

FOR 3rd CYCLE OF ACCREDITATION

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

KUKATPALLY, HYDERABAD 500085 www.jntuh.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

April 2023

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Jawaharlal Nehru Technological University Hyderabad was established on 2nd October 1972 by the Legislature of the State of Andhra Pradesh as the first Technological University in the country. It has been in the forefront for the past 50 years in providing quality technological education of relevance in the unified State of Andhra Pradesh and presently the state of Telangana. After 36 years of existence it was restructured into 4 different Universities by the Government vide Government Ordinance No.13, dated 18th August 2008 and Act of State Legislature No.30 dated September 2008 and this new University has been designated as Jawaharlal Nehru Technological University Hyderabad (JNTUH).

JNTUH is situated in a sprawling 89-acre campus at Kukatpally, Hyderabad. It has now 8 Constituent Engineering Colleges, two at Hyderabad (main campus), one at Kondagattu (Jagithyal), one college at Manthani and two at Sultanpur (Sangareddy dist.), one at Rajanna Sircilla & one at Wanaparthi along with 12 other constituent units on Hyderabad campus. JNTUH offers B.Tech. programmes in 7 disciplines, Integrated 5-year dual degree Masters programmes; M.Tech. Programmes in 26 disciplines, M.Pharm. in 04 disciplines; M.Sc. in 08 disciplines; MCA, MBA, M.S. and Ph.D. programmes in various disciplines of Engineering, Technology, Science, Management and Humanities. JNTUH has 214 affiliated colleges spread over the Telangana State and has more than 3.50 lakhs students on rolls. The University has Memoranda of University with many national and international organizations.

Vision

To provide for the advancement of learning and knowledge in Engineering & Technology, Physical and Social Sciences by teaching, research and experimentation or practical training or by such other means as the University may deem fit.

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.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Locational advantage of being situated in the state capital city with admirable connectivity with the rest of the country.
- Connection with major IT and Pharma Industries situated locally.
- Being an affiliating technological University in the State, upholding the standards in technical education in the entire state with due relevance.

- Qualified and experienced faculty with global linkages
- Academic reputation in the public.
- Largest intake of student with top rankers in the state level admission test
- Research collaborations with leading international institutions and Research organizations
- Students hostels with all amenities.
- Vast resources spread across city and conducive campus characteristics.
- Wide spectrum of academic disciplines unmatched in Indian Universities
- Diverse student-body drawn from different states and sections of the society to promote inclusive practices and foreign students.
- Choice Based Credit System (CBCS) in professional programmes and a good number of Elective options in all programmes
- Integration of Massive Open Online Courses (MOOCs) as part of curricula, with a provision of credit transfer
- A strong base for community outreach and extra-curricular with 5 units of NSS in the University.
- Strong base to offer consultancy to Govt. and Private Organizations.
- Implementation of NEP.
- Offering twining programs with foreign universities.
- Attracting a larger number of foreign students.

Institutional Weakness

- JNTUH is a technological University and hence having lesser prominence on social, humanities and arts aspects.
- JNTUH is state university limited to territorial jurisdiction therefore less/no scope to start offshore campuses.
- Limited resources from the State for expansion of programmes and maintenance of existing infrastructure.
- Dependence on State for funds, sanctions, approvals and policy level decisions.

Institutional Opportunity

- Launching of multidisciplinary courses in emerging areas.
- Attracting more international students for higher education programmes.
- Strategic alliances and collaborations with International and National Educational Institutes, Industries, Government Bodies and NGOs, for research, faculty-student exchange, joint programs, training and consultancy.
- Continuous quality enhancement, accreditations, benchmarking and certification from appropriate bodies / organizations for national and international recognition.
- Promoting multidisciplinary research concerning to community.
- Innovation and entrepreneurship expansion opportunities
- More scope for starting industry-oriented courses as per the requirements of the global requirements.

Institutional Challenge

• Prominent sense of balance between the traditional, innovative and professional programmes offered by

the University.

- Attracting top rank students to the University on par with centrally funded Technical Institutions.
- Meeting the technological advancements through continuous up-gradation of educational resources.
- Sustaining the value system amongst stakeholders.
- Managing resources for quality education while keeping the cost of education low.
- Attendance-related issues of students preparing for various competitive / an entrance examination at local institutes/coaching centers.
- Resource-mobilization through enhancing consultancy and research.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

JNTUH introduced multidisciplinary and interdisciplinary courses to provide a more comprehensive understanding of a topic or problem by drawing on multiple disciplines like Constitution of India, Environmental Science, Software related courses etc. The University revises the syllabi regularly to meet the industry requirements. The Boards of Studies consists of faculty members from various prestigious organizations like IITs, NITs, IIITs, Industry/R&D and Alumni. Implementing Outcome Based CBCS (Choice Based Credit System) which is student centric with more emphasis on practice than theory and job-oriented. JNTUH with the motto of "Gateway of Excellence", has accentuated outcome-based education.

JNTUH University colleges strictly adhere to the academic calendar as prepared by the University. The academic committee meeting is convened to discuss various issues about the delivery of curriculum. The academic calendar is approved by Academic Senate of the University. The curriculum meets the industrial needs vis-a-vis inculcates the ethical and moral values. The University believes in realizing the curricular aspects by defining Programme Outcomes, Programme Specific outcomes and Course Outcomes that bring out the desired competencies expected. Curriculum review is done regularly to keep in pace with developments in respective fields to meet the requirement of academia, industry/profession and society. The University Colleges have diverse range of course options catering to diverse range of learners in terms of core options, Elective subjects and Add-on courses. Courses relevant to Professional Ethics, Human Values and Environment and Sustainability are integrated in different programmes. During last five years, a total of 401 value added courses are conducted. During the current year all students undertook field projects/internships as part of curriculum under experiential learning methods. The feedbacks are sought from various stakeholders' and the suggestions are implemented for continuous improvement in curriculum. The activities like theory, practical classes, class test, practical examination, seminar, project assessment as planned in the academic calendar are monitored by HOD & Principal. Course files and Lesson plans are maintained. On regular basis college academic council meetings, HOD's meetings and Faculty meetings help in effective implementation of the academic process. NPTEL courses are encouraged for both for students and faculty.

Teaching-learning and Evaluation

JNTUH is the one among the premier Technological institutions in the South India and it attracts fairly good rank students through state level common entrance tests The rule of reservation is strictly followed in the admission process. All seats are filled against seats reserved for various categories.

Teaching-Learning and Evaluation are integral components of education that play a crucial role in shaping the

students' knowledge, skills, and attitudes. JNTUH Campus colleges strive hard to design student-centric approaches and activities to address the individual requirements of different levels of students as they come from diverse socio-economic backgrounds and medium of instruction in schoolings. Innovative teaching methodologies such as project-based learning and experiential learning are implemented to enhance the learning experience and promote active learning. Active learning as a team is promoted in most of the courses. Another challenge in OBE is that the difficulty level of question paper is not measured to higher order accuracy, which needs to be eliminated.

The Campus Colleges encourage students from diverse background. The slow learners and advanced learners are identified based on the student performance and special strategies are adopted to overcome the learning barriers. Traditional teaching has been enriched with more innovative and creative ways of disseminating, sharing and facilitating knowledge development. The department wise Mentorship is allotted to continue the student centric learning approach.

Average teaching experience of the faculty in the institute is 15 years, which is an added asset for an institution. The total of 169 doctorate faculty are working in the institution is an added asset for more effective teaching process The Program specific outcomes and course outcomes are displayed on the website. The attainment of the program outcomes reflects in the internal assessment and the results.

Many reforms are introduced in the internal assessment system and the system is made robust and transparent with clear guidelines. Standard procedures exist for examination related grievance redressal. An established feedback mechanism is in-practice for the evaluation of Teaching - Learning Process and thereby necessary corrective mechanism is initiated based on the suggestions/recommendations made in IQAC.

Research, Innovations and Extension

The university has taken up several proactive steps in order to strengthen the research resulting in improved performance of research which is evident from the significant number of research publications (2879), Books(142) patents(44) research projects (213) and collaborative activities (38). The university updates research facilities by considering the latest technological developments and the faculty are encouraged to pursue research in their field of study and work, publish papers, and organize workshops in the area of innovations and research. The University supports the faculty in applying for various project funding schemes of the government. The TEQIP I, II and III phases has supported for the funds for procurement of latest equipment in all the units and fellowships for regular research scholars for a period of 3/5 Years. University received funds from RUSA earmarked research facilities have been implemented for specific area of research.

JNTUH has set up an innovation ecosystem to foster a culture of innovation among the young talents in the University campus. The University keeps up the ecosystem more vibrant and conducive with state of art infrastructure. The University has established J-Hub in synchronization with T-hub of Government of Telangana and facilitating the students to materialize their ideas by conducting various student activities like Hackathons, Ideation, incubation, prototyping, career accelerator etc. The University has received grant from DST for Technology Business Incubator (TBI) to promote innovation and entrepreneurship. AICTE has sanctioned IDEA lab for JNTUH as joint collaborative project to make the ideas of the students into innovative

products. For promoting continuous research promotion in the area of Science and Technology the funding is received for Post-Doctoral Fellowship program from UGC/DST-WoS/AICTE/DBT etc.

JNTUH strongly supports participation of its students and faculty in socially useful activities that contribute significantly to the overall upliftment of society and promote wellbeing. The institution has conducted several Extension activities through NSS like blood donation camps, tree plantation, environment awareness programs electoral literacy programs for the local community etc. A total of 227 programs were conducted during the assessment period.

Infrastructure and Learning Resources

Provision of adequate infrastructural facilities for Teaching and Learning has always been the top priority area of JNTUH. The campus is situated in 89 acres land in a clean and green environment with built-up area of 9.15 lakh sft. Two academic units and the administrative units are located in the main campus. All departments have exclusive blocks along with 5 Boys Hostels (accommodation for 1293), 3 Girls hostels (accommodation for 895), one International students hostel (120), Faculty and staff quarters, JN Auditorium (capacity 1000), UGC-HRDC auditorium (capacity 300), Sports complex, Health center, Fire Station, UGC-HRDC Guest House. There is a Power Backup facility with a capacity of 1600 KVA. The University Campus has state-of-the-art infrastructure and learning resources including ICT enabled classrooms, seminar halls, equipped laboratories, computer labs, library and other support facilities. The JNTUH has substantial infrastructure for sports and other extracurricular activities. A Solar power plant generating 4 MW (5.8 Million units per annum).

The library is situated in an exclusive three floored building with a total area of 4180 Sq.m. An amount of Rs 593.84 lakhs has been spent on books, journals and subscription for e-journals. It is equipped with Digital Library with modern facilities and resources in the form of e-journals, e-books, thesis and dissertations. Fully automated and equipped with Servers, NAS Box, 70 Desktops. Member of UGC-INFONET & INDEST-AICTE Consortium. Provides online access to 30418 e-journals. It has access to Learning Resources like Shodhganga, eShodhsindhu and databases. Budget for infrastructure, library and other learning resources are earmarked annually based on the recommendations of respective committees. The overall functioning of IT resources, review and up gradation of IT infrastructure is carried out annually according to plan and approval of Finance Committee and Executive Council duly earmarked in the budget. The University has 1232 computers exclusively for academic purpose with 1 Gbps bandwidth for internet connection. Classrooms and laboratories are equipped with multimedia teaching aids. High-end equipment is available for regular experiments/ student projects and research. The campus facilities are maintained through fulltime staff appointed by maintenance department.

Student Support and Progression

University is determined to uplift the society through higher education. The underprivileged students are supported with financial assistance in the form of Government scholarships, tuition fee reimbursement, guidance and counselling to become an extraordinary performers in the pursuit of curricular, co-curricular and extra-curricular excellence. The university strives hard to support funding for eligible UG and PG students with scholarships and fellowships from state government, central government and other sources.

Capacity building programmes offered by the university trains our students on soft skills, new language learning, yoga practicing, swimming. Many students were benefitted through the training programmes on

career counselling and guidance for competitive examinations. Exclusive book banks are made available in the library to support the students. The Coaching material is made available in the library for GATE, UGC/CSIR-NET/JRF exam, banking exam, civil services exam and other government employment exams. Reputed companies hire about 80 percent of our students through campus placement drives organized by the university. Further many students are pursuing their higher studies. Sports and cultural activities were organized every year except pandemic period. Students' performances were recognized with several awards / medals in state / national / international level. The NSS unit of the institution has organizes an average of 30 events every year. The statutory committees viz., Anti-Ragging Cell, Internal Committee (IC), Discipline Committee, SC/ST Cell, Women Cell and Grievance Cell exists for the redressal of student grievances. It addresses through mentor / coordinator / HoD to top-level administration. Enquiries and redressals are conducted on need-based by the monitoring committees. Students clubs encourage students to engage and compete in cultural, entertaining and sporting events to promote talent exhibition, relive stress and social togetherness. JNTUH Alumni Association ensures the graduates to stay connected with the university through online and offline mode. An exclusive directorate has been established in the university to get better linkage with the alumni. Several alumni have presented career-based insights through alumni lectures to benefit current students.

Governance, Leadership and Management

The Vision, Mission, Goals and Objectives reflect the nature of Governance and decision making of the University. The Governance of the JNTUH is carried out with the support of statutory bodies. The Executive Council (EC) meetings will be held frequently for taking policy decisions and financial approvals for general governance of the university. The Standing Committee of Academic senate (SCA) meetings will be held for approval of all academic activities, regulations, BoS resolutions. University Committee for Perspective Planning (UCPP)and IQAC takes up the activities of assessing the infrastructure and academic requirements of units and colleges. The participation of teachers at different administrative tasks and actions is quite effective through decentralized Governance and easing out the responsibilities. The strategic plan for the University is to develop, strengthen, and implement academic programs that are responsive to the JNTUH mission and are systematically reviewed for sustained quality, relevance, and excellence to meeting the challenges of a highly competitive and global workforce. Smooth functioning of any University depends on the resolutions and minutes discussed in respective bodies/cells/committees. Being a state Government university, the major funding is from the Government through plan and non-plan budgetary allocations. Other major sources of funding are MHRD (TEQIP), DST, DBT, UGC, AICTE, DietY, MoES etc. In addition, the IRG of the university is from Affiliation and common service fee, Tuition fee and Consultancy projects.

JNTUH provides statutory and non- statutory welfare measures for the benefit of the faculty and the supporting staff. The conclusions arrived at IQAC in its meetings are reformulated to embed into the system for corrective actions. The JNTUH budget proposals are prepared by the heads of individual units and presented in finance committee meeting. After thorough discussions on the requirements, Finance Officer of the university prepares a consolidated budget every year taking in to consideration of both recurring and Non-recurring expenditures. The IQAC and UCPP suggestions that involve finance requirements are duly considered and put forward to respective academic heads. JNTUH has the performance appraisal system is to assess self-appraisal form which is filled-in by the staff member and then assessed by HOD/Principal/Director.

Institutional Values and Best Practices

The University upholds high standards in its values and practices by promoting gender equity, monitoring

internal committees, and forming women's care initiatives etc. The University is proud to inform that more than 50% of the total strength of students comprises of girls. Many of the women teachers are involved in various committees. Many women are also heading administrative positions like Principal, Directors, Deputy directors, etc.

The university is lush with greenery and good landscape. The university has a process of managing solid waste. The green waste like leaves, vegetative waste are collected and converted to vermi compost. Vendors are contacted on regular basis to collect the non bio-degradable waste. For Liquid waste generated from various places is carried to sewage treatment plant (STP) in the campus for primary, secondary and tertiary treatment of sewage. E-waste from different sections of the units are collected at one place, which is sold to authorize e-waste vendor.

Non-Financial Audits like Green audit, environment and energy audits are conducted and the recommendations provided are taken care of. Divyangjan friendly washrooms are available on campus, Signage including tactile path, lights, display boards and signposts are available.

JNTUH has inclusive environment as it has students based on international, national, regional, linguistic, communal and socioeconomic diversities who are pursuing their studies. The university also conducts various cultural programmes to celebrate unity in diversity. To promote the rich cultural heritage of India, several festivals are celebrated by the students, teaching and non-teaching staff.

JNTUH celebrates a large number of commemorative days and a wide variety of religious festivals like National Voters Day, National Republic Day, National Science Day, Telangana formation day, Indian Independence Day, etc. (about 12 festivals) and religious days for all students like Durga Puja etc.

Apart from the above, the university has been implementing two best practices as indicated in Qualitative metrics under criteria-7: 1) J-HUB (JNTUH Innovation Hub) – Nurturing the culture of Innovation and Entrepreneurship and 2) Meet the Achiever to motivate the students to set a goal, work persistently until it has been achieved.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the University					
Name	JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY				
Address	Kukatpally, Hyderabad				
City	Hyderabad				
State	Telangana				
Pin	500085				
Website	www.jntuh.ac.in				

Contacts for Communication								
Designation	Name	Telephone with STD Code	Mobile	Fax	Email			
Vice Chancellor	Katta Narasimha Reddy	040-23158661		040-2315866 5				
IQAC / CIQA coordinator	G.k. Viswanadh	040-23156109	9849163875	-	diqac@jntuh.ac.in			

Nature of University	
Nature of University	State University

Type of University	
Type of University	Affiliating

Establishment Details	
Establishment Date of the University	02-10-1972
Status Prior to Establishment,If applicable	Constituent College
Establishment Date	01-05-1965

Page 9/102 20-06-2023 01:03:58

Recognition Details							
Date of Recognition as a University by UGC or Any Other National Agency :							
Under Section Date View Document							
2f of UGC	24-08-2009	View Document					
12B of UGC	24-08-2009	View Document					

University with Potential for Excellence					
Is the University Recognised as a University with Potential for Excellence (UPE) by the UGC?	No				

Location,	Location, Area and Activity of Campus								
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	Program mes Offered	Date of Establishment	Date of Recognition by UGC/MHRD		
Main campus	Kukatpa lly, Hyd erabad	Urban	89	85006	B.Tech, M.Tech, M.Pharm , MBA, MCA, M.Sc.				

