Annual Quality Assurance Report

2014 – 2015

Submitted to

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.

Part – A

1. Details of the Institution

1.1 Name of the Institution

> Bannari Amman Institute of Technology

1.2 Address Line 1

> Alathukombai Post

Address Line 2

> M. Komarapalayam

City/Town

> Sathyamangalam

State

> Tamil Nadu

Pin Code

> 638401

Institution e-mail address

> stayahead@bitsathy.ac.in

Contact Nos.

> +91-4295-226000

Name of the Head of the Institution:

> Dr.D.Saravanan

Tel. No. with STD Code:

> +91-4295-226000

Mobile:

> 9842217170

Name of the IQAC Co-ordinator:

Dr.P.Sampath

Mobile:

9443003507

IQAC e-mail address:

iqac@bitsathy.ac.in

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

TNCOGN13923

1.4 **NAAC Executive Committee No. & Date:**
(For Example EC/32/A&A/143 dated 3-5-2004.
This EC no. is available in the right corner- bottom
of your institution's Accreditation Certificate)

NAAC/WH/Cert-RAR/EC (5th SC)/102/2015
dated 09.04.2015

1.5 Website address:

www.bitsathy.ac.in

Web-link of the AQAR:

http://www.bitsathy.ac.in/AQAR2014-15.doc

For ex. http://www.ladykeanecollege.edu.in/AQAR2012-13.doc

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1st Cycle	A	3.11	2009	5 Years
2	2nd Cycle	A	3.57	2015	5 Years

1.7 Date of Establishment of IQAC: 17/12/2009

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

2014-15

1.9 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 2013-14 submitted to NAAC on 31/10/2014

1.10 Institutional Status

University   State [-]   Central [-]   eemed [-]   Private [-]

Affiliated College   Yes [√]   No [ ]

Constituent College   Yes [ ]   No [√]

Autonomous college of UGC   Yes [√]   No [ ]

Regulatory Agency approved Institution   Yes [√]   No [ ]
(AICTE)

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 [ ]

Others   (Specify)   [· -]

1.12 Name of the Affiliating University *(for the Colleges)*   [Anna University, Chennai]

1.13 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	TBI
UGC-Innovative PG programmes	-	Any other (*Specify*)	-
UGC-COP Programmes			

2. IQAC Composition and Activities

2.1 No. of Teachers   16

2.2 No. of Administrative/Technical staff   2

2.3 No. of students   2

2.4 No. of Management representatives   2

2.5 No. of Alumni   2

2. 6 No. of any other stakeholder and
    community representatives   1

2.7 No. of Employers/ Industrialists   2

2.8 No. of other External Experts   1

2.9 Total No. of members   27

2.10 No. of IQAC meetings held: 4

2.11 No. of meetings with various stakeholders: No.   2   Faculty   16

      Non-Teaching Staff Students   2   Alumni   3   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. 14   International 1   National 11   State 2   Institution Level ☐

(ii) Themes

Related to information, career, recent trends in engineering and technology

2.14 Significant Activities and contributions made by IQAC

- Improvement in Teaching –Learning through CLM-RBT (Creative Learning Method –Revised Bloom's Taxonomy)
- Introduction of STEM concepts in all Courses offered
- Layered Learning method for understanding the concepts and theory
- Suggestions for setting and improvement of question papers
- Reducing the number of pages in the answer scripts
- IQAC prepared the format for feedback from students on teachers, curriculum and infrastructure.
- The IQAC has developed an online data collection system for generating department-wise Annual Quality Assurance Report (AQARs). The IQAC then consolidates the information for the submission of AQAR of the College.
- Conducted Academic and Administrative Audit in the various academic and administrative departments.

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
Conduct of Seminars & Conferences on the topics of National interest	Many seminars, workshops and conferences have been conducted during the academic year.
Enhance the Industry internship to the students through IIPC	One-month internship introduced for pre-final year during summer vacation
Conduct of Staff Training Programme	Train the faculty members on Revised Bloom's Taxonomy method for handling classes, Laboratories and setting the question paper. Training conducted by ARC and Dr. Job Kuruvilla

Activities for enhancing Placement and skill development of the students	www.careercup.com is a useful website for the students that gives tips for writing resumes, has interview questions and forum for discussion. www.civilservicecoaching.com is useful for civil service aspirants. www.civilserviceindia.com provides free online IAS coaching classes Soft skill training programmes are also given at the department level. The use of English language laboratories is encouraged with the intention of improving the language skills of the students.

* Attach the Academic Calendar of the year as Annexure.

