

FOR 1st CYCLE OF ACCREDITATION

SCIENT INSTITUTE OF TECHNOLOGY

SURVERY NO 324, 326, IBRAHIMPATNAM RANGAREDDY DIST 501506 www.scient.ac.in

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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Endowed with sylvan surroundings, modern infrastructure and ambient learning environment, Scient Institute of Technology (SNTI) is forging ahead to achieve academic excellence.

The institute stood first among several competitors in the year 2001 to achieve the distinction from the state government to establish engineering institution in the entire Ranga Reddy district at Ibrahimpatnam, by Scient Educational Society spread over 26 acres of land in a serene surrounding offering quality education equipped with modern laboratories. Affiliated to prestigious Jawaharlal Nehru technological university, Hyderbad and duly approved by all India council for technical education, New Delhi.

Scient Institute of Technology (SNTI) offers B. Tech degree in Computer Science & Engineering (CSE), Electronics & Communication Engineering (ECE), Electrical & Electronics Engineering (EEE), and Master Business Administration (MBA). It was established for imparting engineering education and for promoting technological research to generate technical manpower in various areas of engineering and technology.

The institution continues to prosper as a result of the keenness and hard work of the faculty, students and the administrative staff of the institution. Several outstanding personalities bestowed their blessings and beautified the institution by contributing their skills and abilities to develop each and every field.

Vision

To impart quality education in building Engineering and Management professionals striving for a symbiosis of innovative technological excellence, research and human values with global standards to meet skills, knowledge and behavior of industry and societal needs.

Mission

To achieve excellence by imparting innovative Teaching & Learning and Research.

- To generate, empower, disseminate, and preserve knowledge and information.
- To render social relevant technical services and inculcating entrepreneurial talents in technological advancements.
- To nurture, inculcate and develop skills, knowledge and attitudes to render technical services for industry and societal needs.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Committed Leadership with a vision to establish an institute in the rural area to provide an opportunity for students to pursue their higher education.
- Well qualified and experienced faculty
- Academic performance by means of reasonably good students' enrolment at UG level.
- Good Placement record of students.
- Good infrastructure, research facilities and good academic interaction with multidisciplinary departments .
- Student's participation in various training programs and internships in industries and national laboratories.
- Active student environment-learning communities, programs, student organizations and clubs.
- Use of ICT tools by all faculty members.
- Well-equipped and neatly maintained Laboratories.
- Regular Parent-Teacher Meetings.
- Exclusive Training & Placement Cell with adequate facilities for training.
- Self-learning space and time for the students.
- Active participation of students in Smart India Hackthon (SIH), VISWAKARMA CHHATRA AWARDS Competitions conducted AICTE.

Institutional Weakness

- Being an affiliated institute of JNTU Hyderabad Curriculum design flexibility is limited.
- Research work for societal development and publication of patents needs to strengthen due to the dearth of senior faculty with industrial research experience.
- Industry institution interaction needs to be strengthened.
- Student-staff interaction on thrust areas of research is limited in the affiliated university curriculum.
- As most of the students are first generation learners, their communication skills need to be improved.

Institutional Opportunity

- To become an autonomous institute under JNTU-Hyderabad and UGC New Delhi.
- To encourage faculty to acquire Ph.D qualification.
- Collaborative student-projects with industries
- To encourage entrepreneurship spirit among the students by creating sensitization, awareness and capacity building programmes.
- Transform pedagogical practices and adopt latest technological relevant courses in curriculum.
- To provide training and awareness for self-reliance of the rural people.

Institutional Challenge

- Continuously decreasing trend in Engineering admissions.
- The majority of admissions are from rural areas causing concern for improvement in communication skills
- Providing scope for employability of the students in currently dynamically changing industry due to continuous change in technology.
- Exposing the teaching faculty to the Industrial practices.
- Generating funds through Research, Patents and Consultancy.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Scient Institute of Technology (SNTI) is an affiliated Institution of Jawaharlal Nehru Technological University (JNTU) - Hyderabad and follows the curriculum prescribed by the University. Academic calendar provided by the University is taken as the base for making curriculum delivery plan. The Principal of the college conducts meetings with the Heads of the Departments for developing detailed academic calendar for conducting curricular, co-curricular, extra-curricular activities. HODs, in turn, conduct meetings with their faculty for the distribution of workload, preparation of class wise and Course wise time tables and course plan. Department calendar of events is derived from the college calendar of events which is specific to the department. All the faculty members submit lesson plans, course files and lab manuals of subjects they are handling, at least 1 week before the commencement of every semester / academic year, to the Academic In charge and made available to the students. Documentation of delivery of course contents is done by maintaining course files by the concerned faculty for both theory and lab courses. The contents of the course file include syllabus, history of subject, about subject handlers, pass percentage, batch and no of students, lesson plan, subject time table, lesson notes, Question bank which includes previous university question papers. Employing learner centric techniques such as assignments, peer learning, group discussion, brain storming, NPTEL lectures, case studies, field trips, industry visits, projects, and quizzes for the effective delivery of the academic courses.

The institution integrates the cross cutting issues like Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum by taking following steps: (i) Environment - Apart from teaching Environmental Studies as a mandatory course, the institution conducts NSS Camps and Tree plantation. (ii)Human Values - The institute integrates Human Values by conducting Blood Donation Camps, Health Awareness programs, Orphanage Visits, Motivation camps for the school students and CANCER Awareness programs through NSS. (iii)Professional Ethics - To make the students as successful professionals in future, the institution conducts soft skills and personality development programs

Teaching-learning and Evaluation

All students are from the local area and the college needs to work to attract quality students from other parts of the state. Mentoring system exists in the Institute and is well managed. The Mentors regularly conduct meetings with their regarding their progress. Mentors are responsible to identify students who scored less than 60% marks in their internals. One faculty is allocated for every 15 students as Mentor for monitoring their

attendance, punctuality, discipline and academic performance as well as to guide them through their career path. Mentor may be changed semester to semester.

In addition to traditional teaching-learning methods, the institute is highly interested in providing innovative methods for enriching the learning experience. The methodologies include illustration and special lectures, field study, case-studies, project-based-methods, experimental methods and group learning methods. The facilities arranged by the institute are (i) Lecture method: this conventional method is commonly adopted by all the teachers. This method facilitates the teacher to interpret, explain and revise the content of a text only for better understanding of the subject by the learners. At the end of instruction of each unit, the students are given with specific a assignment which enriches their learning. (ii) Interactive method: this method of learning includes group discussion, role-play, subject quiz, news analysis, educational games and discussion with question/answers. In all the courses, tutorial classes are conducted in which problem solving skills are imparted.

Program Outcomes (POs) and Program Specific Outcomes (PSOs) for all programs are displayed in the website and also communicated to students. Most of these are common across departments and a few of these are programme specific. The program outcomes are assessed with the help of course outcomes of the relevant courses through Direct and Indirect methods. Direct measures are provided through direct examinations or observations of student knowledge or skills against measureable course outcomes. The mapping of Program Outcomes (POs), Program Specific Outputs (PSOs) with Course Outcomes (COs) has to be done in a more effective way.

Research, Innovations and Extension

The institute has a R&D Cell to monitor and address the issues of research. This cell encourages the faculty members to take up research activities by utilizing the existing facilities. It creates research culture among faculty members and students. It creates network with industries and research institutions for funding and cooperation. It provides guidance for publication of papers/articles. However, serious efforts are required to bring in externally funded research projects and publish quality research articles in peer reviewed reputed journals.

The National Service Scheme (NSS) in the Institute actively involve the undergraduate students in voluntary social service activities for the socio-economic development of the area surrounding the institution as well as the Nation at large. They are strongly connected to the neighboring villages and the nation through an emotional and moral bonding by virtue of the passion and dedication with which the students carry out the various social service initiatives.

Activities under SNTI - NSS Unit include (i) Blood Donation Camps (ii) Fund Collection and Distribution to Old age Homes and Poor Children (iii) Distribution of cloths and free medicines to slum area people (iv)Tree Plantation (v) CANCER Awareness Program (vi) Fire Safety Awareness Camps (vii) World Health day Activities (viii) Computer Awareness Programs to Rural Students and High School Teachers (ix) Conducting Classes to Students Mobilize them for Participating in Social Service Activities (x) Conducting Awareness Program to Public on Plastic free environment (xi) Helping Physically Handicapped People (xii) International YOGA Day etc.,

Infrastructure and Learning Resources

Scient Institute of Technology has good infrastructure to cater to the needs of students. The Institute has sufficient classrooms with LCD/ICT facility and well equipped laboratories with good ambience for academic activities, good sport facility for co-curricular activities, digital library, free WI-FI access to all students and upto-date computer centre. The primary objective of the library is to support the educational and research programs of the Institute by providing physical and online access to information. The library of the institute offer access to 3570 book titles and 27976 volumes of books and hundreds of e-Journals and reference books. E-Cap licensed Software makes search of all available books easy. DELNET Subscription, access all subscribed databases, consortium materials and E-resources, accessible on campus and remotely. The library has adequate number of book titles and volumes to address the academic needs. The CCTV surveillance is there for the smooth functioning. All administrative offices of the Institute are computerized and the offices have LAN and Wi-Fi connectivity. The internet capability of the Institute is providing by Meenakashi Teleservices Pvt Limited with 100 Mbps leased line with several servers for internet. The Institute maintains cleanliness of its Green Campus. Student's programmers are designed to learn to live and work together with achieving excellence in personal and academic areas. Training and Placement Cell provides training in aptitude, technical and personal competencies and facilitates job placements. Career Guidance Cell creates awareness on career opportunities in emerging fields. Motivates students to take part of coaching classes in competitive exam such as GATE, CAT, GRE, and UPSC etc. Training and Placement Cell provides training in aptitude, technical and personal competencies and facilitates job placements.

Institute offers Continuing Education using ICT. The Institute has been chosen a Remote Centre for NPTEL online courses and certification initiated by IITs through NPTEL Local Chapter. Health Care Unit is available and take cares of the of health issues on campus. Grievance redressal mechanism is functional.

Student Support and Progression

A comprehensive Care System is in place to provide a 'conducive environment', for the holistic development of the students. Multi-pronged Capability Enhancement and Development Schemes include Individual Mentoring, Student development programmers', and programmers designed to learn to live and work together with achieving excellence in personal and academic areas. Student Club activities to develop variety of skills and talents in both technical and non-technical activities. Career Guidance Cell creates awareness on career opportunities in emerging fields. Students are motivated to take part in competitive exams such as GATE, CAT, GRE, and UPSC etc.

Training and Placement Cell provides training in aptitude, technical and personal competencies and facilitates job placements.

Continuing Education using ICT: The Institute has been chosen as: 1. Remote Centre for NPTEL online courses and certification initiated by IITs through NPTEL Local Chapter.

Counseling / Mentoring services: are available for students to address the pressures of family expectations, personal expectations, academic pressure, social pressure, psychological adjustments and identity formation. Health Care Unit is there in the campus, annual medical camps, health services, Yoga Clinics etc take care of health issues on campus. Grievance Redressal Mechanism is functional. The Alumni association needs to be registered and enhance their activities.

Governance, Leadership and Management

Conceptualization of the Institute took place resulting into development of the vision and mission, choice of study programmes, human resource requirements, networking, fund raising and sustainability. Organizational Structure is reasonably well planned. Decentralization of decision making is done at level of Head of the Departments. Process for Standard operating procedures of most of the systems in the Institute ensures quality. Smaller Structures of Governance, with few Committees for various purposes are built in to ensure involvement and participation. Faculty Empowerment Strategies include faculty Development Programmes, Induction and Orientation Programmes, Performance Appraisal and Feedback, Refresher Courses etc. The institute has made concrete plans to grow to level of Autonomous Institute and progressing in that direction. The Role of the IQAC: The IQAC is involved in planning, auditing performance, vetting strategic issues and in maintaining quality parameters. Accessibility of the Leadership afforded to everyone in the Institute to interact with all officials is a good characteristic of the Institute. IQAC takes care of lessons plans and its execution and is monitored on daily basis. The institutes could sustain and maintain reasonable strength of student's enrolment in spite of decreasing trends in engineering admissions. The progress of the institute during last five years is quite reasonable.

Institutional Values and Best Practices

The Institute addresses gender sensitive issues through various means. Equal opportunity without gender bias is visible. The social and community engagement activities are carried out through NSS and other activities of the Institute.

CCTV surveillance system in some areas is operational in the institute. The mentoring scheme with mentor to mentee is operational. Separate girls-common refreshment room has been made available.

Waste management systems are in place. Dustbins are installed at various places in the campus. Collection and disposal of sanitary waste, surgical waste is also in place. Eco-friendly, viable and integrated system of liquid waste management is implemented and the liquid waste is discharged into the soak pit/septic tank. College has attempted to maintain its campus free of plastics. Collection bins are kept at various locations to collect plastic material. The institute has installed solar lights with sensors for lighting and illumination of the campus. Ground water recharging is being done in some part of the campus. The institution ensures transparency in its financial transactions to some extent. It also hosts the organizational manual on the website and communicates the attendance and performance in CIE though electronic reports. Transparency is maintained in internal assessment and answer booklets after valuation are shown to students. The institute also organizes national festivals and birth / death anniversaries of the great Indian personalities. However there is no well documented IT policy, Gender Policy and Green audit. To develop communication and presentation skills among the students coming from the rural background, the institute has taken up necessary initiatives.

The distinctiveness of the institute is in creating an opportunity of higher education to the rural students and bringing them in the mainstream by providing good placement opportunities.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College				
Name	SCIENT INSTITUTE OF TECHNOLOGY			
Address	SURVERY NO 324, 326, IBRAHIMPATNAM RANGAREDDY Dist			
City	IBRAHIMPATNAM			
State	Telangana			
Pin	501506			
Website	www.scient.ac.in			

Contacts for Communication						
Designation	Name	Telephone with STD Code	Mobile	Fax	Email	
Principal	G ANIL KUMAR	040-24737387	9246162822	040-2474165 8	scient_insteng@ya hoo.co.in	
IQAC / CIQA coordinator	Prasad chundi	040-65594666	9849068863	08414-22385 4	scient.naac@gmail.	