2.2 ACADEMIC INFORMATION

Affiliated Institutions to the University

Type of Colleges	Permanent	Temporary	Total
Engineering/Technology/Architecture/D esign	0	214	214

Furnish the Details of Colleges of University

Type Of Colleges	Numbers
Constituent Colleges	8
Affiliated Colleges	214
Colleges Under 2(f)	73
Colleges Under 2(f) and 12B	73
NAAC Accredited Colleges	64
Colleges with Potential for Excellence(UGC)	0
Autonomous Colleges	48
Colleges with Postgraduate Departments	178
Colleges with Research Departments	0
University Recognized Research Institutes/Centers	62

Is the University Offering any Regulatory Authority (SRA)	: Yes	
SRA program	Document	
AICTE	105051 8375 1 1675682703.pd <u>f</u>	
PCI	105051_8375_6_1675682710.pd f	

Details Of Teaching & Non-Teaching Staff Of University

Teaching Faculty												
	Professor			Associate Professor			Assistant Professor					
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned				110				36			,	140
Recruited	53	41	0	94	18	18	0	36	1	5	0	6
Yet to Recruit				16				0				134
On Contract	15	1	0	16	0	0	0	0	93	41	0	134

Non-Teaching Staff							
	Male	Female	Others	Total			
Sanctioned				697			
Recruited	124	42	0	166			
Yet to Recruit				531			
On Contract	357	174	0	531			

	Technical Staff							
	Male	Female	Others	Total				
Sanctioned				82				
Recruited	26	4	0	30				
Yet to Recruit				52				
On Contract	10	17	0	27				

Qualification Details of the Teaching Staff

	Permanent Teachers									
Highest Qualificatio n	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	53	41	0	7	11	0	1	2	0	115
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	11	7	0	0	3	0	21
UG	0	0	0	0	0	0	0	0	0	0

	Temporary Teachers									
Highest Qualificatio n	Professor			Associate Professor			Assistant Professor			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	28	7	0	35
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	65	34	0	99
UG	0	0	0	0	0	0	0	0	0	0

	Part Time Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Distinguished Academicians Appointed As

	Male	Female	Others	Total
Emeritus Professor	15	1	0	16
Adjunct Professor	0	0	0	0
Visiting Professor	0	0	0	0

Chairs Instituted by the University

Sl.No	Name of the Department	Name of the Chair	Name of the Sponsor Organisation/Agency
1	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE

Provide the Following Details of Students Enrolled in the University During the Current Academic Year

Programme		From the State Where University is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	933	200	22	64	1219
	Female	740	104	13	38	895
	Others	0	0	0	0	0
PG	Male	651	81	2	23	757
	Female	721	60	0	6	787
	Others	2	0	0	0	2
Doctoral (Ph.D)	Male	29	0	0	20	49
	Female	34	0	0	4	38
	Others	0	0	0	0	0
Certificate /	Male	0	0	0	0	0
Awareness	Female	0	0	0	0	0
	Others	0	0	0	0	0

Does the University offer any Integrated Programmes?	Yes
Total Number of Integrated Programme	6

Integrated Programme	From the State where university is located	From other States of India	NRI students	Foreign Students	Total
Male	401	38	0	0	439
Female	345	27	0	0	372
Others	0	0	0	0	0

Details of UGC Human Resource Development Centre, If applicable

Year of Establishment	04-11-2000
Number of UGC Orientation Programmes	19
Number of UGC Refresher Course	33
Number of University's own Programmes	81
Total Number of Programmes Conducted (last five years)	133

Accreditation Details

Cycle Info	Accredit	ation	Grade	CGPA	Upload Ped	er Team
					Report	
Cycle 1	Accredit	ation				
A	85.7					
A	3.01					
		Peer Team	Report 2017.pdf			
Cycle 2	Reassem	ent				

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Centre For Biotechnology	<u>View Document</u>
Centre For Chemical Science Technology	View Document
Centre For Environment	View Document
Centre For Nanotechnology	<u>View Document</u>
Centre For Pharmaceutical Sciences	View Document
Centre For Spatial Information Technology	View Document
Centre For Water Resources	<u>View Document</u>
Chemical Engineering	View Document
Chemistry	View Document
Civil Engineering	<u>View Document</u>
Computer Science And Engineering	<u>View Document</u>
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineering	View Document
Mathematics	<u>View Document</u>
Mechanical Engineering	View Document
Metallurgical Engineering	View Document
Physics	View Document
School Of Information Technology	View Document
School Of Management Studies	View Document

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	JNTUH introduced multidisciplinary and interdisciplinary courses to provide a more comprehensive understanding of a topic or problem by drawing on multiple disciplines. This approach helps students to gain a deeper and more nuanced perspective on complex issues. These courses help students to develop the ability. In view of this JNTUH introduced interdisciplinary courses in UG & PG level like Constitution of India, Environmental Science, English for Research Paper Writing, Value
	Education, Computer related courses, Software

Page 16/102 20-06-2023 01:03:58

related courses etc. The job market is becoming increasingly multidisciplinary and interdisciplinary, with many employers looking for employees who can think critically and creatively across multiple disciplines. Multidisciplinary and interdisciplinary courses can help students develop these skills and prepare them for the changing job market. As per the requirement of the present trends the multidisciplinary courses are offering for circuit and non-circuit branches like Artificial Intelligence, Research Methodology & IPR and Introduction to Cyber security. These courses can help bridge the gaps between different fields of study and promote collaboration and communication across disciplines. JNT University Hyderabad is actively involved in collaborative programs. The University revises the syllabi for the UG and PG programmes regularly to meet the industry requirements and also to keep up with the day-to-day technological developments. A separate Board of Studies has been constituted for each Department/Centre. The Boards of Studies consists of faculty members from various prestigious organizations like IITs, NITs, IIITs, JNTUH, Industry/R&D, Alumni, Other Universities/Colleges and Senior faculty members of the respective departments. Our University is implementing Outcome Based CBCS (Choice Based Credit System) which is student centric with more emphasis on practice than theory, job-oriented and to compete gradually with other accreditations. By introducing multidisciplinary and interdisciplinary courses in the curriculum provides valuable tool for promoting cross-disciplinary thinking, problem-solving, and innovation.

2. Academic bank of credits (ABC):

The academic bank of credits is a system that allows students to accumulate credits for completed courses and use them towards their degree requirements at a later time. The JNTUH provides academic bank of credits to administer and oversee the program, ensuring that it operates smoothly and efficiently. Specifically, the university is responsible for establishing the criteria for credit transfer and assessing the quality of the courses that are eligible for credit. This may involve evaluating the syllabus, course content, and teaching methods to determine whether they meet the standards of the JNTUH. The university also plays a role in advising students on

the use of the academic bank of credits. This may involve helping students to identify which courses are eligible for credit transfer, and how they can best use their accumulated credits to meet their degree requirements. JNTUH has registered in National Academic Depository for sharing student academic credentials of University Colleges. As UGC has instructed to board in Digilocker for sharing all academic credentials, JNTUH has registered in Digilocker and is in the process of collecting the required data to upload academic marks of the students. Academic Bank of Credits also provides facilities to students to store all the academic credits earned from the MOOC platforms such as SWAYAM AND NPTEL. The transfer of Student's credits earned through MOOC Portal to the Academic Credit Bank is initiated.

3. Skill development:

Skill development programs in JNTUH have been designed to enhance the skills and knowledge of students in specific areas to prepare them for the demands of the job market. This can include technical skills, such as programming or data analytics, as well as soft skills, such as communication and teamwork. These courses can help the Students to align with the needs of the industry. Skill development programs can also promote lifelong learning by encouraging students to continue developing their skills and knowledge throughout their careers. Skill development is given due importance in all UG & PG programmes to the tune of certain weightage in the curriculum. This JNTUH has classified the skill into two kinds, viz generic skills, and domain-specific skills. The generic skills include critical analysis, design thinking, professional communication skills and necessary skills as per the global requirements. Value-added courses, interdisciplinary approaches, and students' participation in seminars and workshops, internships, and projects provide opportunities to learn such generic skills. Domain specific skills are given due importance in all UG & PG programmes. In line with the guidelines of NEP 2020, the JNTUH has established the University Industry Interaction Centre (UIIC). Through this centre, JNTUH has signed MoUs with several industries/companies and the following activities have been conducted, the details are mentioned below:- • A one day workshop on

'Aptitude and Reasoning' • MEGA JOB FAIR have been conducted for the Telengana region total 144 companies participated and around 65000 unemployed youth registered in online to participate in the Job Fair. • Webinar on "Etiquette for Professional Engineers • Webinar on "Invaluable Internships" • Webinar on "Inevitable Hackathons" • Webinar on "Key Skills for Placements – Future Skills" • Are We Bridging the Gap Right? • A Mega Internship Fair in collaboration with HYSEA and TASK with the cooperation of CONDUIRA.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

The first step is to identify the Indian knowledge systems that are relevant to the subject matter being taught. This may involve reviewing ancient texts, consulting with experts, and engaging with local communities. JNTUH is mapping the Indian knowledge systems to the existing curriculum. This may involve identifying areas where Indian knowledge systems can be integrated into the curriculum, such as specific courses or topics. Once the Indian knowledge systems have been identified and mapped to the curriculum, appropriate pedagogical approaches need to be developed. This may involve developing new teaching methods, materials, and assessments. Faculty and staff need to be trained in the appropriate pedagogical approaches and Indian knowledge systems. This may involve workshops, seminars, and other forms of professional development. Indian knowledge systems should be incorporated into the assessment process to ensure that students are being evaluated on their understanding and application of this knowledge. JNTUH has been efficient enough in the transfer of traditional knowledge acquired from indigenous communities, in and around the Telangana State. JNTUH have incorporated traditional based courses in the curriculum such as Sanskrit for Technical Knowledge, Stress Management by Yoga, Personality Development through Life Enlightenment Skills, Plant Biotechnology, Immunotechnology, Virology, Fermentation Technology, Food Science & Technology, Value education, Research Methodology & Intellectual Property Rights, Herbal Cosmetics and Entrepreneur Management

5. Focus on Outcome based education (OBE):

The JNTUH has taken up the responsibility for defining the learning outcomes that students are expected to achieve. This involves identifying the

knowledge, skills, and attitudes that students should be able to demonstrate upon completing the program. Once the learning outcomes have been identified, the JNTUH is responsible for designing a curriculum that supports the achievement of those outcomes. This may involve selecting appropriate courses, developing learning activities, and providing appropriate resources. The JNTUH is responsible for aligning assessments with the desired learning outcomes. This may involve developing assessment rubrics and aligning assessment tasks with the identified learning outcomes. The JNTUH is responsible for monitoring student progress toward the desired learning outcomes. This involves regular feedback from students, tracking their performance, and providing support where needed. The University evaluates the effectiveness of the program in achieving the desired learning outcomes, by collecting data on student performance and analyzes the results. JNTUH with the motto of "Gateway of Excellence", has accentuated outcome-based education ensuring that the outgoing students are well equipped with skills and knowledge to pursue their careers. The Mission, Vision, Program Objectives, and Graduate attributes of the Institution are aligned on the same path to achieve the creation of responsible citizens with a well-defined focus on their future and well-endowed with appropriate skill sets. The challenges faced during the implementation are at the level of perception, structural alignment, implementation, curriculum construction, delivery methods, and assessments. All these are being addressed to overcome gradually. The major challenge of assessing the student's skill levels in domain-specific areas is being addressed by creating a properly designed assessment system in collaboration with various reputed Organizations. Teachers' subjectivity also plays a role in assessing and teachers are allowed to create their assessment tools which have embodied assessment of team learning, project-based learning, case analysis, and other participatory methods used for various courses. Active learning as a team is promoted in most of the courses. Another challenge in OBE is that the difficulty level of question paper is not measured to higher order accuracy, which needs to be eliminated. JNTUH is striving to elevate the academic life of all the students passing through the Institution by

empowering them with a defined focus on careers and the required skill sets to achieve their dream careers.

6. Distance education/online education:

The use of distance education/online education has several benefits. Students can learn at their own pace and on their own schedule, which allows them to balance their studies with work, family, and other obligations. Distance education is accessible to students who may not have the ability to attend traditional classes, such as those who live in remote areas. Distance education can be more affordable than traditional education because students do not have to pay for transportation accommodation, or other expenses associated with attending classes on campus. Distance education can also enhance students' technological skills, which are increasingly important in today's job market. The Directorate of School of Continuing and Distance Education (SCDE) established in JNTUH provides in depth knowledge of the understanding of the technology to meet the industry requirements & helps in staying competitive. It focuses on job aspirants for the enhancement of employability opportunities for Graduates and also for working professionals by providing wide range of skills to deal with complex projects that help the individuals to quickly advance in their career. Certificate Courses hold wide scope and better opportunities for faculty through the improvement of their teaching skills & knowledge in the upcoming areas. The online Certificate Courses gives an opportunity to the students for credits transfer as per National Education Policy (NEP-2020). The following certificate courses are offered by the SCDE • Data science with python programing • Python Programming for Data Science • Machine Learning and Deep Learning for Data Science • Natural Language Processing and Big Data • Block chain technology • BLOCKCHAIN • BITCOIN • Etherum, Smart contract, Hyper ledger, Solodity programming and block chain applications • Cloud & DevOps • Cloud Technology AWS & Microsoft Azure • Continuous Integration/ Continuous deployment with Git, Jenkins and Ansible • Infrastructure provisioning with Docker, Kubernates and Terraform • ARTI FICIAL INTELLIGENCE AND MACHINE LEARING • Artificial Intelligence and Machine learning •

Machine Learning (Supervised & Unsupervised learning) • Machine Learning - Natural Language Processing • Artificial Intelligence – (Deep Neural Networks, Convolutional Neural Networks) • Artificial Intelligence – Natural Language Processing with Deep Learning • Artificial Intelligence – Time Series (RNN), Computer Vision and Model Deployment

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?

The NSS unit of the University is very active to conduct various programmes including the programmes on electoral literacy to create awareness among students, faculty members, and non-teaching employees about voting rights and 100% of ensuring the casting of votes during Elections. The Jawaharlal Nehru Technological University NSS team and the Coordinator have been creating awareness among the public through Volunteers of NSS. Several programmes like rallies and street plays were conducted.

2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?

As per the direction of the State Chief Election Officer, the University assigned the job to the NSS coordinator of the University. The nodal officer arranged sensitization programmes at various affiliated Colleges of the University using the electoral literacy material provided by the election commission. Under the Nodal Officer, one Assistant Registrar, two Section Officers, and two Assistants were assigned to conduct the awareness programmes and to function as contact persons for all activities related to electoral literacy.

3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.

Creation of ward-level brigades to identify vulnerable voters (elders/differently-abled persons who are frequently migrating for work and others). These voters are contacted individually and encouraged to cast their votes. Senior citizens are supported for transport at the time of elections. NGOs are also invited to coordinate with the University. The University NSS coordinator conducted the following innovative programme for "100% voting "and "voting is my right". Invited drawings, logos, slogans, and write-ups from the students of affiliated

colleges. a. Under the above programme nearly 200 plus students participated b. A rally was conducted by the NSS wing and created the "Voting is my right Programme" c. Nearly 200 employees of the University served as presiding officers/polling officers for more than 100 polling stations in Telangana during the Assembly Election, Parliament and Municipal Elections. d. Senior faculty of the University for identified as the zonal officers in the election process. e. Several faculty members were identified as the trainers to conduct election classes/ to the Presiding and polling officers. r. The registrar of the University has been identified as the forwarding authority for voter registrations for the teacher's constituency for the teachers of all the affiliated colleges of the University. g. Faculty members along with the students are appointed as the teams for checking the vehicles whether the carrying cash during election period.

- 4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.
- The University is organizing the orientation programme to the teachers and students on the importance of elections, the Indian constitution, electoral mechanisms at various levels, and the dynamics of democracy. The trained teachers and students in turn created the awareness in the affiliated colleges and provided lectures and workshops to impart adequate knowledge and skills to the voters to exercise their rights during elections.
- 5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.
- a. First-year undergraduate students were encouraged to register as voters. Voter Id cards were collected and distributed to create an informed group of voters among our students. b. Voter enrolment campaigns were conducted with the support of NSS volunteers. c. Online registrationfor new voter was encouraged to eligible students through our commoncomputing center. Form 6 was circulated to eligible students. Booth-level officer interactionswere also arranged. d. Electronic Voting Machine usage was also explained / demonstrated.