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 is prepared based on the details collected from the University departments. Yes, AQAR was placed in statutory body meeting

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	13	Nil	13	Nil
PG	14	1	15	Nil
UG	13	1	14	Nil
PG Diploma	Nil	Nil	Nil	Nil
Advanced Diploma	Nil	Nil	Nil	Nil
Diploma	Nil	Nil	Nil	Nil
Certificate	Nil	Nil	Nil	Nil
Others	Nil	Nil	Nil	Nil
Total	40	2	42	Nil

Interdisciplinary	-	-	-	-
Innovative	-	-	-	-

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

- CBCS introduced in the Institution from 2015-16
- Life skill courses introduced from III-VI semesters
- Introduction of Mathematics, Physics and Chemistry Electives
- Introduction of Fast Track System to enable the students to undergo a semester-long internship or special training.
- Introduction of additional value added courses and special courses
- Introduction of additional elective courses
- Recommendations of UGC

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	42
Trimester	Nil
Annual	Nil

1.3 Feedback from stakeholders* Alumni ✔ Parents ✔ Employers ✔ udents ✔
(On all aspects)

Mode of feedback : Online ✔ Manual ✔ Co-operating schools (for PEI) ☐

Please provide an analysis of the feedback in the Annexure-A

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

> 1. 2015 Regulation and Curriculum for UG and PG all Programmes
> 2. Introduced new electives in curriculum, one- credit courses and revision of Lab experiments in existing curriculum.
> 3. The curriculum gives emphasis on major projects where students are expected to develop a real-time industrial applications/ module required for the industry. Hence students are exposed to industrial environment.
> 4. Case studies are included in the syllabus so that students are involved in the learning process and this would make learning effective
> 5. Application of Current technology is emphasised in the departments

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

> 1. B.E. Agricultural Engineering with Sanctioned intake of 60
> 2. M.E. Industrial Automation and Robotics Engineering with sanctioned intake of 18

Criterion – II
2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others*
470	374	39	38	19

*Language techer, Placement ofiicer, Physical Director, Yoga Teacher etc.,

2.2 No. of permanent faculty with Ph.D.   140

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
100	-	5	-	2	-	11	-	118	-

2.4 No. of Guest and Visiting faculty and Temporary faculty   1

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	30	107	17
Presented papers	99	96	-
Resource Persons	1	8	11

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

- An interesting and informative method of teaching Creative Learning Methodology (CLM) with Revised Bloom's Taxonomy (RBT) is adopted in the Institute. It ensures self learning, peer learning, and group learning.
- Usage of NPTEL materials
- Increased access to latest knowledge through the library and on-line subscribed books and journals.
- Need based institutional/Industrial visits and field trips are also introduced.
- Induction program in the first week of the reopening of the College to introduce the students about various facilities available in the college, optional and elective papers for their choice and availability of various forums and clubs for their extracurricular activities is also undertaken.
- Special coaching for competitive exams –GATE, BEC
- Introduction of Foreign Languages-Chinese, French and Japanese

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

211 days (108 days in Odd Semester+103 days in even semester)

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

- CCD cameras are used to monitor the examination process in the COE office.
- Innovative presentations/ simulation based assignments are given by the faculty to the students and are evaluated on a periodical basis
- Dummy number system is introduced in the valuation of papers
- Photocopies of answer scripts are given to students on request and on payment of a nominal fee
- Online Multiple Choice Questions in Periodical tests

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop.

All the teachers of the institute are involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

2.10 Average percentage of attendance of students

92.33

2.11 Course/Programme wise distribution of pass percentage:

Results of the examinations conducted during Nov – Dec 2014 and April- May 2015are furnished below.

Undergraduate

S No	Discipline	2014 - I Sem	2014 - III Sem	2014 - V Sem	2014 - VII Sem	2015 - II Sem	2015 - IV Sem	2015 VI Sem	2015 - VIII Sem
1	Aeronautical Engineering	72.92	55.77	81.54	92.96	50	53.85	73.44	90.14
2	Automobile Engineering	56.14	-	-	-	53.57	-	-	-
3	Civil Engineering	61.68	38.97	60.71	95.74	53.27	47.37	62.86	79.43
4	Computer Science and Engineering	75	75.14	83.41	92.25	72.94	75	80.69	97.18
5	Electronics and Communication Engineering	72.69	60.24	87.68	86.76	69.91	57.32	77.25	97.79
6	Electrical and Electronics Engineering	72.45	61.11	83.33	97.86	70.41	67.46	88.97	95.68
7	Electronics and Instrumentation Engineering	65.63	54.92	95.77	98.55	58.95	49.17	80.28	-
8	Mechanical Engineering	64.32	59.48	74.19	83.33	54.72	47.76	77.88	91.57
9	Mechatronics	66.98	57.14	76.81	-	55.66	58.57	72.06	-
10	Biotechnology	77.53	81.48	92.73	98.15	86.36	80	89.09	98.15
11	Information Technology	57.8	74.53	83.33	87.41	70.37	81.9	77.42	100
12	Textile Technology	48.08	42.59	93.33	81.54	47.06	48.15	80	89.23
13	Fashion Technology	50	70.37	93.55	96.77	61.54	59.26	96.77	-