Status of the Institution	
Institution Status	Self Financing

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

Recognized Minority institution		
If it is a recognized minroity institution	No	

Establishment Details			
Date of establishment of the college	19-07-2001		

University to which the college is affiliated/ or which governs the college (if it is a constituent college) State University name Document Telangana Jawaharlal Nehru Technological University View Document

Details of UGC recognition			
Under Section	Date	View Document	
2f of UGC			
12B of UGC			

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)						
Statutory Regulatory Authority Recognition/App roval details Inst itution/Departme nt programme Recognition/App pay,Month and year(dd-mm-yyyy) Remarks months						
AICTE	View Document	15-06-2020	24			

Details of autonomy	
Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus						
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.		
Main campus area	SURVERY NO 324, 326, IBRAHIMPATNAM RANGAREDDY Dist	Rural	26.02	14365		

2.2 ACADEMIC INFORMATION

Details of Pro	Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted	
UG	BTech,Comp uter Science And Engineering	48	INTERMED IATE	English	120	90	
UG	BTech,Electr onics And C ommunicatio n Engineering	48	INTERMED IATE	English	60	44	
UG	BTech,Electr ical And Electronics Engineering	48	INTERMED IATE	English	60	22	
PG	MBA,Master Of Business Administrati on	24	UNDER GRADUAT E	English	60	60	

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Profe	Professor				ciate Pr	ofessor		Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				11				18				53
Recruited	11	0	0	11	14	4	0	18	34	19	0	53
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				11				18	J			53
Recruited	11	0	0	11	14	4	0	18	34	19	0	53
Yet to Recruit				0				0				0

	Non-Teaching Staff									
	Male	Female	Others	Total						
Sanctioned by the UGC /University State Government		7,		54						
Recruited	35	19	0	54						
Yet to Recruit				0						
Sanctioned by the Management/Society or Other Authorized Bodies				54						
Recruited	35	19	0	54						
Yet to Recruit				0						

	Technical Staff									
	Male	Female	Others	Total						
Sanctioned by the UGC /University State Government				27						
Recruited	21	6	0	27						
Yet to Recruit				0						
Sanctioned by the Management/Society or Other Authorized Bodies				27						
Recruited	21	6	0	27						
Yet to Recruit				0						

Qualification Details of the Teaching Staff

	Permanent Teachers											
Highest Qualificatio n	Qualificatio		Assoc	iate Profes	ssor	Assistant Professor						
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0		
Ph.D.	11	0	0	3	0	0	0	0	0	14		
M.Phil.	0	0	0	0	0	0	0	0	0	0		
PG	0	0	0	11	4	0	34	19	0	68		

	Temporary Teachers											
Highest Qualificatio n	Qualificatio		Assoc	iate Profes	ssor	Assistant Professor						
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt.	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		

Part Time Teachers											
Highest Qualificatio n	Profes	ssor		Assoc	iate Profes	ssor	Assist	ant Profes	sor		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt.	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	

etails of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	0	0	0	0		

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	91	0	0	0	91
	Female	65	0	0	0	65
	Others	0	0	0	0	0
PG	Male	26	0	0	0	26
	Female	34	0	0	0	34
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years							
Programme		Year 1	Year 2	Year 3	Year 4		
SC	Male	12	13	7	1		
	Female	17	11	1	0		
	Others	0	0	0	0		
ST	Male	5	10	3	3		
	Female	5	1	0	2		
	Others	0	0	0	0		
OBC	Male	64	58	37	28		
	Female	43	44	15	21		
	Others	0	0	0	0		
General	Male	31	24	32	31		
	Female	32	51	27	32		
	Others	0	0	0	0		
Others	Male	3	5	0	4		
	Female	4	3	2	1		
	Others	0	0	0	0		
Total		216	220	124	123		

3. Extended Profile

3.1 Program

Number of courses offered by the Institution across all programs during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
220	224	206	220	196

File Description	Document
Institutional data prescribed format	View Document

Number of programs offered year-wise for last five years?

2019-20	2018-19	2017-18	2016-17	2015-16
4	5	7	8	3

3.2 Students

Number of students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
683	589	497	496	884

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

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

2019-20	2018-19	2017-18	2016-17	2015-16
150	189	171	231	150

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

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

2019-20	2018-19	2017-18	2016-17	2015-16
181	115	55	152	535

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

3.3 Teachers

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

2019-20	2018-19	2017-18	2016-17	2015-16
82	108	149	164	191

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

Number of sanctioned posts year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
82	108	149	164	191

File Description	Document
Institutional data in prescribed format	View Document

3.4 Institution

Total number of classrooms and seminar halls

Response: 28

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

2019-20	2018-19	2017-18	2016-17	2015-16
193.7	180.5	180.4	168.5	196.6

Number of Computers

Response: 290

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The Institution ensures effective curriculum delivery through a well planned and documented process

Response:

Being an affiliated institution, Scient Institute of Technology (SNTI) adopts the curriculum designed by Jawaharlal Nehru Technological University (JNTUH), Hyderabad.

For effective delivery of the curriculum, the following process is developed and deployed.

- At the outset, Academic calendar provided by the University is taken as the base for making curriculum delivery plan. The academic calendar provides the date of commencement of the academic session, submission of mid-term exam marks, Parent Teachers meeting, the duration of the semester, the period of internal assessment tests, practical exam schedule, preparation holidays, final semester examinations etc. The University also declares the list of general and optional holidays to affiliated colleges.
- The Head of the institution conducts meetings with the Head of the departments for developing a detailed academic calendar for the effective implementation of the curriculum immediately after the release of academic calendar of JNTUH.
- A well-structured academic calendar which is in-line with the academic calendar JNTUH is prepared by the Head of the departments with the due approval of the head of the institution. An action plan for conducting co-curricular, extra-curricular activities, to enrich the curriculum will also be included in the detailed academic calendar.
- The Head of the Department allocates the courses to the faculty members as per their expertise and option. Class wise and Course wise time tables will be prepared for effective planning and delivery of courses.
- Each faculty prepares course outcome, a micro level course plan, course notes and course handout, for executing day to day academic activities and the same is circulated to the students on the day of commencement of Instruction. A clear plan to fill up the Curricular Gaps either by teaching content beyond the syllabus, invited lectures, workshops or add-on programs are included in the course plan.
- Teachers are encouraged to impart the curriculum through student centric learning methods, such as presentations, assignments, peer learning, brainstorming, lectures, group discussions, workshops, quiz, role-play, seminars, projects, industrial visits, etc., and innovative teaching methods such as online classes, etc. besides the regular/traditional chalk and talk methods.
- The Head of the Department monitors the academic activities on a regular basis by verifying monthly syllabus coverage report to ensure the execution of effective teaching learning process as per the academic calendar, and finds the gap, if any. The IQAC performs academic audit twice in a semester to ensure the effective delivery of the curriculum.
- The academic performance of students is continuously and meticulously monitored by conducting special tests, Mid Term exams, during the semester to assess the attainment of Course Outcomes (COs). As the attainment of COs is the base for achieving the attainment of Program Outcomes,

Program Specific outcome and by which Vision and Mission of the institution, the institution takes all the possible measures to ensure the effective delivery of curriculum and attainment of COs for all the courses.

Class committee meetings are conducted at regular intervals to ensure the effective delivery of the curriculum

File Description	Document
Upload Additional information	View Document
Link for Additional information	View Document

1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

Response:

To make it practice a committee consisting of Principal and Incharge of Examinations prepare the academic calendar in lieu with respective department HODs well in advance before the commencement of the semester. The calendar outlines the semester class work schedule, Mid term examination schedule and external examination schedule of each department. The faculty members of the concerned department gather the lists of courses for the coming semester. The head of the department finalizes the course allocation for the faculty members based on their choice and area of interest or expertise. The faculty members are prepares the lesson plan before the commencement of semester, indicating the topics to be covered lecture wise including the evaluation process for each subject and it is duly reviewed by the one of the senior faculty in the department and approved by the head of the department and institution. It is then, made available to the students. Timetable in-charge of each department prepares the timetable as per the guidelines of respective statutory bodies for the number of credit hours for each subject prior to the commencement of the semester. Time-table is uploaded on the system and displayed in the respective department notice boards. The performance of the students is assessed on a continuous basis by conducting two mid exams as per the JNTUH University norms per semester where the average is taken of both. In addition to the Mid term Examination, assignments, mini-projects, major projects, technical seminars, comprehensive viva voce and quiz are also the part of Continuous Internal Evaluation. The evaluated answer books are returned to the students and an opportunity is given to the students to discuss the evaluation with the teacher. The teacher rectifies any error on the spot, if any. Finally the Internal Assessment is carried out. From the internal assessment teachers rectify the weaker students and conduct the remedial classes after regular college time.

The University academic time-table includes following factors:

- A) Date of admission
- B) Commencement of teaching
- C) Dates of unit tests

- D) Dates for practical exams
- E) Dates for extra-curricular activities, like student union, NSS/NCC/Sports/Cultural and literacy programs, etc
- F) Commencement of classes
- G) Internal exams
- H) List of holidays, vacations and working days
- I) Duties of teachers
- J) Course completion targets
- K) Teaching diary checking schedule, etc.

File Description	Document	
Upload Additional information	View Document	
Link for Additional information	View Document	

- 1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years
 - 1. Academic council/BoS of Affiliating university
 - 2. Setting of question papers for UG/PG programs
 - 3. Design and Development of Curriculum for Add on/certificate/ Diploma Courses
 - 4. Assessment /evaluation process of the affiliating University
- E. None of the above
- D. Any 1 of the above
- C. Any 2 of the above
- B. Any 3 of the above

Response: A. All of the above

File Description	Document
Institutional data in prescribed format	View Document
Details of participation of teachers in various bodies/activities provided as a response to the metric	View Document
Any additional information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

Response: 100

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

Response: 4

File Description	Document
Minutes of relevant Academic Council/ BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	<u>View Document</u>

1.2.2 Number of Add on /Certificate programs offered during the last five years

Response: 55

1.2.2.1 How many Add on /Certificate programs are added within the last 5 years.

2019-20	2018-19	2017-18	2016-17	2015-16
23	13	8	4	7

File Description	Document
List of Add on /Certificate programs	View Document
Brochure or any other document relating to Add on /Certificate programs	View Document
Any additional information	<u>View Document</u>

1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years

Response: 70.01

1.2.3.1 Number of students enrolled in value added courses (beyond the curriculum) offered yearwise during last five years.

2019-20	2018-19	2017-18	2016-17 2015-16	
478	412	348	347	620

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	<u>View Document</u>
Any additional information	<u>View Document</u>

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 curriculum offered by the university addresses the cross cutting issues like Gender, Environment and Sustainability, Human Values and Professional Ethics. The institute believes in maintaining healthy environment for all of its stakeholders.

Gender Sensitization / Gender Sensitization Lab:

JNTUH introduced a course "Gender Sensitization" to create awareness among students about sensibility with regard to issues of gender in contemporary India. The course also provides critical perspective on the socialization of men and women. It exposes students to debates on the politics and economics of work, to more egalitarian interactions between men and women. Sessions on gender help students attain a finer grasp of how gender discrimination works in our society and how to counter it. Emphasis is given to provide accounts of studies and movements as well as the new laws that provide protection and relief to women. Sessions also empower students to understand and respond to gender violence.

Apart from this the institution formed Grievances Redressal Cell to provide counseling, promote gender equity and also deal with related issues of safety and security of students and lady staff as well to dissolve discrepancies among students and staff.

The Objectives of this course is:

- To develop students' sensibility with regard to issues of gender in contemporary India.
- To provide a critical perspective on the socialization of men and women.
- To introduce students to information about some key biological aspects of genders.
- To expose the students to debates on the politics and economics of work.
- To help students reflect critically on gender violence.
- To expose students to more egalitarian interactions between men and women.

Human Values and Professional Ethics / Professional Ethics:

- Through the course "Professional Ethics" students will be able to know the importance of ethics in engineering profession.
- This course is comprised of class room discussions with real life situations.
- It also focuses on ethical concerns common to human service situations.
- It is in response to a long- felt and urgent need to integrate value education with decision making skills in their professions.
- The issues in professional ethics are analyzed in the context of right understanding with the main focus on the development of ethical competence in the individuals.
- The course concludes by proposing several salient steps to undertake the journey towards holistic and value-based living.

Environmental Studies / Environmental Science and Technology:

University prescribed course "Environmental Studies/ Environmental Science and Technology", "Disaster Management" provides students understanding of ecological balance for sustainable development, impacts of developmental activities and mitigation measures and environmental policies regulations. Institution encourages and supports students to go with plans of protecting environment like planting saplings, best out of waste and plastic free campus and training in first aid.

File Description	Document
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View Document
Any additional information	<u>View Document</u>

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

Response: 71.1

1.3.2.1 Number of courses that include experiential learning through project work/field

work/internship year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
152	138	131	165	169

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Any additional information	View Document

1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year

Response: 78.18

1.3.3.1 Number of students undertaking project work/field work / internships

Response: 534

File Description

Document

List of programmes and number of students undertaking project work/field work//internships

Any additional information

View Document

View Document

1.4 Feedback System

- 1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2) Teachers 3) Employers 4) Alumni
- E. None of the above
- D. Any 1 of the above
- C. Any 2 of the above
- B. Any 3 of the above

Response:	A.	All	of	the	above
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File Description	Document		
Any additional information (Upload)	<u>View Document</u>		
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	View Document)		
URL for stakeholder feedback report	View Document		

1.4.2 Feedback process of the Institution may be classified as follows: Options:

- 1. Feedback collected, analysed and action taken and feedback available on website
- 2. Feedback collected, analysed and action has been taken
- 3. Feedback collected and analysed
- 4. Feedback collected
- 5. Feedback not collected
- E. Feedback not collected
- D. Feedback collected
- C. Feedback collected and analysed
- B. Feedback collected, analysed and action has been taken

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Upload any additional information	View Document
URL for feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 70.29

2.1.1.1 Number of students admitted year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
216	220	212	357	246

2.1.1.2 Number of sanctioned seats year wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
300	378	342	462	300

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

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

Response: 77.47

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

2019-20	2018-19	2017-18	2016-17	2015-16
144	125	108	205	110

File Description	Document
Average percentage of seats filled against seats reserved	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:

The institution pays more attention to the students after admission to cater to diversity among them as they are coming from diverse socio-economic backgrounds and medium of instruction in schoolings. A well planned Orientation program is conducted to motivate them and familiarize them with the university curriculum and the resources available at the institute. Based on their background, language proficiency, confidence level, competency, learning level, etc., also varies. To bridge the gap between the students and to provide a common learning platform, the institution assesses the learning level of the student based on the score obtained in Intermediate/+2 and rank in EAMCET, entrance examination conducted by the government of Telangana for admission to the first engineering programs.

