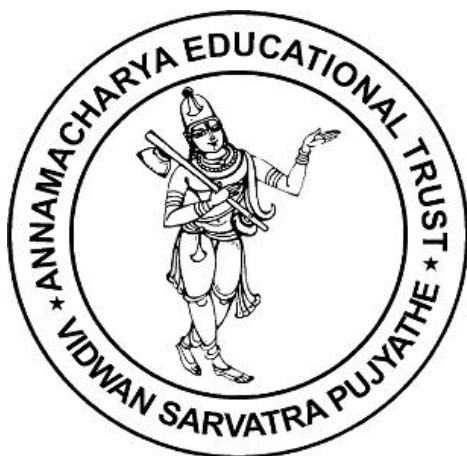# ANNAMACHARYA
INSTITUTE OF TECHNOLOGY & SCIENCES
(AUTONOMOUS)

Internal Quality Assurance Cell (IQAC)
and Submission of Annual Quality Assurance
Report (AQAR)
2017-2018

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission
P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bangalore - 560 072 India

The Annual Quality Assurance Report (AQAR) of the IQAC

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC. *(Note: The AQAR period would be the Academic Year. For example, July 1, 2012 to June 30, 2013)*

Part – A

1. Details of the Institution

1.1 Name of the Institution	Annamacharya Institute of Technology & Sciences (Autonomous), Rajampet
1.2 Address Line 1	Tallapaka (Panchayath)
Address Line 2	New boyanapalli
City/Town	Rajampet
State	Andhra Pradesh
Pin Code	516126
Institution e-mail address	aitsap@yahoo.co.in mallikharjuna.nuka@gmail.com
Contact Nos.	08565251862, 63, 64
Name of the Head of the Institution:	Dr. S M V Narayana
Tel. No. with STD Code:	08565251862
Mobile:	919666675279

Name of the IQAC Co-ordinator:

Dr. N. Mallikharjuna Rao

Mobile:

919848358648

IQAC e-mail address:

drmallik@annamacharyagroup.com

1.3 **NAAC Track ID** (For ex. MHCOGN 18879): **APCOGN14053**

1.4 Website address:

www.aitsrajampet.ac.in

Web-link of the AQAR:

http://aitsrajampet.ac.in/iqac.html

1.5 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1st Cycle	B	2.49	2011-12	5 yrs
2	2nd Cycle	B	2.71	2016-17	5 yrs
3	3rd Cycle				
4	4th Cycle				

1.6 Date of Establishment of IQAC: DD/MM/YYYY

12-01-2012

1.7 AQAR for the year *(for example 2010-11)*

2017-2018

1.8 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((*for example AQAR 2010-11submitted to NAAC on 12-10-2011*)

  i.   AQAR **2015-2016 submitted on 23-02-2017**   (DD/MM/YYYY)
  ii. AQAR **2016-2017 submitted on 12-12-2017**   (DD/MM/YYYY)
  iii. AQAR **2017-2018 submitting on 22-11-2018**   (DD/MM/YYYY)
  iv. AQAR_____ _____ (DD/MM/YYYY)

1.9 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 | ✓ | No | --- |

(eg. AICTE, BCI, MCI, PCI, NCI)

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 | ✓ |

1.10 Type of Faculty/Programme

        Arts | --- | Science | -- | Commerce | --- | Law | -- | PEI (Phys Edu) | --- |

TEI (Edu) | --- | Engineering | ✓ | Health Science | --- | Management | ✓ |

Others (Specify) | . -- |

1.11 Name of the Affiliating University *(for the Colleges)* | Jawaharlal Nehru Technological University Anantapur, Anantapuramu, (A.P) |

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

Autonomy by State/Central Govt. / University | UGC | | ✓ |

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 | 08 |

2.2 No. of Administrative/Technical staff | 11 |

2.3 No. of students | 02 |

2.4 No. of Management representatives | 01 |

2.5 No. of Alumni | 01 |

2. 6 No. of any other stakeholder and
    community representatives | 02 |

2.7 No. of Employers/ Industrialists | 02 |

2.8 No. of other External Experts | 04 |

2.9 Total No. of members | 31 |

2.10 No. of IQAC meetings held | 10 |

2.11 No. of meetings with various stakeholders: No. 01   Faculty 02

Students 03   Alumni 01   Others 01

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. 02   International 00   National 00   State 00   Institution Level 01

