KARUNYA INSTITUTE OF TECHNOLOGY AND SCIENCES

Karunya Nagar, Coimbatore – 641 114, Tamilnadu, South India.

ANNUAL QUALITY ASSURANCE REPORT

(AQAR)

For the Academic year 2016-17

Submitted to

National Assessment and Accreditation Council

(NAAC)

P.O.Box: 1075, Nagarbhavi
Bangalore 560 072.

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

AQAR for the year *(for example 2013-14)* | 2016-17

1. Details of the Institution

1.1 Name of the Institution | Karunya Institute of Technology and Sciences

1.2 Address Line 1 | Karunya Nagar

Address Line 2 | Mathuvarayapuram

City/Town | Coimbatore

State | Tamil Nadu

Pin Code | 641114

Institution e-mail address | vc@karunya.edu

Contact Nos. | 0422-2614310, 9487846504

Name of the Head of the Institution: | Dr. E.J. James
Vice Chancellor

Tel. No. with STD Code: | 0422-2614310

Mobile:

9487846504

Name of the IQAC Co-ordinator:

Dr. D. Tensing

Mobile:

9487846515

IQAC e-mail address:

Head_iqac@karunya.edu

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

TNUNGN11129

OR

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)

EC (SC)15/A&A/76.1

1.5 Website address:

www.karunya.edu

Web-link of the AQAR:

http://www.karunya.edu/aboutus/aqar16-17.html

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	B	2.70	2014	5 years
2	2nd Cycle	B	2.91	2016	5 years*
3	3rd Cycle				
4	4th Cycle				

*Re-assessment.

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

01.5.2004

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.   AQAR2015-16 submitted to NAAC on 17.09.2016
   ii.   AQAR2014-15 submitted to NAAC on 29.09.2015
  iii.   AQAR 2013-14 submitted to NAAC on 31.10.2014
  iv.   AQAR 2012-13 submitted to NAAC on 28.09.2013
   v.   AQAR 2011-12 submitted to NAAC on 29.09.2012
  vi.   AQAR 2010-11 submitted to NAAC on 28.09.2011

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)* | Deemed to be University |

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

Autonomy by State/Central Govt. / University

-

University with Potential for Excellence

-

UGC-CPE

-

DST Star Scheme

-

-

UGC-Special Assistance Programme DST-FIST

-

Applied

UGC-Innovative PG programmes

-

Any other (*Specify*)

-

UGC-COP Programmes

-

2. IQAC Composition and Activities

2.1No. of Teachers

7

2.2 No. of Administrative/Technical staff

9

2.3 No. of students

3

2.4 No. of Management representatives

1

2.5 No. of Alumni

2

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

2

2.7 No. of Employers/ Industrialists

1

2.8 No. of other External Experts

1

2.9 Total No. of members

26

2.10 No. of IQAC meetings held

1

2.11 No. of meetings with various stakeholders: 705 Faculty 132

Non-Teaching Staff 38 Students 447 Alumni 30 Others 58

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. 287 International 11 National 63 State 9 Institution Level 204

(ii) Themes

> 1. Next Gen Genomics & Bioinformatics, Protein Structure Modelling and Its Validation using Python Programming
> 2. Detection of Biomolecules and Its Visualization
> 3. Clinical Data Management- Careers and Opportunities
> 4. Protein Structure Modelling and Its Validation using Python Programming
> 5. Graph theory and engineering
> 6. Current trends in quality indices, Nutraceuticals and functional products Composites, Fuel Cells, Biomass
> 7. Research Challenges in Smart Power and Energy Management System
> 8. Engineering applications to solve human problems on shelter, water, food, health & energy
> 9. Rehabilitation of Structures
> 10. Foundation Engineering
> 11. Green building and LEED rating System
> 12. Trends in Urban Planning and Environmental Health Management Using GIS
> 13. Environmental Science and Climate Change
> 14. Industrial Needs for Civil Engineers
> 15. Practical aspects of Civil Engineers
> 16. Application of Geospatial Technologies in Sustainable Natural Resources Management
> 17. Structural Health Assessment Using Non Destructive Testing Techniques
> 18. ISRO satellite remote sensing for Environmental application in collaboration with Regional Remote Sensing Centre (ISRO), Bengaluru
> 19. Disaster Resistance, Management and Mitigation
> 20. Environmental Issues with Special Reference to Air Pollution
> 21. Simulation based training on Electrical Machine design using FEM Software
> 22. Material Characterization Techniques
> 23. Recent trends in biomedical instrumentation
> 24. Industrial Automation
> 25. Instrumentation, control and signal processing
> 26. Embedded system
> 27. Analog electronics
> 28. Arduino and interfacing
> 29. LabVIEW

30. Big data and Cloud Computing
31. Women as sculptors and architects: Call for change
32. Networking and communication systems
33. Emerging Trends in Biosciences and Technology
34. Farmers meet for sustainable agriculture
35. Thin layer Chromatography
36. Cancer tissue sectioning
37. Histopathology by staining
38. Immunohistochemistry
39. PCR for gene expression
40. Animal handling
41. Handling of human cell lines
42. Response Surface Methodology
43. Design of Explants, Plant Tissue Culture, HPTLC
44. Recent advances in aerospace engineering
45. RC aircraft design fabrication and flying
46. Measurement and flow visualization technique
47. RC-Quad copter
48. Unmanned Aerial Vehicles for societal application: Future prospects and challenges
49. Graphics and Animation, Audio Engineering and Acoustics
50. Projection Mapping, Bio-Acoustics, Music Technology and IPTV

2.14 Significant Activities and contributions made by IQAC

1. Compilation of data for NIRF2017 and uploading of the documents. Karunya University ranked 62 in the Engineering category and 71 in the University category (2017).
2. Performance analysis of the Schools and Departments and awarded the best 3 departments.
3. Organized the Academic Course File Audit for the odd and even Semester of the year 2016-17.
4. Organized IQAC Meetings.
5. Conducted Green Audit and Gender Audit.
6. Offered LMS (Learning Management System) training on Outcome based Education through the Karunya Competency Development Centre (KCDC).
7. Submitted NBA Pre Qualifier Report for the Departments of Civil and Mechanical Engineering.
8. Scrutinized the applications for Cadre revision and AGP revision.
9. Preparation of Annual Report.
10. Setting quality standards for meeting the requirements of accreditation agencies.
11. In collaborations with the Departments Industrial Advisory Board Meetings were organized for obtaining feedback with suggestions regarding the curriculum and the industry related subjects.
12. In collaboration with the Academic Research Office provided seed money to the faculty members and students to the tune of 5.70 lakhs.

2.15Plan 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	Outcome
1. NIRF – 2017 preparations to be done and documents to be uploaded	Preparations and uploading of documents were executed as per the norms of NIRF. Karunya University has secured 62nd rank in Engineering domain and 71st rank in University domain.
2. NBA accreditation for a few degree programmes	NBA preparations for CSE, ECE, EEE and Biotech Programmes were initiated. Orientation programmes were conducted for the Heads and Co-ordinators.
3. Effective functioning of Industry Advisory Committee in each department	Every department constituted an Industry Advisory Committee consisting of Entrepreneurs in the respective fields of Engineering. These committees reviewed the curriculum, syllabi and teaching learning practices to prepare the students to meet market demands which will enhance their employability.
4. Submission of mega research proposals to various funding agencies	38 Project proposals have been submitted during the academic year.
5. Creating opportunities for student start-ups, incubations and entrepreneurships.	18 opportunities were extended for the students to start their companies in the campus by providing them space in the KIIC cell, among them three such start-ups exist and the remaining are in the pipeline.
6. Conducting a survey among the students to identify their options for core company placements, software company placements, Higher studies in India and abroad.	A survey was conducted for the I B.Tech students for identifying the options of students for core company placements, software company placements, Higher studies in India and abroad.
7. Ensuring the participation of faculty members in Online certification courses through MOOC platform.	76 faculty members participated in the Online certification courses through MOOC platform
8. Active association with Karunya Rural Community Hospital through collaborative research activity.	The EIE division is actively participated in research activity with the Medical Officer of Community Hospital. Faculty members published research papers in collaboration with the medical officer.

910 students out of 1063 eligible students were placed. A total of 82 companies visited the campus for placements. |

9.	Placement for more number of passing out students in relevant industries with higher salary.	Two external academic audits and one research audit were conducted during the academic year.
10.	Academic Audit and Research Audit	13 major awards for the Faculty achievers those who received fund for research projects.
11.	Achievers Award and Best Department Awards.	Based on this score, certificates and shields were distributed.
12.	Performance analysis of all Schools and Departments to be conducted.	Annual report for the academic year 2015-16 was prepared by collecting relevant information from various departments and submitted to UGC.
13.	Compilation of annual report for the university and submission to UGC.	
14.	Verification of documents for AGP revision and Cadre revision for the faculty members	Documents submitted by the faculty members for AGP and cadre revisions were verified with the personal interactions with 138 faculty members.

Five parameters of ranking were presented by the five faculty members and discussions hold. |
| 15. | Orientation to faculty members with regard to NIRF documentation | Programmes were organised for the research scholars for educating them on the NIRF parameters regarding research and publications. |
| 16. | Orientation for the full time and part time PhD candidates on NIRF parameters | They were also trained on the challenges ahead in the teaching profession with regard to this parameter in connection with the number of publications and citations for which the NIRF has given 80/100.

LANCET- Centre for Excellence in surgical Innovation was started in the department of EIE. |
| 17. | Centre for Excellence in surgical Innovation | |

* *Enclosed the Academic Calendar as in Annexure-**i**

2.16 Whether the AQAR was placed in statutory body Yes ☑ ☐

Management ☑   Syndicate ☐   Any other body ☑

Provide the details of the action taken

AQAR of 2016-17 was placed in the IQAC meeting on 6th October 2017.

Action taken for the comments received from the previous committee meeting:

1. The University started 'Karunya Competency Development Centre' for training the faculty, students and community in various programmes. A Head has been appointed for organising the various training programmes.

2. Lecture capturing system, recognition of the faculty for their achievements and the functioning of Industry advisory board are in place.

3. Webinars on industrial courses which facilitate the sharing of knowledge is in practise.

4. The importance of uniform branding in all Karunya presentations was initiated

5. The online student feedback system on faculty is in practice for both the semesters in the academic year 2016-17. Based on the feedback, KCDC was requested to arrange for necessary training programmes to the faculty.

6. Video conferencing facilities are being effectively used by the departments.

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	24	-		2
PG	27	-		7
UG	18	4	All our programmes	6
PG Diploma	2	-		0
Advanced Diploma	-	-		0
Diploma	-	-		0
Certificate	6	1		8
Others	-	-		0
Total	71	5		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	63
Trimester	-
Annual	-

1.3 Feedback from stakeholders* Alumni ☐465 Parents ☐414 Employers ☐86 Students ☐15554
   (On all aspects)

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

Please provide an analysis of the feedback in the Annexure (Pl. refer Annexure ii)

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

- Yes. The entire syllabi has been revised and revamped for the academic year 2017-2018 batch incorporating three Course objectives and six Course outcomes meeting all the six levels of Blooms taxonomy. The revision was done after organising four curriculum development cell meetings and two Industrial Advisory Board meetings.
- Syllabi were revised giving more emphasis on applications by means of mini projects/working models.
- Based on student feedback, new softcore has been introduced such as Internet of Things, Binary and Malware Analysis, Machine Learning Techniques.