The institute has embarked on a new initiative to determine Entry Skills of incoming first year students. They are administered screening test to determine their strengths and weaknesses in various Communication skills, listening skills, speaking skills, reading skills.

MENTORING SYSTEM:

- The institute adopted a well defined mentoring process where each faculty mentor is assigned with a maximum of 15 students for monitoring their attendance, punctuality, discipline and academic performance as well as to guide them through their career path.
- So every semester parents should collect the details from the college such as Name and contact details of Mentor, Class I/C and Department In charges and regularly communicate with them about student's regularity, punctuality, academic performance and behavior in the campus.
- Maintaining 75% and above attendance is mandatory as per the JNTUH norms as well as our college academic policy. Hence parents must ensure that the student is regular in attending the classes.

Assisting the Slow learners:

- Identifying the weak students based on their academic performance in Day to Day Evaluation and Mid Exams.
- Bridge classes are conducted in courses based on the performance in Day to Day Evaluation.
- Remedial classes are conducted in courses for poor performers in Mid exams.
- Parent-Teacher Meetings are conducted periodically to have interaction between faculty members and the parents to discuss about the progress of their wards and actions to be initiated, if any.
- Counseling with mentors and the professional counselor is arranged.

• During project work, they are teamed with advanced learners for enabling the peer learning.

Motivating Advanced Learners:

- Arranging lecture/training on advanced topics as a certification course for Students. The students are encouraged to do online certification courses like SWAYAM-NPTEL etc.
- The students having orientation towards research are supported by faculty members to conduct their research in right direction and\publish their work in National/International Conferences/Journals.
- They are motivated and supported to attend conferences, workshops, project expos, Hackathon and other prestigious competitions like Smart India Hackathon, AICTE Viswakarma Awards, etc., to exhibit their skills.
- Advanced learners are encouraged to take active participation in extracurricular and co-curricular events conducted by various institutions.
- They are encouraged to learn new technologies, develop projects, carry out research activities, Internships, training programs & competitions etc.

File Description	Document
Upload any additional information	View Document
Past link for additional Information	View Document

2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)		
Response: 8.33		
File Description Document		
Any additional information View Document		

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:

SNTI ensures that student-centric methods are effectively used in regular academic practices as it makes the students more self-reliant and self-motivated, and learning as interesting and effective. Instead of teacher-centric conventional teaching methods, the institution strongly believes that student-centric learning methods enhance the lifelong learning skills of students.

During course plan development, Faculty members plan for suitable student-centric learning methods for enhancing the learning experiences of the students. Learning by practice, experiments, case studies, project development, etc., has a direct impact on improving the understanding level, communication skills, problem-solving skills, listening skills, etc. Faculty members take more effort into making the learning activity more interactive by adopting the below-mentioned student-centric methods.

Experiential Learning:

The institution imparts the following experiential learning practices to enhance creativity and cognitive level of the students

- Laboratory Sessions with advanced experiments
- Internship to expand the knowledge on market trends
- Add-on Courses on latest technologies
- Case Studies, Prototype Model Making, Visual Aids usage
- Project development

Participatory Learning:

- Tech Fest/Project Expo
- Group Discussion, Debate, Role Play, Quiz
- Technical Seminar Presentation
- Periodical Industrial Visit to get insight into the internal working atmosphere of industries
- Co-curricular & Extra-Curricular activities/contests to trigger self-confidence of the students
- NSS and extension activities

Problem-solving methods:

- Practical Sessions to get Hands-on experience
- Tutorial Sessions
- Brain Storming sessions
- Special Assignments
- Technical Seminar on contemporary topics cum group discussion
- Peer Group Teaching
- Quiz Sessions

The institution is very keen on implementing innovative methods such as online classes to make the learning experience more effective and interesting. To nurture the student-centric practices, the institution has created many project expo's. Advanced Centre for Python, IoT etc., Students are highly motivated to take part in inter-collegiate, state level and national contests, value-added courses, Add-on programs, certification courses and extension activities for their holistic development.

The institution takes significant efforts to explore flipped classrooms with ICT tools and e-resources, such as NPTEL videos, e-books, PPTs, SWAYAM-NPTEL Local Chapter, Virtual classes, Youtube Channel etc which helps to easily transform conventional teaching process to student-centric process

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

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Response:

ICT tools can be used to find, explore, analyze, exchange and present information responsibly and without discrimination. ICT can be employed to give users quick access to ideas and experiences from a wide range of people, communities and cultures.

Contributions to teaching and learning are activities that contribute to the improvement of student learning. These activities include use of ICT, instruction delivery, instructional methods, assessment, evaluation and inclusive class rooms that lead to effective, efficient and engaging instruction.

Following are the best and innovative practices undertaken by the faculty members for improving teaching and learning experience:

- Power Point Presentations
- Spoken Tutorial
- Student Seminars
- Group Discussion
- Industrial Visits
- Sessional and pre-university examinations
- Mini and Major technical projects
- Communication Skill Development
- One to one internal viva voce in labs
- Virtual labs
- Modern teaching aids like Multimedia, Projectors, and Internet enabled Computer systems are used for class room instruction as well as other student learning experiences.
- The students are also encouraged to use computer software packages for their projects.
- E-Journals(DELNET,SPRINGER, ASME)
- Faculty utilizes online resource course material of different International and National Universities.
- The departments conduct paper contest, poster presentation, and technical exhibition etc. under departmental association
- The College arranges state level competitions in literary & cultural, sports & games and technical paper contests Tech fest organized each year.
- Teachers deliver content beyond the syllabus apart from their class room instruction.

File Description	Document
Upload any additional information	<u>View Document</u>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View Document

${\bf 2.3.3}$ Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year)

Response: 8.33

2.3.3.1 Number of mentors

Response: 82

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	View 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: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	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.Litt. during the last five years (consider only highest degree for count)

Response: 10.04

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

2019-20	2018-19	2017-18	2016-17	2015-16
14	14	13	11	9

File Description	Document	
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	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: 5.04

2.4.3.1 Total experience of full-time teachers

Response: 413.3

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	View Document
Any additional information	<u>View Document</u>

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

Response:

The institution maintains high transparency and robustness in conducting internal assessment exams by adopting several effective mechanisms as given below:

- Schedule of Mid term examinations, syllabus and question paper pattern adhered to the academic calendar and regulations of JNTUH are displayed well in advance before the commencement of the academic session.
- Mid term examinations are conducted as per the JNTUH academic calendar. Two different sets of question papers are prepared to maintain the confidentiality and quality of the evaluation system.
- The evaluated answer scripts are made accessible to the students within a week to maintain transparency in the evaluation system. Before distributing the papers to students, answer keys are discussed in the classroom for each course. The issues related to awarding of fewer marks, the discrepancy in counting, etc., are resolved by the respective faculty members immediately.

- Subsequently, marks are displayed on the notice board to maintain high transparency.
- Assignments are given on each unit of the course and suggestions to improve their performance are given after evaluation.
- Attendance report for every fortnight is displayed and uploaded in the JNTUH web portal and the same is communicated to the parents through letters.
- In a technical seminar which is included as part of their curriculum for final years, the students are encouraged to give a presentation on recent and innovative topics. The technical seminar presentation is assessed based on the following parameters:
- Novelty in Topic
- Presentation
- Report preparation
- Mid marks are awarded based on the presentation in mini and major projects and suggestions to improve their presentation are given by the review committee consisting of project guide, project coordinator and head of the department.
- Their performance is assessed on various parameters such as presentation skills, technical skills, communication skills, and viva-voce. Internal marks are displayed immediately after the evaluation.

The information about the internal assessment evaluation process is communicated to students during the orientation program for first-year students.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, timebound and efficient

Response:

The institution takes high concern in addressing the issues related to examinations as it determines the direct outcome in outcome-based education.

Examinations are conducted in two ways,

- Mid term examinations are conducted by the institute
- External examinations are conducted by the University.

The mechanism to resolve internal examination grievances

In general, the issues related to internal exams are resolved by the respective faculty. When the student is not satisfied with the response from the faculty, they can approach the HOD through their mentor. Even if the issue is resolved, they can approach Grievance Redressal Cell.

Grievance Redressal Cell

Grievance Redressal Cell takes utmost care in resolving exam related issues. This cell actively resolves the issues, such as awarding of less mark in answer scripts, seminar, assignment, counting mistakes, poor evaluation answer scripts and assignments, out of syllabus question paper, etc.

Time-Bound

Internal grievances are resolved within the time-bound as given below:

- Internal Assessment in 5-7 days
- Communication to Students in 7 -8 days
- Grievance resolution within 2 days
- Uploading of Internal marks in JNTUH web portal as per the notification.

Mechanisms/Authority to resolve external exam related issues

- Department Examination Cell Coordinator
- Examination Cell Officer In-charge

The hall tickets are issued to the students for University Examinations well in advance. Any grievance related to the hall tickets is addressed by the exam cell. The exam cell immediately looks into the matter and takes necessary actions. The external question papers are printed 15 minutes before the commencement of examination after receiving password from University.

The Examination Coordinator of each department helps the students in addressing their issues after the release of examination results such as

- The student may apply for a recounting of the marks where in the totalling of the marks will only be checked. Within 15 days of declaration of results by paying the prescribed fee to the university.
- The student is entitled to apply for revaluation in theory courses by paying a prescribed fee to the university. Within 15 days of declaration of results.
- The student is also eligible to apply for a challenge revaluation of theory courses by paying the prescribed fee to the University.

The Examination Cell Officer In-charge brings notable grievances immediately to the notice of the Chief Superintendent for necessary action and The university will take up all such applications and revaluate/recount the scripts by competent subject teachers.

In the event of a student is found using unfair means during examinations, the following measures are adopted to address this situation.

Firstly, the subject expert is called to verify whether the material carried is related to the subject and

mentioned in the question paper. If the material has appeared in the question paper the principal is notified about the incident. The principal then communicates the necessary recommendations to the affiliated university. The university then replies based on the letter received. The punishment is then decided and implemented by the university.

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

2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Response:

The curriculum for each program is provided by JNTUH, Hyderabad. As the institute follows outcome based education, Course Outcomes (COs) are defined for all the courses in the curriculum by each department.

The Program Outcomes (POs) are defined by National Board of Accreditation (NBA), New Delhi and are to be fulfilled by all the programs in higher education. There are twelve POs defined by NBA and the institute follows the same. Program Specific Outcomes (PSOs) are defined by individual programs.

The POs, PSOs and COs are disseminated to all the stakeholders through various means. POs and PSOs are displayed on institute's website, various places of the campus like class rooms, corridors, Laboratories, Faculty rooms, etc., and printed on lab manuals, course files, project reports, institute/department newsletters, etc.

The following platforms are used to disseminate the POs and PSOs to the stakeholders.

- * Induction Program / Orientation Program Students and Parents
- * Parent Teacher Meeting Parents
- * Campus Recruitment Drives Employers
- * Alumni Meet Alumni
- * Symbolically through Newsletters, Technical Magazines, etc.,

The COs are published on institute's website and disseminated to students through course coordinators and lesson plan.

COs are made available and communicated to teachers and students via

- Institute website
- Course File
- Announcements to the students during the beginning of each semester and throughout.
- Discussions by faculty in the departmental meetings.
- Faculty discussing CO's during department events
- Course exit surveys.

The POs, PSOs of all the programs and COs of all courses of R16 & R18 regulations are provided in additional information.

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	View Document
Upload any additional information	<u>View Document</u>
Past link for Additional information	<u>View Document</u>

2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

Response:

Attainment of programme outcomes and course outcomes are evaluated by the institution.

Response:

The institute evaluates the attainment of COs, POs and PSOs through its evaluation system and through the process is mentioned below.

The artifacts that demonstrate the skills, personal characteristics and accomplishments required for measuring the attainments are collected from:

- 1.Direct attainment
- 2.In-Direct attainment

CO Attainment of a Course:

Computation of CO In-Direct Attainment in the course:

Attainment of CO in a course = $((Level1 \times No. \text{ of Students Attempted}) + (Level2 \times No. \text{ of Students Attempted}) + (Level3 \times No. \text{ of Students Attempted})) / Total No. of Students.$

COS INDIRECT ASSESSMENT TOOLS

End of Semester Course Evaluation Form: During the survey, students provide their responses on a given scale to the questions which are the COs of the respective courses. Procedure to measure the Indirect-CO attainment of a course is same as direct attainment method, where the results are student's responses

OVERALL CO ATTAINMENT

Computation of Attainment of COs in *a course* = 70% of Direct CO Attainment+ 30% of Indirect CO Attainment

PO and PSO Attainment:

Evaluations of attainment of POs and PSOs based on 70% of direct assessment + 30% of indirect assessment combined to arrive at the Final Evaluation

PO and PSO INDIRECT ASSESSMENT TOOLS

Graduate Exit Survey: At the end of 4 years after graduation, a questionnaire is given to graduates to obtain feedback on Program Outcomes/ Program Specific Outcomes.

Alumni Survey: After completion of graduation, a questionnaire is given to graduates to obtain feedback on Program Outcomes/ Program Specific Outcomes.

Final PO Attainment:

The final attainment of each PO of a program is computed by summing up Direct-PO attainment and Indirect-PO attainment values in the proportion of 70:30.

If the achievement level of a PO reached/completed the PO target then that PO is attained, else PO isconsidered not attained. The procedure for PSOs is similar to POs.

File Description	Document	
Upload any additional information	<u>View Document</u>	
Paste link for Additional information	View Document	

2.6.3 Average pass percentage of Students during last five years

Response: 77.41

2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
135	87	45	108	449

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
181	115	55	152	535

File Description	Document	
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View Document	
Upload any additional information	<u>View Document</u>	
Paste link for the annual report	View Document	

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

P		
File Description	Document	
Upload database of all currently enrolled students (Data Template)	View Document	

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 2.96

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
2.96	0	0	0	0

File Description	Document
List of endowments / projects with details of grants	View Document
e-copies of the grant award letters for sponsored research projects / endowments	View Document

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 1.22

3.1.2.1 Number of teachers recognized as research guides

Response: 1

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

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 5

3.1.3.1 Number of departments having Research projects funded by government and non-government agencies during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
1	0	0	0	0

3.1.3.2 Number of departments offering academic programes

2019-20	2018-19	2017-18	2016-17	2015-16
4	4	5	4	3

File Description	Document
Supporting document from Funding Agency	<u>View Document</u>
List of research projects and funding details	<u>View Document</u>
Paste link to funding agency website	View Document

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Response:

The institution has set up an innovation ecosystem to foster a culture of innovation among the young talents in the campus. The institution keeps up the ecosystem more vibrant and conducive with state of the art infrastructure and suitable scholarly human resources.