(ii) Themes   Recent developments on data science and machine learning with python

2.14 Significant Activities and contributions made by IQAC

1. IQAC motivates teachers on quality improvement
2. IQAC encourages the research based work culture
3. IQAC recommends student centric core procedures

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
✓ Corporate training to final year students for improving analytical skills ✓ To upgrade teachers knowledge based in advanced Research	✓ All the final year students were befitted and improved placements ✓ Teacher used modern strategies for teaching i.e. Power Point Presentation, MOOCS and SWAYAM ✓ Innovative Teaching methods are used.

Attach the Academic Calendar of the year as Annexure.

2.15 Whether the AQAR was placed in statutory body   Yes ✓   No ---

Management ✓ Syndicate --- any other body ---

Provide the details of the action taken

Institute demerits were identified. IQAC is suggested to overcome such demerits.

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	01	-	-	-
PG	11	--	11	-
UG	06		06	-
G Diploma	-	-	-	-
Advanced Diploma	-	-	-	-
Diploma	-	-	-	-
Certificate	-	-	-	-
Others	-	-	-	-
Total	18	-	17	-

Interdisciplinary	-	-	-	-
Innovative	-	--	-	-

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

Pattern	Number of Programmes
Semester	17
Trimester	-
Annual	-

1.3 Feedback from stakeholders*   Alumni [✓]   Parents [✓]   Employers [✓]   Students [✓]
(On all aspects)

    Mode of feedback   :   Online [✓]   Manual [✓]   Co-operating schools (for PEI) [---]

*Please provide an analysis of the feedback in the Annexure

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

> YES- copy enclosed.

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

> Nil

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
317	210	65	42	--

2.2 No. of permanent faculty with Ph.D.   [59]

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
210	-	65	-	42	-	-	-	317	-

2.4 No. of Guest and Visiting faculty and Temporary faculty   [34]   [00]

2.5 Faculty participation in conferences and symposia (2017-18):

No. of Faculty	International level	National level	State level
Attended	25	65	12
Presented papers	60	20	20
Resource Persons	01	08	20

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

> Unique Teaching Methodology "Two way teaching method"

2.7 Total No. of actual teaching days during this academic year   [189]

2.8 Examination/ Evaluation Reforms initiated by
    the Institution (for example: Open Book Examination, Bar Coding, | Single valuation system – evaluation outside the campus

Double Valuation, Photocopy, Online Multiple Choice Questions)

2.9 No. of faculty members involved in curriculum
     Restructuring/revision/syllabus development

63	36	00

As member of Board of Study/Faculty/Curriculum Development workshop

2.10 Average percentage of attendance of students

86%

2.11 Course/Programme wise distribution of pass percentage (2017-18):

Title of the Programme	Total no. of students appeared	Division				
		Distinctions	I	II	III	Pass %
B.Tech- EEE	166	145	21	-	-	100
B.Tech- ME	167	143	21	-	-	97.62
B.Tech- ECE	195	157	29	-	-	95.38
B.Tech- CSE	105	92	6	-	-	93.33
B.Tech- IT	14	11	3	-	-	100
B.Tech- Civil	150	102	19	-	-	80.67
M.Tech- EPS	6	06	-	-	-	100
M.Tech- DESC	04	04	-	-	-	100
M.Tech- VLSI	01	01	-	-	-	100
M.Tech- ES	10	10	-	-	-	100
M.Tech- CSE	04	04	-	-	-	100
M.Tech- MD	01	01	-	-	-	100
M.Tech- SE	9	09	-	-	-	100
MBA	136	106	30	-	-	100
MCA	41	35	6	-	-	100

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

Substantial effort has been put up by IQAC to ensure an environment to achieve excellence in all aspects of teaching and learning and also focused on improving the quality of education and evaluation. The IQAC academic audit is carried out by the Principal. This was done in three stages.