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

1. Structural Dynamics lab and Centre of Consultancy (Civil)
2. LANCET- Centre for Excellence in surgical Innovation (EIE)

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent

Total	Asst. Professors	Associate Professors	Professors	Others
462	337	41	35	49*

faculty

*adjunct faculty

2.2 No. of permanent faculty with Ph.D.

193

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
37	0	10	0	8	0	49	0	96	0

2.4 No. of Guest and Visiting faculty and Temporary faculty

0		3		16

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended Seminars / Workshops	130	359	68
Presented papers	194	163	49
Resource Persons	38	52	33

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

- Learning Management System, Institute-Industry interaction, Industrial Visit, Quality Assessment, E-Assignment, supply of subject materials through soft copy are some of the innovative practices adopted by the Institution
- Besides these methods, the faculty use the following methods: Sharing the Teaching Materials, Lecture Videos (NPTEL videos and videos from Google and YouTube) Question Bank, and recent updates related to the subjects through courses.karunya.edu
- Local visits arranged to trade fairs and technical exhibition related to subject areas to know the real time trends
- Mega courses for the students from different disciplines to get the same level of knowledge and expertise in common courses
- Web references have been included in the teaching plan for the students to get additional technical input
- To build good personality and attitude, Soft Skills courses were introduced for II B.Tech. students to improve communication skills, presentation skills, self-motivation, leadership quality and teamwork
- Multimedia learning Audio, Video, Animation Quiz, Brain storming sessions and group problem solving
- Faculty members prepare video lectures for their courses for effective learning

- Role play mechanism, Scenario analysis and Teaching using multimedia tools

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

| 180 |

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

EXAMINATION REFORMS (2012 – 2017)

2012 – Introduced the Relative Grading Scheme

2013 – Introduced Choice Based Credit System(CBCS)

The salient features of the continuous assessment are:

- Internal : External marks = 70 : 30
- Regular periodic evaluation of each student by the number of pre-notified components.
- Marks obtained in all components to be added and statistical method be used to award the grades as given in the policy.
- End semester examination / Viva made mandatory

Question Pattern for End Semester Exam: Five questions of 20 marks each for UG and PG with one compulsory question (from the syllabi covered from 37th to 45th lectures) (for a 3 credit course except MBA). For MBA, the compulsory question will be from 31st to 36th lecture hours.

	UG & PG
Time	3 Hours
Maximum Marks	100
Total no of questions	**9** *(1 compulsory question(*) + 4 pairs of questions with either/or choice from the portions covered in Tests 1 to 3)*
Total no of questions to be answered	5

(*)Should be from lectures 37 – 45 for a 3 credit course

Minimum Passing Requirement

Level of Course	**End Semester Mark**	**Total (Internal+End Sem)**
1 & 2	≥ 33%	≥ 45%
3	≥ 40%	≥ 50%

2015 – Int: Ext marks have been changed to **60:40**

1. Three tests will be conducted for 40 marks each. All the three tests are compulsory.

Level 1& 2	Marks	Level 3	Marks
3 Internal Tests @ 15 marks each	45	3 Internal Tests @ 15 marks each	45
Quality Assessment (5 marks-Online test)	10	Quality Assessment	15

Minimum Passing Requirement:

Level of Course	End Semester Mark	Total (Internal+End Sem)
1 & 2	≥ 37%	≥ 45%
3	≥ 45%	≥ 50%

Quality Assessment:

Mini Projects and Term Paper were given to improve the research quality of the students.

Auditing:

Experts from other institutions were invited for auditing the internal evaluation. The Question setting is done by the internal examiners and the feedback is circulated to the respective HoDs for improvement.

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

280	49	147

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

2.10 Average percentage of attendance of students

88.55

2.11 Course/Programme wise distribution of pass percentage:

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
UG	1448	25.3	62.8	4	-	92.3
PG	506	36.9	56.12	2.5	-	95.6

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

- IQAC monitors/evaluates the teaching learning process through **Academic auditing**. The faculty members maintain a course file for each of their theory and laboratory courses. In this process, the following are effectively monitored.
  - o Blue book maintenance
  - o Coverage of syllabus as per the teaching plan
  - o Number of classes to be handled and actually handled and the reasons for the non-compliance.

- o The quality of internal test question papers set by the faculty members adopting the six levels of Blooms taxonomy in the questions.
  - o The evaluation quality of the answer scripts
  - o The innovation in the quality assessment components and the method of assessments
  - o The action taken for the improvement of slow learners
  - o The analysis of distribution of internal marks and final grades
  - o Quality of the End semester question papers

- The action taken report on the comments made by the external experts for each faculty member will be submitted by the respective HoDs.

- Student feedbacks:

  Online student feedbacks is obtained from the students twice in an academic year. Feedbacks are being obtained on six parameters each on a five point scale. Apart from this, the students can provide their comments for appreciation as well as for necessary improvements. These scores will be processed by IQAC and will communicate to KCDC for further training.

  Upon processing done by IQAC, the HoDs can view the feedbacks of their respective faculty members and extend assistance wherever is required.

2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher Programmes	45
UGC – Faculty Improvement Programme	1
HRD programmes	46
Orientation programmes	78
Faculty Exchange programme	0
Staff training conducted by the university	213
Staff training conducted by other institutions	90
Summer / Winter schools, Workshops, etc.	118

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	152	0	1	0
Technical Staff	69	0	1	0

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Criterion – III

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3. Research, Consultancy and Extension

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

- An Orientation Programme on the NIRF parameters on research, publication and consultancy were conducted.
- Achievers award were given to the faculty members who received funded projects from Govt. funding agencies
- Initiated Karunya Short term research grant (Seed Money) for the projects of students and faculty members
- Four research groups have been formed based on the thrust areas identified by the University namely food, water, healthcare and energy for faculty members to share/incubate state of art technologies in their areas of interest. Faculty members are also encouraged to carry out research on the above thrust areas.
- The participation of faculty members in workshops/seminars/conferences outside the university to update their knowledge in the recent trends is being documented and the departments are alerted for necessary progress.
- Scopus indexed and Web of Science publications are made mandatory for career advancement.
- Every Department has a Quality Assurance Cell for continuously updating information and supplying the same to IQAC at the central level. The Quality Assurance Cell at the departmental level prepares the roadmap for teaching, learning and Research. The Departmental Quality Assurance Cell has two members nominated by the Head. Awards are given to faculty members to encourage their research and seed money is provided to enhance the research.

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	13	24	12	48
Outlay in Rs. Lakhs	245 lakhs	1257.37 lakhs	391 lakhs	2371 lakhs

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	11	8	8	8
Outlay in Rs. Lakhs	5.65 lakhs	1.62 lakhs	1.49 lakhs	6.954 lakhs

3.4 Details on research publications

	International	National	Others
Peer Review Journals	256	11	22
Non-Peer Review Journals	61	3	0
e-Journals	10	3	0
Conference proceedings	221	156	1

3.5 Details on Impact factor of publications:

Range | 0.604 to 4.24 | Average | 1.91 | h-index | 10 | Nos. in SCOPUS | 179

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 in lakhs	Received In lakhs
Major projects	2016-17	DST, SERB, DRDO, DBT	391	198
Minor Projects	2016-17	IEEE, KU	0.992	0.992
Interdisciplinary Projects	2016-17	DST	65.18	34.85
Industry sponsored	2016-17	Covenant IT Group	15	15
Projects sponsored by the University/ College	2016-17	KU	62.86	62.86
Students research projects *(other than compulsory by the University)*	2016-17	TNSCST	0.30	0.30
Any other(Specify)	--	--	--	--
Total			535.33	312.00

3.7 No. of books published   i) With ISBN No. [10]   Chapters in Edited Books [7]

ii) Without ISBN No. [-]

3.8 No. of University Departments receiving funds from

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

DPE [-]   DBT Scheme/funds [-]

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

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

3.10 Revenue generated through consultancy [96.34 lakhs]

Level	International	National	State	University	College
Number	7	5	3	1	4
Sponsoring agencies	CIIEMAD, IPN, Mexico, IEEE PELS, Sethia Infotech, SUSE, Jasmin Infotech, Venzhou, Scientific Research Group, Romanians Society, Computational Intelligence, AUREL VLAICU, ISRO and DRDL.	PFNDAI, IEEE, Jasmin Infotech, DST-NIMAT & KU	IEEE EDS, Jasmine infotech, Wenzhou, Scientific research group, Romanian Society, Computational Intelligence, AUREL VLAICU,	KITS	KITS

3.11 No. of conferences organized by the Institution | 113 |

3.12 No. of faculty served as experts, chairpersons or resource persons | 27 |

3.13 No. of collaborations International | 6 | National | 21 | Any other

3.14 No. of linkages created during this year | 51 |

3.15 Total budget for research for current year in lakhs:

From funding agency | 387.45 | From Management of University/College | 274.91 |

Total | 662.36 |

3.16 No. of patents received this year

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

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

Total	International	National	State	University	Dist	College
74	16	28	13	17	0	0

3.18 No. of faculty from the Institution
Who are Ph.D. Guides | 116 |
and students registered under them | 330 |

3.19 No. of Ph.D. awarded by faculty from the Institution | 27 |

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

| 15 | JRFSR | 4 | Project Fellows | 10 | Any other | 4 |

3.21 No. of students Participated in NSS events:

University level | 1200 | State level | - |

National level | 28 | International level | - |

3.22 No. of students participated in NCC events:

University level | 44 | State level | 29 |

National level | 13 | International level | - |

3.23 No. of Awards won in NSS:

University level | 6 | State level | 5

National level | 17 | International level | -

3.24 No. of Awards won in NCC:

University level | 2 | State level | -

National level | 8 | International level | -

3.25 No. of Extension activities organized

University forum | 186 | College forum | 3

NCC | 8 | NSS | 184 | Any other | 12

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

No. of programmes conducted   : 370

Special Programmes:

- **Dengue Awareness Rally at Coimbatore City**

Karunya University NSS Unit consisting of nearly 1000 students along with Coimbatore Corporation organized a "Dengue Awareness Rally on 27.08.2016. Inaugurated by the Commissioner of Coimbatore, he highlighted the objective of the rally to make students aware about the mosquito victor so that they can create an awareness on prevention. He appreciated Karunya University for its social concern.

Large banners for dengue awareness were placed in major areas of the city. Vehicle mounted audio amplification system led the rally, where voices on awareness was heard all through the route.

- **Anbin Virundhu (Love feast):**

Dr. Paul Dhinakaran, the Chancellor of the University paid tributes to the former Chief Minister of Tamil Nadu Dr. J. Jeyalalithaa on 15th December 2016 in a meeting at Karunya University. He remembered her valuable help to the development of Karunya Nagar and Karunya University. People of nearby villages, leaders and Karunya Students also participated. After the meeting, food was distributed to more than 3000 nearby villages.

- "**A New Day of Hope**" – **Special Christmas Programme for Labourers of Karunya University.**

Karunya University – Centre for Extension Activities along with Seesha (Samiti for Education, Environment, Social and Health Action) conducted a Special Christmas Programme for Labourers and their family members on 17th December 2016.   Dr. Paul Dhinakaran, Chancellor, Karunya University, distributed new clothes to the children as a goodwill gesture.

- **A Faculty Training Program on "Data Science and Big data analytics"** *(18th to 22nd July 2016)* conducted by CEA in association with CST Department. 25 faculty members participated.

- **Empowering Panchayati Raj Institutions Spatial.**
  A Seminar on "**Asset Mapping at Panchayat Level using Bhuvan – Panchayat Mobile Application**" was conducted on 27th July 2016 in association with the Water Institute. 25 Students from CEA clubs participated.

The National Service Scheme & Community Health Services of CEA organized a Blood Donation Camp" in association with SEESHA   More than 300 students and staff took part in the initiative and donated **200 units of blood.**

Awards:

1. National Young Leaders Programme – 5 students were selected as "Best NSS Volunteer" and awarded by Ministry of HRD, at New Delhi.
2. Best Voluntary Blood Donors Award – 200 Units of Blood Donated at a time.
3. Certificate of Appreciation – NSS – in Gratitude of support of awareness session on "Blood Stem Cell donation for treatment of fatal blood disorders".
4. 3 NSS students and one staff participated in "Indian Student Parliament" conducted at Pune by Mheer University.

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created 2016-17	Source of Fund	Total
Campus area	720 acres	-	KITS	720 acres
Class rooms	194 (15622 sq.m.)	-	KITS	194 (15622 sq.m.)
Laboratories	83 (16493 sq.m.)	-	KITS	90 (16493 sq.m.)
Seminar Halls	19 (3704 sq.m.)	-	KITS	19 (3704 sq.m.)
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	6239	66	KITS/ Funded Projects	6536.34
Value of the equipment purchased during the year (Rs.in Lakhs)	5901.53 lakhs	1873.06 lakhs	KITS	7211.27 lakhs
Others	-	-	-	-

4.2 Computerization of administration and library

The Central Library

The Central library is housed in a three story building with central air conditioning and well equipped modern facilities and resources in the form of CD-ROM, On-line databases, e-journals, e-books, audio video cassettes, books, journals, project reports etc. The Library home page provides electronic access to full texts and bibliographical databases. Links from the home page gives information on library policies, working hours, collections and services. The mission of the Central library is to provide information services and access to bibliographical and full text digital and printed resources to the students, faculty and research scholars of the University.