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2021-22	2020-21	2019-20	2018-19	2017-18
54	54	54	54	54

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

1.2

Number of departments offering academic programmes

Response: 19

2 Students

2.1

Number of students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
4471	4251	4072	3969	4016

File Description		Docun	nent	
Institutional data in prescribed form	nat	View 1	<u>Document</u>	

2.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
1108	1032	930	1009	756

File Description	Document
Institutional data in prescribed format	View Document

2.3

Number of students appeared in the University examination year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
4471	4251	4072	3969	4016

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

2.4

Number of revaluation applications year-wise during the last 5 years

2021-22	2020-21	2019-20	2018-19	2017-18
122	106	114	117	64

3 Teachers

3.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
1304	1424	1521	1222	1234

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

3.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
251	250	261	270	274

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

3.3

Number of sanctioned posts year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
275	253	276	277	279

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

4 Institution

4.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
14600	12570	12630	11620	11190

File Description	Document
Institutional data in prescribed format	View Document

4.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
904	823	804	768	734

File Description	Document
Institutional data in prescribed format	View Document

4.3

Total number of classrooms and seminar halls

Response: 121

4.4

Total number of computers in the campus for academic purpose

Response: 1232

Page 26/102 20-06-2023 01:03:58

4.5

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

2021-22	2020-21	2019-20	2018-19	2017-18
3982.88	5201.27	10814.44	10327.03	6758.07

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

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

Response:

Jawaharlal Nehru Technological University Hyderabad is offering 7 B. Tech., 5 Integrated Dual Degree UG programs, 27 M. Tech., 3 M. Pharmacy., 7 M.Sc., 2 MCA, MBA programs and Doctoral Programs in various disciplines of Engineering, Technology, Science, Management and Humanities. In its quest for excellence the university has adopted a well-structured mechanism for the effective implementation and delivery of the curriculum. The University has carefully designed its curriculum keeping the current trends of National needs in appropriate Technology, Entrepreneurial Skill Development etc. The focus of curriculum development is to disseminate advanced knowledge in an interdisciplinary framework. The curriculum of the University is reviewed every 4 years for UG and 2 years for PG programs to make it socially relevant, job-oriented and to meet the growing needs of students and other stakeholders. All the programs offered for UG include Choice Based Credit System (CBCS), Open Electives, Professional Electives, Project Work, Industry Training/Internship/Industry Oriented Mini Project/Skill Development Courses/Seminars. Value added courses in Engineering, Sciences and Humanities, communication skills, and skill development programmes, focusing on global exposure, are also part of the curriculum. The Program Educational Objectives, Program Specific Outcome, and Course Outcome are designed in consonance with the graduate attributes of programs. Faculty are educated on OBE in order to formulate POs/PSOs/ COs for all programs through extensive training and workshops. The students are given adequate choice between discipline specific, interdisciplinary and multidisciplinary electives and can choose online elective courses, based on their aptitude, skill, and aspiration through MOOCs Courses, especially from SWAYAM, woven into academic structure. The institute has introduced mandatory courses on Human Values & Professional Ethics, Constitution of India, Environmental Science and Gender Sensitization courses in all UG programs and encourage Field Projects and Internships etc. Advanced Communication Skills course is included in curriculum to emphasize English language communication skills. Reinforcing student academic credentials, the university offers a range of add-on certificate courses like 3D Printing, Industrial Safety Management, Industrial Production techniques and Pharmaceutical Regulatory Affairs, Internet of Things, Data science with python programming, Block chain technology, Cloud & DevOps, 5G Technologies and Artificial Intelligence etc. to prepare the students towards skill development and sustain in professional world. The feedback received through online from the stakeholders (students, faculty, alumni, industry representatives and parents) are carefully analysed, discussed and appropriate actions are initiated at various bodies including the Board of Studies, Academic Council, Governing Council etc. Based on feedback received ~ 20% new courses are introduced focusing on employability potential. Academic-Calendar and Teaching-plans are strictly followed and are assessed regularly. To ensure effective curriculum delivery, faculty continuously upgrade their knowledge and technical skills supported by relevant ICT, by participating in faculty development programs, presenting their research papers in conferences and publishing their research articles.

Page 28/102 20-06-2023 01:03:59

File Description	Document
Upload Additional information	<u>View Document</u>

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

Response: 100

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

Response: 53

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

Response: 53

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Institutional data in prescribed format	View Document
Details of Programme syllabus revision in last 5 years	View Document

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

Response: 100

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1304	1424	1521	1222	1234

File Description	Document
Programme/ Curriculum/ Syllabus of the courses	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Institutional data in prescribed format	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response: 42.77

1.2.1.1 How many new courses were introduced within the last five years.

Response: 2868

1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.

Response: 6705

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Institutional data in prescribed format	View Document

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response: 98.15

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

Response: 53

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document

1.3 Curriculum Enrichment

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

Response:

The university offers professional courses encompassing the domains of different fields of engineering and technology like civil, mechanical, electrical, electronics and communication, computer science, metallurgy, chemical and other allied specialisations for post-graduation courses. The other programs in the university are post graduate programs in applied sciences, pharmaceutical sciences, bio technology, nano technology,

remote sensing, spatial information technology, energy systems and interdisciplinary are being offered. The different programs are incorporated with gender, human values, environmental and energy sustainability etc. The courses offered in the curriculum are Gender sensitization, Environmental Studies, disaster management, constitution of India, managerial economics and financial accountancy, cyber security etc are the part of undergraduate programs. This enriches the knowledge base of the student and improves the self-actualization and belongingness to the society. The Environmental Studies is an interdisciplinary course includes the study of natural resources with emphasis on renewable energy resources, the importance of conserving the present ecosystem, promoting biodiversity, perils of environmental pollution and raising awareness on environmental and social issues. Disaster Management is offered as an open elective to understand various types of natural and man-made disasters, their occurrences, effects, mitigation and management systems in India, the role of Geographical Information Systems and Remote Sensing Technology in Disaster Mitigation and Management. In post graduate programs, research methodology, intellectual property rights, cyber security, renewal energy sources, water resources management, remote sensing, environmental science, environment, sustainability etc. All courses are offered with the objective of facilitating the students to attain the respective course outcomes and the program outcomes to a broader extent which also reflects different cross cutting issues. Courses include case studies, practical experiences, learning activities are also done keeping the cross-cutting issues in to consideration. Students are also required to undertake group or individual or review /research projects to complete curricular requirements. During induction program at entry level, all the students are being enlightened with respect to human values, professional ethics, gender equality, yoga and other interactivity sessions. Project groups are formed to indicate a fair mix of boys and girls aimed to kindle respect for each other and these provide a platform for working together. In the laboratory tasks and field activities are being organised in groups with no gender bias for the students. Different workshops/ programs are conducted for the students at department level and university level to instill Moral, Social and Ethical values, on holistic understanding of ethical human conduct, trustful and mutually satisfying human acquire knowledge of their principles and utilization.

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability,	View Document
Human Values and Professional Ethics into the	
Curriculum	

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

Response: 275

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

Response: 275

File Description	Document
Institutional data in prescribed format	View Document
Brochure or any other document relating to value added courses	View Document

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

Response: 71.5

1.3.3.1 Number of students enrolled in value-added courses imparting transferable and life skills offered year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
3683	1279	2776	3535	3527

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

Response: 53.37

1.3.4.1 Number of students undertaking field projects or research projects or internships.

Response: 2386

File Description	Document
List of Programmes and number of students undertaking field projects research projects//internships (Data Template)	View Document

1.4 Feedback System

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

Response: A. All 4 of the above

File Description	Document
Institutional data in prescribed format	View Document

1.4.2 Feedback processes of the institution may be classified as follows:

Self Study Report of JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

Response: A. Feedback collected, analysed and action taken and feedback available on website		
File Description	Document	
Institutional data in prescribed format	View Document	

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Demand Ratio (Average of last five years)

Response: 8.58

2.1.1.1 Number of seats available year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1680	1459	1459	1342	1348

File Description	Document
Demand Ratio (Average of Last five years) based on Data Template upload the document	View Document
Any additional information	View Document

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

Response: 93.73

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

2021-22	2020-21	2019-20	2018-19	2017-18
871	761	760	716	676

File Description	Document
Average percentage of seats filled against seats reserved (Data Template)	View Document
Any additional information	View Document

2.2 Catering to Student Diversity

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

Response:

JNTUH University attracts fairly good students through only common entrance examinations. University strives hard to design student-centric approaches and activities to address the individual requirements of different levels of students as they come from diverse socio-economic backgrounds and medium of instruction in schoolings. Based on their background, language proficiency, confidence level, competency and learning levels, etc, also vary. IDENTIFICATION OF SLOW LEARNERS At the First Year Level: At this level, the students would be academic oriented. Slow learners are identified based on the score obtained in Intermediate/10+2 and rank in the EAMCET entrance examination. In the process, the slow learners are identified by finding their weaknesses such as: o Finding self-directing learning skills of students. o Habits of learning very slowly and forgetting quickly. At the Second Year Level: At this level, the students must be academic oriented. Slow learners are identified by the following factors: Based on their performance in university examinations of previous semester and internal examinations, by posing few oral questions and observing the responses given by the students, based on their class attendance and attentiveness in the class. At the third year, final year and PG level: At this level, the students need to be career oriented. Slow learners are identified by: o Conducting intelligence tests, Conducting aptitude tests, communication, group discussions and presentation skills. SUPPORT POLICY FOR SLOW LEARNERS: Mentoring / Counseling: Every student is asked to fill up the counseling form. This gives an idea for the mentor to understand the strengths and weaknesses of the students. Students who have the personal problems that hamper the student's professional growth are paid special attention. Mentorship: They are provided with simplified learning materials and model question papers. Remedial classes in online / offline / blended mode are conducted by the faculty to those who have backlogs in the examinations. Mentors keenly observe the academic performance to assist the student by resolving the issues that affect their ability to learn or impede their academic success. Poor performance and frequent absenteeism are informed to parents through phone calls, SMS and Letters. o IDENTIFICATION OF ADVANCED LEARNERS Advanced learners are identified based on the performance in the university examinations of previous semesters and internal examinations. In addition to this: o Participation of students in various symposiums like quiz, conferences, fests etc., o Active participation of students in competitive exams and other certification courses. o Students who are actively engaged in paper presentation, cultural, extra-curricular and research competitions. ADVANCED LEARNERS ENCOURAGEMENT POLICY o Advanced learners are provided a platform to showcase the multifarious talents to organize technical events. They are encouraged to learn new technologies, develop projects, internships, training programs & competitions, National and International Paper Presentations, etc. They are also guided to take up additional online courses like NPTEL, MOOCs. They are also encouraged to take up competitive exams like GATE, GRE, TOEFL, IELTS, etc.

File Description	Document
Upload Any additional information	View Document

2.2.2 Student - Full time teacher ratio (Data for the latest completed academic year)				
Response: 17.81				
File Description	Document			
Any additional information	<u>View Document</u>			

2.3 Teaching-Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

The teaching-learning process is one of the major strengths of our university. A right blend of traditional and modern methods is used to make learning student-centric and also a rewarding experience. Activities related to Expediential Learning includes: Field/Industrial Visits, Industry Oriented Internships in Mathworks, Google, Amazon AMD etc, major Projects, mini Projects, Organizing and participating in various Seminars, Workshops Hackathons. Professional body chapter activities like IEEE Student branch activities, CSI etc. University has established Industry Institute Interaction Cell to provide a platform for students to have Industry linkages. Also students are encouraged to do Value added courses and MOOCS courses as part of Curriculum in order to expose the student to eminent lectures by higher learning institutions where in maximum of two elective courses per semester can be done under this category of MOOCS and the credits earned are considered in awarding the degree. As part of Participative learning teachers adopt role play methods viz seminars by students, annual Techno cultural fests where the students are encouraged to build their own models and demonstrate, participate in various paper/poster presentations which improves their technical and communication skills as well. University follows Choice based credit System in line with AICTE and also University has MOUs with various other Institutions and Industry for credit transfer as well as to provide Internships, student/faculty exchange etc., Also the students are encouraged to participate in NSS activities to take up socially responsible events which helps the students to learn the Art of living, Apart from these quizzes are conducted in every subject at both UG and PG level to make the students improve their proficiency in technical, soft and communicative skills as well. Free internet access is provided to all in the campus to promote the habit of self-learning and discussions in various knowledge/ technology sharing forums. University has adopted ICT enabled tools like access to Digital Library, Centralized 24x7 Computer Centre, Online Courses (MOOCS, NPTEL etc.), online journals, Online tests, Use of LCD/LED projectors for teaching, productive use of educational videos created by faculty, and accessibility of non-print material for students of different disciplines to ensure the students are exposed to effective teaching learning process. Communication skills training facility is enriched with ICT tools to make the students acquire proficiency in listening, speaking, reading and writing skills. During pandemic, Coursera has come up with free access to its Moodle content which was promptly utilized by all the students under the University for improving their skills and also to acquire credits which are recognized all over the Country. University is sanctioned a Technology Business Incubation, Atal TBI to a tune of around 6.5 Crores to inculcate the startup culture among the students starting from idea to product which is complimented with JNTUH Hub(J-Hub) activities to encourage students to achieve the goals of Make in India Mission.

File Description	Document
Upload any additional information	<u>View Document</u>

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

Page 36/102 20-06-2023 01:03:59

Response:

The University has adopted ICT enabled tools in the teaching and learning process to ensure that students are exposed for experienced learning. The faculty and student centric learning methods and advanced technological skills help the students to enhance their technical expertise as per the developments across the globe. Faculty use the combination of ICT enabled tools and conventional teaching methods to keep students engaged in long term learning. However, owing to the pandemic situation, education has altered considerably, with the emergence of e-learning, in which instructions are given online and on digital platforms as well. The recorded video classes are also shared to the students so as to learn on their leisure time. In addition to the classrooms, seminar halls are also digitally equipped, and students attend guest lectures, expert presentations and numerous hands-on events on a regular basis. The university has established industry institute interaction cell (UIIC) to provide a plat form to the students to expose themselves to the industrial experts. The innovations and creations of the students are encouraged by the university for participation in different activities conducted by J - hub. Few innovations are identified to convert into start ups and products. Students are provided with choice-based credit system having a blend of mandatory and elective courses. Students can opt for electives from ones' core domain (as Program electives) or from other domains (open electives). The university has many MOUs with different agencies of Government and non-government sectors for the benefit of the students. Each department is equipment with a smart class room in which all the audio video visuals are provided to make the online classes more effective. To enhance the teaching learning process through ICT tools, full fledged internet and Wi Fi facility throughout the campus. The university libraries are well equipped with learning management system to distribute the books students and also make the students to access the e-journals/e-content using digital platforms. A centralised computer lab is made available to use 24 x 7 for the students to access the econtent and also software. Surveillance cameras are provided in the entire campus for the safety of staff and students.

File Description	Document
Upload any additional information	View Document

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

Response: 18:1

Response: 251

File Description	Document
mentor/mentee ratio	View Document
Circulars pertaining to assigning mentors to mentees	View Document

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 96.07

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

2.4.2 Average percentage of full time teachers with Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. year-wise during the last five years

Response: 62.59

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

2021-22	2020-21	2019-20	2018-19	2017-18
162	156	165	166	168

File Description	Document
List of number of full time teachers with Ph D/D M/M Ch/D N B Superspeciality/DSc/D Lit and number of full time teachers for 5 years	View Document
Any additional information	View Document

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

Response: 15.69

2.4.3.1 Total experience of full-time teachers

Response: 3939

File Description Document List of Teachers including their PAN, designation, **View Document** dept and experience details **View Document** Any additional information

2.4.4 Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the last five years

Response: 6.13

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government/Govt. recognized bodies year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2	1	7	2	4

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e-copies of award letters (scanned or soft copy)	View Document

2.5 Evaluation Process and Reforms

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

Response: 29.8

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
32	29	31	30	27

File Description	Document
List of Programmes and date of last semester and date of declaration of results	View Document
Any additional information	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 2.51

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
122	106	114	117	64

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

2.5.3 IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

Response:

The University examination branch has successfully implementedIT integration for all the activities of examinations i.e., pre-examination and post examinations. The subject experts of the relevant courses are identified for paper setting and collected through online. The question papers are moderated by the subject experts. The EDEP system has been established first of its kind in our university for the distribution of e question papers electronically through VPN system. The enrolment of the students for examinations is being made through online and hall tickets are issued through online mode. Based on the registrations and time tables, the details of the students are printed on the answer booklet in advance and the same is distributed during the examination. Computer based test (CBT) has been introduced through on line mode for the students who are not appeared for internal examinations due to various reasons. During the evaluation process, the question wise marks are directly posted by the evaluators into the data base. The results are processed and published through examination portal and student can see their results directly through university web portal. The university examination portal is having the option of student services (exams), in which the students can access for pre/post convocation services, online certificate verification, results verification, previous question papers, syllabus & regulations, student grievances etc. The transcripts of the students can be obtained by applying through online mode. The examination data is maintained in the central database operated by the self-developed software under the supervision of the Director of Evaluation assisted by the Controller/Additional Controller of Examinations. As per the TSCHE/Government directions, the university conduct TS EAMCET and TS ECET state level online entrance examinations for the students to enter into higher education institutions.

File Description	Document
Year wise number of applications, students and revaluation cases	View Document

2.5.4 Status of automation of Examination division along with approved Examination Manual

Page 40/102 20-06-2023 01:03:59

Response: 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Document
Current manual of examination automation system and Annual reports of examination including the present status of automation	View Document
Current Manual of examination automation system	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

Response:

The University has moved from teacher centric learning to student centric learning by following the Outcome Based Education (OBE) system in all the programs being offered. The Directorate of Academic and Planning initiate and formulate the BOS members consisting of good mixture of academicians from IITs, NITs, Universities, researchers from central government R&D centers, members from Alumni, senior faculty members from affiliated colleges and members from public and private industries etc. The BOS members design curriculum in line with Program out comes which are formulated reflecting the vision mission and strategies of institute and UGC guide lines on graduate attributes by considering inputs from stakeholders. Every program has defined Program Educational Objectives (PEO) describing what the graduates are expected to attain within few years of graduation and this is closely related to how strongly a graduate has developed the competencies in terms of POs and PSOs. The Program specific outcomes (PSO) are designed by concerned departments with their respective vision mission and scope of the program. The course outcomes are formulated by the department in consideration with the course teachers and with expected cognitive, affective and psychomotor learning levels. The PO, PSOs and Cos are widely propagated and publicized through various means like Website, Curriculum/regulations books, Class rooms, Department Notice Boards, Laboratories, Library, student Induction Programs, Meetings/ Interactions with employers, Alumni meetings, Professional Body meetings. The course delivery and assessment are planned to achieve the stated objectives and outcomes. The institute follows the Choice Based Credit System (CBCS) by which students have the flexibility to opt courses of their choice by selecting the courses from Professional Elective and Open Electives groups. The attainment of various course outcomes of the various programs of the university is evaluated by direct methods, indirect surveys, co-curricular and extracurricular activities. The direct methods followed in the institute are continuous internal Evaluation (CIE), Semester End Examination (SEE), Assignments, Seminars, Mini and Major Projects and Comprehensive viva voce etc. The various indirect surveys taken are alumni, employer course exit survey, Graduate exit survey etc. The Co-curricular and extracurricular activates taken up by the institute are Technical fest, invited lectures, various sports activities, field visits, NSS programs etc. The evaluation system has been modified to evaluate the courses with respect to the desirable outcomes by adopting Bloom's Taxonomy. Attainment of COs and POs are measured at different stages of program. The learning outcomes are aligned with graduate attributes which describe the qualities, attitudes and

behavior, values and ethics built into the learning process. The learning outcomes are mapped and the non attainment of any of these outcomes is identified and necessary actions are taken by initiating pedagogical tools and techniques. The COs are assessed at the completion of each course and program out comes are measured at the time of completion of the program. OBE inculcates employability and Entrepreneurial skills in among the students.

