.3 Does the university have an explicit policy and strategy for attracting international students?

Yes, the University has established the Directorate of University Foreign Relations (DUFR) to coordinate and organize the admissions of foreign students as per the norms of

the AICTE/UGC and with proficiency in English. All eligible candidates are admitted into various courses offered in campus, constituent, and affiliated colleges of the University. The University Website provides all required information to take admission into various courses including eligibility criteria and fee structure.

The DUFR offers guidance to the overseas students. The University also provides residential accommodation for international students.

1.2.4 Have any courses been developed targeting international students? If so, how successful have they been? If 'no', explain the impediments.

The University offers Undergraduate, Postgraduate and Ph.D programmes for international Students. The foreign students are admitted subject to fulfilment of eligibility criteria. The University designed a certificate course in English to improve their communication skills, before the commencement of the program of study.

772 students have enrolled during the last four years from 25 countries and the admissions were as follows:

2012-2013	286
2013-2014	206
2014-2015	120
2015-2016	160

1.2.5 Does the university facilitate dual degree and twinning programmes? If yes, give details.

Yes. The University facilitates Dual Degree Programmes. The following Dual Degree programs are offered at JNTUH College of Engineering, Hyderabad:

1. B.Tech. in Civil Engineering + M.Tech. (Structural Engineering)
2. B.Tech. in Civil Engineering + MBA (Human Resources / Finance/ Marketing/ Systems
3. B.Tech. in Mechanical Engineering + M.Tech. (Manufacturing Systems)
4. B.Tech. in Mechanical Engineering + MBA (Human Resources / Finance/ Marketing/ Systems)
5. B.Tech. in Electrical & Electronics Engineering + M.Tech. (Power Electronics)
6. B.Tech. in Electrical & Electronics Engineering + MBA (Human Resources / Finance/ Marketing/ Systems)
7. B.Tech. in Electronics & Communication Engineering + M.Tech. (Communications & Signal Processing)
8. B.Tech. in Electronics & Communication Engineering + MBA (Human Resources / Finance/ Marketing/ Systems)
9. B.Tech. in Computer Science & Engineering + M.Tech. (Computer Science)
10. B.Tech. in Computer Science & Engineering + MBA (Human Resources / Finance/

Marketing/ Systems)

Overseas programmes offered on campus:

- 5-Year Integrated Double Degree Masters Programme (IDDMP) in collaboration with Blekinge Institute of Technology, Sweden.
- 5-Year International Integrated Double Degree Masters Programme (IIDDMP) collaboration with Asian Institute of Technology, Bangkok.
- Two year Master of Science in Information Technology (MSIT) Program (2 year) with Carnegie Mellon University, USA in School of Information Technology.
- M.Sc./M.Tech. (Networking and Security) with CIT (Ireland) & University of West Minister (UK)
- MBA programme in School of Management Studies with Central Michigan University, USA, MBA programme in School of Management Studies.

1.2.6 Does the university offer self-financing programmes? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programmes?

Yes. (Annexure - VI)

The University offers the following self-financing programmes. The admission criteria are common for self-financing and aided courses except for the fee structure. The Executive Council/Academic Senate decides fee structure. All these courses are attached to concerned departments.

Course offered	Fee structure
IDP programme	Rs. 25000/- per year
IDDMP Programme	Rs. 4.00 Lakhs for 7 Sem. at JNTUH. 9000 SEK at BTH, Sweden.
IIDDMP Programme	Rs. 2,15,500/- per annum
M.Tech. (Self supporting) programme	Rs. 25000/- per semester
M.Tech. (Sponsored) programme	Rs. 50000/-per semester.

1.2.7 Does the university provide the flexibility of bringing together the conventional face-to-face mode and the distance mode of education and allow students to choose and combine the courses they are interested in? If 'yes,' give operational details.

No

1.2.8 Has the university adopted the Choice Based Credit System (CBCS)? If yes, for how many programmes? What efforts have been made by the university to encourage the introduction of CBCS in its affiliated colleges?

Yes.

On recommendations of Boards of the Studies and Academic Senate the University has introduced the Choice Based Credit System (CBCS) in all UG and PG programmes of UGC Autonomous Constituent and autonomous affiliated colleges of JNTUH from the academic year 2015-16 as per UGC /AICTE guidelines. The University implemented the CBCS in all the PG programmes being offered in non-autonomous constituent and affiliated colleges of JNTUH from the Academic year 2015-16.

The University also implemented CBCS in all the UG programmes being offered at the non-autonomous constituent and affiliated colleges of JNTUH from the academic year 2016-17. The University has organized awareness programmes also for principals and faculty of constituent and affiliated colleges.

1.2.9 What percentage of programmes offered by the university follow:

- **Annual system:** Only the first year of B.Tech programme offered in affiliated colleges has annual system till 2015-16 academic year. The University has introduced Choice Based Credit System (CBCS) in B.Tech/B.Pharm programmes in the academic year 2016-17.
- **Semester system:** 100%
- **Trimester system**: 0

1.2.10 How does the university promote inter- disciplinary programmes? Name a few programmes and comment on their outcome.

Considering the need of the industry and society, the University has introduced inter-disciplinary programs in the following thrust areas.

1. B.Tech (Bio-Medical Engineering)
2. B.Tech (Electronics and Telematics Engineering)
3. B.Tech (Electronics and Computer Engineering)
4. B.Tech (Civil and Environmental Engineering)
5. B.Tech Mechanical Engineering (Nano Technology)
6. B.Tech (Pharmaceutical Engineering)
7. B.Tech Mechanical Engg. (Mechatronics)
8. M.Tech (Energy Systems)
9. M.Tech (Nano Electronics and Photonics)
10. M.Tech (Nano Technology)

11. M.Tech (Bio-informatics)

12. M.Tech (Spatial information Technology)

13. M.Tech (Environmental Science and Technology)

14. M.Tech (Water Resources)

15. M.Tech (Geoinformatics and Surveying Technology)

16. M.Tech (Geotechnical Engineering)

17. M.Tech (Power Electronics)

18. M.Tech (Power Electronics and Electrical Drives)

19. M.Tech (Power Engineering and Energy Systems)

20. M.Tech (Power Plant Engineering & Energy Management)

21. M.Tech (Industrial Engineering and Management)

22. M.Tech (Computers and Communication Engineering)

23. M.Tech (VLSI and Embedded System/ Electronics Design Technology)

24. M.Tech (Wireless and Mobile Communication)

25. M.Tech (Computer Networks and Information Security)

26. M.Tech (Cyber Forensic / Cyber Security & Information Technology)

1.3 Curriculum Enrichment

1.3.1 How often is the curriculum of the university reviewed and upgraded for making it socially relevant and/or job oriented / knowledge intensive and meeting the emerging needs of students and other stakeholders?

The existing curriculum for each subject is reviewed every year and updated. The University revises the curriculum once in every two or three years based on the need of industry R&D establishments/academia, Society and potential employability.

1.3.2 During the last four years, how many new programmes at UG and PG levels were introduced? Give details.

S. No.	Name of the Department/ Centre	Course	Inter disciplinary/ Emerging Area	Year
1	JNTUH College of Engineering,	B.Tech (Civil and Environmental Engg.)	Inter disciplinary	2012-13

	Sultanpur			
2	J N T U H College of Engineering, Sultanpur	B.Tech Mechanical Engg (Mat. Sc. & Nano Tech.)	Inter disciplinary	2012-13
3	Affiliated Colleges	Master of Applied Management	Inter disciplinary	2013-14
4	Affiliated College	B.Tech Pharmaceutical Engg.	Inter disciplinary	2014-15
5	Institute of Science & Technology, JNTUH	M.Tech Nano Electronics & Photonics	Emerging Area	2014-15

1.3.3 What are the strategies adopted for the revision of the existing programmes? What percentage of courses underwent a syllabus revision

The University frequently organizes interactive meetings with stakeholders including the faculty to have their feedback about the curriculum. Based on their feedback, the Boards of Studies meetings are conducted to include the modifications suggested. In all the courses, subject content is being revised to the extent of 20-30%. While considering the modifications, the guidelines from UGC/AICTE are strictly followed. The Director, Academic & Planning organizes the curriculum revision.

1.3.4 What are the value-added courses offered by the university and how does the university ensure that all students Have access to them?

The University offers the following value added courses

(i) Advanced communication skills lab
(ii) Human values and professional ethics
(iii) Intellectual property rights
(iv) Research methodology
(v) Disaster management
(vi) Certificate courses in distance education mode
(vii) Yoga, NCC, NSS
(viii) Gender Sensitization
(ix) Environmental Studies

The University is also planning to introduce certain audit courses in the curriculum.

1.3.5 Has the university introduced any higher order skill development programmes in consonance with the national requirements as outlined by the National Skills Development Corporation and other agencies?

The University offered the courses on intellectual property rights, soft skills, communication skills and also introduced finishing school programme to provide the value education to the students. JNTUH – NASSCOM – TASK – tripartite MOU for offering Certification in Business Analytics and Cyber Security for B.Tech CSE and IT stream of students.

1.4 Feedback System

1.4.1 Does the University have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?

Yes, the feedback on the curriculum is collected from all the stakeholders. The feedback collected is discussed in the Boards of Studies meetings to include the feedback in the curricula. On-line Feedback being implemented.

1.4.2 Does the university elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods such as conducting webinars, workshops, online discussions, etc. and its impact.

Yes, the University has followed norms of UGC/AICTE while preparing the curriculum. Several eminent National Faculty from IITs/NITs/IIMs reputed Universities, highly eminent personalities from R&D, Industries and Government Organizations are invited for the Boards of Studies meetings for reviewing and updating the Curriculum.

The University makes use of meetings with national, international institutes/Universities in which national and international experts participate and discuss the curriculum.

1.4.3 Specify the mechanism through which affiliated institutions give feedback on curriculum enrichment and the extent to which it is made use of.

Eminent faculty from affiliated colleges, and alumni are co-opted as members of Boards of Studies in all disciplines for curriculum development. The suggestions of the members are considered for preparation of syllabi.

The University also conducts conferences/workshops/seminars in emerging areas. During these events the faculty from affiliated colleges get an opportunity to give feedback on the curriculum to the faculty/HoD/BoS Chairperson of the department concerned.

1.4.4 What are the quality sustenance and quality enhancement measures undertaken by the university in ensuring the effective development of the curricula?

The University has introduced the following curriculum enhancement measures to make the curriculum more effective.

- Introducing value added courses.
- Arranging guest lectures by inviting the experts from R&D, industry, IITs, NITs, alumni and other reputed institutes and improving the institute-industry interaction.
- Conducting of orientation and refresher courses for the faculty to update knowledge in the concern areas.

- Entering into MoU with national and international institutes/Universities to enhance the quality of curriculum.
- Encouraging research in inter disciplinary areas.
- Facilitating 24 X 7 computer facility
- Including the seminars, tutorials, project work in the curriculum
- Introducing one year project work in the curriculum at Postgraduate level
- Facilitating domain expert interaction and collective wisdom ensure that the quality of the curriculum proposed is the latest
- Conducting audit courses for Ph.D. scholars once in a year.

The following experts delivered guest lectures at JNTUH as detailed below:

S. No.	Name of the Dept.	Particulars
01	Civil	Centrifuge modelling of Geo Technical Problems - an overview by Prof. B.V.S. Viswanadham, IIT Mumbai.
02	Mechanical	1. A Guest Lecture on Advanced Micromachining Systems under TEQIP - II, 3rd Oct. 2015 by Dr. G. L. Samuel, Assoc. Professor, IIT, Madras 2. A Guest Lecture on Advanced Research in Mechanical Engineering at IITs under TEQIP - II, 13th Nov. 2015 by Dr. J. Ramkumar, Professor, IIT, Kanpur
03	ECE	Sri.Hevendra Rajareddy, Software Manager, Redpine Signals, Mind Space, Raheja IT Park, Madhapur, Hyderabad, has delivered the Guest Lecture on I oT on 19th December, 2015, JNTUH CEH, Under TEQIP – II and interacted with the UG students of ECE and CSE Dept., JNTUH CEH.
04	Metallurgical	1. Dr. Manish Roy, Scientist - F, DMRL, gave a lecture on "Tribological properties of Nano composites" in 21st September 2015. 2. Dr. Manish Roy, Scientist - F, DMRL, gave a lecture on "Heat Treatment on Steels" in 6th January 2016 3. Dr. D.V.V. Satyanaryana, Scientist G, DMRL, Gave a lecture on "Mechanisms of Creep Deformation and Fracture" in 22nd January 2016.

CRITERION II: TEACHING-LEARNING AND EVALUATION

2.1 Student Enrolment and Profile

2.1.1 How does the university ensure publicity and transparency in the admission process?

The University follows the rules and regulations of state government in the admission process. The admissions are made based on the ranks obtained in the common entrance test conducted by state and national agencies, such as Engineering, Agriculture and Medical Common Entrance Test (EAMCET), Engineering Common Entrance Test (ECET), Post Graduate Engineering Common Entrance Test (PGECET), ICET for MBA and MCA; Graduate Aptitude Test in Engineering (GATE), Graduate Pharmacy Aptitude Test (GPAT) and a specific entrance test conducted by the University. The schedules of the entrance examinations are notified in leading newspapers at state and national levels in advance. It is also notified through website of the concerned University conducting the tests.

2.1.2 Explain in detail the process of admission put in place by the university. List the criteria for admission: (*e.g.*: (i) merit, (ii) merit with entrance test, (iii) merit, entrance test and interview, (iv) common entrance test conducted by state agencies and national agencies (v) other criteria followed by the university (please specify)

The admission is based on the ranks secured by the candidates in the common entrance tests conducted by the state or national agencies and the reservation policy for admission is as per Government norms. The University admits the candidates selected by the state agencies into various courses.

Course(s) Offered	Admission Process
B.Tech, B.Tech Plus M.Tech, and B.Tech Plus MBA (Dual Degree programs)	Admission to theses courses is based on merit rank obtained at Telangana State level common entrance test, EAMCET, conducted by Telangana State Council of Higher Education, TSCHE. Admissions are made through web based counselling conducted by TSCHE.
M.Tech./M. Pharmacy	Admission is based on the merit secured at state level common entrance test (PGECET) conducted by State Council of Higher Education and merit at national level test, GATE. Admissions are made through web based counselling conducted by TSCHE.
M.B.A./MCA	Through TS ICET Rank. (State wide entrance examination conducted by State Council of Higher Education). Admissions are made through web based counselling conducted by TSCHE.
M.Sc.	The merit at the entrance test conducted by University is considered for admission into various specialized M.Sc. courses. The admissions are made through Directorate of Admissions, JNTUH.
Ph.D	Through University entrance test, interview, and research credentials. Admission to Ph.D programmes is subject to the availability of vacancies. The admissions are made through

	Directorate of Admissions, JNTUH.

2.1.3 Provide details of admission process in the affiliated colleges and the university's role in monitoring the same.

Admissions are made according to the merit secured at state level common entrance tests such as EAMCET, ECET, PGECET and ICET and reservation policy is followed for different categories as per state Government and University rules in force. There are two types of admission process in the affiliated colleges.

Category – A (Convener Quota): In this category 70% of the sanctioned intake is based on the merit secured at entrance test conducted by state and national agencies such as EAMCET, ECET, GATE, GPAT etc.

Course(s)	Eligibility Criteria
B.Tech.	EAMCET Rank with Intermediate/10+2 level cut-off marks: 45 marks for Open Category (OC) and BC, 40 marks for SC and ST
M. Tech./ M. Pharmacy	PGECET Rank with Degree cut-off marks : 50 marks for OC and 45 marks for BC/SC/ST
M.Sc.	Merit secured at entrance test conducted by the University.
Ph.D.	Merit secured at entrance test conducted by the University, interview and research credentials. Qualifying marks in entrance exam, OC/BC: 40 SC/ST: 25

Category – B (Management quota): In this category the admissions are based on the guidelines issued by the Admission Fee Regulatory Committee (AFRC) from time to time. The Telangana State Council of Higher Education (TSCHE) will approve the same.

2.1.4 Does the university have a mechanism to review its admission process and student profile annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?

Yes, the admission into B.Tech, M.Tech and M.Pharm courses are made according to the merit secured at state and national level common entrance tests (EAMCET, PGECET, GATE, GAP) conducted by state and national agencies. The admission procedure is reviewed before the commencement of admission process in every year. The University conducts separate entrance test to make admissions into M.Sc., M.S. by Research and Ph.D every year. The admission process and admitted students profile will be reviewed at high level meeting with the Vice-Chancellor, Registrar, Director- Academic & Planning and Director Admissions every year. The Profile of passed out students is prepared and reviewed every year and necessary action initiated to improve the system.

2.1.5 What are the strategies adopted to increase / improve access for students belonging to the following categories:

- **SC/ST**
- **OBC**
- **Women**
- **Persons with varied disabilities**
- **Economically weaker sections**
- **Outstanding achievers in sports and other extracurricular activities**

The University follows the inclusive and social justice policies of Central and State Government for admissions to all courses offered. 15% and 7% of available seats are reserved for SC and ST categories respectively. Hostel facility is also provided to these students. There is a separate SC/ST cell to look after the welfare of the students. The University is also arranging remedial classes for the benefit of SC/ST students and weaker students. In each category 33% of reservation is provided for Women category. The women students are provided accommodation in hostels with all facilities.

Ramps and lifts have been provided for disabled persons. The University provides incentives to the students who participate in national and international events. Seats are reserved for sports persons in admissions as per rules.

2.1.6 Number of students admitted in university departments in the last four academic years:

Abstract of the Students admitted

Categories	2012-13		2013-14		2014-15		2015-16	
	M	F	M	F	M	F	M	F
SC	232	139	216	163	218	154	199	146
ST	108	48	100	56	94	62	86	61
OBC	848	457	815	482	783	502	695	473
General	584	358	562	339	347	278	326	238
Others	94	36	98	14	62	22	56	19

College-wise details:

JNTUH College of Engineering, Hyderabad

Categories	2012-13		2013-14		2014-15		2015-16	
	M	F	M	F	M	F	M	F

SC	108	59	107	63	100	62	89	54
ST	46	21	49	23	43	25	35	24
OBC	420	209	398	211	351	201	298	179
General	441	215	434	207	227	156	214	138
Others *	86	25	85	12	51	14	33	11

JNTUH College of Engineering, Jagityal

Categories	**2012-13**		**2013-14**		**2014-15**		**2015-16**	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**
SC	35	31	28	34	27	31	33	31
ST	14	13	14	9	18	13	13	8
OBC	138	86	121	93	140	106	120	109
General	31	41	33	48	33	35	30	41

JNTUH College of Engineering, Manthani

Categories	**2012-13**		**2013-14**		**2014-15**		**2015-16**	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**
SC	34	21	31	21	26	24	25	23
ST	18	4	14	10	13	7	13	13
OBC	134	53	112	60	101	69	98	60
General	20	15	19	14	20	15	14	6

JNTUH College of Engineering, Sultanpur

Categories	**2012-13**		**2013-14**		**2014-15**		**2015-16**	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**
SC	26	11	23	14	26	15	25	13
ST	11	7	9	8	10	6	14	6
OBC	62	68	76	51	86	62	76	51
General	21	23	30	24	23	21	27	16

Institute of Science & Technology, JNTUH, Hyderabad

Categories	**2012-13**		**2013-14**		**2014-15**		**2015-16**	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**
SC	19	8	12	19	24	15	19	15
ST	11	2	9	3	7	7	9	7
OBC	51	20	62	37	62	39	70	45
General	39	32	30	29	33	34	21	25
Others *	4	1	5	2	5	6	15	3

School of Information Technology, JNTUH, Hyderabad

Categories	**2012-13**		**2013-14**		**2014-15**		**2015-16**	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**
SC	7	6	13	8	12	5	5	6
ST	7	0	2	2	1	3	1	2

OBC	30	14	37	21	34	21	29	23
General	28	24	13	17	8	17	12	11
Others *	4	4	7	0	5	2	3	4

School of Management Studies, JNTUH, Hyderabad

Categories	2012-13		2013-14		2014-15		2015-16	
	M	F	M	F	M	F	M	F
SC	3	3	2	4	3	2	3	4
ST	1	1	3	1	2	1	1	1
OBC	13	7	9	9	9	4	4	6
General	4	8	3	0	3	0	8	1
Others *	0	6	1	0	1	0	5	1

* Other Students – Students admitted under NRI/Foreign/Other States including Kashmiri Migrants.

2.1.7 Has the university conducted any analysis of demand ratio for the various programmes of the university departments and affiliated colleges? If so, highlight the significant trends explaining the reasons for increase / decrease.

Yes. The Affiliated Colleges have seen a marked decrease in demand for CSE, IT and ECE streams. Increase of demand has been seen for Mechanical and Civil streams. General demand for Engineering Education in the State of Telangana has decreased to about 55-60%.

Programmes	Number of applications	Number of students admitted	Demand Ratio
UG (*)	-	-	-
PG(*)	23508	16060	1:1.5
Integrated Masters(*)	-	-	-
M.Phil.	-	-	-
Ph.D.	-	-	-
Integrated Ph.D.	-	-	-
Certificate	-	-	-
Diploma	-	-	-
PG Diploma	68	32	1:2

* UG and PG Admissions will be conducted by the State Agencies and the details are mentioned in the point No. 2.1.3. Hence the University does not conduct any analysis.

2.1.8 Were any programmes discontinued/staggered by the university in the last four years? If yes, please specify the reasons

Yes, the following programmes discontinued:

- B.Tech (Mining Machinery) was started in the academic year 2010-11 at JNTUH College of Engineering, Manthani and discontinued from the academic year 2014-15 due to lack of demand.
- B.Tech (Agricultural Engineering) was started in the academic year 2012-13 and discontinued in the academic year 2015-16 as it was not relevant to this Technological University.
- MBA (International Business) was started in the academic year 2009-10 and discontinued in the academic year 2014-15 due to reduced applicants.
- M.Sc. Programmes in Analytical Chemistry and Organic Chemistry were discontinued in the academic year 2015-16 at Centre for Chemical Science & Technology, IST, JNTUH due to lack of students.
- M.Sc. Programmes in Mathematics, Physics and Chemistry were discontinued in the academic year 2015-16 at JNTUH College of Engineering, Hyderabad due to lack of students.

2.2 Catering to Student Diversity

2.2.1 Does the university organize orientation / induction programme for freshers? If yes, give details such as the duration, issues covered, experts involved and mechanism for using the feedback in subsequent years.

Yes, the University organizes orientation / induction programmes for newly admitted batch of students for one or two days covering the issues like Academic Regulations, University resources, Policy of anti ragging, introducing the faculty and subject experts and examination procedures, fees payment schedules, availability of hostel accommodation etc. Usually the Vice-Chancellor, Rector, Registrar and Principal will address the students and highlight the academic practices in the University and local police officials talk about the ill effects of ragging. Hostel manager (if required) talks about the fees deposit, monthly expenses, etc.

The JNTUH College of Engineering, Manthani organized orientation programs for the newly admitted students which is planned to be conducted every year and give freshers a briefing about the college, courses, and future after completing the course. This program is arranged by inviting eminent persons nearby relating to Production Industry/IT Industry/Group services, etc. The previous orientation program was organized on 12.08.2015.

2.2.2 Does the university have a mechanism through which the "differential requirements of the student population" are analysed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?

There is no formal procedure because the admission to Engineering programmes is through state level common entrance test and rank secured. However, the faculty of subjects concerned will identify the differential requirements of the student population and

conduct remedial classes for the weaker students. The advanced learners are encouraged to take up challenging tasks, whereas for average and below average students teachers will provide required help to bring them up to the standard of advanced learners.

For every fifteen students, a faculty member is attached in the first year of B.Tech to counsel and guide them throughout their course of study.

2.2.3 Does the university offer bridge / remedial / add-on courses? If yes, how are they structured into the time table? Give details of the courses offered, department-wise/faculty-wise

The bridge/remedial courses are offered to the socially and economically backward students through Programmes Interface Unit (PIU). The University established PIU in the year 1997. The coordinator is the Head of the Unit and reports the matters relating to the activities of the unit directly to the Registrar. The coordinator of PIU looks after welfare activity of the SC/ST students of the University and affiliated colleges and represents to the State Government, UGC and AICTE from time to time. He/She also provides guidance towards advance study opportunities and prepare the students for State/National level competitive exams/tests such as GATE, IES, ICET, ECET and EAMCET with financial assistance of Social and Tribal Welfare Department of the Government of Telangana State and also the following remedial courses are offered:

- Remedial courses in spoken English and communication skills.
- Remedial classes for weaker students to bring them up to the standard of advanced learners.

2.2.4 Has the university conducted any study on the academic growth of students from disadvantaged sections of society, economically disadvantaged, physically handicapped, slow learners, etc.? If yes, what are the main findings?

Yes, the University conducts study on the academic growth of students from disadvantaged sections of society, and provides the following:

- Coaching for competitive examinations such as GATE, UPSC, TSPSC , Bank examinations etc.,
- Reference books on general knowledge at library
- Remedial classes for educationally weak students
- Remedial classes for soft skill development

2.2.5 How does the university identify and respond to the learning needs of advanced learners?

The competencies of advanced learners are identified through class room interaction, Performance in class tests and such students are encouraged by providing Internship and Multiple Live projects of their interest. These students are also encouraged to participate in national and international conferences, workshops, seminars organized by the reputed institutes, industries, and R&D establishments to interact with experts to make them

motivated in taking up advanced projects.

2.3 Teaching-Learning Process

2.3.1 How does the university plan and organise the teaching, learning and evaluation schedules (academic calendar, teaching plan, evaluation blue print, etc.)?

The University prepares systematic and pre-planned academic calendar well in advance. The academic calendar includes (i) Commencement of class work (ii) Schedule of external and internal examinations, (iii) Vacation, (iv) Commencement of forth coming semester

The faculty prepare the teaching plan well before the commencement of class work. The academic regulations are provided to the students at the time of joining the course and are also discussed in the orientation classes.

2.3.2 Does the university provide course outlines and course schedules prior to the commencement of the academic session? If yes, how is the effectiveness of the process ensured?

Yes, the University conducts meetings with all the Principals of constituent and affiliated colleges before commencement of the class work and informs them about the regulations and syllabi. Each student is provided with a copy of syllabi and academic regulations. The course outlines and schedules are prepared by the faculty concerned and circulated to the students before commencement of the class work. All the affiliated and non-autonomous constituent colleges follow the academic calendar prepared by the University.

2.3.3 Does the university face any challenges in completing the curriculum within the stipulated time frame and calendar? If yes, elaborate on the challenges encountered and the institutional measures to overcome these.

No such challenges are faced by the University. Extra classes will be conducted, if the syllabus is not completed within the stipulated time.

2.3.4 How learning is made student-centric? Give a list of participatory learning activities adopted by the faculty that contributes to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.

The main objective of the University is to make learning student-centric. Learning pedagogy of the University includes interactive methods like case studies, group discussions, role plays, quizzing, brainstorming, demonstrations, simulations, field visits, workshops, seminars, conferences, student festivals and competitions.

UG and PG courses have provision of tutorials in each week and PG students have provision of seminars.

2.3.5 What is the university's policy on inviting experts / people of eminence to deliver lectures and/or organize seminars for students?

All the departments of the University are encouraged to invite experts from industry, R&D establishments, and eminent academicians from IITs, NITs, and other reputed universities, to deliver seminars in the emerging areas. The University encourages the faculty to seek

financial support from UGC, MHRD, AICTE and DST to organize conferences, seminars and workshops. The alumni of the University are also requested to give a presentation on emerging areas during their visit to the Institute.

2.3.6 Does the university formally encourage blended learning by using e-learning resources?

Yes, the University encourages blended learning by using e-learning resources. The University has initiated "e-Learning Solutions and Two-Way HD Delivery Mechanism for Teachers and Students (e-LSDM)" as e-learning resource and is being implemented as part of the University's vision of achieving academic excellence. The e-LSDM initiative is an ambitious and first of its kind initiative undertaken by JNTUH in India that is aimed to address the challenges faced by its affiliated engineering colleges in their teaching and learning efforts.

2.3.7 What are the technologies and facilities such as virtual laboratories, e-learning, open educational resources and mobile education used by the faculty for effective teaching?

The faculty and students are provided with ample opportunities to update their knowledge in the relevant areas with the help of following facilities:

1. Open source simulations
2. GNU project and training tools
3. NPTEL
4. e-books and journals
5. 24 X 7 computer facility
6. e-LSDM facility
7. Internet based resource collection

2.3.8 Is there any designated group among the faculty to monitor the trends and issues regarding developments in Open Source Community and integrate its benefits in the university's educational processes?

Yes, there are specially designated groups in the University to monitor the trends and issues regarding developments in Open Source Community:

- The Boards of Studies is the responsible body to monitor the trends and changes in the subjects
- Academic senate discusses the trends and makes required academic changes in the curriculum.

2.3.9 What steps has the university taken to orient traditional classrooms into 24x7 learning places?

The University has taken certain steps to orient traditional classrooms into 24x7 learning places.

- The College and central library are equipped with books, reputed e-journals and theses of the project works of the students.
- e-learning facilities at 24x7 classrooms and Centralised Simulation lab facility (24X7)
- Internet facility at all student hostels.
- Many class rooms and seminar halls are equipped with LCD projector, computer with Internet connectivity.

2.3.10 Is there a provision for the services of counsellors / mentors/ advisors for each class or group of students for academic, personal and psycho-social guidance? If yes, give details of the process and the number of students who have benefitted.

Yes, a group of fifteen students is attached to each teacher counsellor/mentor in each department. This helps to have close interaction with the students. There is a CRC chair for each class in every department to monitor day to day activities of the students.

2.3.11 Were any innovative teaching approaches/methods/practices adopted/put to use by the faculty during the last four years? If yes, did they improve learning? What were the methods used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?

The University encourages the faculty to use modern teaching aids in the teaching -learning process. Faculty are using innovative teaching methods to make the students to understand the trends of concern subjects. Majority of the faculty use NPTEL video lessons, computer simulations, demos as teaching aids.

2.3.12 How does the university create a culture of instilling and nurturing creativity and scientific temper among the learners?

The University has established a culture of instilling and nurturing creativity through the following activities:

- Providing the flipped class room and blended learning facilities to the students.
- Conducting seminars, workshops, conferences and visits to industries, educational tours.
- Presenting the research papers at national and international conferences
- Students organize the paper presentation contest, project exhibitions.

2.3.13 Does the university consider student projects mandatory in the learning programme? If yes, for how many programmes have they been (percentage of total) made mandatory?

Yes, the University consider student UG and PG projects mandatory in the learning programme. All the faculty members of the respective departments act as project guides.

- **Number of projects executed within the university**

  60%

- **Names of external institutions associated with the university for student project work:**

  RCI, BHEL, BEL, NRSC, BDL, HAL, DMRL, DRDL, HCL, NFC, ECIL.

- **Role of faculty in facilitating such projects:**

All the faculty of the respective departments act as project guides. For all UG and PG

programme/courses the project work is mandatory. The faculty members help the students in defining, designing, implementation, review and documentation of the project work. All project works are reviewed by Project Review Committee of respective specialization constitutes in every Department.

2.3.14 Does the university have a well qualified pool of human resource to meet the requirements of the curriculum? If there is a shortfall, how is it supplemented?

Yes, the University has a well qualified pool of human resources to meet the requirements of the curriculum.

The faculty selections are made as per University Grants Commission/AICTE guidelines. Most of the departments have domain expert faculties of different cadres in respective fields of courses as per curriculum. However, in certain cases where there is a shortfall of experts, the University invites experts from the industry, and other institutes to meet the requirement of curriculum. Apart from this, based on the requirement the University also appoints lecturers on adhoc basis.

2.3.15 How are the faculty enabled to prepare computer-aided teaching/ learning materials? What are the facilities available in the university for such efforts?

The University encourages faculty by providing computers/Laptops, printers with Internet Connectivity and standard reference books in the department library and University Library, online journals. Most of the class rooms have LCD projector facility to have effective computer based teaching learning methods.

2.3.16 Does the university have a mechanism for the evaluation of teachers by the students / alumni? If yes, how is the evaluation feedback used to improve the quality of the teaching-learning process?

Yes, the University has a mechanism for the evaluation of teachers by the student and alumni. The feedback from the students is collected at the end of each semester. The feedback submitted by the students is analyzed and used to take corrective measures. The feedback from alumni is also obtained during their visit to University to make necessary improvements and corrections.

2.4 Teacher Quality

2.4.1 How does the university plan and manage its human resources to meet the changing requirements of the curriculum?

The University has taken the following measures to develop the human resources to meet the changing requirements of the curriculum.

- Organizing the refresher, orientation, faculty development, short term courses and summer and winter schools through Human Resource Development Cell (HRDC) to enable human resources to meet the changing requirements of the curriculum.
- Organizing the national, international conferences, seminars and workshops

- MoU with industries, R&D establishments and national and international institutes.
- Participation in national, international conferences, seminars, workshops and faculty development programmes.

2.4.2 Furnish details of the faculty

Highest Qualification	Professors		Associate Professors		Assistant Professors		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.	--	--	--	--	--	--	--
Ph.D.	68	26	11	12	15	15	147
M.Phil.	0	0	0	0	1	0	1
PG	0	0	13	6	21	23	63
Adhoc teachers							
Ph.D.	0	0	0	0	5	1	6
M.Phil.	0	0	0	0	3	1	4
PG	0	0	0	0	126	44	170
UG	0	0	0	0	2	7	9
Part-time teachers							
Ph.D.	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0

2.4.3 Does the university encourage diversity in its faculty recruitment? Provide the following details (department / school-wise).

Department / School	% of faculty from the same university	% of faculty from other universities within the State	% of faculty from universities outside the State	% of Faculty From Other Countries
-	-	-	-	-

The applications are invited from Indian nationals for faculty recruitment for all the programmes. The University follow the guidelines from state Government and UGC/AICTE for the recruitment of faculty.

2.4.4 How does the university ensure that qualified faculty are appointed for new programmes / emerging areas of study (Bio-technology, Bio-informatics, Material Science, Nanotechnology, Comparative Media Studies, Diaspora Studies, Forensic Computing, Educational Leadership, etc.)? How many faculty members were appointed to teach new programmes during the last four years?

The University strictly follows the State Government and UGC/AICTE guidelines for the recruitment of faculty. The vacant positions in various cadres are advertised in the leading news papers and also placed in the University website to invite applications from all

Indian nationals. The new faculty must cope up with the additional teaching requirements to run new programmes in the emerging areas. The selection committees are constituted as per State Government and UGC/AICTE regulations and the selection is based on merit in the written exam, interview, experience and academic qualifications.

The University has identified a few thrust areas and established centres such as Centre for Bio-Technology, Centre for Nano-Technology, Centre for Environmental Studies, Centre for Energy and recruited faculty several years ago.

2.4.5 How many Emeritus / Adjunct Faculty / Visiting Professors are on the rolls of the university?

The following Departments/Centres of the University have Adjunct Faculty / Visiting Professors.

CCST, IST:

- Dr. R. Nageswara Rao (Scientist G, Retd, CSIR-IICT, Hyderabad)
- Dr. B. Srinivasulu (Professor of Chemistry, Retd, Kakatiya University)

Centre for Biotechnology, IST:

- Prof. Kalluri Subbarao

Centre for Nano Science & Tech., IST

- Dr. V.V.S.S Srikanth, M.Sc., Ph.D., Asst Prof of Nanotechnology, Hyderabad Central University, Hyderabad.
- Dr. K. U. Bhaskar Rao, Director, DMSRDE, DRDO on nanotechnology and its applications
- Dr. Malkondaiah, Director, DMRL on synthesis of nanostructures
- Dr. Mukopadhya, DMSREE, DRDO, synthesis and characterization of nanomaterials
- Dr. N.Sridhar, Assoc Professor, Georgia tech University on biomedical applications
- Dr. Palani balaiah, Assoc Professor, Singapore national university on solar cell applications
- Prof. M. Clara Goncalves, Professor of Chemical Engineering, Instituto SuperiorTecnico, IST Lisbon, Portugal on Design and Production of Silica and ORMOSIL nanoparticles for gene delivery.
- Dr. G. Murali Krishna, Assistant Professor at Delft University of Technology, Netherlands on Nano electro mechanical systems (NEMS).
- Dr. Vivek Dhand, Kyungheee University, South Korea, Research Scientist on Current Scenario of Nanotechnology.
- Dr. M. Venkaiah, Asst. prof. at KCU, Karnataka on Properties of Nanostructure Materials.
- Dr. R. Jayvel, Professor and director, Centre for Nano Science and Technology, Anna University, Chennai on " Nanocrystalline Thin Film"

- Prof. V. R.K. Murthy, Physics Dept, IIT Madras on Microwave sintering of Nano Materials and Bulk Materials
- Dr.. K. Venugopal Reddy, Associate Professor, Physics Dept, NIT, Warangal on Sprintronic Application For Metal Oxide Semiconducting Materials
- Dr. A. Rambabu, Research Scientist, National Research Centre for the Working Environment, Svenska Aerogel AB, Lersø Parkallé 105 , DK-2100 Copenhagen on "Nanoporous silica's and their applications"
- Dr. B. Sreedhar, Principal Scientist, Inorganic and physical Chemistry Division, IICT, Hyderabad on "Tem & XPS Material Characterization".
- Dr. P. K. Jain, Scientist, "F" & Team Leader, Centre for Carbon Materials, (ARCI), Hyderabad on "Carbon Nanotubes and its Application".

Centre for Water Resources:

- Dr. Achi Reddy
- Dr. G. Jagmohan Das
- Dr. B.H. Briz Kishore
- Dr. N. Sriramulu
- Dr. P. Venugopala Rao
- Dr. P.L. Laxminarayana

Centre for Spatial Information Tech.