Postgraduate

S No	Discipline	% Pass 2014 – I SEM	% Pass 2014 - III SEM	% Pass 2015 - II Sem	% Pass 2015 - IV Sem
1	Applied Electronics	100	100	95	100
2	Communication Systems	100	100	93.33	100
3	Computer Science and Engineering	100	100	-	100
4	Power Electronics and Drives	80	94.12	92.86	100
5	Software Engineering	88.89	94.74	-	100
6	Structural Engineering	94.44	100	88.89	100
7	VLSI Design	95	100	85	100
8	Engineering Design	82.35	100	94.12	100
9	Embedded Systems	100	100	80	100
10	CAD/ CAM	100	100	-	100
11	Biotechnology	100	100	100	100
12	Instrumentation Engineering	91.67	-	58.33	-
13	Industrial Safety Engineering	92.31	-	-	-
14	Master of Business Administration	67.27	86.44	94.44	100
15	Master of Computer Applications	-	56.1	-	72.5

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

The Department Advisory Board (DAB) as the part of NBA requirements takes care in the formation of Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Course Outcomes (COs) for the Programmes offered. The IQAC through these Boards review the course content, teaching methods, completion of syllabus and assessment methods and provide regular feedback to respective Board of Studies.

2.13 Initiatives undertaken towards faculty development:

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	102
UGC – Faculty Improvement Programme	16
HRD programmes	201
Orientation programmes	40
Faculty exchange programme	6
Staff training conducted by the university	1
Staff training conducted by other institutions	85
Summer / Winter schools, Workshops, etc.	269
Others	379

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	119	-	21	-
Technical Staff	124	-	15	-

Criterion – III

3. Research, Consultancy and Extension

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

1. Formation of Research Committee and Research Advisory Board to promote the research activities
2. Process of promoting the research culture among the faculty and students encouraged by the Management
3. Identification of thrust areas for research
4. Establishment of 13 Collaborative Centres for Research
5. 10% of total budget allocation for research and development activities
6. Seed money of Rs 2 Crores to promote innovative and inter-disciplinary research projects granted by the management every year
7. 2.5% of grant-in-aid is awarded as incentive for Funded Research Projects by the Management
8. Faculty / Students given On –Duty Permission for attending workshops/ conferences / Part time Research works
9. Promoting research activities and providing financial assistance for registration , TA etc to participating faculty members
10. Departments provided with secretarial assistance to prepare research proposal
11. Organization of National level project design contest every year for intercollegiate students and cash prizes of Rs 2 lakhs awarded to adjudged winners

3.2   Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	25	26	8	30
Outlay in Rs. Lakhs	175	370.48	172	304

3.3   Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	14	-	-	-
Outlay in Rs. Lakhs	105	-	-	-

3.4   Details on research publications

	International	National	Others (State)
Peer Review Journals	208	13	-
Non-Peer Review Journals	205	-	-
e-Journals	1	-	-
Conference proceedings	76	146	1

3.5 Details on Impact factor of publications:

Range 0.149-2.637   Average 1.393   h-index 72   Nos. in SCOPUS 45

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

S.No	PI / Co-PI Name	Project Title	Funding Agency	Amount (Rs.)	Year
1	Dr.K.Subramanian	Synthesis Of New polymer Drug Carriers and Correlation Of Polymer Structure With Drug Release Efficacy	DBT/BT	1459800	2008
2	Dr.D.Saravanan	Scale up Process of Single Stage Process for Preparation and Finishing of Cotton Fabrics Using Enzymes	DBT/FT	493000	2011
3	Dr.P.S.Vijayanand	Synthesis And Characterization of Novel Conducting Polymers As Energy Efficient Materials	CSIR	1140000	2012

