

**Annual Quality Assurance Report (AQAR) of the IQAC
(ACADEMIC YEAR 2017-18)**

Submitted to

National Assessment and Accreditation Council (NAAC)

P.O Box No: 1075, Nagarabhavi, Bengaluru-560 072



Lendi Institute of Engineering & Technology

(Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada)

Jonnada(V), Denkada (M), Vizianagaram-535005, Andhra Pradesh

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The Annual Quality Assurance Report (AQAR) of the IQAC

Part – A

1. Details of the Institution

1.1	Name of the Institution:	Lendi Institute of Engineering and Technology
1.2	Address Line 1:	Via 5th Battalion, Jonnada Village, Vizianagaram
	Address Line 2:	Denkada Mandal.
	City/Town:	Vizianagaram
	State:	Andhra Pradesh
	Pin Code:	535005
	Institution e-mail address:	lendi_2008@yahoo.com
	Contact Nos.	08922-24111
	Name of the Head of the Institution:	Dr. V.V. Rama Reddy
	Tel. No. with STD Code:	08922-241111
	Mobile:	9490304747
	Name of the IQAC Co-ordinator:	Prof. K.V.Narasimham
	Mobile:	9866278504
	IQAC e-mail address:	iqac.lendi@gmail.com
1.3	NAAC Track ID:	APCOGN26930
1.4	NAAC Executive Committee No. & Date:	EC(SC)/25/A&A/29.1
1.5	Website address:	www.lendi.org
	Web-link of the AQAR:	www.lendi.org/IQAC/AQAR2017-18.pdf

1.6 Accreditation Details:

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	A	3.02	2017	08-06-2022
2	2 nd Cycle	---	---	---	---
3	3 rd Cycle	---	---	---	---
4	4 th Cycle	---	---	---	---

1.7 Date of Establishment of IQAC :
(DD/MM/YYYY)

01/07/2016

1.8 AQAR for the year:

2017-18

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC "

- i. AQAR _____ NO _____ (DD/MM/YYYY)
 ii. AQAR _____ NO _____ (DD/MM/YYYY)
 iii. AQAR _____ NO _____ (DD/MM/YYYY)
 iv. AQAR _____ NO _____ (DD/MM/YYYY)

1.10 Institutional Status:

University: State Central Deemed Private

Affiliated College: Yes No

Constituent College: Yes No

Autonomous college of UGC: Yes No

Regulatory Agency approved Institution: Yes AICTE No

Type of Institution: Co-education Men Women

Urban Rural Tribal

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

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

1.11 Type of Faculty/Programme:

Arts Science Commerce Law PEI (Phys Edu)

TEI (Edu) Engineering Health Science Management

1.12 Name of the Affiliating University:

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA (JNTUK),
Kakinada, Andhra Pradesh

1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. /
University

-

University with Potential for
Excellence

-

UGC-CPE

-

DST Star Scheme

-

UGC-CE

-

UGC-Special Assistance Programme

-

DST-FIST

-

UGC-Innovative PG programmes

-

Any other (*Specify*)

-

UGC-COP Programmes

-

2. IQAC Composition and Activities:

2.1 No. of Teachers:

2.2 No. of Administrative/Technical staff:

2.3 No. of students:

2.4 No. of Management representatives:

2.5 No. of Alumni:

2.6 No. of any other stakeholder and community representatives:

2.7 No. of Employers/ Industrialists:

2.8 No. of other External Experts:

2.9 Total No. of members:

2.10 No. of IQAC meetings held in 2017-18:

2.11 No. of meetings with various stakeholders: No. Faculty

Non-Teaching Staff /Students Alumni Others

2.12 Has IQAC received any funding from UGC during the year? ~~Yes~~ No

If yes, mention the amount

2.13 Seminars and Conferences (only quality related):

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

Total Nos. International National State Institution Level

(ii) Themes

1. Design and Implementation of Outcome Based Education(OBE) in Engineering colleges. 2. Blooms Taxonomy- Preparation Quality Question Paper.
--

2.14 Significant Activities and contributions made by IQAC:

1. A Workshop on Outcome Based Education Frame Work-Design, Implementation and Evaluation. 2. A Expert Talk on Blooms Taxonomy- Preparation Quality Question Paper. 3. Academic Audit on various Departments. 4. Preparation for Self Assessment Report of NBA.
--

2.15 Plan of Action by IQAC/Outcome:

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year .

Plan of Action	Achievements
Implementation of Outcome Based Education.	1. Curriculum Implemented in line with OBE. 2. Introduced Add-on courses, Self-study topics in theory courses, mini projects, Employability skills & Co-curricular and Extracurricular activities.
Implementation of corrective actions on Curriculum feedback taken from all stakeholders	Corrective actions are implemented.
Preparation for NBA Accreditation.	Preparation of SAR for all departments.

*Attached the Academic Calendar of the year as Annexure 1.