All required facilities are provided and Guidance is extended to the students. Students are encouraged to actively involve in the application of Technology for societal needs. Necessary support is provided for Documentation, Publication of Research Papers. Awareness meets workshops, seminars and guest lectures on Entrepreneurship and Latest trends in the technology are organized. Students are provided opportunities to directly interact with outstanding entrepreneurs excelling in their field. Product service Training is provided for creating awareness on marketing the products.

The sole objective of the R&D Centre is to facilitate students to convert their Ideas into Technological Innovations. Students are provided facilities to build prototypes useful for promotion of Development of Society. Financial Assistance is provided for major and minor Projects. Workshops on emerging trends in Technology are held. Students are awarded prizes and certificates for best models.

Students are encouraged to gain hands on experience and better Industrial Exposure. This would be an added advantage to the students to further develop their Prototypes. Development of cost effective society related projects are encouraged. Other Initiatives for creation and transfer of knowledge included.

The following are some of the Workshops, FDP's and Seminars Conducted under R&D Cell:

- Conducted Seminar on Intellectual Property Rights, dated 8/Feb/2020.
- Conducted One Week FDP on "Programming Essentials of Python", dated 20-Jan-2020 to 25-Jan-2020.
- Conducted Seminar on Intellectual Property Rights and Patents, dated 23/Oct/2019 24/Oct/2019.
- o Conducted One Week FDP on "Blockchain Technology", dated 29-Jul-2019 to 03-Aug-2019.
- Conducted One Week FDP on" Electrical switch gear and its applications, dated 26-Aug-2019 to 31-Aug-2019
- o Conducted One Day- National Level Workshop on "DRUG ANALYSIS", 11th December 2019.
- o Conducted One Week FDP on Cloud and IOT, 04-Feb-2019 to 09-Feb-2019
- Conducted Seminar on "Research Publications, Citation Indexing and Impact Factor", dated 10/Mar/2018
- Conducted Two-Day National Level Workshop on Higher Education, Technology and Research Methodology, dated 06-02-2019 to 07-02-2019.
- Conducted Three Day National Level Workshop on "Internet of Things", dated 22/Sep/2019 -24/Sep/2019.
- Conducted One Week FDP on Data Science and Big Data Analytics, dated 29-Jan-2018 to 03-Feb-2018.
- o Conducted One -Day National Level Workshop on 'Artificial Intelligence & Machine
- Conducted Two-Day National Level Workshop on Advanced Real Time Embedded Systems, dated 25/10/2018–26/10/2018.
- Conducted One Week FDP on Art of Effective Teaching, dated 17-Dec-2018 to 22-Dec-2018.
- Conducted One Day- National Level Workshop on "Mathematical Techniques Engineering applications", dated 2nd September 2017
- Conducted Five-Day National Level Workshop on Digital signal processing by using MATLAB, dated 04/Oct/2017-09/Oct/2017.
- Conducted One week FDP on Environmental Management and Smart Cities, dated 10-05-2017 to 15-05-2017
- Conducted Two-Day National Level Workshop on PCB Design and Fabrication, dated 15/Jul/2016
 16/Jul/2016.
- Conducted Two-Day National Level Workshop on 'Recent Trendz in Information Technology', dated 07/Aug/2015-08/Aug/2015

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

3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

Response: 48

3.2.2.1 Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
10	9	10	10	9

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	View Document

3.3 Research Publications and Awards

3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

Response: 3

3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years

Response: 6

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

Response: 2

File Description	Document
List of PhD scholars and their details like name of the guide, title of thesis, year of award etc	View Document
Any additional information	View Document

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

Response: 0.89

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

2019-20	2018-19	2017-18	2016-17	2015-16
39	35	15	18	17

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

3.3.3 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: 0.03

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

2019-20	2018-19	2017-18	2016-17	2015-16
0	1	2	0	1

File Description	Document
List books and chapters edited volumes/ books published	View Document
Any additional information	View Document

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

The college has identified the social responsibility as one of the major priorities to act upon, which is being reflected in the Vision and Mission statements. College NSS wing is coordinating all the activities related to social responsibility. The motto of the National Service Scheme is "NOT ME BUT YOU". This expresses the essence of democratic living and upholds the need to appreciate the other man's point of view first and to show consideration for fellow human beings. The College has been sensitizing the students and faculty on Institutional Social Responsibilities through National Services Scheme (NSS). The following activities are under taken by the students and faculty of the College.

- 1. Program on personality development by Lead India.
- 2. Programme on Computer Education and higher education.
- 3. Student Members of NSS unit of college actively participate in blood donation camps and environmental awareness programme to educate the community of nearby villages.

The College encourage the students to join NSS in the College. At present there are more than 400 student volunteers in NSS.

National Service Scheme (NSS):

NSS Cell of Scient Institute of Technology is very active in conducting various programs. The students actively participate in blood donation camps and environmental awareness programme under the supervision of the NSS Programme Officer. Mr.K.Saidulu, Assoc. Professor, Department of ECE. The Swachh Bharat campaign many localities have been cleaned/cleansed to inculcate the cleanliness among the general public. This has been taken up on priority basis by the NSS Unit. Further, during the rainy seasons, plantation of saplings have been taken up in a big way not only in the campus but also on the sides of thoroughfares with the active cooperation of the local forest department officers.

Extension work is undertaken to ensure social justice and empower students from underprivileged and vulnerable sections of society: Activities are under taken by the students and faculty of the College.

- Blood donation camps
- Sanitation programs

Outreach activities and contribution to the community development. The initiatives of the College which have encouraged community participation in its activities are-

- Awareness programs on rural community development & rural education
- Awareness program on Swine flu

Unnat Bharat Abhiyan (UBA)

Scient Institute of technology has agreed to participate in UBA program. Our NSS coordinator Mr.K. Saidulu has been duly authorized to carry on the activities of UBA as a Project Coordinator. In this connection we adopted five villages in Rangareddy district which was approved by the Rangareddy collector for UBA program. The main motto of this program is to build an understanding of the development agenda within institutes of Higher Education and an institutional capacity and training relevant to national needs, especially those of rural India. We adopted five villages namely Tippaiguda, Kurmidda, Thakkallapalli, and Karnguda. We conducted Sanitation Awareness programs in Kurmidda and Tippaiguda & awareness on cleanliness, community development has been conducted.

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

3.4.2 Number of awards and recognitions received for extension activities from government/government recognised bodies during the last five years

Response: 26

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

2019-20	2018-19	2017-18	2016-17	2015-16
8	6	5	4	3

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	<u>View Document</u>

3.4.3 Number of extension and outreached Programmes conducted by the institution through NSS/NCC/ Red Cross/ YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc.) and / or those organised in collaboration with industry, community and NGOs during the last five years.

Response: 52

3.4.3.1 Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., yearwise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
12	11	11	9	9

File Description	Document
Reports of the event organized	<u>View Document</u>
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document
Any additional information	View Document

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 94.03

3.4.4.1 Total number of Students participating in extension activities conducted in collaboration

with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
621	549	473	467	855

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document

3.5 Collaboration

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

Response: 178

3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
48	39	17	26	48

File Description	Document
e-copies of related Document	View Document
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	View Document

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 64

3.5.2.1 Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
12	16	11	14	11

File Description	Document	
e-Copies of the MoUs with institution/ industry/corporate houses	View Document	
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document	
Any additional information	View Document	

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

Response:

1. ACADEMIC ACTIVITIES

SCIENT Institute Of Technology provides state of art infrastructure to the students to become a globally recognized center of excellence for science, technology & engineering education, committed to quality teaching, learning and research.

- 1. The Institution has a sprawling campus spread over 26 acres with modern buildings, technology enabled classrooms and excellent infrastructure to create a learner-centric environment.
- 2. The college has a positive progressive approach for creation and enhancement of the infrastructure which facilitates the effective teaching-learning process. The college management frequently interacts with the stakeholders to improve the infrastructure facilities. The facilities of the college like classrooms, tutorial rooms, ICT enabled classrooms, laboratories, library, digital library and seminar halls are also constantly upgraded to meet the requirements and every department is equipped with their own computing resources as well as department library.

2. CO-CURRICULAR ACTIVITIES

- 1. The College promotes myriad co-curricular activities to expand the knowledge of the students beyond the curriculum and to provide industrial exposure.
- 2. Our college has 2 seminar halls for conducting various co-curricular activities. The college organizes several seminars, invited talks, workshops, symposiums, hackathons, project based technical events, Faculty Development Programs (FDP) related to emerging technologies to keep everyone updated in their respective fields.
- 3. We have clubs which offers a mixture of technical and non-technical activities to develop the organizational skills of the students to further scale up their talent and focus on their area of interest in subsequent years.

3. LABORATORIES

- 1. The laboratories are equipped with state-of-the-art equipment and are more than sufficient to conduct the experiments as per the JNTUH University curriculum. The programming laboratories are equipped with open source & licensed software as per the JNTUH regulations
- 2. In addition to the regular curriculum, students are encouraged to pursue their project work and conduct many case studies in the emerging areas of research.
- 3. The college has established **Research & Development Laboratory** facilities in specific areas to inculcate research habits among the student fraternity.

4. CENTRES OF EXCELLENCE (COE)

SCIENT -BENNET-NVIDIA-RESEARCH AND INCUBATION CENTER

ON ARTIFICIAL INTELIGENCE AND DEEP LEARNING (AN AICTE Initiative)

Facilities	Total Numbers	Area in Square met
Class Rooms	28	3200
Labs	37	3200
Seminar Halls	02	800
Staff Cabins & HoD Rooms	44	800
Video Conference Room	01	50
Workshop	02	500
Drawing Halls	01	200
Computer Labs	10	1042
Library	01	500
Research and Development lab	01	150

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

4.1.2 The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga etc.

Response:

The institute focuses on overall development of the students through participation in co-curricular and extra-curricular activities. Outdoor and indoor sports and games contribute significantly in grooming students. Qualities like leadership, team spirit, and competitive spirit can be inculcated amongst the students through such sports activities. Students are encouraged to participate in different sports/Games and cultural activities. Yoga classes are being conducted for promoting health in the staff and students. Cultural activities are conducted in the seminar halls, Auditorium and open air theatre of the institution.

Sports and Games

Institute has employed well-qualified and experienced physical directors, who trains and supervises students actively participating in various sports and games activities and competitions. Physical Directors trains the students in their chosen games in the time-slot allocated to them. The institute has a spacious and well equipped indoor-sports room, where students can play games like table tennis, chess, caroms, Gym and Hall for Yoga etc. Sufficient area is allocated to outdoor sports and games with adequate facilities. Well laid courts are available for games such as badminton, basketball, volleyball, throw ball, Kho-Kho, kabaddi, cricket net practice, ring tennis etc. Institution encourages students to participate in intra-college, inter-college, university-level, district level, state-level competitions and national level competitions.

Cultural Activities

All the seminar halls and auditorium are provided with adequate facilities to conduct various cultural activities. Cultural activities are conducted in these seminar halls and auditorium on different occasions

like fresher's day, Annual day and on such other important occasions.

To bring out and to encourage inherent talents of the students, various clubs are introduced. Students join in these clubs depending on their interest. Students are encouraged to actively participate and showcase their talent and skills. These activities contribute to bring out latent talent among students, which help to build their overall personality by developing communication skills, leadership qualities and to be a constructive part of a team. Students are encouraged to participate in co-curricular and extra-curricular activities in inter-college, inter-university and in National level competitions.

Various clubs are:

S.No	Name of the Club	Categories
I	Cultural Clubs	Singing Club
		Musical Instruments Club
		Drama /Mono action/Skit Club
		Mime/Mimicry Club
		Dance Club: a)Classical Dance & b)Western Dance
II	Literary Clubs	Debate Club
		Orators / Toastmasters Club
		Quiz Club
		Poetry Club
III	Art Clubs	Painting Club
		Photography Club
		Rangoli/Mehandi
		Pottery Club
IV	IV Sports & Games Clubs	Basket Ball Club
		Throw Ball Club
		Tennis Club
		Chess Club
		Table Tennis Club
		Volley Ball Club
		Foot ball Club
		Cricket Club
V	Technical Clubs	Robotics Club
		Mathematics Club
		Physics Club

File Description	Document	
Upload any additional information	View Document	

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

Response: 82.14

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 23

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View Document
Paste link for additional information	View Document

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

Response: 100

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

2019-20	2018-19	2017-18	2016-17	2015-16
193.7	180.5	180.4	168.5	196.6

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	View Document
Upload audited utilization statements	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

The library uses E-CAP software developed by M/s Webpros Solutions Pvt. Ltd., It is total automation of institution with spanning over an area of 450 sq.mtrs. Library automation is one major part in this package This Library Management Information System supports in-house operations of the library. The software consists of modules on Acquisition, Cataloguing, Circulation, projects and Online Public Access Catalog (OPAC). Retrospective conversion of bibliographic records the data base available in the library is being updated on day to day basis with details of recently acquired books, records of all the library patrons have also been created in this package.

Name of the ILMS Software: ECAP

Nature of Automation: Fully Automated

Version: 1.5

Year of automation: ECAP 1.5 (2009)

Library has the collection of 25917 volumes and 3469 titles. Central subscribes two online databases like DELNET and NDL. Each database consists of 1413 and 816 of e-journals and e-books. They are downloaded and uploaded on all the systems. DELNET has Engineering Science and Technology collection and Management collection. The library subscribes around 72 print journals every year.

The Library offers computerized Catalogue Search Services for user community through the Online Public Access Catalogue (OPAC) (http://192.168.0.144) which allows access of bibliographic details of the books available in the Library.

The library subscribes full-text e-resources providing access to e-journals and e-books, etc. and access to the e-resources are based on the authenticated IP address (http//192.168.0.144). The users can access these resources from anywhere on the campus at any time through the Intranet. Digital Library is equipped with 10 Desktops with Wi-Fi and LAN enabled with 100 Mbps for fast and seamless access the Internet and e-Resources benefit of their academic and research. Library webpage (http://www.scient.ac.in/library/category/6) provides access to various services as well as e-resources, Online Public Access Catalogue (OPAC) etc., besides giving detailed information about library, rules and regulations and necessary contact details.

The library conducts a Book Exhibition by inviting local approved vendors/distributors and various prestigious publishers to inculcate reading habit among the students and faculty members.