1. All the teaching staff members submitted semester teaching plan/lecturer schedules for conduct of theory and practical classes to their respective head of departments.

---

2. Monthly reports are collected from the teaching staff where in teachers give information regarding coverage of syllabus during that particular month. In case where syllabus was not covered as per schedule, the teachers have conducted extra classes for completion of syllabus.

3. At the end of the semester (during the internal audit) the teaching staff submits the monthly monitoring sheets to the respective heads of departments and through the concern in charge it is submitted to the Principal who examines whether the entire syllabus has been completed as per the initial planning and appropriate steps are initiated to complete the syllabus within the scheduled time.

2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	*Number of faculty benefitted*
Refresher courses	40
UGC – Faculty Improvement Programme	05
HRD programmes	10
Orientation programmes	120
Faculty exchange programme	Nil
Staff training conducted by the university	25
Staff training conducted by other institutions	45
Summer / Winter schools, Workshops, etc.	68
Others	Nil

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	14	-	Nil	Nil
Technical Staff	12	-	06	Nil

Criterion – III

3. Research, Consultancy and Extension

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

- ✓ Action research was doing by faculty members for the various problems and issues of institute
- ✓ Faculty members are encouraged to publish research papers in reputed journals such as Scopus, SCI, SCIE and web of science indexed
- ✓ IQAC initiates and supporting financially to final year student every year for their innovative projects.

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	--	--	--	7
Outlay in Rs. Lakhs	--	--	--	13.35

3.4 Details on research publications

	International	National	Others
Peer Review Journals	135	25	--
Non-Peer Review Journals	--	--	--
e-Journals	148	12	--
Conference proceedings	163	68	--

3.5 Details on Impact factor of publications:

Range 0-4 Average 0.63 h-index 49 Nos. in SCOPUS 26

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.   [04]   Chapters in Edited Books   [03]

ii) Without ISBN No.   [00]

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	-	02	--	--	-
Sponsoring agencies	-	SERB/Institute	--	--	-

3.12 No. of faculty served as experts, chairpersons or resource persons   [28]

3.13 No. of collaborations   International [--]   National [01]   Any other [01]

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 [32, 39,200/-]

Total   [32,39,200/-]

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	--
	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
02	01	01	--	--	--	--

3.18 No. of faculty from the Institution
who are Ph. D. Guides

14

and students registered under them

08

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

09

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 35 State level 12

National level - International level -

3.22 No. of students participated in NCC events:

University level - State level -

National level - International 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

- ✓ Blood Donation Camp
- ✓ Distribution of school uniform for students nearby villages.
- ✓ Awareness Programme on right to vote.
- ✓ Awareness programme on women's rights.

Criterion – IV
4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities: 33 acres

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	20.69 Acres (32567.68 Sq.m)		Self	-
Class rooms	110	-	Self	110
Laboratories	45	--	Self	45
Seminar Halls	19	-	Self	19
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	12	-	Self	12
Value of the equipment purchased during the year (Rs. in Lakhs)	86,35,678/-	-	--	--
Others	--	-	--	--

4.2 Computerization of administration and library

Library fully automated system

Fully implemented with bar coding system

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	28986	61,80,000	795	3,49,593	29781	65,29,593
Reference Books	19465	41,20,000	530	2,33,062	19995	43,53,062
e-Books	1013	-	1500	-	2513	-
Journals	100	-	100	-	100	2,39,749
e-Journals	2000	-	3500	-	5500	11,15,966
Digital Database	-	-	-	-	-	-
CD & Video	2600	-	200	-	2800	20,000
Others (specify)	-	-	-	-	2513	-

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart-ments	Others
Existing	1025	14	100 Mbps	01	01	10	25	10
Added	-	-	10 Mbps	-	-	-	-	-
Total	1025	14	110 Mbps	01	01	10	25	10

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

Faculty development programme, orientation program and workshop have been conducted for the faculty members to enhance knowledge on technology up gradation. Special programme for internet access was conducted for the staff and students of this institute. Recently, we organized workshop on Tally9.0 package and usage to ministerial staff.