- Dr. R.S. Dwivedi
- Dr. I.V. Murali Krishna
- Dr. Sundara Rajan

Department of ECE, JNTUH CEH

- Dr. B. Yegnarayana , Microsoft Chair, IIIT, Hyderabad
- Dr. V. U. Reddy , Honorary Professor, IIT, Hyderabad
- Dr. Mohan Sundaran Rajan,
- Sri. Anil Kumar Dasari, CEO, AMI Technologies Hyderabad

List of Emeritus Professors

- Dr. Kaluri V. Ranga Rao, Former Emeritus Professor of ECE Dept.

2.4.6 What policies/systems are in place to academically recharge and rejuvenate teachers (*e.g.* providing research grants, study leave, nomination to national/international conferences/ seminars, in-service training, organizing national/ international conferences etc.)?

The University encourages the faculty to update knowledge and network with peers through:

- Deputing them for Ph.D programme under Quality Improvement Programme.
- Permitting them to attend the workshops, seminars, national and international

conferences and providing them TA/DA and registration fee.

- Providing financial support to the departments in organising the workshops, seminars and conferences.
- Encouraging them to seek financial support from AICTE/UGC/DST etc., for research.
- Encouraging them for Post-Doc programme in abroad.
- Deputation or lien or Foreign Service calculated at the rate of one year for every five years of service put in.
- TEQIP-II grants, UGC Unassigned Grants, University Development Fund (UDF), study leave, depute/nominate the faculty to national/international conferences/ seminars, etc.

2.4.7 How many faculty received awards / recognitions for excellence in teaching at the state, national and international level during the last four years?

Every year the state government identifies three teachers from JNTUH for Best Teacher Awards. In addition, recipients of other prestigious awards are as follows:

Department of Civil Engg., JNTUH CEH

- Dr. M. Viswanadham - Best Teacher Award - Telangana State Government - 2014
- Dr. P. Srinivasa Rao - Best Teacher Award - Telangana State Government - 2015
- Dr. P. Srinivasa Rao - Received ICI-ULTRATECH Award for Outstanding Concrete Engineer of Telangana State - - 2015

Department of EEE, JNTUH CEH

- Dr. G. Tulasiram Das – Mother Teresa Shiromani award-2013.
- Dr. N. Yadaiah- Engineer of the year Award -2014, Govt. of Andhra Pradesh.
- Dr. N. Yadaiah - Best Teacher Award of 2015 of Telangana State.
- Dr. M. Suryakalavathi - PDF – Carnegie Mellon University, Pittsburg, USA**.**
- Dr. K. Bhaskar - POSOCO Power System Award-2015 - Power System Operation Corporation Ltd and Foundation for Innovation & Technology Transfer (FITT), IIT, Delhi, - 2015

Department of Mech. Engg., JNTUH CEH:

- Dr. A. Chenna Kesava Reddy was awarded “Best Teacher” for the year 2014 – By Government of Telangana State.
- Dr. T. Kishen Kumar Reddy awarded Best Research Paper at ICMO Conference New Delhi-2013
- Dr. K. Eshwara Prasad was awarded “Best Teacher” for the year 2014 – By Government of Telangana State.

Department of ECE, JNTUH CEH:

- Dr. M. Madhavi Latha, Professor of ECE Dept., JNTUH CEH, was awarded “Best

Teacher" for the year 2013 – By Government of Andhra Pradesh.

- Dr. M. Madhavi Latha, has been awarded as Exchange visitor award by Dept. of states, Institute of International Education, USA.

Department of CSE, JNTUH CEH

- Dr. A. Vinaya Babu, Best State Teacher Award, Govt. of Andhra Pradesh – 2011

Department of Chemistry, JNTUH CEH

- Dr. P. K. Dubey - Best teacher Award - A. P. Govt. - 2013
- Dr Ch. Venkata Ramana Reddy - Teaching Excellence Award - Indus Foundation – 2015

Department of CSE, JNTUH CEJ

- Dr. S. Viswanadha Raju - Teacher Award - ISTE AP section
- Dr. S. Viswanadha Raju - Bharath Jyothi award - International friendship forum, Delhi
- Dr. S. Viswanadha Raju - Best citizens of India award - International publishing house New Delhi.
- Dr. S. Viswanadha Raju - Travel grant award - Multimodal Biometrics-Sources, Architecture & Fusion Techniques
- Dr. D Ramesh - The Visishta Seva Puraskar -
- Dr G Narsimha - Visishta Seva Puraskar award - JNTUH CEJ, Karimnagar
- Dr G Narsimha - Shiksharathan Puraskar award - IIFS, New Delhi
- B. V. RamNaresh Yadav - Visishta seva Puraskar award - JNTUHCE, Karimnagar
- B. V. RamNaresh Yadav - Shiksha Ratna Puraskar award - IIFS, New Delhi

Department of EEE, JNTUH CEJ

- Dr. K. Naga Sujatha - Outstanding Scientist-2015 - Venus International Foundation, Chennai - 2015

Institute of Science & Technology:

- **Dr. M. Anji Reddy**
  - Indira Gandhi Excellence Award November 2013 by International Business Council, New Delhi, India.
  - Bharat Ratna Sir Mokshagundam Visvesvaraya Award-2013. Govt of AP and Institute of Engineers.
- **Dr. K. Mukkanti:**
  - Faculty members placed among top hundred researchers of India for 2011-2013, by OUTLOOK group Careers 360 magazine), from data obtained from Scopus. top 5 in pharmaceutical sciences
  - UGC-BSR Faculty Fellowship has been awarded for 3 years to avail after

super annuation (i.e. applicable from July 2014).

- **Dr. Ch. Sasikala:**
  - Faculty members placed among top hundred researchers of India for 2011-2013, by OUTLOOK group Careers 360 magazine), from data obtained from Scopus. top 5 in microbiology
  - Best Publication Award 2013 – Society For Advancement of Human and Nature (SADHNA), Dr YS Parmar university of Horticulture and Forestry Nauni, Solan Himachal Pradesh, INDIA.
  - Biography included in "Who is Who in the World" (Marquis Who's Who), 1996 to 2013
  - Biography included in "Asian Admirable Achievers", 2006- 2013 Biography included in "Who is Who in Asia", 2006-2013
- **Prof. A. Jaya shree -**
  - Recipient of Research Excellency award for the year 2015 from The Indus global foundation
- **Dr. M. Lakshmi Narasu:**
  - Meritorious Teachers Award by Govt. of Andhra Pradesh 2011
- **Dr. B. Venkateswara Rao**
  - National Geoscience Award – 2011 in the field of Groundwater Exploration by Government of India.
  - Best Teacher Award-2015 by Govt. of Telangana.
- **Dr. K. Manjula Vani**
  - Awarded SABALA by Doordarsan Saptagiri channel in 2013

School of Information Technology:

- **Dr. A. Govardhan**
  - Star of Asia International Award - 2014
  - Pride of Asia International Award - 2014
  - Rashtriya Pragati Award - 2013
  - Mother Teresa Award - 2013
  - Seva Shree Award - 2013
  - Bharat Excellence Award - 2013
  - National Integration Award - 2013
  - Bharat Seva Ratna Puraskar for the year - 2013
  - A.P. State Government Best Teacher Award - 2012
  - Rashtriya Pragati Award - 2012

- Mother Teresa Seva Ratna Award - 2012
- Indira Gandhi Seva Ratna Award - 2012
- Rajiv Gandhi Seva Ratna Award - 2012

- **Dr. K. Santhisree**
  - Best Citizens of India Award 2015
  - Excellence in Education Award, April 2015.
  - Bharat Jyothi Award June 2015.
  - Glory of India Gold medal Award. 2015.
  - Teachers Excellence Award for Outstanding Achievement in Education

Dr. M. Suryakalavathi

- PDF – Carnegie Mellon University, Pittsburg, USA**.**

2.4.8 How many faculty underwent staff development programmes during the last four years (add any other programme if necessary)?

Academic Staff Development Programmes	Number of faculty
Refresher courses	792
HRD programmes	--
Orientation programmes	643
Staff training conducted by the university	--
Staff training conducted by other institutions (outreach programmes)	154
Summer / Winter schools, workshops, etc.	174
Interaction Programmes	83
Short Term Courses	522

2.4.9 What percentage of the faculty have

- **Been invited as resource persons in Workshops/Seminars/Conferences organized by external professional agencies?** 50%
- **Participated in external Workshops/Seminars/Conferences recognized by national / international professional bodies?** 70%
- **Presented papers in Workshops/ Seminars/ Conferences conducted or recognized by professional agencies?** 90%
- **Teaching experience in other universities / national institutions and other institutions?** 25 to 30%
- **Industrial engagement?** 50%
- **International experience in teaching?** 15%

The faculty of JNTUH College of Engineering, Hyderabad have published and presented as many as 839 technical papers during the last three years in various International/National Journals/Conferences. The department-wise contributions are as follows:

Sl. No.	Department	No. of papers published/presented
1.	Civil Engineering	101
2.	Mechanical Engg	192
3.	Electrical & Electronics Engineering	108
4.	Electronics & Communication Engineering	144
5.	Computer Science Engineering	96
6.	Metallurgical Engineering	19
7.	Chemistry	105
8.	Physics	32
9.	Mathematics	28
10.	Humanities & Social Sciences	10
11.	Physical Education	04

2.4.10 How often does the university organize academic development programmes (*e.g.*: curriculum development, teaching-learning methods, examination reforms, content / knowledge management, etc.) for its faculty aimed at enriching the teaching-learning process?

The University revises curriculum once in two or three years and accordingly reforms in teaching-learning methods, examinations, and content/knowledge management are included in the curriculum. The University is having UGC Academic Staff College and organizes faculty development programmes for different faculties. The teachers are also deputed to attend the short term courses at other reputed Universities/Colleges/IITs/ NITs/ IIMs to enrich their knowledge.

2.4.11 Does the university have a mechanism to encourage

- **Mobility of faculty between universities for teaching?**

Yes.

The scheme of guest lectures is implemented to have interaction with experts from outside the University. The faculty are permitted to go on lien to other Universities.

- **Faculty exchange programmes with national and international bodies? If yes, how have these schemes helped in enriching the quality of the faculty?**

Yes.

The faculty exchange programme is initiated with international institutes. The faculty who visit other universities/institutes under this scheme become aware of the teaching-learning process. The faculty members are benefited with different interactive

learning pedagogies, enriched with research ability, equipped with knowledge and teaching techniques of national and international repute.

2.5 Evaluation Process and Reforms

2.5.1 How does the university ensure that all the stakeholders are aware of the evaluation processes that are in place?

The detailed scheme of instructions, examination pattern, and syllabi in a book form are made available for the students of the University, and can be purchased. The University ensures the systematic process of evaluation activities, such as conduct of examinations in various centres under the control of Additional Controllers, Controller of Examination and Director of Evaluation of the University. The University conducts spot valuation, revaluation at spot centres in the campus.

Further the University has placed the academic regulations and syllabus in the University website as well as college websites. Examination branch related information such as notifications, examinations time table and results etc. are available in the website and portals of 1) http://jntuhresults.in and 2) http://exams1.jntuh.ac.in/Portal/common/load.action for all the stakeholders.

The University has arranged training to all the new evaluators participating in the evaluation. Two hours of training on the first day of evaluation, dedicated floor technical support in the evaluation centre will allow the evaluators to be completely aware of all the process involved.

Chief evaluators for the particular subjects are being appointed to interact with the evaluators and provide necessary guidance.

2.5.2 What are the important examination reforms initiated by the university and to what extent have they been implemented in the university departments and affiliated colleges? Cite a few examples which have positively impacted the examination management system.

A total of four lakhs of examination answer scripts including supplementary students per semester are handled by the Directorate of Evaluation. Question papers are released online, half an hour before the commencement of examination, answer sheets are also personalized. Examination centres are interchanged. Answer books are collected, evaluated by the University and results are declared within thirty days.

Question paper delivery process has been streamlined in such a way that the client software installed in the college computer which would download the question papers just 30 minutes before the examination time through VPN after the appropriate authentication from the University question paper portal server.

Centralized evaluation process has been implemented for better monitoring and security and its results the following:

- Faster retrieval of information and availability of required data throughout the University
- Faster examination result declaration

- Better coordination between University and the colleges
- Less Manpower for the activities and more efficient use of available resources
- Help desk support (Email, Phone, Walk-in support)
- Student grievance redressal Portal
- First in Telangana state to implement Online Degree Verification of passed out students
- Better services for administration staff, teaching staff, and students
- Support for examination offices
- Availability of information's for further modernization of administrative processes
- Improve efficiency and transparency in the whole system and address any inaccuracies
- Provide online services by connecting to the e-Governance portal between all stake holders
- Minimized paper work within departments
- Communication and data transfer between colleges/ study centres in a faster mode
- Managing vast amount of students data

2.5.3 What is the average time taken by the university for declaration of examination results? In case of delay, what measures have been taken to address them? Indicate the mode / media adopted by the university for the publication of examination results *(e.g.* website, SMS, email, etc.).

The results are declared within 45 days from the date of last examination or within a week from the date of completion of evaluation whichever is earlier. In case of any foreseen delay more number of evaluators are pooled so as to complete the evaluation process in time by communicating with the colleges or in some cases, faculties from other universities are requested to do the evaluation process. The results are communicated to the colleges as well as published on the University portals.

2.5.4 How does the university ensure transparency in the evaluation process? What are the rigorous features introduced by the university to ensure confidentiality?

University has adopted very transparent evaluation process by which the evaluators will be invited for the evaluation based on their academic experiences. University has also implemented Smart Evaluation System in their evaluation centres by which

- Only experienced evaluators/ faculty members will be invited for the centralized evaluation process in the University

- Evaluators will have to authenticate themselves by submitting the necessary proof documents at the centres
- Answer scripts pertaining to their department/ year/subjects will be allocated after the prior approval from the University officials
- Answer scripts will be evaluated by the evaluator initially
- Evaluated scripts will be forwarded to scrutinizer for marks verification. Any discrepancies found in the valuation/ marks entry will be raised by the scrutinizer back to the evaluator
- Evaluator would do the marks correction and hand over the scripts back to University officials
- The Scripts issue and collection process would require the thumb impression of the evaluators/ scrutinizers hence the control is established
- The remuneration bills, relieving letters would be provided to them upon the completion of the work assigned to them

During the inception, University has managed to have sixty evaluation centres to carry out the evaluation. Through the implementation of centralized smart evaluation system in the premises, University has reduced the delay in evaluation, logistics in sending the answer scripts and improved the control and transparency in the evaluation process.

2.5.5 Does the university have an integrated examination platform for the following processes?

- **Pre-examination processes– Time table generation, OMR, student list generation, invigilators, squads, attendance sheet, online payment gateway, etc.**
- **Examination process – Examination material management, logistics, etc.**
- **Post-examination process -Attendance capture, OMR-based exam result, auto processing, generic result processing, moderation, certification, etc.**

University has implemented Smart Examination Management System by which the below activities are automated and controlled

- Student profiles are registered online in SEMS by the colleges. The profiles would include their personal details, photograph.
- Students can apply for their regular & supplementary examinations online
- Fees will be calculated online automatically and provision is available for the colleges to remit in University premises or through online mechanisms using payment gateway.
- Students fortnight attendance will be captured online by SEMS and their eligibility for appearing for examinations would be decided based on the academic regulations
- Attendance approved students would be provided hall tickets online for appearing in the examinations.
- University would assign the examination centres and observers for the examination centres
- Colleges would collect the stationeries from the University upon producing the receipts of fee paid.

- Question papers for the examinations would be delivered to all the examination centres 30 minutes before the start of the examination time through VPN after the appropriate authentication from the University Question paper portal server.
- Students answer scripts would reach University Evaluation centres for evaluation
- Evaluated answer scripts would be processed for results by applying the suitable moderation techniques as prescribed in the academic regulations
- Processed results will be published in University results portal for the students to check online.
- Tabulation registers containing the results would be sent online to all the colleges
- Marks memo and necessary certificates would be printed upon sufficient approvals from the University officials.

2.5.6 Has the university introduced any reforms in its Ph.D. evaluation process?

Yes, the University has introduced some reforms in its Ph.D. evaluation process.

- The student is required to complete the pre-PhD examination in two subjects.
- The student has to deliver seminar related to his/her research work before the Research Review Committee meeting (RRM) and obtain minimum marks.
- After completion of work, the research scholar has to complete the colloquium.
- The student is permitted to submit the thesis once the colloquium is completed after plagiarism check is done by Turn-it-in software.
- The student shall publish THREE research papers with at least TWO papers published in a peer-reviewed refereed national or international journal with ISSN and impact factor of more than 1 preferably.
- The final thesis submitted will be evaluated by three Indian examiners, one from each of the following:

  (i) IITs

  (ii) NITs,

  (iii) State/Central Universities.

2.5.7 Has the university created any provision for including the name of the college in the degree certificate?

Yes, the University created provision for including the name of the college in the degree certificate from 2008 onwards.

2.5.8 What is the mechanism for redressal of grievances with reference to examinations?

- Help desk support has been established with a call centre to receive grievances through dedicated phone numbers.
- Email support for affiliated colleges

- Walk-in support for affiliated colleges
- Ticketing software for affiliated colleges
- Student grievance redressal Portal(Forum) for students
- Monthly grievance meeting for students/ parents/ colleges attended by University officials.

2.5.9 What efforts have been made by the university to streamline the operations at the Office of the Controller of Examinations? Mention any significant efforts which have improved the process and functioning of the examination division/section.

Since the University is handling four lakhs of exam scripts including supplementary examinations every semester, several measures are taken to ensure accuracy of evaluation and timely declaration of results. Several Additional Controllers of Examinations are appointed by the University to handle B.Tech and B. Pharm semester wise exams and results declaration; PG exams and results declaration; and Ph.D. exams separately. All this has resulted in declaration of results within forty five days. In addition to this, the University has provided the following in the examination branch:

- Office staff
- Enquiry /grievance cell
- Student counters
- Greater management's control over processes in all academic areas
- Availability of data throughout the University
- Give students the choice of when, where and how to access information, wherever possible
- Provide consistent high quality interactions between students and the institution
- Better services for administration staff, teaching staff, and students
- Support for examination offices
- Better co-ordination of faculties
- More efficient use of resources
- Availability of information’s for further modernization of administrative processes
- Secured question paper delivery so as to avoid any leakage of question papers
- Distributed authoring of question papers by faculties from anywhere across the world
- Easy mark entry by the evaluators
- Providing of tamper proof mark sheets and other certificates
- Tamper proof hall tickets to avoid impersonation in the examination halls
- Improve efficiency and transparency in the whole system and address any inaccuracies

- Security to the mark sheets and certificates and completely eliminates faking of certificates and system to verify the Degree certificate online
- Provide online services by connecting to the e-Governance portal between all stake holders
- Simplified process for data processing, attendance uploading, internal marks uploading and faster declaration of the results
- Minimized paper work within departments
- Communication and data transfer between colleges/ study centres in a faster mode
- Managing vast amount of students data
- Provides simplified system for data backup and recovery
- Produce necessary reports from the exam process
- Provides necessary security features, on-line registration and adding intelligence in the whole examination process
- Provides multiple simultaneous access by the stake holders viz., University officials, administration, faculties, students and parents

2.6 Student Performance and Learning Outcomes

2.6.1 Has the university articulated its Graduate Attributes? If so, how does it facilitate and monitor its implementation and outcome?

Yes, the University articulated its Graduate Attributes as per NBA and ABET guidelines and specifications. The list of Graduate Attributes have been articulated as follows:

- An ability to apply knowledge of mathematics, science, and engineering
- An ability to design and conduct experiments, as well as to analyze and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- An ability to function on multidisciplinary teams.
- An ability to identify, formulate, and solve engineering problems
- An understanding of professional and ethical responsibility
- An ability to communicate effectively
- The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- A recognition of the need for, and an ability to engage in life-long learning
- A knowledge of contemporary issues
- An ability to use the techniques, skills, and modern engineering tools necessary for

engineering practice.

2.6.2 Does the university have clearly stated learning outcomes for its academic programmes? If yes, give details on how the students and staff are made aware of these?

Yes, the University has clearly stated learning outcomes for its academic programmes as per the requirements of NBA, TEQIP and NAAC. The learning outcomes are clearly stated for each theory course, laboratory course, syllabi for a specific semester, and for the entire course itself. At the start of the semester or year, the faculty apprises the students about the course and its learning outcomes and the teaching road map which is also made available in the department laboratories, display boards, University website for the students and faculty.

2.6.3 How are the university's teaching, learning and assessment strategies structured to facilitate the achievement of the intended learning outcomes?

The University structured teaching, learning and assignment strategies as per the guidelines of NBA and TEQIP.

2.6.4 How does the university collect and analyse data on student learning outcomes and use it to overcome the barriers to learning?

At the end of each semester, the student's performance is evaluated and examined whether the intended learning outcomes have really been achieved.

2.6.5 What are the new technologies deployed by the university in enhancing student learning and evaluation and how does it seek to meet fresh/ future challenges?

i. The following technologies and methods have been deployed by the University to enhance student learning and evaluation:

- Information via the Internet such as Massive Open Online Courses (MOOC), NPTEL, JNTUH designed e-LSDM, YouTube videos, etc.,
- Student centric initiatives such as flipped classes, blended learning, quizzes, assignments, term papers, etc.

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION

3.1 Promotion of Research

3.1.1 Does the university have a Research Committee to monitor and address issues related to research? If yes, what is its composition? Mention a few recommendations which have been implemented and their impact.

Yes, the University has established a Directorate of Research & Development under which Departmental Research Committees (DRCs) have been constituted to identify emerging areas of research; propose research topics in such areas, and monitor the research progress of funded research undertaken by faculty and research scholars. The composition of the DRC is BOS Chair, HOD and two senior faculty members of the concern department. DRC conducts colloquium for research scholars and gives clearance for thesis submission based on the progress/publications of the work. The DRC has recommended establishing Centre for Nanotechnology and Disaster Management and the same has been established.

3.1.2 What is the policy of the university to promote research in its affiliated / constituent colleges?

- The University has a policy to recognise research centres in affiliated colleges based on the criteria of availability of infrastructure, qualified faculty and track record of research. The University has already recognised three such research centres.

- Many of the faculty of constituent and affiliated colleges are eligible for admission into Part-Time Ph.D. /MS/M.Phil external registrations. The admission shall be made by way of conduct of entrance examinations and interviews as per the norms of the UGC/AICTE.

- Faculty ratified by the University as per the UGC/AICTE guidelines, can serve as supervisor/co-supervisor of research scholars.

3.1.3 What are the proactive mechanisms adopted by the university to facilitate the smooth implementation of research schemes/ projects?

The University provides full administrative support to the principal investigator in implementing the project sanctioned by various central government agencies, and expedites the process of progress of the project by submitting the report along with audit statement to funding agencies.

* **advancing funds for sanctioned projects**

The University provides advance funds to Principal Investigator as per norms of the University if there is an assurance of funding by Central Government agencies.

* **providing seed money:**

No, the University does not provide seed money.

* **simplification of procedures related to sanctions / purchases to be made by the investigators:**

  Yes. The procedures are simplified in the University.

* **autonomy to the principal investigator/coordinator for utilizing overhead charges:**

  Yes. The principle investigator/coordinator has permitted to utilize the funds.

* **timely release of grants:**

  Yes, based on the request of the principle investigator/coordinator and requirement of the project, the grants are released immediately.

* **timely auditing:**

  Yes, auditing process is carried out regularly.

* **submission of utilization certificate to the funding authorities:**

  Yes, the University monitors and ensures that the utilization certificate are submitted within due date to the funding agencies.

3.1.4 How is interdisciplinary research promoted?

* **between/among different departments /schools of the university and**
* **Collaboration with national/international institutes / industries.**

The University undertakes interdisciplinary research work involving departments within and outside the University. The University has Mechanical and Nano Technology, Bio-Technology and Nano-Technology and Centre of Excellence, CoE (TEQIP-II) interdisciplinary departments/centres. Collaborative research is also going on with IICT, DMRL, DRDL, DRDO, TECUMSEH, Godrej, DLRL, CITD and other international organizations.

3.1.5 Give details of workshops/ training programmes/ sensitization programmes conducted by the university to promote a research culture on campus.

Directorate of Research and Development has been conducting one week Research methodology course for all the Ph.D/M.S/M.Phil scholars as per the UGC requirement twice in a year.
Human Resource Development Cell (HRDC) of JNTUH is also conducting three week course on research methodology. The University also makes provision to invite eminent personalities to deliver expert lectures in the emerging research areas.

3.1.6 How does the university facilitate researchers of eminence to visit the campus as adjunct professors? What is the impact of such efforts on the research activities of the university?

The JNTUH College of Engineering, Hyderabad conducted three courses and invited Prof. J.N. Reddy and Dr. Sandeep Kumar from USA, Prof. Bandyopadhyay, Senior Visiting Fellow, UNSW Australia under GIAN scheme.

Eminent retired professors from IITs/NITs and from other reputed universities are invited to join as Adjunct Professors to mentor the students and faculty in emerging research areas. It helps in development of research labs, publication of research papers, sending research proposals, filing patents and fine tuning of research problems.

3.1.7 What percentage of the total budget is earmarked for research? Give details of heads of expenditure, financial allocation and actual utilization

The University under the aegis of Directorate of R&D is providing full time research fellowships to few students; The University earmark funds for research equipment, setting up of Centres of Excellence with the combined support of central government funding agencies. The Directorate also supports subscription to e-journals for the benefit of faculty and research scholars.

3.1.8 In its budget, does the university earmark fund for promoting research in its affiliated colleges? If yes, provide details.

No, the University does not earmark funds for promoting research in its affiliated colleges; however the facilities and expertise extended to affiliated colleges.

3.1.9 Does the university encourage research by awarding Post Doctoral Fellowships/Research Associate ships? If yes, provide details like number of students registered, funding by the university and other sources.

No

3.1.10 What percentage of faculty has utilized the sabbatical leave for pursuit of higher research in premier institutions within the country and abroad? How does the university monitor the output of these scholars?

About ten percent of the faculty are deputed for Quality Improvement Programme (QIP), Post Doctoral Fellowship (PDF) for three years, six months respectively to premier institutes in India and abroad to pursue higher studies and research.

3.1.11 Provide details of national and international conferences organized by the university highlighting the names of eminent scientists/scholars who participated in these events.

Several departments and centres of the University organized various national and international conferences. The details of these conferences are provided in the departmental evaluation reports. One Nobel laureate Dr. Claude Cohen has been invited to JNTUH under M/s Honeywell initiative in 2008.

3.2 Resource Mobilization for Research

3.2.1 What are the financial provisions made in the university budget for supporting students' research projects?

The University provides scholarships to research scholars, Under Graduate and Post Graduate students through TEQIP-II funds.

3.2.2 Has the university taken any special efforts to encourage its faculty to file for patents? If so, how many have been registered and accepted?

Yes, the University has taken some special efforts to encourage the faculty to purse research and file for patents.

Patents filed by the School of Information Technology:

- A Method to Authenticate Users in Multi-Server Environment, Mohammed Misbahuddin, P. Premchand and A. Govardhan, Published in The Patent Office Journal on January 13, 2012.

- A Two-factor Password-based Authentication Method for Web Users, Mohammed Misbahuddin, P. Premchand and A. Govardhan, Published in The Patent Office Journal on April 20, 2012.
- A Secure and Usable Text-o-Graphic Password Method to Authenticate Web Users, Mohammed Misbahuddin, P .Premchand and A. Govardhan, Published in The Patent Office Journal on April 20, 2012.

  (A product called STAR has been developed by C-DAC based on this work)
- A Novel Method and System for Detecting Near Duplicates for Both Web Documents and Normal Documents, V.A. Narayana, P. Premchand and A. Govardhan, Published in The Patent Office Journal on February 21, 2014.

Dr S Viswanadha Raju, Professor CSE, JNTUH CEJ applied for Patents and the details are:

- Video Input based System for Warning Anomalies and Automating Attendance of Students(VISWAAAS) -5747/CHE/2015 - 2015 - Indian patent
- A Secured Optimized Multimodal Biometric Identification System (OMBIS) for Remote Infrastructure Management, (filed - 584/CHE/2014) - 2014 - Indian patent
- An Expert System for Residential Medical Diagnosis(filed -- 704/CHE/2014) - 2014 - Indian patent
- A Frame Work for STEP Data Transformation,(filed --814/CHE/2014) - 2014 - Indian patent
- Hybrid Approach for Multimodal Biometric Template Security(filed- 1350/CHE/2013) - 2013 - Indian patent
- Automotive Security System Using Embedded Biometrics (filed 1995/CHE/2013)- - 2013 - Indian patent
- Enhancing the Security Strength of Cloud Computing through Biometric Template Protection Scheme(filed - TEMP/E-1/7859/2013-CHE) - 2013 - Indian patent

Pre-granted Patents applied by IST:

- A process for extraction of neurosporene from a novel phototrophic bacterium Rhodobacter viridis JA737 T and utilisation thereof. (4196/ CHE/2012A)
- A microbiological method using marine water for the production of neurosporene from a marine bacterium Rhodovulum sp.ja756t and compositions containing the said pigment and process for making the same (4961/CHE/2012A).
- A process for the isolation and purification of lycopene from Rhodospirillum sulfurexigens JA 143T and Rhodospirillum oryzae JA 318T and utilization thereof (4962/CHE/2012A).
- Phototrophic Purple Bacteria as Dietary Supplements and as medicaments for reducing Total blood cholesterol, Triglycerides, LDL Cholesterol and feed compositions containing them. (4276/CHE/2013A).
- Application of Geo-Membrane in rainwater harvesting structures (640/CHE/2015)
- Replenishing Aquifers with excess surface flows above fsl of canals/ tanks/ lakes through filter coupled recharge shaft (670/CHE/2015)
- “Design of Effective dosage of Holocellulolytic enzymes for the hydrolysis of pre-treated biomass to fermentable sugars and their fermentation to ethanol”. (5550/CHE/2013)

- Sequential fractionation of Rice Straw into Hemicellulose, Lignin, Silica and Cellulose, and an efficient saccharification of cellulose for fermentable sugar (Glucose) production. (7893/CHI/2014)

3.2.3 Provide the following details of ongoing research projects of faculty:

Department	Year wise	Number	Name of the project	Name of the funding agency	Total grant received (Rupees)
University awarded projects					
Minor projects -		**0**			
Major projects		**0**			
Other agencies - national and international (specify)					
Minor projects -		**0**			
Major projects –		**0**	**Details are given below:**		
CEH – Chemistry Dr. B. Rama Devi		3	Synthesis of novel heterocyclic cinnamic benzimidazole and quinoline benzimidazole and quinoline scaffolds as potential anti tuberculosis agents	CSIR-OSDD, CDRI, Lucknow	7,50,000
			Synthesis and biological activity evaluation of n el quinoline derivatives potential and cancer agents.	UGC-New Delhi	7,70,000
			Development of PEM, AEM and alkaline water electrolysers for hydrogen production.	BRNS, BARC	33,95,300
CEH – Chemistry Dr. Ch. Venkata Ramana Reddy		1	Synthesis characterization and biological activity evaluation of metal complexes obtained from benzimidazole ligands	UGC-New Delhi	6,99,000
CEH - EEE – Dr N. Yadaiah		3	Design and Development of brain inspired intelligent controller to solve complex non-linear problems	DST	51,40,000
			Investigation, Design and implementation of robust observer based vector control of ac machine	AICTE	18,30,000

			Investigation of Neural Network Techniques for Rocket Trajectory Estimation	Indian Space Research Organization	9,30,000
CEH - Maths – Dr. MA Srinivas		1	Stochastic/delayed nonlinear bio mathematical models	UGC	6,76,000
CEH – ECE - Dr. L. Pratap Reddy		1	Analysis of Crypto System using Information Theoretic Approach with the help of Spurious Keys. (on going)	RCI	9,85,000
CEH – ECE - Dr. K. Anitha Sheela		1	Design, Construction and Analysis of Comprehensive Dataset for Emotion Detection using Multiple Biometrics. (on going)	UGC - MRP	11,37,000
CEH – ECE - Dr. M. Madhavi Latha & Dr. B. N. Bhandari		2	DST - FIST Program 5 years – 2012 (on going)	DST	55,00,000
CEH – ECE - Dr. M. Madhavi Latha			MODROBS Project for Communications Lab for 1 year – 2011 (Completed)	AICTE	8,00,000
CEH – ECE - Dr. K.V. Ranga Rao & Dr. L. Pratap Reddy		1	DLRL Project(Completed)	DLRL	
CEH – MECH. Dr. T. Kishen Kumar Reddy		3	Investigation of Refrigeration System using Eco Friendly Refrigerant with Nano particles added to Lubricating Oil(On Going)	AICTE	23,50,000
			Design of Actively Cooled Scramjet Combustor (Completed)	DRDL-HYD	9,89,000
			Numerical Simulation of Planar Flow Melt Spinning Process using CFD analysis and optimization of process parameters for obtaining good quality amorphous ribbons of Fe-Si-B alloys.(Completed)	DRDO	26,85,000
CNST - IST - Dr. K . VenkateswaraRao		3	Synthesis of Nanostructured metal oxides by microwave assisted room temperature ionic liquids and their applications	UGC	8,60,000
			Biology-Nanomaterials-Green Nanotechnology	UGC	11,70,000
			Development of gas sensors by using microbial biofilms with	DST-SERB	37,40,000

			ferrite nanoparticles		
Centre for Pharm. Sc. (CPS), IST - Dr. G. Krishna Mohan		4	Development and Standardization of Herbal Formulation for anti-HIV activity	AICTE-RPS	15,00,000
			Centre for Ethno pharmacological studies	AICTE-MODROBS	13,50,000
			Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions	DST-FIST	55,00,000
			Synthesis, characterisation and pharmacological evaluation of some herbal mediated silver nano particles for anti diabetic activity	DST-SERB	39,90,000
CPS – IST - Dr M. Sunitha Reddy		1	NDDS/SEDDS	AICTE-MODROB	20,00,000
CPS – IST - Dr. M. Ajitha		2	Eco-design of Isatin derivatization under solvent free condition and evaluation for anticancer and antimitotic activity	UGC	11,47,000
			Development of solvent free and economically viable process for novel isatin derivatization and cytotoxic	AICTE	6,50,000
CPS – IST - Dr. S. Shobha Rani		2	Design, Microwave synthesis of novel Angiogenesis Inhibitors As Potential DNA Intercalators	UGC	14,35,800
			Design and Novel Microwave Assisted Green synthesis of TRKS (Receptor Tyrosine Kinases)	AICTE	24,60,000
SIT - Dr.M.Sreenivasa Rao		1	Society for elimination of Rural poverty AP Government Indira Kranti Padakam	IT Security policy for SEP	2,19,000
CWR – IST M.V.S.S.Giridhar		3	Rooftop rainwater harvesting, use and artificial recharge in urban scenario using Geomatics	AICTE, RPS, New Delhi	14,50,000
			Hyperspectral remote sensing based crop inventory	UGC, New Delhi	12,00,000

			Validation of hyper-spectral remote sensing based drought assessment through water	AICTE, RPS, New Delhi	10,91,000

			balance and geomatic approach		
CWR – IST Dr. B. Venkateswara Rao		1	Application of Resistivity Imaging for the delineation of kaolinised zones to contain water well failures in the khondalitic terrain	DST	19,93,000
CWR – IST M.V.S.S.Giridhar		1	Urban Lake water quality Monitoring-A people's participation approach	Earth Watch International N G O , International Funding	7,00,000
CBT – IST - Dr. A. Uma		1	Production of Bioethanol from Concentrated black liquor (CBL) Waste of Rajahmundry Paper mills".	CSIR	9,80,000
CBT – IST – Dr. M Lakshmi Narasu		5	Technology Project on Hydrogen Production through Biological Routes	MNRE	49,69,000
CBT – IST – Dr. M Lakshmi Narasu			Bioconversion of ascorbic acid to ascorbic acid 2- phosphate by using ascorbic acid 2 kinase from a microbial source	UGC	7,41,000
CBT – IST – Dr. M Lakshmi Narasu			Scale up studies and process development for the production of L-arginine by fermentation	TIFAC	29,00,000
CBT – IST – Dr. M Lakshmi Narasu			One time grant of funds from UGC under BSR scheme	UGC	7,00,000
CBT – IST – Dr. M Lakshmi Narasu			Evaluation of chemopreventive activity of Elytraria acaulis – as insight into molecular mechanism	AICTE	12,00,000
CBT – IST - Dr. Archana giri		1	Bioprocess development for adiponectin production using hairy root culturers of withan somnifera	AICTE	16,30,000
CBT – IST - Dr. A. Uma		3	Studies on the effects of Obesity and Obesity induced Type 2 Diabetes on advanced aging phenomenon.	DBT	56,96,000
CBT – IST - Dr. A. Uma			Consortium for development of Sustainable Advanced Lignocellulosic Biofuel Systems.	I N D O - U S Joint Clean E n e r g y R e s e a r c h A n d Development Centre	88,68,000

CBT – IST - Dr. A. Uma			Commercialization of sweet sorghum as a complementary feed stock for ethanol production in the sugar mills of Maharashtra, Tamilnadu and Gujarat.	DBT	38,79,000
CBT – IST - Dr. Archana giri		1	Biochemical elucidation of *Centella asiatica* leaf epidermome , cloning and over expression of the genes involved in the production of pharmaceutically important centellosides	DST	32,47,000
CCST-IST - Dr. Jaya Shree		1	Design of Biological active molecules using molecular modelling techniques	DST	17,00,000
CCST-IST - Dr. K. Mukkanti		2	Synthesis of Heterocyclic compounds via Pd/C catalyzed reactions	CSIR	17,50,000
CCST-IST - Dr. K. Mukkanti			Chemical synthesis of cobalt and cobalt oxide nanoparticals and its investigative studies towards application in chemical [catalysis, defence, nano-hybrid materials and devices], biological and optoelectronic devices	DRDO	14,00,000
CCST-IST - Dr. Sadanandam Palle		1	Design, synthesis and Biological Evaluation of small molecule antimicotic agents with DNAS Damaging properties	SERB	31,50,000

3.2.4 Does the university have any projects sponsored by the industry / corporate houses? If yes, give details such as the name of the project, funding agency and grants received.