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

2.6.2 Attainment of Programme outcomes, Programme specific outcomes and course outcomes are evaluated by the institution

Response:

The outcome based education policy has been implemented across all s programs of the JNTUH. The course structure for all the programs is being finalised in common board of studies meeting so as to make the composition as per the global requirements. The concerned BOS prepare the syllabi as per the course structure along with course objectives and course outcomes. Each of the courses has defined Course Outcomes (COs) in concurrence with program outcomes (POs) and program specific outcomes (PSOs). The COindicates the competencies of the students in that particular subject. The CO attainments for both UG and PG coursesare mainly evaluated through students' performance in different assessment components, like for theoretical courses, the assessments are done based on mid-semester examinations, assignments and end semester examinations. For practical courses, assessment ismadeday to activities of the laboratories, by evaluating the experimental performance, report preparation, performance of internal examinations and end-semester examinations. The main project of the UG program require knowledge on core areas as well as interdisciplinary fields, and they are evaluated continuously by the supervisor (s) and viva voce is conducted by the panel of internal, external and HOD at the end of the course. However for the PG programs, the during of the project is one year and evaluated at three times by the Project Review Committee (PRC) consisting of HOD, supervisor and senior faculty for continuous evaluation. At the end of the course, the student submit the project report duly signed by supervisor and HOD and later evaluated by the panel of examiners i.e, internal examiner and external examiner. All the assessment tasks i.e. learning activities and questions are framed such that they are directly mapped with the COs. Every program has Program Outcomes (POs) and Program Specific Outcomes (PSOs) indicating the general and specific abilities based on graduate attributes. The COs of different courses are mapped to POs and PSOs based on their level of correlation and relevance and graduate attributes are evaluated.

File Description	Document
Upload any additional information	View Document

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

Response: 81.26

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

Response: 941

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

Response: 1158

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination	View Document
Upload any additional information	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.08

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

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

Response:

All the units update their research facilities at frequent intervals by considering the latest technological developments and the faculty are encouraged to pursue research in their field of study and work, publish papers, and organize workshops in the area of innovations and research. The University supports the faculty in applying for various project funding schemes of the government. The TEQIP I, II and III phases has supported for the funds for procurement of latest equipment in all the units and fellowships for regular research scholars for a period of 3/5 Years. In each department a separate research laboratory has been established by adding advanced research equipment beyond the curriculum requirements. Research grants are received by several faculty members from various agencies like AICTE/DST/UGC/DRDO/DBT etc. and these are used for establishment of modern equipment in the laboratories promoting the need based research. University received funds from RUSA earmarked research facilities have been implemented for specific are of research. JNTUH has a full-fledged University Industry Interaction Centre (UIIC) which always keeps track of industrial collaboration through MoU's and continuous learning engagement and enhancement. In order to strengthen the research at JNTUH, the Directorate, R&D Cell was established and has taken proactive steps resulting in improved performance of research which is evident from the significant improvement in the number of research publication in Scopus indexed journals and research grants received from the various funding agencies.. JNTUH strongly supports participation of its students and faculty in socially useful activities that contribute significantly to the overall upliftment of society and promote wellbeing. To encourage the young student ideas, the University has established J-Hub in synchronization with T-hub of Government of Telangana and facilitating the students to materialise their ideas by conducting various student activities and 24 x 7 internet facility and Wi-Fi provided to the students in order to update their knowledge and processing the innovative ideas as per the needs of the local and global requirements. The University is promoting for presentation of papers by the faculty members in National and International Conferences with the financial support for registration, travel and accommodation from TEQIP, UDF funds and UGC unassigned grants from time to time. The University is also providing the financial support for the conduction of faculty development programs, seminars, conferences and workshops in emerging areas of technology. The University has received grant from DST for establishment of Technology Business Incubator (TBI) and had been established and procure various advanced equipment to promote innovation and entrepreneurship. AICTE has sanctioned IDEA lab for JNTUH as joint collaborative project to make the ideas of the students into innovative products. The University has a structured policy for consultancy projects and encourage the faculty by giving the remuneration as per the norms of the University. JNTUH has several projects funded by government and non-government agencies where faculty acts as supervisors or Principal investigators (PI). For promoting continuous research promotion in the area of Science and Technology the funding is received for Post-Doctoral Fellowship program from UGC/DST-WoS/AICTE/DBT etc.

File Description	Document
Any additional information	<u>View Document</u>
URL of Policy document on promotion of research uploaded on website	View Document

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

Response: 51.3

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
161.7	40.19	36.57	16.84	1.2

File Description	Document
Institutional data in prescribed format	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document

3.1.3 Percentage of teachers receiving national / international fellowship / financial support by various agencies for advanced studies / research during the last five years.

Response: 0.46

3.1.3.1 The number of teachers who received national / international fellowship / financial support by various agencies for advanced studies / research year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
2	0	0	1	3

File Description	Document
Institutional data in prescribed format	View Document
e-copies of the award letters of the teachers	View Document

3.1.4 Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the last five years.

Response: 68

3.1.4.1 The Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled in the institution year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
17	10	20	8	13

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

3.1.5 Institution has the following facilities to support research

- 1. Central Instrumentation Centre
- 2. Animal House/Green House
- 3. Museum
- 4. Media laboratory/Studios
- 5. Business Lab
- 6. Research/Statistical Databases
- 7. Mootcourt
- 8. Theatre
- 9. Art Gallery
- 10. Any other facility to support research

Response: A. 4 or more of the above

File Description	Document
Upload the list of facilities provided by the university and their year of establishment	View Document
Paste link of videos and geotagged photographs	View Document

3.1.6 Percentage of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies (Data for the latest completed academic year)

Response: 5.26

3.1.6.1 The Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other similar recognitions by national and international agencies.

Page 46/102 20-06-2023 01:03:59

Response: 1	
File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e-version of departmental recognition award letters	<u>View Document</u>

3.2 Resource Mobilization for Research

3.2.1 Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the last five years (INR in Lakhs).

Response: 56.44

3.2.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years (INR in Lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
29	0	6	7.44	14

File Description	Document
Institutional data in prescribed format	View Document
e-copies of the grant award letters for research projects sponsored by non-government	View Document

3.2.2 Grants for research projects sponsored by the government agencies during the last five years (INR in Lakhs).

Response: 2619.97

3.2.2.1 Total Grants for research projects sponsored by the government agencies year-wise during the last five years (INR in Lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
508.42	435.066	514.386	652.401	509.701

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e-copies of the grant award letters for research projects sponsored by government	View Document

3.2.3 Number of research projects per teacher funded by government and non-government agencies during the last five years

Response: 3.72

3.2.3.1 Number of research projects funded by government and non-government agencies during the last five years.

Response: 213

3.2.3.2 Number of full time teachers worked in the institution year-wise during the last five years...

Response: 286

File Description	Document
Supporting document from Funding Agency	View Document
Institutional data in prescribed format	View Document

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge.

Response:

JNTUH INNOVATION HUB (J-HUB) JHUB is the University's Innovation Ecosystem that empowers new generation graduates with Innovation mind set and support for startup incubation. Launched in January 2018, JHUB works in a Hub and Spoke model with JLABS at constituent and affiliated colleges to seed the dynamic culture of innovation, and the Central Hub at the university campus develops the knowledge, skills and experiences in translating ideas to innovations, products and startups. JLABS In the year of establishment, 25 institutions were identified to pilot JLABS and today more than 75 affiliated and constituent institutions have JLabs. JLABS served as a single point of contact for the encouragement of Innovation and Entrepreneurship activities of the institutions. UNIVERSITY HUB The Central Hub at the University campus offers access to its stakeholders, a spectrum of programs, experts, labs, equipment, collaborators, networks and spaces to catalyze innovation, knowledge and support to practice innovation and entrepreneurial skills. It is the focal point for creating technology startups and solutions critically relevant to the social and economic challenges. EXCITE EXCITE is the flagship Product Engineering Workshop designed where students are provided support to convert their ideas and initial prototypes to products. Executed for six weeks during the summer, the Workshop typically has about 200 participants working on 30-35 ideas at JHUB. IDEA ACCELERATOR PROGRAM The top teams of EXCITE

Page 48/102 20-06-2023 01:03:59

Workshop become eligible for the Idea Accelerator Program. They are nurtured for product commercialization and minimum viable product HACKATHON LEAGUES JHub: The first official Hackathon league organised by JHUB was themed 'Sustainable Development Goals?. The 17 Sustainable Development Goals (SDGs) prescribed by the United Nations are believed to stimulate and align student innovations in the areas of critical importance to the world in general and India in particular. With a Strong Mentor Connect from Industry, Alumni and HYSEA Innovation Forum, the students have received the best of mentoring in this journey. Central Hackathon for winners of the 15 Hackathons was held at JHUB. Boot Camps: The JHub Program, along with the Institution level JLABS, is committed to seed innovation in all students graduating from JNTUH. In order to achieve this goal, JHub conducts immersive Bootcamps on Innovation and Entrepreneurship. IGNITE is a three day Workshop for B.tech first year graduates. ENLITE is a 15 day Bootcamp on Innovation and Entrepreneurship for the second year students selected from JLABS. These programs create a pipeline for the EXCITE Workshop and Accelerator programs and admission to Incubation Support Startup Incubation: DappLogix Software Private Ltd: An AI and Blockchain platform from Hiring. With the core idea being the winner at Nasscom NIPP challenge 2018 and part of the NASSCOM 10000 startups, DappLogix is building products for recruitment and Verification of application using Blockchain Technology and AI technologies. The first of its product Hirestar.io was launched on 29th June 2019. Innovation and Startup Policy for Students: JNTUH has implemented National innovation and start-up policy (NISP) to support Tech-Startup incubation on campuses, University wide.

File Description	Document
Upload any additional information	View Document

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

Response: 121

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

2021-22	2020-21	2019-20	2018-19	2017-18
16	27	30	29	19

File Description	Document
Report of the event	View Document
Institutional data in prescribed format	View Document

3.3.3 Number of awards / recognitions received for research/innovations by the institution / teachers / research scholars / students during the last five years.

Response: 65

3.3.3.1 Total number of awards / recognitions received for *research* / innovations won by institution / teachers / research scholars / students year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
17	13	19	8	8

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e- copies of award letters	View Document

3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee

Response: A. All of the above

File Description	Document
Code of ethics for Research document, Research Advisory committee and ethics committee constitution and list of members on these committees, software used for Plagiarism check, link to Website	View Document

3.4.2 The institution provides incentives to teachers who receive state, national and international recognitions/awards
1.Commendation and monetary incentive at a University function
2.Commendation and medal at a University function
3. Certificate of honor
4.Announcement in the Newsletter / website

Response: E. None of the above

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e- copies of the letters of awards	View Document

3.4.3 Number of Patents published / awarded during the last five years.

Response: 44

3.4.3.1 Total number of Patents published / awarded year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
19	12	4	6	3

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

3.4.4 Number of Ph.D's awarded per teacher during the last five years.

Response: 9.09

3.4.4.1 How many Ph.D's are awarded within last five years.

Response: 391

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

Response: 43

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

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

Response: 3.17

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

2021-22	2020-21	2019-20	2018-19	2017-18
208	183	194	133	110

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

3.4.6 Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years

Response: 0.46

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

2021-22	2020-21	2019-20	2018-19	2017-18
28	32	20	19	20

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

3.4.7 E-content is developed by teachers:

- 1. For e-PG-Pathshala
- 2.For CEC (Under Graduate)
- 3.For SWAYAM
- **4.For other MOOCs platform**
- **5.** Any other Government Initiatives
- 6. For Institutional LMS

Response: C. Any 3 of the above

File Description	Document
Institutional data in prescribed format	View Document
Give links or upload document of e-content developed	View Document

3.4.8 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Response: 5.17

File Description		Document
Bibliometrics of the publication	ons during the last five	View Document
years		

3.4.9 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - hindex of the Institution

Response: 38

File Description	Document
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document

3.5 Consultancy

3.5.1 Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy.

Response:

The JNTUH has a faculty-friendly Consultancy policy which includes revenue sharing between the University and the teaching and non-teaching staff of various departments. The faculty members are encouraged to take up consultancy assignments from different government and private agencies. The Consultancy Policy encourages the faculty members to leverage their areas of expertise and apply them to practical problems faced by the industry and research laboratories. JNTUH has a structured policy evolved by a committee consisting with the vice chancellor as a chairman, Director (BICS) as the convenor, Registrar, Rector, Principals of various units and the Directors of all the sections as members, for consultancy projects approved by the Executive Council.

The consultancy revenue earned is shared between the concerned faculty and the university as per the norms specified in the policy. The expenditure incurred for field visits, testing etc. is being borne from the consultancy fee. After the deduction of the various expenses, the University share is utilised for the procurement and established equipment required for the research and the faculty share is disbursed to the teaching/supporting staff, Coordinator, Head of the department and Principal/Director. The University provides full freedom to the Investigator/Coordinator to utilize the overheads.

The major focussed areas of Consultancy include structural designing, testing of concrete structures, soil testing, software development, design and evaluation of tractor trailers, electrical engineering, metallurgical engineering and many other projects given by the industries.

File Description	Document
Upload soft copy of the Consultancy Policy	<u>View Document</u>

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

Response: 2457.13

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

2021-22	2020-21	2019-20	2018-19	2017-18
778.95	404.93	424.76	368.03	480.46

File Description	Document
Institutional data in prescribed format	View Document
Audited statements of accounts indicating the revenue generated through consultancy	View Document

3.6 Extension Activities

3.6.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years.

Response:

In the line with the vision and mission, the University has defined its strategies to make the students socially conscious and to learn beyond the confines of the classrooms, the students of the University are actively engaged in various outreach and extension activities. The University has national service scheme (NSS) which involves the students and faculty members in various societal developmental issues. Some of the major activities of the NSS Unit of the University are:

Health

- To create awareness among the Faculty and students about the importance of yoga in daily life international yoga day was celebrated on 21st June 2017 onwards.
- To create awareness among the faculty and students about covid 19 and the importance of vaccination in preventing the spread of covid, various vaccination programmes were conducted for the benefit of students & faculty and their families.
- To inculcate the habit of donating the blood number of blood donation camps were organized in regular intervals.
- Cancer awareness programme among students is created for encouraging students to practice preventive measures to lead a healthy life.
- A Programme on mental health awareness was conducted to focus on the necessity of the students to train the students to face the challenges of the future by the psychologist.

Environment

- Govt. of Telangana has launched a major initiative to plant saplings as a part of this programme, the NSS Unit of the University is actively involved in Haritha Haram (Planting of saplings) every year in the month of July August and takes the responsibility for the growth of the plants.
- To create awareness about the evil effects of plastic a programme was conducted to sensitize the students about the use of plastic.

Social Responsibility

- To create awareness about voting in the elections and to register as a voter a one week programme on voters was conducted for the students with the initiation from the Govt.
- The University organized youth festival and conducted event like essay writing, Quiz, Rangoli and Group Dance on the occasion of Swami Vivekananda Birth Anniversary.
- The University organized NSS Day Celebrations and with cultural events.
- On the memory of the student expired due to cancer, students are organizing blood donation camps.
- Students have volunteered with the process of local elections web casting. 6. Faculty and staff members taken up election duty as Zonal Officer/Poling Officer/APO etc.
- Masks were distributed to all the workers in the university by MBA Students and Faculty.
- 3D Printed Face shields were donated to Frontline workers during COVID-19 first lockdown by Nanotechnology students and faculty.