4.6 Amount spent on maintenance in lakhs:

i) ICT   25, 39,452/-

ii) Campus Infrastructure and facilities   12, 72, 78,345/-

iii) Equipments   65, 02,305/-

iv) Others   26, 32, 28,625/-

Total: **39, 95, 48,727/-**

Criterion – V
5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

> - ✓ IQAC organized and delivered lectures from time to time to make the students aware of the changing global scenario. Students are be given support service in seeking jobs opportunities not only locally but also globally. IQAC has been encouraging the student to develop skills, competencies and values among students. These are being imparted to the students through courses and other activities.
>
> - ✓ At the beginning of an academic year, IQAC sends a format to the Heads of Departments to collect the information regarding the support services to the students to be undertaken throughout the year. This will help IQAC to know the working of each Department and will help to prepare an Action Plan of the Institution. Monitoring of the working of the Departments is being done through meeting of the IQAC and this will direct the future course of action.
> - ✓ IQAC motivates the faculty to maintain day wise academic dairy which help ensuring quality of teaching and accountability
> - ✓ IQAC has been developing better internal communication between students and their department
> - ✓ Encouraging eco-consciousness among students
> - ✓ On-line Grievances Redressal Cell is working for students support.

5.2 Efforts made by the institution for tracking the progression

> - ✓ Regular observation
> - ✓ Regular meetings/monitoring
> - ✓ Faculty involvement through counselling system.
> - ✓ Regular feedback from students on facilities
> - ✓ Continuous quality Improvement (CQI) assessment

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
3204	452	--	--

(b) No. of students outside the state

02

(c) No. of international students

Nil

	No	%
Men	2378	65.04

	No	%
Women	1278	34.96

Last Year (2016-17)						This Year (2017-17)					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
601	81	12	373	00	1067	562	91	14	312	0	979

Demand ratio   71%   Dropout % Nil

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

- ✓ The Training and placement cell is providing coaching to various competitive exams such as Banks PO, Group-II, UPSC and other examinations.

- ✓ The training and placement cell is organizing special training for final year students every year

- ✓ The departments are taking special care on GATE appearing students

No. of students beneficiaries   258

5.5 No. of students qualified in these examinations

NET   --   SET/SLET   --   GATE   25   CAT   --

IAS/IPS etc   --   State PSC   --   UPSC   --   Others   --

5.6 Details of student counselling and career guidance

Students per counsellor - 20

- ✓ Mode - Telephonic and Personal Meeting

- ✓ Reporting - Monthly Report to the Head of Departments.

- ✓ Area - Personal problem, Grievances and Motivation for better performance

No. of students benefitted   452

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
29	782	425	125

5.8 Details of gender sensitization programmes

Women Empowerment cell is conducted on gender equity and gender integration

5.9 Students Activities

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

State/ University level 132 National level 09 International level 0

No. of students participated in cultural events

State/ University level 65 National level 15 International level 0

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

Sports: State/ University level 19 National level 00 International level 00

Cultural: State/ University level 00 National level 00 International level 00

5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	Nil	-
Financial support from government	2468	9,75,32,000/-
Financial support from other sources	Nil	-
Number of students who received International/ National recognitions	-	-

5.11   Student organised / initiatives

Fairs   : State/ University level | 01 | National level | 01 | International level | -- |

Exhibition: State/ University level | -- | National level | -- | International level | -- |

5.12   No. of social initiatives undertaken by the students | 02 |

5.13 Major grievances of students (if any) redressed:

   1. Water Problem (Water purifier system is installed. Now students are getting filtered and safe water since six months).

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Our Vision

We impart futuristic technical education and instil high patterns of discipline through our dedicated staff who set global standards, making our students technologically superior and ethically strong, who in turn shall improve the quality of life of the human race.