Holdings of the Library as on date are:

Books : 25917

Titles : 3469

Print Journals : 72

e-Books (DELNET) : 816

e-journals (DELNET): 1413

Facilities / Services available at SCIENT Library:

Open Access System: Yes

Reprographic Facility: Yes

HARDWARE REQUIREMENTS

Processor : Dual Core Processor

Hard Disk : 150 GB

RAM : 2 GB

Frame Work : .Net 4.5

ECAP : Gate IN & OUT ENTRY, BOOK ISSUE & RETURN(Engg. College Automated package)

SOFTWARE REQUIREMENTS

Operating System : Windows 7 and higher Windows Server 2008

Front End : Visual C#.NET 2013 ASP

Back End : SQL Server 2008 R2 Enterprise Edition

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for Additional Information	View Document

4.2.2 The institution has subscription for the following e-resources

- 1.e-journals
- 2.e-ShodhSindhu
- 3. Shodhganga Membership
- 4.e-books
- 5. Databases
- 6. Remote access to e-resources
- E. None of the above
- D. Any 1 of the above
- C. Any 2 of the above
- B. Any 3 of the above

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	<u>View Document</u>
Details of subscriptions like e-journals, e- ShodhSindhu, Shodhganga Membership, Remote access to library resources, Web interface etc (Data Template)	View Document

4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 7.7

4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
9.32	8.28	7.62	7.15	6.15

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template)	View Document
Audited statements of accounts	<u>View Document</u>
Any additional information	View Document

4.2.4 Percentage per day usage of library by teachers and students during the last completed academic year

Response: 16.99

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

Response: 130

File Description	Document
Details of library usage by teachers and students	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

Scient Institute Of Technology has established excellent IT infrastructure to the needs of all students and faculty. Updating the IT facilities has been on the high priority activities of the institution. The list of

IT infrastructure created consists of the following items.

- Computers
- Printers
- Scanners
- Software
- LAN / WAN hardware
- LCD projectors
- Internet with High bandwidth
- Surveillance camera facility available etc

Our institution keen in updating, IT facilities for effective learning and teaching process.

In the entire campus, the LAN connects all the computers with 100 Mbps speed capacity leased line provided by Meenakshi Tele Services.

- LAN connects all the computers in Labs, Principal, HOD, Staff rooms, Administration, Library.
- Wi-Fi connectivity is provided in the Administrative, Principal, Library and academic areas.
 Surplus Ethernet ports are provided all over the campus, for laptops/devices in need of internet connectivity.
- Computer laboratories are equipped with latest technology and are available to all the staff and students.
- Firewall is provided to prevent the unauthorized Internet users from / to accessing private networks connected to the Internet, especially intranets.
- Licensed Antivirus is used to enable the security of the computers. Our college has 290+ computers, and all the departments have software packages as per the curriculum needs.
- All the departments are equipped with printers and LAN connected computers with the latest software's. Wi-Fi facility with access points is provided in the administrative and academic areas.
- At the beginning of the academic year every system is updated with new software or hardware equipments. At present we have 290+ systems in various laboratories, departments, administration office, library and examination branch to meet the requirements of curriculum.
- The institute upgrades the software packages and also purchases software currently being used in the industry to make the students, industry ready.
- The Computer laboratories are being upgraded from time to time to provide the best computational infrastructure to the students by providing 290 systems.
- Teaching aid provisions like LCD projector with computer internet based system available in each class room.
- Scient college provides Biometric Finger-Print enabled attendance.
- 50+ CCTV cameras have been installed in all over the campus at various places for 24/7 campus surveillance.
- A separate team takes care of the IT related needs of the campus such as hardware and networking.
- o Teaching aid provisions like 24 LCD projectors with computer internet based system available in

each class room.

• 20 Printers, 3 Scanners are available in Scient campus.

Wi-Fi facility

• Full coverage of Wi-Fi

• Name of the internet provider : Meenakshi Tele Services

• Available Bandwidth: 100 Mbps

• Wi-Fi Availability: Available in Labs, administrative and academic blocks

• Security arrangements: Router inbuilt with firewall and Quick Heal(Total security)

Software Server Details

E-Cap Server	Processor	: Intel(R) Dual Core
	HDD	: 350GB
	RAM	: 2GB
Globarena	Processor	: Intel(R) Dual Core
	HDD	: 500GB
	RAM	: 2GB
	Monitor	: LED

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

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

Response: 2.36

File Description	Document
Upload any additional information	View Document
Student – computer ratio	View Document

4.3.3 Bandwidth of internet connection in the Institution

E. < **05 MBPS**

D. 05 MBPS - 10 MBPS

C. 10 MBPS - 30 MBPS

B. 30 MBPS - 50 MBPS

Response: A. ?50 MBPS

File Description	Document
Upload any additional Information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

Response: 100

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)

2019-20	2018-19	2017-18	2016-17	2015-16
193.7	180.5	180.4	168.5	196.6

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View Document
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View Document
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:

Response:

- The college has appointed personnel for maintaining facilities such as buildings, transport, electrical, gardening etc.
- Regular cleaning of college floors, classrooms, laboratories, equipment, and Restrooms are being done by the housekeeping team.
- Separate complaint registers are maintained for various services.
- Stock verification of all labs and other facilities is done at the end of every year by the staff members from other department and the report is submitted to the Principal.

Maintenance of Laboratory Equipment:

- Laboratory incharge along with laboratory Assistant ensures proper working of all equipment at the beginning of each semester.
- Repairs and Maintenance of laboratory equipments are initiated by the respective laboratory incharge as and when required.

Maintenance of Computer Laboratories:

- Maintenance of computers, software installations and networking are handled by the System Administrator.
- LAN and Wi-Fi are regularly checked by the System Administrator.
- The computer systems and other sensitive equipments (servers, Projectors, Printers, Scanners, Xerox machines, Bio-metric machines) are provided with UPS systems to avoid any damage during power Outages.

Library Maintenance:

- The librarian is the incharge for handling all the maintenance works required in the library through maintenance staff .Librarian takes care of utilization of books, computers and other learning materials in the library.
- Librarian collects the requirement for a list of books, journals and other resources from all HODs during the commencement of each Academic year. The list is duly verified and approved by the Principal.

Classrooms:

- The benches and windows are cleaned and mopping of the class rooms is done every day.
- In case of any damage to the projector, internet, the class mentor brings it to the notice of the Administration. The necessary follow up is done by the Administration and steps are taken to fix whatever is broken.
- At the beginning of each semester the readiness of the classrooms, ICT facilities and furniture are verified by the Administrative Officer.

Sports Infrastructure Maintenance:

- Physical Director maintains the sports facilities available in the institution.
- Stock Register and Issue Register are maintained to ensure the proper handling of the sports

equipment.

- Stock verification is done on sports equipment at the commencement of each semester.
- The playground is maintained regularly under the supervision of the Physical Director with the supporting faculty.

Vehicle Maintenance:

- Preventative maintenance is performed daily which includes fuel and fluid level checks. .
- Vehicle records with all maintenance tasks performed, vehicle miles and emission control reports are maintained.

Buildings and Infrastructure:

Maintenance of buildings and related areas are undertaken by the maintenance staff. This maintenance staff consists of qualified electricians, Carpenters, plumbers and other service personnel.

Electrical Facilities:

Electricians perform regular checks in the campus to ensure that all electrical fittings are in excellent condition.

Maintenance of sensitive equipment, power and water supply:

	capacity	Total number	
Category			
Generator	125kvA	1	
RO plant	1000L	1	
UPS	5kvA to 20 kvA	9 (sufficient numbers available in 7 labs)	

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

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 Government during last five years

Response: 72.37

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
481	418	379	368	619

File Description	Document
upload self attested letter with the list of students sanctioned scholarship	View Document
Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)	View Document

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 21.66

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution / non- government agencies year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
176	124	117	118	125

File Description	Document
Upload any additional information	View Document
Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)	View Document

5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

- 1. Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene)
- 4.ICT/computing skills
- E. None of the above
- D. 1 of the above
- C. 2 of the above
- B. 3 of the above

Response: A. All of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Response: 86.59

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

2019-20	2018-19	2017-18	2016-17	2015-16
646	520	410	398	772

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

5.1.5 The Institution has a transparent mechanism for timely 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
- E. None of the above
- D. 1 of the above
- C. 2 of the above
- B. 3 of the above

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 placement of outgoing students during the last five years

Response: 68.8

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

2019-20	2018-19	2017-18	2016-17	2015-16
127	72	39	107	374

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Details of student placement during the last five years (Data Template)	<u>View Document</u>

5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 91.16

5.2.2.1 Number of outgoing student progression to higher education during last five years

Response: 165

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education (Data Template)	View Document
Any additional information	<u>View Document</u>

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

Response: 95.2

5.2.3.1 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

2019-20	2018-19	2017-18	2016-17	2015-16
8	24	7	35	63

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government

examinations) year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
10	25	7	35	63

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	View Document
Any additional information	View Document

5.3 Student Participation and Activities

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

Response: 161

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) yearwise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
55	24	42	20	20

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year	View Document
e-copies of award letters and certificates	<u>View Document</u>
Any additional information	View Document

5.3.2 Institution facilitates students' representation and engagement in various administrative, cocurricular and extracurricular activities following duly established processes and norms (student

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council, students representation on various bodies)

Response:

The Institute creates a platform for the active participation of the students in the various academic and administrative bodies including other activities. This empowers the students in gaining leadership qualities, in following rules, regulations and execution of skills. Student Committees are actively participating and organizing various activities related to academics, co- curricular and Extra-curricular activities, with the guidance of faculty.

They are providing great support to college related academic / administrative work with the help of other students. They are actively involving in motivating the students to participate in various activities conducted by the college. Students are encouraged to participate in co-curricular and extra-curricular activities in inter-college, inter-university and in National level competitions.

Institute has constituted various other committees to involve in different academic and administrative activities in campus apart from the Student Committees. College is very keen in encouraging students to participate in various academic and administrative committees. It improves the academic and administrative capabilities of a student.

The various student Committees in **SCIENT** are:

- Students' representation and engagement in Class Representative Committee (CRs) as Elected CR and Selected CR
- Students' representation and engagement in **NSS committee** as volunteers
- Students' representation and engagement in **Club Activities** as Student In-Charge Facilitator and Student Assistant In-Charge Facilitator for co-curricular and extracurricular activities
- Students' representation and engagement in Alumni Activity committee as members
- Students' representation and engagement in **Anti Ragging committee** as representatives of students belonging to the freshers' category as well as senior students
- Students' representation and engagement in Mini and Major Project Work as Team Leader
- Students' representation and engagement in Computer Society of India (CSI) student chapters as Student Member for co-curricular activities
- Students' representation and engagement in **Grievance Redressal policy** as representatives
- Students' representation and engagement in **Department Advisory Committee** as Student representative members
- Students' representation and engagement in **Library Advisory Committee** as Student representative members
- Students' representation and engagement in **Sports & Cultural Committee** as Student representative members

Various Clubs are:

S. No	Name of the Club	Categories	
1	Cultural Clubs	Singing Club	

		Musical Instruments Club Drama /Mono action/Skit Club
		Mime/Mimicry Club
		Dance Club: a)Classical Dance & b)Western Dan
2	Literary Clubs	Debate Club
		Quiz Club
		Poetry Club
3	Art Clubs	Painting Club
		Photography Club
		Rangoli/Mehandi
4 Sports & Games Clubs	Basket Ball Club	
		Throw Ball Club
		Tennis Club
	Chess Club	
		Volley Ball Club
		Foot ball Club
		Table Tennis Club
5	Technical Clubs	Mathematics
		Sensor and Cricuits
	Robotics Club	
File De	scription	Document
Upload	any additional information	View Document

5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

View Document

Response: 36.4

Paste link for additional information

5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
22	45	40	36	39

File Description	Document
Report of the event	View Document
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	View Document

5.4 Alumni Engagement

5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

The Institute has Alumni Activity Committee. The main objectives of Alumni Activity Committee are:

- To promote and foster mutually beneficial interaction between Alumni and the Institute.
- To encourage the formation of regional chapters to increase participation of Alumni.
- To encourage the Alumni to take abiding interest in the process and development of Institute.
- To arrange and support in placement activities for the students of Institute.
- To motivate the students of the Institute and members of the Association for research & development work in various fields like engineering, computer Industrialization etc.
- To mentor the students of the Institute for higher education, development of character and being Good citizens.
- To provide scholarships to deserving students and ex-students of the Institute for the purpose of education and sports.
- To encourage and guide the students of the Institute on self-employment to become entrepreneurs.
- To guide students of the Institute on various professional avenues available and support them through various activities such as expert advice, seminars, visit etc.
- Promote the Industry-Institute interaction to bridge the gap between industry requirements and education offered and enhance students' employability.
- To help and assist other regional bodies for training programs in entrepreneurship development, with resources available with association.
- To encourage and support students of the Institute in sports, cultural and extra-curricular activities.
- To promote computer and internet literacy among the society.
- To provide medical support to existing and retired teaching and non-teaching staff. To organize debates on various social issues.
- To help towards environmental conservation, anti-pollution activities against air, water and sound pollution, by slide show, street play, demos, handbills and all possible ways of social awareness.

- To help victims and victim areas of natural calamity and disasters like earth quakes, flood, storms, malnutrition, fire and violence etc.
- To help and guide students and ex-students of the Institute for anti-drug, anti-ragging, and any other anti-social activities.
- To publish books, periodicals for public interest.
- To arrange blood donation, eye donation and health awareness Camps Sighting the above objectives of Alumni Activity committee our alumni contributes in many ways for the development and betterment of our Institute. Our students and Institute are benefited in various fields such as student placement, training, expert lectures, career guidance sessions, Industrial visits and mentoring. The alumni of Institute is guiding and nurturing our students to become engineering professionals. It is our plan to develop everlasting relations with our alumni which in turn will give rise to mutual benefits.

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

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

E. <1 Lakhs

D. 1 Lakhs - 3 Lakhs

C. 3 Lakhs - 4 Lakhs

B. 4 Lakhs - 5 Lakhs

Response: A. ? 5 Lakhs

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

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of and in tune with the vision and mission of the institution

Response:

The Scient Institute of Technology (SNTI) has a vision and mission which are futuristic in nature. They satisfy the needs of society by providing quality education through leading-edge technology.

Vision of the Institution:

To impart quality education in building engineering and management professionals striving for a symbiosis of innovative technological excellence, research and human values with global standards to meet skills, knowledge and behavior of industry and societal needs with global exposure.