No, the University does not have any projects sponsored by the industry/corporate houses.

3.2.5 How many departments of the university have been recognized for their research activities by national / international agencies (UGC-SAP, CAS; Department with Potential for Excellence; DST-FIST; DBT, ICSSR, ICHR, ICPR, etc.) and what is the quantum of assistance received? Mention any two significant outcomes or breakthroughs achieved by this recognition.

Yes.

The following departments/centres of the University have been identified for their research activities:

- Department of ECE, JNTUH College of Engineering, Hyderabad.

- Department of CSE, JNTUH College of Engineering, Hyderabad.
- Department of Civil Engg., JNTUH College of Engineering, Hyderabad.
- Department of Mechanical Engg., JNTUH College of Engineering, Hyderabad.
- Centre for Biotechnology, IST, JNTUH.
- Centre for Pharmaceutical Science, IST, JNTUH.
- Centre for Nanotechnology, IST, JNTUH.
- Centre for Water Resources, IST, JNTUH.

3.2.6 a. List details of

a. research projects completed and grants received during the last four years (funded by National/International agencies).

Name of the faculty	Department	Funding agency	Project title	Grant received (in Rupees)
Prof. Madhavi Latha & Prof. B.N. Bhandari	ECE- JNTUH CEH	DST-FIST	FIST	55,00,000
Dr. A. Uma	Centre for Biotechnology	DBT	Studies on the effects of Obesity and Obesity induced Type 2 Diabetes on advanced aging phenomenon.	56,96,000
Dr. A. Uma	Centre for Biotechnology	DBT	Commercialization of sweet sorghum as a complementary feed stock for ethanol production in the sugar mills of Maharashtra, Tamilnadu and Gujarat.	38,79,000
Dr. G. Krishna Mohan	IST Pharmacy	AICTE-RPS	Development and Standardization of Herbal Formulation for anti-HIV activity	15,00,000
Dr. G. Krishna Mohan	IST Pharmacy	AICTE-MODROBS	Centre for Ethno pharmacological studies	13,50,000
Dr. G. Krishna Mohan	IST Pharmacy	DST-FIST	Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions	55,00,000
Dr. G. Krishna Mohan	IST Pharmacy	DST-SERB	Synthesis, characterisation and pharmacological evaluation for some herbal mediated silver nano particles for anti diabetic activity	39,90,000
Dr M. Sunitha Reddy	IST Pharmacy	AICTE-MODROB	NDDS/SEDDS	20,00,000

Dr. M. Ajitha	IST Pharmacy	UGC	Eco-design of Isatin derivatization under solvent free condition and evaluation for anticancer and antimitotic activity	11,47,000
		AICTE	Development of solvent free and economically viable process for novel isatin derivatization and cytotoxic evaluation	6,50,000
Dr. S. Shobha Rani	IST Pharmacy	UGC	Design, Microwave synthesis of novel Angiogenesis Inhibitors As Potential DNA Intercalators	14,35,800 24,60,000
		AICTE	Design and Novel Microwave Assisted Green synthesis of TRKS (Receptor Tyrosine Kinases)	24,60,000
Dr.T.Kishen Kumar Reddy	MECH – CEH	AICTE	Nano Lubricant Performance in R&A/c Applications(on going)	23,50,000
Dr. M. V. Seshagiri Rao Dr. K. Lakshmana Rao, Dr. Yadaiah Dr. Dean Kumar	Civil	World Bank	Disaster Management (COE)	5,00,00,000
Dr M. Janardhana & Dr N. Darga Kumar	Civil	DST, Govt. of India	Stabilized Compressed Earth Blocks using Rice Husk Ash and their applications to Load Bearing Walls	17,00,000
Dr. K. Venkateswara Rao	Centre for Nano Sc. & Tech.	DST – 2010 for 5 yrs.	DST- Nano Mission	2,60,00,000
Dr. M.V.S.S. Giridhar	Centre for Water Res.	AICTE, RPS	Ultra micro level water shed management using Geomatics AICTE, RPS, New Delhi	9,50,000
		CGWB, MoWR	Demonstrative rainwater harvesting structures in JNTUH campus – Phase –I CGWB, MoWR, New Delhi	27,93,000
		CGWB, MoWR	Demonstrative rainwater harvesting structures in JNTUH campus – Phase –II CGWB, MoWR, New Delhi	12,00,000

		Institute of Engineers (India), Kolkata	Development of Hybrid Power Generation Model using Rain water, Solar and Wind Institute of Engineers (India), Kolkata	60,000
Dr. B. Venkateswara Rao	Centre for Water Res.	UGC	UGC Innovative programme for the M.Sc (satellite meteorology & weather informatics)	53,30,000
		DST	DST - Application of Resistivity Imaging for the delineation of kaolinised zones to contain water well failures in the khondalitic terrain	19,93,000
Dr. K. Anitha Sheela Dr. V. Kamakshi Prasad	ECE- JNTUH CEH	CSIR	Implementation of Sign Language Translator & Synthesizer employing Brain inspired Knowledge driven Artificial Intelligence to make deaf & dumb communicate in Telugu spoken Language	63,54,000
Dr. A. Vinaya Babu Dr. L. Prathap Reddy	CSE- JNTUH CEH	UGC	Integrating Rendering Model for OCR Error Correction on South Indian Scripts	18,47,800
Dr. K. Anitha Sheela Dr. Supreeethi K.P.	ECE- JNTUH CEH	UGC	design construction and analysis of comprehensive dataset for emotion detection UV multiple biometric	11,60,000
Dr. G. Vijaya Kumari	CSE- JNTUH CEH	DIT	Development of Integer Based Homomorphic Encryption Techniques with application on Cloud Computing	48,48,000
		World Bank	Technical Educational Quality Improvement Programme	12,50,000

b. b. Inter-institutional collaborative projects and grants received

i) All India collaboration

ii) International

- Centre for Spatial Information Technology, IST, JNTUH: IMWI, Colombo, Sri Lanka granted funds of Rs. 14,00,000/-

- Centre for Water Resources, IST, JNTUH: Earth Watch International NGO, Urban Lake water quality Monitoring-A people's participation approach, International Funding of Rs. 7,00,000/-

Centre for Environmental Science, IST, JNTUH:

i) Collaboration between Centre for Environment, IST, JNTUH and Department of Plant sciences, University of Hyderabad

Title of the Project: Inventory and bio prospecting of spirochetes of marine habitats of India. Duration, 3 Years (16-11-2011 to 15-10-2014)

Funding Agency: Department of Biotechnology, Government of India. Total outlay: Rs.76,10,000 (Rupees seventy six lakhs ten thousand only).

ii) Collaboration between Centre for Environment (Dr. Ch Sasikala), IST, JNTUH and Department of Life sciences (Dr. Bharti Dave, Professor and Head), M. K. Bhavnagar University, Bhavnagar, Gujarat

Title of the Project: Marine anaerobic bacterial diversity for the production of antimicrobials. Duration, 3 years (18-7-2013 to 17-7-2016)

Funding Agency: Ministry of Earth Sciences, Government of India. Total outlay: Rs. 46, 00,000/- (Forty six lakhs only).

3.3 Research Facilities

3.3.1 What efforts have been made by the university to improve its infrastructure requirements to facilitate research? What strategies have been evolved to meet the needs of researchers in emerging disciplines?

The University administration facilitates sending of various project proposals for funding from various organizations. We sought and obtained funding from DST for improvement of infrastructure (DST-FIST) and three centres of IST (Centre for Environment, Centre for Pharmaceutical Sciences and Centre for Chemical Sciences and Technology) have received funding under DST-FIST till now. When specific request is made for specific equipments, software etc., the University has sanctioned and funded from University Development Fund (UDF) following procedures in vogue, depending on the merits. New courses/departments received generous grants from University for procuring equipments.

The University allows generous utilization of the overhead grant of projects by the principal investigator for research work. This enables outsourcing certain analyses for which facilities are not available at the University, helps in funding research of direct fellowship holders like UGC CSIR JRF/ SRF/UGC-MANF/UGC RGNF/UGC OBC JRF initiation of research in new areas also and the preliminary work done will enable getting sponsored projects in the new areas as well.

The University also extended facilities to establish Optical Aeronomy Laboratory, Joint program with Physics Research Laboratory, Ahmadabad, at Centre for Environment. This unique laboratory facilitates to undertake research in Upper Atmosphere and trying to evolve a R&D study to assess pollution related aspects in the Upper Atmosphere.

3.3.2 Does the university have an Information Resource Centre to cater to the needs of researchers? If yes, provide details of the facility.

The University has the following research facilities for researchers.

- Free Internet access of 20 MBPS (1:1) bandwidth for browsing e-resources. One Air conditioned cabin exclusively for research scholars with 16 desktops is being provided for accessing e-resources like e-journals, databases, e-books, e-lectures, multimedia content and other library databases.
- Access to the above e-content with latest computer systems, fully equipped with headphones with microphones.
- They can also utilize the Wi-Fi facility to update their knowledge through personal Laptops.
- **The following facilities are also made available for the researchers:**
  - 5 Nos. of Library Tickets are issued to the research scholars for borrowing books from library.
  - Journal databases/packages as per AICTE: 18 Nos. + 17 UGC-Infonet totalling to 30418 Nos. (Approx).
  - E-books: 3519 Nos.
  - Print Journals – Indian: 190 Nos.
  - Print Journals – Foreign: 36 Nos.
  - Back Volume of Journals: 3330 Nos.
  - Print Books: 92630 Nos. with reference books 9230 Nos.
  - Software tools available for research in all the departments.
- Users can easily search and locate reading materials with the help of OPAC and also by the book rack display indicators with range of call numbers on the front panel of the each double faced book racks.

3.3.3 Does the university have a University Science Instrumentation Centre (USIC)? If yes, have the facilities been made available to research scholars? What is the funding allotted to USIC?

No, the University does not have a Science Instrumentation Centre (USIC).

3.3.4 Does the university provide residential facilities (with computer and internet facilities) for research scholars, post-doctoral fellows, research associates, summer fellows of various academies and visiting scientists (national/international)?

Yes, the University provides limited residential facilities (with Internet facilities) for research scholars, and also provides residential quarters for married research scholars.

3.3.5 Does the university have a specialized research centre/ workstation on-campus and off-campus to address the special challenges of research programmes?

Yes, the University provides 24/7 computing facilities with latest softwares to research scholars.

3.3.6 Does the university have centres of national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories.

Yes, the University has centres of national recognized.

- The Centre for Water Resources is recognized by Central Public Health and Environmental Engineering Organizations as one of the centre of excellence for sponsoring the in-service personnel from public health engineering departments of central government to the M.Tech programme at this centre. The centre is first of its kind in Deccan Plateau to deal with comprehensively integrative Water Resources Management.
- The bacterial discovery lab of the Centre for Environment, IST, JNTU Hyderabad, is world leader in bacterial diversity studies leading to description of novel taxa of an oxygenic phototrophic bacteria with more than 80% of descriptions worldwide coming from this lab alone in the last 10 years. We have developed novel methods of enrichment and isolation of APB, established hopanoid diversity as a cheotaxonomic marker, obtained patents, transferred technology and commercialized use of several bacteria as probiotics, bio fertilizers, and bioremediation agents for management of solid waste.

3.4 Research Publications and Awards

3.4.1 Does the university publish any research journal(s)? If yes, indicate the composition of the editorial board, editorial policies and state whether it/they is/are listed in any international database.

(i) Yes, the University publishes the following:

- **Technology Spectrum** Composition of the editorial board from the Directorate of Research & Development from March 2007 to August 2014.
- **Forum for Musings:** the JNTUH Journal of English Studies, a bi-annual, national and peer-reviewed journal has been initiated by the Department of H&SS in September 2007. Twelve issues of the journal including English language and literature have been published so far by the department. ISSN 2231-0266 has been allocated to the journal in February 2011.

3.4.2 Give details of publications by the faculty:
Given in the following Table

List of Publications of faculty during 2012-13 to 2015-16

Sl. No.	Name of the faculty	Designation	Place of working	Journals		Conferences		Workshops	
				National	International	National	International	National	International
1.	Dr. M. V. Seshagiri Rao	Professor	Civil - CEH	6	14	24	19	4	0
2.	Dr. E. C. Nirmala Peter	Professor	Civil - CEH	0	3	0	2	0	0
3.	Dr. S. Srinivasulu	Professor	Civil - CEH	0	0	0	2	0	0
4.	Dr. M. Janardhana	Professor	Civil - CEH	10	0	13	12	0	0
5.	Dr. B. Dean Kumar	Professor	Civil - CEH	0	17	9	5	0	0
6.	Dr. S. Vidyavathi	Assoc. Prof.	Civil - CEH	0	0	1	2	0	0
7.	Dr. V. Padmavathi	Assoc. Prof.	Civil - CEH	0	0	1	2	1	0
8.	Dr. G. V.Narasimha Reddy	Assoc. Prof.	Civil - CEH	0	2	4	3	1	0
9.	Mrs. M. Padmavathi	Asst. Prof.	Civil - CEH	0	0	1	2	1	0
10.	Dr. P. Sravana	Professor	Civil - CEH	0	0	0	0	5	0
11.	Dr. S. Tara Kalyani	Professor	EEE - CEH	1	6	1	6	1	0
12.	Dr. G. Tulasi Ram Das	Professor	EEE - CEH	7	29	1	10	0	0
13.	Dr. S. S. Tulasi Ram	Professor	EEE - CEH	2	16	0	6	0	0
14.	Dr. B. V. Sankar Ram	Professor	EEE - CEH	0	14	0	4	0	0
15.	Dr. N. Yadaiah	Professor	EEE - CEH	2	13	10	14	1	0
16.	Dr. M. Surya Kalavathi	Professor	EEE - CEH	2	25	5	10	0	0
17.	Dr. M. Sushama	Professor	EEE - CEH	35	5	15	2	4	0
18.	Dr. A. Raghu Ram	Professor	EEE - CEH	3	3	0	1	0	0
19.	Dr. A. Jaya Laxmi	Professor	EEE - CEH	7	60	9	45	4	2
20.	Mr. P. Venkatnarayana	Asst. Prof.	EEE - CEH	0	01	1	0	0	04
21.	Dr. K.H. Phanishree	Asst. Prof.	EEE - CEH	0	4	2	1	2	0
22.	Dr. K. Bhaskar	Asst. Prof.	EEE - CEH	0	2	1	2	0	0
23.	Mr. D. Kiran Kumar	Asst. Prof.	EEE - CEH	0	1	1	0	2	0

24.	Dr. M. Sreenivasa Rao	Professor & HOD	Mech - CEH	0	9	0	6	1	0
25.	Dr. T. Kishen Kumar Reddy	Professor	Mech – CEH	0	37	0	10	2	0
26.	Dr. A.V. Sitarama Raju	Professor	Mech – CEH	1	18	5	6	0	0
27.	Dr. K. Vijaya Kumar Reddy	Professor	Mech – CEH	15	69	18	11	0	5
28.	Dr. B. Sudheer Prem Kumar	Professor	Mech – CEH	9	37	5	11	3	0
29.	Dr. K. Eshwara Prasad	Professor	Mech – CEH	3	17	2	19	1	0
30.	Dr. B. Anjaneya Prasad	Professor	Mech – CEH	0	30	4	3	0	0
31.	Dr. A.V.S.S.K.S.Gupta	Professor	Mech – CEH	7	32	9	7	1	0
32.	Dr. B. Balu Naik	Professor	Mech – CEH	7	27	8	7	0	0
33.	Dr. M.T. Naik	Professor	Mech – CEH	13	25	25	35	0	0
34.	Dr. J. Suresh Kumar	Professor	Mech – CEH	0	48	6	15	0	0
35.	Dr. S. Naga Sarada	Professor	Mech – CEH	4	7	0	13	6	0
36.	Dr. G. Krishna Mohan Rao	Professor	Mech – CEH	0	38	4	23	0	0
37.	Dr. G. Satish Babu	Professor	Mech – CEH	0	17	0	0	0	0
38.	Dr. M. Indira Rani	Professor	Mech – CEH	3	9	8	1	1	0
39.	Dr. E. Ramjee	Professor	Mech – CEH	1	6	0	5	2	0
40.	Dr .A .Aruna Kumari	Professor	Mech – CEH	0	1	0	0	0	0
41.	Dr. M. Vidya Sagar	Assoc. Prof.	Mech - CEH	0	4	1	1	0	0
42.	Dr. P .Bhramara	Assoc. Prof.	Mech – CEH	0	17	2	9	10	0
43.	Dr. P. Prasanna	Asst. Prof.	Mech – CEH	1	7	0	2	0	0
44.	Sri A Bala Ram Naik	Asst. Prof.	Mech – CEH	1	1	0	4	0	0
45.	Dr. M. Asha Rani	Professor & HOD	ECE – CEH	2	4	3	4	5	0
46.	Dr. L. Pratap Reddy	Professor	ECE – CEH	3	5	0	1	2	0
47.	Dr. M. Madhavi Latha	Professor	ECE – CEH	4	13	1	15	9	0

48.	Dr. D. Sreenivasa Rao	Professor	ECE – CEH	4	31	0	4	3	0
49.	Dr. BN Bhandari	Professor	ECE – CEH	0	6	02	8	6	0
50.	Dr. T. Satya Savithri	Professor	ECE – CEH	1	9	5	11	3	0
51.	Dr. P. Chandrasekhar Reddy	Professor	ECE – CEH	4	7	1	4	0	0
52.	Dr. K. Anitha Sheela	Assoc. Prof.	ECE – CEH	1	7	1	7	5	0
53.	Dr. V. Kamakshi Prasad	Professor	CSE – CEH	5	23	1	24	9	
54.	Dr. G. Vijaya Kumari	Professor	CSE – CEH	0	5	0	0	0	0
55.	Dr. A. Vinaya Babu	Professor	CSE – CEH	0	6	0	0	0	0
56.	Dr. Padmaja Rani	Professor	CSE – CEH	0	5	0	0	0	0
57.	Dr. R. Sridevi	Professor	CSE – CEH	0	3	0	5	0	0
58.	Dr. R. Markandeya	Professor	Met. – CEH	2	18	2	0	0	0
59.	Mrs. R. Sri Rama Devi	Assoc. Prof.	Met. – CEH	0	4	0	0	1	0
60.	Dr. S. Devaki Rani	Assoc. Prof.	Met. – CEH	0	9	0	0	1	0
61.	Dr. K. Srinivasa Vadayar	Asst. Prof.	Met. – CEH	3	7	0	0	1	0
62.	Dr. NVSN Lakshmi	Asst. Prof.	HSS – CEH	5	2	4	0	0	0
63.	Dr. V. Parvathi	Assoc. Prof.	HSS –CEH	4	4	5	0	2	0
64.	Dr. B. Rama Devi	Professor	Chemistry–CEH	37	13	7	1	2	0
65.	Dr. M. Thirumala Chary	Professor	Chemistry–CEH	39	14	0	0	0	0
66.	Dr. Ch. Venkata Ramana Reddy	Professor	Chemistry–CEH	49	11	0	0	0	0
67.	Dr. MA Srinivas	Professor	Maths – CEH	2	11	0	0	0	0
68.	Dr. BS Lakshmi	Assoc. Prof.	Maths – CEH	2	20	0	0	0	0
69.	Dr. V. Srinivasa Kumar	Asst. Prof.	Maths – CEH	3	17	0	0	0	0
70.	Dr. S. Venkateswara Rao	Assoc. Prof. & HOD	Physics – CEH	0	10	1	1	8	0

71.	Dr. S. Chandralingham	Professor	Physics – CEH	3	33	8	19	0	0
72.	Dr. P. Madhusudhana Rao	Professor	Physics – CEH	15	0	15	7	0	0
73.	Dr. Y. Aparna	Professor	Physics – CEH	1	33	9	5	0	0
74.	Dr. Ch. Sridhar Reddy	Assoc. Prof.	JNTUHCEM	0	12	4	4	0	0
75.	Dr. K. Shahu Chatrapati	Asst. Prof.	JNTUHCEM	2	7	3	12	3	2
76.	Dr. K. Prasanna Laxmi	Asst. Prof.	JNTUHCEM	0	0	0	3	0	0
77.	Dr. N.V. Ramana	Professor & Principal	JNTUHCEJ	0	14	0	13	0	0
78.	Dr. NVS Raju	Professor & Vice-Principal	JNTUHCEJ	1	9	5	5	3	2
79.	Mr. R. Durga Rao	Asst. Prof.	JNTUHCEJ	7	0	5	2	0	0
80.	Dr. K. Naga Sujatha	Assoc. Prof.	JNTUHCEJ	6	6	4	2	5	0
81.	Mr. S. Jagadish Kumar	Asst. Prof.	JNTUHCEJ	0	0	3	1	0	0
82.	Mrs. V.B.Shalini	Asst. Prof.	JNTUHCEJ	0	2	4	2	0	0
83.	Mrs. P. Sangeetha	Asst. Prof.	JNTUHCEJ	0	1	5	0	0	0
84.	Dr. K. Srinivas	Asst. Prof.	JNTUHCEJ	0	9	2	0	0	0
85.	Mr. C. Radha Charan	Asst. Prof.	JNTUHCEJ	1	3	4	5	0	0
86.	Mrs. Shailaja M	Asst. Prof.	JNTUHCEJ	3	0	4	5	1	0
87.	Dr. Suresh Arjula	Asst. Prof.	JNTUHCEJ	0	0	0	0	1	0
88.	Dr. K. Vasantha Kumar	Asst. Prof.	JNTUHCEJ	5	0	0	0	1	0
89.	Dr. Y. Raghavender Rao	Assoc. Prof.	JNTUHCEJ	3	7	4	4	0	1
90.	Dr. Dhiraj Sunehra	Assoc. Prof.	JNTUHCEJ	1	2	0	7	1	0
91.	Mr. S. Praveen Kumar	Asst. Prof.	JNTUHCEJ	0	0	0	2	0	0
92.	Mrs. D.Naga Sudha	Asst. Prof.	JNTUHCEJ	0	0	0	4	0	0

93.	Mrs. M.Tirupathamma	Asst. Prof.	JNTUHCEJ	1	1	3	1	3	0
94.	Mr. Uday Kumar M	Assoc. Prof.	JNTUHCEJ	0	0	0	0	1	1
95.	Dr. S. Viswanadha Raju	Professor	JNTUHCEJ	4	13	7	18	2	0
96.	Dr. B. Vishnu Vardhan	Professor	JNTUHCEJ	5	7	0	1	0	0
97.	Dr. D. Ramesh	Assoc. Prof.	JNTUHCEJ	5	5	2	1	0	0
98.	Mr. P. Sreenivasa Rao	Assoc. Prof.	JNTUHCEJ	0	2	1	0	0	0
99.	Mrs. P. Swetha	Assoc. Prof.	JNTUHCEJ	0	0	3	3	5	2
100.	Dr. G. Narsimha	Assoc. Prof.	JNTUHCEJ	5	8	9	18	0	0
101.	Dr. P. Sammulal	Asst. Prof.	JNTUHCEJ	1	3	6	3	0	0
102.	Mr. B. V. Ram Naresh Yadav	Asst. Prof.	JNTUHCEJ	3	1	2	2	0	0
103.	Dr. Kranthi Kiran B	Asst. Prof.	JNTUHCEJ	3	2	2	1	1	1
104.	Mr. B.Sateesh Kumar	Asst. Prof.	JNTUHCEJ	4	2	0	0	0	0
105.	Dr. M. Dhanalakshmi	Assoc. Prof.	JNTUHCEJ	1	4	0	0	0	0
106.	Dr. S. Suresh Kumar	Asst. Prof.	JNTUHCEJ	4	1	0	0	0	0
107.	Mrs. Ch. Asha Jyothi	Asst. Prof.	JNTUHCEJ	2	0	0	0	0	0
108.	Dr. K. Vijaya Kumar	Asst. Prof.	JNTUHCEJ	4	8	4	5	1	2
109.	Dr. Suresh Sripada	Asst. Prof.	JNTUHCEJ	5	2	2	1	1	2
110.	Dr. D. Esther Kalpana Rani	Asst. Prof.	JNTUHCEJ	0	5	0	0	0	0
111.	Dr. B. Sathyanarayana	Asst. Prof.	JNTUHCEJ	0	6	1	3	0	0
112.	Dr. K. Vidya	Asst. Prof.	JNTUHCEJ	1	2	3	2	0	0
113.	Dr. M.N. Raja Shekar	Assoc. Prof.	JNTUHCEJ	0	2	0	1	0	0
114.	Dr. Y. Rajashekhar Reddy	Asst. Prof.	JNTUHCEJ	3	3	0	0	0	0
115.	Dr. M. ManzoorHussain	Professor	JNTUH CES	19	24	2	16	4	3

116.	Dr. G N Srinivas	Professor	JNTUH CES	0	0	0	3	0	0
117.	Dr. T. VenuGopal	Assoc. Prof.	JNTUHCES	12	26	14	28	7	22
118.	Dr. B. Prabhakar	Assoc. Prof.	JNTUHCES	0	0	3	3	3	20
119.	Dr. T. Sreekanth	Asst. Prof.	JNTUHCES	0	9	19	8	2	3
120.	Mr. V. Rajneesh	Asst. Prof.	JNTUHCES	0	0	3	6	3	3
121.	Mr. Sripad Joshi	Asst. Prof.	JNTUHCES	0	1	4	2	0	3
122.	Dr. G. Krishna Mohan	Professor	CPS – IST	7	46	4	1	0	0
123.	Dr. M. Ajitha	Assoc. Prof.	CPS – IST	2	27	0	0	0	0
124.	Dr. Sunitha	Asst. Prof.	CPS – IST	0	31	9	1	0	0
125.	Dr. S. Shobha Rani	Asst. Prof.	CPS – IST	2	24	0	0	0	0
126.	Dr. K. Venkateswara Rao	Assoc. Prof.	CNST – IST	0	78	4	9	1	4
127.	Ms. Shilpa Chakra	Asst. Prof.	CNST – IST	0	45	1	7	1	3
128.	Dr. K. Manjula Vani	Professor	CSIT – IST	6	6	15	9	1	0
129.	Dr. J. Venkatesh	Assoc. Prof.	CSIT – IST	3	3	1	0	2	0
130.	Dr. M. Lakshmi Narasu	Professor	CBT	12	42	1	7	7	0
131.	Dr. Archana Giri	Asst. Prof.	CBT	12	96	6	12	10	2
132.	Dr. A. Uma	Asst. Prof.	CBT	0	36	7	3	2	0
133.	Dr. L. Saida	Asst. Prof.	CBT	0	7	2	1	1	0
134.	Dr. M. Anji Reddy	Professor	CEN	0	19	0	0	1	0
135.	Dr. Ch. Sasikala	Professor	CEN	0	70	2	0	4	2
136.	Dr. V. Hima Bindu	Assoc. Prof.	CEN	0	33	4	3	6	1
137.	Dr. T. Vijaya Lakshmi	Asst. Prof.	CEN	0	11	4	0	3	0
138.	Dr. C. Sarala	Professor	CWR	4	3	0	1	0	0
139.	Dr. MVSS Giridhar	Asst. Prof.	CWR	4	18	33	23	12	3
140.	Dr. B. Venkateswara Rao	Professor	CWR	8	3	9	11	4	6
141.	Dr. K. Rammohan Reddy	Professor	CWR	3	9	4	1	1	0

142.	Dr. A. Jaya Shree	Professor	CCST	30	16	0	1	2	0
143.	Dr. K. Mukkanti	Retd. Prof.	CCST	80	50	0	1	2	0
144.	Dr. M. Sreenivasa Rao	Professor	SIT	2	41	3	2	0	0
145.	Dr. A. Govardhan	Professor	SIT	0	11	0	0	6	0
146.	Dr. K. Santhisree	Professor	SIT	2	17	1	2	0	0
147.	Dr. G. Narasimham	Assoc. Prof.	SIT	0	0	2	0	0	0
148.	Dr. Venkata Rami Reddy	Assoc. Prof.	SIT	1	21	0	4	12	0
149.	Mrs. M. Arathi	Asst. Prof.	SIT	0	2	2	3	15	0
150.	Dr. K. Suresh Babu	Asst. Prof.	SIT	0	7	6	3	12	0
151.	Mrs. V. Uma Rani	Asst. Prof.	SIT	0	11	3	2	18	0
152.	Mr. N. Naveen Kumar	Asst. Prof.	SIT	0	24	1	0	3	0
153.	Dr. A. Prabhu Kumar	Professor & Director	SMS	7	8	12	8	0	0
154.	Dr. D. Raghunatha Reddy	Professor	SMS	15	6	1	1	0	0
155.	Dr. V. M. Prasad	Professor	SMS	4	15	3	9	3	0
156.	Dr. Sindhu	Assoc. Prof.	SMS	9	20	13	10	1	0
157.	Mrs. A. Santosh Kumari	Asst. Prof.	SMS	2	4	2	10	2	0
	Total			**655**	**2070**	**553**	**796**	**290**	**88**

* **Number of papers published in peer reviewed journals (national / international)**

  More than 2600

* **Monographs**

  - Dr. K. Santhisree, Monograph by LAP Lambert Academic Publishing in 2015 On Sequential Data Clustering.
  - Dr. Balu Naik- 01

* **Chapters in Books**

  - Dr. MT Naik- 01
  - Dr. B.N. Bhandari – 01
  - Dr. A. Govardhan - 04
    - Manasa N.L, A Govardhan and Satyanarayana Ch, "Fusion of Multiple Biometric Traits: Fingerprint, Palmprint and Iris", Bio-inspired Computing in Cyber Security, Intelligent Systems Reference Library by Springer, Germany, 2014, pp. 287-320.
    - N. Gomathi, P. Seethalakshmi and A. Govardhan, "An Adaptive Cross Layer Design to Enhance Throughput for Multimedia Streaming over Mobile Adhoc Networks", Trends in Networks and Communications, Springer-Verlag Berlin Heidelberg 2011, pp. 21-32.
    - A.P. SivaKumar, P. Premchand and A. Govardhan, "Application of Latent Semantic Indexing for Hindi-English CLIR Irrespective of Context Similarity", Trends in Networks and Communications, Springer-Verlag Berlin Heidelberg 2011, pp. 711-720.
    - Ram Mohan Rao Kovvur, S. Ramachandram, Vijayakumar Kadappa and A. Govardhan, "A Reliable Distributed Grid Scheduler for Mixed Tasks", Aadvances in Parallel and Distributed Computing, Volume 203 of the series Communications in Computer and Information Science, Springer, 2011, pp. 213-223

* **Books edited**

  - Dr. G. Tulasi Ram Das – 2 No's
  - Dr. T. Kishen Kumar Reddy – 2 No's.
  - Dr. B. Sudheer Prem Kumar has edited Heat Transfer by Ghoshdastidar (Oxford Publisher) & Heat Transfer by Cengel (Tata McGraw-Hill)

- Dr. K. Eshwara Prasad Authored 2 books
- Dr. B.N. Bhandari – 01 book
- Dr. A. Govardhan – 02
- Dr. M. Sreenivasa Rao – 03
- Dr. K. Chandrasekhraiah - 01

* **Books with ISBN with details of publishers**

Sl. No.	Name of the faculty	Designation	Place of working	Books with ISBN with details of publishers
1.	Dr. BS Lakshmi	Associate Professor	Department of Mathematics –JNTUHCEH	1 Chaotic Dynamics in Nonlinear Theory, Publisher: Springer, ISBN 978-81-322-2091-6 ISBN 978-81-322-2092-3 (eBook)
2.	Dr. B. Sudheer Prem Kumar	Professor	Department of Mech. Engg. – JNTUHCEH	1. Internal Combustion Engines-Standard Publishers, Delhi(9788189401313) 2. Computer Aided Engg Drawing- New Age Publishers (9788122438260) 3. Engineering Drawing- Med Tech Publishers Delhi (9789384007775)
3.	Dr. M. Vidyasagar & Dr. P.V. Ramana murti	Professor	Department of Mech. Engg. – JNTUHCEH	"Design data book" ISBN:978-93-83635-75-7, BS Publications, Hyderabad.
4.	Dr. K. Eshwara Prasad	Professor	Department of Mech. Engg. – JNTUHCEH	1. Manufacturing Engineering, ISBN 9789382126935 2. Advanced Production Engineering, 9789382126959
5.	Dr. B. Sudheer Prem Kumar & Dr. K. Vijaya Kumar Reddy	Professor	Department of Mech. Engg. – JNTUHCEH	Textbook on Internal Combustion Engines, Standard Book House, New Delhi 2012
6.	Dr. K. Vijaya Kumar Reddy & Dr. J. Suresh Kumar	Professor	Department of Mech. Engg. – JNTUHCEH	Operation Research Cengage Publication 2013

7.	Dr. K. Vijaya Kumar Reddy	Professor	Department of Mech. Engg. – JNTUHCEH	Reliability Engineering Galgotia Publishers 2012
8.	Dr. G. Krishna Mohan Rao	Professor	Department of Mech. Engg. – JNTUHCEH	Engineering Mechanics, Pearson Education, New Delhi 2012
9.	Dr M. Janardhana	Professor	Department of Civil Engg.– JNTUHCEH	Indeterminate Structural Analysis ISBN 978-93-82332-60-2 M/s I.K. International Publishing House Pvt. Ltd. (2014)
10.	Dr M. Janardhan	Professor	Department of Civil Engg.– JNTUHCEH	Basic Structural Analysis ISBN: 978-93-84588-76-2 sic Structural Analysis M/s I.K. International Publishing House Pvt. Ltd. (2015)
11.	Dr. J. Suresh Kumar	Professor	Department of Mech. Engg. – JNTUHCEH	Design of Machine Element – I & II (New Age International Publications, ISBN No.: 978-81-224-3046-2,2015 & ISBN No.: 978-81-224-2838-4,2015)
12.	Dr. V. Kamakshi Prasad	Professor	Department of CSE – JNTUHCEH	1. Evolutionary Computing Based Cryptographic Key Management, A New Approach, Lambert Academic Publishing. October 30, 2012. 2. Automatic Text Independent Speaker Recognition Using Source Feature, Modelling Automation, Lambert Academic Publishing. April 27, 2012
13.	Dr. B. Rama Devi & Dr. Ch. Venkata Ramana Reddy	Professor	Department of Chemistry - JNTUHCEH	Textbook of Engineering Chemistry (Cengage Learning)
14.	Dr. NVS Raju	Professor	Department of Mech. Engg. – JNTUHCEJ	1. A Textbook in "Operations Research", for the students of all streams of Bachelor of Technology (B.Tech), Master of Business Administration (M.B.A.), Master of Computer Applications (M.C.A.), Published by The Hi Tech Publishers, Hyderabad, India

					First Edition 2002, Second Edn. 2003, Third Edition – 2006 – ISBN-81-298-0057-8 2. A Textbook in "Mathematical Modelling & Simulation", aiming at the students of Bachelor of Technology (B.Tech) in CSE, CSSE & E. Comp. E, Master of Business Administration (M.B.A.), Master of Computer Applications (M.C.A.), Published by The Hi Tech Publishers, Hyderabad, India First Edition -2006 – ISBN – 81-298-0054-3 3. A Course, "Productivity Management" for B.Tech. – Mechanical (Manufacturing & Management Engineering) for Indira Gandhi National Open University (IGNOU), New Delhi. 4. A Course, "Plant Engineering & Management" for B.Tech. – Mechanical (Manufacturing & Management Engineering) for Indira Gandhi National Open University (IGNOU), New Delhi. 5. Authored a course "Condition Monitoring and Maintenance Engineering" (Course code – BME-025) for B.Tech. – Mechanical (Manufacturing & Management Engineering) for Indira Gandhi National Open University (IGNOU), New Delhi. 6. A course in "Operations Research", for Distance Education Programme in Engineering for the students of all streams of Bachelor of Technology (B.Tech), from Andhra University, Vishakhapatnam, AP 7. Authored a Textbook in course "Instrumentation &