Our Mission

Our mission is to educate students from the local and rural areas and from other states so that they become enlightened individuals, improving the living standards of their families, industry and society. We provide individual attention, world-class quality of Technical education and take care of character building

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6.2 Does the Institution has a management Information System

Yes, Management information system is being used in accounts department, administration department and other departments.
Some of the MIS are
- ✓ Daily Absent Report (Staff)
- ✓ Daily Absent Report (Students)
- ✓ Monthly Defaulter Report

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

6.3.1 Curriculum Development

Curriculum involves interaction between teachers and learners, between learners and Learners, between learners and curriculum content.
The focus of teaching is more on course outcomes (COs) through learning than the transmission of concepts and skills.
Teaching is a complex endeavour. The following points were implemented by AITS for Curriculum Development for course set-up and teaching methodology
- ✓ Problem Identification in an area and General needs assessment
- ✓ Needs assessment of targeted learners
- ✓ Goals and objectives on chosen subjects or area
- ✓ Educational Strategies on chosen subjects
- ✓ Implementation
  - o Introduction of curriculum
  - o Administration of curriculum
  - o Refinement of curriculum
- ✓ Evaluation and feedback
  - o Individual evaluation
  - o Program evaluation
  - o Finding of outcome

6.3.2   Teaching and Learning

AIT follows the given methods for teaching and leaning

1.   **Teacher-centered methods**

In teacher-centered education, students put their focus on the content delivered by the teacher while the teacher talks, the students exclusively listen to him. During activities, students alone work.

Teacher Role: Authority

2.   **Student Centered methods**

When a classroom operates with student-centered instruction, students and instructors share the focus. Instead of listening to the teacher exclusively, students and teachers interact equally. Group work is encouraged, and students learn to collaborate and communicate with one another to learn the subject

Teacher Role: Facilitator

6.3.3 Examination and Evaluation

- All components in any programme of study are evaluated continuously through internal evaluation and an external evaluation. Internal evaluation is done throughout semester/year in the form of mid examinations and assignments. External evaluation is done at the end of semester/ year in the form of end examination.

- Question paper setters for end examination are from outside the college. Subject experts from our institute prepare the scheme of evaluation, giving guidelines for the examiners for distribution of marks for different points in the question. In case of numerical problems, solutions of the problems with distribution of marks for different stages are given in scheme of marking. Feedback on question paper is collected from subject experts to improve the quality of questions in future. Evaluation of answer scripts will be done by the external examiners from other colleges and universities.

- The method of evaluation involves coding & decoding of answer scripts to ensure unbiased evaluation. Evaluation process is transparent. Institute communicates the outcome of the evaluation by publishing results on the internet through Institute website.

- Students are permitted to apply for recounting/ revaluation of the end theory examination answer scripts within a stipulated period after announcement of the results.

- After recounting or revaluation, records are updated with changes if any and the student will be issued a revised memorandum of marks. If there are no changes, the student are intimated the same through a letter or a notice.

- Based on the credits and marks obtained by the student Credit Point Average (CPA) will be calculate for semester/year and Cumulative Credit Point Average (CCPA) will be calculated for entire program. Award of class will be finalized based on CCPA.

6.3.4 Research and Development

Research and Development cell is an integral part of the activities of Annamacharya Institute of Technology & Sciences. The Institute conducts research investigations within its academic programmes under all the departments and the Academic Research Centres.

This cell is one of the wings of the Institute which facilitates, channelizes, records, and regulates all the academic, sponsored, collaborative research projects and consultancy works in the Institute. The objective of the Research Cell varies from the advancement of theoretical knowledge to development of new technology to solve practical problems.

The research conducted till now has covered areas such as theoretical and applied aspects of core science (physics, chemistry and mathematics), information and communication technology, electronics, electrical, artificial intelligence, machine design, manufacturing, product design, management, social sciences etc. The research projects have also acted as the training ground for the young post-graduates of our college.

6.3.5 Library, ICT and physical infrastructure / instrumentation

Physical Infrastructure

AITS has sufficient seminar Halls/e-class rooms equipped with internet and projector with seating capacity of 100~120 members, Faculty rooms, Head's chambers, Meeting rooms, Office , Class rooms ,Tutorial rooms , Boys common rooms, Girls common rooms , Systems Laboratory equipped with 1025 systems, communication Laboratory equipped with 70 systems, Research Laboratory , Library, Internet and wi-fi facility in the entire building.