Mission of the Institution:

- To achieve excellence by imparting innovative Teaching &Learning and Research
- To generate, empower, disseminate, and preserve knowledge and information.
- To render social relevant technical services and inculcating entrepreneurial talents in technological advancements.
- To nurture, inculcate and develop skills, knowledge and attitudes to render technical services for industry and societal needs

The Quality Policies are framed based on the Vision and Mission of the Institution and are driven by the needs of the industry, society and stakeholders. Deployment of the quality policy is done by providing requisite academic infrastructure, learning environment and harmonious work culture. The Student's surveys, stakeholders feedback plays essential role in framing and revising policies and activities.

Vision and Mission of the Institute focuses on the needs of society by providing quality education. The governance comprising of Governing Body (GB), Department Advisory Board (DAB) and Internal Quality Assurance Cell (IQAC) play significant role in the evolutionary reforms towards positioning the Institute in the preferred list of all stake holders. The Institute believes in promoting a culture of delegation of powers through strategic policies.

The Principal of Institute is assisted by Head of the Departments, and coordinators of various committees in decision making process of the Institute. Faculty and staff are assigned with the roles and responsibilities to work in a harmonious environment with complete transparency.

IQAC has a well developed process to ensure quality benchmarks of academic and administrative activities. The Institute maintains the culture of retention of Faculty and hence has an edge of senior and dedicated faculty for realizing its vision. Institute follows recruitment policies and service conditions as per the rules and regulations of regulatory authorities. Fair representation of women faculty is also ensured at all levels of organization and congenial environment is fostered.

Based on the Vision and Mission of the Institution, Quality Policies are framed and driven by the needs of the corporate world, society and stakeholders. Institute has a perspective plan developed by Principal and HOD's with suggestions of IQAC, DAB under the guidance of Governing body. Deployment of the quality policy is done by providing requisite academic infrastructure, learning environment and harmonious work culture.

IQAC formulates perspective plan taking into consideration inputs from all stake holders. This plan is forwarded to the Governing body for approval. The Institution policy believes involvement of all staff in decision making. To streamline the same, various committees at Institute level are formed which look after academic and administrative activities which lead to the realization of vision and mission of the Institute.

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

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

Response:

Institution practices decentralization and participative management. Decentralization and operational transparency are the features of the institute.

The institute having been a support for participative management achieved it involving faculty and students. Thus it formed policy of participative management as it forms part of democratic governance. The Governing Body considering the same as a quality promotional policy for the improvement of the institution has accorded to its approval.

The institute works as per the rules and regulations framed by JNTU H and governing Body in designing and implementation of the quality policy and plans. The Principal is the Head of the institution and is empowered with sufficient authority and power delegated from the management for smooth functioning of day-to-day activities. Under the direct supervision of Principal all the departments of the institute function. Day-to-day academic activities of the departments are taken care by the HODs. The Principal, as a representative of the institute, leads its faculty members and HODs in all academic matters. He encourages and cooperates the HODs and faculty members in ensuring a proper academic environment in the institute which may benefit the students.

The plans and the policies for fulfillment of the mission of the institute are executed by the active involvement of the college authorities, along with all the faculty members. For this purpose, different committees have been constituted in the institute, who has been entrusted with the responsibility of implementing the programmes and policies. Efforts are regularly being made by the authority to create ample environment and suitable platform for all-round development of the students.

For the proper functioning of the institute and promotion of participative management, the institute runs on a decentralized management operative process, wherein different committees have been framed by the Principal in the governance of the institute. Such decentralized and participative management leads to a situation of harmony and congenial atmosphere in the institute for the development of the students.

A number of committees have been constituted by the Principal to run the institute properly and smoothly. Senior members of different faculties head the respective committees. Principal, along with the faculty and the staff are being involved in the process of decision-making and its implementation. Principal and HODs always welcomes the suggestion and proposals of the faulty members and committees and transforms them to applicative practices in the institute. The In-Charges of different committees including extra-curricular student-centered and student-supporting activities as well as co-curricular activities have operational autonomy.

The institute has an Internal Quality Assurance Cell, which includes members from various stakeholders. IQAC meets at regular intervals and plays an important role in the implementation of its plans and policies.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

The perspective/strategic plan is made by institution to fulfill requirements of industry and society by providing quality education to produce technically competent Engineers and Managers to serve the nation. Student's progression towards technical and social excellence is achieved with well established infrastructure. Institute has developed a strategic plan of establishing IQAC in 2015 for ensuring quality in Teaching and learning, enhancing industry institute interaction, innovation and incubation centre, promotion of research in staff and students.

Successfully Implemented:

1. Internal Quality Assurance Cell (IQAC)

According to the strategic plan which is in line with vision of our institution, IQAC was established in the year 2015-2020. In our institute all major tasks related to teaching -learning, Academic and Administration planning, implementation is being monitored by (IQAC).

IQAC has made constant efforts to shift from the traditional teacher-centric approach to a student-centric approach. Some of the initiatives taken are:

- Periodical review of teaching learning process.
- Monitoring student academic progress.
- Adapting to student centric, ICT enabled and interactive teaching learning
- Scope for Self-learning
- Prominent academicians from reputed institutions were invited for guest lecturers on advanced topics.
- Organizing expert sessions on various teaching-learning and pedagogic methods.
- Organizing faculty enrichment programmers.
- Internal Quality Assurance Cell (IQAC), SNTI conducts Academic Administrative Audit (AAA) at regular intervals. Based on AAA report, suggestions are given to concern for improvement based of the discrepancies found during audit.

1. Research and Development

Research and Development was institutionalized and many research papers were published through peer reviewed journals in the year 2015-20. Some of the initiatives taken are:

- Recruitment of Faculty with Research abilities
- Equipped laboratories with research suitable equipment / software
- Technical services such as sophisticated equipment and software

1. Training and Placements

To offer variety of training modules to suit higher education or perspective career. To continuously provide mentoring with experts from industry to appraise of the industry demands relevant skill set.

The core departments shall offer training in technical domains. Some of the initiatives taken are:

• Technical domain training by TASK through placements department

Student internships through AICTE Internshala and Placements department

File Description	Document
Upload any additional information	<u>View Document</u>
strategic Plan and deployment documents on the website	View Document
Paste link for additional information	View Document

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

Response:

With the hands-on experience of the management, the Institutional Management is designed in a scientific way with transparency to get the optimum results out of it. A hierarchical sets up is established from top management to down the level clearly demarking the Duties, Responsibilities, Accountability and Authorities at every stage.

SCIENT Institute of Technology (SNTI) has been established in 2001 under Scient educational society. It has a Governing body to monitor and achieving the vision and mission of the institution. It has an effective organizational structure which monitors and improves the institution.

The over-all structure of the Institutional Management is categorized as "ACADEMICS" and "ADMINISTRATION". Keeping in view all the stakeholders more on students an effective administrative system is structured.

The Institution has constituted various committees at institute and department level for the effective functioning of the organization. The objectives and functions of the committees are organized as per the guidelines of the head of the institution.

Institute Level Committees:

- Academic Committee
- Admin Committee
- Admission Committee
- Alumni Activities Committee
- Anti Ragging Committee
- Discipline Committee
- Electrical Maintenance & Disaster Management Committee
- Event Management Committee
- Examination Committee
- Hackathon Committee
- ICT/ E- Learning, NTPEL, MOOCS Committee
- Infrastructure ,Maintenance and Repair Committee
- IQAC Committee
- Library Committee
- NAAC Committee
- NSS Committee
- Program Assessment committee (PAC)
- Project & Internship Committee
- Resource & Development and Institution's Industry Committee
- Remedial and Bridge Class Committee
- Sports& Cultural committee
- Student Grievance & Redressal Committee
- Training & Placement Committee
- Transport Committee
- Waste Management (a. E- Waste, b. Solid Waste, c. Liquid Waste)
- Website Committee
- Women Empowerment Committee

File Description	Document
Upload any additional information	View Document
Paste link for additional information	<u>View Document</u>
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination
- E. None of the above
- D. 1 of the above
- C. 2 of the above
- B. 3 of the above

Response: A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP (Enterprise Resource Planning) Document	View Document
Details of implementation of e-governance in areas of operation, Administration etc	View Document
Any additional information	View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

The Institute has a welfare mechanism in place, for Teaching and Non-teaching staff.

Welfare measures for Teaching Staff:

• As per the norms of AICTE, Pay commission recommendations are implemented

- Service, Conduct and Leave Rules are made available in the institute website
- Transportation to all faculty members with nominal fee.
- The faculty is honored with an incentive in the form of cash for various distinguished merit activities in the field of academics and research.
- 10 days of sabbatical leaves will be sanctioned with full pay to the teaching staff for attending FDP/Workshops/Conferences / who have registered for / pursuing to attend the Ph.D work.
- Special Casual Leaves of 15 days for an academic year.
- Maternity Leave of 3 month to women staff members
- First aid kit and Medicines are available in the college for minor ailments.
- College organizes free and periodic health checkups.
- Canteen subsidy is provided for all faculty members.
- Appreciation for the faculty member for achieving 100% results in the dealt course.

R&D Incentives for teaching staff:

- Sanction of OD for presenting papers in conferences, symposiums and workshops in other establishments at least once in a semester for 5 days.
- Provide incentive of Rs.7000/- will be paid to the authors who publish standard

text books.

 A research incentive of 5000/- per academic year to the authors who publish articles in peer reviewed National/International Journal

Welfare measures for Non-Teaching Staff:

- Service, Conduct and Leave Rules are made available in the institute website.
- The faculty is honored with an incentive in the form of cash for various distinguished merit activities in the field of academics and research.
- First aid kit and Medicines are available in the college for minor ailments.
- College organizes free and periodic health checkups.
- Transportation to all staff members with nominal fee

Maternity, Medical leaves / vacation is sanctioned for the required staff

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

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: 60.55

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

2019-20	2018-19	2017-18	2016-17	2015-16
50	68	76	92	137

File Description	Document
Upload any additional information	View Document
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	View Document

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

Response: 12.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
15	13	11	10	12

File Description	Document
Upload any additional information	View Document
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	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: 61.95

6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
81	85	76	68	76

File Description	Document
Upload any additional information	View Document
IQAC report summary	<u>View Document</u>
Details of teachers attending professional development programmes during the last five years	View Document

6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

Response:

Performance Appraisal System for Faculty:

Quality teaching is indispensable for improving student outcomes and achievements. Institute has well designed performance appraisal system. It is implemented with the help of Performance Appraisal Reports (PAR) which evaluates overall performance. Performance is self assessed and duly filled in PAR by Faculty and Staff at the end of every semester. PARs are then evaluated by respective HODs and Principal. PAR system inspires Faculty which boosts professional knowledge and growth. Therefore it is made mandatory for every Faculty and Staff to submit the performance appraisal every semester.

The performance appraisal system evaluates on following parameters:

Key points for Faculty Appraisal - ACADEMIC:

- 1. Teaching Performance indicators
- 2. Students Academic Results
- 3. Student Feedback indicator
- 4. Interactive class room teaching approach
- 5. R&D including Journals/articles
- 6. Participation in Conferences/seminars/workshops/FDPs.
- 7. Individual Faculty Academic Responsibilities
- 8. Co-curricular/Extracurricular duties assigned by the college
- 9. Additional responsibilities
- 10. Assessment of the Teacher by the HOD

Non-Teaching staff:

Self appraisal of Non Teaching Staff comprises the following Components:

- Knowledge on Work
- Communication
- Team Work
- Decision Making/Problem Solving
- Punctuality

- Leadership
- Responsiveness

On the basis of the above details, a committee under the chairmanship of the Principal will evaluate the appraisals of the non-teaching staff and submits its recommendations to Management for final decisions.

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

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The Accounts department prepares the budget estimates by collecting the requirement with regards to recurring and non-recurring expenses at the department as well as at Institute level. The department conducts the budget meeting well in time before the commencement of academic year, collects the various requirements from the faculty and lab in-charges for the procurement of equipment (based on the changes in curriculum or based on obsolete items) and also separates budget for the maintenance of the equipment for conducting experiments for the coming semester. The HoDs conduct a meeting with the faculty members to collect the inputs regarding the activities planned for the coming academic year and prepares a budgetary requirement. The accountant collects the requirements of the budget from various departments

All the budget requirements are consolidated and put forward to the admin committee. The committee suitably conducts the meeting with HODs, Coordinators, AO, Librarian and other coordinators to fine tune the requirement of budget for the financial and academic year. After deliberations in the meeting, any changes required will be incorporated in consultations with the concerned head. The final consolidated budget is submitted through the Principal for further action of approvals from the management/governing body.

Once the budget is approved, the department is empowered to utilize the same for conducting the activities as desired in the proposals. The sanctioned budget is released by following the due procedures and the necessary bills for the same are collected by the accounts department for the expenditure incurred.

The institute carries out two type of auditing; Internal and External. The college has an Internal Finance Committee to examine the budget proposals, receipts, bills and vouchers and supporting documents for the current year. The financial committee after scrutiny may advise the concerned departments for any possible improvement. They also verify the due process followed in application, sanction and utilization of the budget. After due verification the accountant prepares the balance sheet.

The institute also appoints an external auditor (Chartered Accountant) as per the income tax regulatory authority who carries out auditing of the institute budget and gives the valuable inputs to the management for effective planning and implementation of budgetary requirements.

Once the budget is audited for a financial year the same will be made available on the college website.

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

6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropers during the last five years (not covered in Criterion III)

Response: 3.89

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

2019-20	2018-19	2017-18	2016-17	2015-16
1.24	0.84	0.72	0.58	0.51

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	View Document
Any additional information	<u>View Document</u>
Annual statements of accounts	View Document

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

Response:

The mobilization of funds is an important aspect to maintain quality education in the institution. The majority of the financial needs of the institution will be fulfilled by tuition fees paid by the students. The mere tuition fee from the students is not sufficient to meet the standards. The management takes initiative to fill this financial gap. Faculty members actively involved in generating funds by submitting their research proposals to various funding agencies and by undertaking the consultancy services. These funds are utilized for developing research laboratories and upgrading the facilities.

The institution follows a well-defined mechanism for monitoring the effective utilization of the financial resources for academic process and infrastructure development. The budget for every year is proposed by

the finance committee after taking into consideration the requirement of each department. After getting approval from the principal and governing body on the proposed budget, the finance committee will ensure the effective utilization of the allocated funds.

