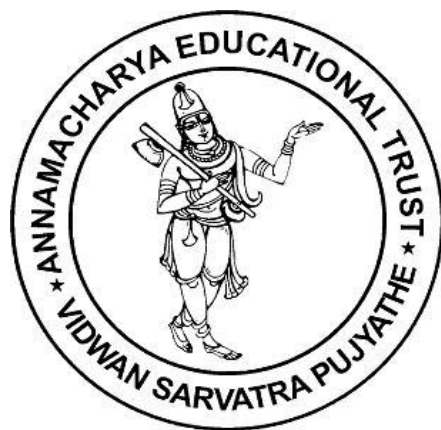# ANNAMACHARYA

INSTITUTE OF TECHNOLOGY & SCIENCES
(AUTONOMOUS)

Internal Quality Assurance Cell (IQAC)

and Submission of Annual Quality Assurance

Report (AQAR)

2016-2017

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)*

2016-2017

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 submitting on 12-12-2017**   (DD/MM/YYYY)
 iii.   AQAR_____ _____ (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 | 08 |

2.11 No. of meetings with various stakeholders: No. 03 Faculty 03

Students 02 Alumni 02 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 02

(ii) Themes | Recent developments on cloud computing and its security |

2.14 Significant Activities and contributions made by IQAC

1. IQAC is motivating teacher 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
✓ Remedial classes for slow learners ✓ Upgrade teachers knowledge based in advanced Research ✓ Training on Bloom's Taxonomy	✓ several students were benefited ✓ Teacher used modern strategies for teaching i.e. Power Point Presentation. ✓ 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
331	219	72	40	--

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
219	-	72	-	40	-	-	-	331	-

2.4 No. of Guest and Visiting faculty and Temporary faculty   26   00

2.5 Faculty participation in conferences and symposia (2016-17):

No. of Faculty	International level	National level	State level
Attended	35	54	02
Presented papers	30	27	03
Resource Persons	02	05	22

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   191

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

   Single valuation system – evaluation outside the campus

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

23	16	00

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

2.10 Average percentage of attendance of students

81%

2.11 Course/Programme wise distribution of pass percentage (2016-17):

Title of the Programme	Total no. of students appeared	Division				
		Distinctions	I	II	III	Pass %
B.Tech- EEE	123	61	26	-	-	70.73
B.Tech- ME	184	78	48	-	-	69.02
B.Tech- ECE	177	97	38	-	-	76.27
B.Tech- CSE	103	60	13	-	-	70.87
B.Tech- IT	16	04	04	-	-	50.00
B.Tech- Civil	113	57	19	-	-	67.26
M.Tech- EPE	05	05	-	-	-	100.00
M.Tech- EPS	15	14	01	-	-	100.00
M.Tech- DESC	08	08	-	-	-	100.00
M.Tech- VLSI	07	07	-	-	-	100.00
M.Tech- ES	11	11	-	-	-	100.00
M.Tech- CSE	08	08	-	-	-	100.00
M.Tech- MD	07	07	-	-	-	100.00
M.Tech- SE	19	17	02	-	-	100.00
MBA	166	140	21	-	-	96.99
MCA	19	12	02	-	-	77.78

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	13
UGC – Faculty Improvement Programme	Nil
HRD programmes	08
Orientation programmes	78
Faculty exchange programme	Nil
Staff training conducted by the university	15
Staff training conducted by other institutions	29
Summer / Winter schools, Workshops, etc.	31
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	120	18	--
Non-Peer Review Journals	--	--	--
e-Journals	114	09	--
Conference proceedings	72	42	--

3.5 Details on Impact factor of publications:

Range 0-4   Average 0.55   h-index 39   Nos. in SCOPUS 13

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. | 03 | Chapters in Edited Books | 02 |

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 | 14 |

3.13 No. of collaborations   International | 02 | National | 02 | 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 | 21, 55,000/- |

Total | 21, 55,000/- |

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
03	01	02	--	--	--	--

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

06

04

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

06

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 [15]   State level [-]

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 (33384.1 Sq.m)		Self	-
Class rooms	115	-	Self	115
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)	76,65,947/-	-	--	--
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	25986	58,80,000/-	356	1,22,464/-	26342	60,02,464/-
Reference Books	17323	39,20,000/-	245	84,280/-	1960	40,04,280/-
e-Books	1013	-	1500	-	1500	-
Journals	100	2,39,749/-	100	-	100	2,39,749/-
e-Journals	3500+	11,15,966/-	3500+	-	3500+	11,15,966/-
Digital Database	-	-	-	-	-	-
CD & Video	800+	20,000	800+	-	800+	20,000/-
Others (specify)	-	-	-	-	-	-

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart-ments	Others
Existing	881	11	100 Mbps	01	01	10	25	10
Added	-	-	10 Mbps	-	-	-	-	-
Total	881	11	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   17, 89,735/-

ii) Campus Infrastructure and facilities   9, 33, 52,845/-

iii) Equipments   45, 04,406/-

iv) Others   16, 24, 82,329/-

Total: **26, 20, 82,989/-**

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 were 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
> ✓ Grievances Re-dressal 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
3065	517	--	--

(b) No. of students outside the state

03

(c) No. of international students

Nil

Men

No	%
2350	65.60

Women

No	%
1232	34.40

Last Year (2015-16)						This Year (2016-17)					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
1108	275	36	85	02	2457	1163	243	29	826	03	2468

Demand ratio   83%   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   362

5.5 No. of students qualified in these examinations

NET   --   SET/SLET --   GATE   23   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   221

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
24	858	343	20

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   170   National level   16   International level   0

No. of students participated in cultural events

State/ University level   85   National level   25   International level   0

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

Sports: State/ University level   13   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	8,96,21,000/-
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

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 all of their focus on the teacher. The teacher talks, while the students exclusively listen. During activities, students work alone
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
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, solution of the problems with distribution of marks for different stages should be given in scheme of marking. Feedback on question paper will be 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 objectives 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 881 systems, communication Laboratory equipped with 70 systems, Research Laboratory , Library, Internet and wi-fi facility in the entire building.