					Control Systems" for the students of Bachelor of Technology (B.Tech) – Mechanical Engg, Prod. Engg, Instrumentation Engg, Mechatronics and other related branches Published by The SMS Education, New Delhi, India First Edition 2008 8. Authored a Textbook "Plant Maintenance and Reliability Engineering" for MS/M.Tech, and BE/B.Tech students and also for industrialists, published by Cengage Learning India (P) Ltd., Delhi- 1st Edn. 2011- National & International edition ISBN-13: 978-81-315-1469-6 & ISBN-10: 81-315-1469-2 9. Authored a Textbook "Industrial Engineering and Management" for all the branches of Engineering published by Cengage Learning India (P) Ltd., Delhi- 1st Edn. 2013- Both international and national editions ISBN-13: 978-81-315-1948-1 and ISBN-10: 81-315-1948-1 10. Authored a Textbook "Reliability Cantered Maintenance Models for Mining Machinery" - 'Statistical Analyses & Investigations on Reliability, Availability and Maintainability (S-A-I-R-A-M)' aimed for research scholars, industrialists, practitioners and M.Tech. level students published by LAMBERT Academic Publishing (LAP), U.S.A., U.K. and Germany, international Edition, 1st

					edn.-2012, ISBN: 978-659-10809-9 11. Authored a Textbook "Optimization Methods for Engineers" for all the branches of Engineering at B.Tech and M.Tech levels published by PHI Learning India (P) Ltd., Delhi- 1st Edn. 2013- Both international and national editions ISBN – 978-81-203-4744-1. 12. Authored a Textbook "Total Quality Management" for all the branches of Engineering under publication by Cengage Learning India (P) Ltd., Delhi- 1st Edn. 2014- Both international and national editions ISBN – 13:978-81-315-2562-3, ISB-10: 81-315-2562-7 13. Authored a Textbook "Quality Management and Six-Sigma" exclusively for the students of Institute Management & Technology (IMT), New Delhi, under publication by Cengage Learning (P), Delhi, 1st edition-2015. ISBN – 13:978-81-315-2562-3, ISB-10: 81-315-2562-7 14. Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

15.	Dr. K. Venkateswara Rao	Assoc. Prof.	Centre for Nano Science & Technology, IST, JNTUH	1. Combustion & Chemical Bath Deposition of Nanopowders and Thin Films with ISBN No. 978-3-659-35939-2, Lambert Publications, Germany, published in 2013. 2. Magnetic Nanoparticles: Synthesis and Characterization with ISBN No. 978-3-659-35864-7, Lambert Publications, Germany, published in 2013. 3. Solution Combustion Synthesis of Nanocrystalline Bismuth Ferrite with ISBN No. 978-3-659-34512-8, Lambert Publications, Germany, published in 2013. 4. CdS Nanoparticles and Thin films for Solar Cell Application with ISBN No. 978-3-659-37024-3, Lambert Publications, Germany, published in 2013. 5. Tribological Properties of Epoxy/Al_2O_3 Nano Composites with ISBN No. 978-3-659-39289-4, Lambert Publications, Germany, published in 2013. 6. Novel Synthesis of Fe doped Zinc Oxide Nanoparticles Properties with ISBN No. 978-3-659-35372-7, Lambert Publications, Germany, published in 2013. 7. Nano Crystalline Lanthanum Ferrite: Synthesis and Characterization with ISBN No. 978-3-659-37615-3, Lambert Publications, Germany, published in 2013. 8. Seed Germination Activity - ZnO Nanoparticles with ISBN No. 978-3-659-37806-5, Lambert Publications, Germany,

				published in 2013. 9. Carbon Nanomaterial: Graphene Oxide and Graphene Oxide Film with ISBN No. 978-3-659-37639-9, Lambert Publications, Germany, published in 2013. 10. Modern Ayurvedic Method: Iron Oxide Nanoparticles with ISBN No. 978-3-659-37779-2, Lambert Publications, Germany, published in 2013. 11. Silver Nanoparticles-Bio Synthesis by Ocimum Species with ISBN No. 978-3-659-36385-6, Lambert Publications, Germany, published in 2013
16.	Dr. A. Uma	Asst. Professor	Centre for Bio-Technology, IST, JNTUH	1. The recent progress in genetically engineered xylanases: Production and industrial Applications. Studium Press. 2013. *Biotechnology*, (Gene and Protein engineering) Vol. 5, Ch0509 (Accepted-In Press). 2. Sorghum biomass: A novel renewable carbon source for industrial bio products. *Biofuels*. 2013 (Accepted-In Press). 3. Uma Addepally and Chiranjeevi Thulluri, The recent progress in genetically engineered xylanases: Production and industrial applications. Studium Press. 2013. Biotechnology, (Gene and Protein engineering) Vol. 5, Ch 0509. 4. A Uma, T Chiranjeevi, K Radhika, RS Prakasham, P Srinivasarao, AV Umakanth. Lignin: A bio renewable resource for the valorisation as fuel energy and valuable chemicals. Pan Stanford

				Publishing 2014, Hand Book of Sustainable Polymers: Processing and Applications. (In Press). 5. Vinutha KS, Srinivas Rao P, A. Kumar GS, T. Chiranjeevi, A. Uma, RS Prakasham, HP Singh, Surinder Chopra and Shibu Jose 2015. Sorghum-a multi-purpose bio energy crop. American Society of Agronomy. (Accepted In-Press).
17.	Dr. P. Madhusudhan Rao	Professor	Dept. Of Physics, JNTUH CET	• Author: Applied Physics for Engineers by Academic Publishing Company , Hyderabad 2013 ISBN: 81-89966-69-3 • Author: Engineering Physics by New age India Publications, New Delhi in 2009 - ISBN: 978-81-224-2252-

* **Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, EBSCO host, etc.)**

Nil

* **Citation Index – range / average**

Sl. No.	Name of the faculty	Designation	Place of working	Citation Index – range / average
1.	Dr. B.S. Lakshmi	Assoc. Prof.	Dept. of Mathematics – JNTUHCEH	22
2.	Dr. A. Govardhan	Professor	Dept. of CSE – JNTUHCEH	20
3.	Dr. V. Kamakshi Prasad	Professor	Dept. of CSE – JNTUHCEH	248
4.	Dr. G. Vijaya Kumari	Professor	Dept. of CSE – JNTUHCEH	146
5.	Dr. A. Kavitha	Asst. Prof.	Dept. of CSE – JNTUHCEH	11
6.	B.N. Bhandari	Professor	Dept. of ECE - JNTUHCEH	35
7.	Dr. K. Venkateswara Rao	Assoc. Prof.	Centre for Nano Science	351

			& Tech. – IST, JNTUH	
8.	Ms. Ch. Shilpa Chakra	Asst. Prof.	Centre for Nano Science & Tech. – IST, JNTUH	50
9.	Dr. S. Viswanatha Raju	Professor	CSE - JNTUH CEH	217

* **SNIP**

Nil

* **SJR**

Nil

* **Impact Factor – range / average**

Sl. No.	Name of the faculty	Designation	Place of working	Impact Factor – range / average
1.	Dr. M.A. Srinivas	Professor	Dept. of Mathematics –JNTUHCEH	2 - 9
2.	Dr. B.S. Lakshmi	Assoc. Prof.	Dept. of Mathematics –JNTUHCEH	2 - 9
3.	Dr. K. Venkateswara Rao	Assoc. Prof.	Centre for Nano Science & Tech. – IST, JNTUH	1.1
4.	Dr. V. Srinivasa Kumar:	Assistant Professor	Dept. of Mathematics –JNTUHCEH	**2-9**

* **h-index**

Sl. No.	Name of the faculty	Designation	Place of working	H- Index – range / average
1.	Dr. A. Govardhan	Professor	Dept. of CSE – JNTUHCEH	15
2.	Dr. V. Kamakshi Prasad	Professor	Dept. of CSE – JNTUHCEH	9
3.	Dr. G. Vijaya Kumari	Professor	Dept. of CSE – JNTUHCEH	5
4.	Dr. A. Kavitha	Asst. Professor	Dept. of CSE – JNTUHCEH	2

5.	Dr. K. Venkateswara Rao	Asst. Professor	Centre for Nano Sc. & Tech.	10
6.	Ms. Ch. Shilpa Chakra	Asst. Professor	Centre for Nano Sc. & Tech.	4

3.4.3 Give details of

faculty serving on the editorial boards of national and international journals

Dr. N. Yadaiah, Professor of Electrical Electronics & Engineering, acted as

- Editorial board member to Journal of Computer Science
- Reviewer: Reviewer for the following International Journals
- IEEE Trans Systems Man Cybernetics
- IEEE Trans on Mechatronics
- International Journal Power Electronics (Inder Science Publications)
- European Trans on Electric Power
- Further reviewed papers for many International Conferences/National Conferences, Chaired sessions in National Conferences and involved in many Technical Committees of conferences as member at International/National level conferences.

Dr. Ch. Sasikala, Professor, Centre for Environmental Science:

- Member, Editorial board of Indian Journal of Microbiology (Springer).
- Referee for International Journal of Hydrogen Energy (Elsevier Science Publishers); Indian Journal of Microbiology (Springer); Indian Journal of Experimental Biology; Journal of scientific and industrial research (NISCOM, India); Journal of General and Applied Microbiology (Centre for academic publications, Japan) etc.
- Technical reviewer for R and D projects of by DBT & CSIR, Government of India

Dr V. Hima Bindu, Assoc. Professor:

- Referee, for -International Journal of Hazardous materials (Elsevier Science Publishers),

- Polymers & Polymer Composites' (Smithers Rapra Publishing),
- Journal of Hydrogen Energy (Elsevier Science Publishers),
- Journal of Environmental Chemistry and Ecotoxicology (academic journals),
- The Korean Journal of Chemical engineering,
- Journal of Environmental Technology

Dr. Archana Giri, Assoc. Professor

- Editor for the Journal of Phytomedicine
- Reviewer for Frointers in Plant Biotechnology, Plant Growth Regulation
- Dr. K. Rammohan Reddy
- Chief Editor of International Journal of Science and Technology, New Delhi.

Dr. A. Govardhan, Professor of CSE

- Editor, Emerging ICT for Bridging the Future, Springer Proceedings of the 49th Annual Convention of the Computer Society of India (CSI) (Vol. I and Vol. II) (Advances in Intelligent Systems and Computing, Springer, Vol. 337 and Vol. 338), 2014.
- Member, Scientific and Technical Committee & Editorial Review Board, World Academy of Science, Engineering and Technology, USA.
- Member, Editorial Board, International Journal of Computational Intelligence and Information Security, Australia.
- Member, Editorial Board, Advanced Computing: An International Journal, India.
- Member, Editorial Board, International Journal of Advanced Computing, India.
- Member, Editorial Board, International Journal of Information Technology & Emerging Science, Australia.
- Member, Editorial Board, International Journal of Advanced Research in Engineering and Applied Sciences, India.

- Member, Editorial Board, International Journal of Technology and Engineering Science.
- Member, Editorial Board, Journal of Innovations in Computer Science and Engineering, GNI, Hyderabad, India.
- Member, Editorial Board, International Journal of Advanced Science and Technology, Australia.
- Member, Editorial Board, International Journal of Emerging Technologies and Applications in Engineering Technology and Sciences, India.
- Member, Editorial Board, International Journal of Computer Applications in Engineering,

Dr. Ch. Venkata Ramana Reddy,

- Member of Board of Associate Editors of the Journal of the Indian Chemical Society 2013 till date

Dr. J. Suresh Kumar

- Editorial member for SPRINGER books

Dr. K. Vijaya Kumar Reddy

- Asia Pacific International Conference Chief Editorial member
- Editorial member for SPRINGER books

Dr. B. Sudheer Prem Kumar

- Editorial member for 2 International Journals: 1)IJETS 2)IJERT

Dr. K. Eswara Prasad

- Reviewer for Science Direct journals

Members of Editorial Boards

- Dr. B. N. Bhandari
- Dr. M. Madhavi Latha

- Dr. D. Srinivasa Rao
- Dr. T. Satya Savithri
- Dr. K. Anitha Sheela

Dr. V. Kamakshi Prasad

- Editorial Board Member for International Journal of Wireless Networks and Communications (IJWNC).

Dr. P. Madhusudana Rao

- Reviewer for Research Journals: 02
- International Journal on Advances in Materials Research
- Editor – Journal of Nuclear Engineering & Technology (STM Journals)

Dr. S. Viswanada Raju,

- Editorial and Technical board member for Information fusion journal , ELSEVIER PUBLICATION , ISSN: 1566-2535
- Editorial and Technical board member for International Journal of Research and Reviews in Information Technology (IJRRIT),ISSN: 2046-6501
- Editorial and Technical board member for International Journal of Advanced Computing, ISSN : 0975 7686
- Editorial and Technical board member for International Journal of Data Engineering and Computer Science ISSN :0975 8372

Dr. B. Vishnu Vardhan

- Technical member for International Journal of Information and Electronics Engineering IJIEE.

* **faculty serving as members of steering committees of international conferences recognized by reputed organizations / societies**

Dr. Ch. Sasikala

- Elected member of International committee on Systematics of Prokaryotes: subcommittee on the taxonomy of Phototrophic bacteria

3.4.4 Provide details of

* **research awards received by the faculty and students**

Department	Name of the Faculty/ Student	Name of the Award	Organized by	Year
Department of Mechanical Engineering, JNTUH CEH	Dr. T. Kishen Kumar Reddy and Sowjanya Makarala	Best Research Paper Award	ICMO International Conference, New Delhi	2013
Dept. of Chemistry, CEH	Syed Riaz	Young Scientist Award	Indian Council of Chemists, Agra	2011
Dept. of Chemistry, CEH	Y. Dathu Reddy	Young Scientist Award	K. V. Rao Scientific Society	2014
CPS – IST	Miss Shalini	Gold Medal in M.Pharm	JNTUH	2014
CEN- IST	Ms. P. Seshabala	Young Scientist Award ISEHT-2012,	VSU, Nellore	2012
CNST – IST	Tambur Pavani	Best Poster Award		2014
CNST – IST	K. Ganapathi Rao	Best Oral Presentation Award		2014
CNST – IST	CH. Ashok	Best Oral Presentation Award		2014

* **national and international recognition received by the faculty from reputed professional bodies and agencies**

- Dr. N. Yadaiah, Professor of EEE & Principal was awarded outstanding reviewer award by Applied Soft Computing, Elsevier, May 2014 for his contribution.
- Dr. P. Madhusudana Rao, Professor of Physics got Teaching Excellence Award by Indus Foundation USA & India in November, 2014.
- Dr. M. Madhavi Latha, has been awarded Exchange Visitor Award by Dept of states, Institute of International Education, USA
- Dr. J. Suresh Kumar, Professor of Mechanical Engineering was awarded Best NSS Programme Officer by the Govt. Andhra Pradesh.
- Dr. K. Bhaskar was awarded POSOCO Power System Award-2015 in the area of Power System Operation Corporation Limited and Foundation for Innovation & Technology Transfer (FITT), IIT, Delhi, 2015.
- Dr. A. Jaya Laxmi, Professor of EEE, Centre for Energy Studies was awarded Best Oral

Poster presentation Award at Eleventh IEEE Indi Conference INDICON-2014, Pune Section held during 11-13 December, 2014.

- Dr. K. Mukkanti, Professor of Chemistry, got India's best researcher Award in top 5 authors in the field of Pharmacology, Toxicology and Pharmaceutics by survey of Careers 360 Magazine based on Elsevier Science's bibliographic indexing database (Listed in India's 100 best researchers 2014).
- Dr. Ch. Shasikala, Professor received Best Publication Award 2013 – Society For Advancement of Human and Nature (SADHNA) from Dr YS Parmar University of Horticulture and Forestry Nauni, Solan, Himachal Pradesh, INDIA.

3.4.5 Indicate the average number of successful M.Phil. and Ph.D. scholars guided per faculty during the last four years. Does the university participate in *Shodhganga* by depositing the Ph.D. theses with INFLIBNET for electronic dissemination through open access?

Name of the faculty	Designation	Department	Qualification	Ph.D specialization	No. of Scholars guided for the last four years
Dr. B. Rama Devi	Professor & Head	Chemistry, CEH	M.Sc., M.Phil, Ph.D	Organic Chemistry	8
Dr. M. Thirumala Chary	Professor	Chemistry, CEH	M.Sc., Ph.D	Organic Chemistry	1
Dr. Ch. Venkata Ramana Reddy	Professor	Chemistry, CEH	M.Sc, M.Phil, Ph.D	Inorganic Chemistry	5
Dr. M. A. Srinivas	Professor and Head	Maths, CEH	M.Sc, M.Tech, Ph.D	Mathematical Modeling, Boundary Value Problems	2
Dr. B. S. Lakshmi	Associate Professor	Maths-CEH	M.A., M.Sc., Ph.D	Dynamical systems, Mathematical Modeling	2
Dr. P. V. D. Somasekhar Rao (Retired on 31st July, 2015)	Professor	ECE - CEH	Ph.D	Microwave Engineering, Antennas Wave Propagation	6
Dr. L. Pratap Reddy	Professor	ECE - CEH	Ph.D	Text Encoding Scheme through Computer	6

				Networks	
Dr. M. Madhavi Latha	Professor	ECE - CEH	Ph.D	Signal Processing, and Image Processing, VLSI & Embedded Systems	16
Dr. D. Sreenivasa Rao	Professor	ECE - CEH	Ph.D	Communications & Computer Networks	3
Dr. T. Satya Savithri	Professor	ECE - CEH	Ph.D	Signal Processing, Image Processing and VLSI	1
Dr. K. Anitha Sheela	Associate Professor	ECE - CEH	Ph.D	Image Processing, Speech Proc., Analog and Digital Commn.	1
Dr. R. Markandeya	Professor	Met. - CEM	Ph.D	Metallurgical Engineering	2
Dr. T. Kishen Kumar Reddy	Professor & Rector	MECH - CEH	Ph.D	Thermal Fluid Sciences	3
Dr. A.V. Sitarama Raju	Professor	MECH – CEH	Ph.D	Thermal Engineering-	06
Dr. K. Vijaya Kumar Reddy	Professor	MECH – CEH	Ph.D	Thermal Engineering & IC Engines	14
Dr. B. Sudheer Prem Kumar	Professor	MECH – CEH	Ph.D	Heat Transfer	10
Dr. K. Eshwara Prasad	Professor	MECH – CEH	Ph.D	Theory of Metal Cutting & Advanced Production Process	07
Dr. M. Manzoor Hussain	Professor & Principal, JNTUCES	MECH – CEH	Ph.D	Automobile Engineering & Autocronotics	02
Dr. B. Anjaneya Prasad	Professor	MECH – CEH	Ph.D	Non Conventional resources of Energy & R & Ac	2

Dr. A.V.S.S.K.S. Gupta	Professor	MECH – CEH	Ph.D	Thermodynamics & Thermal Engineering	4
Dr. B. Balu Naik	Professor	MECH – CEH	Ph.D	Energy Systems	05
Dr. M.T. Naik	Professor	MECH - CEH	Ph.D	Heat Transfer in Nano fluid	03
Dr. J. Suresh Kumar	Professor	MECH – CEH	Ph.D	Design of Machine Members, Composite Materials & FEM	19
Dr. G. Krishna Mohan Rao	Professor	MECH - CEH	Ph.D	Manufacturing	04
Dr. S. Chandralingam	Professor	Physics - CEH	M. Sc. Ph. D.	Physics	4
Dr. Y. Aparna	Professor	Physics - CEH	M. Sc. Ph. D.	Physics	1
Dr. E. Saibaba Reddy	Professor & Vice-Chancellor (On Lien)	Civil - CEH	Ph.D	Geo-Technical	**02**
Dr. M.V. Seshagiri Rao	Professor	Civil - CEH	Ph.D	Structures	**05**
Dr. G. K. Viswanadh	Professor & OSD	Civil - CEH	Ph.D	HWR&E	**03**
Dr. P. Srinivasa Rao	Professor& Vice -Principal	Civil - CEH	Ph.D	Structures	**06**
Dr. K. M. Lakshman Rao	Professor & Head	Civil - CEH	Ph.D	Transportation	**04**
Dr. P. Sravana	Professor & Coordinator TE	Civil - CEH	Ph.D	Transportation	**01**
Dr. V. Venkateswara Reddy	Professor & Coordinator BICS	Civil - CEH	Ph.D	Environmental	**02**
Dr. M. Janardhana	Professor	Civil - CEH	Ph.D	Structures	**01**
Dr. S.Vidyavathi	Associate Professor	Civil - CEH	Ph.D	HWR&E	**03**
Dr. N. Darga Kumar	Assistant Professor	Civil - CEH	Ph.D	Geo-Technical	**01**
Dr. S. Viswanadha	Professor	CSE -	Ph.D	Information	5

Raju		CEJ		Retrieval, Biometrics and OBE	
Dr. B. Vishnu Vardhan	Professor	CSE – CEJ	Ph.D	CSE	4
Dr. NV Ramana	Prof. of EEE & Principal	EEE – CEJ	Ph.D	Power Systems	04
Dr. M N Raja Shekar	Associate Professor	HSS – CEJ	Ph.D	Applied Mathematics	2
Dr. NVS Raju	Prof. of ME & Vice-Principal	Mech. - CEJ	Ph.D	Reliability Centered Maintenance	06
Dr. K. Venkateswara Rao	Associate Professor	C N S T - IST	Ph.D	Nano Magnetic materials, Synthesis and Characterization of Nanomaterials, Thin films, Solar and Battery applications	8
Dr. G. Krishna Mohan	Professor	Centre for Pharm. Sc. IST	Ph.D	Pharmacy	23
Dr. S. Shobha Rani	Assistant Professor	Centre for Pharm. Sc. IST	Ph.D	Pharmacy	08
Dr. K. Mukkanti	Retd. Professor	Centre for Pharm. Sc. IST	Ph.D	Chemistry	40
Dr. K. Manjula Vani	Professor	CSIT – IST	Ph.D	Civil Engg. (Structures)	22
Dr. S. Durga Bhavani	Professor	School of Information Tech.	Ph.D	CSE	4
Dr.M.Sreenivas Rao	Professor	School of Information Tech.	Ph.D	CSE	5
Dr. A. Damodaram	Professor	School of Information Tech.	Ph.D	CSE	9

Dr. S.V.L. Narasimham	Professor	School of Information Tech.	Ph.D	CSE	5
Dr. A. Govardhan	Professor	School of Information Tech.	Ph.D	CSE	55
Dr. B. Venkateswara Rao	Professor	CWR - IST	Ph.D	Water Resources	01
Dr. K. Ramamohana Reddy	Professor	CWR - IST	Ph.D	Water Resources	02
Dr. M.V.S.S. Giridhar	Assistant Professor	CWR – IST	Ph.D	Water Resources	01
Dr. A. Uma	Assistant Professor	CBT - IST	Ph.D	Biotechnology	5
Dr. M. Lakshmi Narasu	Professor	CBT - IST	Ph.D	Biotechnology	20
Dr. Archana Giri	Assistant Professor	CBT - IST	Ph.D	Biotechnology	8
Prof .A. Jaya Shree	Professor	CCST - IST	Ph.D	Chemistry	09
Prof. Pramod Kumar	Professor Retd	CCST - IST	Ph.D	Chemical engineering	08
Dr. Bala Narasaiah	Assoc. Professor	CCST - IST	Ph.D	Chemical engineering	02
Dr. V. Kamakshi Prasad	Professor	CSE CEH	Ph.D	CSE	03
Dr. A. Vinaya Babu	Professor	CSE CEH	Ph.D	CSE	04
Dr. G. Vijayakumari	Professor	CSE CEH	Ph.D	CSE	04
Dr. O.B.V. Ramanaiah	Professor	CSE CEH	Ph.D	CSE	04
Dr. B. Padmaja Rani	Professor	CSE CEH	Ph.D	CSE	04
Dr. M. Chandra Mohan	Professor	CSE CEH	Ph.D	CSE	03

Yes, we have participated in Shodhganga and JNTUH is rated number one in erstwhile AP. (The process has just now been initiated.)

3.4.6 What is the official policy of the university to check malpractices and plagiarism in research? Mention the number of plagiarism cases reported and action taken.

The Directorate of Research and Development of University has license of Turn-it-in anti-Plagiarism package to check the originality of the research output of the Ph.D/M.S/M.Phil scholars. This process has been continuing since 2008 as per the University

norms. If it is not in the acceptable range, then the scholar is instructed to revise and resubmit his/her thesis. During the last four years, 50% of the theses copies were asked to resubmit after they have been identified by anti-plagiarism check.

Academic Year	Accepted	Revised & Re-Submitted	Total
2012-13	374	171	545
2013-14	588	266	854
2014-15	458	166	624
2015-16 up to Jan. 28, 2016	215	85	300

3.4.7 Does the university promote interdisciplinary research? If yes, how many interdepartmental / interdisciplinary research projects have been undertaken and mention the number of departments involved in such endeavours?

Yes, the University promotes interdisciplinary research. The following centres/units offer inter-disciplinary research.

1. Centre for Environment, Institute of Science & Technology (IST), JNTUH, has a project from Ministry of Earth Sciences with Centre for Pharmaceutical Sciences, IST.
2. Centre for Environment, IST, collaboratively guiding the proposed work "Biodegradation of pharmaceutical waste water containing antibiotics using different bioreactors" with Centre for Water Resources, IST.
3. Centre for Environment, Institute of Science and Technology collaboratively guiding the proposed work "Development of unitized regenerative fuel cell (URFC) system" with Mechanical Engineering Department, JNTUH College of Engineering, Hyderabad.
4. Centre for Environment, IST, JNTUH collaboratively guiding the proposed works "Treatment of commonly used antibiotics uses advanced oxidation processes (AOPs), Utilization of industrial hazardous wastes and preparation of bricks from industrial solid waste" with Civil Engineering, JNTUH College of Engineering, Hyderabad.
5. Centre for Environment, IST, JNTUH collaboratively guiding the proposed works "Bio hydrogen production using industrial waste waters" with Centre for Atmospheric Weather Modification, IST.

Interdisciplinary externally funded Research and Development project:

1. Centre for Environment, IST, JNTUH collaboratively carrying on research project titled "Hydrogen production through biological routes" with Centre for Biotechnology, IST, JNTUH sponsored by Ministry of New and Renewable Energy (MNRE).
2. Centre for Environment, IST, JNTUH collaboratively carrying on research project titled "Development of PEM, AEM and Alkaline water electrolysers for Hydrogen production" with Department of Chemistry, JNTUH College of Engineering, Hyderabad sponsored by Bhabha Atomic Research Centre (BARC).

3. Centre for Environment and School of Information Technology, JNTUH collaboratively carrying one DST funded R & D project on Village Information System (2015-2017).

3.4.8 Has the university instituted any research awards? If yes, list the awards

It is in the process of being instituted.

3.4.9 What are the incentives given to the faculty for receiving state, national and international recognition for research contributions?

The University encourages the faculty to present papers in National and International Universities/Organizations and granting the financial assistance under UGC XII plan/UDF Account of the University. The University also provides financial assistance to receive the awards and recognized during promotional interview.

3.5 Consultancy

3.5.1 What is the official policy of the university for structured consultancy? List a few important consultancies undertaken by the university during the last four years.

Jawaharlal Nehru Technological University was established in 1972 to provide an impetus to higher technical education. Among the objectives of the University, as enshrined in its Act, are Entrepreneurship among the students and industrial consultancy services in different disciplines.

In pursuance of these objectives, an Industrial Consultancy Unit was established, immediately after the formation of the University. Initially the activities of the unit were confined to assignments relating to Civil Engineering with emphasis on structural designs and architectural services. Subsequently, the scope of activities was enlarged in 1988. The Industrial Consultancy Unit was reorganized and named as the Bureau of Industrial Consultancy and Research & Development (BICARD). In the year 2005, the Research and Development wing was separated and presently it is known as Bureau of Industrial Consultancy Services (BICS). In 2008, the unified University was divided into four separate universities. BICS is part of the JNTU Hyderabad. The Bureau seeks to establish viable and mutually beneficial linkages between JNTUH and industry by expanding its range of operations to realize the objectives of University and industry interaction. It also whets and approves structural designs submitted by different agencies of the Central and State governments, like Hyderabad Metro and Greater Hyderabad Municipal Corporation (GHMC).

3.5.2 Does the university have a university-industry cell? If yes, what is its scope and range of activities?

Yes, the Directorate of University Industry Interaction Cell (UIIC) and Bureau of Industrial Consultancy Services (BICS) are performing the following activities:

- **Government Works:** 1) BHEL 2) A.P. and Telangana Tourism 3) Social Welfare Residential works 4) Greater Hyderabad Municipal Corporation (GHMC) 5) Hyderabad Metro Rail (HMR) 6) Military Engineering Services (MES) 7) Krishna University, Machilipatnam, INCAP.

- **University Works:** 1) Designing and proof checking of all campuses, namely, JNTUH College of Engineering, Hyderabad; JNTUH College of Engineering, Jagityal; JNTUH College of Engineering, Manthani; and JNTUH College of Engineering, Sultanpur.

- **Other Private works:** Extending consultancy services to various private, quasi-government in various categories.

3.5.3 What is the mode of publicizing the expertise of the university for consultancy services? Which are the departments from whom consultancy has been sought?

As part of the JNTU Hyderabad, the BICS seeks to establish viable and mutually beneficial linkages between JNTUH and industry by expanding its range of operations to realize the objectives of University. It also whets and approves structural designs submitted by different agencies of the Central and State governments. The scope of expertise is indicated in the University website and through brochures.

3.5.4 How does the university utilize the expertise of its faculty with regard to consultancy services?

Expertise of its faculty being utilised by appointing them for the following posts:

- **Director :** All Consultancy works related to the BICS department
- **Co-Coordinator:** To assist the director in consultancy works related to the BICS.
- **Arch. Draughtsman Grade-I:** TPQCC works, proof checking of drawings, verification, JNTUH consultant correspondence and works allotted by Director.
- **Structural Engineers:** Designs and proof checking of JNTUH campuses, Government and other private works
- **Site Engineer:** Quality control works and stability works of Government and other private, lab works.
- **Design Engineer:** Works assisted by the structural engineers.

In constituent colleges, the Principal acts as Chief Coordinator of Industrial Consultancy Service (ICS) works. The existing staff members form as teams for extending the consultancy services to various central, state government, public, private limited companies, etc.,

3.5.5 List the broad areas of consultancy services provided by the university and the revenue generated during the last four years.

Areas of consultancy offered by each department depend on the expertise and equipment available in the individual departments and so on. Revenue generated by BICS department per year is nearly Rs. 2.00 Crores, in addition to ICS, JNTUH College of Engineering, Hyderabad carry out consultancy work of about 1.5 Crores per year.

3.6 Extension Activities and Institutional Social Responsibility (ISR)

3.6.1 How does the university sensitize its faculty and students on its Institutional Social Responsibilities? List the social outreach programmes which have created an impact on students' campus experience during the last four years.

The NSS Volunteers are distributed over 113 units in 6 constituent colleges/units and 107 affiliated engineering colleges. Over the years, the NSS Units of the University have been organizing numerous activities, and responding to the needs of the society by participating in various community building activities in the units of the colleges.

The following are some of the NSS activities organized by the university NSS Units during the academic year 2014-15.

- Apart from the regular programmes, the NSS concentrated on special camps and achieved good results. The NSS conducted 50 special camps.
- Nearly 9000 Saplings were planted by NSS volunteers of various units (2 Mega Camps).
- 30 health check-up camps were organized and 18,000 people were benefited from the camps.
- 25 Kilo meters of approach roads were laid and 38 Kilo meters of roads were repaired by the NSS volunteers of all affiliated colleges of the University.
- Nearly 110 NSS units infused self confidence and pride in the NSS girl volunteers by providing them training in self defence through the Police Training Institutes.
- A Youth Festival Programme was organized by the University on 8th February, 2014. Constituent and affiliated colleges participated in the Festival. About 250 NSS volunteers participated in various competitions like Elocution, Debate, Quiz, Poster Painting, Rangoli, and Solo Instrumental on basic Indian Instruments, Classical Dance, and Group Dance.
- National Youth Policy-2014 (NYP-14) and Rajiv Gandhi Khel Abhiyan, (RGKA) rally in the campus were conducted on 21st February 2014 with 600 NSS volunteers from various affiliated colleges. University Vice-Chancellor, Registrar and NSS Programme co-ordinator participated in the rally.
- WOW (Wealth out of Waste): In the neighbourhood of JNTUH, the NSS Volunteers participated in the eco-friendly festivals like Ganesh Chaturthi, Holi, Pongal etc.

- **Activities of the JNTUH College of Engineering, Hyderabad**

1. "HARITHAHARAM" was organized in JNTUH College of Engineering, Hyderabad on 13th **J**uly, 2015
2. "Anti Drug Campaign" conducted by NSS, JNTUH College of Engg., Hyderabad
3. "Anti Ragging Rally" was organized on Fresher's Day
4. Conducted "Blood Donation Camp" on 13th August, 2015
5. "Swachh Bharath Campaign" organised by NSS unit-JNTUH
6. NSS volunteers participated in "SHE RALLY", organized by Government of Telangana
7. NSS UNIT volunteer Mr. E. Lalith Adithya participated in 21st National Youth Festival at Raipur, Chhattisgarh.
8. "World Water Day Walk & Human Join"
9. GHMC Election as volunteers
10. "State Youth Festival" conducted by NSS unit, Sathavahana University
11. Cleanliness Drive conducted
12. "Inter University Youth Festival" conducted by the NSS unit.
13. "World AIDS Day rally and awareness program" conducted by SACS-TG
14. "National Voters' day & Awareness Rally" conducted by Election Commission of Telangana
15. "Farmer Survey" with" Mission Kakatiya" in Nalgonda
16. "Unveiling of Country's Longest National Flag" Programme on the occasion of Gandhi Jayanthi
17. "World Consumer Rights Day" conducted by Government of Telangana
18. "Thought Transformation and Leadership Program" conducted by Divine India Youth Association"
19. "National Ozone Day Program" conducted by TSPCB
20. "5th Edition of Harithon-The Green Run" conducted by Government of Telangana

3.6.2 How does the university promote university-neighbourhood network and student engagement, contributing to the holistic development of students and sustained community development?

- The University promotes opportunities for students formally as well as informally to promote University-neighbourhood network and student engagement for the holistic development of students

- The NSS volunteers of the University participated in Bathukamma Campaign at Lumbini Park and other places. Bathukamma represents cultural spirit of Telangana.

- The services of the NSS volunteers were utilized for Rural Bodies Election

(MPTC/ZPTC) and General Election to Lok Sabha and State Assembly Elections.

- Students of Centre for Environment initiated and participated in the "WOW" program jointly organized in association with ITC Pvt. Ltd. A two-day campaign was conducted on Reuse and Recycle Concept for the residents in and around JNTUH. Students collected used books and bags under "Wealth out of Waste" program worth of Rs. 10,000.00

3.6.3 How does the university promote the participation of the students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International programmes?

The University promotes participation of students and faculty in several extension activities. The University has NSS unit and organizes various camps.

JNTUH organized "Swachh Bharat Campaign". The NSS organized a seven-day special campaign by adopting slums and took up cleanliness drive with NSS volunteers from various colleges. About 60 NSS volunteers participated every day in the campaign.

The University also conducted the following activities:

- State level NSS mega camp at Kakatiya University, November, 2015
- National youth convention on universal brotherhood, 11th September, 2015
- State level youth convention on sustainable life style, 14th November, 2015
- Khadi Day, 2nd October, 2015
- World Aids Day, 1st December, 2015
- Anti Pollution day 3rd, December, 2015
- Anti Drug awareness Campaign at HCU 12th November, 2015
- Inter State Youth Exchange Program on National Integration from 25th December, 2015 to 27th December, 2015.
- Inter District Youth Festival on 15th December, 2015 at JNTUH College of Engg., Sultanpur.
- District Level Youth Festival at Annamacharya Institute on 29th December, 2015
- Inter District Youth Festival at Laqshya College of Engg. Khammam on 18th December, 2015
- District Level Youth Festival on 22nd December, 2015 at Malla Reddy Engineering College for Women.

3.6.4 Give details of social surveys, research or extension work, if any, undertaken by the university to ensure social justice and empower the underprivileged and the most vulnerable sections of society?

NSS programme coordinator conducted environment awareness programme on the occasion of International Ozone Day celebrations in co-ordination with Telangana State

Pollution Control Board, State Government of Telangana. As a part of this celebration, a few competitions were conducted for the NSS volunteers on environmental issues and climatical changes. 300 NSS volunteers from different units participated in the competition. Certificates were issued to the winners.

In coordination with the Andhra Pradesh State AIDS Control Society (**APSACS)** on the eve of International Youth Day, "Youth and Mental Health" Rally was organized. 500 NSS volunteers participated in the rally.

3.6.5 Does the university have a mechanism to track the students' involvement in various social movements / activities which promote citizenship roles?

Yes, the University has a mechanism to track the students' involvement in various social movements / activities.

The University organized blood donation camps in the constituent and affiliated colleges. 80 camps were conducted and 15,000 units of blood were collected.

All the NSS units are organizing HIV/AIDS awareness programmes for the students and the public in regularly. So far nearly 10,000 participants have been made aware of HIV/AIDS.

NSS volunteers participated in the following programs:

- National Integration Camps at Karimnagar, Gurgoan and Bhagalkot.
- Yuva Meet 2015 and participated 20 NSS volunteers.
- Republic Day Parade camp at New Delhi
- National Adventures Camp
- Inter –University Competition on Water Resource Management
- National Workshop on Entrepreneurship Development
- National Youth Festival, National Youth Convention
- National Workshop on use of Social Media for conservation of Bio-diversity
- National Level Entrepreneurship competition
- International Kuchipudi Convention Forum
- Conference of Parties(COP-11)
- World Parliament of Spirituality
- Inter-State Youth Exchange Programme
- Inter-State Youth Exchange and Home Stay Program
- Sate Level Mega Camp
- State Level NSS Youth Festival
- State Level Youth Convention
- Youth convention on universal brotherhood day
- State Level Inter University Floral biodiversity Campaign

- Regional YUVA Meet
- Bucket Ganesh Nimajjan
- Khadi Day Celebration
- Inter College Camps
- Environmental fest
- TOC trainings
- National Youth Policy Launch

3.6.6 Bearing in mind the objectives and expected outcomes of the extension activities organized by the university, how did they complement students' academic learning experience? Specify the values inculcated and skills learnt.

The students learned how to manage waste, conserve energy and develop empathy.