Digital Library

In addition to the above, the 'Digital Library' with 30 PCs and 3 touch display kiosk with broad-band hi-speed Internet connection with Wi-Fi enables users to access and download information. The access to 5020 CD-Rom database collection is enabled through a server to all computers. The Library is a member of DELNET, which provides access to more than one million records globally and article services. Intranet library web portal (http://library.karunya.edu/opac/)is created to provide online e-services.

4.3 Library services:

	Existing		Newly added (2016-2017)		Total	
	No.	**Value Rs.**	**No.**	**Value, Rs.**	**No.**	**Value, Rs.**
Text Books	87401	2,24,93,074.50	14640	55,57,532.90	102041	2,80,50,607.40
Reference Books	5887	1,49,67,899.00	646	9,04,019.07	6533	1,58,71,918.07
e-Books	930	11,59,000.00	142618	4,48,500.00	143548	16,07,500.00
Journals	7338	1,60,77,765.00	144	1,82,061.00	7482	1,62,59,826.00
e-Journals	Science direct - 883 Springer -586 EBSCO -800 Scopus (Abstract) IEEE-161	3,14,13,507.00	Science direct - 883 Springer -586 EBSCO -800 Scopus (Abstract) IEEE-161 Emerald	46,41,000.00 9,13,100.00 2,67,978.00 18,161,69.00 8,79,957.00 3,70,000.00	Science direct - 883 Springer - 586 EBSCO - 800 Scopus (Abstract) IEEE- 161	4,03,01,711.00
Digital Database						
CD & Video	3700	3,74,720.00	1320	1,33,320.00	5020	5,08,040.00
Others (specify)						

4.4 Technology up-gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart-ments	Others
Existing	2138	19	200 Mbps	19	4	1	0	0
Added	487	5	1000 Mbps	5	1	0	0	0
Total	2625	24	1200 Mbps	24	5	1	0	0

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

The departments conducted the following activities for the teachers and students for technology up-gradation

- Training on class room lecture capturing and video lecture capturing
- Learning Management System
- Effective Class room Management using NLP Techniques, Learnertainement & Gamification
- Mastering YouTube for Education
- SMAC and IOT in Higher Education
- Mastering Educational Technology Tools
- Flipped Classroom and Blended Learning
- Sharpening Interpersonal Skills
- FDP on mentoring the Millennial Engineering Students
- Computer based education tools for Non teaching staff
- Training Program on outcome based education
- Training Program on CLCM (Creating a Learning Community trough Mentoring)

- Workshop on developing one's own text books for students
- Subscription based learning of Industrial software(Lynda and Plural Sight)

4.6 Amount spent on maintenance in lakhs:

i) ICT

| 178.70 |

ii) Campus Infrastructure and facilities

| 837.77 |

iii) Equipments

| 67.4 |

iv) Others

| 102.22 |

Total:

| 1186.09 |

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

- Awareness on student support services is provided to the students through Social Media – WhatsApp & Facebook.
- Remedial classes were suggested and implemented for giving support to the students who are slow learners.
- Counselling classes are conducted – once a week
- Faculty members participated in the workshop on "Understanding student behaviour" organized by SEESHA
- Insisted on regular seminar session on advances in technologies delivered by experts from Industry for orienting the students to the need of the market.
- Initiated Green Energy Club , GATE Coaching and Placement training
- Strengthened the functioning of Women re-dressalcell, Anti Ragging Squad and feedback through Suggestion boxes etc.
- Technical day was conducted for the final year students.
- Online aptitude test series were conducted for pre-final year students.

5.2 Efforts made by the institution for tracking the progression

- Regular Alumni meet in India and abroad through ALMA CONNECT (web based forum)
- Separate face book links for Departments to connect with the Students /Alumni
- Mentoring system to personally assist the students in Academics and Placements
- Extending support to the students with Letter of Recommendation for higher studies for top ranking universities in India and abroad and gathering information such as their scores in GRE, TOEFL etc. Some of the Universities in which our graduates pursue their studies are: Ben-Gurion University of Beer Sheva; Technion of Haifa, Bar-Ilan of Tel Avive and Volcani Institute of Israel, Norma Business School, University of Washington, Oklahoma State University, USA, University of Illinois Chicago etc.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
6231	861	539	33

(b) No. of students outside the state

3710

(c) No. of international students

| 12 |

Men

	No	%
	5172	66.5

Women

	No	%
	2605	33.5

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
3162	294	141	4184	0	7781	3034	330	145	4268	0	7777

Demand ratio   2.79:1 Dropout %: 2.03

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

- Online tests on non-verbal, reasoning and aptitude are being conducted by the Centre for Placement and Training (CPT) for improving the standard of the students.
- Online tests for final year students to improve their performance in the placement drive in IT, Core Industries and enhance their performance in tests/exams such as GATE, IELTS and BEC.
- The LMS web portal serves as a good platform for the students and updated by the faculty members on a regular basis. Connectivity to the video lectures from NPTEL, Course era, YouTube videos etc., are provided in the LMS.
- To prepare students for competitive examinations, solved question papers are available in the LMS website.

No. of students beneficiaries

| 1800 |

5.5 No. of students qualified in these examinations

NET | 1 | SET/SLET | 3 | GATE | 19 | CAT | 2 |

IAS/IPS etc. | - | State PSC | - | UPSC | - | Others | 20 |

5.6 Details of student counselling and career guidance

- Personal guidance on academic and non-academic matters, through mentoring in the department.
- The Career Guidance Cell provides comprehensive services in the areas of training, options for higher studies, internships and full-time placements for both undergraduate students and post-graduate students.
- Periodic guidance is given by the mentors and faculty to prepare for Aptitude tests, IELTS, TOEFL, and BEC etc.
- Placement Training for product based and service based IT companies are provided through career guidance cell of the departments.

No. of students benefitted   1506

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
82	1063	840	70 (92 companies)

5.8 Details of gender sensitization programmes

i) **Women empowerment programs** are organized, as part of Women's day celebrations in the University and on a regular basis in the Women's Hostels. **REJOICE** is an annual event conducted in the Ladies hostels to celebrate womanhood and its uniqueness. Further, frequent seminars on women empowerment and gender-sensitive issues by eminent women personalities are conducted. A seminar on **"Marriage and Career"** was delivered by the consultant psychiatrist Dr. Shanthi Davidar, C.S.I Rainy Multispecialty Hospital on 08th March, 2015. An interactive session on **"Hygiene, Adolescence and Relationships"** by Mrs. Hannah, CMC Vellore was also organized.

ii) **Sexual Harassment Prevention Cell** at Karunya University is committed for creating a safe environment for women students and employees – an environment free of violence, harassment, exploitation, intimidation and stress. When an incident of sexual harassment occurs, the victim or third-party may submit a written complaint in person at Sexual Harassment Prevention Cell, or send via email at "shpc@karunya.edu".   A policy is in place with regard to sexual harassment.

The committee comprises of the following members:
I.   Two women directors nominated by the Vice-Chancellor.

II.	Three student representatives (one Research Scholar, one PG student/and one UG student –two of these students shall be women)
III.	Two faculty members –one of them shall be woman
IV.	One woman counsellor (Expert from NGO)
V.	One external Legal expert
VI.	Chief Warden (Women's Residence)
VII.	Director Campus Life
VIII.	Officer-in-Charge of grievance redressal cell

The SHPC strives to educate awareness on sexual harassment in its various forms and evolve a preventive mechanism.

5.9 Students Activities

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

State/ University level 617   National level 9   International level -

No. of students participated in cultural events

State/ University level 0   National level 0   International level 50

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

Sports: State/ University level 582   National level 9   International level -

Cultural: State/ University level 0   National level 0   International level 15

5.10 Scholarships and Financial Support

Scholarship from various Government Departments and other funding agencies during the year 2016-17

S.No.	Government Scholarships	No. of students		Amount in Rs.
		Male	Female	
1.	Govt. of Andhra Pradesh- Social Welfare Scholarship	2	1	97200
2.	Govt. of Karnataka – Social Welfare Scholarship	1		44100
3.	Govt. of Tamilnadu – Adi Dravida Special Subsidy	42	25	536000
4.	Govt. of Tamilnadu – Adi Dravida Special Subsidy	26		208000
5.	Govt. of India Merit Cum Means Based Scholarship	115	94	5961100
Institutional Scholarship				
6.	Dr. D.G.S.Dhinakaran Educational Scholarship	15	22	740000
7.	Academic Incentives	4	3	640000
8.	Student Awards	163	333	672500
9.	Student Benevolent Fund	12	7	1861608
10.	PED Sports Scholarships	46	10	8727376
11.	Earn While Learn	28	13	194061
12.	Scholarship for Top KEE rank holders	4	1	600000
			Total	**13435545**

5.11 Student organised / initiatives

Fairs: State/ University level ⟨11⟩ National level ⟨6⟩ International level ⟨1⟩

Exhibition: State/ University level ⟨8⟩ National level ⟨7⟩ International level ⟨-⟩

5.12 No. of social initiatives undertaken by the students ⟨25⟩

5.13 Major grievances of students (if any) redressed:

Grievance Redressal Cell at KITS has been set up in accordance with the University Grants Commission regulations 2012 (The Gazette of India, March 23-29, 2013), and Article XXV of the constitution/MOA of Karunya University for handling day-to-day grievances related to students, staff members and other stakeholders.

The grievance redressal cell at KITS has emerged as an effective and readily accessible forum to students and staff members to express their grievances freely and frankly, without any fear of being victimized. Any student with a genuine grievance related to the following may approach grievance re-dressal cell and submit his/her grievance in writing or send via tellus@karunya.edu – an email ID earmarked for sending grievances. These grievances pertains to:

  i.   Admissions, Examinations/Assessments, Library facilities and
  ii. Extension activities–Award of non-academic credits, Physical Education, etc.

iii. Hostel facilities‒Allocation of rooms, Standard of meal, Wi-Fi, internet connectivity, Computer facilities, Drinking water, Sanitation & hygiene, Maintenance, Medical facilities, etc.
iv. Placements – On-campus or off-campus interviews, soft skills training, Internships, etc.
v. Collection of fee – on-line fee payment gateway, issues related to HR, etc.
vi. Safety & security, discipline, misbehaviour, Emergency services, etc.

The grievance re-dressal cell comprises of the following members:

1. Vice-Chancellor   - Chairperson
2. Registrar   - Secretary
3. Deputy Registrar (Student Affairs)   - Member
4. Director(s), as the case may be   - Member(s)
5. Officer-in-Charge of grievance re-dressal cell   - Member
6. UG/PG student(s) /Research scholar(s)/   - Spl. Invitee(s)
7. Women Representative(s), as the case may be   - Member(s)

The grievance re-dressal process is as given below:

1. Registration of grievance via tellus@karunya.edu or in person
2. Acknowledgement of receipt / Instant auto email reply
3. Forwarding to respective department / office seeking re-dressal / solution
4. Follow-up / reminder to ensure re-dressal within stipulated time
5. Scrutiny of re-dressal process / review of proceedings
6. Call for hearing / ordering enquiry, if resolution is not satisfactory
7. Final decision / resolution by grievance re-dressal committee
8. Communicating the decision to both parties via email
9. Closing of grievance & documentation of proceedings
10. Feedback for improving the Redressal process from time to time

The process of grievance redressal can be accessed in the university website through the link
http://www.karunya.edu/downloads/grievance.pdf

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

> **Karunya's Vision**
>
> True to its name Karunya which means 'compassion'. Karunya Institute of Technology and Sciences shall be a deemed to be university with a social concern which will address the problems of humanity through teaching, research and extension in socially relevant areas.
>
> The students and faculty of KITS will be imbibed with spiritual discernment and a zeal to serve humanity and to eventually become leaders of society.
>
> **Karunya's Mission**
>
> To accomplish the vision, Karunya Institute of Technology and Sciences – a Christian Minority Institution will be committed to transform lives through the following objectives:
>
> - To raise undergraduate and post graduate students and research scholars to serve humanity by attaining high levels of academic excellence, professional competence, exemplary values and spiritual empowerment.
>
> - To find solutions to human problems in areas relating to Water, Food, Health Care and Energy through scientific, social and technological research as well as policy formulation.
>
>   To set up care homes for physically and mentally challenged as well as the elderly and the terminally ill to enable the students to understand the human needs and pain, by participating in the services rendered to them on campus and thus to dedicate themselves to work towards solving those problems through research, development, policy making at high levels or through providing spiritual care.