Optimal Utilization of funds can be done as follows:

- Conducive academic ambience.
- Constant encouragement for professional development.
- Thrust for research and publication and various staff welfare schemes.
- Environment-friendly campus with facility for rainwater harvest, segregation of wastes and diverse flora promotes natural resources conversation.
- Preparation of budget for every project enables the institution in the effective use of allotted funds and avoids the mismanagement of funds.
- Conducting various training programs for faculty and students, academic activities and fests.

File Description	Document
Upload 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

Response:

IQAC has contributed to institutionalizing the quality assurance processes in the following two areas:

I. IQAC for Academic Audit Verification Components:

- 1. FORM-1: WLTT- Workload Approval, Allocation and Time Tables Submission Status Report
- 2. FORM-2: LPCF Lesson Plan, Course File & Lab Execution Plan Submission Status Report
- 3. FORM-3: SCRB Syllabus Completion, Remedial & Bridge Classes Conduction Status Report
- 4. Daily Class Work Report (DCWR)
- 5. Student Lab Attendance and Lab Log Register (Laboratory Attendance Register)
- 6. Internal Examinations Marks
- 7. Student Mentoring.
- 8. Faculty Feedback and Action Taken

II. IQAC for Student regularity, Mentoring, Parent interaction, labs & Infrastructure Monitoring Verification Components:

- 1. FORM-4: AMLP Attendance, Mentoring and Lab Performance Status Report
- 2. FORM-5: CARC Conduction & Attendance Remedial Classes Status Report
- 3. Class Attendance Register
- 4. Student Mentoring / Counseling Register
- 5. Parent Communication Register (PCR)

Two examples of best practices of IQAC initiatives are:

Best Practice-1

1. Title of the Practice:

"LEARNER-CENTRIC "PEDAGOGY TO ACHIEVE GRADUATE ATTRIBUTES"

- 2. Objectives of the Practice.
 - 1. Develop "Learner- Centric Environment".
 - 2. Skills development through "Course-Based Projects".
 - 3. Enhance usage of "ICT in Teaching-Learning Process".
 - 4. Achieving "Graduate Attributes' by all students.

3. The Context

Several pedagogical - Learner-centric methods meets the needs of such diversity in various dimensions of technical education in our institution

4. The Practice:

- 1. "Learning by Doing", "Think-Pair-Share" and "Process Oriented Guided Inquiry Learning (POGIL)" fosters cooperative learning and addresses different learning levels and styles.
- 2. "Course-Based Projects" provides platform for modeling and development of projects.
- 3. "Career Vision Approach" sets the goals for Teacher and student.
- 4. "Flipped classroom & Blended learning" and ICT fosters learning even outside traditional classroom

5. Evidence of Success.

- 1. The interactive learning enhanced the team spirit, learning capabilities and soft skills and making them socially responsible.
- 2. Our students visited many industries, best of them like Shatish Dhavan Space Center Sriharikota (SDSC-SHAR), ECII, NGRI ,BSNL Srisailam Hydraulic Power ,Nagarjuna Sagar Hydraulic

power projects and Infosys etc.

Problems Encountered and Resources Required

- 1) Learning styles and retention vary across the student fraternity creating a challenge to the classroom deliverables.
 - 2) Adaptation of ICT teaching methodologies is challenging.
 - 3) There are two crucial aspects to the design of a POGIL activity

Best Practice-2

1. Title of the practice:

STUDENTS PROJECTS BASED ON SOCIETAL EMPOWERMENT.

2. Objectives of the practice:

- Involve students and faculty in interdisciplinary research in cutting-edge technologies
- o student's practical laboratory skills.

3. The Context:

Major Projects addressing the societal needs and Internships. **The Research and Development** Cell of the institute.

4. The Practice:

ØCourse-based projects,

ØCertificate Courses:

- Big Idea Competition
- Weekend projects lab
- SNTI HACKATHON
- Research & Development Cell

5. Evidence of Success:

Projects like "Cough and wheeze analyzer for respiratory digital health services "Solar Powered car and Weapon Locking and Tracking system won accolades at national Level.

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

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

Continuous development is attempted through IQAC at periodic intervals. It is responsible for directing, developing, providing and implementing guidelines to review curricular, instructional, teaching and learning materials. Latest teaching aids, techniques, activities, assessment tools and methodologies are used to enhance overall functioning to achieve goals of the Institute.

Two examples of institutional reviews and implementation of teaching learning reforms are outlined below:

- 1. Continuous Assessment System
- 2. Student Feedback on Teaching and Learning Process

1. CONTINUOUS ASSESSMENT SYSTEM

To assess and keep handy records of student's performance, the methodology of maintaining continuous assessments sheets (CAS) in the class rooms and laboratories. Academic performance was monitored by mentors and developed .Initially Policies were framed for continuous assessment to initiate formative assessments and provide opportunities of success to students continuously. The strategies developed and policies framed time to time were laid down on student mentor record which was distributed among all faculties in the beginning of each Academic year. It provides the excellent way of disseminating all policies framed for students and staffs performance monitoring. All teaching and learning activities were recorded, assessed and reviewed by checking records of these student mentor record continuously. It reflected student details ,student performance in internal examinations, university examinations and its assessments , practical's and other co-curricular activities conducted by faculty, students attendance and continuous assessments. Students and faculty were regularly monitored based on this assessment. Depending upon the outcome achieved and the need raised; the policies, methodology, are being upgraded time to time. It also gives ideas of periodical reformations occurred in assessment tools, techniques and methodologies used for evaluating faculty and students performance.

2. STUDENT FEEDBACK ON TEACHING AND LEARNING PROCESS (TLP)

Student feedback on faculty performance is done through comprehensive performance systems and the feedback is communicated to all concerned. Students appraise the faculty through a structured format on a

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variety of parameters. Based on the feedback the institution updates academic programmes and value added programmes most relevant to the current requirements. Institute has adopted structured mechanism to continuously review the teaching learning process are:

Student feedback on TLP:

Student feedback on Teaching Learning Process has been collecting just before the end-semesters and suggestion/appreciation letters will be issued to the faculty regarding feedback. This feedback has five metrics (attributes) are as follows:

- Planning and Organization
- Presentation / Communication
- Student Participation
- Class Management / Assessment of the Students
- Overall Rating

Student feedback has been collecting from students at beginning of the semester. Feedback analysis has been preparing based on the data and suggested accordingly.

This feedback has two categories are as follows:

- Specific skills of the teacher like, subject knowledge, communication skills, class preparation, and use of ICT tools.
- The overall approach of the teacher and institution with respect to providing the right environment, motivation, interpersonal relationships, feedback etc.

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

6.5.3 Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
- 2. Collaborative quality intitiatives with other institution(s)
- 3. Participation in NIRF
- 4.any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)
- E. None of the above
- D. 1 of the above
- C. 2 of the above

B. 3 of the above

Response: B. 3 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	View Document	
Upload any additional information	View Document	
Paste web link of Annual reports of Institution	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:

Gender equity & sensitization in curriculum:

The course on "Gender Sensitization (An Activity-based Course)" was introduced by the Affiliating University JNTUH as a compulsory foundation course with two credits in II year II Semester in B.Tech for all branches of Engineering and Technology from the academic year 2015-16 (with existing R13 & R15 regulations. It should be treated as a Lab Subject (Student Centered). Further continuing with "Gender Sensitization Lab" from 2016-17 onwards.

Learning Outcomes of the Course:

- Students will have developed a better understanding of important issues related to gender in Contemporary India.
- Students will be sensitized to basic dimensions of the biological, sociological, psychological and legal aspects of gender. This will be achieved through discussion of materials derived from research, facts, everyday life, literature and film.
- Male and Female students and professionals will be better equipped to work and live together as equals.

Gender equity & sensitization in co-curricular activities:

The following Gender equity promotion programs organized by the institution during the last five years:

- Sports and Games competitions for girls
- Various club activities like Cultural programs, Dandiya & Bathukamma, Fresher's day, International Women's Day, Painting competition, Pongal Celebrations, Plantation, International Yoga Day etc.

Facilities for women on campus:

The following Specific facilities provided for women

1. Safety and security:

Surveillance CCTV cameras are installed in the campus for monitoring students' movements into and out of the college. The security personnel are deployed across the college premises for any kind of security incidents/issues and offers strict vigilance. Fire extinguishers are available in all labs and corridors. Regular check on fire extinguishers is taken care by administration department. Anti-ragging committee will ensure that campus is free of ragging. The anti-ragging squad regularly monitors at scheduled timings in different places to make the campus ragging-free.

The college also has anti-sexual harassment committee to address issues if any. Any sort of complaint can be lodged either through online or complaint box provided at the campus.

2. Counseling:

Counseling is arranged by the college for girl students in three major areas i.e. Counseling related to academics, career and behavioral patterns. The counselor counsels the student on issues like personal, psychological, emotional problems and difficulties. It helps them to deal with stressful or emotional feelings and to inculcate the positivity in them.

3. Common Rooms:

Separate Common rooms are provided for boys and girls. Rooms are provided with necessary facilities like first aid box, rest room, cots, beds, mirror, chair, table, washbasin, dustbin, etc.

4. Day care center for young children:

Child care is one of the most effective ways that colleges can help their employees in completing their work without being worried about their child's welfare. SCIENT provides an on-campus care center which is much less affordable and high in quality.

File Description	Document
Link for 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
Link for annual gender sensitization action plan	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
- E. None of the above
- D. 1 of the above
- C. 2 of the above
- B. 3 of the above

Response:	A.	4 or	All	of	the	above
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File Description	Document
Geotagged Photographs	View Document
Any other relevant information	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:

Inspired by Swachh Bharath, a flagship initiative of Government of India, the college took several initiatives to properly dispose waste and maintain eco-friendly environment in and around the campus. Appropriate labeling is used on all kinds of bins to help users discard various type of waste avoiding manual segregation.

Solid waste management:

Institute practices the segregation of Solid Waste and its effective management in the campus. The collected waste is segregated at the source of the generation. The waste bins are placed separately for dry and wet waste at every corner of the corridor, wash rooms and common room. The dry waste bins are also placed in laboratories, library, classrooms, etc. The dry and wet waste is handed over to municipal waste collection agency for further treatment.

Liquid waste management:

The institute practices segregation of waste water into water from wash rooms and water from laboratories. Liquid waste from the wash rooms is conveyed to the Municipal drain and waste water from laboratories is disposed off into closed collecting tank after neutralizing the chemicals etc. Liquid waste from the canteen & the wash rooms is collected into pools, recycled using four beds filtration method will further be used for watering the gardens.

Biomedical waste management:

The institute is not involved in any clinical experiments directly hence no biomedical waste is generated.

E-waste management:

The condemned batteries and damaged computers are disposed through outside agencies. Obsolete computers and other electronic gadgets are sold to recyclers. E-waste generated is given to the authorized dealers who purchase the scrap and reuse the useful components. Apart from this, the electronic and electrical instruments under repair are given to the students during the lab sessions to dismantle and reassemble, which help in application oriented learning. The low configured computers are donated to nearest schools.

Waste recycling system:

It handles the liquid wastes and makes it suitable for reusing. Recycled water is used for toilet flushing and gardening. The artificial water ponds within the campus serves as a reservoir for rain water harvesting and it helped in preventing water logging inside the campus during summer. All buildings have been provided with rain water harvesting systems complying with the State Government Regulations.

Hazardous chemicals and radioactive waste management:

Hazardous Chemicals are kept separately in the store room away from the reach of students. Lab Incharges takes care of the chemicals and safety norms in the laboratory are strictly followed. Students are made aware of the hazardous chemicals and safety aspects before utilizing the chemicals. The labs are well ventilated and spacious

File Description	Document	
Any other relevant information	View Document	
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	View Document	
Link for 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
- E. None of the above
- D.1 of the above
- C. 2 of the above

B. 3 of the above

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
- E. None of the above
- D. 1 of the above
- C. 2 of the above
- B. 3 of the above

Response: 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	
Any other relevant documents	View Document	

7.1.6 Quality audits on environment and energy regularly undertaken by the Institution

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

E. None of the above

- D.1 of the above
- C. 2 of the above
- B. 3 of the above

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. Disabled-friendly washrooms
- 3. Signage including tactile path, lights, display boards and signposts
- **4.** Assistive technology and facilities for persons with disabilities (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
- E. None of the above
- D.1 of the above
- C. 2 of the above
- B. 3 of the above

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
Any other relevant information	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:

The institute is located at Ibrahimpatnam-Ranga reddy Dist, Telangana on the outskirts of Hyderabad which spreads over 26 acres of lush green campus enveloped with serene beauty and environment. around 700 strength of students along with about 120 faculty members come from various cultural backgrounds who carry forward their rich cultural diversities.

The institute adorns a festive look to celebrate Bathukamma, the state festival of Telangana. Many competitions such as 'Bathukamma' and 'Dandiya" display the enthusiasm and teamwork of the faculty. Themes based on the role of agriculture are chosen for Rangoli competition. Many departments such as physical education and human resources department work in collaboration for the benefit of the institution and conduct various competitions for the faculties and students in the campus.

The institute takes extra efforts in providing an inclusive environment for all the students and employees. Tolerance and Harmony to cultural, regional, linguistic, communal socioeconomic and other diversities is best achieved by the major events like Holy, Dussehra, TechFest and Cultural Fest at Institute levels. Students have formed various clubs at the campus levels which also support and propagate the idea of diverse cultures.

TechFest and Cultural Fest are annual events where the Institute invites popular music singers with their teams to enthrall the students with rich cultural songs. Regional events are also celebrated at the institute especially Pongal celebrations, Bathukamma Festival, Dandiya Festival etc. Now the students have themselves started enacting the whole story behind the colourful festival of Holi. The colourful Holi is celebrated with Flowers on the campus.

Navarathri heralds the assembly of elaborate golu in the institute. New Year celebration brings in fun filled games and special food which amplifies the spirit of togetherness. Individual departments and committees perform Saraswathi Pooja /Ayudha Pooja in their respective laboratories invoking the blessings of the Almighty.

International Yoga day is being celebrated every year.

International commemorative days like world music day, international artist day, world poet day are conducted and marked by appropriate competitions. The students cultural programme has always themed of communal and inter-religious harmony.

Social connect with rural people residing in and around the institute is also encouraged respecting the cultural, communal, socioeconomic and linguistic values of locals.

File Description	Document
Link for any other relevant information	View Document
Link for 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:

The course on "CONSTITUTION OF INDIA (Audit Course)" was introduced by the affiliating university JNTUH as a compulsory foundation course in II year in B.Tech for all branches of Engineering and Technology from the academic year 2018-19 and I year in M.Tech for all branches of Engineering and Technology from the academic year 2019-20 and. It should be treated as a Lab Subject (Student Centered).