Library
Printed books-titles: 9318, volumes: 48090, 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
- ✓ 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 students 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.

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 the all departments across the Institute. Planned to complement the guidance and mentoring provided within campus s premises, the Programme aims to:

- ✓ Familiarize members of staff with key Institute policies and procedures
- ✓ Providing opportunities to potentially enhance 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**:   *Promotion of Research*
>
> **2. Objectives of the Practice**
>
> - To keep pace with the relentless wheel of change and update the intellectual calibre of the faculty
> - To encourage the faculty to pursue Ph.D.
> - To acquire guide ship to produce more research scholars
> - To motivate the faculty to apply for the major and minor research projects by providing guidelines and details of funding agencies
>   To fulfill the requirements to promote the research departments into research centre's
> - To collaborate with other institutions and universities in and abroad
> - To arrange for interface among the institutions, industries and the public to take up research projects relevant for the present day
> - To encourage the faculty and the students to organize and present research papers in the national / international seminars / conferences / workshops
> - To publish quality research articles in reputed journals, edit study materials for the prescribed syllabus and author books of high originality
> - To provide seed money for research activities
> - To take steps for publishing a Research Journal

3. The Context

Since constant updating of the subject is very essential to try the untrodden paths, the teaching staffs of the college is highly conscious of quality enhancement and quality sustenance on par with the progress of technology in keeping with other autonomous institutions. The College generates knowledge for dissemination and so its main focus is on quality research. It has created a research ambience through strengthening infrastructure facilities, motivating staff members and guiding them to acquire grants from the funding agencies to launch on research undertakings - pursuing Ph.D., taking up minor or major research projects, guiding research scholars and publishing research papers and books. Challenging issues to be addressed while designing and implementing the practice:

- The great demand of the rural based students for the attention of the staff to cope with their studies
- Requiring sound knowledge of technology development
- Creation of awareness on the need for research to update the knowledge of the students and the staff at international/national standards
- Creating an interest in research in students through individual or group research projects as part of their syllabus
- Forming linkage with the industries and research centres and collaborating with them for the research projects of staff and students.

4. The Practice

The institution provides opportunities to the faculty to do Ph. D. under Part Time research privately. The College also motivates for doing major and minor projects through UGC and other funding agencies. A Research Committee under the Chairmanship of the Principal actively involves in promoting research culture among the staff and students in the campus. It sets the target for achievement in the action plan presented and submitted in the Planning and Evaluation Committee meeting every year. The attainment of the target is reviewed at the end of the academic year. Support facilities for research:

- Special consideration in the form of leave is given to the staffs that are on the verge of completing their research work.
- The visits to various Universities/websites and libraries for data collection have enriched their research.
- The management extends co-operation to the staff to go abroad for paper presentation and send proposals to UGC to avail travel grant.
- The management has decided to give financial assistance to the self finance faculty who make research publications in the journals with high impact factor.
- Rewards of teachers are based on their achievements in research. Constraints faced in the pursuit of research
- Owing to time constraint and interface, the gap between academia and industries is not adequately bridged to fulfil the needs of industries.

- The students can be further motivated to explore new areas of research and procure funds from various funding agencies.
- Students can be provided hands-on activity based research in the industries to address challenges faced in the job market.
- Extension Programme can focus on neighbourhood oriented research to solve real life problems.
- Interdisciplinary and socio-economic developmental research can be encouraged among the students and the teachers.
- Ph.D. holders can be motivated to publicize their research in the form of books.

5. Evidence of Success

The achievements in the field of research are the main indicators of excellence in research practiced at the college.

- Recently five to six staff members have successfully defended their doctoral degrees in different Universities. A good number of staff have availed the opportunities for presenting papers and publishing articles and books. 5 Minor and 2 Major Research Projects are undertaken during the assessment period. 5 staff members are University approved supervisors for guiding Ph.D. scholars. Final year UG and PG students undertake mandatory and funded, individual and group projects.
- One of Research Departments has been elevated into Research Centre.
- E-journals, INFLIBNET and Internet laboratory are added in the library.
- Additional Internet laboratory has been established for the hostel students.
- Publication of research papers in reputed journals with high impact factor evinces the keen interest of the faculty in research.

6. Problems Encountered and Resources Required

- More incentives can be given to the teachers by the institute for research activities - publications of books and papers in reputed journals.
- Refresher courses can groom teachers to take up research projects.
- Conferences and seminars can be organized for the teachers and the students to create awareness of the requirements for research - preparation of proposals, various funding agencies etc.
- International collaboration and co-operation can be sought to make research more qualitative.
- Academic audit formulates quality parameters to ascertain the quality of research of the staff and the students in each department.
- The institution is run separate laboratory along with internet in free-of-cost.
- Holistic development for all the students and faculties

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
- Dissemination of information by administration – needs to be strengthened and streamlined
- Services and office support are not adequate due to lack of necessary staff
- 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 centered 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 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
- Declining financial support for students

8. Plans of institution for next year

Programmes planned for the year 2017-18

- Preparation of Annual action plan- Strategic Plan
- Introduce Internal 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

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