6.2 Does the Institution have a Management Information System?

> Yes. The institution has an innovative and user friendly Campus Management System (CMS).
>
> **Campus Management System** is a compact package, designed to provide a sophisticated, state of the art web technology to bring total quality in the education management. CMS focuses on excellent coordination among all stakeholders, making e-education "a reality". It covers all aspects of the Students and staff, Schools / Departments, Assessments Attendance, Examination Time Table, Results, Placements and Co – Curricular and Extra - Curricular activities. KITS provides necessary information required by staff and students through the website: www.karunya.edu

The 'mykarunya' is a new addition to CMS which helps the faculty members, parents and students of KITS to keep track of the day-to-day activities such as Attendance Management, Mentee Management, Management Information System (MIS), Internal Assessment Management, Reports generation etc. The following are some of the highlights and best practices emerging out of our user friendly package *mykarunya* System:

1. The process of Course Registration, Student Registration, and Mentee Registration is simplified in *mykarunya* system.
2. The attendance marking system in *mykarunya* is highly user friendly.
3. The online leave submission, approval of OD, Medical leave are decentralized.
4. The change/delete attendance, late attendance entry, internal assessment correction/deletion go through automated hierarchical approvals.
5. The attendance and the internal marks are transparent and can be viewed by the students, parents, teachers and Heads. This information is also disseminated to parents through SMS.
6. Mentors are provided with an efficient reviewing system for their mentees. A reminder through SMS helps them enter the attendance on time.
7. Colour coded report facilitates the mentors to easily track the reviewing /approval processes.
8. The internal assessment reports can be generated using *mykarunya* system which will then be communicated to the parents.

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

6.3.1   Curriculum Development

- Industrialists, Stakeholders and Alumni contribute significantly to the development of curriculum are analysed by the Curriculum Development Cell (CDC). Their suggestions and feedback are presented to the Board of Studies (BoS) for discussion and subsequently tabled in the Academic Council for approval.

- Based on the framework given, department develops an outline of the proposed programme/Course, with details such as Course description, Course objectives and outcomes, utilisation of the courses, evaluation patterns and references. The expertise of the faculty members as resource persons at conferences, seminars/workshops and as members of Boards of Studies and Academic Audit Committees in other institutions facilitates the process of revision.

- Choice Based Credit System is in place offering a high degree of flexibility in the choice of courses and faculty.

- Course outcomes (COs) are redefined based on the six levels of Blooms taxonomy for the desired programme outcomes (POs).

6.3.2   Teaching and Learning

- A combined class: This teaching is held at gallery class room with 180 seater capacity with good lighting air-conditioning and with modern gadgets such as Media Projector and Tablet for clear visibility of teaching module.   The expertise of the senior faculty members available is well utilized and the

junior faculty members participate as tutors and acquire wide knowledge in the respective subjects. Through mega courses, students from different batches get the same level of knowledge and expertise in a particular course.

- A learning management system is in place in which the learning materials for the courses are uploaded.

- Faculty members are motivated to attend training sessions and programs to enhance their teaching skills and upgrade their knowledge in technological advancements. Evaluation patterns are revised to encourage creativity, originality and analytical thinking among students.

- The teaching and evaluation methodology adopted is based on Bloom's Taxonomy. All the class rooms are equipped with modern ICT facilities.

- Every faculty is maintaining a file for each Course, which records syllabus, lesson-plan, attendance, evaluation procedures, and student result analysis. In the Academic Audit organized once in a semester, external experts evaluate the course files and present their observations.

- The department has initiated online coding and verification in the laboratory subjects such as programming in Java, Data structures where the results are evaluated using test cases.

- Audio Lectures and Desktop captures prepared by the faculty are provided for the students to enable the slow learners with poor communication skills. The students who miss the live sessions will benefit by this initiative.

- Role play, crosswords, technical puzzles and analogies are adopted in teaching to create an enthusiastic and interactive classroom environment.

6.3.3 Examination and Evaluation

The Internal question papers are scrutinized by senior faculty members of the department. Result analysis is done after every internal exam to evaluate the class pass percentage and the remedial measures to be taken for improvement.

Computer technology centre helps in registration of subjects and provides prompt information on exam time table, hall number through the university website. The examination has become a rigorous method with Choice Based Credit System wherein students are assessed continuously at the end of every 12 lecture hours.

The ratio of Continuous Internal Assessment and End Semester Exam for the first CBCS batch is 70: 30. For the subsequent CBCS batches, it has been changed to 60 : 40

The end semester examinations are to be scheduled between 93rd working day and 100th working day for the programs under Semester System.

Theory Courses

The question paper for all the theory courses will contain 5 questions of 20 marks each. One question will be compulsory and others will consist of 4 pairs of questions with either - or choice.

The students registered for the same course will appear for a common End Semester examination.

Practical, Part-semester Project and Full-semester Projects: Faculty who conducted the practical Supervisors of the Project along with an expert from KU appointed by the Head and will conduct the End Semester Examination.

The salient features of the continuous internal assessment are:

- There will be a regular periodic evaluation of each student by the number of pre-notified components.
- The marks obtained in all components will be added and statistical method will be used to award the grades as given in the policy.
- End Semester Examination / Viva is mandatory

Question Pattern for End Semester Exam: Five questions of 20 marks each for UG and PG with one compulsory question (from the syllabi covered from 37th to 45th lectures) will form the question paper (for a 3 credit course except MBA). For MBA, the compulsory question will be that handled during 31st and 36th lecture hours.

	UG & PG
Time	3 Hours
Maximum Marks	100
Total no of questions	**9** *(1 compulsory question(*) + 4 pairs of questions with either/or choice from the portions covered in Tests 1 to 3)*
Total no of questions to be answered	5

(*)Should be from lectures 37 – 45 for a 3 credit course

Minimum Passing Requirement

Level of Course	End Semester Mark	Total (Internal+End Sem)
1 & 2	≥ 33%	≥ 45%
3	≥ 40%	≥ 50%

1. Three tests will be conducted for 40 marks each. All the three tests are compulsory.

Level 1& 2	Marks	Level 3	Marks
3 Internal Tests @ 15 marks each	45	3 Internal Tests @ 15 marks each	45
Quality Assessment (5 marks-Online test)	10	Quality Assessment	15

Minimum Passing Requirement:

Level of Course	End Semester Mark	Total (Internal+End Sem)
1 & 2	≥ 37%	≥ 45%
3	≥ 45%	≥ 50%

Quality Assessment:

Mini Projects and Term Paper are given to improve the research aptitude of the students.

Auditing:

Experts from other institutions were called for auditing the internal evaluation; Questions set by the internal examiners and the feedback from the experts are submitted to the respective HoDs for improvement.

6.3.4 Research and Development

Significant development in research was observed during the last academic year compared to the earlier academic years. The unique features are:
- 45Project proposals were submitted to external funding agencies at a total outlay 6.33 crores.
- 15 Patents have been filed and 5 more are in the pipeline.
- The following Research Labs are established and are in operation, enabling the faculty and research scholars to work jointly on funded projects and provide training in advanced technologies.

    o Karunya Salzer Innovation Cell
    o DST INCITE Cell in collaboration with Mazumdar Shaw Medical Foundation
    o CMTI, Bangalore and FCRI Palakkad
    o CISCO Centre Of Excellence for advanced networking
    o NOVELL Centre Of Excellence for Cloud computing
    o IBM Big Data Software Centre of Excellence

- The department research committee meeting is being conducted once in a month to discuss about the research activities, to strengthen the research and monitor the progress of the Ph.D Scholars.

- Ph.D research Audit is conducted once in a year to scrutinize the records maintained by the Supervisor in the form of a Red Book to evaluate the progress of the Ph.D scholars
- Seed money for faculty, UG and PG students for carrying out their project works.
- The M.Tech project findings are converted to research publications by the following research groups:
    - Advanced computing, Network security, Data Mining, Image Processing and Computational Intelligence,
    - Signal processing, embedded systems, VLSI and Communication.
    - Thermal Engineering, Design and Manufacturing
    - Structural, Environmental and Water Research
    - Solar Energy, Wind Energy, Power Electronics and Drives, Electric Vehicles, Biomedical Signal Processing
- Invited talks and seminars by eminent experts from industries and other institutions are conducted to improve and enhance the research potential and initiate quality assessment standards of the research groups. The departments encourage Undergraduate and Postgraduate students to do their projects in the major research thrust areas and also motivate them to participate in International/ National Conferences and publish their work in Scopus indexed Journals.
- One-day hands-on training workshop on UV visible and Fluorescence Spectroscopy was conducted to familiarise the young researchers with these techniques.
- Frontier area of research is pursued on NEMS/MEMS, Nano device Fabrications, Nano-composites for various engineering applications.

6.3.5   Library, ICT and physical infrastructure / instrumentation

The Central Library is open from 08.00 am to 11.00 pm

The following facilities are available:

- Total No. of books = 104344 (titles and volumes)
- Access to digital library
- Reading rooms/halls with A/C facilities
- Thesis/Project reports
- E-Journals/Journals/Magazines/E-books
- Special Collections   (UPSC, IBPS, CDS,GATE, GRE, TOEFL, aptitude books, etc.,)
- Document delivery service –DELNET
- Touch screen Kiosk
- Photocopier
- LCD Projectors
- Webinar on latest technologies
- 30 Computers with internet facility

6.3.6 Human Resource Management

1. Faculty members are provided with a good working environment and facilities to perform their duties effectively.
2. The workload is distributed among the faculty members as per UGC norms.
3. Career advancement policies are framed and implemented as per UGC norms.
4. The faculty members are granted adequate leave under the categories of Casual Leave, Earned Leave, Special Casual Leave, Sabbatical Leave, Study Leave, Medical Leave and Maternity Leave, etc.
5. Staff Accommodation/Quarters are provided for the teaching and non-teaching staff as per the requirement and availability.
6. The Staff members are compensated with salary as per the 6th Pay Commission as prescribed by the UGC. Their salaries are credited to their accounts every month on time.
7. Statutory benefits such as EPF, Gratuity, Maternity, etc. are provided to all eligible staff members.
8. Financial assistance is provided to the children of non-teaching staff for educational pursuing as per the university norms.
9. Group Mediclaim coverage is administered for the benefit of employees.
10. Non-Teaching Staff are benefited through the loans provided at lower interest rate through Staff Benevolent Fund.

6.3.7 Faculty and Staff recruitment

The Faculty and Staff Recruitments are carried out whenever vacancy arises in the departments. Well qualified and experienced Faculty / Staff are recruited by procuring prospective profiles through advertising in leading newspapers, University websites, job portals, and through referrals. The prospective candidates apply online and their applications are scrutinized by the respective Heads of the Department / the Directors of the Schools. The shortlisted applicants are invited for an assessment to evaluate teaching-skill/ research / aptitude in the presence of an external expert. The University Selection Committee conducts the final round of interview along with external experts. The right candidates with the required qualification / hands-on experience are recruited for appropriate positions.

6.3.8 Industry Interaction / Collaboration

1. Industry/University Relations

Karunya University has signed MoUs / MoAs with corporate organizations and International Universities establishing collaborative ventures for student projects, twinning/dual Degree programs, internships, faculty exchange programs, joint research activities, consultancy, establishing centres of excellence in advanced scientific/technical areas and International programs offered through Karunya University are the most exciting and career enhancing options for every student.

With an international perspective and seeking out new challenges are significant elements of a study abroad experience.

(a). Karunya University has active collaborations with the following universities.

Sl. No.	Name of the University
1	The University of the West of England, Bristol, UK
2	Aachen University, Aachen, Germany, (Department of Engineering Geology and Hydrology)
3	Technion – Israel Institute of Technology
4	Jacob Blaustein Institutes for Desert Research (BIDR), Ben-Gurion University of the Negev, Beer Sheva, Israel
5	University of Wisconsin, Milwaukee, USA
6	Institute of Archeology, Hebrew University of Jerusalem
7	University of North-western, USA

(b) Collaborations with industries.