Course Outcomes:

Students will be able to:

- Discuss the growth of the demand for civil rights in India for the bulk of Indians before the arrival of Gandhi in Indian politics.
- Discuss the intellectual origins of the framework of argument that informed the conceptualization of social reforms leading to revolution in India.
- Discuss the circumstances surrounding the foundation of the Congress Socialist Party [CSP] under the leadership of Jawaharlal Nehru and the eventual failure of the proposal of direct elections through adult suffrage in the Indian Constitution.
- Discuss the passage of the Hindu Code Bill of 1956.

The Institute takes pride in the fact that apart from preparing a sound academic foundation of the student community; the Institute constantly works upon to develop them as better citizens of the country. In this regard, the Institute, apart from imparting professional legal education, inculcates a feeling of oneness among the student community through various practices and programs. Various faculties have always been in the practice of organizing activities that not only initiate but also motivate the students to adopt various practices that promote the "Unity in Diversity" of our motherland. The Institute ensures that the students

participate very enthusiastically in all such activities. Since the last five years, the Institute has strived forward with great effort to increase the level of awareness and appropriate practices amongst the students with regard to the following areas:

- 1. National Identities and Symbols: The Institute has always taken various direct and indirect steps which promote the awareness about various National Identities and Symbols. The Institute celebrates the Independence Day & Republic Day with great pomp and vigour. The Faculty organizes and celebrates the Constitution Day on an annual basis and thus contributes to the spreading of Constitutional values and ideals.
- **2. Fundamental Duties and Rights of Indian Citizens:** The Faculty has organized various academic and co-curricular activities for the propagation of the Fundamental Duties and Rights of the Indian citizens.

The students have enthusiastically participated in various programs like:

- Academic programs like Seminar, Conferences, Expert talks, etc which have enriched the awareness about this aspects.
- Various activities like poster making competition, etc.
- Organizing Annual Competitions on various contemporary legal issues.
- **3. Constitutional Obligations:** The Institute has organized student centric activities like paper, poster & essay competition through Club Activities which have always received huge participation from the students and promoted their awareness about various aspects of Indian citizenship.

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	View Document
Link for any other relevant information	<u>View Document</u>

- 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
- E. None of the above
- D. 1 of the above
- C. 2 of the above

B. 3 of the above

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
Code of ethics policy document	View Document
Any other relevant information	View Document

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

Response:

Institution organizes every year various national and international commemorative days, events and festivals:

- National Youth Day- The birthday of Swami Vivekananda-12 January
- Republic day- 26thJanuary
- Science Day- 28thFebruary
- International Women's Day -8th March
- International Day of Yoga 21st June
- Independence Day- 15th August
- Teachers Day Sir Sarvepally Radhakrishnan's Birth Anniversary- 5thSeptember
- Engineers Day- Sir Mokshagundam Visvesvaraya Birth Anniversary- 15thSeptember
- World Students Day- APJ Abul Kalam Birth Anniversary- 15th October
- Bathukamma Festival-October during Dussehra recess
- National Education Day- Sri Maulana Abul Kalam Azad Birth Anniversary –11th November
- National Mathematics Day Sri Srinivasa Ramanujan Birth Anniversary –22nd December

File Description	Document
Link for Geotagged photographs of some of the events	View Document
Link for any other relevant information	<u>View Document</u>
Link for Annual report of the celebrations and commemorative events for the last five years	View Document

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:

Best Practice-1

Title of the Practice:

"LEARNER-CENTRIC "PEDAGOGY TO ACHIEVE GRADUATE ATTRIBUTES

2. Objectives of the Practice.

- 1. Develop "Learner- Centric Environment".
- 2. Knowledge and Process Skills development through "Course-Based Projects".
- 3. Enhance usage of "ICT in Teaching-Learning Process".
- 4. Achieving "Graduate Attributes' by all students

3. The Context

A fusion of several pedagogical - Learner-centric methods meets the needs of such diversity in various dimensions of technical education in our institution

4. The Practice:

Inspired and imbibed with "The Seven Habits of Highly Successful People" at all a level, encourages intrinsic motivation.

- 1. "Learning by Doing", "Think-Pair-Share" and "Process Oriented Guided Inquiry Learning (POGIL)" fosters cooperative learning and addresses different learning levels and styles.
- 2. "Course-Based Projects" provides platform for modeling and development of projects.
- 3. "Career Vision Approach" sets the goals for Teacher and student.
- 4. "Flipped classroom & Blended learning" and ICT fosters learning even outside traditional classroom

In contrast to traditional classrooms, students in a **POGIL** classroom work in small groups (of 3 or 4) on a specially designed activity. Each student is assigned a role, such as manager, recorder, spokesperson or reflector. The instructor serves as a facilitator who listens to the discussion and intervenes at appropriate times to guide student learning. In groups, students discuss the answers to carefully crafted questions that lead them to consider the general ideas in question and to construct their own understanding of important course concepts. As ideas are formulated, groups share their findings and understanding to new and increasingly difficult problems or contexts.

This new Program allows prospective Engineering students to see Industry from a student's perspective and allows students to spend a week with a current engineering in the multidisciplinary areas

(Computer, Electrical, Electronics and Communication, Software & Hardware, or Systems Design) at the Industry and see what Industry life is really like. Visiting students will go around the Industry, see the manufacturing processes and facilities, and most importantly, get time to talk with working Engineers about their experiences. The Program is an opportunity for budding Engineers to learn what it means to be an Engineer. Students who participate in the program will spend time at that company while they are visiting.

5. Evidence of Success.

- 1. The interactive learning enhanced the team spirit, learning capabilities and soft skills and making them socially responsible.
- 2. Students' proactive involvement Course projects and are part of research projects leading to publications, Startups.
- 3. Built into the experience is the support of a variety of important process skills, including communication, teamwork, and critical thinking, which translates to a more complete understanding of the entire concept, and a lasting understanding of the material
- 4. Our students visited many industries, best of them like Shatish Dhavan Space Center Sriharikota (SDSC-SHAR), ECII, NGRI, BSNL Srisailam "Hydro Power plant", Nagarjuna Sagar "Hydro power projects" and Infosys etc..

5 Success rate of the placements

Problems Encountered and Resources Required

- 1) Learning styles and retention vary across the student fraternity creating a challenge to the Classroom deliverables.
- 2. Adaptation of ICT teaching methodologies is challenging.
- 3. There are two crucial aspects to the design of a POGIL activity.
- I) First, sufficient appropriate information must be provided for the initial "Exploration" so that students are able to develop the desired concepts.
- 2) Second, the guiding questions must be sequenced in a carefully constructed manner so that not only the students reach the appropriate conclusion, but at the same time various process and learning skills are implemented and developed

Best Practice-2

1. Title of the practice:

STUDENTS PROJECTS BASED ON SOCIETAL EMPOWERMENT.

2.Objectives of the practice:

• Involve students and faculty in interdisciplinary research in cutting-edge technologies

- To sharpen the student's practical laboratory skills.
- To upgrade the student's ability to collect, analyze and interpret experimental data.
- To upgrade skills in developing societal projects
- o To motivate them towards their goal

3. The Context:

The course structure assigns credits to the industry participation through Mini-Projects, Major Projects addressing the societal needs and Internships. **The Research and Development** Cell of the institute promotes research and innovation in technologies.

4. The Practice:

Course-based projects, the best way to master in a subject is by doing projects. Through a project student not only get a deeper understanding of the subject but also gain hands-on practical experience

Certificate Courses: Certification Course helps an individual to showcase his competency, commitment for the profession, build expertise in his professional subject area, and helps with job advancement. It is a designation earned by a person giving a kind of assurance to the company of his competencies of performing a job.

Big Idea Competition: Scient Institute provides plat form for our students to explore their innovations, intellectual projects and big ideas .R&D cell conducting project exhibition to develop projects for **societal empowerment** in the fields of Agriculture ,Educations, Health and Swachatha

Weekend projects lab transform classroom learning into a project-based experience.

SCIENT HACKATHON: SCIENT HACKATHON is proving grounds for new ideas. These are especially good tools to stimulate the creative and problem-solving juices of developers. Unlike their course based projects where risk-taking may be frowned upon, in a hackathon there is a low cost of failure.

Research & Development Cell is important to gain knowledge to develop, design, enhance, and modify societal empowerment projects, services, technologies, business plans, processes and sometimes vision .R&D cell motivate students to incubate their ideas.

Entrepreneur and Development Cell: Inculcate entrepreneurial spirit and culture among the Engineering graduates and post graduates. ED cell conduct programs in Entrepreneurship enabling skills.

5. Evidence of Success:

Projects like "smart Helmet", "Cough and wheeze analyzer for respiratory digital health services", 'Solar Powered car' and' Weapon Locking and Tracking system'.

Some societal empower projects like 'smart walking stick for blind and old age people', 'fully automated solar power grass cutter', 'development of effective wireless sensor network system for water quality and quantity monitoring'. Automated Commando Training System for Greyhounds and 86 Social projects are executed successfully by SCIENT students

6.Problems Encountered and Resources Required:

Maintaining equilibrium between Research and Academia.

Identifying and retaining the research team

Expertise training in upcoming technologies, on a continuous basis.

Institutional network beyond the academic sphere.

Development of non-scientific skills related to research

File Description	Document
Link for any other relevant information	<u>View Document</u>
Link for Best practices in the Institutional web site	View Document

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:

Scient Institute of Technology's (SNTI) Vision, priority, and thrust are focused on:

Providing Value based education to excel in academics.

Conducting Interdisciplinary research in cutting-edge technologies.

Producing socially responsible engineers, managers, entrepreneurs leading to the sustainable socioeconomic development of the nation.

Dedicated to serving the society, SNTI with its environment of innovation pledges to reinvent itself from time to time and has an integrated model for all its activities of teaching, research, innovation and extension activities. The distinctiveness of the institution lies in its philosophy "Education Process Reengineering(EPR)/ SCIENT Spectral Pyramid ".

The Education Process Re-engineering(EPR)/ SCIENT Spectral Pyramid Model is widely disseminated by five critical faces in the Organization to develop the structure under critical success factors and sub functions. The five faces are:

1.Excellence in Academics

- 2.Exploration of Knowledge through Research
- 3. Excitement of Innovation & Entrepreneurship
- 4.Exponent for Development of a Rounded Personality with Global Vision
- 5.Designing the projects for Societal Empowerment
- 1. Excellence in Academics:

A high quality of academic excellence can provide value-added experience for the students. The positive outcomes are achieved by designing the curriculum to meet the global requirements and through teaching-learning methods blended with ethical values. It outlines the commitment to academic performance expected for all the students. The structured induction of the student into the curriculum enables to visualize the career opportunities and the approach towards achieving them.

2) Exploration of Knowledge through Research:

The Institute's determination to be transformed into a center for major research is therefore, in itself, a commitment to offer high quality teaching through.

- Synergies between Research & Education
- Activities Research Based Learning & Teaching

The Course based projects, Social impact projects, certificate courses offered by the institute provides the knowledge regarding cutting edge technologies, enabling the students to carry out inter-disciplinary research. The Research and Development Cell (R&D), of the institute is equipped with advanced level research Laboratories to facilitate the academic and sponsored projects.

3) Excitement of Innovation & Entrepreneurship:

The institute provides a platform to business Start-ups to develop their ideas into commercially viable products. The students participate in the **Big Idea Competition** and the best ideas are rewarded. **Week End Lab** facilitates the students to work on innovative project ideas. **SCIENT HUB** encourages the stakeholders to incubate the selected projects, by providing the seed money and infrastructure based on their credentials. **EDC Cell** crucially works on generating the excitement in the young engineering brains to produce innovation and thus laying the stones for entrepreneurship.

4) Exponent for Development of a Rounded Personality with Global Vision

Participation of students in Co-Curricular Activities (CCA) and Extra Curricular Activities (ECA) helps to enhance all rounded personality to strongly face the turbulent road of the future. Experiences and appreciations gained through these activities assist students during internships. Career guidance, Personal counseling, Training are well structured through a Mentoring Training and Placement (MTP) center. Student participation in ECA / CCA is facilitated through professional bodies and student associations.

1. Designing the projects for Societal Empowerment:

Our Institute Adopted five village to transform the technology in rural areas. In this program the students and faculty teams are visiting the Adopted villagers to study and understand the way to transform technology in Agriculture ,Educations, Health and Swachatha. New technologies enable small farmers to shift from input-intensive to knowledge-intensive agriculture. ... Combined with improved seed quality knowledge , water management and innovative Agriculture , which can in turn increase double and triple cropping, farmers' income can grow. EDC cell conducting project exhibition to develop projects for **Societal Empowerment** in the fields of Agriculture ,Educations, Health and Swachatha.

File Description	Document
Link for appropriate web in the Institutional website	View Document
Link for any other relevant information	View Document

5. CONCLUSION

Additional Information:

Action taken on the following categories for improving academic activities:

- Education and Placement of Students: Rigorous training for student placements.
- Qualified Senior Teachers and Heads of Departments: Faculty strength has been augmented with full time senior and adjunct faculty.
- Increase collaborative linkages with other corporate/ institutes for teaching and research.
- Strengthen formal feedback from students for quality improvement and analytic evaluation of teachers for improvement in quality of teaching.
- Promotion of research projects from funding agencies be given better attention.
- Counseling cell to be strengthened: counseling services available on campus
- Research Publications in indexed journals needs to be increased and incentivized

Concluding Remarks:

Scient Institute of Technology is the outcome of meticulous planning, clear vision and concepts, conceived and nurtured by an internationally renowned educational society, committed to excellence in academics, research and governance, with its greatest strength in the cadre of men and women devoted to excellence in every process and undertaking. A detailed analysis of the criteria that are the concomitants of an institution of excellence is given in the Self Study Reports of the Institute and its Departments uploaded on the NAAC website.

The process of preparation of the Self Study Report of SNTI for NAAC inspection has given an opportunity to assess the quality of academic and administrative practices followed in the institution and to perform SWOC analysis. This SWOC analysis will help us to uphold the existing systems and procedures to meet the standards of higher education. The utmost cooperation and camaraderie extended by the faculty of all levels for collecting documentary evidence and data have strengthened and proven the team spirit. The contribution of the NAAC steering team, IQAC cell, and all the faculty members who have helped directly or indirectly in developing the SSR is gratefully acknowledged.

The institution is looking forward to the NAAC peer team visit not only to showcase our educational excellence but also to receive suggestions to further tune up the system.