3.6.7 How does the university ensure the involvement of the community in its outreach activities and contribute to community development? Give details of the initiatives of the university which have encouraged community participation in its activities.

University permits the local NGOs involved in science popularization programme of DST to bring school students to the laboratories of the University and this is in practice for the last one decade. Recently University took an initiative of clean and green environment. Local residents are involved during NSS activities.

3.6.8 Give details of awards received by the institution for extension activities and/contributions to social/community development during the last four years.

"Indira Gandhi Award" presented by the Hon'ble President Sri. Pranab Mukharjee in the year 2015 to a student Mr. A. Abhiram Reddy.

One Best Programme Officer award was presented to C. Mallesha, CVSR College of Engg, (V), Ghatkesar (M), R. R. Dist and two best volunteer(s) M. Mamatha, Anurag Group of Institutions and Mr. A. Uma Shankar Kumar, Aurora's Engineering College., was given State Level NSS Awards for the year 2013-14.

The NSS unit of IST received the following:

- Prakruthi Paryavaranam-2012, 1st Prize in Group Discussion
- Prakruthi Rakshak Award -2015, Group Discussion

3.7 Collaboration

3.7.1 How has the university's collaboration with other agencies impacted the visibility, identity and diversity of activities on campus? To what extent has the university benefitted academically and financially because of collaborations?

The University has entered into MoU with national/international organizations/ universities to impart technical education and unique industry need courses. The following programmes were offered with international universities leads to student and faculty exchange to get better opportunities in India and abroad:

Carnegie Mellon University, USA (Telangana State Council Higher Education, Hyderabad and JNTUH)	2-year MSIT programme
Central Michigan University, USA	2- year MBA Programme
Asian Institute of Technology (AIT), Bangkok, Thailand (through SHE foundation)	5-year International Integrated Double Degree Masters Programmes (IIDDMP) in CSE, Civil, EEE. UG degree awarded by JNTUH and PG degree awarded by AIT, Bangkok
Blekinge Institute of Technology, Sweden	5-year IDDMP programmes CSE, ECE, and Mechanical Engineering. UG degree awarded by JNTUH and PG degree awarded by BIT, Sweden

Also the University conducted EAMCET/ECET and other recruitment examinations on behalf of the Government of Telangana in a successful manner.

The University has been identified as a lead institute in the implementation of the world bank projects (TEQIP) I and II for Quality Improvement. Several doctoral research outputs emanating from the University have an impact on DRDO labs, Bio-Tech and IT industry.

3.7.2 Mention specific examples of how these linkages promote

- **Curriculum development**

Experts from industries / R&D establishments like DRDO, CSIR, IITs, NITs, IIITs, BHEL, and HAL play a key role in framing of curriculum and detailed syllabi.

- **Internship**

The DRDO labs, software companies, Bio-Tech parks and other industries offer internships to our students.

- **On-the-job training**

Students are being offered NASSCOM driven courses in cyber security and data analytics as part of academic curriculum leading to certification.

- **Faculty exchange and development**

Faculty members have visited Japan and Saudi Arabia for professional development on exchange program.

- **Research**

30 to 40% of doctoral dissertations are industry driven, especially in chemistry, pharmacy, bio-technology, environmental sciences, etc.

- **Publication**

Networking with industry partners by the faculty has resulted in several publications.

- **Consultancy**

State Government, Central Government, Defence agencies have been frequently consulting

the University.

- **Extension**

The University also introduced courses on Intellectual Property Rights (IPR), soft skills, communication skills, and finishing school programmes to provide value education to students.

- **Student placement**

Due to active collaboration with industry, several students have been placed in TCS, Wipro, Infosys and other industries.

- **Any other (please specify)**

  Five students of Civil Engineering Department (Ms. Mounika Deshkukh, Ms. Sravaya Nall and Ms. Rohini Guguloth in 2014 and Ms. Sravanthi Chana and Sneha Reddy in 2015) have visited Japan to attend the conference/internship.

3.7.3 Has the university signed any MoUs with institutions of national/international importance/other universities/ industries/corporate houses etc.? If yes, how have they enhanced the research and development activities of the university?

Yes, the University has signed MoUs with institutions of national/international level. List enclosed as Annexure VII.

3.7.4 Have the university-industry interactions resulted in the establishment / creation of highly specialized laboratories / facilities?

Yes, the University- Industry interaction resulted in the establishment of Centre for Nano Technology and Centre for Disaster Management and created highly specialized equipment for research.

The Centre of Excellence in Disaster Management under TEQIP-II for JNTUH College of Engineering, Hyderabad with funding of Rs. 5.00 Crores which is one out of 25 CoEs sanctioned by MHRD across India.

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1 How does the university plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?

The University has been continuously upgrading the physical infrastructure as per the AICTE norms.

- 24/7 Computer facilities are available in the departments/centres which are shared with other departments whenever necessary.
- The central library caters to the needs of all the students pertaining to learning resources.
- All the colleges/units have separate libraries.
- The facilities in the laboratories are used for conducting regular practical classes as per the syllabi for the students of other departments when the practical subject is of inter-disciplinary nature.

4.1.2 Does the university have a policy for the creation and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives.

Yes, the University has a policy for the creation and enhancement of infrastructure.

- The University provides lab facilities, class rooms, seminar halls and teaching aids as per UGC/AICTE guidelines.
- Three new constituent colleges have been established in 2012. As per UGC/AICTE norms, infrastructure facilities are provided to the tune of about Rs. 500 Crores.
- The University is providing on-line classes to JNTUH affiliated colleges facilitated by School of Information Technology through Centre of Excellence in E-Learning Solutions.
- JNTUH, in collaboration with Third Party Company, created e-LSDM facility to develop engineering e-content (i.e., content for teaching and learning and engineering e-LABs) for five engineering streams, namely, Computer Science and Engineering, Information Technology, Mechanical Engineering, Electrical and Electronics Engineering, and Electronics and Communication Engineering. This content is useful both for the faculty members and students.
- The University has created infrastructure to establish central e-studio at JNTUH for delivering video lectures by the subject/industry experts for improving their levels of understanding in the subjects and enhance employability skills.

4.1.3 How does the university create a conductive physical ambience for the faculty in terms of adequate research laboratories, computing facilities and allied services?

Research laboratories and computing facilities with relevant scientific software tools have been provided as per UGC/AICTE norms.

4.1.4 Has the university provided all departments with facilities like office room, common room and separate rest rooms for women students and staff?

Yes, the University provided required facilities to faculty and students. The University has constructed a separate building for each department consisting of office rooms with infrastructure facilities, rooms for faculty, seminar hall for discussions and rest rooms for women students and staff.

4.1.5 How does the university ensure that the infrastructure facilities are disabled-friendly?

University constructed ramps in two buildings for disabled students. A ramp was also constructed for the differently-abled users at the side entrance of the University Library building, and SIT Building. However lifts are provided in other buildings like Administrative Block and SIT. Lift facility provided in the library enables the differently-abled users to access all the floors and sections of the library comfortably. In other buildings, class rooms are arranged in the ground floor.

4.1.6 How does the university cater to the requirements of residential students? Give details of

- **Capacity of the hostels and occupancy (to be given separately for men and women)**
- **Recreational facilities in hostel/s like gymnasium, yoga centre, etc.**
- **Broadband connectivity / Wi-Fi facility in hostels.**

The University has provided hostels in all the constituent colleges with the facilities of TV, dining hall and Wi-Fi facility. The details are as follows:

1	JNTUH College of Engineering Hyderabad 5-Boys Hostels – 1300 capacity 3-Girls Hostels – 982 capacity Family accommodation for	Boys Hostel – Godavari	200	TV Hall, Dining Hall, Gymnasium, Computer Room, Reading Room
		Boys Hostel – Krishna	150	
		Boys Hostel – Manjeera	530	
		Boys Hostel – Kinnera	420	
		Girls Hostel –	450	

	international students : 60	Kamala Nehru		
		Girls Hostel – Saraswathi	232	
		Girls Hostel – Gayathri	300	
		International Students Hostel – Family accommodation	60	Single Bed room tenements
2	JNTUH College of Engineering, Jagityal	Boys Hostel	650	TV Hall, Dining Hall, Gymnasium, Computer Room, Reading Room
		Girls Hostel	550	
3	JNTUH College of Engineering, Manthani	Boys Hostel	606	TV Hall, Dining Hall, Gymnasium, Computer Room, Reading Room
		Girls Hostel	400	
4	JNTUH College of Engineering, Sultanpur 6-Boys Hostels 3-Girls Hostels	Boys Hostel	380	TV Hall, Dining Hall, Gymnasium, Computer Room, Reading Room
		Girls Hostel	270	

4.1.7 Does the university offer medical facilities for its students and teaching and non-teaching staff living on campus?

Yes, the University offer medical facilities for its students and all the employees.
The University has health centre on the campus. Medical facilities are also available in the constituent colleges.

4.1.8 What special facilities are available on campus to promote students' interest in sports and cultural events/activities?

The University is having a sports council consisting of the Vice-Chancellor as the Chairperson and Rector, Registrar, Principals/Directors of Constituent Colleges/Units two Physical Directors of outside Universities and two Physical Directors from the Affiliated Colleges of the University are members of the council. The University Physical Director will act as Secretary of the Sports Council.

The University conducts sports council meeting periodically and all the major events and administrative sanctions will be placed in the Sports Council meeting.

The University provides facilities like

i) Yoga Hall

ii) Cricket Ground

iii) Running Track

iv) Gym

v) Basket ball court and indoor game facilities.

vi) Providing healthy food and fruits for players during the coaching camps.

vii) Sports kits, uniform and allowances are being given to the players.

viii) The University prepares the annual sports calendar for organising inter-collegiate and intra-collegiate events

ix) Financial incentives are also being provided to the players who win in National/ International events.

4.2 Library as a Learning Resource

4.2.1 Does the library have an Advisory Committee? Specify the composition of the committee. What significant initiatives have been taken by the committee to render the library student/user friendly?

Yes, the library has an advisory committee with the following objectives:

- To lay down policies to enhance collection of good books
- To recommend print journals, e – journals and online databases
- To make provision for better utilization of library resources and services
- To develop general program of library services to suit the interest of different sections of users.
- To recommend sufficient library funds for the acquisition of library resources
- To assist the librarian in formulating general library polices and regulations which govern the effective functioning of the library
- Separate Competitive Examinations Reference Library (CERL) has been created to augment reading resources for all competitive examinations.

The Library Committee consists of the following members:

1. Dr. M Lakshmi Narasu
   (Head & Professor, Centre for Biotechnology, Institute of Science & Technology, JNTUH)
2. Dr. M. Srinivasa Rao
   (Director, Academic Audit Cell & Professor of Computer Science, JNTUH)
3. Dr. P. Srinivasa Rao
   (Vice Principal, Professor of Civil Engg., JNTUH College of Engg. Hyderabad)
4. Dr. A. Prabhu Kumar
   (Director, School of Management Studies & Professor, JNTUH)
5. Dr. N. Rupsing Naik
   (University Librarian I/c., JNTUH & Convenor)

4.2.2 Provide details of the following:

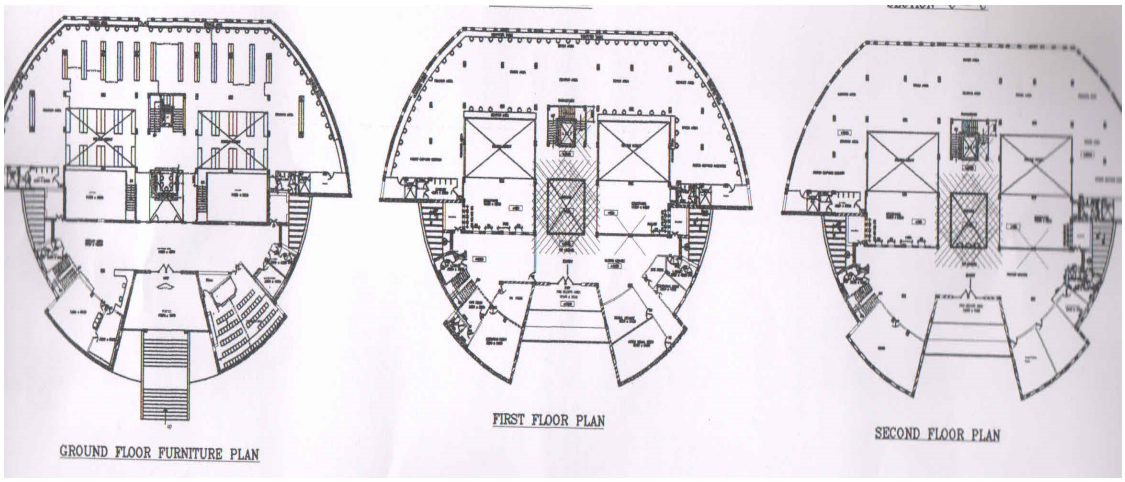
- **Total area of the library (in Sq. Mts.) :** 4180.6368 and extended in three floors
- **Total seating capacity :** 500

* **Working hours (on working days, on holidays, before examination, during examination, during vacation)**

  - All Working Days : 09:00 AM to 09:00 PM
  - On holidays : 09:00 AM to 05:00 PM
    (Second Saturdays & Sundays)
  - Library is open throughout the year except on general public holidays.

* **Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)**

  - **Ground floor:** General issue books, reading room, conference hall with a seating capacity of 50, staff rooms, personal books & newspaper reading room, property counter, user terminals, staff terminals, and un-interrupted Power Supply (UPS) room.
  - **First floor:** Administrative section, Journal section, Reference section, Back volumes of Journals, Thesis, Xerox room, Audio Visual room, Staff rooms, user terminals, Staff terminals, and UPS room.
  - **Second floor:** Digital Library with 48 terminals (one cabin exclusive for research scholars with 16 desktops), Server room with 5 terminals, Competitive Examinations Reference Library (CERL), Staff terminals, SC & ST Book Bank, Technical Section and UPS room.`



* **Clear and prominent display of floor plan; adequate sign boards; fire alarm; access to differently-abled users and mode of access to collection**

  - The library building has three floors. In every floor required sign boards and guiding symbols are displayed prominently. Statutory fire protection and fire alarm measures are taken as required.
  - A ramp was constructed for the differently- abled users at the side entrance of the library for entering.
  - Lift facility provided in the library enables the differently- abled users to access

all the floors and sections of the library comfortably.

- They are helped by an attender or book keeper for accessing the books.
- Open access facility is provided for all students and faculty members. Users can easily search and locate reading materials with the help of OPAC and also by the book rack display indicators with range of call numbers on the front panel of each double faced book racks.

4.2.3 Give details of the library holdings:

a) Print (books, back volumes and theses)

S. No.	Description	Total Volumes
1	Print Books : No. of Volumes	92630
2	Print Journals – Indian	190
3	Print journals – Foreign	36
4	Back Volumes: Journals	3330
5	Thesis : Ph.D	1511
6	Thesis : M. Phil.	140

b) Average number of books added during the last three years

- 5548 Nos. + 3360 No. of books transferred from School of Continuing Distance Education.

c) Non Print (Microfiche, AV)

80 Nos.

d) Electronic (e-books, e-journals)

S. No.	Description	Total Volumes
1	e-Books : No. of Volumes	3519
2	e-Journals	30418
3	e-Journal Databases/ packages as per AICTE	18 Nos. (University funded) + 17 Nos.(UGC-INFLINET funded)

e) e) Special collections (e.g. text books, reference books, standards, patents)

- Donated Books : 2505
- Thesis : 1651
- E-Learning Tutorials : NPTEL

f) Book Banks

1	SC/ST Books Bank	10000 Nos.
2	SC/ST Integrated Book Bank	8500 Nos.

g) Question Banks

Yes, University library provides old question papers.

4.2.4 What tools does the library deploy to provide access to the collection?

* **OPAC:** Users can search the library collection through Online Public Access Catalogue (OPAC).
* **Electronic Resource Management package for e-journals**

Funded by Jawaharlal Nehru Technological University, Hyderabad.

1. American Society of Civil Engineers (ASCE)
2. American Society of Mechanical Engineering (ASME)
3. McGraw Hill -General Engg.
4. ACM Digital Library
5. EBSCO- Management: Business Source Elite e-journal
6. Gale Cengage Learning -Environmental Engg:
7. Nature Pub. Group.
8. ELSEVIER-SD-Biotechnology
9. ELSEVIER-SD-Pharmacy
10. ELSEVIER-SD-Environmental Engg.
11. ELSEVIER-SD-Nano Technology
12. ELSEVIER-SD-Chemical Engg.
13. ELSEVIER-SD-Geo Technology
14. BENTHAM- Pharmacy:
15. J-GATE- Engg. & Tech: JET.

16. J-GATE Social & Management Science: JSMS
17 IEL Growth Plan / IEEE Explorer
18 Elsevier Science Direct Engineering & Computer Science -(275)

Funded by UGC-INFONET Digital Library Consortium

Full Text e-resources:

1. American Chemical Society
2. American Institute of Physics
3. American Physical Society
4. Cambridge University Press
5. Economic & Political Weekly (EPW)
6. Institute of Physics
7. JSTOR
8. Oxford University Press
9. Royal Society of Chemistry
10. Springer Link
11. Taylor and Francis
12. Wiley-Blackwell Publishing

Bibliographic Databases

13 ISID: Indexes of 125 Indian Social Science journals + newspaper articles, etc.

14 JCCC: (facility to e-mail request for article to ILL Centers or to INFLIBNET Centre)

15 SciFinder: 40,000 scientific journals + patents + Conf. Proceed. + chemistry, life sciences, etc. Abstracts for 23 million documents are accessible

16 Web of Science: Access to the citation databases. Searches over 10,000 journals from over 45 different languages across the sciences, social sciences and arts & humanities with back files of 1900.

17 The Shodhganga@INFLIBNET Centre provides a platform for research students to deposit their Ph.D. theses and make it available to the entire scholarly community in open access.

* **Federated searching tools to search articles in multiple databases**
  - Knimbus (Business Management, Engineering & Technology)
  - DELNET

* **Library Website**

  http://jntuh.ac.in/new/library/

* **In-house/remote access to e-publications**

All the online journals/databases and e-books through JNTUH Digital Library are available on Intranet of the University and can be accessed online from anywhere in the campus.

4.2.5 To what extent is ICT deployed in the library? Give details with regard to

* **Library automation**

Library automation is carried out using "VTLS (Visionary Technology in Library Solutions) software.

* **Total number of computers for general access**

48 Nos.

* **Total numbers of printers for general access**

2 Nos.

* **Internet bandwidth speed** ☐ **2 Mbps** ☐ **10 Mbps** ☐ **1 GB**

20 Mbps (1:1) bandwidth dedicated under NKN/NME-ICT programme sanctioned under UGC-INFONET Programme

* **Institutional Repository**

Yes

* **Content management system for e-learning**

Yes

* **Participation in resource sharing networks/consortia (like INFLIBNET)**

Yes

4.2.6 Provide details (per month) with regard to

* **Average number of walk-ins**	500
* **Average number of books issued/returned**	3100 per month
* **Ratio of library books to students enrolled**	40:1
* **Average number of books added during the last four years**	5548
* **Average number of login to OPAC**	300 per month
* **Average number of login to e-resources**	1100 per month
* **Average number of e-resources downloaded/printed**	800 per month
* **Number of IT literacy trainings organized**	Two per year

4.2.7 Give details of specialized services provided by the library with regard to

* **Manuscripts**

0

* **Reference**

Reference facilities are available at the University Library, comprising a good collection of reference books on all branches of study as mentioned in the University syllabus.

In addition, books for various competitive examinations, books on General Knowledge, Encyclopaedia Britannica, Encyclopaedia of Science and Technology, Encyclopaedia of Physical Science and Technology, Handbooks, Preparatory guides for GATE Examinations, UPSC, TSPSC, Groups, GRE, GMAT, SAT, CAT, TOEFL etc. are also available for study are available in the Competitive Examinations Reference Library (CERL) on the 2nd Floor.

* **Reprography/Scanning**

This is available at ground and first floors during the working hours of the University Library.

* **Inter-library Loan Service**

This service is extended to the following library networks INLFIBNET & DELNET.

* **Information Deployment and Notification**

The library has been periodically engaged in routing of documents, displaying the current title contents of periodicals to keep the readers abreast of the information in the various fields of study. Besides this, services like CAS (Current Awareness Service), SDI (Selective Dissemination of Information) are regularly provided by the library for the benefit of the users and researchers of the University.

* **OPACS**

The books are arranged using Dewey Decimal Classification Scheme for easy access. The library catalogue is available online. Users can search the library collection through OPAC (Online Public Access Catalogue), four systems (two in each floor) have been kept exclusively for this purpose.

* **Internet Access**

The library has a 20 Mbps dedicated leased line connectivity under NKN/NME-ICT Programme. The Digital Library acts as a subject gateway providing access to the information resources of various libraries and information centres both internal and external, all under a single roof, enabling users to search, browse and download any required data needed for study and research.

* **Downloads**

The Digital Library has the facilities to download electronic resources.

* **Printouts**

Printouts of research articles are provided to the users on request.

* **Reading list/ Bibliography compilation**

Provided on request.

* **In-house/remote access to e-resources**

The Digital Library enables access to the e-resources like e-journals, e-books, e-databases & e-learning resources.

* **User Orientation**

Orientation is given to the first year students of the University by the library staff at the beginning of every year and also through user awareness programs.

* **Assistance in searching Databases**

Computer programmer and library assistants of the library assist the users in searching e-resources & databases.

* **INFLIBNET/IUC facilities**

The library has been one of the active members of the INFLIBNET, Ahmadabad and INDEST Consortium. INFLIBNET has funded and given access to 17 Nos. of e-journals for the benefit of users

4.2.8 Provide details of the annual library budget and the amount spent for purchasing new books and journals.

Library holdings	2015		2014		2013		2012	
	Number	Total Cost (Rs.)	Number	Total Cost (Rs.)	Number	Total Cost (Rs.)	Number	Total Cost (Rs.)
Text books/ Reference Books	600	3,00,000	2272	14,75,000	1793	12,85,000	883	4,90,000
Journals/ Periodicals	212	15,49,721	183	12,94,849	85	9,53,271	97	9,70,116
e-resources	15	29,44,435	15	25,73,657	15	27,91,916	10	11,00,550
Any other (e-books) / (IST TEQIP)	--	--	--	--	--	--	1271	1,95,24,451

4.2.9 What initiatives has the university taken to make the library a 'happening place' on campus?

- University library has organised extension activities like book exhibitions, talks, user awareness programmes, library day celebrations etc.,
- The University library periodically organizes seminar / refresher courses/ short term courses/ workshop on recent trends in the field of Library and Information Science to enhance and keep the practicing library professionals abreast of latest information in the field of library science.

In the process of providing a single platform and environment to Library and Information Science, academicians and researchers to access/study in digital libraries, the University library has organized one National Conference on Library Security Management in Digital Era (NCLSM-2011) and one International Conference on Sustainability of Digital Libraries (ICSDL-2014) in the year 2011 and 2014 respectively.

4.2.10 What are the strategies used by the library to collect feedback from its users? How is the feedback analysed and used for the improvement of the library services?

- Suggestion box provided for collection of feedback from the students, research scholars and faculty
- ICT training program feed back
- Product Demo feed back
- E-mail feed back
- Complaint through Letters
- Committee recommendations
- Through visitors diary
- Directors/HODs feed back
- Each feedback has taken care to improve our library services
- Orient them properly about library services if they are not aware
- Organizing product demo to appraise about the latest information
- Book catalogue distribution to improve the library collection
- Faculty book indent recommendations, timely supporting to get the books from the publisher

4.2.11 List the efforts made towards the infrastructural development of the library in the

last four years.

- Digital Library:

– The fully air-conditioned digital library section was upgraded with two IBM x3650 M4 Servers (one each for Library Management Software & E-resources) and with sixty Dell Desktops.

– Two air-conditioned cabins with forty Dell Desktops are provided in user cabins, in which one cabin exclusively for research scholars with 16 desktops is being provided for accessing e-journals, databases, e-books, e-lectures, multimedia content and other library databases.

– The University has given a permission to install the biometric attendance system in the University Library for staff.

– Wi-Fi facility is provided in University library. Electrical power points are also provided in ground floor & first floor for the users using personal Laptops and accessing Internet through W_i-F_i.

- A Firewall (CISCO Make), L3-GIGA Switch & 1841 modular router (CISCO Make) are installed to protect computer servers, to prevent the users from viewing unwanted sites, and to monitor and regulate all incoming and outgoing Internet traffic

- Surveillance system in the University library was upgraded on all the three floors with forty six colour dome cameras, two night vision cameras LED TV's and DV Recorders with 2 TB storage capacity

- EM (Electro-magnetic) Library Security System :

– The University library has installed EM (Electro-magnetic) Library Security System with one 3M 3501 Single corridor Security gate/Detection panel at main gate and one 3M 942 Work station/ Book check system for security of books from theft.

Initiation and establishment of:

- Competitive Examinations Reference Library (CERL):

– The University library has inaugurated fully air-conditioned Competitive Examinations Reference Library (CERL) on 2nd floor of University library in an effort to provide separate books and periodicals exclusively to students preparing for competitive examinations like UPSC/Civil Services/ Group-I/ IES/ GATE/ CAT/GRE/ TOEFL, Railways, Banking, etc.,

– This section has been provided with over 2000 volumes of competitive books for reference and is also equipped with 8 computers for accessing Internet.

– This section is equipped with 50 new revolving chairs, 20 Book case racks and 2 Air- conditioners.

- Personal Books Reading Room:

  The University Library for the benefit of students has started the services of personal books reading room where the students can study their personal books which are not allowed inside. This section is equipped with revolving chairs.

4.3 IT Infrastructure

4.3.1 Does the university have a comprehensive IT policy with regard to

- **IT Service Management**

All the units of University have wired and wireless connectivity for IT communications.

- **Information Security**

Basic firewalls are installed at the main Gateway.

- **Network Security**

Network connectivity is maintained through router and filters.

- **Risk Management**

Basic firewalls and filters are installed at the main inward Gateway.

- **Software Asset Management**

Connection through reputed assets is present through NKN connectivity.

- **Open Source Resources**

Usage of open source is deployed for curricular and also for office activity.

- **Green Computing**

Official communication is carried out through e-mails and short message service to decrease the usage of carbon footprint.

4.3.2 Give details of the university's computing facilities i.e., hardware and software.

- **Number of systems with individual configurations:**

More than 4000 with P5 and above configurations.

- **Computer-student ratio:**

1:2 for P.G. courses; 1:5 for UG courses.

- **Dedicated computing facilities:**

- 24/7 lab computing facility is available in the University.

LAN facility:

LAN facilities within the units and between the units are present.

Proprietary software:

Open source software for most of the usage and proprietary software for research usage.

Number of nodes / computers with internet facility:

4000 Computers with Internet facility with bandwidth of 20 Mbps.

Any other (please specify):

Campus is provided with Wi-Fi Internet facility**.**

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

To provide home for IT startups. The three constituent colleges are to be connected through network for Intranet communication.

4.3.4 Give details on access to on-line teaching and learning resources and other knowledge and information database/packages provided to the staff and students for quality teaching, learning and research

The staff and students are allowed to access various learning resources through campus-wide network. The learners have access to 30418 online journals and 3519 e-books.

4.3.5 What are the new technologies deployed by the university in enhancing student learning and evaluation during the last four years and how do they meet new / future challenges?

On-line classes are being conducted to interested faculty/students of JNTUH affiliated colleges by identifying eminent professors from different disciplines in a given period of time. By this the affiliated colleges can receive and provide the lectures to their students to have better understanding of the subject.

Turn-IT- ON software for plagiarism check in doctoral thesis is available in the University. There is a Centre of Excellence in E-Learning (CoEEL) for on-line, e-lectures from e-lab facilities.

4.3.6 What are the IT facilities available to individual teachers for effective teaching and quality research?

- Entire campus including staff quarters and student hostels are Wi-Fi enabled.
- On-line access of many reputed journals is available in University library.
- Major departments are having departmental library with latest books.
- NPTEL course access to major subjects.

The departments are having sufficient infrastructure like LCD projectors, laptops for professors, e-class room/seminar hall facilities for seminars by experts, invited talks on latest technologies.

4.3.7 Give details of ICT-enabled classrooms/learning spaces available within the university? How are they utilized for enhancing the quality of teaching and learning?

The University monitors regular usage of ICT facilities in the class rooms by faculty members and students; this is encouraged and appreciated by the colleges. The Feedback from faculty, coordinators and students is encouraging.

Faculty members deliver power point presentation version of lectures for PG students and wherever necessary for UG students also.

JNTUH under e-LSDM project also conducts cluster-wise Faculty Orientation Program (FOP) by inviting the college nominated faculty coordinators to an earmarked location in which the University faculty are orienting them to use the engineering e-content effectively while teaching.

4.3.8 How are the faculty assisted in preparing computer- aided teaching-learning materials? What are the facilities available in the university for such initiatives?

Engineering e-learning courseware is being prepared with help of various resource persons in and around the state as per JNTUH curriculum. Faculty are involved in verifying the standard of the content which will be fine tuned by experts from IIT-H, HCU, BITS-H and other University faculty.

4.3.9 How are the computers and their accessories maintained?

System administrators/hardware technicians are appointed to maintain the computers and its accessories in all the constituent colleges/units.

4.3.10 Does the university avail of the National Knowledge Network connectivity? If so, what are the services availed of?

Yes, the University avail the National Knowledge Network connectivity. It has 1 GB NKN Connectivity. Digital libraries are accessed by all the students and staff through this network.

4.3.11 Does the university avail of web resources such as Wikipedia, dictionary and other education enhancing resources? What are its policies in this regard?

Yes. The University avail of web resources. There are no policies to access the web resources.

4.3.12 Provide details on the provision made in the annual budget for the update, deployment and maintenance of computers in the university.

The University provides budget as and when the Principals/Directors submit proposals. Open source software is used with latest versions. The proprietary licensed software extensions are renewed.

4.3.13 What plans have been envisioned for the gradual transfer of teaching and learning from closed university information network to open environment?

Some of the faculty members are preparing lecture notes and placing at website.

4.4 Maintenance of Campus Facilities

4.4.1 Does the university have an estate office / designated officer for overseeing the maintenance of buildings, class-rooms and laboratories? If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.

Yes, the University has taken an initiative through Director, Bureau of Industrial Consultancy for the following:

a. Plantations in all constituent colleges and in the University campus through Telangana Harithahaaram project.

b. Installation of CC Cameras and biometric in all affiliated colleges to avoid

malpractices, monitor class work and examinations thoroughly by JNTUH.

c. International students hostels (G+2) constructed at JNTUH Hyderabad Campus.

d. Solar PV Power Plant (4 MW) and internal roads constructed at JNTUH College of Engineering, Sultanpur.

e. Rain Water Harvesting done over hostel and academic block roof tops.

f. Well-being facilities at University Health Centre

g. Volley Ball Courts with nets

h. Fitness centres for men and women

4.4.2 How are the infrastructure facilities, services and equipments maintained? Give details

The Director, Bureau of Industrial Consultancy looks after maintenance and repairs of infrastructure including housekeeping and security services.

Any other information regarding infrastructure and learning resources which the university would like to include.

University has two guest houses, one is Athidhi (VIP) guest house and another guest house with two storied buildings and providing the accommodation to the guests, faculty and who are coming for the training programs of UGC-Human Resource Development Center etc.

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support

5.1.1 Does the university have a system for student support and mentoring? If yes, what are its structural and functional characteristics?

Yes, the University has a system for student support and mentoring. Each faculty member acts as counsellor for a batch of fifteen students. He/she helps the students while subjects registration and in other academic related matters. Every class has student representative and he/she interacts with other students and Head of the Department (HoD) on any issue. The HoD or senior faculty after discussions takes appropriate action to resolve the problems of the students. The University conducts remedial classes for weaker students after regular working hours.

5.1.2 Apart from classroom interaction, what are the provisions available for academic mentoring?

- Faculty members use their contacts with industry to get internships to students and arrange for industrial visits.
- Expert lectures are arranged in the emerging research areas.
- Every year, the University conducts techno workshops, symposiums, seminars in every department. Students organise these programmes with the guidance of the faculty. The neighbourhood colleges are also involved in the workshops for presentation of technical papers, quiz, presentation of modules, etc.
- Alumni also help in mentoring the students.

5.1.3 Does the university have any personal enhancement and development schemes such as career counselling, soft skill development, career-path-identification, and orientation to well-being for its students? Give details of such schemes.

Yes, the University has been conducting various training programmes to students and some of them are listed below.

a) A refresher course on “Soft Skills for Professional Excellence” by Dr. Parvathi. V at UGC Academic Staff College, JNTUH, 2015.

b) A workshop on “Gender Sensitisation” by Dr. Parvathi .V on 4^{th} -5^{th} Dec 2015.

c) A refresher course on “Soft Skills for Professional Excellence” at UGC Academic Staff College, JNTUH, 2014.

d) Two days programme on “Teacher-Text-Student Interaction” in December 2013 with a focus on the changes in the syllabus as per R13 regulations.

e) An In-House Master Training Programme on Soft Skills on 18^{th} -23^{rd} Nov 2013.

f) A Finishing School Programme on Soft Skills for M.Tech students, July 2012.

g) A Finishing School Programme on communication skills for B. Tech students, July 2013.

h) An invited lecture on communication skills and soft skills has been conducted.

5.1.4 Does the university provide assistance to students for obtaining educational loans from banks and other financial institutions?

Yes, the University provides assistance to students for obtaining educational loans. The colleges are providing required documents to the banks mentioning the estimated expenditure which includes study material, tuition fee, living expenditure and purchase of computers as and when necessary.

5.1.5 Does the university publish its updated prospectus and handbook annually? If yes, what are the main issues / activities / information included / provided to students through these documents? Is there a provision for online access?

Yes, the University publish its updated prospectus and handbook annually. It provides the Academic Calendar, Academic Regulations, Course Structure and syllabi in the form of hard copy and also placed at website. Instructions are given to the Principals/Directors/HoDs to ensure that every student has a copy of Academic Regulations, Course Structure and syllabi. The handbook provides achievements of faculty members at various departments. It also provides the students achievements.

5.1.6 Specify the type and number of university scholarships / freeships given to the students during the last four years. Was financial aid given to them on time? Give details (in a tabular form) for the following categories: UG/PG/M.Phil/Ph.D./Diploma/others (please specify).;

The University allocated an amount of Rs. 50.00 lakhs per annum to 25 research scholars who are admitted under full time Ph.D. Programme from the academic year 2016-17.

5.1.7 What percentage of students receive financial assistance from state government, central government and other national agencies (Kishore Vaigyanik Protsahan Yojana (KVPY), SN Bose Fellow, etc.)?

The State Government is encouraging the students whose parental income is below Rs. 2.00 lakhs per annum to apply for tuition fee reimbursement.

5.1.8 Does the university have an International Student Cell to attract foreign students and cater to their needs?

Yes, the University has established a Directorate of University Foreign Relations. The Director monitors the foreign students' problems in India. The University has constructed an international students hostel and with necessary amenities and Gym and Sports facilities.

By giving wide publicity through JNTUH website, the University is conducting educational fairs, corresponding with Embassies of various countries and also through educational consultants like EdCIL and ICCR.

5.1.9 Does the university provide assistance to students for obtaining educational loans from banks and other financial institutions?

Yes, the University provides assistance to students for obtaining educational loans.The colleges are providing required documents to the banks mentioning the estimated expenditure which includes study material, tuition fee, living expenditure and purchase of computers as and when necessary.

5.1.10 What types of support services are available for

* **overseas students:**

- Forty eight flats are available for research scholars.
- Sixty single bed flats with attached kitchen are also available for international students.

* **Physically challenged / differently-abled students.**

- Ramps and lifts are provided in certain buildings including library. In other buildings, classes are arranged in ground floor.
- In Central Library an attender or book keeper is available for accessing the books.

* **SC/ST, OBC and economically weaker sections:**

The University conducts classes for students appearing for competitive examinations separately. Remedial classes are also being conducted for the academically weak students. The State Government provides scholarships to the students. The University library has SC/ST book bank & SC/ST Integrated Book Bank facility with a collection of 18,500 books.

The JNTUH College of Engineering, Hyderabad has organized the following Finishing Schools and Remedial classes under TEQIP-II

Sl. No.	Name of the faculty	Department	Name of the conference/ workshop	Duration
1	Dr. S. Tara kalyani, Professor & Head	EEE	Remedial classes for III B.Tech (IDP, IIDDMP) students for the Switchgear & Protection, Power System	One week (13.04.2015 to 18.04.2015.)
2	Dr. S. Tara kalyani, Professor	EEE	Remedial classes for III B.Tech (Regular) students for the Switchgear & Protection, Power System	One week (13.04.2015 to 18.04.2015)
3	Dr. A. Raghu Ram, Professor of EEE department	EEE	Remedial classes for IV year B.Tech (IDP & IIDDMP) students for the “Modern Control Theory” Remedial	One week (02.11.2015 to 06.11.2015).

			classes for IV year B.Tech (IDP & IIDDMP) students for the "Modern Control Theory"	

- **Students participating in various competitions/conferences in India and abroad**

The University encourages the students to participate in competitions and conferences such as SAE BAJA competition and others. The students are actively participated in various competitions.

- **health centre, health insurance etc. :**

A dispensary with outpatient facility and first-aid level treatment is provided on each campus.

- **Skill development (spoken English, computer literacy, etc.)**

Workshops on soft skills development are conducted. Courses on English language are also being offered.

- **performance enhancement for slow learners**

Remedial classes are being conducted for slow learners after regular working hours.