1	SIEMENS Ltd, Mumbai
2	CISCO Systems, INC
3	Novel Software India Pvt Ltd
4	Red Hat India Pvt Ltd, Pune
5	Oracle India Pvt Ltd
6	IBM India Pvt ltd
7	Microsoft Corporation India Pvt.Ltd
8	Infosys Technologies
9	Mazumdar Shaw Medical Foundation, Bangalore
10	Central Manufacturing Technology Institute, Bangalore
11	M/s. Fluid Control Research Institute, Palaghat
12	Technology Training & Research Centre subsirframe Aero designs Pvt Ltd, cochin
13	Tata Elxsi Limited, Bangalore
14	Jasmin Infotech P.Ltd, Chennai
15	Vi Microsystems Pvt.Ltd, Chennai
16	M/s. Central Institute of Agricultural Engineering (ICAR), Bhopal
17	SEESHA Karunya community Hospital, Coimbatore
18	M/s. Salzer Electronics, CBE
19	BIS Certificate, Coimbatore
20	M/s. Sri Ramakrishna Advanced Training Inst., Coimbatore
21	Microbiological Laboratory Research and Services India Private Ltd, Coimbatore

22	Central Sericulture Germplasm Resources centre, Hosur
23	Suguna Poultry Farm Limited, Coimbatore
24	M/s. Synthite Industries Ltd, Cochin
25	M/s. Ni Logic Pvt. Ltd, Pune
26	Deccan Industries, Coimbatore
27	M/s KPIT Technologies. Ltd, CBE
28	Vital Bio Systems
29	M/s Edgate Technologies (TI University Program Partner)
30	Pravin Electricals-Mumbai
31	National Stock Exchange
32	Project Management Institute, USA
33	Confederation of Indian Industry, Chennai
34	International Association of Accounting Professionals, UK
35	Builder's Association of India - Coimbatore Centre
36	Pearson Vue Testing Centre
37	M/s. Kriatech Services P.Ltd, Chennai
38	CAD Solutions, Coimbatore
39	Genome Life Sciences
40	NEN (National Entrepreneurship Network)

MoU with NEN (National Entrepreneurship Network) enables the university to work together systematically in developing the entrepreneurship capabilities of the Institute Partner leveraging NEN high impact methodologies, models, content frameworks and best practices for entrepreneurship development and sustainable infrastructure and programs.

Covenant IT Group, US

A Java based IT consulting project is being carried out for M/s Covenant IT Groups, US by our student team. 4 of our 2016 passed out alumni are working as full time employee along with other student teams. The full time employees are getting paid a salary of Rs.8 lakhs per annum where as other student members are getting $1 per hour of working.

6.3.9 Admission of Students

Admission to various courses/programmes is based on the merit of students and transparent Single window system is adopted.

- Efforts are made to ensure that all students seeking admission to the various courses are provided with adequate information through different modes of publicity.
- The Institution has developed its own website for the convenience of students seeking admission to the University.
- The University strictly adheres to the government norms in the admission process giving chance to the meritorious students belonging to the various sections of the society.

Karunya Entrance Examination (KEE) is conducted annually by Karunya University in different locations across India during the month of May. The Admission for all B.Tech. Courses is made based on the aggregate marks scored in +2 and KEE score. The admission for UG arts and science courses is made based on the aggregate marks scored in +2 as per the eligibility norms.

The admission for M.Tech. and other PG Programmes is made based on the eligibility norms given below:

M.Phil. / Ph.D.

- Master's Degree of this University or any other qualification recognized as equivalent thereto in the fields of study notified from time to time by this University. Minimum eligibility is 55% of marks or equivalent CGPA. However 5% relaxation is given to the candidates belonging to SC/ST for admission into Ph.D program
- Master Degree in Arts, Science, Computer Application and Management of this University or any other qualification recognized as equivalent thereto in the field of study. Minimum eligibility is 55% of marks or equivalent CGPA. However 5% relaxation is given to the candidates belonging to SC/ST.
- All eligible applicants will be called for a written entrance test and interview. The admissions will be based on a merit list reflecting consistent academic record and performance in the entrance test and interview.
- The candidates will also attend an interview in the concerned department.
- The candidates are ranked based on the academic records / performance as given below:

  - ❖ UG – 5 marks;
  - ❖ PG – 20;
  - ❖ Experience – 5 [half a mark for each year of service];
  - ❖ Publications – 5; [2- for International refereed Journals, 1 – National refereed journal / Conference conducted by Professional Associations];
  - ❖ Entrance test – 40 [Part A - 15 marks for common test and Part B - 25 marks for departmental test to be conducted together];
  - ❖ Interview by the Department – 25.

School / Department wise merit list will be uploaded in the Website.

6.4 Welfare schemes

Teaching Staff	Staff welfare Fund , Staff Benefit fund, Mediclaim, Employee Provident Fund, Quarters, Hospital services, Water, Wifi, Transport, Gratuity, Pension benefits
Non-teaching Staff	Staff welfare Fund, Mediclaim, Employee Provident Fund, Hospital services, Welfare fund. Educational facility for children, Gratuity, Accommodation, Pension benefits
Students	The students are enrolled in a Health care program where they get both outpatient and inpatient facility at a subsidized cost from the SEESHA Community Hospital. Wifi, hostel, water, power, scholarship to students who excel in sports, Separate Gym for Boys and Girls are available in the University Hostels, IASTE, Hospital, Bank, post office facilities are available

6.5 Total corpus fund generated

884.12 Lakhs

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	Yes	Senior Faculty members from premier Institutions	Yes	Senior Faculty Members from Karunya University
Administrative	No	-		

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

For UG Programmes   Yes ✓ No ☐

For PG Programmes   Yes ✓ No ☐

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

2012 – Relative Grading Scheme was introduced

2013 – Choice Based Credit System was introduced

The salient features of the continuous assessment are:

- The marks obtained in all components will be added and statistical method will be used to award the grades as given in the policy.
- End semester examination / Viva is mandatory

Question Pattern for End Semester Exam: Five questions of 20 marks each for UG and PG with one compulsory question (from the syllabi covered from 37th to 45th lectures) will form the question paper (for a 3 credit course except MBA). For MBA, the compulsory question will be based on the syllabi covered between 31st and 36th lecture hours.

	UG & PG
Time	3 Hours
Maximum Marks	100
Total no of questions	9 *(1 compulsory question(*) + 4 pairs of questions with either/or choice from the portions covered in Tests 1 to 3)*
Total no of questions to be answered	5

(*)*Should be from lectures 37 – 45 for a 3 credit course*

Minimum Passing Requirement

Level of Course	End Semester Mark	Total (Internal+End Sem)
1 & 2	≥ 33%	≥ 45%
3	≥ 40%	≥ 50%

2015 – Int: Ext marks have been changed to **60:40**

1. Three tests will be conducted for 40 marks each. All the three tests are compulsory.

Level 1& 2	Marks	Level 3	Marks
3 Internal Tests @ 15 marks each	45	3 Internal Tests @ 15 marks each	45
Quality Assessment (5 marks-Online test)	10	Quality Assessment	15

Minimum Passing Requirement:

Level of Course	End Semester Mark	Total (Internal+End Sem)
1 & 2	≥ 37%	≥ 45%
3	≥ 45%	≥ 50%

Quality Assessment:

Mini Projects and Term Papers are given to improve the research quality of the students.

Auditing:

Experts from other institutions were called for auditing the internal evaluation and also Question setting done by the internal examiners and the feedback is circulated to the respective HoDs for improvement.

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

The University has a dedicated Alumni Association to network with the alumni across decades. Alumni are represented in the Board of Studies (BoS) and their expertise is utilized for department seminars, workshops, guest lectures, career counselling, placement training, placement, curriculum reformation, research and admission into foreign universities.

The Alumni Cell sponsors a variety of events to provide opportunities to connect with the Alumni.
- Career Networking Social Events
- Educational Programs
- Reunions
- Incubation Projects
- Placements

Karunya Alumni Cell has two bodies, Karunya International Alumni Association (KIAA) and Karunya Alumni Association for India operations.

Our Alumni Portal karunyauniversity.almaconnect.com facilitates the networking and collaboration among student, faculty and alumni association members. Karunya Alma Connect is a social network facilitating our alumni to get trusted help from alumni network.

Alumni Cell Achievements from Jul 2016-June 2017
- Academic Board: 40 alumni are actively involved in the Board of Studies.
- Placements: 33 placements were provided by alumni in various departments.
- Internships: 27 internships were provided by alumni.
- Consultancy: One alumnus was involved in offering a consultancy project.
- Alumni Guest lectures: 10 alumni visited Karunya University to participate in departmental activities and interacted with students through guest lectures.
- Alumni Lecture series: 9 senior distinguished alumni actively participated in the four alumni lecture series and handled workshops/ seminars on latest technologies.

	Alumni Reunion: Alumni Gatherings & Reunion		
S.No	Alumni Gatherings & Reunion	Date	Number of Participants
1	Silver Jubilee reunion of 1987-1991 Batch	29/07/16	70
2	30th Anniversary Alumni Meet	09/10/16	165
3	Meet and Greet Dallas USA	01/10/16	30
4	Meet and Greet Tampa Florida	01/10/16	8
5	Meet and Greet USA West Coast	01/10/16	14
6	Karunya Alumni Association Executive Directors Meet	11/02/17	35
7	Alumni Induction Program for Final Year Students	22/04/17	320

6.12 Activities and support from the Parent – Teacher Association

Parents' meets are held in the campus as well as outside the campus to get the feedback, suggestions for improvement and also to address the grievances. The mentors communicate with the parents regularly regarding the progress of their wards. Progress reports are sent to the parents after every internal exam. University level Parents Meet was organized at Chennai.   (Please see a report in **Annexure -iii**)

Department-wise Parents Meet conducted during the year 2016-17 are as given below:

S.No.	Date	Department	Venue
1.	11.2.2017	EEE	EEE Gallery Hall
2.	11.3.2017	Civil	EEE Seminar Hall
3.	11.3.2017	CST	Immanuel Auditorium
4.	11.2.2017	ECE	Elohim Auditorium
5.	11.2.2017	EMT	EEE Gallery Hall

- Parents and teachers meet together under one roof every year and discuss about the performance of their wards. Very good ambience is provided for the parents to interact with the mentors of their wards, to know about the performance in Examination, Laboratories and other co-curricular and extra circular activities.

- The parents from the relevant field of engineering offer their suggestions regarding the curriculum, training required to be given based on the market need, value added courses and other avenues for the improvement of the functioning of the department.

6.13 Development programmes for support staff

The developmental programmes conducted for the supporting staff are as follows:
- Supporting staff are given training on equipments which are newly purchased in departments.
- Training on Computer Based Productivity Tools and applications

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

To maintain an eco-friendly campus, the following initiatives are taken:

1. Vehicles are generally not permitted inside the campus.
2. Differently abled students are provided with the facility of using battery car for their travel inside the campus
3. All the circular and communication to faculty and students are made through email ensuring paperless official transactions.
4. Swatch Bharat scheme announced by the Honourable Prime Minister of India was promoted among the students and local community as part of extension activities.
5. Solvent waste management in research laboratory
6. Solid waste management
7. Educating students on Green Environment and Green marketing
8. Students are motivated to keep the campus litter free

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.