2.16 Whether the AQAR was placed in statutory body Yes No

Management Syndicate Any other body

Provide the details of the action taken

AQAR was placed on Institute Website.

*

Part – B
Criterion – I

1. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	---	---	---	---
PG	02	---	02	---
UG	04	---	04	---
PG Diploma	---	---	---	---
Advanced Diploma	---	---	---	--
Diploma	---	---	---	---
Certificate	---	---	---	03
Others	---	---	---	02
Total	06	---	---	

Interdisciplinary	---	---	---	---
Innovative	---	---	---	---

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

Yes, Flexibility in Elective option

Branch	Total Number of Electives Offered	Year & Semester
ECE	2	IV Year-I Semester
	4	IV Year-II Semester
CSE	2	IV Year-I Semester
	4	IV Year-II Semester
EEE	2	IV Year-I Semester
	2	IV Year-II Semester
ME	2	IV Year-I Semester
	2	IV Year-II Semester

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	4 UG + 2 PG
Trimester	---
Annual	---

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

Note: The analysis of the feedback in the Annexure 2

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

The Institute is Affiliated to JNTUK, Kakinada and the Institution implemented the prescribed regulation of the University.

- 1.5 Any new Department/Centre introduced during the year. If yes, give details:

The Institution introduced the CM Centre of Excellence for Skill Development in collaboration with APSSDC

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty:

Total	Asst. Professors	Associate Professors	Professors	Others
166	105	50	19	---

2.2 No. of permanent faculty with Ph.D:

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

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
23	0	6	0	2	0	0	0	31	0

2.4 No. of Guest and Visiting faculty and Temporary faculty:

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended Seminars/	8	125	4
Presented papers	27	13	--
Resource Persons	1	--	1

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

<p>1. Real Time Examples:</p> <ul style="list-style-type: none"> • Real time practical examples are discussed with working models in class rooms to demonstrate the complexity and unpredictability of real issues and stimulate critical thinking among them to highlight the need for an inter-disciplinary approach of problem solving. <p>2. Interactive classrooms: ICT enabled classroom environment is made more interactive by encouraging the student participation as detailed below:</p> <ul style="list-style-type: none"> • Encourage students to have an elaborate discussion on real time problems in the subject. • Encourage students to participate in the group discussion. • Conducting case study or similar kind of problem solving exercise within the class. • Encourage questionnaire sessions involving diagnostic, logical, evaluative and predictive questions. • Initiate the students to summarize lecture points which are discussed. • Subject Seminar are organized. <p>3. Quality of laboratory experiments with regard to the conduct of experiments:</p> <ul style="list-style-type: none"> • The master and student lab manuals are maintained in each laboratory subject,
--

which includes experiments from the prescribed syllabus, Experiments that cover advanced topics and Open-ended Experiments etc.

- Lab Viva Voce based application.

4. Collaborative & Self Learning: The Institution continuously encouraging collaborative learning among students in the form of Groups for learning new technologies, enhance the knowledge on a particular topic, studying new tools to be in pace with the industry, doing some mini projects, etc with smart class room concept.

- Each class is divided into a few groups of students who motivate themselves to have combined study among them.
- These groups are also motivated to take up group-wise challenging assignments.
- Inter Departmental Projects are encouraged in Curriculum to offer an opportunity to collaborate with peers of other branches.
- Various Project Expos are conducted on platforms like Engineers without Borders (EWB), CSI, IEI and IETE student chapters to have competitions collaboratively.
- The focus of the tasks should be on learning new technologies, enhance the knowledge on a particular topic, studying new tools to be in pace with the industry, doing some mini projects, etc.
- Code – Tantra platform created for self learning of programming skill development.
- The need based Add-On courses on advanced topics are introduced in each department.

5. Encouraging Bright Students:

- The advanced learners are encouraged to take up the MOOCS online certificate courses like NPTEL.
- Allowing them to exhibit talent of innovation, advanced Technical Skills in latest technologies on the platform Engineers without Borders a global body that works for innovation.
- Encouraging the Students to take the choice based Projects and promoting them to present papers in conferences/journals.
- Institute established Entrepreneurship Development Cell to encourage the advanced learners to become an Entrepreneur.
- Teachers in the institution deliver additional topics beyond syllabus to enrich the knowledge of the students in advanced topics.
- Institute provides additional facilities like Wi-Fi internet, digital resources.

6. Assistance to Weak Students:

- Remedial classes are conducted for weak students whose performance is poor in the subject
- In the case of laboratories extra lab sessions will be allotted for weaker to boost their skills in laboratories.
- Teacher prepares specially designed notes and distributes it for slow learners to understand the subject easily.
- An awareness is created to parents about remedial actions.
- NPTEL videos based learning.

7. Assignments:

- Students are asked to write assignments to help each other to stimulate their thought process and enhance learning abilities.
- The assignment given could be theoretical or a practical implementation.