- **exposure of students to other institutions of higher learning/ corporate/business houses, etc.**

Visits to IIT's, NIT's, IIITs and other business houses and R&D establishments such as WIPRO, INFOSYS, IBM, DRDO, BHEL, CITD.

- **publication of student magazines**

The University encourages the students to present technical papers in national/international conferences organized by IITs/NITs and other reputed universities. It is also a practice to the PG students to publish research papers on their PG project topics.

5.1.11 Does the university provide guidance and/or conduct coaching classes for students appearing for Civil Services, Defence Services, NET/SET and any other competitive examinations? If yes, what is the outcome?

Yes, the University conducts coaching classes for SC/ST, OBC and economically weaker sections of students for competitive examinations. The University Library provides a separate unit called Competitive Examinations Reference Library (CERL) with separate books and periodicals exclusively for students preparing for competitive examinations like UPSC/Civil Services/ Group-I/ IES/ GATE/ CAT/GRE/ TOEFL, Railways, Banking, etc. This section has been provided with over 2000 volumes of competitive books for reference and is also equipped with eight computers for accessing Internet Performance of the students of JNTUH College of Engineering, Hyderabad

Sl. No.	Name of the Dept.	No. of students qualified
1	Civil Engineering	14 (GATE Best Rank : 44)
2	Electrical & Electronics Engineering	40 (Best Rank:06)
3	Mechanical Engineering	17
4	Electronics & Communication Engineering	41 students qualified in GATE /CAT / GRE - Best GATE 2014 Ranks : 625, 637
5	Computer Science & Engineering	41
6	Metallurgical Engineering	3 (GRE, TOEFL, CAT)

5.1.12 Mention the policies of the university for enhancing student participation in sports and extracurricular activities through strategies / schemes such as

∗ additional academic support and academic flexibility in examinations

The University regularly organises inter class tournaments and it provides attendance to the players who are attending the programs. The practical exams and internal mid-term exams are separately conducted for the sportspersons who represent the college or University. The University also organises special cultural programmes like Spandana for every year.

∗ special dietary requirements, sports uniform and materials

- Providing healthy food and fruits for players during the coaching camps.
- Sports kits, uniform and allowances are being given to the players.
- Financial incentives are also being provided to the players who won in national/ international events.
- University constituted a sports council to monitor the events annually.

5.1.13 Does the university have an institutionalized mechanism for students' placement? What are the services provided to help students identify job opportunities, prepare themselves for interview, and develop entrepreneurship skills?

The University has established a Training & Placement cell as part of University Industry Interaction Centre. It provides necessary career guidance and training programs to the students for placements. It arranges both the on-campus and off-campus placement drives to the students. All the constituent colleges and units also have placement cell, which support placement activities. The focus is on pre-placement activity.

Further JNTUH College of Engineering, Hyderabad has MoU with Netcracker company for recruitment and training process.

Entrepreneur Development Cell (EDC) provides training on Entrepreneurship development skills and focusing is on pre-placement training

The EDC conducted Entrepreneurship Awareness Camps (EACs), on general and Technically-specific in nature, over 2 to 3-Day duration. An extended version of the EACs is the Entrepreneurship Development Programmes (EDPs) which runs for a duration of 2 to 4-weeks. The aim of both the programmes is to apprise the participants about the various entrepreneurial opportunities that are existent and the support they can derive from EDC and all the agencies/ organizations which work with the Department. Participants of the EDPs are usually counselled and a follow-up mechanism is in place to track their progress in their respective projects.

As part of the 'Train-the-Trainer' concept, EDC conducted Faculty Development Programmes (FDPs) for the benefit of the faculty of the various private engineering colleges under the purview of JNTUH and also participation is invited from all over the country. The FDPs is for a duration of 2-weeks, training to the faculty who in turn help promote the cause of entrepreneurship in the institutions where they are employed.

List of activities of Entrepreneurship Development Cell, JNTUH College of Engineering, Hyderabad for the financial year 2013-14:

S. No	Name of The Programme	Date	Number of Participants	Chief Sponsor
1.	Skill Development Program on Fashion Designing	8th March to 25th March, 2013	26	EDC, JNTUH
2.	Skill Development Program on Cosmetic and Beauty Therapy	16th July-12th August, 2013	15	EDC, JNTUH
3.	Skill Development Program on Web Designing	18th July -13th August, 2013	29	EDC, JNTUH
4.	Skill Development program on Basic Tailoring for Women	5th September-11th October, 2013	19	EDC, JNTUH
5.	One Day Entrepreneurship Awareness Drive at College of Engineering, JNTUH	09th October, 2013	1100	EDC, JNTUH and IITKGP
6.	Entrepreneurship Development Programme	10th December, 2013 – 11th February, 2014	30	EDII, under DSTNIMAT (2013-2014)
7.	Two Day Entrepreneurship Awareness Camp at Rishi Engineering College,	24th & 25th December, 2013	80	EDII, under DSTNIMAT (2013-2014)

	Nizampet			
8.	Two Day Entrepreneurship Awareness Camp at Nalla Narashima Reddy Society's Group of Institutions	2nd & 3rd January, 2014	100	EDII, under DSTNIMAT (2013-2014)
9.	Two Day Entrepreneurship Awareness Camp at Aurora's Engineering College	23rd & 24th January, 2014	160	EDII, under DSTNIMAT (2013-2014)
10.	Two Day Entrepreneurship Awareness Camp at Siddhartha College of Engineering	27th & 28th January, 2014	83	EDII, under DSTNIMAT (2013-2014)
11.	Two Day Entrepreneurship Awareness Camp at Sphoorthy Engineering College	30th Jan and 1st February, 2014	75	EDII, under DSTNIMAT (2013-2014)
12.	Two Day Entrepreneurship Awareness Camp at Talla Padmavathi College of Engineering, Warangal	17th and 18th February, 2014	100	EDII, under DSTNIMAT (2013-2014)
13.	Two Day Entrepreneurship Awareness Camp at Bomma Institute of Science & Technology, Khammam	21st and 22nd February, 2014	90	EDII under DSTNIMAT (2013-2014)
14.	Two Day Entrepreneurship Awareness Camp at Vaagdevi college of Engineering, Warangal	24th and 25th February, 2014	300	EDII under DSTNIMAT (2013-2014)

List of Activities of Entrepreneurship Development Cell, JNTUH College of Engineering, Hyderabad for the financial year 2014-15

S. No	Name of the programme	Date	No. of Partic i-pant s	Target Group	Venue	Chief Sponsor
1	Entrepreneurship Awareness Camp	3rd and 4th March,	150	Science & Engineering Students	SR Engineering College,	EDII-DSTN IMAT Project

		2014			Kazipet	
2	Women Entrepreneurship Development Programme	17.02.14 to 18.03.14	25	Science & Engineering Students	ED Cell, JNTUH Kukatpally Hyderabad	EDII-DSTN IMAT Project
3	Faculty Development Programme in Entrepreneurship	23.06.14 to 05.07.14	21	Faculties of Science & Engg. Collages	ED Cell, JNTUH Kukatpally Hyderabad	EDII-DSTN IMAT Project
4	Technology based Entrepreneurship Development Programme on Solar Power Technologies	31.07.14 to 11.09.14	36	Science & Engineering Graduates	ED Cell, JNTUH Kukatpally Hyderabad	EDII-DSTN IMAT Project
5	Entrepreneurship Awareness Camp	2.09.14 to 25.09.14	85	Science & Engineering Students	Sridevi Women's Engineering College,.	EDII-DSTN IMAT Project
6	Technology based EDP on Animations(TED P)	18.12.14 to 31.01.14	30	Science & Engineering Students	ED Cell, JNTUH Kukatpally Hyderabad	EDII under DSTNIMA T (2014-2015)
7	One day Entrepreneurship Awareness Drive	23rd December 2014	50	Science & Engineering Students	ED Cell, JNTUH Kukatpally Hyderabad	NIT, Trichy & EDC Cell, JNTUH CEH
8	Technology based EDP on Animations (TEDP)	18.12.14 to 31.01.15	30	Science & Engineering Students	ED Cell, JNTUH Kukatpally Hyderabad	EDII under DSTNIMA T (2014-2015)
9	Three Day Entrepreneurship Awareness Camp	18.03.15 to 20.03.15	80	Science & Engineering Students	Malla Reddy Engg. College, Hyderabad	EDII under DSTNIMA T (2014-2015)
10	Entrepreneurship Development Programme on Solar	31.03.15 to 30.04.15	45	Science & Engineering Students	ED Cell, JNTUH Kukatpally Hyderabad	EDII under DSTNIMA T(2014-201 5)

5.1.14 Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus during the last four years).

The University Training and Placement office coordinates with all the placement units of JNTUHCEH, JNTUHCEJ, JNTUHCEM, JNTUHCES, JNTUH-SIT, JNTUH-IST, and

JNTUH-SMS.

The exact placement details from the various units /colleges are summarized below:

S. No	Dept.	Year				Companies
		2012	2013	2014	2015	
1.	J N T U H College of Engineering, Hyderabad	404	422	465	422	Net Cracker, Oracle, Deloitte, Model N, CommVault, Zoho, Unisys, MAQ, Teradata, TCS, Wipro, FMC, Accenture, CSC, HP, Tech Mahindra, L&T, ITC, Uurmi Systems, JP Morgan, SAB MILLER, M&M, FIAT, Alliance Global Services, ACCL, Cap Gemini, LNT InfoTech, ECI Telecom, Persistent, Ford, Hyundai Mobis, Mu Sigma, BlueStar, CA Technologies, MRF, Gramener, Oracle, UHG, Akash, HCL, IBM, Medha Servo Drives, Verizon, Crypsis Tech, Cyient Ltd., Godrej, Gnana Analytics (AVISO), UHG , OSMOSYS, Idea Cellular, Merchant Navy, Oracle, Kanha Plastics, Johnson & Johnson, HP , Thinktankers, Nalsoft, Amazon, Rane Valves, Hyundai Motors, VISA, Enterprise Signal Pvt. Ltd., Infor, Life Style Projects, UHG, Zen Technologies, NPCI, ATLAS Copco., United Online,
2.	J N T U H College of Engineering, Jagityal	160	182	179		TCS, CSC, Indus Towers, Satyam Ventures, Cyient and RANE, ZS Associates, IVY Comptech, NCR Corporation ,

						Zoho Corporation
3.	J N T U H College of E n g g . , Manthani		11	8	9	Computer Science Corporation , - Progressive Digital Media, Osmosys, Genpact, Biological E Limited, Coromandel Corporation Limited
4.	J N T U H School of Information Technology	92	181	122	112	**<u>On Campus:</u>** Tata Consultancy Services (TCS), Wipro Technologies, JP Morgan, DST, Tech Mahindra, Amazon, IBM India Pvt. Ltd., CSC, Infosys, Cognizant Technologies Ltd., ZOHO Corporation, Garmener, Osmosys Asia, RKUGT, SEESTA, Semantic Space, CDAC, IdenBytes, Nedrasys, AGS, CA Technologies, Accenture, Wipro, Polaris, CapGemini, AVISO, L&T Infotech, Matrebyte, Zeesta, CIPS, Cyient(Infotech), Osmosys, Sutherland Global Services, Short Service Commission, CM-Excellence, Singareni Collieries, Krishnapatnam Port, Ivy Comptech, Uurmi Solutions, Garmener, Cash Karo, Progressive Software, Magniture, MAQ Software, BYTE Software, Securifi, Oracle, Cyient, Honeywell, Thinktankers. **<u>Off Campus:</u>** MAQ Software, Calico, Virtusa, CapGemini, Accolite, Kantar Operations, Zeta

						Interactive, Tibco Inc, Vasudyka S/W Solutions, Amazon, Cognizant, TCS, GreyEther, Tara Mobile Technologies, Semantic Space.
5.	J N T U H Institute of Science & Technology	50	60	43	44	Neuland laboratories ltd, Hyderabad, Sai Life Sciences, Banjara Hills, Hyderabad, Telangana State, GVK bio`, Accenture, Aizant Pharma company, Neuheit Pharma Technologies. Pvt. Ltd, GVK Pharma,

5.1.15 Does the university have a registered Alumni Association? If yes, what are its activities and contributions to the development of the university?

Yes, the University has a registered Alumni Association.

The different college/unit of the University has individual Alumni Association

- To provide facility for the Alumni to interact with students, staff, faculty and with one other
- To participate in the activities which contribute to the improvement of the status of the University
- To provide technical help in solving real life problems based on their experience
- To institute prizes for merit
- To provide financial aid to the poor and the deserving

5.1.16 Does the university have a student grievance redressal cell? Give details of the nature of grievances reported. How were they redressed?

Yes, the University has a student grievance redressal cell. There is a student grievance redressal cell in the University examination branch to resolve examination related issues. In every class, the class representative coordinates with the faculty and students. If there is any issue, the HoD and Principal resolve it.

5.1.17 Does the university promote a gender-sensitive environment by (i) conducting gender related programmes (ii) establishing cell and mechanism to deal with issues related to sexual harassment? Give details

A compulsory course on gender sensitization has been introduced in B.Tech and B.Pharmacy II year, II Semester level from the academic year 2015-16. A workshop on gender sensitization has been conducted in two different spells for the teachers of all the constituent and affiliated colleges of JNTUH.

5.1.1 Is there an anti-ragging committee? How many instances, if any, have been reported

8 during the last four years and what action has been taken in these cases?

Anti-ragging committees are formed every year and the faculty interacts with freshers and senior classes representatives. Further the University provides a toll free ragging helpline phone number 18004251288 and it is available at JNTUH website.

An incident took place in CMR institute of technical campus on 19.01.2015. The college submitted a report and the police filed a case against the college and investigation is going on.

5.1.19 How does the university elicit the cooperation of all its stakeholders to ensure the overall development of its students?

Yes, the University is having an MoU with NASSCOM in collaboration with Telangana Academy for Skills and Knowledge (TASK) for job roles, such as, Associate Analyst and Security Analyst. The study content is an additional elective in III Year II Semester, IV year I Semester and II Semester in B.Tech. Computer Science & Engineering and Information Technology.

The interested students who have taken the above subjects as electives, have to appear for the online exam to be conducted by NAASCOM separately after IV Year II Semester for the purpose of certification issued by NASSCOM. Based on the certification, a group of companies exempts the students from online examinations. Apart from the above, the University Industrial Interaction Cell coordinates with the Multi National Companies for placements.

5.1.20 How does the university ensure the participation of women students in intra- and inter-institutional sports competitions and cultural activities? Provide details of sports and cultural activities where such efforts were made.

The University and the colleges depute about 30 women student teams in inter University tournaments and also in inter collegiate and intramural tournaments

5.2 Student Progression

5.2.1 What is the student strength of the university for the current academic year? Analyse the Programme-wise data and provide the trends for the last four years.

Student Progression													%
	CEH						IST						
	Civil	EEE	Mech.	ECE	CSE	Met.	CBT	CCST	CEN	CNST	CPS	CSIT	
UG to PG	45	25	30	30	30	15	0	-	-	-	-	-	29.17
PG to M.Phil	-	-	-	-	-	-	-	-	-	10	-	-	

PG to Ph.D	**10**	**5**	**10**	**10**	**10**	**5**	**30**	**5**	**30**	**30**	**5**	**15**	**13.75**
Ph.D to post doctoral	**-**	**1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1.00**
Campus selection	**80**	**80**	**100**	**100**	**100**	**75**	**10**	**75**	**0**	**10**	**50**	**20**	**58.33**
other than campus	**10**	**20**	**-**	**-**	**-**	**25**	**60**	**25**	**60**	**60**	**50**	**70**	**31.67**

5.2.2 What is the programme-wise completion rate during the time span stipulated by the university?

The details of programme-wise completion rates are as follows:

Course	2012-13 Academic Year			2013-14 Academic Year			2014-15 Academic Year			2015-16 Academic Year		
	Admitted	Passed	%	Admitted	Passed	%	Admitted	Passed	%	Admitted	Passed	%
B. Tech.	83602	73411	87.81	82804	72230	87.23	90806	76611	84.37	79844	61973	77.62
B. Pharmacy	5765	5011	86.92	5432	4382	80.67	4421	3401	76.93	5526	3612	65.36
M. Tech.	6724	5306	78.91	8227	6612	80.37	14955	11776	78.74	21615	12848	59.44
M. Pharmacy	886	837	94.47	2494	2288	91.74	4044	3604	89.12	4250	2426	57.08
MBA	14481	12526	86.50	13660	10822	79.22	14834	9968	67.20	16851	4093	24.29
MCA	3218	2875	89.34	2162	1951	90.24	862	783	90.84	515	10	1.94

5.2.3 What is the number and percentage of students who appeared/ qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central / State services, Defence, Civil Services, etc.?

Department	Number
Dept. of Civil Engineering	24
Dept. of EEE	36
Dept. of Mech. Engineering	20
Dept. of Elect. & Comn. Engineering	25

Dept. of Computer Science and Engineering	8
Dept. of Metallurgical Engineering	14

5.2.4 Provide category-wise details regarding the number of Ph.D./ D.Litt./D.Sc. theses submitted/ accepted/ resubmitted/ rejected in the last four years.

Year	Submitted	Resubmitted	Accepted	Rejected
2012-13	276	101	377	0
2013-14	333	173	506	0
2014-15	309	266	575	0
2015-16 up to Jan. 28, 2016	202	128	330	0

5.3 Student Participation and Activities

5.3.1 List the range of sports, cultural and extracurricular activities available to students. Furnish the programme calendar and provide details of students' participation.

The University has all the sports facilities like 1) Yoga Hall 2) One Cricket Ground 3) Track 4) Gym 5) T.T Halls 6) Volley Ball courts 7) Foot Ball Ground 8) Badminton Courts in Hostels 9)Throw Ball Court 10) Parallel Bars 11) Horizontal Bars

The following students of JNTUH participated in various national level inter University tournaments during the academic year 2013-14.

S. No	Name of the Player	Class & Branch	Game/ Event	Hosting University
1	U. Vamshi KrishNA	B.Tech - (III/IV) ECE	Kho-Kho	Utkal University (Orissa)
2	G. Sneha	B.Tech - (I/IV) CSE	Taekwondo	Sathyabhama University (Chennai)
3	K .Divya Chowdari	M.Tech - Civil	Taekwondo	Sathyabhama University (Chennai)
4	Amani	B.Tech - (I/IV) CSE	Taekwondo	Sathyabhama University (Chennai)
5	Vishal Reddy	B.Tech - (IV/IV) ECE	Badminton	KIIT, Bhubaneswar
6	S. Siddartha	B.Tech - (II/IV) CSE	Tennis	KIIT, Bhubaneswar
7	MD. Basheeruddin	B.Tech - (III/IV) ECE	Basketball	KIIT, Bhubaneswar
8	G. Roopa	B.Tech - (V/V) MECH	Volley Ball	KIIT, Bhubaneswar
9	G. Sneha	B.Tech - (II/IV) CSE	Yoga	Kurukshetra University

10	G. Roopa	B.Tech - (V/V) MECH	Yoga	Kurukshetra University
11	Amani	B.Tech - (I/IV) CSE	Yoga	Kurukshetra University
12	G. Roopa	B.Tech - (V/V) MECH	Kabaddi	Orissa
13	G. Akhil	M.Tech -	Hand Ball	Kakatiya University
14	G. Sneha	B.Tech - (II/IV) CSE	Soft Ball	Nagarjuna University (A.P)
15	G. Roopa	B.Tech - (V/V) MECH	Soft Ball	Nagarjuna University (A.P)
16	T. Gauthami	B.Tech - (IV/IV) CSE	Archery	Kurukshetra University
17	Y. Harani	M.Tech	Athletics	Punjab University
18	P.V. Ajay Kumar	M.Tech	Fencing	Punjab University
19	N. Sriram	M.Tech	Fencing	Punjab University
20	G. Roopa	B.Tech - (V/V) MECH	Hand Ball	Kakatiya University
21	P.V. Ajay Kumar	M.Tech	Hand Ball	Kakatiya University
22	Kishore Kumar	M.Tech	Hand Ball	Kakatiya University
23	Sharzil Mohammed	M.Tech	Weight Lifting	Anna University (Chennai)

The following students of JNTUH participated in various national level inter University tournaments during the academic year 2014-15.

S. No.	**Name of the Player**	**Class & Branch**	**Game/ Event**	**Hosting University**
1	M. Keerity	B.Tech (I/IV) MECH	Swimming	Punjab University, Chandigarh
2	E. Lalith Aditya	B.Tech (I/IV) MECH	Swimming	Punjab University, Chandigarh
3	CH. Soma Shekar	B.Tech (III/IV) EEE	Volley Ball	Andhra University (A.P)
4	V. Pothan Kumar Reddy	M.Tech (I/IV) MECH	Volley Ball	Andhra University (A.P)
5	K. Revanth Roy	B.Tech (III/IV) EEE	Volley Ball	Andhra University (A.P)
6	R. Dharani	B.Tech (III/IV) CSE	Basket Ball	SRM University, Chennai
7	G. Sneha	B.Tech (III/IV) CSE	Basket Ball	SRM University Chennai
8	Pavuluri Harry Ben Alex	B.Tech (II/IV) CSE	Wrestling	University Of Mysore, Mysore

9	D. Prasatya Vidwath	B.Tech (II/IV) MECH	Judo	KIIT University Bhubaneswar
10	A. Jaya Lakshmi	B.Tech (III/IV) CIVIL	Cricket	Savitha University Chennai
11	G. Haritha	B.Tech (II/IV) MET	Cricket	Savitha University Chennai
12	G. Sneha	B.Tech (III/IV) CSE	Cricket	Savitha University Chennai
13	M. Nandini	B.Tech (III/IV) CIVIL	Cricket	Savitha University Chennai
14	J. Priyanka	B.Tech (II/V)+MBA	B a l l Badminton	SRM University, Chennai
15	P. Chander	B.Tech (IV/IV) MET	Kho-Kho	Anna Malai, University (T.N)
16	CH. Somashekar	B.Tech (III/V)EEE	Volley Ball	Andhra University, AP
17	V.Pothan Kumar Reddy	M.Tech (II/II) MECH	Volley Ball	Andhra University, AP
18	K. Revanth Roy	M.Tech (II/V) MECH	Volley Ball	Andhra University, AP
19	G.Sandeep	B.Tech (IV/IV) MECH	B a l l Badminton	Mangalore University
20	B. Girivarshini	B.Tech (II/V) CSE	Volley Ball	Krishna University
21	Srujana	B.Tech (I/V)chemical	Volley Ball	Krishna University

The following (21) students from JNTUH CEH have participated in various national level inter University tournament from June 2015 -2016 academic year.

Sl.No.	**Name of the Player**	**Class & Branch**	**Game/ Event**	**Hosting University**
1	M. Keerity	B.Tech (I/IV) MECH	Swimming	Punjab University Chandigarh
2	E. Lalith Aditya	B.Tech (I/IV) MECH	Swimming	Punjab University Chandigarh
3	CH. Soma Shekar	B.Tech (III/IV) EEE	Volley Ball	Andhra University (A.P)
4	V. Pothan Kumar Reddy	M.Tech (I/IV) MECH	Volley Ball	Andhra University (A.P)
5	K. Revanth Roy	B.Tech (III/IV) EEE	Volley Ball	Andhra University (A.P)
6	R. Dharani	B.Tech (III/IV) CSE	Basket Ball	SRM University Chennai
7	G. Sneha	B.Tech	Basket Ball	SRM University

		(III/IV) CSE		Chennai
8	Pavuluri Harry Ben Alex	B.Tech (II/IV) CSE	Wrestling	University of Mysore, Mysore
9	D. Prasatya Vidwath	B.Tech (II/IV) MECH	Judo	KIIT University Bhubaneswar
10	A. Jaya Lakshmi	B.Tech (III/IV) CIVIL	Cricket	Savitha University Chennai
11	G. Haritha	B.Tech (II/IV) MET	Cricket	Savitha University Chennai
12	G. Sneha	B.Tech (III/IV) CSE	Cricket	Savitha University Chennai
13	M. Nandini	B.Tech (III/IV) CIVIL	Cricket	Savitha University Chennai
14	J. Priyanka	B.Tech (II/V)+MBA	Ball Badminton	SRM University, Chennai
15	P. Chander	B.Tech (IV/IV) MET	Kho-Kho	Anna Malai University (T.N)
16	CH. Somashekar	B.Tech (III/V)EEE	Volley Ball	Andhra University, AP
17	V. Pothan Kumar Reddy	M.Tech (II/II) MECH	Volley Ball	Andhra University, AP
18	K. Revanth Roy	M.Tech (II/V) MECH	Volley Ball	Andhra University, AP
19	G. Sandeep	B.Tech (IV/IV) MECH	Ball Badminton	Mangalore University
20	B. Girivarshini	B.Tech (II/V) CSE	Volley Ball	Krishna University
21	Srujana	B.Tech (I/V)chemical	Volley Ball	Krishna University

5.3.2 Give details of the achievements of students in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. during the last four years

- All the Departments are conducting annual events, such as Spandana and Spoorthi etc.,
- Conducting At-home functions.
- Most of our college students represented the University, and a few students represented national and international tournaments.
- Received gold medal in 3000 meters Steeple Chase in all India inter-University tournaments.
- Received Bronze Medal and Silver Medal in Taekwondo and Judo at all India inter-University tournament.
- Three students represented India in the world University Badminton Tournament

- Two students represented India in Badminton Tournament at senior level
- Some students represented Hyderabad Ranji Cricket Team

5.3.3 Does the university conduct special drives / campaigns for students to promote heritage consciousness?

Yes, the University conducts special drives to promote heritage consciousness. The University periodically conducts Yoga classes.

5.3.4 How does the university involve and encourage its students to publish materials like catalogues, wall magazines, college magazine, and other material? List the major publications/ materials brought out by the students during the last four academic sessions.

i) College magazine 'Naipunya' has been brought out by college editorial board with articles from the staff and students.

ii) Students released the Souvenirs during technical/management fests by all the departments

5.3.5 Does the university have a Student Council or any other similar body? Give details on its constitution, activities and funding.

Yes, each department has Students' Technical Association.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them. Also provide details of their activities.

The University involves the students in hostel committees, placement activities and anti ragging committees. The students also have IEEE, ISTE, SAE, CSI, ISHMT, ACM, IIM, ASME, and ISHRAE chapters.

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 State the vision and the mission of the university.

VISION

- Jawaharlal Nehru Technological University Hyderabad (JNTUH), was established with a vision to provide advanced learning and knowledge in Engineering & Technology, Physical and Social Sciences through teaching, research, experimentation and practical training and/or by such other means as the University may deem necessary.

MISSION:

- To provide the form of education that allows students to spend periods of intramural work so that upon graduation not only do they possess a range of academic learning, but also learn and acquire knowledge for the benefit of the state in particular and the country in general.

ROADMAP

- Ensuring autonomy and objectivity;
- Expansion and inclusion;
- Relevance and excellence;
- Imparting and creating knowledge by constantly engaging young minds;
- Proactively interacting with industry and society;
- Constant updating of knowledge for faculty, non-teaching and administrative staff, and fostering global academic and research alliances.

6.1.2 Does the mission statement define the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, the institution's tradition and value orientations, its vision for the future, etc.?

Yes.

- Jawaharlal Nehru Technological University was established on 2nd October, 1972. In 2008 the University was divided into four Universities as JNTU Hyderabad, JNTU Kakinada, JNTU Anathapuram and JNAFAU Hyderabad respectively for administrative convenience.

- It has been providing the knowledge in Engineering and Technology and applied sciences to the students. Upon graduation students not only possess a range of academic learning, but also the relevance of learning to the affairs of the state in general and the country at large.

- It is multi campus and affiliating University.
- On the basis of its vision and mission, infrastructure facilities, innovations and best practices, it is in the forefront of technological universities of India.

6.1.3 How is the leadership involved

*** In ensuring the organization's management system development, implementation and continuous improvement?**

The organization chart for the various committees are presented below:

Executive Council is the highest body for making policy decisions by the University. The Council have the following powers and functions such as:-

i. to approve the budget estimates of the University as per the recommendations of Finance Committee or presented by the Vice- Chancellor;

ii. to create posts and appoint teachers and other employees of the University in the manner prescribed;

iii. to acquire, hold or dispose of properties or accept gifts and donations, for and on behalf of the University;

iv. to arrange for the investment and withdrawal of the moneys belonging to the University;

v. to direct the form and use of the common seal of the University;

vi. to determine and regulate the policies relating to all the affairs of the University in accordance with the provisions of this Act and the statutes, ordinances and regulations made there under;

vii. to appoint such committees, either standing or temporary, as may be considered necessary for any specific or general purpose for fulfilment of the objects of the University and for ensuring the proper administration of the affairs or academic activities of the University;

The Finance Committee is a sub-Committee of the Executive Council. The committee involves as detailed below:

a. to examine the annual accounts of the University;

b. to examine the annual budget estimates;

c. to review the financial position of the University from time to time;

d. to make recommendations to the Executive Council on matters relating to the finances of the University and all proposals involving expenditure for which no provision has been made in the budget, or which involves expenditure in excess of the amount provided in the Budget.

University Committee for Perspective Planning (UCPP):

As and when the proposals received from the principals for purchase of equipments and etc. or financial making policies to be discussed in the UCPP and below the financial commitment of Rs. 5.00 lakhs will be scrutinized.

Planning and Monitoring Board: The board is the principal planning and reviewing body. Presently the policies and developmental programmes of teaching and research in the University are reviewing by the UCPP

The Academic Senate shall have powers of approving all courses of study proposed by the Board of Studies and of determining their curriculum and have general control of teaching, research and examinations within the University and shall be responsible for the maintenance of standards thereof by the colleges.
The Academic Senate have power to make regulations consistent with this Act and the statutes relating to all academic matters and to amend and repeal such regulations.

The College Academic Committee is have the following powers

i. to organise and co-ordinate teaching and research in the departments of the college subject to the general control of the Academic Senate;

ii. to recommend to the [Board of Studies] the courses of study for the different examinations after considering the recommendations of the departments of teaching

iii. to recommend to the Board of Studies programmes of curriculum development

iv. to recommend to the [Board of Studies] the institution of new courses, and constitution or reconstitution or departments of teaching;

Board of Studies :

The University constituting Board of Studies for each department with the members from IITs, NITs and other reputed Universities. The BOS will prepare the course structure, syllabi based on the requirement of the society and industry

Selection Committee

The Selection Committee deals with the appointment of Professors, Associate Professors as per the norms of the UGC/AICTE/Government/Act of the University. The recommendations of the Committee will be placed in to the Executive Council of the University for approval.

Building Committee:

The Building Committee will scrutinize, finalise and approve plans, estimations, deviations, work slips and designs of the building/projects of the University and also scrutinize and recommends the award of tenders.

The constitution of members of the above bodies are listed below:

i. Executive Council:

The Executive Council shall consists of the following officers;

Class -I Ex-Officio Members:

a) The Vice-Chancellor,

b) The Rector,

c) The Secretary to the Government in the Education Department dealing with Technical Education or an officer in the Education Department dealing with Technical Education nominated by the Government;

d) The Secretary to the Government in the Finance & Planning (Finance wing) Department or an officer in the Finance & Planning (Finance wing) Department nominated by the Government;

e) The Director of Technical Education

Class - II - Other Members

a) One Senior Professor of the University colleges to be nominated by the Government;

b) One Principal of the University colleges to be nominated by the Government;

c) One Principal of the affiliated colleges to be nominated by the Government;

d) One teacher from the teachers of the University colleges to be nominated by the Government;

e) One teacher from the teachers of the affiliated colleges if any to be nominated by the Government;

f) Four eminent persons representing Industry, Research and Development, Engineering and Technology, Architecture, Fine Arts, Physical and Social Sciences and public life etc., to be nominated by the Government.

(2) The Vice-Chancellor shall be the Chairperson of the Council and shall preside over all its meetings.

(3) The Registrar shall act as the Secretary to the Council.

ii **Academic Senate:**

The Academic Senate shall consist of the following persons, namely,

Ex-Officio members of all members of the Executive Council; All Principals and Directors; The Chairman of the Telangana State Council of Higher Education or in his absence the Vice-Chairman thereof; All members the University Planning and Monitoring Board.

iii. **Finance Committee:**

A Finance Committee shall be a sub-committee of the Executive Committee with the following members:

a. Vice-Chancellor (Chairperson);

b. Two members of the Executive Council nominated by it;

c. One member of the Executive Council to represent Banking or Accounting.

The Finance Officer shall be the Secretary of the Finance Committee.

iv. **Planning and Monitoring Board:**

There shall be a planning and Monitoring Board consisting of

a) The Vice-Chancellor (Chairman);

b) Four from among the Principals of University Colleges, Deans/Chairmen of Faculties and Directors nominated by the Vice-Chancellor;

c) Two educationists nominated by the Government;

d) Two nominees of the University Grants Commission.

The Board shall be the principal planning and reviewing body and it shall also arrange for periodical monitoring of the developmental programmes and of teaching and research in the University.

v. **Selection Committee:**

The Selection Committee should have the following composition:

a) The Vice-Chancellor to be the Chairperson of the Selection Committee.

b) An academician who is the nominee of the Visitor/Chancellor, wherever applicable.

c) Three experts in the concerned subject/field out of the panel of names recommended by the Vice-Chancellor and approved by the relevant statutory body of the University concerned, at least one of whom to be drawn from the panel of subject experts developed by UGC and hosted in its web-site

d) Dean of the faculty, wherever applicable.

e) Head/Chairperson of the Department/School.

f) An academician representing SC/ST/OBC/ Minority/Women/ Differently-abled categories, if any of candidates representing these categories is the applicant, to be nominated by the Vice-Chancellor, if any of the above members of the selection committee do not belong to that category.

At least four members, including two outside subject experts, shall constitute the quorum.

vi. **The College Academic Committee:**

The Academic Committee of each college shall consist of

a. The principal of the college, who shall be the chairman of the committee

b. All professors of the college

c. One expert from industry for each faculty in the college, to be nominated by the Principal in consultation with the Professor of the particular faculty

d. Two representatives of the students to be nominated by the Principal

vii. **Board of Studies :**

A separate Board of Studies has been constituted for each Department/Centre. The constitution and functions of the Board of Studies shall be prescribed by ordinances. There shall be representation for students on the Board of Studies.

* **In interacting with its stakeholders?**

For organizing seminars, symposiums and workshops on different topics, the University invites eminent speakers in the respective specializations and experts from industry. interacting with the participants and their deliberations takes place. Alumni meetings conducted from time to time.

The faculty interacted with the following speakers during tutorials / workshops:

- Dr. A. Chockalingam, Professor of ECE, IISc Bangalore, handled a tutorial session on Large MIMO Technology on 23rd Aug., 2014 (FN).
- Dr. K.V.S. Hari, Professor of ECE, IISc, Bangalore., handled tutorial session on Spatial Modulation, on 23rd Aug 2014 (AN)
- Dr. V. U. Reddy, Honorary Professor, IIT, Hyderabad, delivered an expert lecture on Signal processing on 24th Aug., 2014.
- Dr. Kaluri V. Ranga Rao, Former Emeritus Professor of ECE Department delivered a lecture on detecting methods Direction of Arrival on 24th Aug., 2014.
- Dr. B. Yegnarayana, Microsoft Chair, IIIT, Hyderabad, delivered an expert lecture on speech signal processing on 25th Aug., 2014

- A lecture in the area of Nano Electronics was given by Dr. Mohan Sundaran Rajan an eminent person in the field of Nano technology and adviser to Government of India on Dec. 16th 2014. More than 88 Students of ECE, EEE, Mechanical Engg. of JNTUH CEH and Centre for Nano-Technology students, research scholars and staff attended the lecture.
- A lecture in the area of "EMI/EMC and Antennas" was given by Dr. A. Chakrabarty, Professor, IIT Kharagpur on Jan. 28th 2015 for the benefit of research scholars, PG and UG students of ECE. A total of 55 students and staff attended the lecture.
- A lecture by Prof. P.J. Narayanan, Director, IIIT, Hyderabad was delivered in November, 2015 on the topic, "Technology and the present times: Some thoughts" as part of Distinguished Lecture Series.

*** in reinforcing a culture of excellence? .**

- By conducting annual technical fest in all the departments and students are encouraged to participate in technical fests conducted by other institutions
- Providing financial support to students and faculty for the presentation of research papers at national and international conferences
- The University provides leadership to its affiliated colleges in promoting quality and innovativeness in technical education

*** in identifying organizational needs and striving to fulfil them?**

The needs of the University are identified by continuous interaction with all the stakeholders. The Vice-Chancellor, Academic Senate, Executive Council, Finance Committee, the University Committee for Perspective Planning (UCPP), faculty and Boards of Studies meets regularly to assess the University requirements to fulfil the capacity and capability building needs and also social needs.

Through the Directorate of University Foreign relations the emerging global needs are identified and being met through MoUs with national and international organizations. In the MoUs the focus is on faculty exchange and student exchange, educating foreign students for research and project works.

6.1.4 Were any of the top leadership positions of the university vacant for more than a year? If so, state the reasons.

The top leadership positions of the University were not vacant for more than a year.

6.1.5 Does the university ensure that all positions in its various statutory bodies are filled and meetings conducted regularly?

Yes, all positions in its various statutory bodies are filled. The Statutory Bodies of the University like Executive Council, Standing Committee of the Academic Senate (Academic Senate), Finance Committee, and Boards of Studies meet regularly and implement the decisions taken.

6.1.6 Does the university promote a culture of participative management? If yes, indicate the levels of participative management.

Yes, the University promotes a culture of participative management. The faculty members are made part of the decision making process along with student representatives/ Alumni.