File Description	Document
Upload any additional information	View Document

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

Response: 2

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

2021-22	2020-21	2019-20	2018-19	2017-18
1	0	1	0	0

File Description	Document	
Institutional data in prescribed format	View Document	
e-copy of the award letters	<u>View Document</u>	

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

Response: 227

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

2021-22	2020-21	2019-20	2018-19	2017-18
70	18	41	40	58

File Description	Document	
Reports of the event organized	<u>View Document</u>	
Institutional data in prescribed format	View Document	
Any additional information	View Document	

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

Response: 88.5

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

2021-22	2020-21	2019-20	2018-19	2017-18
4300	2559	3900	3800	3800

File Description	Document
Report of the event	<u>View Document</u>
Institutional data in prescribed format	View Document
Any additional information	View Document

3.7 Collaboration

3.7.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship per year

Response: 5.2

3.7.1.1 Total number of Collaborative activities with other institutions / research establishment / industry for research and academic development of faculty and students year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
4	1	6	10	5

File Description	Document	
Institutional data in prescribed format	View Document	
Copies of collaboration	View Document	

3.7.2 Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 22

3.7.2.1 Number of functional MoUs with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
12	4	2	2	2

File Description	Document
Institutional data in prescribed format	View Document
e-copies of the MoUs with institution/ industry	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

Jawaharlal Nehru Technological University Hyderabad has adequate facilities in each campus for teachinglearning activities. Each department has required number of class rooms for UG, IDP, PG and other allied programs. All departments have necessary ICT facilities including network connectivity, Wi-Fi coverage, LCD projectors, screens, AV systems etc. University has also established smart class room in each department with audio and video facilities and it facilitates online materials, videos, animations, subscribed research articles, presentations and demonstrations for the students' understanding. For security reasons CCTVs are made available in various places of the entire campus including hostels. The University has 1200 capacity JN Auditorium, 300 capacity UGC-HRDC Auditorium, college seminar halls; departmental seminar halls, Golden Jubilee conference hall etc. are available across the campus. The University central library is having mammoth collection of academic resources along with digital library with good number of desktop computers. Each unit has its own institute library with the required academic learning resources. All the doctoral theses are available in the central library as hard and soft copies. The faculty members and students have access to high bandwidth wi-fi connectivity anywhere inside the University. The college has made arrangements for online classes during pandemic period by providing enough number of digital writing pads along with audio video equipment for smooth functioning of regular class work. The departments have separate computing labs with sufficient number of desktops with licensed software to carry out lab specific simulations, open ended tasks, coding assignments, project works and research work. A wide spectrum of laboratories is operational in the departments and being effectively used for academic and research activities. Safety protocols are strictly enforced and provisions for immediate medical attention (first aid, ambulance and health centre) are available. All the laboratories are fully equipped as per the curriculum and provided with lab manuals, wi-fi access, security provisions and updates log books. University has supported by the TEQIP funds of various phases to establish the research laboratories in various departments including, centre of excellence for disaster management etc. The centralised laboratory facilities are provided for the innovative activities in JTBI (JNTUH Technology Business Incubator), J-Hub, Automation and Robotics Lab, Cyber security and Forensic laboratory, 24x7 computer laboratory etc. University encourages the cultural activities. CRC seminar hall is used for practicing and the programs will be held in UGC and JN auditoriums. Yoga center is provided in the floor of health centre for regular practice. Play is used, whenever yoga programs are to be organized by the University for more participants from outsides also.14 Clubs are there for students to improve their cultural and technical knowledge. These clubs activities will be after 5:30 pm, class rooms and CRC seminar hall are used.

File Description	Document
Upload any additional information	<u>View Document</u>

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

Page 58/102 20-06-2023 01:04:00

Response:

JNTUH always gives high importance to sports and games since inception of the university. The students actively participate in inter college level, state, National level competitions. All modern facilities are provided to the students as per the requirement. The university appointed a sports secretary at university level to organise and monitor all sports and games across different colleges at university level. Each unit has their own physical directors for their respective units and conducts the sports and games in synchronized with sports secretary. The University has a playground for outdoor games like cricket, basketball, football, Valleyball, throw ball, KhoKho, Kabaddi etc and Central Indoor Stadium for indoor games like table tennis, shuttle badminton, ball badminton, caroms, chess etc.The University has Yoga Hall for making the students to participate for Yoga and the students are trained by the yoga teacher on regular intervals. The university has established a swimming pool and is located in the indoor stadium of the university.

All the units of university are conducting the cultural events every year at the end of the instructional days of the academic year. The major event of the university is SPANDANA, in which all the students are actively participated in the cultural events which are related to patriotism, classical, modern and regional dances. Various other cultural activities are organised like singing competition, treasure hunt, DJ etc. The university is also organising the cultural events during the national festivals, convocation, golden jubilee celebrations, conferences, annual days etc to motivate creativity towards social and cultural activities. The University foreign relations separately organize the cultural event for the foreign national students with their national traditions and make them all the students to get homely environment. As the tradition of Telangana state, all the students and faculty participate in Bathukamma festival during the Dassara Navarathrulu. It is also to be noted that the Bonalu is another local traditional festival and is celebrated in the university with many cultural activities. All Hindu, Muslim and Christian festivals are celebrated by the students and staff with social integrity and involvement.

4.1.3 Availability of general campus facilities and overall ambience

Response:

The overall ambience of the university is unique in integration of professional education with social concerns. The university is located in Hyderabad which is the cosmopolitan city and also the capital city of Telangana state. The city is well connected with road ways, railways and air ways. The campus is proud to have students from all corners of Telangana state, other parts of India and also foreign students from different countries. The University isoffering graduate, post-graduate and doctoral programs in a wide range of science and engineering disciplines. All the departments are well equipped with modern equipment as per the needs of the industry and society. Research equipment is procured under TEQIP scheme in all the departments which are useful for the students to do advanced research. The campus is enabled with Wi Fi facility and CCTV cameras at important locations. Participative transparent governance system is maintained with active participation of members from academic of repute, industries, faculty, academic leaders and alumni in all the policy making bodies of the University. All the departments are well equipped with projectors, computers, audio visual equipment as well as internet connectivity so as to make use ICT tools for effectively learning by the students. The Centers of Excellence are established to interact with the industries and also for updation of latest technologies, so as unable to the students to be placed in

better industries. All the departments are provided with Ramps and Lift facility for physically disabled students. The central library and unit libraries are available with the required books, journals, digital content etc. For student activities the centralised facilities like J-HUB, UIIC, Technology Incubation Centre, Cyber Security centre, AICTE Idea lab etc. made available in the campus. Separate boys' and girls' hostels are available in the campus for UG and PG students with Wi Fi facility, a hostel for research scholars with family and a hostel for foreign students. The university has established a health centre with specialised doctors to facilitate the treatment and free medicine for the students, staff and their wards.

The University has ground facility for Cricket, Hockey, Kabaddi, Football, Volleyball, Kho-Kho, Throwball, Basketball, Handball etc. as outdoor games and Indoor Stadium contains a modern gymnasium housing modern gym equipment and indoor sports arenas such as badminton courts, shuttle, caroms, table tennis, chess, squash etc. A swimming pool is made available for the students and faculty. In addition to the above, the university has staff quarters for teaching, non-teaching and ministerial staff. A canteen, SBI and Union Bank, Post Office, Fire station are also available in the campus.

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

Response: 33.72

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

2021-22	2020-21	2019-20	2018-19	2017-18
300.92	1065.17	3262.87	4792.31	4324.88

File Description	Document
Upload audited utilization statements	View Document
Institutional data in prescribed format	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

Response:

The University Central Library is automated using Integrated Library Management Software VTLS-VIRTUA and has a digitisation facility. The University Library is a central facility supporting the teaching and research activities of the University. It was fully automated using Integrated Library Management Software VTLS-VIRTUA in the year 2006. We are presently using Virtua Version 16.0. The main features of the software are Web-OPAC, Acquisition, Cataloguing, Circulation and Serial Control. The fully

Page 60/102 20-06-2023 01:04:00

automated Library is equipped with two new IBM x3650 M4 Servers, NAS Box, and 70 Dell Desktops. The Library has a 20 MBPS dedicated leased line connectivity under NKN/NME-ICT Programme. All the systems are connected to the campus-wide LAN, thus enabling the users to access the online resources from their respective desktops. The University Library has access to Original Anti-Plagiarism Detection tool (earlier URKUND) provided by Information and Library Network (INFLIBNET) Centre. The Library has a collection of 92,000 books and subscribes to 205 print journals of National and International origin in the fields of Sciences and Technology. The Library has a perpetual access to 4533 e-books from Springer on Biomedical & Life Sciences, Earth & Environmental Sciences, Elsevier's Engineering, Science & Technology, IEEE MIT Press and renowned publishers McGraw Hill Education, Taylor & Francis, Pearson Education, CBS etc. The Library is a member of various National level Consortia namely DELNET (Developing Library Network) and INFLIBNET's e-ShodhSindhu Consortium. Through Consortia and subscriptions, the University Library provides IP Authenticated online access and Remote Access facility to 29,230+ e-journals and databases from IEEE's IEL Online, ASCE, J- GATE, EBSCO Business Source Elite, Nature Pub. Group, SpringerLink, DELNET, Indian Citation Index etc. The University Library holds 3940 copies of Ph.D. and M.Phil. theses submitted at JNTUH. With financial support through UGC and INFLIBNET Centre under Shodhganga, the National ETD Repository project, JNTUH University Library has established the ETD Lab in the year 2018 at the cost of Rs. 19.57 Lakhs (Rs. 15.36 Lakhs UGC-Inflibnet + Rs. 4.21 Lakhs JNTUH) and digitized 620 + Theses and Dissertations and uploaded into the Shodhganga repository. The lab is equipped with Dell Server & Desktop Computers, HP High end Scanner & Printer, etc. The users can access these full-texts of theses and dissertations in the Electronic Theses and Dissertations (ETD) Lab and through the Shodhganga project website. Till date nearly 1200 JNTUH Theses are available online. (https://shodhganga.inflibnet.ac.in/handle/10603/2163). Keeping in view, the safety and security of the resources and readers, the Library has been installed with surveillance system on all the three floors. EM (Electro-magnetic) Library Security System has been installed with Detection panel and Book check system for security of books from theft. To prevent from fire hazards, fire extinguishers have been installed in the library in every floor. To provide access to the online resources during the pandemic period onwards, Remote Login support through RemoteXs cloud platform has been provided to all the Researchers, students and staff across all the University College of Engineering campuses.

File Description	Document
Upload any additional information	View Document

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

Response: A. Any 4 or more of the above

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

4.2.3 Average annual expenditure for purchase of books/ e-books and subscription to journals/e-

Page 61/102 20-06-2023 01:04:00

journals during the last five years (INR in Lakhs)

Response: 118.41

4.2.3.1 Annual expenditure for the purchase of books and journals including e-journals year-wise during last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
71.32	111.258	129.93	162.178	117.384

File Description	Document
Institutional data in prescribed format	View Document
Audited statements of accounts	View Document

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year

Response: 17.53

4.2.4.1 Number of teachers and students using library per day over last one year

Response: 828

File Description	Document
Details of library usage by teachers and students (Library accession register, online accession details	View Document
to be provided as supporting documents)	

4.3 IT Infrastructure

4.3.1 Percentage of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities. (Data for the latest completed academic year)

Response: 63.64

4.3.1.1 Number of classrooms and seminar halls with ICT facilities

Response: 77

File Description	Document
Upload any additional information	<u>View Document</u>
Institutional data in prescribed format	View Document

4.3.2 Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

Response:

Institution frequently updates its IT facilities and provides sufficient bandwidth for Internet connection: (15) Owing to the increasing demands for Internet access in the University campus, the University has never left any stone unturned to provide the best IT facilities and infrastructure so as to ensure excellent academic and working ambience for its students, research scholars, faculty members and other University working employees. Network Infrastructure: JNTUH is the first State University with a vision to have a fully networked campus and provide enhanced Internet services to its stakeholders, has commissioned Campus Wide Network way back in 2003. Three-Layer Switching model is implemented. High-end Core layer switches in the buildings are connected with the Optical Fiber Ring Network. This core switching was further extended to Distributed Switching for departments wherein 100/1000 Mbps (Gigabit Switches) are installed. Wi-Fi infrastructure: With regard to Wi-Fi facility, the campus became complete Wi-Fi campus in 2011 including the student hostels and Staff quarters with 450 Wireless Access points + 3600 controller (both ARUBA make). Later in 2016, 2017 & 2018 years another 100 Wireless Access points + 2405 / 5520 controller (both CISCO make) were added to network as some more hostel buildings were started. Internet Connectivity: For the last six years the Internet requirements have largely (including the COVID-19 impact) scaled up (i.e., from 100 Mbps to 1 Gbps), 24 x7 basis for more than 9000 user devices shown below: Internet Service Provider (ISP) of (1:1) Leased Line 2017-18 2018-19 2019-20 2020-21 2021-22 High speed Internet from National Knowledge Network (through BSNL) 1 Gbps 1 Gbps 1 Gbps 1 Gbps 1 Gbps Additional Fail safe Internet Service Provider (ISP) 110-120 Mbps by Rail Tel Corporation of India Ltd. 120 Mbps by Power Grid Corporation of India Ltd. 120 Mbps by Power Grid Corporation of India Ltd. 200 Mbps by Rail Tel Corporation of India Ltd. 1 Gbps by BSNL Computer Systems and other accessories: Further, based on various notifications for schemes like AICTE-MODROBS/RPS, RUSA, TEQIP, etc., from time to time, University/departments also procure the Computer Systems and its peripherals. Firewalls and Perimeter Security: University uses firewall service purchased from SOPHOS (model-XG750) and the support license is latest renewed (SOPHOS-XGS5500) in 2022 till 2025(3 years). The SOPHOS XGS 5500 firewall is one of the best enterprise firewalls that offer superior performance with a simple management interface. The XGS 5500 firewalls installed at the University campus is for more than 5000+ users, 100 Gbps firewall throughput and 13500 Mbps VPN throughput As a part from rendering the required IT facilities, School of Information Technology-SIT is instrumental in extending the complete support for the following activities: Maintenance of entire Campus Wide Networking, Internet connectivity and Wi-Fi connectivity. School of IT is responsible for issuing of email identities to all the University regular Faculty members and other administrative officers/offices associated. Hosting, development, maintenance and monitoring of the official University website (www.jntuh.ac.in). Maintaining Wi-Fi Controllers catering to the University campus: both ARUBA 3600 & CISCO 5520.

File Description	Document
Upload any additional information	View Document

4.3.3 Student - Computer ratio (Data for the latest completed academic year)

Page 63/102 20-06-2023 01:04:00

Response: 4:1		
File Description Documen		Document
	Student – computer ratio	View Document

4.3.4 Available bandwidth of internet connection in the Institution (Leased line)			
Response: B. 500 MBPS - 1 GBPS			
File Description Document			
Details of available bandwidth of internet View Document			

4.3.5 Institution has the following Facilities for e-content development

1. Media centre

connection in the Institution

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

Response: B. 3 of the above

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

4.4 Maintenance of Campus Infrastructure

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

Response: 8.06

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year-wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
461.72	344.3	551.44	738.88	665.58

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Audited statements of accounts	View Document

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

Response:

Laboratories: Concerned head of the department assigns lab in charges among the permanent faculty. Labin-charges are responsible for making proposals, procurement, recording, maintenance of the consumables and non-consumables based on the report given by the technical supporting staff. They are also responsible for preparation and display of manuals, precautionary measures, do's and dont's, list of experiments, stock registers and verification maintenance of log books. Library: Inventory of all text books, periodicals, journals, e-content are made available in the TR Doss University library, college and departmental libraries. Barcode technology is being used to maintain the accession data. Every process is subjected to internal audit. Opinion of the faculty members is sought at regular intervals for the procurement of the content. Sports Complex: Indoor stadium which is being supervised by a permanent employee has physical director, is having facilities line swimming pool, shuttle courts, gym, open field ground courts etc. In addition, a sport secretary monitors the funding, maintenance, participation in sports activities inside and outside the University. Computers: A Centralised computing facility "24 x 7 lab" is made available with TEQIP funds and most of the software's required by the students are uploaded. As the name indicates, students can make use of this facility at any time. In addition, each department is equipped with computer systems with appropriate configuration and software's being maintained by qualified persons. These labs will take care of lab requirements as per the curriculum. A centralized lab facility maintained by J Hub. Class room: Sufficient number of classrooms which are appropriately ventilated, illuminated are equipped with sufficient furniture. Class rooms are equipped with internet facility, projector, audio visual facilities. At regular intervals these class rooms are monitored for any repairs.

File Description	Document
Upload any additional information	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the institution, Government and non-government agencies (NGOs) during the last five years (other than the students receiving scholarships under the government schemes for reserved categories).

Response: 7.22

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

2021-22	2020-21	2019-20	2018-19	2017-18
277	295	311	297	315

File Description	Document
Upload self attested letter with the list of students sanctioned scholarship	View Document
Institutional data in prescribed format	View Document

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

Response: 50.95

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

2021-22	2020-21	2019-20	2018-19	2017-18
4420	2116	1404	1580	1279

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

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

Page 66/102 20-06-2023 01:04:00 students capability 1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology

Response: A. All of the above

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

- 5.1.4 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

Response: A. All of the above

File Description	Document
Upload any additional information	View Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression

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

Response: 86.39

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

2021-22	2020-21	2019-20	2018-19	2017-18
127	274	227	86	100

5.2.1.2 Number of students appearing in state/ national/ international level examinations (eg:

Page 67/102 20-06-2023 01:04:00

IIT/JAM/ NET / SLET/ GATE/ GMAT/CAT,GRE/ TOEFL/ Civil Services/ State government examinations) year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
145	292	242	113	124

File Description	Document
Upload supporting data for the same	View Document
Institutional data in prescribed format	View Document

5.2.2 Average percentage of placement of outgoing students during the last five years

Response: 32.25

5.2.2.1 Number of outgoing students placed year - wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
545	197	260	182	355

File Description	Document
Self attested list of students placed	View Document
Institutional data in prescribed format	View Document

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

Response: 18.77

5.2.3.1 Number of outgoing student progressing to higher education.

Response: 208

File Description	Document
Upload supporting data for student/alumni	<u>View Document</u>
Institutional data in prescribed format	<u>View Document</u>

5.3 Student Participation and Activities

Page 68/102 20-06-2023 01:04:00

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

Response: 53

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

2021-22	2020-21	2019-20	2018-19	2017-18
25	06	09	09	04

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
e-copies of award letters and certificates	View Document

5.3.2 Presence of Student Council and its activities for institutional development and student welfare.

Response:

The University attracts the top rankers of the state level entrance test, TSEAMCET for UG engineering admissions. The University provides the conducive atmosphere for the students to hone the skills of these students and to provide them holistic education as per NEP 2020. The University has appointed the Professor I/C to monitor and implement the student level councils and committees which will be beneficial for the overall development of the students. The main objective is to provide a platform for the students to explore their innate talents and creativity, build team spirit by indulging in several co-curricular and extracurricular activities and provide them an opportunity to test their skills at regular intervals, by encouraging them to participate in university level and national level events. Opportunities provided at University Level: J-Hub: The university has established Innovation and R&D initiative, J-Hub in the year 2017, to impact the quality, confidence and competitiveness of the students and prepare them for 21st century Knowledge Economy. Through a well planned sequence of events like Ideation, Excite, Acceleration and Incubation, the skills of the students will be upgraded. This starts with first year students and as the student's progress towards the completion of graduation, the creative and entrepreneurial skills will also be imparted. The details are presented in their website, the link for the same is as follows. https://jhub.ac.in/ JTBI: JNTUH Innovation Foundation - TBI is a registered Section 8 Company, works with the motive of building a better country through strengthening startup culture & eco-system. It is funded by the Department of Science and Technology (DST) under NIDHI scheme. Many students are testing their ideas presently at the facility. Some of the student clubs like Watts Guild Club, Robonauts Club, Idea and Career Guidance and Entrepreneurship club are collaborated with J TBI to provide the awareness about such opportunities of innovation to their fellow students. The more details are in their website, the link for the same is presented as follows: https://jntuhtbi.in/ Student Professional Bodies: The University encourages the students to become the member of at least one professional society, viz., IEEE, IEOM, ISTE, CSI etc.,

The College's IEEE chapter is one of the oldest which was started in the year 1992. Since then, it has been hosting many professional talks, seminars and conferences on the regular basis. Student Clubs: Different units also have their individual student clubs such as Watts Guild Club, Robonauts Club, Idea and Career Guidance and Entrepreneurship club, Coding Club, Google Developer Student Club, Elite Fete, Dancing Club, Raga Varsha, Khelkorner club, Photography Club, Film and Videography Club, Art Meraki and Environmental Club. These clubs are actively participated for showing the innovation and talent in their respective domains. The students are encouraged to participate actively in various department wise technical events. Different events comprising of workshops, cultural events etc., help students to work as Organizers to develop interpersonal skills such as Leadership, Positive Attitude, Relationship Management and Team management etc.