8. Tutorial Classes: Tutorial classes are conducted by assigning two faculties in each subject every week by making the students work on complex exercise problems and conduct investigations helping them gain a deep understanding of subject matter

- 9. Self-Learning Facility:** The self-learning facilities provided in the college are:
- R&D Centre with computers are available round the working hours and beyond.
 - Wi-Fi facility is available which can be accessed anywhere in the campus.
 - The central Library and department library with an excellent collection of Books, Journals, Technical magazines, News Papers and non-book materials in engineering and technology, science, humanities and management like CD-ROM's are also available.
 - The digital library provides many full texts on line journal databases from the various publishers like IEEE, Springer etc.
- 10. Co-Curricular Activities:**
- Lectures and Seminars in a variety of fields are arranged for articulating the thoughts and provide a complete learning skill as the lectures, demonstrations, visual materials, and interactive tools are appropriately networked throughout the seminar content for full educational impact.
 - Career Guidance/ Motivational Talks: helps students understand themselves, explore the career options available to them today and in the future, and make realistic academic and career plans and decisions.
 - Student Centric Workshops are organized.
 - Industrial visits, Industrial trainings, real time Trainings are organized.
 - Several Professional Chapters are activated.
 - Employability, skill development activities are organized.
- 11. Arrangement of Industrial Training and Industrial Visits:** To expose students to engineering practices that are specific to their course specialization which enable them to further identify their responsibilities as an engineer.

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

Working Days = 247
Teaching Days = 192

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

The inherently follows the rules and regulations on Examination/ Evaluation methodologies of the affiliated University. But the questions are framed in the mid examinations in view of continuous assessment of Course outcomes in line with revised Blooms taxonomy.
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2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

0	0	0
---	---	---

2.10 Average percentage of attendance of students:

86.04%

2.11 Course/Programme wise distribution of pass percentage :

Title of the Programme	Total no. of Students Appeared	Division				
		Distinction %	I %	II %	III %	Pass %
CSE	156	46.80	23.72	0.01	---	71.15
EEE	125	40.80	35.20	0.00	---	76.00
ECE	179	57.54	24.02	0.00	---	81.56
ME	135	30.37	42.22	0.01	---	73.33

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes :

1. Benchmarking and internal quality checks by introducing the Academic Audit System for all academic departments.
2. Ensures the quality of Embedded Questions in continuous assessment for CO measurement, Question paper setting for all courses in line with revised Blooms taxonomy
3. Establish Academic Committee to monitor and ensure uniform content delivery in class rooms.
4. Nominate Course coordinator for multi section courses to oversee uniform course delivery and evaluation.
5. IQAC is in place to collect the data from all the departments.
6. Ensures feedback is taken from students twice in a semester for continuous improvement.
7. Ensures Student Counseling and Grievance Redressal System are in place.
8. To track the slow learners and conduct remedial classes ensuring all students clear the courses.
9. Analyze and consolidate the data obtained from various departments and suggest remedial measures to Academic Committee.
10. Ensures that question papers are set balancing the cognitive learning levels.

2.13 Initiatives undertaken towards faculty development:

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	---
UGC – Faculty Improvement Programme	37
HRD programmes (NPTEL MOOCS)	50
Orientation programmes	3
Faculty exchange programme	--
Staff training conducted by the university	--
Staff training conducted by other institutions	3
Summer / Winter schools, Workshops, etc.	2
Others	--

2.14 Details of Administrative and Technical staff:

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	77	0	0	0
Technical Staff	19	0	0	0

Criterion – III

3. Research, Consultancy and Extension

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

1. Form Research forums to impart the knowledge on emerging and thrust areas in the field of Science and Technology.
2. National Workshops/seminars in thrust areas are organized to discuss and disseminate the latest research findings in many frontiers and contemporary technology related issues
3. Incentivize consultancy, research publications, externally funded projects etc.
4. Motivate students to carryout industry linked projects
5. Conduct motivational programs to promote research

3.2 Details regarding major projects:

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

3.3 Details regarding minor projects:

	Completed	Ongoing	Sanctioned	Submitted
Number	1	---	Lendi Management	---
Outlay in Rs. Lakhs	1	---	---	---

3.4 Details on research publications:

	International	National	Others
Peer Review Journals	15	0	0
Non-Peer Review Journals	20	7	0
e-Journals	9	0	0
Conference proceedings	17	3	0

3.5 Details on Impact factor of publications:

Range 1.38 to 5.6 Average 1.77 h-index 3 Nos. in SCOPUS 11

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

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects	---	---	---	---
Minor Projects	---	---	---	---
Interdisciplinary Projects	---	---	---	---
Industry sponsored	---	---	---	---

Projects sponsored by the University/ College	---	---	---	---
Students research projects (other than compulsory by the University)	---	---	---	---
Any other(Specify)	---	---	---	---
Total	---	---	---	---

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

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from:

UGC-SAP CAS DST-FIST

DPE DBT Scheme/funds

3.9 For colleges: Autonomy CPE DBT Star Scheme

INSPIRE CE Any Other (specify)

3.10 Revenue generated through consultancy:

3.11 No. of conferences organized by the Institution :

Level	International	National	State	University	College
Number	--	1	--	--	--
Sponsoring agencies	--	Lendi	--	--	--

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

3.13 No. of collaborations: International National Any other

3.14 No. of linkages created during this year:

3.15 Total budget for research for current year in lakhs
 :
 From Funding agency From Management of University/College

Total

3.16 No. of patents received this year:

Type of Patent		Number
National	Applied	4
	Granted	---
International	Applied	---
	Granted	---
Commercialised	Applied	---
	Granted	---

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

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

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

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

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

JRF SRF Project Fellows Any other

3.21 No. of students Participated in NSS events:

University level State level
 National level International level
 College level

3.22 No. of students participated in NCC events:

University level State level

National level International level

College level

3.23 No. of Awards won in NSS:

University level State level

National level International level

3.24 No. of Awards won in NCC:

University level State level

National level International level

3.25 No. of Extension activities organized

University forum College forum

NCC NSS Any other

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

1. Women's Day
2. Blood Donation camp.
3. International Day of Yoga
4. Swachh Bharat
5. Meditation camp
6. NSS Special Camp Programmes.
7. Clean & green programme in the campus.
8. Awareness talk on usage of Plastics.
9. Engineer's Day
10. Awareness rally on World Aids.
11. Awareness rally on electoral registration.
12. Vanam – ManamVanamahostav Programme.
13. Awareness Rally in connection with voter enrolment.
14. Awareness Programme on Digital Financial Literacy for Cashless Transactions.
15. Open defecation-free (ODF) rally.
16. Awareness about the advantages for using Clay Idols & Distribution of Clay Vinayaka Idols on the occasion of Vinayaka Chavithi.
17. Distribution of food and useful items to Orphanage home on the Occasion of Children's

Day.

18. Distribution of food and useful items to old people in various old age homes on the Occasion of Gandhi Jayanthi.

19. A camp is organized for LLR of driving licence for students and staff.

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	54551.61 sq.mts.	---	---	54551.61 sq.mts.
Class rooms	54			54
Laboratories	32			32
Seminar Halls	2			2
No. of important equipments purchased (≥ 1-0 lakh) during the current year.		4	College Management	4
Value of the equipment purchased during the year (Rs. in Lakhs)		20.3	College Management	20.3
Others(solar Power Plant)		200KWP	College Management	200

4.2 Computerization of administration and library

1. College Automation Management System (ez school) is in place for all the institutional activities viz. attendance management, examinations management, fee collection and student academic data base with web reporting facility to the parents, faculty and students.
2. Finance, Purchase, HR and Stores managed system.
3. Library is fully automated through Library Systems. Students and Faculty can access the availability of books through Web OPAC.
4. Digital Library is supported with server.

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	21074	5155692	1392	787331	22466	5943023
Reference Books	7023	3106706	464	262444	7487	3369150
e-Books	284					
Journals	885	1964276	50	138956	935	2103232
e-Journals	3185	2413149	197	1013130	3382	3426279
Digital Database	3	16500	1	13570		
CD & Video	1500		45		1545	
Others (specify)	43	1217955	6	137600	49	1355555

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others (Digital Library)
Existing	600	9	75MBPS	0	1	15	5	24
Added	102	0	25MBPS	0	0	0	0	--
Total	702	9	100 MBPS	0	1	0	5	24

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

1. An Awareness of program Computers usage, internet are conducted among first year students during orientation program for students, teaching and non teaching staff.
2. Faculty development programmes, orientation programs and workshops have been conducted for the faculty members and students to enhance knowledge on technology up gradation.
3. Training programmes for faculty members and students on IoT,3D Printing, MATLAB, Python, Android App developmenet etc.
4. Campus Management System, online student feedback system and campus surveillance system.
- 5.Embedded training for students

4.6 Amount spent on maintenance in lakhs in 2017-18 :

i) ICT	---
ii) Campus Infrastructure and facilities	Rs 26,70,983/-
iii) Equipments	Rs 4,48,537/-
iv) Others	Rs 5,79,694/-
Total :	Rs 36,99,214/-

Criterion – V

5. Student Support and Progression

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

1. Office of Students affairs takes care of Students Mentoring System, Grievances Redressal system, Anti Ragging Committee, Women Empowerment Cell and Academic Monitoring Committee for student's welfare and support.
2. Counselling to students by professional psychologist.
3. Exclusive internship cell to support student's internships at industries.
4. Career development cell to take care of students training, entrepreneurship skills, career counselling and placements.
5. Co-curricular and extra-curricular activities like Project design contests, seminars, workshops, technical quizzes, guest lectures, sports and NSS camps are conducted to improve the professional skill sets of students.
6. Remedial classes are conducted for slow learners to enhance the skills and competence.
7. Induction programmes for students to get awareness about the resources and career opportunities.
8. Language improvement support for English and other foreign languages.
9. In-house medical facility.