The **Executive Council** represented by the Vice-Chancellor, Rector, and the following members are nominated by the State Government;

i. The Secretary to the State Government in the Education Department, or an officer in the Education Department dealing with the Technical Education

ii. The Secretary to the Government in the Finance & Planning (Finance wing) Department or an officer in the Finance & Planning (Finance wing) Department

iii. A Senior Professor of the University colleges, Principal of the University colleges, Principal of the affiliated colleges, faculty member from the faculty of the University colleges, Faculty member from the faculty of the affiliated colleges if any, four eminent personalities representing industry, research and development, Engineering and Technology, Architecture, Fine Arts, Physical and Social Sciences and public life.

iv. The Vice-Chancellor shall be the Chairman of the Council and shall preside over all its meetings. The Registrar shall act as the Secretary to the Council.

The **Academic Senate** which consists of ex-officio members and all members of the Executive Council; All Principals and Directors; The Chairman of the Telangana State Council of Higher Education or in his absence the Vice-Chairman thereof; All members the University Planning and Monitoring Board.

Finance Committee which shall be a sub-committee of the Executive Committee with Vice-Chancellor (Chairman), two members of the executive council nominated by it, one member of the Executive Council to represent Banking or Accounting as members. The Finance Officer shall be the Secretary of the Finance Committee.

Planning and Monitoring Board consists of the Vice-Chancellor (Chairman); four from the Principals of University Colleges; Deans/Chairman of Faculties and Directors nominated by the Vice-Chancellor; two educationists nominated by the Government; two nominees of the University Grants Commission.

The Board shall be the principal planning and reviewing body and it shall also arrange for periodical monitoring of the developmental programmes and of teaching and research in the University.

The College Academic Committee is represented by the principal of the college, who shall be the chairperson of the committee, all professors of the college, one expert from industry for each faculty in the college to be nominated by the Principal in consultation with the Professor of the particular faculty, two representatives of the students to be nominated by the Principal. Faculty members and Boards of Studies prepare the syllabi. The constitution and functions of the Board of Studies shall be prescribed by ordinances.

6.1.7 Give details of the academic and administrative leadership provided by the university to its affiliated colleges and the support and encouragement given to

them to become autonomous.

Yes, the University provides academic, administrative leadership, support and encouragement to affiliated colleges to apply for NAAC/NBA and UGC to become autonomous. The Director Academic and Planning, Director Academic and Audit Cell, Director of Evaluation help the colleges in fulfilling the requirements to get autonomous status. Boards of Studies help in preparing the syllabi. The University representative is available in all the affiliated colleges as a member of the Governing Body/Board of Governors/BoS to provide leadership.

6.1.8 Have any provisions been incorporated / introduced in the university Act and Statutes to provide for conferment of degrees by autonomous colleges?

No provisions been incorporated/ introduced in the University Act. The autonomous colleges can prepare their own syllabus, conduct the examinations and process the results. However, the degrees are conferred by the University.

6.1.9 How does the university groom leadership at various levels? Give details.

The University encourages the faculty to take up administrative and academic positions like Directors/Principal/ Vice-Principal/Head of the Department / BoS Chairperson to inculcate leadership qualities. The young faculty are motivated by providing an opportunity to take up assignments like deputy warden of hostels, coordinators, additional controller of examinations, etc.,

6.1.10 Has the university evolved a knowledge management strategy? If yes, give details

As a part of knowledge management strategy the University has initiated "e-learning solutions and two-way HD delivery mechanism for teachers and students (e-LSDM)" as e-learning resource and is being implemented as a part of the University's vision of achieving academic excellence. The e-LSDM initiative is an ambitious and first of its kind initiative undertaken by this technological University in India aimed to address the challenges faced by its affiliated engineering colleges in their teaching and learning efforts.

Also on-line classes are being conducted for interested faculty/students of JNTUH affiliated colleges by identifying eminent professors from different disciplines in a scheduled period of time. By this the affiliated colleges can receive and provide the lectures to their students to have better understanding of the subject.

6.1.11 How the following values are reflected the functioning of the university?

*** Contributing to national development**

The University has a large affiliating engineering/ technology institutes of higher learning providing more competent human resources to the national development. The alumni of the University have become entrepreneurs and run enterprises. The University has received funded projects from UGC, AICTE, DST, DRDO, MHRD etc., The University involved all the sections of the society in its activities. The University is also leading in sports and cultural activities. The faculty is also contributing cutting edge research in engineering/ technology, applied sciences, biotechnology, and pharmacy towards national

development.

***Fostering global competencies among students**

With sweeping economic reforms it is required to promote global competition in the country. In this regard, the University has taken all measures to foster competitiveness among the students. The University also started twinning programmes with universities abroad, thereby ensuring the internationally acceptable standards in higher education. The representatives from industries and R&D establishments are invited for the boards of studies meetings to help the University design the curricula acceptable globally. The University offers admissions to foreign students and integrated programmes through MoU with foreign universities for Indian students to promote the global competences among the students. The University evaluation system is accepted all over the world.

***Inculcating a sound value system among students**

The University inculcates a sound value system among the students by involving them in NCC, NSS, Sports, Swachh Bharath, tree plantation, blood donation camp for public and other social activities. The University also conducts courses on personality development and art-of -living to imbibe positive attitude in the students. The University included in the curriculum, subjects like gender sensitization, professional ethics and human values, environmental studies, disaster managements, quality management, intellectual property rights to develop the students.

***promoting use of technology**

The Information and Communication Technologies (ICT) oriented teaching is adopted in all the departments and units of the University. In the University e-class rooms are available in every college and unit. An Internet facility is provided in each department and units of the University. Every department is provided with LCD projectors for class room teaching. The University library provides good e-resource and on line facility to access from their departments/units.

The University is developing engineering e-Content (i.e., content for teaching and learning and engineering e-LABs) for five engineering streams i.e., Computer Science Engineering, Information Technology (CSE/IT), Mechanical Engineering (ME), Electrical & Electronics Engineering (EEE), and Electronic & Communication Engineering (ECE). This content is useful for the both faculty and students using separately developed e-content modules.

The University also established central e-studio at JNTUH to deliver video lectures by the subject/industry experts for improving their levels of understanding in subjects and employability skills. This is the additional facility created apart from existing A-View software and web based MOOCS.

On-line classes are being conducted for interested faculty/students of JNTUH affiliated colleges by identifying eminent professors from different disciplines in a scheduled period of time. By this the affiliated colleges can receive and provide the lectures to their students to have better understanding of the subject.

***Quest for excellence**

The University has a strong emphasis on providing excellence in teaching and learning, understanding and research activity. The University has been developing skills and values among the students. The faculty are encouraged with funding agencies like DST, AICTE, UGC, etc., for developing new and progressive concepts.

6.2 Strategy Development and Deployment

6.2.1 Does the university have a perspective plan for development? If yes, what aspects are considered in the development of policies and strategies?

Yes, the University has a perspective plan for its development. The perspective plan for development includes

- Implementing the CBCS and strengthening the continuous assessment
- Introducing multi-disciplinary courses and undertaking new and industry need research work
- Introducing the credit accumulation and credit transfer system
- Increasing the global visibility of the University through MoUs and offering admissions to international students
- Increasing the placements to 100% by enhancing the domain knowledge and soft skills of the students
- Transforming the University into a world class University through best practices.
- Encouraging e-learning and creation of hot-spots
- Enhancing the knowledge of the students through guidance, training, and support services

*** Teaching and learning**

In the University, the planning of teaching activities is carried out at department level as per syllabus and regulations are approved by the Boards of Studies and Academic Senate. The time table for the theory and practicals is prepared by the Head of the Department at least one week before the commencement of class work in consultation with the faculty and it is informed to the students. The faculty are encouraged to adopt ICT and interactive methods of teaching. The University has initiated "e-learning solutions and two-way HD delivery mechanism for teachers and students (e-LSDM)" as e-learning resource. The University depute faculty for Quality Improvement Programme (QIP) and training for faculty development.

*** Research and development**

At the University, the Director, Research and Development, monitors the research programmes of the University. At the college level, the research review committee in each department reviews and monitors the research activities in the department. The University encourages the faculty members to identify the thrust areas of research and prepare the project proposals for seeking financial support from funding agencies. The University also encourages all departments to organise workshops, training programmes, seminars and conferences. The University supports the faculty and research scholars to

participate in workshops, seminars and conferences.

Every year, the University gives the advertisement for admissions into full time and part-time Ph.D programmes to encourage the faculty and industrial personal to involve in the research activities and encourages the research scholars by way of scholarships. An amount of Rs. 50.00 lakhs has been allocated to 25 research scholars who are admitted under full time Ph.D Programmes from the academic year 2016-17. The latest techniques are implemented to ensure quality of research and development.

*** Community engagement**

Students participate in the community development programs like Swachh Bharath, Blood donation, tree plantation, etc.,

*** Human resource planning and development**

The recruitment and selection process of human resource is strictly based on the State Government/ UGC/AICTE rules and regulations. The faculty members are recruited in three different categories such as Professor, Associate Professor and Assistant Professor. The non-teaching recruitment is purely based on the rules and regulations of State Government. The University provides training periodically to non-teaching staff to improve their technical skills.

The University encourages the faculty to take training by participation in orientation, faculty development and refresher programmes. The University also provides opportunity to develop skills in teaching and learning by organising the workshops, seminars, conferences and interacting with industries and R&D organisations.

*** Industry interaction**

The University has established University Industry Interaction Cell headed by a Director to cater to the needs of the industry to strengthen the University-industry interaction. The Director interacts with the Chairpersons of the Boards of Studies to develop the course contents and they are encouraged to have collaboration with industry through consultancy and research projects in thrust areas. The Director also provides necessary training programmes to the students to develop their communication and soft skills.

The University has also entered into several MoUs with industries for research and development. The experts in thrust areas are invited from the industries to deliver expert lectures at various departments/units of the University to interact with students and faculty. Through institute and industry interaction, students are able to get internships.

*** Internationalisation**

The University has entered into MoU programs with international organizations in the foreign countries to exchange the faculty and students. The faculty from international institutes/organisations are invited to partcipate in GIAN scheme.

The University has been updating the curricula in every two/ three years by collecting feedback and reviews from the subject experts of international repute to meet the global standards. The University has MoUs with foreign universities to organise twinning and dual degree programmes. The University designs programmes for foreign students and to

provide support to foreign students, University has appointed a Director of University Foreign Relations (DUFR). The University has hostel/family accommodation for foreign students. The University encourages the faculty to organise international conferences, workshops, seminars, etc., in the colleges/units by inviting eminent faculty/researchers from abroad to have interaction with the students and faculty. The University also encourages the faculty to participate in the academic programmes organised outside India.

6.2.2 Describe the university's internal organizational structure and decision making processes and their effectiveness.

The internal organizational structure of the University is as follows:

(i) Executive Council

(ii) Finance Committee

(ii) (iii) Academic Senate

(iii) (iv) Standing Committee of the Academic Senate

(iv) Standing Committee of the Academic Audit Cell

(v) Appellate Committee

(vi) Building Committee

(vii) Boards of Studies

(viii) College Academic Committee

The Committees are mentioned above from Sl. No. (i) to (vi) headed by the Vice-Chancellor. Executive council shall be the executive authority of the University and the remaining committees shall supervise the policies to enhance the quality of education, financial and other related areas.

Academic Senate:

The Academic Senate shall have powers of approving all courses of study as may be proposed by the Board of Studies and of determining their curriculum and have general control of teaching, research and examinations within the University and shall be responsible for the maintenance of standards thereof by the colleges.

The Academic Senate shall have power to make regulations consistent with this Act and the statutes relating to all academic matters and to amend and repeal such regulations.

Standing Committee of the Academic Senate:

After division of JNTU, the constitution of the Academic Senate has to be received from the Government of Telangana. In the meanwhile the Executive Council constituted a Standing Committee of the Academic Senate in place of Academic Senate. The resolutions of the Standing Committee of the Academic Senate will be placed in the Executive Council.

Standing Committee of the Academic Audit Cell:

As per the directions of the Executive Council, the Standing Committee of the Academic Audit Cell is constituted. The Committee looks after the affiliation matters of the affiliated colleges and resolves issues if any from the Managements/Principals of the affiliated colleges.

Appellate Committee

Appellate Committee shall scrutinize the appeals received from the institutions along with supporting documents. The committee may seek further clarification, if necessary, by inviting the Principals of the college and / or recommend for a re-inspection of the college by an FFCA. After scrutiny of the documents and re-inspection report if any, the committee shall make appropriate recommendations on affiliation as per regulations. The committee shall submit its recommendations to the Vice-Chancellor whose decision shall be final.

Building Committee:

To scrutinize, finalise and approve plans, estimations, deviations, work slips and designs of the Building/Projects of the University.

To scrutinize and recommend the award of tenders

To ensure completion of the buildings in accordance with the approved plans and estimates and proper utilization of funds earmarked for the purpose.

Boards of Studies:

A separate Board of Studies shall be attached to each faculty of teaching. The constitution and functions of the Board of Studies shall be prescribed by ordinances.

College Academic Committee:

The academic committee of each college shall have powers-

i. to organise and co-ordinate academic and research in the departments of the college;

ii. to approve the courses of study recommended by the Boards of Studies

6.2.3 Does the University have a formal policy to ensure quality? How is it designed, driven, deployed and reviewed?

Yes, the University has Internal Quality Assurance Cell (IQAC). After division of JNTU in 2008, the JNTUH got eligibility for NAAC in Cycle – 1 in the academic year 2013-14. Recently the Internal Quality Assurance Cell (IQAC), was constituted in the University under the chairmanship of the Rector to raise the quality of education and research and

serve society for its enrichment in technical education and advancement.

The University also constituted a Directorate of Academic and Audit Cell to monitor the functioning of all affiliated colleges under JNTUH jurisdiction. The Academic Audit Cell of the University is entrusted with the responsibilities of affiliation, inspection and maintenance of academic standards in affiliated institutes.

The University faculty members are the members of the Governing Bodies of all the affiliated colleges to ensure the academic development of the institution.

6.2.4 Does the university encourage its academic departments to function independently and autonomously and how does it ensure accountability?

Yes, the University encourages autonomy of the departments. Accountability is assured through academic audit procedures. The Head of the Department conducts meetings periodically to discuss academic and administrative matters of the department. The Head of the Department i.e. BoS chairperson of autonomous college, conducts board of studies meetings to make decision regarding curricula design. The department research committee meets regularly to discuss the research activities in the department. The principal of the college conducts periodic meetings with the Heads of Departments and College Academic Council to ensure that the departments are functioning effectively.

6.2.5 During the last four years, have there been any instances of court cases filed by and against the institute? What were the critical issues and verdicts of the courts on these issues?

Yes, the court cases are as follows:

2012-13	2013-14	2014-15	2015-16
187	242	324	468

Most of the court cases filed by the students / parents regarding the shortage of attendance and promotion rules.

The University has appointed a Standing Council of the University to represent the University for vacating the cases in the High Court and Supreme Court. The University has also appointed an advocate for liaising between Standing Council and the University for documentation.

The major court cases are filed by the affiliated colleges regarding affiliation of the University. In 2014-15 the University did not grant affiliation to some of the courses of 163 affiliated colleges because they did not follow the AICTE /University norms such as shortage of faculty, shortage of laboratory facilities, shortage of books and journals and shortage of built-up area. The 163 affiliated colleges approached the High Court and Supreme Court. The Supreme Court issued interim direction to the University to give affiliation to the above colleges with certain conditions. The matter is still under the jurisdiction of the Supreme Court.

6.2.6 How does the university ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyse the nature of grievances

for promoting better stakeholder-relationship?

Students pursuing professional courses under the jurisdiction of JNTUH Hyderabad can directly approach the Ombudsman and Grievance Redressal Committee to lodge complaints against the University or their colleges with regard to any dispute, such as, denial of admission, collection of donation, excess fee, withholding certificates etc., JNTUH has become the first University in the state to have an Ombudsman and Grievance Redressal Committee as directed by the All India Council for Technical Education. JNTUH is one of the largest technological universities in India, with nearly 400 affiliated colleges including Engineering, Pharmacy, MBA and MCA colleges located in the Telangana State.

There is a corresponding increase in disputes between the students and colleges, with the managements often resorting to unfair practices. There was no mechanism to address the students' grievances hitherto. The ombudsman has powers to accept any complaint right from denial of admission to discrimination in evaluation. Prof. B.C. Jinaga, former Rector of JNTUH, has been appointed Ombudsman. He will also be the chairman of the five-member grievance redressal committee. The most common problems that students have are withholding of their original certificates by the management, and having to pay the total course fee if they drop out in the middle of the course. The UGC and AICTE norms clearly stipulate that managements must hand over the original certificates to students.

In addition to this, the University Examination Branch constituted a Grievances Redressal Cell and the Cell meets once in a month in the premises of the Examination Branch headed by the Director of Evaluation to solve the students' exam related issues and college problems, if any.

6.2.7 Does the university have a mechanism for analyzing student feedback on institutional performance? If yes, what was the institutional response?

Feedback mechanism is available in the University. A link has been provided in the website of JNTUH College of Engineering, Hyderabad (http://jntuhceh.org/feedback). This feedback form is strictly restricted to submit opinions and suggestions regarding the website only, and not for sending the messages related to any aspect of the University. Any suggestion, advice, opinion and queries related to the results, and exams need to be e-mailed to the respective departments, addressing the person concerned. The University collects the information related to teaching, and other activities periodically that is analyzed to enhance the performance, if necessary.

6.2.8 Does the university conduct performance audit of the various departments?

Yes, the University conducts performance audit of the various departments. Technical Education Quality Improvement Programme (TEQIP) also conducts performance audit of all the departments periodically.

6.2.9 What mechanisms have been evolved by the university to identify the developmental needs of its affiliated institutions?

Inspection, affiliation, academic audit, examination, evaluation process and sports activities / NSS activities of the affiliated colleges are monitored by the University. Every affiliated college shall be managed by duly constituted Governing Body and that has members among others, a representative from the University. The University helps affiliated colleges to meet their academic needs. The Director, Academic and Planning, Director of Evaluation and Director Academic and Audit Cell guide the affiliated colleges in getting 2(f) and 12(b) status.

6.2.10 Does the university have a vibrant College Development Council (CDC) / Board of College and university Development (BCUD)? If yes, detail its structure, functions and achievements

Yes, as per Academic Audit Cell (AAC) guidelines, each institution has a Governing Body with a University nominee and the function is to ensure the academic quality and oversee the financial health of the college. The Director Academic Audit Cell serves as an academic guide to affiliated colleges. The Director, Academic and Audit Cell conduct inspection of the colleges and convene the meeting with the principals. The AAC meets periodically to review the implementation of the programmes at affiliated colleges.

6.3 Faculty Empowerment Strategies

6.3.1 What efforts have been made to enhance the professional development of teaching and non-teaching staff?

The University deputes teaching and non-teaching staff periodically, based on work centric requirements to different institutes of national and international repute for training and development. The University organizes refresher, faculty development, and orientation courses through UGC-HRDC (ASC), which was established in 2000 now renamed as JNTUH-HRDC. JNTUH also organises the courses through GIAN scheme. The faculty members also attend the courses such as faculty development, and refresher programmes courses conducted by other institutions at national/international level. The University provides financial support to departments/units for organizing the seminars, workshops and national and international conferences. The University also encourages the faculty to acquire Ph.D. degrees under Quality Improvement Programme (QIP). The faculty members utilize the services of University library wherein a numerous books, journals, e-resource, magazines are made available. All the faculty members are provided computers with Internet facility. The University also provides training to non-teaching staff to enrich their knowledge and practices.

6.3.2 What is the outcome of the review of various appraisal methods used by the university? List the important decisions.

The University has adopted self-appraisal system for evaluating faculty performance at the time of promotion under Career Advancement Scheme (CAS).The appraisal methods used by the University have resulted in improved research contribution from the faculty and interactive teaching-learning methodologies. The appraisal methods have made the faculty to acquire research projects in different streams sponsored by UGC, DST, TEQIP, CSIR, and CSSR through the University.

6.3.3 What are the welfare schemes available for teaching and non- teaching staff? What percentage of staff have benefitted from these schemes in the last four years? Give details

The University implements several welfare schemes for teaching and non-teaching staff. The following are the some of the schemes adopted by the University,

(i) Group Insurance

(ii) Provident Fund

(iii) University Health Centre

(iv) Loans for various purposes

(v) Pension Fund

(vi) Sabbatical Leave

(vii) Sports Activities

JNTUH has been providing convenient platforms to the teaching, non-teaching, women, and SC/ST stakeholders by allowing them to have healthy associations to benefit themselves by handling grievances and resolving identified problems and other common general issues by conducting periodical meetings.

6.3.4 What are the measures taken by the university for attracting and retaining eminent faculty?

The University retains and honours eminent faculty/retired Professors in the capacity of Academic Advisors and Emeritus fellows. The University also provides good academic ambience, research environment and freedom to work.

6.3.5 Has the university conducted a gender audit during the last four years? If yes, mention a few salient findings

No formal gender auditing carried out. However, the University sensitizes the needs and welfare of the women staff and students of the University and provides necessary support. There are 40% of women faculty members in the University.

6.3.6 Does the university conduct any gender sensitization programmes for its faculty?

Yes, the University conducts workshops for faculty members of constituent and affiliated colleges through JNTUH CEH on the course, “Gender Sensitization”, which has been recently approved and introduced by the University in all UG programmes in II year II Semester.

6.3.7 What is the impact of the university’s Academic Staff College Programmes in enhancing the competencies of the university faculty?

The training programs conducted by the Academic Staff College, JNTUH enable the faculty to understand the significance of the education in general and technological education in particular in the global and Indian contexts and also enables the teachers to understand the new methods and innovations in technological education. The young

faculty members are trained through orientation programmes on methodologies of teaching and research. These training programs promote Computer Literacy and use of ICT in teaching and learning process and establish a culture of continuous learning and quality improvement among the teachers and keep them abreast of the latest development in their specific subjects.

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism available to monitor the effective and efficient use of financial resources?

The receipts and payments of all the departments/units of the University are monitored by the finance officer and controlled by internal audit and local fund audit. The Finance Committee does planning and resource allocation to advice on the allocation and utilization of the funds.

6.4.2 Does the university have a mechanism for internal and external audit? Give details.

The finance officer is responsible for preparing the budget of the University and monitors the utilization of allocated funds. The University has a mechanism of internal audit headed by the finance officer and the team inspects all the constituent colleges and units every year. The Local Fund Audit of the State Government audits accounts every year. In addition, A.G. also audits the University accounts periodically.

6.4.3 Are the institution's accounts audited regularly? Have there been any major audit objections, if so, how were they addressed?

Yes, auditing is being done regularly. The accounts are audited by the State Local Fund audit of the Government. However, no major audit objections indicated. There are only a few procedural objections and are compiled by the accounts officers of the respective departments /units.

6.4.4 Provide the audited income and expenditure statement of academic and administrative activities of the last four years

Enclosed Annexure – VIII.

6.4.5 Narrate the efforts taken by the university for resource mobilization.

The following are some of the initiatives taken by the University for mobilization of resources

- Self financing courses
- Special fee from international students
- Consultancy and testing services
- Approaching through various projects and getting funds from various state and

central funding agencies such as UGC, DST, AICTE, MHRD, DRDO, etc.

- Encouraging collaborative research with prominent institutions for infrastructure development.
- Conduct of periodic meetings with alumni to seek financial support for the development of the University

6.4.6 Is there any provision for the university to create a corpus fund? If yes, give details.

Yes, there is a provision for the University to create a corpus fund. There are two corpus fund accounts in the University.

(i) Registrar, JNTUH Corpus Fund A/c Rs. 4,42,484/-

(ii) Pension Corpus Fund A/c Rs. 12,83,01,897/-

6.5 Internal Quality Assurance System

6.5.1 Does the university conduct an academic audit of its departments? If yes, give details.

Technical Education Quality Improvement Programme (TEQIP) conducts academic audit of all the departments.

6.5.2 Based on the recommendations of the academic audit, what specific measures have been taken by the university to improve teaching, learning and evaluation?

The University takes appropriate actions to improve teaching, learning and evaluation processes based on the academic audit report. The average and below average faculty are motivated by providing an opportunity to interact with experts in the departments and the expert faculty are recognized and nominated for best teacher award presented by the state Government.

Choice Based Credit System (CBCS) being implemented in non- autonomous constituent and affiliated colleges of JNTUH from the academic year 2015-16 and 2016-17 for all PG and UG Programmes respectively. It is also implemented in autonomous constituent and affiliated colleges from the academic year 2015-16 for UG and PG Programmes.

6.5.3 Is there a central body within the university to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

The review process is conducted at various levels such as departments, colleges and the University. The Director Academic and Audit Cell conducts inspections, grants affiliation and provides support to the affiliated colleges to improve the quality of education.

6.5.4 How has IQAC contributed to institutionalizing quality assurance strategies and processes?

The University established Internal Quality Assurance Cell (IQAC) to design a quality management system. The IQAC has to play a key role in implementing the following functionalities

(i) to communicate quality policy of the University to all the stakeholders

(ii) to implement the new curriculum like Choice Based Credit System (CBCS) for UG and PG courses

(iii) to develop the centralised research facilities for faculty and research scholars

(iv) to implement MoU programmes with national and international institutes

(v) to inform the objectives to all the academic departments in the University

(vi) to inform HoDs to maintain activity diary for recording the activities of the department

(vii) Strengthening the procedures for admission into Ph.D. programmes

(viii) to organize the orientation programmes on quality technical education for Head of the departments, faculty and supporting staff

(ix) to maintain separate cell for counselling of the students

(x) to conduct review meetings with faculty, HoDs, supporting staff.

6.5.5 How many decisions of the IQAC have been placed before the statutory authorities of the university for implementation?

After division of JNTU in 2008, the JNTUH got eligibility for NAAC in Cycle – 1 in the academic year 2013-14. Recently the University constituted IQAC. Apart from this the University has separate Directorate, Academic audit cell to manage the quality of education in the affiliated colleges. Some of the issues related to constituent colleges and affiliated colleges are placed before the statutory authorities of the University.

6.5.6 Does the IQAC have external members on its committees? If so, mention any significant contribution made by such members.

Yes, nominated three external members as per the IQAC guidelines. All the external members are contributing to the improvement of Quality of Technical Education and other activities of the University like institute and industry interaction.

6.5.7 Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?

- There is a separate SC/ST cell to monitor the problems of the students and University conducts separate classes for weak students.
- There is a women welfare association in the University to discuss the problems of women staff.

6.5.8 What policies are in place for the periodic review of administrative and academic departments, subject areas, research centres, etc.?

The following policies are adopted by the University to review administrative and academic departments, evaluation, research activities periodically

(i) Admission

(ii) Academic
(iii) Evaluation
(iv) Finance
(v) Purchase
(vi) Research and Development
(vii) Infrastructure Development

The annual reports of each department/unit are received and consolidated to prepare the annual report of the University. This report indicates the academic performance and thrust areas of each department/unit of the University.

CRITERION VII: INNOVATIONS AND BEST PRACTICES

7.1 Environment Consciousness

7.1.1 Does the university conduct a Green Audit of its campus?

Yes, the University conducts a green audit of the campus. The green cover in the campus is at present 40%, however it needs to be increased. The employees and students of the University participate in plantation of trees in all the JNTUH campuses.

7.1.2 What are the initiatives taken by the university to make the campus eco-friendly?

* **Energy conservation**

- Energy saving LED lights have been installed in all buildings

* **Use of renewable energy**

4 MW Photovoltaic Solar Energy Power Plant is constructed, installed and commissioned at JNTUH College of Engineering, Sultanpur and caters to the college needs.

* **Water harvesting**

Rainwater harvesting pits for groundwater recharging is provided for every building

* **Check dam construction**

Rainwater collecting ponds/ tanks of 50 TMC capacity – 3 Numbers have been provided at JNTUH Sultanpur for ground water recharge by providing check dams.

* **Efforts for Carbon neutrality**

- Campus green cover improvement plan is being planned for JNTUH Hyderabad campus towards carbon neutrality
- Zoning system is being created to have separate zones for academic, residential and hostels to achieve carbon free environment in all the campuses where cycle tracks are being provided to encourage cycling.

* **Plantation**

(i) About 1000 trees have been recently planted under "Swatch Bharat" in JNTUH Hyderabad campus

(ii) About 2000 trees have been recently planted in JNTUH Sultanpur campus

* **Hazardous waste management**

The generation of hazardous waste is at minimal level. A Solid Waste Incinerator of 2 cubic meter capacity is being installed at JNTUH Hyderabad campus

* **e-waste management**

The e-waste like computers and peripherals are disposed of by inviting tenders from-waste management organizations.

7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the university.

1. Flexible library working hours
2. Improved the efficiency and transparency through online admissions
3. Created e-learning opportunities for the students and faculty members with free Internet access (Wi-Fi) in the campus and hostels.
4. On-line distribution of questions papers to the examination centres to save the time and to improve the confidentiality. On-line application form, issue of hall tickets On-line increased the efficiency of the system.
5. The University introduced the gender sensitization course at B.Tech level.
6. SYSTEMIC- Stringent Inspections Criteria enhanced the quality of education in affiliated colleges.
7. International Memoranda of Understanding (MoU) with research organizations, Foreign Universities and Government organizations enabled our students to be on par with international systems and best practices.
8. Quality objectives are set for every department/unit of the University through CBCS system to enable individual student interest and choices.
9. Feedback from stakeholders on usefulness of the curricula, infrastructure and administration has been taken to identify the areas for improvement to take an appropriate action.
10. Problems of the students of the University are resolved by the establishment of the Grievance Redressal Cell and appointment of an Ombudsman.
11. The University organizes orientation and training programmes for non-teaching staff.
12. The University organizes the finishing school programs to make students better

employable.

13. The University is helping the affiliated colleges with the introduction of quality initiatives.

7.3 Best Practices

Give details of any two best practices which have contributed to better academic and administrative functioning of the university.

1. Admissions of foreign students through Memorandum of Understanding (MoU)
2. Implementation of Online Examinations and Electronic Distribution of Examination Papers (EDEP)
3 Online Examination System

7.3.1(1) Title of the Practice:

Admissions of Foreign Students including Memorandum of Understanding (MoU) with National and International Organizations

7.3.1(2) Objectives of the Practice

What are the objectives/intended outcomes of this "best practice" and what are the underlying principles or concepts of this practice (in about 100 words)?

Providing institute and industry interaction and make the students to understand the global standards of education with the following objectives

- To promote the global competences among the students
- To ensure that the University training its students with internationally acceptable standards of higher education
- To offer higher education to foreign students at global standards
- To improve the institute and industry interaction
- To share the Indian culture with other foreign countries and also to learn from them.

7.3.1(3) The Context

What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words)?

The JNTUH is one of the best technological universities in India. The University has signed MoUs with international universities to offer twinning and dual degree programmes. The international students are pursuing B.Tech, M.Tech, M.Sc. and MBA programmes. The University appointed a Director, University Foreign Relations (DUFR) to guide the foreign students. The students are admitted through single window system. The University also has MoU with national institutes/industries to support Undergraduate and Post Graduate industry linked programmes.

7.3.1(4) The Practice:

Describe the practice and its uniqueness in the context of India higher education. What were the constraints/limitations, if any, faced (in about 400 words)?

- The University established the Directorate of University Foreign Relations (DUFR) to coordinate and process the admissions of the foreign students as per the norms of the AICTE/UGC
- The University is offering Under graduate, Post-Graduate and Ph.D programmes for international students
- The University website provides all the information related to admission process into various courses
- The DUFR offers the guidance to the students with regard to courses offered, eligibility conditions, and fee structure
- The University has constructed international students' hostel with necessary amenities.
- The University facilitates health security for all international students
- There will be "at home function" every year at the University
- The presence of international students provides the cross culture learning practices to the Indian students in the campus.

7.3.1(5) Evidence of Success

Provide evidence of success such as performance against targets and benchmarks, review results. What do these results indicate? Describe in about 200 words.

The University offering UG, PG and Ph.D programmes to the foreign students. There is good response from the foreign students to join the courses. The details of admissions during the last four years

Academic Year	Success rate/percentage of passed students
2012-13	70%
2013-14	64%
2014-15	77.3%

- The DUFR attends all the needs of foreign students.
- 772 students enrolled during the last four years representing twenty five countries.
- Students improved their communication/technical/academic/soft skills.

7.3.1(6) Problems Encountered and Resources Required

1. Additional space for conducting classes and arrangement of bridge courses in

important subjects.

2. International Ladies Hostel

3. Exclusive library for foreign students with important core books in various subjects. Books for personality development, communication skills etc.,

4. Exclusive sports facilities for international students

7.3.2(1) Title of the Practice:

Electronic Distribution Of Examination Papers (EDEP)

7.3.2(2) Objectives of the Practice

What are the objectives/intended outcomes of this "best practice" and what are the underlying principles or concepts of this practice (in about 100 words)?

- To eliminate the possibility of leakage at various stages of preparation of question papers, namely, while typing, printing and distributing to colleges.
- To have a question bank for each subject prepared by subject experts and checked and verified by other experts, to enable random generation of questions and also to make them error-free.

7.3.2(3) The Context

What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words)?

The University has a total of 337 affiliated engineering colleges, in addition to colleges offering other courses, spread all over the State of Telangana. Twenty-four different courses of B.Tech are offered in these colleges. The examination Directorate of the University prepares question papers and distributes them to all the colleges. This process entails a high possibility of leakage during printing and while distributing these question papers.

To eliminate the possibility of leakage and to avoid mass copying in the colleges, the concept of question bank with random generation of question papers, and electronic distribution of examination papers (EDEP) system has been devised and implemented since December 2002.

7.3.2(4) The Practice:

Describe the practice and its uniqueness in the context of India higher education. What were the constraints/limitations, if any, faced (in about 400 words)?

For each subject four sets of question papers are prepared. These are encrypted using a specially designed encryption tool and then placed on the examination portal of the University. The encrypted version of the question papers is also sent to all the colleges in CDs since some of the colleges do not have Internet facility. These question

papers can be decrypted by entering three levels of passwords, in addition to the password of the college concerned. The first is the University (public) key which is common for all colleges; the second is the college (or private) key which is known only to the college concerned, that is, the Principal and the staff on the examination duty; the third password is given on the day of the examination, about an hour before the commencement of the examination. The colleges can then decrypt and print the papers for distribution to the examiners. This system has been successfully implemented for the last two and half years.

The software for automatic generation of question papers is another step towards automation. For each subject a question bank of about 200 questions is prepared by invited subject experts. Each such question bank is divided into eight units based on the different topics.

For the preparation of the question banks, the names of experienced faculty in the respective subjects are provided by the respective Heads of Department. In case experts are not available in a subject within the University, qualified and experienced staff from affiliated colleges or other universities are given the task of preparing the question banks.

These question banks are moderated by the faculty other than those who have prepared the question banks. They check the questions for correctness and make required changes. They also grade the questions in three categories according to the standard of their difficulty. This ensures that the four sets generated are of similar level of difficulty. Changes, if any, are incorporated into the question banks.

The questions are then converted to Latex format for random generation. The question banks are then ready for use to generate question papers as and when required. This ensures that the paper is kept confidential with least human intervention once the question banks are finalized. This system was implemented for the first time in April /May 2005.

An advantage of this system is that the question banks can be used to generate question papers for the same subject offered by different branches in different semesters with necessary modifications as and when required.

7.3.2(5) Evidence of Success

Provide evidence of success such as performance against targets and benchmarks, review results. What do these results indicate? Describe in about 200 words.

No leakage of papers for the past 11 years of its implementation and hence it is 100% success.

Advantages and disadvantages:

Advantages:

- The possibility of leakage by the paper setter is eliminated.
- The expert can set questions unit-wise with higher efficiency and speed.
- Examiners will not believe in rumours of leakage of papers.

- Four different question papers are distributed, mass copying is eliminated.
- Printing of question papers at Security Press is dispensed with, so the possibility of leakage of papers from the press is eliminated.
- The possibility of distributing wrong question papers is eliminated and so the examination schedule is not affected. However, if an unforeseen problem arises at any of the examination centres, such centres will be isolated and a separate examination will be conducted for them.

Disadvantages:

In case there are changes in the syllabus, these changes have to be identified carefully and the Question Banks have to be revised meticulously.

7.3.2(6) Problems Encountered and Resources Required

Obstacles if any and strategies to overcome them:

The main hurdle has been identification of subject experts for preparation of question banks and moderation of question papers in the emerging fields like Bio-Technology and Aeronautical Engineering. To solve this problem, experts from institutions outside the state, as well as from the affiliated colleges are involved.

Impact of the practice:

The EDEP has helped to solve the problem of leakage and mass copying; and transportation of question papers is simplified as only the CD containing the encrypted papers is provided to the colleges.

Resources Required

The System Requires:

- A well-equipped computer laboratory facility with networking.
- Trained data entry operators to convert the questions to latex format.
- Continuous high speed Internet connectivity to upload encrypted papers and passwords on each the day of examination.
- Sufficient space for storage and moderation of question banks.

7.3.3(1) Title of the Practice:

On-line Examination for internal evaluation

7.3.3(2) The Objectives

What are the objectives/intended outcomes of this "best practice" and what are the

underlying principles or concepts of this practice (in about 100 words)?

To have uniformity in evaluating the internal quiz marks of the subjects offered in all the engineering colleges affiliated to the University.

7.3.3(3) The Context

What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice (in about 150 words)?

There is no uniformity in awarding internal marks in the affiliated colleges. In some of the affiliated engineering colleges, the coverage of syllabus is not uniform for different quiz examinations. Due to lacking in infrastructure and competent faculty. This fact is evident from the huge variations in the internal and external marks of the students in all subjects. As a leading technological University in the country, Jawaharlal Nehru Technological University Hyderabad has introduced several innovations in the examination system of the University. In keeping with this tradition, the on-line quiz examinations have been introduced for internal evaluation in the B.Tech courses in all affiliated engineering colleges.