File Description	Document
Upload any additional information	View Document

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

Response: 29.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
53	0	29	31	33

File Description	Document
Report of the event	<u>View Document</u>
Institutional data in prescribed format	<u>View Document</u>

5.4 Alumni Engagement

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

Response:

JNTUH has registered/Functional Alumni Associations i.e. JNTUH UCEH AA, JNTUH IST AA, JNTUH SIT AA, JNTUH SMS AA, JNTUH AA INC USA, JNTUH AA Canada and JNTUH AA Australia to address the long felt need for a platform and cherished aspirations of its Alumni. The Associations have been established to take up alumni connect drives, explore and connect the present stakeholders with the

illustrious alumni for opportunities leading to mutual growth and raise funding for various development activities including human resources and infrastructure. The Alumni Association acts as a link between the "Alma Mater" and the "Alumni". It is moving ahead, with selfless intentions for the growth and development of the institute and the students. The association provides a platform for interaction between alumni, present students, faculty of the institute and institute administration. It has contributed significantly through financial and non-financial means during the last five years to improve the facilities and infrastructure of the University with the help of the active participation of the alumni. Alumni can mean a great deal to a University, forming an ever-growing delegation of ambassadors on behalf of Alma matter. They serve as a tool to unite students and alumni by promoting the values and standards that will be advantageous and empower both current and former students and create a social, informed and motivating environment for all its stakeholders. A strong Alumni network can play a vital role in the student experience from recruitment to graduation and serving as a point of access to a diverse set of opportunities including mentoring, expertise, Internships, employment and global reach Contribution of the Alumni Associations:

- The Alumni Associations have granted Scholarships, Prizes, Financial assistance, books and stationery to the toppers and deserving students for a worth of Rs.5,65,000/- (Rupees Five Lakhs Sixty Five Thousand only).
- The Alumni has sponsored Gold medal for the students of Metallurgical Engineering.
- The Alumni Associations are contributing for the construction of Alumni Building in the campus for which the foundation stone was laid by the Hon'ble Chancellor and Governor of the Telangana State.
- Alumni contribute towards enriching academic resources through curriculum design, where they
 give their inputs as per the global market requirements and through books and other learning
 materials.
- Alumni play proactive role as resource persons for invited alumni talks, Seminars, Webinars and Workshops in emerging areas.
- Alumni working in various organizations talk to students on how to choose career in various domains, skill required and ways to crack interviews and vocational guidance for professional and career development. The members of the Associations get every type of possible assistance.

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

Response: D. 5 Lakhs - 20 Lakhs

File Description	Document
Any additional information	<u>View Document</u>

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance.

Response:

The JNTUH has a clearly defined vision and mission statements which are given below: Vision: To provide for the advancement of learning and knowledge in Engineering & Technology, Physical and Social Sciences by teaching, research and experimentation or practical training or by such other means as the University may deem fit. 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. Imparting value based quality Technical education of international standard and imbibing skills for solving real life problems, and inculcating the global perspective which is inclusive and affordable to all the state holders. Creating leadership qualities with futuristic vision, JNTUH follows the best and healthy practices in cultivating professional ethics, normal and human values in professional life. This can be implemented by instilling habit of continual learning, encouraging and supporting creative abilities and research temperament, establishing and promoting close interaction with industries, other institutions, to keep abreast with state-of-the-art technology and constant updating of knowledge for faculty, non-teaching and administrative staff. JNTUH aims to bridge the gap between current learning outcomes and what is required through undertaking major reforms that brings the quality, equity and integrity into the system, which was endorsed by NEP-2020. More emphasis will be given e-governance to ensure transparency and accountability. The University follows an integrated teaching – learning system with active participation of faculty members and students. The teaching-learning process is based on an internationalized curriculum driven outcome based education policy by considering the National Educational Policy (NEP 2020). It is supplemented by a framework of learning activities for all courses, culmination of program core, program and open elective courses, experiential learning, live projects, industrial and field exposure through internships and trainings, group activities focusing on team spirit and leadership, industry-designed courses, research, entrepreneurial and industry interactions. JNTUH has established Technology-Business-Incubator (TBI), J Hub for innovation activities, Centre of Excellence in Cyber Security and Forensic, University Industry Institution Interaction Cell (UIIC), Entrepreneur Development Cell (EDC), Centre of Excellence in Disaster Management AICTE Idea Laboratory. Every program has a defined set of program educational objectives aligned with the mission of the units in align with the University mission. Academic freedom with focus on professional and ethical practices is provided for faculty members having full support from the University in terms of research and consultancy activities. It also encourages all staff members for higher studies for the academic enhancement.

File Description	Document	
Any additional information	<u>View Document</u>	

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

Page 72/102 20-06-2023 01:04:01

Response:

The JNTUH has been established by the act of Telangana state Assembly and has the governance system with decentralised structure and also have better involvement at all levels. The University has been granted an affiliating status by the state Government and one of the affiliating Universities in the state of Telanganafor granting affiliations to private colleges offering Engineering, Pharmacy, MBA and MCA programmes. The University officials are the Chancellor (Governor of Telangana), the Vice Chancellor (Nominated by the Chancellor), the Rector, the Registrar, the Directors, the Finance Officers, the Principals of the constituent colleges, such other persons in the service of the University as may be prescribed. The governance has its own well defined policies, processes and standard practices for all levels. The functionality of the University is monitored by various authorities of the university like the Executive Council (EC), the Academic Senate, the Board of Studies, such other bodies.

The Executive Council headed by the Vice Chancellor is the highest body in which ex-officio members from government, rector, registrar (Secretary to the Council), nominated members from the university units, affiliated colleges and Industrial members to implement the policy decisions.

The Academic Senate of the university monitor the academic matters, information to related fellowships, scholarships, formulation of academic schemes for constituent and affiliated colleges, regulations regarding the student admissions, equivalence of examinations and degrees, teaching and research, faculty development programs, curriculum development, industrial trainings, industry institute collaborations etc.

The Finance committee discusses about the financial position of university, budget, financial requirements, procurements, infrastructure expenditure, income and expenditure of the university.

A separate Board of studies shall be attached to each department which comprises the chairman, the subject experts other repute institutes, university, industries, alumni, senior faculty members of the department, former BOS chairman. They update the curriculum by considering the global requirements, technological developments, advancement, laboratories, professional electives, open electives, mandatory courses, projects etc in to the syllabi in order to meet the industrial requirements.

The University believes in a participative and inclusive governance system by making all the members as part of the system. The roles and responsibilities of Directors / Principal of each and every college include overseeing matters relating to the academic, examinations, research & developments, implementation of statutory rules and regulations in respect of their units. They will be assisted by their academic fraternity and strong administrative staff comprising Joint Registrar, Deputy Registrar, Asst Registrar and other administrative staff members. Head of the department is the Strategic Head for the particular programme and execute the academic and administrative functions for particular programme in consultation with the Director/Principal.

6.2	Strategy	Development	and	Deploymen	ıt
------------	----------	--------------------	-----	-----------	----

6.2.1 The institutional Strategic plan is effectively deployed.

Response:

The University has an effective strategic plan with respect to academic excellence, research excellence, collaboration, entrepreneurship and innovation, University social responsibility& Individual Social Responsibility, globalization, strengthening the relationship with alumni, governance, infrastructure & resources, branding and governance. Major initiatives are made in the following directions to realize the strategic plans: Continuous update of courses and curriculum, inculcation of outcome based education and assessment, integrated teaching learning processes, inter disciplinary & multidisciplinary programs/ courses, usage of ICT in teaching-learning practices at par with National and International trends. Better research ecosystem has been established by producing research personnel, research projects and consultancy. The students are encouraged in product innovation and development in their endeavors with the support of J-Hub (JNTUH Innovation Hub). Attracting meritorious students of national and international origin and from all sections of the society through state level entrance examinations like TSEAMCET, TSECET, TSICET, TSPGECET etc. The institute is continually striving to achieve top ranks among the global institutions and recognition from various national accreditation bodies and ranking systems. Alumni cell promotes the close interaction with all alumni, industrial and academic partners for knowledge sharing and technology up-dation for young minds through workshops, guest lectures, faculty development programs etc. Adequate infrastructure like laboratories, libraries, accommodation, recreation, sports and medical facilities are provided in the campus for the students. CCTVs are made also available at the important locations. Strong governance system has been established with transparency, accountability and efficiency. The main sources of fund are grants from the state government, student fees, UGC grants, affiliation fees, research projects and consultancies. There is a well-defined financial plan providing financial autonomy to all the executive authorities to maintain the speed and pace of growth. The University has prepared the perspective plan by involving all the Stakeholders of the system in line with our University's vision and mission. The University envisions the generation and development of excellent human resource through holistic education by implementing the NEP-2020 in various spheres of relevant education system.

File Description	Document
Any additional information	View Document

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

Response:

A strong governance system has been established in the University for effective and efficient functioning in JNTUH. Utmost transparency in governance is maintained with active participation of all its stakeholders of the university. The Vice Chancellor is the Executive Head of the University who acts as Chairman of different Committees constituted in the University. The governance structure can be broadly seen in distinct bodies in interaction with each other i.e. Executive Council, Academic Senate, Finance Committee, UCPP etc. The University follows the established rules in setting up by the state government by considering the academic and administrative needs.

The University has the standard procedures defined by the UGC and approved by the government for the recruitment of regular faculty members based on the vacancies available and by following the rule of reservation. A public notification is released in National wide newspapers and also placed in the website

Page 74/102 20-06-2023 01:04:01

for vide publicity. The applications are invited from the eligible candidates as per UGC norm. Both external and internal committees review the applications based on eligibility conditions and finalise the list of eligible candidates for appearing the interview. As per the UGC norms, a selection committee interview the performance and selected based on the merit order. The same may placed in executive council for the approval and also for issue of appointment. As per the requirement additional work load the Asst Professors (Contract) are being recruited through a notification and by conducting the interview with selection committee consisting of Principal, HOD, BOS, internal and external subject experts.

A well-defined service rules are existing in the University for Service Matter of teaching and non-teaching staff members of the university. Both teaching and non-teaching staff members strictly adhere to the service rules defined by the University.

The roles and responsibilities of Principal / Director / Officersof the respective units overseeing matters relating to the academic, examinations, research & developments, implementation of statutory rules and regulations in respect of their units. They will be assisted by their academic fraternity and strong administrative staff comprising Joint Registrar, Deputy Registrar, Asst Registrar and other supporting staff for smooth functions of both academic and administrative activities. Accounts, Library and inventory are being monitored by the concerned officers.

Head of the Department is required to delegate the role and responsibility to their respective staff members as per their capability and form different committees as per the requirement. He/she should execute the academic and administrative functions for a particular programme in consultation with the Director/Principal.

File Description	Document
Link to Organogram of the University webpage	View Document

6.2.3 Institution Implements e-governance covering following areas of operation

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

Response: C. 2 of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP (Enterprise Resource Planning) Document	<u>View Document</u>
Details of implementation of e-governance in areas of operation, Administration etc (Data Template)	View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff.

Response:

Performance Appraisal system: Institution Performance Appraisal System for teaching JNTUH has the performance appraisal system in three-fold, 1. Students' online feedback. 2. Results analysis of examinations in the subjects taught (Average pass rate). 3. Assessing the progress of staff. The Teaching staff is apprised based on the following Performance Indicators 1. Result Analysis 2. Students Feedback 3. Conferences / Workshops attended 4. Number of publications/papers 5. Contribution to the college for developing labs and giving proposals for new courses. 6. Contribution to the department 7. Project Guided etc for B.Tech, M.Tech, M.Pharmacy, Ph.D 8. Punctuality; Adaptability The promotional avenues: The promotional avenues for teaching faculty members are to get higher academic pay and promote to Associate Professor and Professor Designations. Career Advancement Schemes (CAS) for the assessment period invited for all units of JNTUH teaching staff. The institution has effective welfare measures for teaching and non-teaching staff: 1. Pensioner Benefits. 2. GSLIC Contribution scheme. 3. General Provident Fund Facility 4. Medical Reimbursement Yearly. 5. Medical Reimbursement for surgery, Hospital Charges up to Rs.2.0 Lakhs 6. UGC unassigned grants for paper presentation in India Rs.10,000/-7. UGC unassigned grants for paper presentation in Abroad Registration Fee+ Travel Grant + DA (As per UGC norms). 8. EL encashment for 15 days per year for Non-Teaching staff. 9. Short Term and Long Term advances/ Festival advances. Short Term for Non-Teaching Staff only: Festival Advance, Educational School Fee Reimbursement. Long Term: House Building (Purchase, Construction, Repairs), Purchase of Land, Motor Car, Motor Cycle, Computer, Marriage Advance for Children. 1. Providing and sanctioning regular increments and implementation of RPS. 2. Dearness Allowances. For the employees recruited after Sep'2004: 1. LIC Contributory Pension Scheme 2. UGC unassigned grants for paper presentation in India Rs.10,000/- 3. UGC unassigned grants for paper presentation in Abroad Registration Fee+ Travel Grant + DA (As per UGC norms). 4. Long Term Advances: House Building (Purchase, Construction, Repairs), Purchase of Land, Motor Car, Motor Cycle, Computer, Marriage Advance for Children. 5. Providing and sanctioning regular increments and implementation of RPS. 6. Dearness Allowances. Outsourcing Staff: ESI /EPF Contributions. NON- MONETARY WELFARE SCHEMES Leaves: 1. Study Leave for 6 Months in service. 2. Maternity leave with half pay for two months. 3. Paternity Leave for 15 Days. 4. Child Care Leave for women employees: 6. Months in service. 5. Medical Leave: 20 Days per annum. 6. Summer vacation for 2 Months and Winter Vacation for One Month. 7. Casual+ Special Casual leaves – 22 days per annum 8. Optional Holidays: 5 days per annum 9. Academic Leave: 12 Days per annum 10. Attending RC/OC/FDPs; on duty Leave.

File Description	Document
Any additional information	View Document

6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years.

Response: 2.88

Page 76/102 20-06-2023 01:04:01

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
7	2	10	7	12

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc. during the last five years (Data Template)	View Document

Other Upload Files	
1	View Document

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

Response: 26.4

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

2021-22	2020-21	2019-20	2018-19	2017-18
34	39	37	16	6

File Description	Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View Document
Any additional information	View Document

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 48.75

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

Page 77/102 20-06-2023 01:04:01

during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
115	182	130	93	112

File Description	Document
IQAC report summary	View Document
Details of teachers attending professional development Programmes during the last five years (Data Template)	View Document

6.4 Financial Management and Resource Mobilization

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

Response:

JNTUH is motivating the faculty members to conduct the research, consultancy, learning and development activities in the constituent colleges. The faculty members conduct research through funding from the organizations like UGC, AICTE, DST and other organizations from both Public and private sector organizations. The consultancy activities are encouraged by the University which adds substantial amount of revenue year on year. In the learning and development activities include teaching, experiential learning, conduct of Seminars, Conferences, Workshops, FDPs, Executive development programmes and also with collaboration with other institutions with nominal registration fees to meet the expenditure accordingly. The university is raising funds to conduct the above activities and utilizing the funds for the developmental activities of the Students. The activities include Laboratory infrastructure and maintaining, up-gradation of laboratory equipment, computers, building infrastructure, Purchasing of Library books, subscription of journals and Software. Construction of new buildings, Establishment of new labs, organizing events in the units such as Industrial visits, workshops, hands on training, national level events such as Tech-Fests, sports day etc. The major sources of funds are given below. Affiliation Fee: The University is having Affiliated Colleges in Engineering, Pharmacy and Management. The prescribed fee is collected as per the intake of the respective Colleges (Encl. I) Examination –Student Services: The University examination services is providing the facilities to the students such as transcripts, WIS Form, issue of ODs and other services on a nominal charges. Consultancy: This is also a major generation of the income to the University. The Department of Civil Engineering of JNTUH College of Engineering Science & Technology, Hyderabad and Directorate of BICs are taking the consultancy works from the Government Organizations like GHMC, Private Organizations for Soil Testing, Material Testing, Cube Testing and other related activities. Research: The faculty of the University are conducting the Research activities and contributing the funds to the University. They are also encouraging the students for taking the JRF/SRF which are funded by the Government bodies. As per the norms there is a share to the University. Electricity: In JNTUH University College of Engineering Sulthanpur has constructed 4 MW Solar Power Plant and generating the electricity. There is huge discount to the University for the electrical consumptions. This is saving to the University in the electricity bills charges which is a contribution to the

Page 78/102 20-06-2023 01:04:01

sources of Funds of the University.