5.2 Efforts made by the institution for tracking the progression

1. Mentor- Mentee system.
2. Feedback system.
3. Online attendance system with web reporting facility.
4. Reviewing progress and attendance of the students through Academic Monitoring Committee meetings.
5. Result analysis of internal as well as external examinations.
6. Reviewing concerns expressed by the students during counselling in HODs meeting.
7. SWOC analysis of the institute.
8. Reviewing progress of each class as well as department in HODs meeting.
9. Progress review of the students with backlogs by track sheets.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
2448	3	--	--

(b) No. of students outside the state

(c) No. of international students

Men	No	%	Women	No	%
	1505	61.5		943	38.5

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
768+12	64	4	1356	0	2204	858+16	57	8	1509	0	2448

Demand ratio NA Dropout 0.3%

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

On-campus training for competitive exams and CRT, GATE, higher education etc.

No. of students beneficiaries

560

5.5 No. of students qualified in these examinations

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

5.6 Details of student counselling and career guidance

1. Mentoring system is in place for students and 15-20 students are assigned to each faculty to support and guide the students for holistic development.
2. Guest lecture & Motivation lectures for career guidance by inviting experts from industry and academia.
3. Career development cell to take care of students training, entrepreneurship skills, career counselling and placements.
4. Regular counselling sessions with Professional Psychologist.

No. of students benefitted

450

5.7 Details of campus placement

On campus			Off Campus
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
34	450	241	8

5.8 Details of gender sensitization programmes

Women Empowerment Cell (Femina Wing) is working to sensitize and empower the women by involving them in various programmes.

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events

State/ University level National level International level

No. of students participated in cultural events

State/ University level National level International level

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

Sports : State/ University level National level International level

Cultural: State/ University level National level International level

5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	165	Rs 9,27,100/-
Financial support from government	1414	Rs 4,50,42,825/-
Financial support from other sources		
Number of students who received International/ National recognitions		

5.11 Student organised / initiatives

Fairs : State/ University level National level International level

Exhibition: State/ University level National level International level

5.12 No. of social initiatives undertaken by the students

5.13 Major grievances of students (if any) redressed: _____

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Vision:

Producing globally competent and quality technocrats with human values for the holistic needs of industry and society

Mission:

- Creating an outstanding infrastructure and platform for enhancement of skills, knowledge and behaviour of students towards employment and higher studies.
- Providing a healthy environment for research, development and entrepreneurship, to meet the expectations of industry and society.
- Transforming the graduates to contribute to the socio- economic development and welfare of the society through value based education.

6.2 Does the Institution has a management Information System

Yes, the Institution has a Management Information System (ez-School).

1. MIS for all the institutional academic activities viz. academic achievements, awards, details of paper presentations, workshops and conferences attended and conducted, details of all training and placement related activities, student's participation in curricular, co-curricular and extra-curricular activities and details of guest lecture conducted are captured.
2. MIS for all the institutional activities such as finance, administration, purchases, inventory etc. are maintained and communicated.

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

1. Feedback mechanism is in place for continuous improvement.
2. Curriculum implementation is reviewed twice in a year.

6.3.2 Teaching and Learning

1. Industry engagement for latest emerging technologies.
2. Departmental Academic Committee (DAC) to review class wise academic progress time to time and suggest remedial measures.
3. Adequate provisions are there in the curriculum to promote collaborative learning, self learning and interactive learning
4. Periodic academic audits.
5. Financial support and academic leave to attend FDP, Conferences, Workshops.

6.3.3 Examination and Evaluation

1. Audit for question paper quality assurance.
2. Assessment pattern for question paper design.
3. Re-evaluation by other senior persons to ensure quality of evaluation.

6.3.4 Research and Development

1. Introduction of Faculty incentives to encourage research and development.
2. Financial support and paid leaves for attending the course work of Ph.D.

3. Faculty engagement in taking real time industry oriented research projects.
4. Organize National/International conferences and Workshops.
5. Appending/Upgrading infrastructural facilities for research and development to augment postgraduate and doctoral level studies.
6. Faculty engagement in taking real time industry oriented research projects.

6.3.5 Library, ICT and physical infrastructure / instrumentation

1. The printed books, national and international journals on various subjects of reputed publishers to enhance the advanced knowledge and skills of students and faculty.
2. The commutative entrance books, magazines, news papers, placement and personality development books for updating their knowledge.
3. The e-resources of e-journals, e-books, video lectures(like NPTEL), audio lectures of various publisher are made available in the Digital Library for effective teaching learning process
4. The Learning materials, Previous Question Papers, Project Reports of all departments are made available in the Central Library and Department libraries.
5. The e-contents of the web: <http://ndl.iitkgp.ac.in> is extensively used in the regular teaching learning process.
6. DELNET Facility is available in the central library.
7. Virtual labs (<http://vlab.co.in/>) in physics, other sciences and engineering subjects are used to enthuse students to conduct experiments by arousing their curiosity.
8. Multimedia animated lectures and Prototype models are used to teach the various subjects like ED, Machine design etc., for effective interpretation and understanding of the content.