7.3.3(4) The Practice:

Describe the practice and its uniqueness in the context of India higher education. What were the constraints/limitations, if any, faced (in about 400 words)?

The objective type and unit wise question bank in each subject is invited from the identified subject experts. Another subject expert verifies the question bank for its correctness. Each question and its four alternative answers are converted into latex format. The quiz examination is divided into groups and each group is further subdivided into three levels of standard, namely, simple, moderate and difficult questions. The quiz examination question papers are randomly generated from the question bank. No two students get the same question paper. Even if a question is commonly present in two different papers, the sequence of four alternative answers is different. Although the students get different quiz examination papers, the difficulty level of all question papers is almost the same. The proportion of simple, moderate and difficult level questions in each paper is predetermined before the generation of question papers. A large number of question papers (ex: 120) are generated at the University-end, compressed and encrypted and sent to the colleges. At the college-end when the student logs in to write the examination, one of these 120 papers will be randomly assigned to the student. If the number of students writing the examination in the same subjects are less than or equal to 120, every student will get a distinct paper. The answers keyed-in by the students are saved in the high-end college server at regular intervals. In the case of break-down/failure of any student's computer, the student's saved answers become visible in the other computer where the student can continue his/her examination.

7.3.3(5) Evidence of Success

Provide evidence of success such as performance against targets and benchmarks, review results. What do these results indicate? Describe in about 200 words.

Advantages and disadvantages

Advantages:

- Un-biased valuation by the faculty.
- Uniform representation of questions from all the topics of the syllabus.
- No human intervention in setting the question papers and assessing the answer scripts.
- The student gets his/her marks and the key for the wrong answers instantly.
- This system facilitates the automatic integration of internal marks in the marks memo issued to the students after each semester.

Disadvantages:

The student will not be able to represent his/her grievances.

7.3.3(6) Problems Encountered and Resources Required

Obstacles if any and strategies to overcome them:

As the system is new and unique, the system administrators at the college-end are provided necessary training in the installation of on-line examination software, trouble shooting and maintenance of database.

As the objective type of examinations are time-critical in nature, to meet the on-line examination software requirements from time to time, to handle the queries of college-side system administrators and trouble-shooting instantly, an exclusive software development centre with five programmers has been set up at the Examination Directorate of the University. The new on-line examination software has been entirely designed and developed by the software development centre of the University.

Impact of the practice:

- It brings uniformity in awarding internal marks in the subjects offered in all the affiliated engineering colleges of the University.
- It inculcates promptness in the subject-teachers to cover the syllabus in the specified sequence and for a uniform coverage of syllabus.
- It eliminates use of stationery in the conduct of examinations and the correspondence between the University and the colleges.
- It improves computer laboratory infrastructure due to regular maintenance.

Resources Required:

- One high-end server with a minimum of 1GB RAM
- A local area network (LAN) with a minimum of 60 desktop computers (clients).
- One UPS with a minimum of 1 hour back up.
- A trained system administrator.

Registered No. HSE/49 [Price : Rs. 3-45 Paise.

ఆంధ్రప్రదేశ్ రాజపత్రము

THE ANDHRA PRADESH GAZETTE

PART IV-B EXTRAORDINARY

PUBLISHED BY AUTHORITY

No. 44] HYDERABAD, WEDNESDAY, SEPTEMBER 24, 2008

ANDHRA PRADESH ACTS, ORDINANCES AND REGULATIONS Etc.

The following Act of the Andhra Pradesh Legislature received the assent of the Governor on the 21st September, 2008 and the said assent is hereby first published on the 24th September, 2008 in the Andhra Pradesh Gazette for general information:-

ACT No. 30 OF 2008.

AN ACT TO PROVIDE FOR THE ESTABLISHMENT AND INCORPORATION OF JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITIES IN THE STATE OF ANDHRA PRADESH AND FOR MATTERS CONNECTED THEREWITH OR INCIDENTAL THERETO.

Annexure - I

202

Be it enacted by the Legislature of the State of Andhra Pradesh in the Fifty ninth Year of the Republic of India as follows:–

CHAPTER – I

Preliminary.

Short title, extent and commence-ment.

1. (1) This Act may be called the Jawaharlal Nehru Technological Universities Act, 2008.

(2) It extends to the whole of the State of Andhra Pradesh.

(3) It shall be deemed to have come into force on the 18th August, 2008.

Defini-tions.

2. In this Act, unless the context otherwise requires,-

(1) "academic year" means a period of twelve months commencing on the first day of July of the year or such other period of twelve months beginning on such date as the Executive Council may specify in respect of all colleges under the control of the University or any particular college thereof;

(2) "affiliated college" means a college within the University area affiliated to the University in accordance with the conditions prescribed;

(3) "autonomous college" means a college on which the status of autonomy has been conferred by the University;

(4) "college" means a college established and maintained by or affiliated to or recognized by the University;

(5) "constituent college" means a College established or maintained by the University for providing courses of study qualifying students for admission to the University examinations in accordance with the regulations prescribed and includes a

राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission

Certificate of Accreditation

The Executive Committee of the
National Assessment and Accreditation Council
on the recommendation of the duly appointed
Peer Team is pleased to declare the

Jawaharlal Nehru Technological University

Kukatpally, Hyderabad, Andhra Pradesh as

Accredited

at the A level.

copy

Date : May 03, 2004

Director

- This certification is valid for a period of *Five* years with effect from May 03, 2004
- An institutional score (%) in the range of 55-60 denotes C grade, 60-65 -C^{+}grade, 65-70 - C^{++}grade, 70-75 - B grade, 75-80 -B^{+} grade, 80-85 - B^{++} grade, 85-90 - A grade, 90-95 - A^{+} grade, 95-100 - A^{++} grade (upper limits exclusive).

Ph. 23236351, 23232701, 23237721, 23234116
23235733, 23232317, 23236735, 23239437

विश्वविद्यालय अनुदान आयोग
बहादुरशाह जफर मार्ग
नई दिल्ली-110 002
UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110 002

ज्ञान-विज्ञान विमुक्तये

Speed Post

F.9-20/2008 (CPP-I)

Aug, 2009

OFFICE MEMORANDUM

Jawaharlal Nehru Technological University, Kukatpally, Hyderabad – 500 085, Andhra Pradesh has been established by Government of Andhra Pradesh through an Act (No. 30 September, 2008) by Andhra Pradesh State. The University is declared eligible to receive Central assistance in terms of Rules framed under section 12 (B) of the UGC Act, 1956.

(S.C. Chadha)
Deputy Secretary

Copy to:-

1. The Vice - Chancellor, J.N.T.U, Kukatpally, Hyderabad – 500 085, Andhra Pradesh along with a copy of the report of UGC Expert Committee.
2. The Secretary, Government of India, Ministry of Human Resource Development, (Department of Secondary & Higher Education), Shastri Bhavan, New Delhi-110 001.
3. The Secretary to the State Government of Andhra Pradesh, Department of Higher Education, Hyderabad, Andhra Pradesh.
4. The Director of Higher Education, State Government of Hyderabad, Andhra Pradesh.
5. The Director, Technical Education State Government of Hyderabad, Andhra Pradesh.
6. The Secretary General, Association of Indian Universities, 16 Kotla Marg, New Delhi-110 002.
7. Director, (NAAC) National Assessment and Accreditation Council (NAAC), Bangalore-560 010.
8. The Director, Medical Council of India, Medical Council of India, Pocket– 14, Sector – 8, Dwarka Phase – I, New Delhi – 110 075
9. The Secretary, Union Public Service Commission, Shahajahan Road, New Delhi-110 001.
10. The Joint Secretary, State Universities, UGC, New Delhi.
11. Senior Statistical Officer, UGC, 35, Ferozshah Road, New Delhi-110 001.
12. Publication Officer (web-site), UGC, New Delhi.
13. Section Officer (Meeting Section), UGC, New Delhi with intimation of action taken on item No. 5.12 of 461st meeting of UGC held on 4th August, 2009.
14. All Regional Offices, UGC.
15. All Section of the UGC, New Delhi.
16. D.T.P. Cell, UGC, New Delhi
17. Guard file

(S.C. Chadha)
Deputy Secretary

Reg/DAP

26/8/09

Annexure -II

Annexure –III

The following courses offered in the JNTUH Affiliated Colleges:

B.Tech courses:

1. Aeronautical Engineering.
2. Automobile Engineering.
3. Bio-Medical Engineering.
4. Biotechnology.
5. Chemical Engineering.
6. Civil Engineering.
7. Civil & Environmental Engineering
8. Computer Science & Technology
9. Computer Science and Engineering.
10. Electrical and Electronics Engineering.
11. Electronics and Communication Engineering.
12. Electronics and Computer Engineering.
13. Electronics and Instrumentation Engineering.
14. Electronics and Telematics Engineering.
15. Information Technology.
16. Instrumentation and Control Engineering.
17. Mechanical Engineering (MSNT)
18. Mechanical Engineering (Mechatronics).
19. Mechanical Engineering (Production).
20. Mechanical Engineering.
21. Metallurgy and Material Technology.
22. Mining Engineering

23. Petroleum Engineering

24. Pharmaceutical Engineering

B. Pharmacy
Master of Applied Management (MAM) 5 years course

Master of Technology Management (MTM) (Integrated Programme in Management along with B.Tech.) 5 ½ years.

MBA

MCA

M. Tech courses – Specializations:

1. Advanced Manufacturing Systems
2. Aerospace Engineering
3. Aeronautical Engineering
4. Automation
5. Biomedical Signal Processing and Instrumentation
6. Bio-Technology
7. CAD/CAM
8. Chemical Engineering
9. Communication Systems
10. Computer Networks
11. Computer Networks and Information Security
12. Computer Science
13. Computer Science and Engineering
14. Computers and Communication Engineering.
15. Construction Management
16. Control Engineering
17. Control Systems
18. Cyber Forensic & Information Security
19. Cyber Security
20. Design for Manufacturing
21. Design and Manufacturing
22. Digital Electronics and Communication Engineering.
23. Digital Electronics and Communication Systems
24. Digital Systems and Computer Electronics
25. Electrical Power Engineering
26. Electrical Power Systems
27. Electronics & Instrumentation
28. Electronics and Communication Engineering
29. Embedded Systems
30. Embedded Systems and VLSI Design
31. Energy Systems
32. Engineering Design
33. Environmental Engineering
34. Geoinformatics and Surveying Technology
35. Geotechnical Engineering.
36. Heating Ventilation & Air Conditioning.

37. Highway Engineering
38. Image Processing
39. Industrial Engineering and Management
40. Information Technology
41. Infrastructure Engineering
42. Machine Design
43. Mechatronics.
44. Microwave & Radar Engineering
45. Nano Technology
46. Neural Networks
47. Parallel Computing
48. Power and Industrial Drives
49. Power Electronics
50. Power Electronics and Electrical Drives
51. Power Engineering and Energy Systems
52. Power Plant Engineering & Energy Management
53. Power System Control and Automation
54. Power System with Emphasis H.V. Engineering
55. H.V. Engineering
56. Production Engineering.
57. Real Time Systems
58. Software Engineering
59. Structural Engineering
60. Systems & Signal Processing
61. Thermal Engineering.
62. Transportation Engineering
63. VLSI
64. VLSI and Embedded Systems
65. Electronics Design Technology
66. VLSI Design
67. VLSI System Design
68. Web Technologies
69. Wireless and Mobile Communication

M. Pharmacy Courses - Specializations

1. Industrial Pharmacy
2. Hospital and Clinical Pharmacy
3. Pharmaceutics.
4. Pharmaceutical Chemistry.
5. Pharmaceutical Technology
6. Pharmacognosy
7. Pharmacology.
8. Pharmaceutical Analysis and Quality Assurance.
9. Pharmaceutical Management & Regulatory Affaires
10. Quality Assurance
11. Quality Assurance & Pharma Regulatory Affairs

Pharma D

Pharma D (PB)

Speed Post

University Grants Commission
(Distance Education Bureau, IGNOU Campus, Maidan Garhi, New Delhi - 110068)

F. No. UGC/DEB/JNTU/HYD/AP/2014/7032-36 28th May, 2014

To,

The Vice Chancellor
Jawaharlal Nehru Technological University
Kukatpally, Hyderabad – 500085 (AP)

Sub: Continuation of recognition for offering programmes in Open & Distance Learning (ODL) for academic year 2014-15 – reg.

Sir/Madam,

Reference is invited to Office Letter No. F.No. DEC/2009/4916 dated 17.12.2009 (copy enclosed) conveying the approval of the Distance Education Council (DEC) to your University for offering programmes in Open & Distance Learning (ODL) mode. In this regard, I am directed to inform that the UGC has taken decision to maintain status quo for 2014-15 and accordingly the recognition/approval granted to you vide the aforementioned letter would continue for academic year 2014-15. Your University may offer the programmes in ODL mode which were approved by the statutory body/ies of your University and were offered during 2013-14 in accordance with approval conveyed by DEC.

2. The above recognition is subject to the following terms and conditions:

i) The University shall offer only those programmes through distance mode which are approved by the statutory bodies of the University as per norms and wherever necessary by the Apex regulatory bodies of the country.

ii) It is the responsibility of the University to follow the norms prescribed by the concerned regulatory body/ies such as UGC/AICTE/any other, and also seek its/their prior approval, wherever required, for any specific programme mentioned above.

iii) Nomenclature of all programmes shall be as per UGC/AICTE.

iv) No teacher education programmes can be offered without prior approval of the NCTE.

v) Programmes in physiotherapy are not allowed through distance mode.

vi) University shall refrain from offering such programmes that are not allowed to be offered through distance mode by respective apex body/ies.

vii) MHRD directions prohibiting B.E. / B. Tech. through Distance mode vide its letter dated 29/07/2009 shall be adhered to strictly (copy at UGC website).

viii) The eligibility conditions for admissions will be as per UGC/AICTE norms.

ix) The minimum duration of a programme offered in ODL mode should not be less than the minimum duration of similar programme offered through the regular mode.

x) The University has at least one full time faculty member exclusively for coordinating each programme at the headquarters.

xi) The territorial jurisdiction in respect of Universities for offering programmes through distance mode will be as per the policy of UGC on territorial jurisdiction and opening of

off campuses/centres/study centres as mentioned in the UGC Notification No. F. 27-1/ 2012 (CPP-II), dated 27th June 2013, a copy of which is also posted in the UGC website www.ugc.ac.in/deb. In respect of standalone Institutions (other than the Universities), the territorial jurisdiction will be headquarters.

xii) Franchising arrangement for offering programmes in distance mode in any form is not allowed.

3. The Institution's management of the distance education programmes will be open for review and inspection by the UGC. The academic norms of the programmes shall be under monitoring by the concerned regulatory authorities.

4. Before launching the programme/s, the Institution shall submit an affidavit within 30 days from date of issue of this letter that it agrees to and will abide by all terms and conditions contained in letter referred to in para 1 above and the terms and conditions laid down in para 2 above. In case the UGC does not receive the affidavit within 30 days from the date of issue of this letter, the approval accorded to your Institution will be liable to be withdrawn. It may also be noted that:

   i) If the institution fails to comply with the conditions of recognition or if it is found conducting affairs in a manner that leads to deterioration of academic standards, the UGC may withdraw its recognition.

   ii) In case any information, documentary evidence submitted/produced by the University/institution is found to be false or fake at a later stage, the recognition of University/institution shall be withdrawn and the University/Institution concerned shall be solely responsible for the career of the students enrolled.

5. Your University is required to send along with the affidavit, a list of programmes (approved by the statutory bodies) that are on offer through distance mode currently, duly authenticated by the Registrar.

Yours faithfully,

(Bijayalaxmi Mishra)
Dy. Director
Tel No.: 011-29533340, 29572634

Encl as above:

Copy to:

1. The Director, Directorate of Distance Education, Jawaharlal Nehru Technological University, Hyderabad, AP.
2. The Principal Secretary, Higher Education, Govt. of AP.
3. The Member Secretary, AICTE, 7th floor, Chanderlok Building, Janpath, New Delhi 110001
4. Shri Praveen Prakash, Joint Secretary (TEL), MHRD, Govt of India, Shastri Bhawan, New Delhi.
5. Concerned file
6. Master file
7. Publication Officer (Web), UGC for updating website.

(Bijayalaxmi Mishra)
Dy. Director

Annexure –V

List NAAC / NBA Accredited Constituent Colleges/Units of JNTUH

S. No	Name of the College
1.	JNTUH College of Engineering, Hyderabad
2.	School of Information Technology, JNTUH
3.	Institute of Science and Technology, JNTUH (NBA)

List of NAAC Affiliated Colleges

S. No.	College
1.	G.Narayanmma Institute of Technology & Science for Women, Shaikpet, Hyderabad
2.	J.B. Institute of Engineering & Technology, Yenkapally, Moinabad, Hyderabad
3.	Sultan-ul-Uloom College of Pharmacy, 8-2-249, Road No.3, Banjara Hills, Hyderabad
4.	Vignana Bharathi Institute of Technology, Aushapur (V), Gatkesar (M), RR District
5.	Gokaraju Rangaraju Institute of Engineering & Technology, Bhachupally, Quthbullapur, RR District
6.	Vardhaman College of Engineering, Kacharam, Shamshabad, Hyderabad
7.	Malla Reddy College of Engineering & Technology, Maisammaguda, Dulapally (V), Kompally, Medchal (M), RR District
8.	Christu Jyothi Institute of Technology & Science, Colombonagar, Yeswanthapur, Jangaon, Warangal District
9.	Narsimha Reddy Engineering College, (XO) Maisammaguda (V), Dulapally (PO), Medchal (M), RR District

List NBA Accredited Affiliated Colleges of JNTUH

S. No	Name of the College
1.	Sultan Ul Uloom College of Pharmacy, Road No:3., Banjara Hills, Hyderabad – 500 034
2.	Sree Datha Institute of Engineering & Science, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist – 501 510.
3.	CMR Institute of Technology, Kandlakoya Vil, Medchal Mdl, Hyderabad.
4.	Goka Raju Ranga Raju Inst of Engg & Technology Bachupally, Kukatpally, Hyderabad-500 072.
5.	Malla Reddy Inst of Tech & Science, Mysammaguda, Gundlapochampally (V), Medchal (M), Ranga Reddy Dist 500014
6.	MLR Institute of Technology,(Formerly KMR Inst. of Engg & Tech.), Dundigal Vil, Qutbullapur Mdl, Hyderabad – 43
7.	St.Martin's Engineering College, Dulapalli (V), Medchal(M), Ranga Reddy Dist-500 014.
8.	Vardhaman College of Engineering, Kacharam Vil, Nanajipur Post, Shamshabad (M), Ranga Reddy Dist-501218.
9.	Vidya Jyothi Inst. of Technology, Himayathnagar (V), CB Post, Hyderabad –500 075.
10.	Malla Reddy College of Engg & Technology, Maisammaguda, Gundlapochampally(V), Medchal(M), Ranga Reddy Dist
11.	Christu Jyothi Inst of Technology & Science, Colombo Nagar, Yashwanthapuram, Janagaon Mandal, Warangal Dist.-506 157.
12.	Anurag Group of Institutions, (Formerly CVSR CE), Venkatapur (V), Ghatkesar (M), Ranga Reddy Dist.
13.	Sri Kavitha Engineering College, Karepally, Yellandu, Khammam Dist-507 122.
14.	Al-Habeeb college of Engineering & Technology, Dammergidda (V), Chevella (M), Ranga Reddy Dist.
15.	Vignana Bharati Institute of Technology, Aushapur (V), Ghatkesar, Ranga Reddy Dist.
16.	ACE Engineering College, Sy.No:175 & 181, Ankushapur (V), Ghatkesar (M), Ranga Reddy Dist-50130
17.	Jayamukhi Institute of Technological Sciences, Muqdumpuram (V), Chennaraopet (M), Via. Narsampet, Warangal. Dist-506 332.

18.	CVR College of Engineering, Vastu Nagar, S.No.315, Mangalpalli (V), Ibrahimpatnam (M) Ranga Reddy Dist.-501 510.
19.	JB Institute of Engineering. & Technology, Yenkapally (V), Moinabad Mandal, Rangareddy Dist-500 075.
20.	Geetanjali College of Engg & Technology, Cheeryal, Keesara Mdl, Ranga Reddy Dt.
21.	CMR College of Engineering & Technology, Kandlakoya, Medchal (M), Hyderabad –501401

Annexure –VI

JNTUH Self-Financing Courses offered in the academic year 2015-16

JNTUH College of Engineering, Hyderabad.

Double Degree Programme			
S.No	**Name of the Course**	Seats allotted	**Tuition Fee per Semester**
1	B.Tech + M.Tech Civil Engg.	18	31,000/-
2	B.Tech Civil Engineering + MBA	12	31,000/-
3	B.Tech + M.Tech Mech Engg.	18	31,000/-
4	B.Tech Mech Engg. + MBA	12	31,000/-
5	B.Tech + M.Tech EEE	18	31,000/-
6	B.Tech EEE + MBA	12	31,000/-
7	B.Tech + M.Tech ECE	18	31,000/-
8	B.Tech ECE + MBA	12	31,000/-
9	B.Tech + M.Tech CSE	18	31,000/-
10	B.Tech CSE + MBA	12	31,000/-
11	M.Sc. Drugs and Pharmaceuticals	25	15,000/-
12	M.Sc. Fiber Optics and Communication	25	15,000/-
13	M.Sc. Applied Mathematics	25	15,000/-
14	M.Sc. Organic Chemistry	25	15,000/-
15	M.Tech. Advanced Manufacturing Systems	5	25,000/-
16	M.Tech. Computer Science	5	25,000/-
17	M.Tech. Digital Systems and Computer Electronics	5	25,000/-
18	M.Tech. Electrical Power Engineering	5	25,000/-
19	M.Tech. Embedded Systems	5	25,000/-
20	M.Tech. Energy Systems	5	25,000/-
21	M.Tech. Engineering Design	5	25,000/-
22	M.Tech. Geo-Technical Engineering	5	25,000/-
23	M.Tech. Computer Science and Information Engineering	18	25,000/-

24	M.Tech. Metallurgy	5	25,000/-
25	M.Tech. Power Electronics	5	25,000/-
26	M.Tech. Structural Engineering	5	25,000/-
27	M.Tech. Systems and Signal Processing	5	25,000/-
28	M.Tech. Thermal Engineering	5	25,000/-
29	M.Tech. Transportation Engineering	5	25,000/-

MoU Course – Integrated Double Degree Masters' 5 Years Programme (IDDMP)

30	IDDMP (B.Tech. + M.Tech. Telecommunication Systems)	30	Rs.4.00 Lakhs for 7 Sem. at JNTUH. 9000 SEK at BTH, Sweden.
31	IDDMP (B.Tech. + M.Tech. Computer Science & Engineering)	15	
32	IDDMP (B.Tech. + M.Tech. Software Engineering)	15	

International Integrated Double Degree Masters' Programme (IIDDMP) – 5 Years programme

33	IIDDMP (B.Tech. + M.Tech. Computer Science & Engineering)	10	Rs.2,15,500/- per annum

JNTUH Institute of Science and Technology

1	M.Sc. Biotechnology	25	15,000/-
2	M.Sc. Microbiology	25	15,000/-
3	M.Sc. Environmental Biotechnology	25	15,000/-
4	M.Sc. Environmental Science and Technology	25	15,000/-
5	M.Sc. Geo-Spatial Science and Technology	25	15,000/-
6	M.Sc. Water and Environmental Technology	25	15,000/-
7	M.Sc. Satellite Meteorology and Weather Informatics	25	15,000/-
8	M.Sc. Nano Technology	25	15,000/-
9	M.Sc. Organic Chemistry	25	15,000/-
10	M.Sc. Analytical Chemistry	25	15,000/-
11	M. Tech. Bio-Chemical Engineering	5	25,000/-
12	M. Tech. Bio-Technology	5	25,000/-
13	M. Tech Chemical Technology	5	25,000/-
14	M. Tech. Environmental Management	5	25,000/-

15	M. Tech. Environmental Geomatics	5	25,000/-
16	M. Tech. Spatial Information Technology	5	25,000/-
17	M. Tech. Geo-Informatics & Surveying Technology	5	25,000/-
18	M. Tech. Nano Technology	5	25,000/-
19	M. Tech. Water and Environmental Technology	5	25,000/-
20	M. Tech. Nano Electronics and Photonics	18	25,000/-

JNTUH School of Information Technology

1	M.Tech. Bio-Informatics	5	25,000/-
2	M.Tech. Computer Networks and Information Security	5	25,000/-
3	M.Tech. Computer Science	5	25,000/-
4	M.Tech. Software Engineering	5	25,000/-

JNTUH College of Engineering, Jagityala

1.	M.Tech. Computer Science and Engineering	5	25,000/-
2.	M.Tech. Digital Systems and Computer Electronics	5	25,000/-
3.	M.Tech. Engineering Design	5	25,000/-
4.	M.Tech. Information Technology	5	25,000/-
5.	M.Tech. Power Systems	5	25,000/-

Annexure –VII

MoU Coures offered by the University.

National MoUs:

S.No	Name of the Organizations	Courses offered
1	National Academy of Construction, (NAC), Hyderabad	1-year PG Diploma in i. Construction Project Management, ii.Building Technology, iii. Highway and Runway Technology, iv. Facilities Management.
2	Central Institute of Tool Design (CITD), Hyderabad	2- year M. Tech (Mechatronics) and 2- year M. Tech Robotics & Automation
3	Military College of Electronics and Mechanical Engineering, (MCEME), Secunderabad	2-year M. Tech programme in 1 Computer Technology 2 Aviation Technology
4	Navigation Training School, Air Force Station, Begumpet, Secunderabad	2-year M Sc degree in Aviation Science
5	National Institute of Tourism and Hospitality Management, (NITHM) Hyderabad	i. 2-year MBA (Tourism & Hospitality) ii. 4-year BBA (Tourism & Hospitality) iii. 2-year MBA course in Hospitality Management
6	National Institute of Mentally Handicapped (NIMH), Secunderabad	2- year Master in Disability Rehabilitation Administration (MDRA) course
7	Telangana State Avitation Academy, (TSAA), Hyderabad	5- year integrated course M Sc (Aviation) with specialization in Ground Duty Stream/(AME-Mechanical/Avionics) on regular basis.
8	International Academy of Computer Graphics, (IACG), Hyderabad	4- year Bachelor of Multimedia (BMM) 2-year M Sc (Multimedia)
9	M/s. Veda Institute of Information Technology Pvt., Ltd., Hyderabad	2-year MS program in VLSI Engineering
10	Mahindra Educational Institutions, Hyderabad	4-year B. Tech programmes Mechanical Engg., Computer Science and Engineering Civil Engineering Electrical Engineering
11	Annapurna International School of Film + Media, Banjara Hills, Hyderabad	2 -year MBA (Media) course.
12	M/s. Anoo's International Beauty School,	2-year M Sc (Cosmetology) Course

	Hyderabad	

13	Indian Institute of Chemical Technology (IICT), Hyderabad	Under this MoU, JNTUH on its part would admit students of CSIR / ICMR /UGC /JRF /SRF /Project Assistants/any other National Scholarship holders/IICT employees working at IICT/CSIR under their Ph. D Programme.
14	TATA Consultancy Services Limited (TCS), Mumbai	TCS will provide training to SC/ST students to improve their employability through improvement of English communication Skills, Corporate etiquette, analytical thinking and other problem solving skills.
15	Ordinance Factory Medak, Medak District	For development of the project and also to have the projects for the UG and PG students of JNTUH CEH
16	National Association of Software & Service Companies, (NASSCOM), Hyderabad	For "Qualification Pack (QP) content development
17	Defense Metallurgical Research Laboratory (DMRL), Hyderabad	for identified research projects on mutual interest on materials, Registration of JRFs and SRFs of DMRL as M. Tech or Ph. D students at JNTUH
18	Intel Technology India Pvt. Ltd., Hyderabad	Develop and deploy and industry relevant curriculum on Embedded Systems based on **Intel® Atom™ Processor**.

International MoUs:

1	Carnegie Mellon University, USA (AP State Council Higher Education, Hyderabad and JNTUH)	2-year MSIT programme
2	Central Michigan University, USA	2- year MBA Programme
3	Asian Institute of Technology (AIT), Bangkok, Thailand	5-year International Integrated Double Degree Masters Programs (IIDDMP) into B. Tech (CSE, Civil, EEE) & M. Tech in relevant field by JNTUH and M.S by AIT, Bangkok
4	SRIIT, Hyderabad A tripartite agreement was entered between University of Massachisetts Lowell, JNTUH and SRIIT	5- year Global Integrated Engineering Programmes BS &MS) degree in IT, ECE, EEE and CSE
5	Blekinge Institute of Technology, Sweden	IDDMP: B. Tech (ECE) & M. Tech (Telecommunication Systems) by JNTUH and M Sc (Telecommunication Systems) by BIT, Sweden
		IDDMP: B. Tech (CSE) & M. Tech (Software Engineering) by JNTUH and M Sc (Software Engineering) by BIT, Sweden.
		IDDMP: B. Tech (CSE) & M. Tech (CSE) by JNTUH and M Sc (CSE) by BIT, Sweden
		IDDMP: B. Tech (MECH) & M. Tech (Mechanical Engineering: Structural Mechanics) by JNTUH and M Sc., (Mechanical Engineering emphasis on Structural Mechanics) by BIT, Sweden
6	Southern Illinois University, Center for International Education, NorthWest Annex B Wing – Mail Code 4333, 860 Lincoln Drive, Carbondale, Illinois 62901	Enhancing global educational opportunities for students and improved professional development opportunities for faculties and other staff

Grams: "TECHNOLOGY"
E mail:

phone:off:040-32405422
cell:040 – 9395524281
fax: 040 – 23152333

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

Kukatpally, Hyderabad – 500 085, Telangana (India)
(Established by Andhra Pradesh Act No.30 of 2008)

ANNUAL ACCOUNT FOR THE YEAR 2012-13 OF R/JNTU/ PD A/C

RECEIPTS

Grant-in-aid JNTUH		
311 Salaries: 36,00,00,000.00		36,00,00,000.00
JNTU College of Engg. Karimnagar		
311 Salaries: 2,51,80,000.00		
312 Others : 73,65,000.00		3,25,45,000.00
JNTU College of Engg. Sultanpur		
311 Salaries: 1,55,00,000.00		
312 Others : 50,00,000.00		2,05,00,000.00
	RECEIPT :	41,50,45,000.00
	Opening Balance :	------NIL------
	Grand Total :	41,50,45,000.00

PAYMENT

TRANSFER TO REGISTRAR GENERAL FUND ACCOUNT		
311 Salaries: 36,00,00,000.00		36,00,00,000.00
JNTU College of Engg. Karimnagar		
311 Salaries: 2,51,80,000.00		
312 Others : 73,65,000.00		3,25,45,000.00
JNTU College of Engg. Sultanpur		
311 Salaries: 1,55,00,000.00		
312 Others : 50,00,000.00		2,05,00,000.00
	Payment :	41,50,45,000.00
	Closing Balance :	------NIL ------
	Grand Total :	41,50,45,000.00

ANNUAL ACCOUNT FOR THE YEAR 2013-14 OF R/JNTU/ PD A/C

RECEIPTS		EXPENDITURE	
TRANSFER TO REGISTRAR GENERAL FUND ACCOUNT			
311 Salaries: 30,63,79,000.00		311 Salaries: 30,63,79,000.00	
JNTU College of Engg. Karimnagar			
311 Salaries:	2,07,74,000.00	311 Salaries:	2,07,74,000.00
312 Others :	49,10,000.00	312 Others :	49,10,000.00
	2,56,84,000.00		2,56,84,000.00
JNTU College of Engg. Sultanpur			
311 Salaries:	75,00,000.00	311 Salaries:	75,00,000.00
312 Others :	60,00,00,000.00	312 Others :	60,00,00,000.00
	60,75,00,000.00		60,75,00,000.00
JNTU College of Engg. Manthani			
311 Salaries:	1,00,00,000.00	311 Salaries:	1,00,00,000.00
OB :	---------	**CB** :	---------
	94,95,63,000.00		**94,95,63,000.00**

ACCOUNT FOR THE YEAR 2014-15 OF R/JNTU/ PD A/C

RECEIPTS		EXPENDITURE
Grant-in-aid JNTUH Non-Plan		
311 Salaries: 44,74,20,000=00		44,74,20,000=00
JNTUH College of Engg. Jagtial		
311 Salaries:	3,46,22,000=00	
312 Others :	98,20,000=00	4,44,42,000=00
Plan		
JNTUH College of Engg. Manthani		
311 Salaries:	62,49,000=00	
312 Others :	75,00,000=00	1,37,49,000=00
JNTUH College of Engg. Sultanpur		
311 Salaries:	1,36,79,000=00	
312 Others :	60,00,00,000=00	61,36,79,000=00
	TOTAL :	**111,92,90,000=00**

311 Salaries:	50,19,70,000=00
312 Others :	61,73,20,000=00
TOTAL :	**111,92,90,000=00**

ABBREVIATIONS

AICTE	All India Council for Technical Education
AIT	Asian Institute of Technology, Bangkok
AQAR	Annual Quality Assurance Reports
B.Tech.	Bachelor of Technology
BICS	Bureau of Industrial Consultancy Services
BoS	Board of Studies
BTH	Blekings Institute of Technology, Sweden
CBCS	Choice Based Credit System
CBT	Centre for Bio-Technology
CCST	Centre for Chemical Science and Technology
CEN	Centre for Environmental Sciences
CITD	Central Institute of Tool Design
CMU	Carnegie Mellon University
CNST	Centre for Nano Science and Technology
CoE	College of Engineering
CPST/CPS	Centre for Pharmaceutical Science and Technology
CSIR	Council of Scientific and Industrial Research
CSIT	Centre for Spatial Information Technology
CWR	Centre for Water Resources
DBT	Department of Bio-Technology
DLRL	Defence Electronics & Research Laboratory
DMRL	Defence Metallurgical Research Laboratory
DRC	Departmental Research Committees
DRDL	Defence Research and Development Laboratory
DRDO	Defence Research and Development Organisation
DST	Department of Science and Technology
DUFR	Directorate of University Foreign Relations
EAMCET	Engineering, Agriculture and Medical Common Entrance Test
ECET	Engineering Common Entrance Test

EDC	Entrepreneurship Development Cell
EDCET	Education Common Entrance Test
EDEP	Electronic Distribution of Examination Papers
e-LSDM	e-Learning Solutions and two-way HD Delivery Mechanism
FIST	Fund for Improvement of Science &Technology Infrastructure
GATE	Graduate Aptitude Test in Engineering
GPAT	Graduate Pharmacy Aptitude Test
GRE	Graduate Record Examination
HoD	Head of the Department
HRDC	Human Resources Development Centre
ICET	Integrated Common Entrance Test
ICHR	Indian Council of Historical Research
ICPR	Indian Council of Philosophical Research
ICSSR	Indian Council of Social Science Research
ICT	Information Communication Technology
IDDMP	Integrated Double Degree Masters' Programme
IDP	Integrated Dual Degree Programme
IICT	Indian Institute of Chemical Technology
IIDDMP	International Integrated Double Degree Masters' Programme
IIIT	International Institute of Information Technology
IIT	Institute of Information Technology
INFLIBINET	Information and Library Network
IQAC	Internal Quality Assurance Cell
IST	Institute of Science & Technology
JNTUH	Jawaharlal Nehru Technological University Hyderabad
JNTUH CEH	JNTUH College of Engineering, Hyderabad
JNTUH CEJ	JNTUH College of Engineering, Jagityal
JNTUH CEM	JNTUH College of Engineering, Manthani
JNTUH CES	JNTUH College of Engineering, Sultanpur
JRF	Junior Research Fellow
LAWCET	Law Common Entrance Test

M.Phil	Master of Philosophy
M.Sc	Master of Science
M.Tech	Master of Technology
MBA	Master of Business Administration
MCA	Master of Computer Applications
MHRD	Ministry of Human Resources Development
MOOC	Massive Open Online Courses
MoU	Memoranda of Understanding
NAAC	National Assessment and Accreditation Council
NASSCOM	National Association of Software and Services Companies
NBA	National Board of Accreditation
NIT	National Institute of Technology
NPTEL	National Programmed Teaching Enhanced Learning
NSS	National Service Scheme
OPAC	Online Public Access Catalogue
PDF	Post Doctoral Fellowship
PG	Post Graduate
PGECET	Post Graduate Engineering Common Entrance Test
Ph.D	Doctor of Philosophy
PIU	through Programmes Interface Unit
QIP	Quality Improvement Programme
SCDE	School of Continuing and Distance Education
SERB	Science and Engineering Research Board
SET/SLET	State Level Eligibility Test
SIT	School of Information Technology
SMS	School of Management Studies
SNIP	Source Normalized Impact per Paper
SRF	Senior Research Fellow
SWOC	Strengths, Weaknesses, Opportunities and Challenges
TASK	Telangana Academy of Skills and Knowledge
TEQIP	Technical Education Quality Improvement Programme

TSCHE	Telangana State Council of Higher Education
TSPSC	Telangana State Public Service Commission
UCPP	Committee for Perspective Planning
UCPP	University Committee for Perspective Planning
UG	Under Graduate
UGC	University Grants Commission
UIIC	Directorate of University-Industry Interaction Cell
UPSC	Union Public Service Commission
Wi-Fi	Wireless Fidelity