Library
Printed books-titles: 9618, volumes: 49123, e-books: 1230, Journals: 100 e-Journals: IEEE, ASME, Delnet and J-Gate
 Reading facilities, CDs Newspapers
Library Committee suggested a list of books based on interaction with the students and faculty members. This list was forwarded to concerned authority for sanction and purchase of books.

ICT Infrastructure
LCD projectors , HP, Dell Desktops, HP printers, Internet switches, Dot matrix printers 20 KVS UPS, 10 KVA ups , Power Generator (250 KVA) , application software and systems software

Sports

The institute has several sports facilities like Gym Hall, Play grounds, carom boards, chess boards, badminton kits, cricket kit, TT kit, volleyball, football, etc. are available

3.6   Human Resource Management

AITS HRM encompasses

- ✓ Payroll
- ✓ Attendance (ARP solutions)
- ✓ Performance Appraisal (UGC-PBAS preform)
- ✓ Performance record

6.3.7   Faculty and Staff recruitment

Faculty

For qualitative improvement there were some changes in the recruitment. Proper advertisements were given and the faculty members were selected and appointed after going through following improved steps.

- ✓ First Step-General Interview by Principal of the Institute
- ✓ Second Step-Subject and skill interview by department experts/outside experts
- ✓ Third Step-Demonstration
- ✓ Fourth Step-Interview by Management and finalizing the selections
- ✓ Fifth step – ratification by University selection committee.

Faculty Recruitment

Faculty for Undergraduate programs is as per the staff: Student Ratio i.e. 1:15 and cadre ratio is 1:2:6 (1 Professor 2 Associate Professor 6 Assistant Professors)

Faculty for Postgraduate programs is as per the staff: Student Ratio i.e. 1:12 and cadre ratio is 1:2:0 (1 Professor 2 Associate Professor)

Qualification, eligibility criteria, pay and pay scale are as per the AICTE, UGC & state government norms

6.3.8   Industry Interaction / Collaboration

The Industry Institute Interaction Cell (IIC) at AITS is intended to be the face of the institute to the industry. It aims to facilitate the industry-institute interaction and actively promoting fresh avenues for the same. Industry interaction cell (IIC) at AITS strives to enhance industry interaction with students and bridge the gap between academic and corporate world. IIC invites thought leaders, entrepreneurs, executives and policy makers to address students thereby facilitating practical learning.

Major events organized by IIC, AITS Rajampet

- ✓ Guest lectures
- ✓ Industry visits
- ✓ Personality development and grooming sessions
- ✓ Placement sessions
- ✓ Summer Internships evaluation process
- ✓ CEO forums

6.3.9 Admission of Students

A candidate should possess the eligibility of 10+2 qualification from Board of Intermediate, Government of Andhra Pradesh with Mathematics, Physics and Chemistry as his/her optional subjects, or any other equivalent examination recognized as equivalent there to.

A student to step in four-year degree course in Engineering except NRI quota must qualify in "Engineering, Agricultural and Medical Common Entrance Test" (EAMCET), a State-Level Entrance Test conducted by the Govt. of Andhra Pradesh. Students who qualify in EAMCET entrance test will be admitted strictly on merit bases.

The Convener of EAMCET admits on merit secured in Intermediate or an equivalent examination and the rank secured in EAMCET.

The Management admits 30% candidates under the Management and NRI quota based on merit duly following the guidelines given by APSCHE.

The Convener of ECET admits 10% of the candidates from the stream of Diploma Holders the candidate should pass in diploma from Andhra Pradesh State Government or an equivalent examination.

Similarly an UG & PG student joins based on ECET, PGCET & ICET's

6.4 Welfare schemes for

Teaching	--
Non teaching	--
Students	--

6.5 Total corpus fund generated

13, 51, 81,158/-

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 Cell
Administrative	No	---	Yes	IQAC Cell

6.8 Does the University/ Autonomous College declare 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?

- ✓ End examination question paper setters are from other colleges and universities.
- ✓ Examiners for end examinations are from other colleges and universities.
- ✓ Evaluation process involves coding & decoding of answer scripts.
- ✓ Recounting and revaluation facility is provided to student.
- ✓ Award of class will be finalized based on CGPA.