6.3.6 Human Resource Management

1. Transparent Lendi HR policies and procedures for welfare of the employees.
2. Well-structured annual faculty appraisal system for all employees.
3. Maintaining faculty-student ratio as per the norms.
4. Well defined internal promotion policy for career advancement of the faculty.
5. Training programs for skill development and personality development of employees.
6. Providing Group Insurance of staff and family.
7. Providing Provident Fund
8. Financial support for doing Ph.D.

6.3.7 Faculty and Staff Recruitment

1. Department Advisory Committee plans for recruitment of faculty and staff based on vacancies.
2. Profiles for the required positions are sourced through various sources viz., advertisements (newspapers, portals...), internal reference etc.
3. Screening and short listing of the profiles depending on their suitability for the position is done by the respective departments.
4. Robust selection and recruitment process with well constituted selection board.

5. Well constituted selection committee shall conduct the interviews and screen the candidates giving the selected panel list.

6.3.8 Industry Interaction / Collaboration

1. MoUs for full semester internship and summer internship.
2. MoUs for industrial research and training.
3. MoUs for academic collaborations viz. Curriculum implementation design, delivery and assessment.

6.3.9 Admission of Students

Promotional incentives for quality admissions viz. Tuition & hostel fee concession.

6.4 Welfare schemes for

Teaching	PF, Group Medical Insurance, Financial assistance for acquiring Ph.Ds, Special leaves.
Non teaching	PF, Group Medical Insurance, Financial assistance for acquiring higher studies, Special leaves, Free transport, fee concession for their children.
Students	24×7 Medical assistance, Student Counselling, Coaching for higher studies and Competitive Exams.

6.5 Total corpus fund generated : Nil

6.6 Whether annual financial audit has been done Yes No

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	NO		YES	IQAC
Administrative	YES	Manohar Chowdary & Associates(Chartered Accounts), Visakapatnam	YES	IQAC

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

For UG Programmes Yes No

For PG Programmes Yes No

6.9 What efforts are made by the University/ ~~Autonomous College~~ for Examination Reforms?

1. Continuous assessment.
2. Improved question paper pattern enabling CO attainment calculation.

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

Not applicable

6.11 Activities and support from the Alumni Association

1. Alumni actively participate in Department Academic meetings for curriculum development.
2. Deliver guest lectures/Invited Talks
3. Support for Placement & Internships
4. Support start-ups & student projects
5. Students mentoring
6. Alumni chapter meet at regular intervals at different locations

6.12 Activities and support from the Parent – Teacher Association

1. Involvement in anti ragging committee and counselling to students
2. Feedback from parents for overall growth of the Institution.
3. Support to the internship & placements

6.13 Development programmes for support staff

1. Training programs on Personality Development.
2. Workshops for technical & behavioral skills .

6.14 Initiatives taken by the institution to make the campus eco-friendly

YES.

The Institution has a conscious of its responsibility to protect the environment by conducting Green Audit of the campus - As a part of that, Institution maintains a checklist of the following activities undertaken in connection with

Green Audit:

- i) Optimum Consumption and utilization of energy in the campus as an activity of Energy Conservation Club.
 - ii) Service records pertaining to waste materials/condemned equipment are maintained from regularly. Sustainability principles, practices and Environmental Studies are an integrated into Curriculum.
 - iii) The NSS team is striving continuously to maintain an eco-friendly green environment in the campus as well as nearby villages by adopting them and conducting some awareness programs.
 - iv) A continuously greenery monitoring is in the place.1. 200KV solar power plant.
 - v) Landscaping done across the campus for beautification and eco friendliness
 - vi) Pollution Free campus.
 - vii) LED street lights are being used as a power conservative initiative
- .