S.No	PI / Co-PI Name	Project Title	Funding Agency	Amount (Rs.)	Year
4	Dr.R.Harikumar	Non Invasive photo plethysmographic Based Glucometer for mass Screening of Diabetes	ICMR	981820	2012
5	Dr.Malathi Mahalingam	Dipod,tripod and tetrapod quinoline fluorescent chemosensors for transition metal ions-Preparation,characterization and binding analysis	SERB	2525000	2012
6	Dr.MLN Madhu Mohan	Synthesis and Characterization of Nano Liquid Crystalline Materials	DAE	1196250	2012
7	Dr.K.Premalatha	Clugene : A Clustering Tool for Gene Expression Data	DBT	1066000	2012
8	Dr.Arunava Das	Molecular Characterrization and Evalution of Antibacterial Property of Novel Bacteriocin useful for Biopreservation and Contrlo of Bovine Mastitis	AICTE - RPS	959900	2012
9	Dr.K.Sivakumar	Industry Institute Partnership Cell Scheme	AICTE - IIPC	775000	2013
10	Dr.K.Sivakumar	Investigation on the Performance of Electric Discharge Machining Using CrB2-CU Electrode	AICTE - RPS	2130000	2013
11	Dr.S.Valarmathy	Development of Software to increase the data availabilty and security in the could computing enviorement and recover data from disater	AICTE - RPS	940000	2013
12	Dr.D.Sharmila	Automation of level control of non - liner tanks (Spherical and Conical)	AICTE - RPS	820000	2013
13	Dr.P.Sampath	Design and Implementation of Analog Beamforming System Using Microstrip Conformal Phased Array Antennas for Novisive Brieast Cancer Detection	AICTE - RPS	1200000	2013

S.No	PI / Co-PI Name	Project Title	Funding Agency	Amount (Rs.)	Year
14	Dr.R.Perumalraj	Design and Development of Electro Static Discharce tester for Textile materials	AICTE - RPS	700000	2013
15	Dr.N.Arunachalam	Development of Innovative Building blocks	TNSCST	200000	2013
16	Dr.B.A.GowriShankar	Toxin and Voltage gated sodium channel interactions : A Study on structure activity relationship	DST - BT	382100	2013
17	Dr.B.A.GowriShankar	Toxin and Voltage gated sodium channel interactions :a bioinformatic approach of structure - activity relationships	DST - BT	2901000	2013
18	Dr.P.Thangaraj	Modernization of Mobile & Pervasive Computing Laboratory	AICTE - MODRO BS	800000	2013
19	Dr.P.Sengottuvalan	Development of Personalised and Performance based E-Learning tool for existing E-Resources	DIT	1190000	2013
20	Dr.K.Sivakumar	Industry Institute Partnership Cell Scheme	AICTE - IIPC- II	755000	2013
21	Dr.K.Subramanian	Liquid Chromatography for Biomolecules Characterization	AICTE - MODRO BS	1240000	2013
22	Dr.P.Thangaraj	Proposal for creation of interactive and brainstorming Math portal	DST - CSE Dept - II	927000	2013
23	G.Anusha	Modernization of Concrete Laboratory and Structural Engineering Laboratory	AICTE - Modrobs	1005000	2013
24	Dr.K.P.KANNAN	Endophytic Fungi From Medicinal Plants of Sathyamangalam Forest As A Source of Medicinally important Biomolecules with Special reference to Camptothecin and Optimizayion of Technology Transfer to Industries	DRDO - BT	1111800	2013

S.No	PI / Co-PI Name	Project Title	Funding Agency	Amount (Rs.)	Year
25	Dr.V.N.Vijayakumar	Efficient optical and energy storage assets of hydrogen bonded supramolecular liquid crystals	DST	1915000	2014
26	Dr.Arunava Das	Career Award for Young Teachers	AICTE-CAYT	150000	2014
27	Dr.R.Ravikumar	Development of an intensive and novel technology for ethanol production using fibrous cotton waste from textile mills in and around Coimbatore	TNSCST	467000	2014
28	Dr.R.Ravikumar	Development of Novel and Intensified metabolic biorefinery Technology for sustainable ethanol production impregnating societal needs	DST(SERB)	4182200	2014
29	Dr.R.Bharanikumar	An Optimal Design of Axial Flux Permanent Magnet Generator for Low Speed Direct Drive Wind Turbine Applications	MNRE	2300000	2015
30	Dr.Sanjoy Deb	An experimental study on elephant seismic communication to reduce human elephant conflict	World Wide Fund for Nature (WWF)	197000	2015
31	Dr.P.Thangaraj	Center for Industrial Automation and Data Analysis (CIADA)	AICTE - RESEARCH PARK	10000000	2013
32	Dr.R.Perumalraj	Establishment of Advanced Garment Construction Laboratory	AICTE - MODrobs	1040000	2015
33	Dr.Sanjoy Deb/ ECE	Road kill prevention system	Rufford Foundation	226000	2015

S.No	PI / Co-PI Name	Project Title	Funding Agency	Amount (Rs.)	Year
34	Dr.R.V.Nataraj/IT	Google Network Infrastructure support Project	Google	Total Cost: 69Lakhs Google Contribution: 29.35 Lakhs	Aug 2014 - Feb 2015
			Total Cost	542,75,000	