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

The JNTUA University effort to bring the autonomous status for AITS is:

- ✓ To promote academic freedom in autonomous colleges by encouraging introduction of innovative academic programmes
- ✓ To facilitate new courses of study, subject to the required minimum number of hours of instruction, content and standards
- ✓ To permit them to issue their own provisional, migration and other certificates
- ✓ To deputes nominees of the university to serve in various committees of the autonomous colleges and get the feedback on their functioning
- ✓ To provide an opportunity to conduct examination more innovatively
- ✓ To Provide academic flexibility to the institute

6.11 Activities and support from the Alumni Association

An alumni meeting is conducted every year in the month of December. They regularly interact with the students to create awareness about an industry environment. Guest lecturers are also arranged for creating more awareness on industry. Alumni helps the poor students.

6.12 Activities and support from the Parent – Teacher Association

Not available. Yet to be established

6.13 Development programmes for support staff

Academic and Professional Development is drawing on the knowledge, experience and expertise of academic staff and support staff from all the departments of the Institute. Planned to complement the guidance and mentoring provided within campus premises, the Programme aims to:

- ✓ Familiarize the members of staff with key Institute policies and procedures
- ✓ Providing opportunities to potentially enhance the practice in teaching and research
- ✓ Enhance professional expertise
- ✓ Create an environment which provides the opportunity to share ideas and experiences with other academics issues in a Institute.

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

The AITS since 1998 has been making a conscious effort to establish the campus as a **'zero waste'** zone. A number of initiatives have been put in place to promote the concept of **'reduce, reuse and recycle'** and contribute mite to protecting the environment. The institute have the following eco-friendly scenarios. They are

- ✓ Waste Segregation
- ✓ Rainwater Harvesting
- ✓ Solar Energy

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.

> To promote academic excellence in the teaching and research, the management of AITS has accepted to go for the status of deemed to be university.

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

> IQAC planned the objectives for current year (2016-17) and its progress was monitored through action taken report monthly from all concerned persons. In its meeting these action taken reports were discussed and correction was done appropriately whenever it was required

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

> **1. Title of the Practice**: **Student Design Model Contest**
>
> **2. Objectives of the Practice**
>
> The main aim of this practice is to encourage the students in a direction, in which they can improve their creative skills and innovative skills and also exhibit their knowledge in the form of either a working model or study model or in the form of a chart representation of their idea about a model.
>
> **3. The Context**
>
> The students are good with their theoretical Knowledge. But it has come to the notice of faculty that they are lagging in practical implementation of designs other than the circuits they practice only the laboratory experiments. In this connection, to encourage the students to design their own creations, this student design model contest practice has been organized. They have been supported frequently by professional bodies in the institute. Also through this practice students can compete with in the present, fast growing and changing technological era, having introduced with new technologies in emerging fields or subjects. It is very much useful to the fast learning students and also it helps the students who need orientation to develop new technology and to learn evaluation process of new technology.

4. The Practice

It has been started in the year 2015 on a lower level and has been continued every year by leading to enthusiasm in the students. In the beginning the students had many apprehensions regarding the success of this practice. But through the frequent motivation by the faculty and lab technicians, those apprehensions have been overcome by the students. The Professional bodies in the institute have played a vital role in organizing this practice. They gave various volunteer teams to conduct these events. Further, the students were encouraged with appreciation certificates and also with appropriate prizes. Later, for betterment in the conduction process of these events a dedicated team of faculty has been appointed in the department. They are taking care of enlisting the interested students, selection of better among enrolled, implementation process, design and development phase and monitoring process. This Practice also leads to self-learning of students through which their confidence levels have been improved.