Criterion – VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

- *Outcome Based Education (OBE) approach* is implemented in teaching and evaluation using Revised Blooms Taxonomy to develop students' self learning.
- Value additions in the form of *Content beyond syllabus* to align the industry academic needs.
- Web 2.0 tools *Socrative, Edmodo* are used for revolutionary learning of language communication.
- Programming skill enhancement through Code Tantra platform to attempt code competitions like IBM's The Great Mind Challenge (TGMC) and TCS's Code vita.
- *Digi Phrase*, an Interface, used for evaluation of Paragraph Writing and Picture Perception Discussion Tests developed by department of CSE..
- E-Z School office automation is used for Software for obtaining quick information and Bio-Metric system employed for attendance.
- *Alumni Video Conferencing* through *Skype, Hangout, Whatsapp* to have a liaison between the campus and Industry.
- *Smart Class room concept* (a student centric learning driven by students) for enhancement of collaborative learning.
- *Online Feedback mechanism* for unbiased responses in continuous quality improvement.
- *Student teacher adoption* for continuous counseling and motivation.
- *One minute Visume (Video Resume)* for entering the National Talent pool to grab the job opportunities.
- *Posting of activities on You Tube* for peer reviews and likes to stimulate communicative vein.
- *Online interface* in the Labs is used in place of *Viva-Voce* to bait the students in acquisition of skills.
- Common Booklet for both the descriptive mid-term examinations for tracking the performance of students at a time.
- Providing for Student In and out barcode checkout system at Main gate of the campus.
- Digital Check in and Checkout system at Library developed by students.

- Various Clubs are for creative practices E-Plus Club for Communication Development, Mother Teresa Club for charity activities, Faraday club for innovations, Photography Club for hobby persuasion. Engineers, and Without Borders (EWB) platform for service through technology.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year .

The minutes were forwarded to respective department for effective implementation of the 'Action Plan'. At the end of the year, all the directions in action plan have been successfully implemented.

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

Best Practice - I

Title: “Encouragement to Faculty for Pursuing Ph. D and Research Publications”

Goal of this practice:

The institution encourages faculty to pursue their Ph.Ds at institutes of repute by giving financial assistance and academic leaves to overcome scarcity of faculty having doctoral degrees. This has resulted in cultivating research culture, quality publications and enhanced teaching learning process.

The main objective of this practice is to motivate the faculty for active involvement in research and to contribute for the overall development of the institution.

The Context:

In the initial stages of the Institution, there was a dearth of faculty having Doctoral Degrees.

The Practice:

- Encouraging faculty to register for Ph.D Programs at reputed institutes like IITs, NITs, Government Universities etc.
- For Registered candidates, the Institution provides Academic leaves with financial assistance for attending Ph.D course work.
- Academic Leaves are sanctioned time to time for carrying out research

discussions.

- Sponsoring faculty members to various Workshops, National and International Conferences/Seminars in India and Abroad by providing necessary support.
- At the submission stage of Ph.D, an academic leave is sanctioned up to six months.
- After acquiring the Ph.D degrees a substantial hike is given in the pay package.
- Incentives for Research Publications in Reputed Journals.
- In-house research funding is provided for the promotion of R&D.

Evidence of Success:

After exercising this practice, the number of Ph.Ds .

Problems Encountered & Resources Required:

1. The major problem encountered is the pre requisite of minimum experience to register for Ph.D.
2. Limited number of seats available in the universities to register.
3. Additional budget allocation in order to meet the expenses during the implementation of this practice.

Best Practice II

Title: “Skill enhancement through Mentoring System to develop Social relevance projects”

Goal of this Practice:

Goal of this practice includes motivating the students to enhance their knowledge and skill levels through mentoring system, in turn to develop social relevance projects that enable them to become industry ready.

The Context:

Most of the students joining our institution hail from rural background and from vernacular medium of study. It has become a major challenge to transform them into self sustained engineers.

The Practice:

Various activities under this practice are:

- i) A teacher-student adoption is to drive the performers towards excellence and slow learners to reach the minimum qualifying level.
- ii) Students are mentored to maintain good track record of academics by encouraging them to be abreast of latest technological developments.
- iii) Imparting practical exposure to students in latest technologies by arranging industrial visits/in-plant trainings.

- iv) Conducting workshops, guest lectures and seminars by eminent academicians from premier institutions and Industry Experts.
- v) In order to transform students into tomorrow's potential leaders of the society, various personality development and soft skill training programs are conducted.
- vi) A continuous encouragement for students to come up with innovative ideas related to societal issues.
- vii) Students are allowed to share their ideas with outside world by allowing them to present papers at various National / International conferences.

Evidence of Success:

As a result of this practice, a discernible positive change has been observed in the morale of the students in addition to few of the outcomes listed below:

- More than 85% of pass percentage is maintained consistently.
- Social relevance projects like mini agriculture harvester, Smart Gamela, GSM Based Solar Irrigation System, Wastebin Monitoring System using GSM Technology, Suraksha App for Women Protection, Multi Nut remover and tightener, Power assisted screw jack, Swing Electric Power Generation, Manual Plough, Solar Car (under construction).
- Acquisition of skill enablement and consistent increase in the placement track is profoundly observed.

Problems Encountered: As technologies are rapidly changing, it has become difficult for the institution to incorporate all those rapid changes in the process of skill development.

Resources Required: Provision is made in the Budgetary Allocations to arrange training programs.

Best Practice III

Education through Community Service

Goal of this Practice:

Encouraging the students to involve in community service for inculcating social responsibility, leadership and organizational skills among them.