3.7 No. of books published   i) With ISBN No. [3]   Chapters in Edited Books [2]

ii) Without ISBN No. [-]

3.8 No. of University Departments receiving funds from

UGC-SAP [ ]   CAS [ ]   DST-FIST [ ]

DPE [ ]   DBT Scheme/funds(DST) [✓] -

3.9 For colleges   Autonomy [✓] -   CPE [ ]   DBT Star Scheme [ ]

INSPIRE [ ]   CE [ ]   Any Other (specify) [ ]

3.10 Revenue generated through consultancy   [Rs.2.09 Lakhs]

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	1	13	2	-	-
Sponsoring agencies	-	AICTE, CSIR, DRDO & BIT	-	-	-

3.12 No. of faculty served as experts, chairpersons or resource persons - 26

3.13 No. of collaborations   International [1]   National [47]   Any other [1]

3.14 No. of linkages created during this year   [48]

3.15 Total budget for research for current year in lakhs :

From Funding agency   Rs.136.59 Lakhs

From Management of University/College   Rs.248.54 Lakhs

Total   Rs.385.13 Lakhs

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	9
	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
6	-	5	1	-	-	-

3.18 No. of faculty from the Institution   [70]
    who are Ph. D. Guides
    and students registered under them   [269]

3.19 No. of Ph.D. awarded by faculty from the Institution   [21]

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

JRF [8]   SRF [ ]   Project Fellows [ ]   Any other [ ]

3.21 No. of students Participated in NSS events:

University level [-]   State level [200]

National level [-]   International level [-]

3.22 No. of students participated in NCC events:

University level	-	State level	-	
National level	5	International level		

3.23 No. of Awards won in NSS:

University level	-	State level	1	
National level	-	International level	-	

3.24 No. of Awards won in NCC:

University level	-	State level	-	
National level	2*	International level	-	

* Runner Prize and as guard for the Commanding Officer

3.25 No. of Extension activities organized

University forum	-	College forum			
NCC	18	NSS	4	Any other	

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

S.No	Date	Event
1	14th June 2014	World blood donation day awareness programme
2	26th June 2014, 13th Sep 2014, 15th Nov 2014, 30th March 2015	Blood donation camp
3	14th July 2014	Rally on eye safety awareness
4	20th July 2014	Village campaign - Kundri
5	21st July 2014	Seminar on road safety awareness
6	13th Aug 2014	Eye donation registration
7	24th Sep 2014	NSS day
8	8th, 9th and 10th Oct 2014	16th Futura - ODAC
9	6th, 7th and 8th Nov 2014	Voter ID registration
10	25th Dec, 2014	Burgur village visit

11	27th Dec, 2014	Cleaning campaign at kalyana perumal temple
12	11th Jan 2015	Survey for special camp
13	23rd Jan 2015	Voters awareness oath and seminar
14	29th Jan 2015	Female infanticide awareness rally
15	21st Feb 2015 to 27th Feb 2015	Special camp at Kaliyappagoundanpudur and Vettuvanpudur
16	9th March 2015	Dengue awareness rally
17	17th and 18th March 2015	Sevayatra - symposium
18	23rd March 2015	World water day awareness to village people
19	7th April 2015	Celebration of World Health Day

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	180 Acres	-		180 Acres
Class rooms	107	38		145
Laboratories	243	16		259
Seminar Halls	4	5	Management	9
No. of important equipments purchased (1-0 lakh) during the current year.	289	18		307
Value of the equipment purchased during the year (Rs. in Lakhs)	292.00	171.16		463.16

4.2 Computerization of administration and library

- RFID based entry
- In Learning Centre- all the textbooks affixed with RFID tags for unique identification
- OPAC is used to check the location and availability of books
- Self check-out kiosk installed for issuing books
- Return of books made easier round- the- clock through the drop box placed outside the library
- SMS sent to mobile on return of books
- RFID based store verification process

4.3 Library services:

	Added Last year		Newly added		Total	
	No.	Value (Rs.in Lakhs)	No.	Value (Rs.in Lakhs)	No.	Value (Rs.in Lakhs)
Text Books	63000	35	5879	26.48	68879	61.48
Reference Books	-	-	-	-	-	-
e-Books	-	-	-	-	-	-
Journals	387	17.32	376	17.20		34.52
e-Journals	6184	46.94	10	48.26		95.2
Digital Database	-	-	-	-	-	-
CD & Video	6269	-	-	-	-	-
Others (specify)	144	-	-	-	-	-

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart-ments	Others
Existing	1937	30	100Mbps	2	1	1	14	-
Added	200	6	100Mbps	-	-	-	1	-
Total	2137	36	200Mbps	2	1	1	15	-

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

- CLOUD computing facility
- Wi-Fi facility provided in the hostels
- 100 Mbps Internet has been provided to the students
- Campus intranet facility comprises intranet web services, mail services, file sharing, print services and Database services.