File Description	Document
Any additional information	View Document

6.4.2 Funds / Grants received from government bodies during the last five years for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs).

Response: 2446.11

6.4.2.1 Total Funds / Grants received from government bodies for development and maintenance of infrastructure (not covered under Criteria III and V) year wise during the last five years (INR in Lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
0	87.04	1000	659.07	700

File Description	Document
Details of Funds / Grants received from government bodies during the last five years (Data Template)	View Document
Annual statements of accounts	<u>View Document</u>

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

Response: 0

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

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

File Description	Document
Institutional data in prescribed format	View Document

Page 79/102 20-06-2023 01:04:01

6.4.4 Institution conducts internal and external financial audits regularly

Response:

ACCOUNTING PROCEDURE

Voucher: Before making a payment, the office prepares voucher by furnishing all the details of expenditure and bank cheque details. A voucher consists of sub-vouchers such as: Proceedings for payment, Original Bill, Comparative statement and Quotations.

Bank Accounts: The University maintains different number of accounts in the Bank based on its necessity.

Cash Book: Each account is maintained with a cash book. The receipts (Income) and Expenditure details are entered in cash book daily wise for a month and monthly wise of a particular financial year.

AUDIT PROCEDURE

- Each voucher is verified for its correctness by way of verifying the sub-vouchers.
- Receipt (Income)/ Expenditure entries are verified in all the cash books.
- Cash book entries are reconciled with the Bank statements (both Receipts and Expenditures).
- Finally, the audit party prepares Receipt-Expenditure statement and submits to the Registrar.
- Audit Objections: After the verification of all the accounts, the audit party raises the objections if any.

INTERNAL AND EXTERNAL AUDIT

Objectives of the Financial Audits: Financial Planning and resource management is the foresights of the University in strategize its growth and development.

Pre Audit:-

The expenditure of the university and their units are pre-audited by the internal accounts team before processing the payments and verify the university norms. After verification and approved by the pre-audit team, the bills may sent to the accounts section for payment.

State and AG Audits:-

The state audit team comprises the audit officer and other team members visit each and every unit of the University every year for auditing the each and every item of receipts and payments. The audit objections are informed to the concerned disbursing authorities for resolving the issues and concerned officers clarify them. Telangana Government's Accountant General (AG Audit) comes under External Audit Party and makes audit periodically.

Dissemination of Audit Reports: At the completion of every financial year, the accounts are well audited by the Audit Officers. The same is disseminated to public domain through college website.

Page 80/102 20-06-2023 01:04:01

File Description	Document
Any additional information	<u>View Document</u>

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes by constantly reviewing the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals.

Response:

IQAC has taken many initiatives for the institutionalisation of quality improvement in teaching learning and research in the university and are mentioned below: 1. Student Academics Suggested to use ICT and modern techniques for the better teaching learning practices and are effectively used during pandemic conditions. Students are encouraged to participate in various value added courses and experiential learning. Outcome based education has been implemented along with choice based credit system. Initiation has been taken to enrol and complete the NPTEL, Course era etc. Feed back from the students has been taken for every semester on curriculum, teaching learning, faculty etc. Suggested to organise the skill development training programs to the students for better placements. Faculty members and students are encouraged to enrol in various professional bodies on their core domain. Students are asked to create different student clubs and suggested to make the activities in that clubs. Remedial are classes suggested for the weak students in order to improve their progress. Mentor and mentee relationship has been improved in all the units and suggested to have the parent teacher meet in every semester. 2. Staff Academics Faculty members are being advised to conduct and attend different faculty development/orientation/refresher courses/workshops/conferences etc to improve their teaching and research skills. Feed back on curriculum has been collected from the staff members in order to improve the quality of syllabi. Research projects, publications, patents, awards and consultancy activities of the faculty members are being enhanced. 3. Academic Facilities Library and learning resources are being improved and made digital data available to the faculty and students during library hours. Incorporation of smart class room in each department and providing the ICT for better teaching learning practices. Increase of hostel intake by enhancing the space and other infrastructure in the existing hostels for both boys and girls students. New boys and girls hostels are constructed to improve the in house student capacity. 4. Audit issues Pre audit has been introduced in the university for verification of receipts and payments before release of the funds. Academic and Administrative audits have been conducted in all the departments in order to maintain the quality of the teaching learning processes. Departments are advised to make the result analysis of the students every semester. Environmental, energy and green audits are being regularly conducted. 5. Governance issues To university is striving for the achievement of the specified vision and mission by improving the quality of teaching learning processes and frequent changes in regulations and syllabi. University has been implementing all the welfare schemes for teaching and non teaching staff members and also for the students. Alumni member has been made as part of IQAC committee and make suggestions for transfer of technology to our students from the alumni. University has implemented the code of conduct for the employees of regular and contract and also students. MOUs are being encouraged with industries and other reputed organisations.

File Description	Document
Any additional information	<u>View Document</u>

6.5.2 Institution has adopted the following for Quality assurance 1. Academic Administrative Audit (AAA) and follow up action taken 2.Confernces, Seminars, Workshops on quality conducted 3. Collaborative quality initiatives with other institution(s) 4.Orientation programme on quality issues for teachers and students 5. Participation in NIRF 6.Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA).

Response: A. Any 5 or more of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Upload details of Quality assurance initiatives of the institution (Data Template)	View Document

6.5.3 Incremental improvements made for the preceding five years with regard to quality (in case of first cycle), Post accreditation quality initiatives (second and subsequent cycles).

Response:

The University is committed to Quality as the guiding Principle in its decision making and leadership in providing education and to realize this, the governance of the university will regularly monitor the quality of Teaching-Learning, research and review the performance to produce competent graduates and by providing continuous augmentation of State-of-Art infrastructural facilities in implementing an effective Quality Management System based on ISO-9001 standards and the Industrial needs". Based on its Quality and Mission Statements, the institution mainly focuses on two Quality issues.

• Quality in Teaching-Learning Processes in producing Competent Graduates.

The University has adopted unique courses by considering global thinking with local needs and suitably termed as "Globalization". JNTUH follows flexible curricular structures for the Holistic development of the students. Pedagogy with Participative Learning to provide an Optimum Learning Environment, JNTUH has multidisciplinary programs in professional education. The programs offer flexibility in the curricula with CBCS patterns inclusive of electives and value-added courses.

The following phenomenal developments can be observed during the past 5 years pertaining to the Quality Issue Q1:

- Research growth in the university by getting good number of research projects, publications, and consultancy.
- A Good number of MOUs are active, and the university is regularly interacting with the industry and other research institutions.
- A rigorous and robust online feedback collection mechanism from all the stakeholders followed by

Page 82/102 20-06-2023 01:04:01

analysis and action has been established.

- Conduction of faculty development programs, staff development programs, workshops for technical and laboratory assistants.
- Continuous augmentation in Library resources.
- Organization of student training programs.
- Reforms in evaluation procedures.
- Participation in NIRF ranking.
- Student Encouragement in participating co-curricular and extra-curricular activities.
- More Focus on student placements and internships.
- Incorporation of Curriculum changes meeting the industry needs.
- The ICT infrastructure has been strengthened and used exhaustively in all the Teaching-Learning operations.
- Strengthening of laboratory resources for experiential learning.
- Excellence in providing State-of-Art infrastructural facilities for enrichment of Student knowledge and opportunities.
- The University is working towards the upgradation/construction of centers of excellence, laboratories, hostels, staff quarters and administrative spaces.
- JNTUH is sprawling lush green residential campus with large number of academic departments, research centers, hostels (boys and girls), two Guest houses, a 1010 seat big A.C auditorium, a Gymnasium, outdoor sports grounds, indoor stadium, swimming pool, an Out-patient department, post office, two banks, faculty and staff residential quarters, rainwater harvesting, waste management systems, green audit, surveillance CC Cameras, and solar energy system, spread over 80 acres land in the heart of Hyderabad City.

File Description	Document
Link for Additional Information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response:

Measures and initiatives of the University to promote GENDER EQUITY: The University has been taking various measures and good initiatives to create an environment in the campus to give the feeling to every girl student as free from anxiety, depression, stress, loneliness and adjusting to the University environment. The parents of girls noticed as safe and secured place for taking admissions to their children as evident that the university has a large number of girl students that amounts to more than 50% of the total strength. In the University, a large number of women teaching faculty and supporting staff are working at various levels. Involvement of Women Faculty and Staff in various activities of the University Women faculty of the university are involved as Chairperson/ coordinator/ member in various committees like Disciplinary committee, Anti Ragging Committee, Malpractice committee, Boards of Studies, Board of Governors, Academic council, Fact finding committee, Project review committee, colloquium etc., Many women faculty of this university are actively involved in organizing various workshops. Conferences, Seminars, Guest Lectures. Orientation Programmes, Refresher courses etc., The women faculty are Holding Administrative positions like HoD's Principal, Directors, Deputy directors, Assistant Directors, Controller of Examinations, Additional controller of Examinations etc., of the University. They are encouraged to Submit project proposals to various Government funding agencies. Many have completed / ongoing research projects funded by DST, AICTE, UGC, CSIR, BARC etc., Women faculty and staff have got higher promotions. They have published their research work in Reputed journals and conferences at National and International level. They have attended conference to present their papers across the globe. They have filed / published / awarded patents to their credit. They are involved as Coordinator for N.S.S activity. Women faculty and staff are the members of University teaching and nonteaching Employees Association. Women's Association is organizing International Women's day every year. Guest lectures and Invited talks by eminent educationalists are being arranged on women's day. They are also involved as Mentors to create awareness and confidence among the students. Involvement of Girl Students in Curricular activities Many Girl students are involved as coordinators of event organizers, Paper presentations, and Quiz competitions etc., organized during the technical fests to make them improve leadership qualities. They have been participating in Paper presentations, Quiz competitions training programmes, workshops, Internships. Conferences organized at various reputed organizations like IITs, NITs, IIITs, Universities and received awards and Prizes. They are also elected as Class representatives for various UG and PG Programmes of the departments. Many students of UG and PG programmes of the university are doing Internships in various industrial organizations in and outside Hyderabad and due to their excellent performance they got absorbed in the same organization. Many have Secured Good scores in EAMCET, GATE, PGSET etc., and Pursued higher studies in IITs, NITs, IIITs and Reputed Universities in abroad. They got good placements in reputed organizations with high packages. Students of various departments are top rankers of their class and received Gold medals.

Page 84/102 20-06-2023 01:04:01

File Description	Document
Specific facilities provided for women in terms of: a.Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	View Document

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

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

Response: B. 3 of the above

File Description	Document
Geotagged Photographs	View Document

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

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

Response:

The university located in heart of the city with heavy traffic, shopping malls and high density population. The inside campus is being well maintained with clear and green environment even though the outside region is effected by the traffic and other pollutants. The University campus is provided with boys, girls hostels, research scholars hostel, international student hostels and staff quarters. It is almost like residential campus with good infrastructure facilities. Online weather station was installed to measure all weather parameters in the university campus, this activity is collaboratively monitored with City University of New York (CUNY), USA. Trainings/workshops used to conduct to create awareness to various stake holders. The university administration believes strongly to maintain the hygienic conditions in the campus by providing a clean environment to the residents by providing the following facilities.

• Solid waste management in the university premises is collecting in the different dust bins in different corners of the units and accordingly treated. The leaves/vegetative waste generated from the huge greenery are converted to vermi compost. The institution follows paper reuse by utilizing single sided used papers

for writing/printing. Non-biodegradable waste is sold to scrap vendors on a regular basis.

- Liquid waste generated from various places such as canteen, hostels and restrooms is very well connected through properly designed underground drainage sewerage network from the source to sewage treatment plant (STP) in the campus for primary, secondary and tertiary treatment of sewage, the treated water has been using for gardening with high pressurized pumping network since 2000. Further, constructed wetlands are designed and constructed to treat the sewage naturally to meet towards Sustainable Development Goal no.07. Twenty-two recharge bore wells, eleven rainwater harvesting systems, storage pond and three piezometers are planned, designed and installed along in the campus to collect the direct runoff generated from the rooftops and other than roof top areas in the campus as part of demonstrative rainwater harvesting systems funded by Government of India to water resources department to meet the SDG no:06. The University campus is now a zero discharge campus and capable of harvesting nearly 10 crore liters of direct runoff per year since 2010. After intervention the groundwater static water levels are improved from 150 feet to 15 feet BGL during monsoon period. Quality of Fluoride concentration is improved from 2.5 ppm to 1.3 ppm immediately after one year of activity. University also educates various stake holders on rain water harvesting and takes up activities related to saving water campaigns. Since the university did not offer any bio medical courses in the university campus, biomedical waste is not generated in the campus.
- E-waste from different sections of the units are collected and dumped at one place, which is sold to authorize e-waste vendor. Students are also educated by faculty member on proper e-disposal methods.
- Hazardous chemicals like acids are used in the Chemistry, environmental, biotechnology, chemical technology departments etc for conducting practical classes for students. These acids are neutralized before disposing them off.

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

7.1.4 Water conservation facilities available in the Institution:

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

Response: A. Any 4 or all of the above

File Description	Document		
Geotagged photographs / videos of the facilities	View Document		
Any other relevant information	View Document		

7.1.5 Green campus initiatives include:

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

Response: A. Any 4 or All of the above

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

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

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

Response: A. Any 4 or all of the above

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

7.1.7 The Institution has disabled-friendly, barrier free environment

- 1. Built environment with ramps/lifts for easy access to classrooms.
- 2. Divyangjan friendly washrooms

Page 87/102 20-06-2023 01:04:01

- 3. Signage including tactile path, lights, display boards and signposts
- 4. Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
- 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

Response: A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Details of the Software procured for providing the assistance	View Document

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

Response:

JNTUH has students based on international, national, regional, linguistic, communal and socioeconomic diversities who are pursuing their studies. Students from different countries across the globe and from different states such as Telangana, Andhra Pradesh, Jammu & Kashmir, north eastern states in India are studying in the different units and are staying on campus in the hostels. For inculcation of tolerance and harmony amongst students about the diversities in the university, a separate international hostel is provided for foreign students and the Indian students are allotted in the hostels according to the university norms. A few foreign research students are also staying in research scholar's hostels along with the Indian research scholars in order to have the harmony towards integrity with diversified backgrounds. The teaching and non-teaching members of the university are from different states with diverging background. The institution takes much efforts and interest to empower the education on moral and ethical values to all the students in order improve the harmony and diversity. The objectives of higher education policies of the nation are clearly reflected in the university mission of providing education to all the students. University always focuses on a peaceful, healthy and comfortable campus for all the students while preserving the motto of unity in diversity. In the inter university competitions, the students' potential has been taken into consideration for selections and various regional and religious students participate. A special event "At Home" is being conducted every year for the foreign national students with their different cultural activities so as to create a homely environment. By conducting different technical and cultural events, the students gain experience and cultivate social responsibility and inculcate the interpersonal and intrapersonal skills through participation. The university also conducts various cultural programmes to celebrate unity in diversity. To promote the rich cultural heritage of India, festivals such as Ganesh Chathurdhasi, Bathukamma and Ayudha Pooja during theDasara, RenukaEllammaJathara followed by Bonalu, Ramadan, Christmas are celebrated by the students, teaching and non-teaching staff for the wellbeing of each stakeholder of the university and the wellbeing of everyone in the society. During Ganesh Chathurdhasi, eco-friendly clay idols of Ganesh were being distributed by students of JNTUH and were distributed to people. An exclusive prayer hall for Muslims is available throughout the year on

Page 88/102 20-06-2023 01:04:02

campus. In addition, Birthdays of social reformers like SantSevalalMaharaj, JyothibaPhule are celebrated in its grandeur. National festivals such as Independence Day, Republic Day, AmbedkarJayanthi, Gandhi Jayanthi, Telangana Formation Day are celebrated in their true patriotic spirit on campus. International Women's Day is celebrated in the university and women entrepreneurs are encouraged to put up stalls to sell their products on campus. Every year, JNTUH Convocation is followed by rich cultural performances by the international and Indian students. This serves as a platform for them to foster learning through a great synergy between science, engineering and cultural programmes on the other. All these activities and institutional initiatives by JNTUH provide an inclusive environment.