The Context

As the Institution is at a modest rural setting, students are expected to address the community problems like alcoholism, illiteracy, child labour, Open Defecation, Child Marriages etc in order to inculcate social responsibility.

The Practice

To inculcate the social responsibility, leadership and organizational skill among

students, following are some of the practices:

- The Institution has adopted a few villages nearby campus for rural development by addressing the problems with technological solutions.
- Several social service camps are organized periodically in the adopted villages by involving students to understand the ethos of rural life and its problems through surveys.
- Visiting Orphanages, Oldage Homes is a regular practice to inculcate human values.
- Plantation, Blood Donation Camps, Rain Harvesting Pits, Health Camps and Awareness Rallies on various social stigmas.
- As part of *Digital India*, activities on e-banking, internet usage, Aadhaar and Vote Franchise enrolment are taken place.
- Skill development Programmes like House Wiring, Fan Winding, Computer Literacy are conducted.
- As part of Swachh Bharath initiative, awareness on problems of Open Defecation, clean and green programmes are conducted.
- Fund raising activities like fund for eradication of Polio, establishment of Library at D. Tallavalasa village.

Evidence of Success

The following are some of the appreciations are for activities undertaken:

- An Appreciation from District collector Vizainagaram as Best Institution for conducting Blood donation camps in 2011.
- Best Institution award from JNTUK for conducting service camps in the villages in 2012
- An Appreciation Certificate from District Collector for the committed service rendered in Sankranthi Sambaraalu in 2017
- An Appreciation Certificate from District Collector for the committed service rendered in Vizianagara Utsavaalu in 2016
- An appreciation certificate is given by Govt. of AP to Akulapeta Village a hamlet of our adopted village D. Tallavalasa for the initiatives of Open Defecation Free

Problems Encountered

- Initially, a resistance is found among villagers in accepting the students to serve them. Later after the students heartfelt involvement made them to unite both the counterparts to have mutual benefits.

Resources

- The Management itself has met the financial needs for the attainment of the goals in this practice as a social responsibility. Sometimes, the students and staff of the

Institution have also come forward to support the wise mission of management.

7.4 Contribution to environmental awareness / protection

Faculty and student community of the Institution are committed to environmental safety and protection by adopting practices of green revolution in and around the campus, waste reduction and energy conservation etc. Our strategic plans of development are focused towards safeguarding nature and sustainability of important resources like energy, water, green cover etc.

7.5 Whether environmental audit was conducted? Yes No

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

The Institution has conducted the SWOC analysis for developing a comprehensive picture of its position and prospects. The following explains in detailed:

STRENGTHS:

- a. Positive mindset of Management and academic team towards quality education, accreditation & excellence.
- b. Effective Teaching Learning Process
- c. Strong Learning Resources and well equipped Library.
- d. Excellent Infrastructure and Ambience conducive for Quality Education.
- e. Dedicated and energetic Staff and good number of faculty having Ph.Ds
- f. Encouragement for faculty to pursue Ph.D.
- g. Motivational incentives for faculty and students.
- h. Strong research aptitude and Substantial R & D Grants from college Management
- i. Significant Consultancy and Testing Services
- j. Extra focus on Students' Communication & Personality Development.

ii) WEAKNESSES:

- a. Financial restraints due to constrained fees of un – aided private Engineering colleges to the state – of – art facilities for PG and R & D.
- b. MOUs with industries and Consultancy are limited.
- c. Sponsored R & D activities to be strengthened.
- d. Business Incubators in collaboration with local industries.
- e. Limited Collaboration with premier research.

iii) OPPORTUNITIES:

- a. Wide range of upcoming new specialized research areas / technologies.
- b. An improved research environment can be foreseen as large number of faculty is pursuing Ph.D.
- c. Wide scope for collaboration with Indian and foreign research institutes/ universities / organizations.
- d. Strong alumni base with persons working in industries, Government and abroad willing to extend support.
- e. Industry institute interaction
- f. Lot of scope for Faculty Development

iv) CONSTRAINTS

- a. Input quality of students.
- b. Volatile economic situation
- c. Industry-Academia gap through rapid development in technology.

8. Plans of institution for next year

1. To obtain the reorganization of our Research Center as “University Recognized Research Centre”.
2. Inclusion of this Institution under UGC section 2(f) and 12(B).
3. To obtain Autonomous Status for the Institution.
4. Research Collaboration with Industries and premier Institutes.
5. Improving the consultancy and Industrial Interaction.
6. Improving the quality and quantity of research publications in peer-reviewed and indexed journals.
7. Encouraging faculty to undertake research projects, consultancy and collaboration activities.
8. Planning to establish new Post graduated course in Mechanical Engineering and Electrical, Electronics & Communication Engineering.
9. Planning to establish Job-oriented short term courses.

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Name Dr. V.V.Rama Reddy

K.V. Narasimham

V.V. Rama Reddy

Signature of the Coordinator, IQAC

Signature of the Chairperson, IQAC

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