4.6 Amount spent on maintenance in lakhs :

i) ICT — Rs.38.32 Lakhs

ii) Campus Infrastructure and facilities — Rs.131.39Lakhs

iii) Equipments — Rs.34.65 Lakhs

iv) Others — Rs.146.34 Lakhs

Total : Rs.350.70 Lakhs

Criterion – V
5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

> - Good governance is vital for both to gaining and maintaining public trust. It ensures that all stakeholders including students, Faculty and Management have full confidence and trust in the Institution.
> - Facilitating learner eccentric environment to impact quality education
> - Arrangement of feedback response from students, parents, and stakeholders

5.2 Efforts made by the institution for tracking the progression

> - Regular meeting of Heads of the Departments by the Principal
> - Department level meetings with the members of faculty by the Heads of the Departments
> - Meetings of the Co-ordinator, DAB with the faculty members
> - Need based meetings of the teachers with the parents
> - Feedback from students, alumni, peer Academic members, Industry Personnel and parents

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
5384	748	20	-

(b) No. of students outside the state

57

(c) No. of international students

-

Men
No	%
3759	61

Women
No	%
2394	39

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
210	626	15	4342	9	5202	246	666	15	5199	6	6132

Dropout % - 0.001%

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

> Regular GATE coaching classes have been conducted in the respective departments.

No. of students beneficiaries   157

5.5 No. of students qualified in these examinations

NET [ ]   SET/SLET [ ]   GATE 17   CAT [ ]

IAS/IPS etc 1   State PSC [ ]   UPSC [ ]   Others [ ]

5.6 Details of student counselling and career guidance

> Students have been given regular guidance on the career options, based on their interests. All Government Exam updates have been given to the students.

No. of students benefitted   6132

5.7 Details of campus placement

On campus			Off Campus	Total
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed	Number of Students Placed
82	1400 (UG+PG)	951	3	954

5.8 Details of gender sensitization programmes

09.02.2015	Guest Lecture on Self Defense	Women Development Cell
19.02.2015	Awareness Program on Child Poverty	Women Development Cell
19.02.2015.	Youth Leadership program	Women's Development Cell on About 700 girl students and 25 lady faculty member attended the meeting.
09.03.2015	Women's day celebration	Dr. C. Kannaki Uthraraj, Director, The Fertility Centre, Kovai Medical Centre Hospital, Coimbatore V. Malini, Project Manager, Honeywell Technology Solutions, Bengaluru D. Periya Nayaki, Life Skills and Health and Wellness Teacher, Chennai

5.9 Students Activities

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

State/ University level | 106 | National level | 252 | International level | 2

No. of students participated in cultural events

State/ University level | 21 | National level | - | International level |

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

Sports : State/ University level | 17 | National level | 29 | International level |

Cultural: State/ University level | 4 | National level | | International level |

5.10 Scholarships and Financial Support

	Number of students	Amount in Rs.
Financial support from institution	70	8,82,500
Financial support from government	2683	2,06,24,035
Financial support from other sources (Friend of Friendless-FOF)	101	11,99,981
Number of students who received International/ National recognitions	1 (CSE)	70,000

5.11   Student organised / initiatives

Fairs   : State/ University level | - | National level | 14 | International level | 3

Exhibition: State/ University level | 2 | National level | 2 | International level | -

5.12   No. of social initiatives undertaken by the students | 20 |

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

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

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THE VISION
- To reach the highest, the ultimate phase of intellectual development, the zenith of learning - the Omega
- To walk tall, take on the world with confidence
- To conquer ignorance and pursue excellence in our goal to always 'stay ahead'
- To draw the strength from the power of the Omega and to create leaders for tomorrow's world

THE MISSION
- To equip the students with sound technical knowledge and skill
- To offer an educational programme with a plethora of innovative concepts for creating a host of talented professionals
- To foster an open student - oriented culture and perhaps even more important, an understanding of students, their needs, goals and aspirations
- To develop exceptional opportunities for study and research and system of industry - Institution interaction, through industry liaison cells, for students to contribute to our nation's economic growth
- To evolve a friendly face of education with emphasis on engineering, technology, and research

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6.2 Does the Institution has a management Information System

<div style="border:1px solid">

YES.