The list of innovations and best practices are presented as given below and the key innovations are elaborately presented:

The university administration has consciously promoted the culture of creativity and innovation among students and staff, by suitably **introducing incentives for innovation**. Various innovations have emerged from the portals of the university during its 30 years of existence. The following innovations and best practices were introduced and implemented during the assessment period:

Some of the notable innovations have been effectively deployed through:
- Innovation and Patent cell
- e-governance
- Integrating Community Services into the Curriculum

Innovative Devices developed and Patents

a) Low cost vacuum suction based wound healing: KITS in association with Karunya Rural Community Hospital developed a low cost technique for the speedy recovery of wound in diabetic patients, thereby preventing amputation of the extremities. The negative pressure developed by the module removes interstitial fluid, decreasing localized edema and increasing the blood flow. This in turn decreases tissue bacterial levels, thus helping in speedy wound healing. Patenting process is under progress. More than 100 instruments have been supplied to the hospitals in Tamil Nadu and Kerala for reporting the results.

b) Lift Laparoscopy: A gasless procedure has been developed, which is useful for low cost surgery among the rural community. A lot of surgeries have been performed till date by the Karunya rural community hospital to understand the performance of the protocols. This demonstratesan indigenous technology which has been transferred from lab to land. This technology is being converted into a product with the help of STAAN Biotech private limited based in Coimbatore.

c) Non-invasive Blood Glucose monitor: *Bloodless, Painless and Needleless*

This product was developed to indicate the blood glucose level in humans by using the optical sensor with the support of electronic devices and instrumentation techniques. It is a non-invasive method which does not need blood sampling from the human body. The physiological signal is recorded using an optical sensor. Using signal processing and machine learning techniques the measurement algorithm is developed to determine the blood glucose values. This device ensures patient safety and painless procedure.
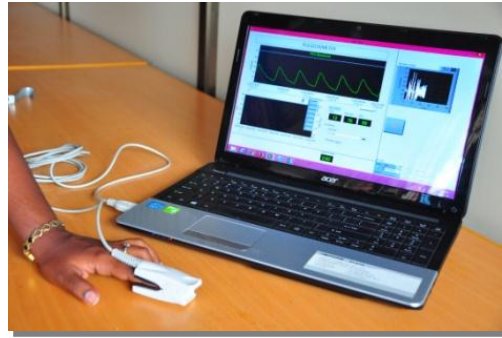
d) Non-invasive blood pressure monitoring system:
It is a non-invasive method which does not need the use of cuff. The physiological signal is recorded using an optical sensor. Using signal processing and advanced computing techniques a measurement algorithm was developed to determine the blood pressure. This device ensures patient comfort and is user friendly.

e) Cardiac pulmonary resuscitation (CPR) unit for reviving patients
This robotic system delivers uninterrupted chest compressions during CPR for a person suffering from cardiac arrest. The device developed adheres to the norms prescribed by American Heart Ass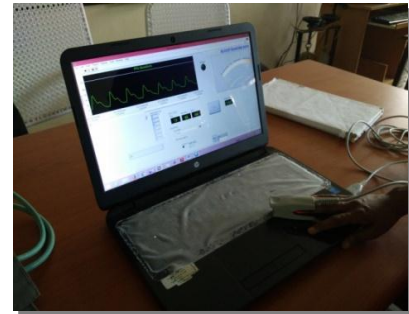ociation guidelines - 2015. The available mechanical cardiac system demands human assistance continuously. The present system developed is based on a novel conceptual model incorporating a parallel manipulator.
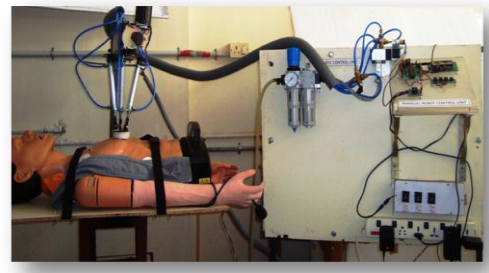
f) Interlocking bricks for increasing the strength of buildings
Interlocking bricks limit the requirement of cement mortar and enhances the speed of construction process. Interlocking clay bricks with a new shape lock have been designed and tested, with enhanced alignment accuracy, and increased load bearing capacity of brick masonry. The dimensions of the brick were taken as 300x150x100mm. Compressive and shear strength of the bricks were observed as 2.65 N/mm^2 and 1.369 N/mm^2 respectively.
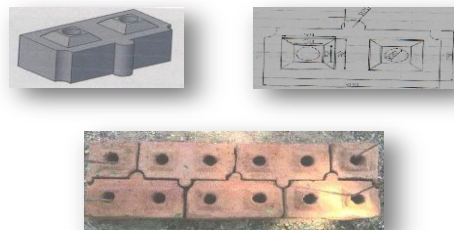
7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

Plan of Action	Action Taken Report
1. NBA accreditation –Pre qualifier proforma being sent to NBA for getting three year accreditation against the existing approval for 2 years.	Pre qualifier submitted and approval for three years obtained for Civil and Mechanical Engineering programmes.
2. Participation in NIRF 2017: Preparation and uploading of data in the NIRF portal done before 24th December 2016.	The documents were prepared and uploaded as scheduled. The ranks obtained in NIRF under the Engg. Criteria is 62 and university domain is 71.
3. Placement for more number of passing out students in relevant industries with higher salary.	787 students out of 1337 eligible students got placement. Among 1337 students, around 200 students opted for higher education. Hence among the remaining students who opted for placements, 70% of the students could be placed through campus placement drive.
4. Face-lift to all laboratories attached to departments by procuring sophisticated equipments.	Facilities in the specialized labs of Departments were improved.
5. Academic Audit and Research Audit to be conducted	External Academic Audit and research audit were conducted and the suggestions were implemented.
6. Achievers Award and Best Department Awards to be given for motivating faculty members.	Achievers Award (those who got funded research project) were awarded. The norms for the award of best departments have been revised to alert the departments on various quality parameters.
7. Performance analysis of all departments to be conducted.	Performance analysis of all departments were conducted based on the IQAC score as per the revised norms.
8. Verification of documents submitted by faculty for AGP revision and cadre revision	The documents submitted by 135 faculty members were verified and the data given on publications were also verified using the respective websites.
9. Preparation and submission of annual report 2015-16 to UGC	The annual report was prepared and submitted to UGC.

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

Please see **Annexure - iv**

Provide the details in annexure (annexure need to be numbered as i, ii, iii)

7.4 Contribution to environmental awareness / protection

Energy conservation steps are taken for saving electrical energy, by using energy efficient devices. Energy audits were conducted and the outcome of the audits was used for conserving energy. In the students' residences and faculty residences, the incandescent lamps have been replaced with CFL bulbs. Sensors are provided in the areas used by the administrative faculty to conserve energy.

All the student residences are provided with solar water heaters. Apart from this, the entire terrace of the Administrative building is provided with solar panel with a capacity of 95kW which supply power to the electrical fittings thus, saving 520 units of EB power every day.129.94 tons of CO_2 emission per year is prevented by solar water heaters. KITS is situated in the foothills of Siruvani and surrounded by green environment. KITS plants and maintains trees in the campus and encourages natural vegetation, apart from maintaining lawns and flower plants.

Hazardous wastes are separated before disposing waste water from laboratories into soak pits. Polythene bags and plastics are separated before treating the organic waste. Old computers/printers are donated to schools if they are in usable conditions; otherwise they are sold to vendors for recycling.

7.5 Whether environmental audit was conducted?   Yes [ ]   No [✔]

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

SWOT Analysis of KITS

Strengths:
1. Choice Based Credit System with interdisciplinary subjects and international credit transfer policies.
2. All class rooms are ICT and Wi-Fi enabled.
3. Dedicated and qualified faculty members with international reputation and experience.
4. Effective functioning of industry advisory committee in each department
5. A structured mentoring policy to endorse an effective mechanism for every student of the university is in place.
6. Centers for technology development tin collaboration with IBM, Salzer, Siemens, Novell etc.
7. Active IPR Cell for patent filing, publishing and granting.
8. Karunya Innovation and Incubation Centre (KIIC) to foster innovation, research and entrepreneurial activities in Science and Technology
9. Consultancy activities in every department.
10. Strong industry and alumni collaborations with visible, measurable outcomes.
11. Study circle for Civil service, GATE, NET/ SLET exams and other competitive exams.

12. Effective decentralized setup with academic and financial autonomy to Heads.
13. Faculty members participating in online certification courses through MOOC platform

Weakness:

1. The location of the institution at the foothills of Western Ghats, construction and expansion related activities are delayed infrastructure development.
2. Despite an increase in number of funded projects, university is striving hard for mega projects (> 2 crores) from funding agencies.
3. Non conventional energy resources such as solar energy using solar panels are to be installed apart from the panels installed on the roof of the Administrative building, in order to save conventional electricity.

Opportunities:

1. Efforts to bring in vocational training centers in collaboration with government agencies such as CIPET, COINDIA are in pipeline.
2. University envisages to enlist eminent scientists and technologists from multinational agencies for product development.
3. Translational research center for device fabrication is on the verge of launching. More industry partnership is envisaged for device fabrication to make this center a hub for medical electronics.
4. With the growing trend in ICT based learning, teaching learning process can be completely tuned to project based learning.
5. Emphasis is given more for student projects at both PG and UG level. Need for more IPR and entrepreneurial activities are imminent.

Threats

1. With growing interdisciplinary approach in teaching-learning process, there is a greater challenge to periodically restructure our research infrastructure and industry partnership.
2. More research grants and industry partnerships are needed for student product development activities in order to groom potential entrepreneurs.
3. Identifying industry partners who are willing to invest on product development is a paramount task.
4. Venture capitalists and angel investors' participation will determine our priorities on Translational research.
5. Government initiatives launched recently on smart city, start-ups, Make in India, Clean India, skill development schemes have close parallel to the vision and mission of our university which need to be integrated.

8. **Plans of institution for next year**

In line with the Vision and Mission of the University, the departments came up with different plans for development during the academic year 2017-18. The key plans are identified by IQAC which in turn will monitor the progress and implementation of the same. The identified plans are:

- Introduction of activity and project based UG Courses and publication based PG Courses
- Sandwich programmes with industries to equip students with practical skills
- Induction of students from abroad through IAESTE to promote research
- Submission of Major research proposals to various funding agencies
- Interdisciplinary certificate programmes
- Simultaneous interdisciplinary PG diploma for biotech, mechanical and electronics students in instrumental characterization
- To create opportunities for student start-ups, Incubation & Entrepreneurship
- Conducting a survey among the students to identify their options for Core company placements, Software company placements, higher studies in India / abroad and orienting them towards attaining the same.
- Conversion of the research facilities into Centres of Excellence
- Participation of all faculty members in online certification courses through MOOC platform
- Active association with Karunya Rural Community Hospital for collaborative research

Dr.D.Tensing

Name _____

_____ 25/10/17

Signature of the Coordinator, IQAC

Dr. E. J. James

Name _____

Signature of the Chairperson, IQAC

_____ *** _____

Abbreviations:

CAS	-	Career Advanced Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
COP	-	Career Oriented Programme
CPE	-	College with Potential for Excellence
DPE	-	Department with Potential for Excellence
GATE	-	Graduate Aptitude Test
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution
UPE	-	University with Potential Excellence
UPSC	-	Union Public Service Commission

Annexure-i

Academic Calendar for the Academic year 2016-17

ACADEMIC CALENDAR - JUNE 2016

Day	Date	B.Tech / M.Sc [Integrated] / B.Sc. (Viscom) V	IV	III	II	I	M.Tech II	I	MA / M.Sc. II	I	MBA II	I	B.Com, BBA, BCA, B.Sc. (IT) I	Events
Wed	1													
Thu	2													
Fri	3													
Sat	4													
Sun	5													
Mon	6													
Tue	7													
Wed	8													
Thu	9													
Fri	10													
Sat	11													
Sun	12													
Mon	13													
Tue	14													
Wed	15													
Thu	16													
Fri	17													
Sat	18													
Sun	19													
Mon	20													
Tue	21													
Wed	22	Lateral Entry Enrollment												
Thu	23													Lateral Entry Orientation
Fri	24													Lateral Entry Orientation
Sat	25													Lateral Entry Orientation
Sun	26													
Mon	27													Lateral Entry Orientation
Tue	28													Lateral Entry Orientation
Wed	29	Staff Retreat												
Thu	30													

ACADEMIC CALENDAR - JULY 2016

Day	Date	B.Tech / M.Sc [Integrated] / B.Sc. (Viscom) V	IV	III	II	I	M.Tech II	I	MA / M.Sc. II	I	MBA II	I	B.Com, BBA, BCA, B.Sc. (IT) I	Events
Fri	1	Dr. D.G.S. Dhinakaran's 81st Birth Anniversary												
Sat	2	14th Convocation												
Sun	3													
Mon	4	1	1	1	1		1		1					Ph.D., M.Phil Enrollment
Tue	5	2	2	2	2		2		2					
Wed	6	3	3	3	3		3		3					University Staff Fellowship
Thu	7	Ramzan												
Fri	8	4	4	4	4		4		4					
		B.Tech. & PG (Integrated) Enrollment												
Sat	9	B.Tech., B.Com., BBA, BCA, B.Sc. (IT) & B.Sc. (Viscom) Enrollment												
Sun	10													
Mon	11	5	5	5	5	1	5		5				1	
Tue	12	6	6	6	6	2	6		6				2	
Wed	13	7	7	7	7	3	7		7				3	University Staff Meeting
Thu	14	8	8	8	8	4	8		8				4	
Fri	15	9	9	9	9	5	9		9				5	
Sat	16													
Sun	17													
Mon	18	10	10	10	10	6	10		10		*1		6	*Reopening for II MBA
Tue	19	11	11	11	11	7	11		11		2		7	
Wed	20	12	12	12	12	8	12		12		3		8	Dept. Staff Fellowship
Thu	21	13	13	13	13	9	13		13		4		9	
Fri	22	14	14	14	14	10	14		14		5		10	
Sat	23													
Sun	24													
Mon	25	15	15	15	15	11	15		15		6		11	
Tue	26	16	16	16	16	12	16		16		7		12	
		M.Tech., MBA, M.Sc., MA & PG Diploma Enrollment												
Wed	27	17	17	17	17	13	17	1	17	1	8	1	13	Dept. Staff Meeting
Thu	28	18	18	18	18	14	18	2	18	2	9	2	14	
Fri	29	19	19	19	19	15	19	3	19	3	10	3	15	
Sat	30													DC Meeting Day
Sun	31													