5. Evidence of Success

This practice, which was tested in year 2015 with a small group of individuals, has grown to 20 batches with minimum of 3 students per batch in the year 2016. The results of this practice have shown a tremendous rise in the year 2017 leading to creation of 33 models. The top 5 models among 33 were selected to compete in the district level model exhibition. After receiving positive feedback, they were selected for university level competitions. In the year 2018 this practice has led to design and develop 53 models and exhibited in the institute level competitions. Further, this practice created zeal among group of students which made their model selected for a competition titled "*Smart India Hackthon-2018*". This particular model impressed the organizers and jury members of the above said competition leading to file a patent.

6. Problems Encountered and Resources Required

Although, the practice leads to a grand success, the students found difficulty to find time to carry out this type of activities due to their academic assignments. In the beginning it was very difficult to provide them laboratory slots and equipment's. Later it has been overcome by providing flexibility for the interested students and the supervising faculty in the academic activities. The main resources require to implement the practice were the consumables and the equipment. This requirement has been provided continuously by establishing the project lab where the students and their corresponding mentors can meet and discuss about the implementation of models.

7.4 Contribution to environmental awareness / protection

AITS seeks to provide an education combining the generous arts, work and service with a strong commitment to environmental responsibility and cross-cultural understanding in a setting that promotes wisdom, spiritual growth and contribution to the common good.

AITS demonstrate its strong commitment to environmental responsibility through these commitments:

- ✓ Strive within the limits of practical considerations to conserve energy and resources, reduce waste, purchase environmentally friendly products, and minimize our adverse impact on the surrounding environment.
- ✓ Recognize and promote efforts to increase a deep, aesthetic, spiritually based awareness of our connection to the environment among the students of this institute and the larger community.
- ✓ Every year 100~200 trees are planted in the campus

7.5 Whether environmental audit was conducted?   Yes | -- | No | ✓ |

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

Strengths
- Strong/own defined Curriculum
- Team work of faculty & staff
- Quality of faculty
- Quality graduate program
- Strength of character – steadiness in the midst of difficulties, strong work ethic and commitment to quality, positive morale, commitment to seek opportunities in face of adversity
- Student environment -learning communities, programs, student organizations and clubs
- Close relationship between student and academic affairs professionals
- Atmosphere of success for faculty, staff, and students
- Produce knowledgeable graduates from rural areas with high earning power
- Workforce has a commitment to quality, dedication, positive morale, and work ethic
- students, faculty, and staff are committed to the College and community
- location in an area of natural beauty that offers many outdoor recreational opportunities

Weakness
- Greater number of behavioural problems in students
- Students dissatisfaction with some areas
- Intercampus communication
- Team spirit in faculty to be improved
- Research culture

- Research infrastructure
- Lack of long-term budget planning and a process that is transparent
- Lack of diversity
- Underutilization of and lack of organization for technology – not taking full advantage of IT potential, e.g., integration in teaching in learning and evidence of haphazard developments across campus and waste of resources

Opportunities

- Development of leaders in engineering
- Interdisciplinary growth across departments
- Practice-based research
- Increased research funding
- Joint Research Programs
- Expand and improve the effectiveness of marketing of the College.
- Increase and strengthen internal collaborations and external collaborations
- Focus on excellence with an emphasis on areas in which the College should grow
- Alternative budgeting/funding models, e.g., responsibility centre management
- Drastic changes in Higher education policies allows the College to redefine its image and mission, and further differentiate itself from other institutions
- Increase national and regional recognition

Threats

- Poor student enrolment
- Reluctant of highly qualified faculty to work at rural colleges
- Saturation of engineering education market
- Inability to recruit good faculty
- Reduced research funding
- Declining resources from the state and increasing dependence on tuition revenue
- Alternative providers, i.e., Private/Deemed universities and community colleges

8. Plans of institution for next year

Programmes planned for the year 2018-19

- Preparation of Annual action plan- Strategic Plan
- Introduce External Academic and Administrative audits
- Pedagogy Training
  - ✓ Outcome Based Education
  - ✓ Training on Blooms' Taxonomy
  - ✓ Curriculum design and development workshops etc.,

- Scheduling PAC and DAB Meetings regularly for improvements in Curriculum
- Annual faculty review
- Strengthen Quality circles in all the Departments
- Induction programme for the first year students

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