- Administrative procedures including finance (Financial Accounting System (FAS))
- Student admission
- Student records (Camps Software)
- Evaluation and examination procedures (Result processing Software)
- Research administration (Intranet)
- Others (Google drive/Cloud, CAMPS and OPAC)

</div>

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

6.3.1 Curriculum Development

<div style="border:1px solid">

Experts from Industries, Academia, and Alumni were consulted for Board of Studies Meeting twice a year and their suggestions are included and approved by in Academic Council Meeting.

</div>

6.3.2 Teaching and Learning

- Creative Learning Methodology (CLM) with Revised Bloom's Taxonomy (RBT) and Layered Learning methodology propose a very interesting and informative concept of teaching which has been followed in the Institute.
- It ensures self learning, peer learning, and group learning.
- NBA Outcome Based Education (OBE) has been incorporated in the syllabi.

6.3.3 Examination and Evaluation

- Multiple choice questions (20 marks) for UG programme
- One compulsory question (12 marks) for PG programme
- Dummy numbering system introduced for answer scripts

6.3.4 Research and Development

- Weight is given for promotion to those who guide research works and/or do research work. All eligible faculty are encouraged to pursue Ph.D. programmes either in the college or outside the college
- Whenever needed, funds are provided for the purchase of equipment required for research works
- Faculty members sponsored for Doctoral Programme are given on-duty leave for a period of 2 months besides complete reimbursement of registration, tuition and examination fee for 3 years
- Necessary TA & DA are granted to members of faculty for attending Seminars / Conferences / Short Courses in India. Grant of registration charge and soft loan for travel to attend International Conferences abroad
- Mentoring programme to all the faculty members by external experts to improve the research activities in the Institute
- 2.5% of grant-in-aid is awarded as incentive for Funded Research Projects by the Management

6.3.5 Library, ICT and physical infrastructure / instrumentation

Library:
- Electronic Security Gates are installed in the library to detect the authorised books
- This automated system registers each transaction based on item and members ID.

ICT:
- Online tests conducted
- Students feedback and analysis by online
- Firewalls installed to prevent the use unauthorised websites

Physical infrastructure:
- CCTV and security systems provided in main entrances and important places

6.3.6 Human Resource Management

- Training for faculty members by external experts in various skill enhancing programmes like Personal Effectiveness Program (PEP), RBT training and Faculty Development Programme (FDP)
- Attending workshops whenever conducted for FDP
- Yoga classes for the faculty members

6.3.7 Faculty and Staff recruitment

The Faculty Recruited is as follows

- M.E./ M.Tech: 84
- Ph.D.: 25
- Others: 9

6.3.8 Industry Interaction / Collaboration

40 Memorandum of Understanding (MoU) signed with industries for student's internship, projects and mini projects.

6.3.9 Admission of Students

- Admission is not controlled by the Institution. Students are admitted through Single Window System of TNEA by ANNA UNIVERSITY Chennai
- Association of Management of Coimbatore Anna University Affiliated Colleges

6.4 Welfare schemes for

Teaching	• Maternity Leave provided • Fully furnished rent free Staff Quarters are provided for the eligible faculty members • Permission for part time Ph D provided to enhance research works of faculty
Non teaching	• Basic Software training was provided. • Compensation leave provided for working beyond college hours
Students	• Scholarships-SC/ST, BC and Friend of Friendness • Flexible tuition fee payment

6.5 Total corpus fund generated

-

6.6 Whether annual financial audit has been done Yes ✓ No ☐

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	TUV NORD	Yes	Steering Committee
Administrative	-	-	Yes	Auditor

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?

Question papers along with answer keys have been collected with two sets. The end semester examination answer scripts were given dummy numbers and evaluation by central evaluation board consisting of external and internal examiners as per the Anna University guidelines.

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

- Regular meetings are conducted as per the statutory requirements

- Reunion meet is conducted once in a year

- Feedback and suggestions have been received regarding the choice / selection of resource persons from industry for Guest Lectures, seeking expertise in Curriculum improvement and finding suitable experts for one-credit courses

6.12 Activities and support from the Parent – Teacher Association

- Information is sent to parents regarding attendance and failures

- Suggestions in improving the studies of the students discussed and feedback received

6.13 Development programmes for support staff

The following Training programmes conducted

- Basic Fire Safety and Emergency Preparedness

- MS Office

- Utilization of Sub- Stores System

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

Initiatives were taken to create healthy ambience in and around the campus. They are:

- Tree plantation
- Water management
- Sewage treatment
- Use of biogas
- Use of solar energy
- Use of vegetables from organic farming in Hostel mess
- Reduced usage of papers by automation
- Vermicomposting for waste disposal

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.

- Guidance and counseling system is in vogue to assess the needs of each student and take remedial measures.