ACADEMIC CALENDAR - AUGUST 2016

Day	Date	B.Tech / M.Sc [Integrated] / B.Sc. (Viscom) V	IV	III	II	I	M.Tech II	I	MA / M.Sc. II	I	MBA II	I	B.Com, BBA, BCA, B.Sc. (IT) I	Events
Mon	1	20	20	20	20	16	20	4	20	4	11	4	16	
Tue	2	21	21	21	21	17	21	5	21	5	12	5	17	
Wed	3	22	22	22	22	18	22	6	22	6	13	6	18	University Staff Fellowship
Thu	4	23	23	23	23	19	23	7	23	7	14	7	19	
Fri	5	24	24	24	24	20	24	8	24	8	15	8	20	
Sat	6													
Sun	7													
Mon	8	25T1	25T1	25T1	25	21	25T1	9	25T1	9	16	9	21	
Tue	9	26T1	26T1	26T1	26	22	26T1	10	26T1	10	17	10	22	
Wed	10	27T1	27T1	27T1	27	23	27T1	11	27T1	11	18	11	23	
Thu	11	28T1	28T1	28T1	28	24	28T1	12	28T1	12	19	12	24	
Fri	12	29T1	29T1	29T1	29	25	29T1	13	29T1	13	20	13	25	
Sat	13	T1	T1	T1			T1		T1					
Sun	14													
Mon	15	Independence Day												
Tue	16	30	30	30	30	26	30	14	30	14	21	14	26	
Wed	17	31	31	31	31	27	31	15	31	15	22	15	27	Dept. Staff Fellowship
Thu	18	32	32	32	32	28	32	16	32	16	23	16	28	
Fri	19	33	33	33	33	29	33	17	33	17	24	17	29	
Sat	20	Non Academic Working Day - I												DC Meeting Day
Sun	21													
Mon	22	34	34	34	34	30	34	18	34	18	25T1	18	30	
Tue	23	35	35	35	35	31	35	19	35	19	26T1	19	31	
Wed	24	36	36	36	36	32	36	20	36	20	27T1	20	32	Dept. Staff Meeting
Thu	25	Krishna Jeyanthi												
Fri	26	37	37	37	37	33	37	21	37	21	28	21	33	
Sat	27	Non Academic Working Day - II												
Sun	28													
Mon	29	38	38	38	38	34	38	22	38	22	29	22	34	
Tue	30	39	39	39	39	35	39	23	39	23	30	23	35	
Wed	31	40	40	40	40	36	40	24	40	24	31	24	36	

T1,T2,T3 Internal Exam Dates

ACADEMIC CALENDAR - SEPTEMBER 2016

Day	Date	B.Tech / M.Sc [Integrated] / B.Sc. (Viscom) V	IV	III	II	I	M.Tech II	I	MA / M.Sc. II	I	MBA II	I	B.Com, BBA, BCA, B.Sc. (IT) I	Events
Thu	1	41	41	41	41	37	41	25	41	25	32	25	37	
Fri	2	42	42	42	42	38	42	26	42	26	33	26	38	
Sat	3													
Sun	4													
Mon	5	Vinayakar Chathurthi												
Tue	6	43T2	43T2	43T2	43T	39T	43T2	27T	43T2	27T	34	27	39	
Wed	7	44T2	44T2	44T2	44T	40T	44T2	28T	44T2	28T	35	28	40	University Staff Fellowship
Thu	8	45T2	45T2	45T2	45T	41T	45T2	29T	45T2	29T	36	29	41	
Fri	9	46T2	46T2	46T2	46T	42T	46T2	30T	46T2	30T	37	30	42	
Sat	10	47T2	47T2	47T2	47T	43T	47T2	31T1	47T2	31T1	38	31	43	Tuesday Time table
Sun	11													
Mon	12	48T2	48T2	48T2	48T	44T	48T2	32T1	48T2	32T1	39	32	44	
Tue	13	Bakrid												
Wed	14	Onam												
Thu	15	49	49	49	49	45	49	33	49	33	40	33	45	
Fri	16	50	50	50	50	46	50	34	50	34	41	34	46	
Sat	17	Non Academic Working Day - III												
Sun	18													
Mon	19	51	51	51	51		51	35	51	35	42	35	47	
Tue	20	52	52	52	52		52	36	52	36	43	36	48	
Wed	21	53	53	53	53	MSB	53	37	53	37	44	37	49	KEMT
Thu	22	54	54	54	54		54	38	54	38	45	38	50	KEMT
Fri	23	55	55	55	55		55	39	55	39	46	39	51	KEMT
Sat	24													KEMT
Sun	25													
Mon	26	56	56	56	56	47	56	40	56	40	47T2	40	52	
Tue	27	57	57	57	57	48	57	41	57	41	48T2	41	53	
Wed	28	58	58	58	58	49	58	42	58	42	49T2	42	54	Dept. Staff Meeting
Thu	29	59	59	59	59	50	59	43	59	43	50	43	55	
Fri	30	60	60	60	60	51	60	44	60	44	51	44	56	

T1, T2,T3 Internal Exam Dates   KEMT - Karunya Evangeline Memorial Tournament   MSB - Mid Semester Break

ACADEMIC CALENDAR - OCTOBER 2016

Day	Date	V	IV	III	II	I	M.Tech II	M.Tech I	MA II	MA I	MBA II	MBA I	B.Com/BBA/BCA/B.Sc.(IT) I	Events
Sat	1													
Sun	2	Gandhi Jeyanthi												
Mon	3	61	61	61	61	52	61	45	61	45	52	45T	57	
Tue	4	62	62	62	62	53	62	46	62	46	53	46T	58	University Foundation Day
Wed	5	63	63	63	63	54	63	47	63	47	54	47T	59	University Staff Fellowship
Thu	6	64	64	64	64	55	64	48	64	48	55	48T	60	
Fri	7	65	65	65	65	56	65	49	65	49	56	49T	61	30th Anniversary Celebrations; Wednesday Timetable; Alumni Lecture Series - I
Sat	8	66	66	66	66	57	66	50	66	50	57	50T	62	30th Anniversary Celebrations
Sun	9													30th Anniversary Celebrations
Mon	10	67	67	67	67	58	67	51	67	51	58	51	63	30th Anniversary Celebrations
Tue	11	Vijaya Dasami												
Wed	12	Muharram												
Thu	13	68	68	68	68	59	68	52	68	52	59	52	64	
Fri	14	69	69	69	69	60	69	53	69	53	60*	53	65	*Refer COE Time Table for End Semester Exam Dates
Sat	15	Non Academic Working Day - IV												
Sun	16													
Mon	17	70	70	70	70	61	70	54	70	54	E1	54	66	
Tue	18	71	71	71	71	62	71	55	71	55	E2	55	67	
Wed	19	72	72	72	72	63	72	56	72	56	E3	56	68	Dept. Staff Fellowship
Thu	20	73T3	73T3	73T3	73	64	73T3	57T2	73T3	57T2	E4	57	69	
Fri	21	74T3	74T3	74T3	74	65	74T3	58T2	74T3	58T2	E5	58	70	
Sat	22													
Sun	23													
Mon	24	75T3	75T3	75T3	75	66	75T3	59T2	75T3	59T2	E6	59	71	
Tue	25	76T3	76T3	76T3	76	67	76T3	60T2	76T3	60T2	E7	60	72	
Wed	26	77T3	77T3	77T3	77	68	77T3	61T2	77T3	61T2	E8	61	73	
Thu	27	78T3	78T3	78T3	78	69	78T3	62T2	78T3	62T2	E9	62	74	
Fri	28	79	79	79	79	70	79	63	79	63	E10	63	75	
Sat	29	Deepavali												
Sun	30													
Mon	31	80	80	80	80	71	80	64	80	64	1	64	76	

T1, T2,T3 Internal Exam Dates

ACADEMIC CALENDAR - NOVEMBER 2016

Day	Date	V	IV	III	II	I	M.Tech II	M.Tech I	MA II	MA I	MBA II	MBA I	B.Com/BBA/BCA/B.Sc.(IT) I	Events
Tue	1	81	81	81	81	72	81	65	81	65	2	65	77	
Wed	2	82	82	82	82	73	82	66	82	66	3	66	78	University Staff Fellowship
Thu	3	83	83	83	83	74	83	67	83	67	4	67	79	
Fri	4	84	84	84	84	75	84	68	84	68	5	68	80	
Sat	5													
Sun	6													
Mon	7	85	85	85	85	76	85	69	85	69	6	69	81	
Tue	8	86	86	86	86	77	86	70	86	70	7	70	82	
Wed	9	87	87	87	87	78	87	71	87	71	8	71	83	University Staff Meeting
Thu	10	88	88	88	88	79	88	72	88	72	9	72	84	
Fri	11	89	89	89	89	80	89	73	89	73	10	73	85	
Sat	12													
Sun	13													
Mon	14	90*	90*	90*	90*	81	90*	74	90*	74	11	74	86	*Refer COE Time Table for End Semester Exam Dates
Tue	15	E1	E1	E1	E1	82	E1	75	E1	75	12	75	87	
Wed	16	E2	E2	E2	E2	83	E2	76	E2	76	13	76	88	Dept. Staff Fellowship
Thu	17	E3	E3	E3	E3	84	E3	77	E3	77	14	77	89	
Fri	18	E4	E4	E4	E4	85	E4	78	E4	78	15	78	90*	*Refer COE Time Table for End Semester Exam Dates
Sat	19	E5	E5	E5	E5		E5	T3	E5				E1	
Sun	20													
Mon	21	E6	E6	E6	E6	86	E6	79T3	E6	79T3	16	79	E2	
Tue	22	E7	E7	E7	E7	87	E7	80T3	E7	80T3	17	80	E3	
Wed	23	E8	E8	E8	E8	88	E8	81T3	E8	81T3	18	81	E4	Dept. Staff Meeting
Thu	24	E9	E9	E9	E9	89	E9	82T3	E9	82T3	19	82	E5	
Fri	25	E10	E10	E10	E10	90*	E10	83T3	E10	83T3	20	83	E6	*Refer COE Time Table for End Semester Exam Dates
Sat	26	E11	E11	E11	E11	E1	E11		E11				E7	
Sun	27													
Mon	28	E12	E12	E12	E12	E2	E12	84	E12	84	21	84	E8	
Tue	29	E13	E13	E13	E13	E3	E13	85	E13	85	22	85	E9	
Wed	30	E14	E14	E14	E14	E4	E14	86	E14	86	23	86	E10	

T1, T2,T3 Internal Exam Dates | E - Tentative End Semester Exam Dates

ACADEMIC CALENDAR - DECEMBER 2016

Day	Date	V	IV	III	II	I	M.Tech II	M.Tech I	MA II	MA I	MBA II	MBA I	B.Com/BBA/BCA/B.Sc.(IT) I	Events
Thu	1	E15	E15	E15	E15	E5	E15	87	E15	87	24	87	E11	
Fri	2						E6	88		88	25	88		
Sat	3	1	1	1	1	E7	1	89	1	89	26T1	89	1	Monday Timetable; Alumni Lecture Series - I
Sun	4													
Mon	5	2	2	2	2	E8	2	90*	2	90*	27T1	90*	2	*Refer COE Time Table for End Semester Exam Dates
Tue	6	3	3	3	3	E9	3	E1	3	E1	28T1	E1	3	
Wed	7	4	4	4	4	E10	4	E2	4	E2	29	E2	4	University Staff Fellowship
Thu	8	5	5	5	5	E11	5	E3	5	E3	30	E3	5	
Fri	9	6	6	6	6	E12	6	E4	6	E4	31	E4	6	
Sat	10													
Sun	11													
Mon	12	Milad Un Nabi												
Tue	13	7	7	7	7	E13	7	E5	7	E5	32	E5	7	
Wed	14	8	8	8	8	1	8	E6	8	E6	33	E6	8	University Staff Meeting
Thu	15	9	9	9	9	2	9	E7	9	E7	34	E7	9	
Fri	16	10	10	10	10	3	10	E8	10	E8	35	E8	10	Annual Thanksgiving day
Sat	17	11	11	11	11	4	11	E9	11	E9	36	E9	11	Monday Timetable
Sun	18													
Mon	19													
Tue	20	Vacation / Winter												
Wed	21													
Thu	22													
Fri	23													
Sat	24													
Sun	25	Christmas												
Mon	26													
Tue	27													
Wed	28													
Thu	29													
Fri	30													
Sat	31													