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

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

Response:

In line with the vision and vision of University, several extracurricular activities are carried out spread over the entire assessment period to inspire the students and employees to be aware and internalise the constitutional obligations of values, rights, duties and responsibilities as citizens, including their rights and duties towards their near and dear ones, friends, faculty and staff members, the university and the society, for the benefit of the state in particular and the country in general. This initiative starts as the students join any program of the university, with induction and orientation programs and continues to personality development programs Specific courses like 'Constitution of India', Environmental Science', 'Gender sensitization', 'Cyber security', & Students and staff have participated as volunteers and web casting officials with great enthusiasm and got appreciation certificates from the district election officer. Responsibilities: Efforts are on to make everyone feel responsible to the Nation and its growth. NSS unit is promoting digital literacy, Swatch Bharath, No-Plastic drive, paying tax, save water, save environment programs, blood donation, eye camp and so forth for the benefit of the surrounding villagers. Girl students are educating village girls on the importance of education, and ill-effects of child marriages. 5 villages were adopted under UnnatBharathAbhiyan, under which a survey was carried out to identify the requirements and same is reported to the Government of India. Ethics: The Curriculum includes: (a) Constitution of India; (b) Professional Ethics; c) Bioethics (c) Cyber Security (d) Intellectual Property Rights to make students understand the ethical responsibilities. Rigorous plagiarism checks have been introduced for all post-graduate research projects, doctoral theses. Both teaching and nonteaching staff have helped the district administration in organizing different elections, as election officers, returning officers, etc. · awareness programs on right to vote was conducted and registration as voters done on the campus. :#39;Research methodology' and 'Intellectual Property Rights' etc., are offered to students in this regard. Orientation programs are also organized for newly appointed faculty members under UGC-HRDC directorate, where they are made aware of the values, ethics and responsibilities, in addition to teaching learning and evaluation methods. Values: During orientation program, special interactive lectures and activities are arranged on human values. The teacher mentors specifically counsel the students. In addition, several festivals like Bathukamma, Sankranthi, Ramzan, X-mas are organised to make students,

faculty and non-teaching staff remember the values of our culture. Also Independence day, Republic Day etc. Rights: The institution encourages students and staff participation in various awareness programs such as the importance of the fundamental rights (e.g. right to Vote, Right to information, right to speech etc.). Duties: The University has defined the duties of each and every position and a code of conduct is to be followed. Every individual including students enthusiastically participate in executing the duties and activities that are demanded by the Governments of the state and centre.

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

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

Response: A. All of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View Document

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

Response:

Our JNTUH celebrates a large number of commemorative days and a wide variety of religious festivals as outlined below: The National commemorative days observed every year include the New Year's Day, National Youth Day, National Voters Day, National Republic Day, National Science Day, Telangana formation day, Indian Independence Day, National Sports Day, Teacher's Day, Dr Ambedkar Jayanthi, Gandhi Jayanti, Dr Jagjivanram Jayanthi, Children's Day, National Mathematics Day and Engineers Day. Apart from the above, the University also observes different festivals and religious days for all students like Durga Puja, Holi, Ganesh Chaturthi, Maha-Shiva Ratri, BasantaPanchami, Ram Navami, Janmasthami, Good Friday, Diwali, Bonalu, Bathukamma, Id-Ul_Fitre, Id-Ul-Juha, Muharram, Christmas and many others.

Renowned Yoga professionals are invited on the occasion of International Yoga Day celebration. A session of basic yoga is taught to the students and staff. Every year the University celebrates International Women's Day with a theme like-Women empowerment, women in industries, work-life balance, balance for the better, etc.. Eco-friendly Various festivals like Sankranthi, Deepavali, Bathakamma, pre christmus are also celebrated in the campus. Altogether, JNTUH is a symbol of social values, culture, ethics and education.

College Festivals: The annual tech fest Spoorthy, Connaisance, Ayaset is being organized every year in their respective departments and students from other colleges are invited to participate in various technical and cultural competitions. Attractive prizes are given away to the winners in these competitions.

Cultural fest named Spandana is organized by the student's enthuastically by conducting different cultural activities to the students. At home function is organised by the university on 31st December of every year and releases the New Year calendar and dairy of the university. Fresher's day is organised every year to welcome the fresher's into the campus and Annual day in which the academic and extra-curricular achievements are addresses.

The JNTUH has completed 50 years after the establishment and organised year long Golden Jubilee celebrations and conducted many activities like All India vice chancellors conference, Internal conference on Science and technology, workshops, faculty development programs etc.

7.2 Best Practices

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

Response:

Two Best Practices Practicing in the University on Meet the Achiever and Nuturing the Culture of Innovation & Entrepreneurship (JNTUH - Innovation Hub). Details are attached.

File Description	Document	
Best practices in the Institutional web site	<u>View Document</u>	

7.3 Institutional Distinctiveness

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

Response:

Distinctiveness Jawaharlal Nehru Technological University Hyderabad will issue Degrees to various students, who undergo UG, PG and Ph.D programs in varied disciplines of Engineering and Applied Sciences. These students will pursue their studies in various University Colleges, Affiliated College and Autonomous Colleges, which are geographically situated across the state of Telangana. Apart from content delivery, evaluation should be done for every semester. The evaluation model of the University is quite distinct and it is hassle free implementation from the past five decades with consistent improvements.

• Evaluation Model in a nutshell:

This model is first introduced by the University. Later it is a catch up to other universities. To detail the model, there are around 214 Colleges and the exams will be conducted for a student strength of around 1,26,000 every semester. Fairness in question paper distribution is achieved with the help of Electronic Distribution.

• Zero Discharge Campus Context:

University is surrounded by lot of commercial establishments and residential areas. Ground water is exploited to a larger extent by all these establishments. The land area for absorption of rain water has come down drastically. At the same time within the University water consumption increased due to increase of student strength. With this back ground "Zero Discharge Campus" initiative is taken up by the University and execution is carried out by Water Resources Department. Model: Rain water will go out through storm water drains, losing the entire direct runoff. Direct run off is harvested and stored in the aquifers with various rain water harvesting systems. The structures identified and constructed in the campus are 22 recharge bore wells and 11 storage tanks, one pond and one sump. All the structures capture the direct run off from the rain fall. Capacity of these structures is 10cr liters in a normal rain fall year. These structures are maintenance free. The modified design is to recharge wells through gravity injection. These structures are working since 2010. Impact: Water logging outside the campus is found in earlier period, which is not seen from the past 10 years. Ground water quality due to dilution and addition of rain water reflected in fluoride concentration levels coming down from 2.5 ppm to 1.3 ppm. Static water level improved from 150 ft to 15 ft below ground level during monsoon period. There is an indirect effect on soil moisture levels helping growth of greenery. This model added with increase in water storage capacity completely avoided the purchase of water tanks in summer. Sustainable Development Goal six is another impact of this initiative. Lot of training is provided for various groups outside the University to create societal impact.

File Description	Document	
Any other relevant information	View Document	

5. CONCLUSION

Additional Information:

Jawaharlal Nehru Technological University during the Academic Year 2021-2022 celebrated Golden Jubilee. This is a cherished moment in the journey of a university where the synergy between an academic excellence and the commitment of our exceptional students could create an immemorial legacy. JNTUH has always strived for excellence and building the character and capacity of students into highly motivated, responsible and competent citizens of the country. Building on this momentum over the years, the institute has successfully pursued the wider goals of improving its members' academic and research programs and strong value system. National Education Policy 2020 is being followed at JNTUH to gear up towards novel multi-disciplinary course curriculum which is student-centric and competitive. An all India Vice-Chancellors conference was held in the university during April 2022.

JNTUH has an excellent track record of academic results and placement of students and more than 100 companies visit the campus for the placements. The university have a very strong Alumni base, who have brought many laurels to the University.

There are 12 directorates in the university each is headed by a senior professor of the university viz. Academic & Planning, Examination Evaluation, Admissions, Academic Audit, UGC-HRDC, Research & Development, Bureau of Industrial Consultancy Services, Foreign Relations, Industry Interaction, Innovation Hub, IQAC and Alumni affairs. These directorates work in synergy for the upliftment of the university in all fronts.

The university developed a fool-proof affiliation system through fact finding committees for according affiliation to the self-financing institutions across the state of Telangana. To monitor the faculty and student attendance in the affiliated colleges, Biometric Attendance System (BAS) is introduced which provides continuous monitoring the availability of faculty in the colleges. The regulations and guidelines are prepared to maintain standards in the colleges in line with AICTE with a continuous monitoring mechanisms.

The University has its own in-house developed examination management system for conduct of examinations in all the affiliated colleges. The university also supports the State Government by conducting various state level admission tests, web based counselling for all admissions, various recruitment tests to several departments of the governments.

Concluding Remarks:

Jawaharlal Nehru Technological University Hyderabad (JNTUH) is established to offer different professional programs encompassing the domains of Engineering, Science & Technology and Management.

- Curriculum is designed and developed keeping its relevance and appropriateness to the changing needs of the society and industry. JNTUH adopted the Choice-Based Credit System (CBCS) which includes core, elective, and value-added courses in the curriculum. This provides the cross-cutting themes, such as environmental sustainability, gender sensitization, and social justice, in the curriculum.
- Effective teaching-learning and evaluation processes are established and in place that students receive quality education that prepares them for their personal and professional lives.

- The University play a crucial role in fostering research and innovation by providing a supportive environment, facilitating interdisciplinary research, and promoting industry collaboration and entrepreneurship.
- Availability of state-of-the-art equipment, physical infrastructure, including e-classrooms, laboratories, libraries, seminar halls, auditoriums, sports facilities, and other necessary amenities is another major strength of the University. The updated and relevant learning resources, including textbooks, journals, eresources, and other reference materials in the library bring the image to the university in the studentworld.
- Universities provided resources to help students succeed academically, such as tutoring services, study groups, academic advising, and access to learning resources and technologies. JNTUH offer resources to help students prepare for their post-graduation careers, such as career counseling, job placement services, and networking opportunities.
- JNTUH has clear defined vision, mission, and goals of the institution, aligned with the needs and expectations of stakeholders. It has a transparent and participatory decision-making process, involving all stakeholders, such as faculty, students, staff, and alumni.
- JNTUH adopts a value-based education system, with a focus on ethical and moral values, social responsibility, and sustainable development. Provision of a safe and secure campus environment, with adequate measures for disaster management, emergency response, and student welfare has been taken by JNTUH and implementing eco-friendly and sustainable practices, including waste reduction, energy conservation, and carbon footprint reduction.

Given the opportunity with considerable score to the JNTUH, it will flourish in the field of Technical Education by providing quality education and by attracting sizeable funds from National and International Organizations making the statement true: Jawaharlal Nehru Technological University Hyderabad acronym is "GATEWAY OF EXCELLENCE".

6.ANNEXURE

1.Metrics Level Deviations

	CALO CONTRACTOR OF THE CONTRAC								
	D Sub Questions and Answers before and after DVV Verification								
1.1.2	Percentage of Programmes where syllabus revision was carried out during the last five years.								
	 1.1.2.1. How many Programmes were revised out of total number of Programmes offered during the last five years Answer before DVV Verification: 53 Answer after DVV Verification: 53 1.1.2.2. Number of all Programmes offered by the institution during the last five years. Answer before DVV Verification: 53 								
1.2.1	Percentage of new courses introduced of the total number of courses across all programs								
	offered during the last five years.								
	1.2.1.1. How many new courses were introduced within the last five years. Answer before DVV Verification: 2868 Answer after DVV Verification: 2868 1.2.1.2. Number of courses offered by the institution across all programmes during the last five years. Answer before DVV Verification: 6705								
1.3.2	Number of value-added courses for imparting transferable and life skills offered during last								
	five years.								
1.3.4	1.3.2.1. How many new value-added courses are added within the last five years. Answer before DVV Verification: 275 Answer after DVV Verification: 275 Percentage of students undertaking field projects / research projects / internships (Data for the latest completed academic year).								
	1.3.4.1. Number of students undertaking field projects or research projects or internships. Answer before DVV Verification: 2382 Answer after DVV Verification: 2386								
	Remark : As per data provided								
2.1.2	Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the last five years								
	(Excluding Supernumerary Seats)								
	2.1.2.1. Number of actual students admitted from the reserved categories year wise during								
	last five years								
	Answer before DVV Verification:								
	2021-22 2020-21 2019-20 2018-19 2017-18								

		1109	972	942	913	812		
		Answer Af	ter DVV V	erification :	ı	I.		
		2021-22	2020-21	2019-20	2018-19	2017-18		
		871	761	760	716	676		
	Ren	nark : As p	er the data	provided by	HEI	Į.		
2.4.3		_	_	ce of full tin number o		s in the sam	e institution (Data for the latest	
		Answer bet	fore DVV V	of full-time Verification rification: 3	: 4793			
3.1.3		_		_			lowship / financial support by last five years.	
	suppo	rt by vario	us agencie		ced studies		nternational fellowship / financial year-wise during the last five years.	
		2021-22	2020-21	2019-20	2018-19	2017-18		
	-	0	0	0	1	2		
	L	Answer Af	ter DVV V	erification :		l		
		2021-22	2020-21	2019-20	2018-19	2017-18		
		2	0	0	1	3		
3.1.6		_	_				Γ, DBT, ICSSR and other or the latest completed academic	
	other s	3.1.6.1. The Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other similar recognitions by national and international agencies. Answer before DVV Verification: 9 Answer after DVV Verification: 1						
			has affixed ed for resea		order as aga	inst the des	ired 9 for all the centres and	
3.2.1	indust	ry, corpor	ate houses,	internatio	_	for researc	non-government sources such as n projects) endowments, Chairs in	

3.2.1.1. Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution yearwise during the last five years (INR in Lakhs).

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
30	0	7	8.44	15

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
29	0	6	7.44	14

Remark : HEI has not provided the detailed break -up hence decreasing the amount by 1 lakh each year

- Grants for research projects sponsored by the government agencies during the last five years (INR in Lakhs).
 - 3.2.2.1. Total Grants for research projects sponsored by the government agencies year-wise during the last five years (INR in Lakhs).

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
508.42	435.066	514.386	631.901	509.701

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
508.42	435.066	514.386	652.401	509.701

- Number of awards / recognitions received for research/innovations by the institution / teachers / research scholars / students during the last five years.
 - 3.3.3.1. Total number of awards / recognitions received for *research* / innovations won by institution / teachers / research scholars / students year-wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
19	28	35	18	23

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
17	13	19	8	8

Remark: As per data provided 3.4.2 The institution provides incentives to teachers who receive state, national and international recognitions/awards 1. Commendation and monetary incentive at a University function 2. Commendation and medal at a University function 3. Certificate of honor 4. Announcement in the Newsletter / website Answer before DVV Verification: C. 2 of the above Answer After DVV Verification: E. None of the above 3.4.5 Number of research papers per teachers in the Journals notified on UGC website during the last five years 3.4.5.1. Number of research papers in the Journals notified on UGC website during the last five years. Answer before DVV Verification: 2021-22 2020-21 2019-20 2018-19 2017-18 593 661 555 546 524 Answer After DVV Verification: 2021-22 2020-21 2019-20 2018-19 2017-18 208 183 194 133 110 Remark: As per data provided considering listed journal 3.4.6 Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years 3.4.6.1. Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year-wise during last five years Answer before DVV Verification: 2021-22 2020-21 2019-20 2018-19 2017-18 32 37 24 25 24 Answer After DVV Verification: 2019-20 2021-22 2020-21 2018-19 2017-18 28 32 20 19 20

Remark: As per data provided 3.4.7 **E-content is developed by teachers:** 1. For e-PG-Pathshala 2. For CEC (Under Graduate) 3. For SWAYAM 4. For other MOOCs platform 5. Any other Government Initiatives 6. For Institutional LMS Answer before DVV Verification: C. Any 3 of the above Answer After DVV Verification: C. Any 3 of the above Remark: As per data provided 3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years 3.6.4.1. Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years. Answer before DVV Verification: 2021-22 2020-21 2019-20 2018-19 2017-18 8626 2559 6426 4965 6719 Answer After DVV Verification: 2021-22 2020-21 2019-20 2018-19 2017-18 2559 3900 3800 4300 3800 Remark: As per data provided by HEI and aligning with EP 2.1 3.7.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year 3.7.1.1. Total number of Collaborative activities with other institutions / research establishment / industry for research and academic development of faculty and students yearwise during the last five years. Answer before DVV Verification: 2021-22 2020-21 2019-20 2018-19 2017-18

Angwer	A fter	DVV	Verific	ation '	•

4

4

2021-22	2020-21	2019-20	2018-19	2017-18
4	1	6	10	5

12

10

5

Remark: As per data provided by HEI

- Number of functional MoUs with institutions/ industries in India and abroad for internship, onthe-job training, project work, student / faculty exchange and collaborative research during the last five years.
 - 3.7.2.1. Number of functional MoUs with institutions/industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research year-wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
10	8	3	7	7

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
12	4	2	2	2

Remark: As per data provided by HEI

- 6.2.3 Institution Implements e-governance covering following areas of operation
 - 1. Administration
 - 2. Finance and Accounts
 - 3. Student Admission and Support
 - 4. Examination

Answer before DVV Verification : A. All of the above Answer After DVV Verification: C. 2 of the above

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
69	71	39	16	6

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
34	39	37	16	6

	Remark : As per data provided by HEI
7.1.2	The Institution has facilities for alternate sources of energy and energy conservation measures
	1. Solar energy
	2. Biogas plant
	3. Wheeling to the Grid
	4. Sensor-based energy conservation
	5. Use of LED bulbs/ power efficient equipment
	Answer before DVV Verification: A. 4 or All of the above
	Answer After DVV Verification: B. 3 of the above
7.1.5	Green campus initiatives include:
	1. Restricted entry of automobiles
	2. Use of Bicycles/ Battery powered vehicles
	3. Pedestrian Friendly pathways
	4. Ban on use of Plastic
	5. landscaping with trees and plants
	Answer before DVV Verification: A. Any 4 or All of the above
	Answer After DVV Verification: A. Any 4 or All of the above
	Remark : As per data

2.Extended Profile Deviations

ID	Extended (Questions			
1.1	Number o	f programs	offered yea	r-wise for la	ast five year
	Answer be	fore DVV V	erification:		
	2021-22	2020-21	2019-20	2018-19	2017-18
	53	48	48	51	51
	Answer Af	ter DVV Ve	erification:		
	2021-22	2020-21	2019-20	2018-19	2017-18
	54	54	54	54	54
2.2	Number o	f full time to	eachers year	r-wise durir	ng the last f
	A navyar ba	fore DVV V	'arification:		
				2010 10	2017 10
	2021-22	2020-21	2019-20	2018-19	2017-18
	1251	250	266	270	274
	251	230			

2021-22	2020-21	2019-20	2018-19	2017-18
251	250	261	270	274