- Induction and CLM orientation programme for faculty members to improve quality of classroom delivery and improvement of various soft skills. Optional Industrial training during vacation for teachers.

- Google drive is used for effective usage of course materials

- CAMPS software updates class advisor with students daily hour attendance

- Wi- Fi facilities

- Hostel Digital Library

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

Action Taken Report – 2014 – 2015

S No	Date of Meeting	Points Discussed	Proposed by	Action Taken
1.	11.04.2014	Individual departments should contact at least 12-15 core companies related to their discipline for placement of students.	Dr. K. Sivakumar	Implemented and under progress
2.	15.07.2014	To enhance the practical exposure of faculty members by undergoing industrial training / workshops/FDPs	Dr. A.M. Natarajan Chief Executive	Faculty members are undergoing training in various industries continuously
3.	20.01.2015	All the faculty members to utilize the e-learning materials of NPTEL,NITTT and extend e-learning and evaluation in PG Programmes.	Dr. N.Rengarajan	Faculty members are referring the materials for preparing the lecture notes as per RBT format.

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

> **Practice I**
> • ICT Based Teaching – Learning
> **Practice II**
> • Decentralisation and Delegation of Power – Apex Committee

7.4 Contribution to environmental awareness / protection

> • Waste water from hostels recycled through sewage treatment plant and used for gardening.
>
> • Solar Power Generation (600kWh)

7.5 Whether environmental audit was conducted?   Yes ✔   No ☐

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

Bannari Amman Institute of Technology participated in the surveys conducted by leading National magazines and secured the following awards and rankings:

1. The Institute is Re-accredited with a CGPA of 3.57 on a four point scale with A Grade

2. The Society for Educational and Entrepreneurship development honour BIT with Sustainable Institute Industry Partnership Award 2015 for recognizing the outstanding work done by the Institution in establishing effective partnership with Industries

3. Secured 6th rank in the Dataquest Survey 2015

4. Secured 40th rank in Top 100 Engineering Colleges survey 2015 conducted by OUTLOOK Magazine

5. 5S Excellence Award 2014 for Strong Commitment from CII - Southern Region

6. Ranked as "South Stars - A3" amongst the B-Schools of South India by Business Standard and Indian Management, October 2014

7. Ranked 50th among the "India's Best B-Schools 2015" by Careers360

8. Plans of institution for next year

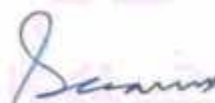| Parameter for Qualify Enhancement	Target
Curricular Aspect	To revise curriculum with more focus to practical courses.
	To encourage faculty members to pursue Ph D and increase the strength of Ph D holders from 30% to ~ 35%.
	To improve the interaction with alumni and industry-experts to improve the curriculum.
Teaching-Learning & Evaluation	To effectively utilize the e-learning materials of NPTEL, NITTT&R and extend e-learning and evaluation in PG programmes.
	Use 14 point indicators to motivate and monitor the performance of the students.
	To enhance the teaching skills of the faculty members through CLM –RBT orientation programme.
	To enhance the practical exposure of faculty members through internship training / workshops / FDPs.
	Motivating the faculty members to pursue Ph D on part-time / full time basis with monetary benefits.
Research, Consultancy &	To publish 30% more research papers in the 'Scopus' journals.

Parameter for Qualify Enhancement	Target
Extension	To submit proposals to various funding agencies.
	To enhance consultancy and testing services offered by the Institute.
Infrastructure and Learning Resources	To enhance the server facilities for more data storage and improve MIS and report generation.
	To complete the construction of new blocks for ECE and Mechatronics
Student Support and Progression	To provide coaching to the students for GATE / GRE / IELTS / TANCET / MAT / CAT Examinations. To offer French language
	To submit proposals to seek funds for students projects.
	To start Community Radio to harness creativity of the students.
Governance and Leadership	To provide mentoring support to the faculty members.
	To motivate the faculty members to pursue higher studies and arranging skill upgradation programmes to non-teaching staff members.
	To inculcate ethical responsibilities among the students through in-house programmes and club-activities.
	To facilitate IPR creation to the students, executing novel projects.
	To undertake the developmental activities of the nearby schools by providing training / providing access to the resources.
	To offer more services through community radio for the benefit of the local public.
Innovative Practices	To empower the students to organize departmental events and FUTURA.
	To maintain the gender balance in the faculty and non-teaching staff members.
	To conduct Beginners Programme (induction programme) to the newly recruited staff members.

Name __Dr. P. SAMPATH__   Name __Dr. D. SARAVANAN.__

Signature of the Coordinator, IQAC   Signature of the Chairperson, IQAC