ACADEMIC CALENDAR - JANUARY 2017

Day	Date	V	IV	III	II	I	M.Tech II	M.Tech I	MA II	MA I	MBA II	MBA I	B.Com/BBA/BCA/B.Sc.(IT) I	Events
Sun	1	New Year												
Mon	2													
Tue	3													Staff Retreat (Subject to Change)
Wed	4	12	12	12	12	5	12	1	12	1	37	1	12	
Thu	5	13	13	13	13	6	13	2	13	2	38	2	13	
Fri	6	14	14	14	14	7	14	3	14	3	39	3	14	
Sat	7	Non Academic Working Day - I												
Sun	8													
Mon	9	15	15	15	15	8	15	4	15	4	40	4	15	
Tue	10	16	16	16	16	9	16	5	16	5	41	5	16	
Wed	11	17	17	17	17	10	17	6	17	6	42	6	17	University Staff Meeting
Thu	12	18	18	18	18	11	18	7	18	7	43	7	18	
Fri	13	19	19	19	19	12	19	8	19	8	44	8	19	
Sat	14	Pongal												
Sun	15													
Mon	16	Uzhavar Thirunal												
Tue	17	20	20	20	20	13	20	9	20	9	45T2	9	20	
Wed	18	21	21	21	21	14	21	10	21	10	46T2	10	21	Dept. Staff Fellowship
Thu	19	22	22	22	22	15	22	11	22	11	47T2	11	22	U- Turn Programme
Fri	20	23	23	23	23	16	23	12	23	12	48	12	23	Prophetic Conference
Sat	21													Prophetic Conference
Sun	22													Prophetic Conference
Mon	23	24	24	24	24	17	24	13	24	13	49	13	24	
Tue	24	25	25	25	25	18	25	14	25	14	50	14	25	
Wed	25	26	26	26	26	19	26	15	26	15	51	15	26	Dept. Staff Meeting
Thu	26	Republic Day												
Fri	27	27	27	27	27	20	27	16	27	16	52	16	27	
Sat	28	Non Academic Working Day - II												DC Meeting Day
Sun	29													
Mon	30	28T1	28T1	28T1	28T1	21	28T1	17T1	28T1	17T1	53	17	28T1	
Tue	31	29T1	29T1	29T1	29T1	22	29T1	18T1	29T1	18T1	54	18	29T1	

T1, T2,T3 Internal Exam Dates

ACADEMIC CALENDAR - FEBRUARY 2017

UNIVERSITY CAMPUS: B.Tech / M.Sc [Integrated] / B.Sc. (Viscom) [V, IV, III, II, I] · M.Tech [II, I] · MA / M.Sc. [II, I]
KUBS: MBA [II, I] · B.Com, BBA, BCA, B.Sc. (IT) [I]

Day	Date	V	IV	III	II	I	M.Tech II	M.Tech I	MA/M.Sc II	MA/M.Sc I	MBA II	MBA I	B.Com,BBA,BCA,B.Sc.(IT) I	Events
Wed	1	30T1	30T1	30T1	30T1	23T1	30T1	19T1	30T1	19T1	55	19	30T1	
Thu	2	31T1	31T1	31T1	31T1	24T1	31T1	20T1	31T1	20T1	56	20	31T1	
Fri	3	32T1	32T1	32T1	32T1	25T1	32T1	21T1	32T1	21T1	57	21	32T1	
Sat	4	T1	T1	T1	T1	T1	T1	T1	T1	T1			T1	
Sun	5													
Mon	6	33	33	33	33	26	33	22	33	22	58	22	33	
Tue	7	34	34	34	34	27	34	23	34	23	59	23	34	
Wed	8	35	35	35	35	28	35	24	35	24	60*	24	35	University Staff Meeting
Thu	9	36	36	36	36	29	36	25	36	25	E1	25	36	
Fri	10	37	37	37	37	30	37	26	37	26	E2	26	37	
Sat	11	Non Academic Working Day - III												
Sun	12													
Mon	13	38	38	38	38	31	38	27	38	27	E3	27T1	38	
Tue	14	39	39	39	39	32	39	28	39	28	E4	28T1	39	
Wed	15	40	40	40	40	33	40	29	40	29	E5	29T1	40	Dept. Staff Fellowship
Thu	16	41	41	41	41	34	41	30	41	30	E6	30T1	41	
Fri	17	42	42	42	42	35	42	31	42	31	E7	31T1	42	
Sat	18													
Sun	19													
Mon	20	43	43	43	43	36	43	32	43	32	1	32	43	9th Dr. D.G.S. Dhinakaran Memorial Thanks Giving Day
Tue	21	44	44	44	44	37	44	33	44	33	2	33	44	
Wed	22	45	45	45	45	38	45	34	45	34	3	34	45	Dept. Staff Meeting
Thu	23	46	46	46	46	39	46	35	46	35	4	35	46	
Fri	24	47	47	47	47	40	47	36	47	36	5	36	47	
Sat	25	48	48	48	48	41	48	37	48	37	6	37	48	Monday Timetable / Alumni Lecture Series II
Sun	26													
Mon	27	49	49	49	49	42	49	38	49	38	7	38	49	
Tue	28	50	50	50	50	43	50	39	50	39	8	39	50	

ACADEMIC CALENDAR - MARCH 2017

Day	Date	V	IV	III	II	I	M.Tech II	M.Tech I	MA/M.Sc II	MA/M.Sc I	MBA II	MBA I	B.Com,BBA,BCA,B.Sc.(IT) I	Events
Wed	1	51	51	51	51	44	51	40	51	40	9	40	51	
Thu	2	52	52	52	52	45	52	41	52	41	10	41	52	
Fri	3	53	53	53	53	46	53	42	53	42	11	42	53	University Staff Fellowship
Sat	4													
Sun	5													
Mon	6	54T2	54T2	54T2	54T2	47T2	54T2	43T2	54T2	43T2	12	43	54T2	
Tue	7	55T2	55T2	55T2	55T2	48T2	55T2	44T2	55T2	44T2	13	44	55T2	
Wed	8	56T2	56T2	56T2	56T2	49T2	56T2	45T2	56T2	45T2	14	45	56T2	
Thu	9	57T2	57T2	57T2	57T2	50T2	57T2	46T2	57T2	46T2	15	46	57T2	
Fri	10	58T2	58T2	58T2	58T2	51T2	58T2	47T2	58T2	47T2	16	47	58T2	
Sat	11	T2	T2	T2	T2	T2	T2	T2	T2	T2			T2	
Sun	12													
Mon	13	59	59	59	59	52	59	48	59	48	17	48	59	
Tue	14	60	60	60	60	53	60	49	60	49	18	49	60	
Wed	15	61	61	61	61	54	61	50	61	50	19	50	61	Dept. Staff Fellowship
Thu	16	62	62	62	62	55	62	51	62	51	20	51	62	
Fri	17	63	63	63	63	56	63	52	63	52	21	52	63	
Sat	18	Non Academic Working Day - IV												
Sun	19													
Mon	20	64	64	64	64	57	64	53	64	53	22	53T2	64	
Tue	21	65	65	65	65	58	65	54	65	54	23	54T2	65	
Wed	22	66	66	66	66	59	66	55	66	55	24T2	55T2	66	Dept. Staff Meeting
Thu	23	67	67	67	67	60	67	56	67	56	25T2	56T2	67	
Fri	24	68	68	68	68	61	68	57	68	57	26T2	57T2	68	
Sat	25													
Sun	26													
Mon	27	69	69	69	69	62	69	58	69	58	27	58	69	
Tue	28	70	70	70	70	63	70	59	70	59	28	59	70	
Wed	29	Telugu New Year												
Thu	30	71	71	71	71	64	71	60	71	60	29	60	71	
Fri	31	72	72	72	72	65	72	61	72	61	30	61	72	

T1, T2,T3 Internal Exam Dates

ACADEMIC CALENDAR - APRIL 2017

Day	Date	V	IV	III	II	I	M.Tech II	M.Tech I	MA/M.Sc II	MA/M.Sc I	MBA II	MBA I	B.Com,BBA,BCA,B.Sc.(IT) I	Events
Sat	1													
Sun	2													
Mon	3	73	73	73	73	66	73	62	73	62	31	62	73	
Tue	4	74	74	74	74	67	74	63	74	63	32	63	74	
Wed	5	75T3	75T3	75T3	75T3	68T3	75T3	64T3	75T3	64T3	33	64	75T3	
Thu	6	76T3	76T3	76T3	76T3	69T3	76T3	65T3	76T3	65T3	34	65	76T3	
Fri	7	77T3	77T3	77T3	77T3	70T3	77T3	66T3	77T3	66T3	35	66	77T3	
Sat	8	T3	T3	T3	T3	T3	T3	T3	T3	T3			T3	
Sun	9													
Mon	10	78T3	78T3	78T3	78T3	71T3	78T3	67T3	78T3	67T3	36	67	78T3	
Tue	11	79T3	79T3	79T3	79T3	72T3	79T3	68T3	79T3	68T3	37	68	79T3	
Wed	12	80	80	80	80	73	80	69	80	69	38	69	80T3	
Thu	13	Maundy Thursday												
Fri	14	Good Friday												
Sat	15													
Sun	16	Easter												
Mon	17	81	81	81	81	74	81	70	81	70	39	70	81	
Tue	18	82	82	82	82	75	82	71	82	71	40	71	82	
Wed	19	83	83	83	83	76	83	72	83	72	41	72	83	Dept. Staff Fellowship
Thu	20	84	84	84	84	77	84	73	84	73	42	73	84	
Fri	21	85	85	85	85	78	85	74	85	74	43	74	85	
Sat	22													
Sun	23													
Mon	24	86	86	86	86	79	86	75	86	75	44T2	75T3	86	
Tue	25	87	87	87	87	80	87	76	87	76	45T2	76T3	87	
Wed	26	88	88	88	88	81	88	77	88	77	46T2	77T3	88	Dept. Staff Meeting
Thu	27	89	89	89	89	82	89	78	89	78	47	78T3	89	
Fri	28	90*	90*	90*	90*	83	90*	79	90*	79	48	79T3	90*	*Refer COB Time Table for End Semester Exam Dates
Sat	29	E1	E1	E1	E1	84	E1	80	E1	80	49	80	E1	Thursday Timetable
Sun	30													

T1, T2,T3 Internal Exam Dates

ACADEMIC CALENDAR - MAY 2017

Day	Date	V	IV	III	II	I	M.Tech II	M.Tech I	MA/M.Sc II	MA/M.Sc I	MBA II	MBA I	B.Com,BBA,BCA,B.Sc.(IT) I	Events
Mon	1	May Day												
Tue	2	E2	E2	E2	E2	85	E2	81	E2	81	50	81	E2	
Wed	3	E3	E3	E3	E3	86	E3	82	E3	82	51	82	E3	
Thu	4	E4	E4	E4	E4	87	E4	83	E4	83	52	83	E4	
Fri	5	E5	E5	E5	E5	88	E5	84	E5	84	53	84	E5	
Sat	6	E6	E6	E6	E6	89	E6	85	E6	85	54	85	E6	Monday Timetable
Sun	7													
Mon	8	E7	E7	E7	E7	90*	E7	86	E7	86	55	86	E7	*Refer COB Time Table for Semester Exam Dates
Tue	9	E8	E8	E8	E8	E1	E8	87	E8	87	56	87	E8	
Wed	10	E9	E9	E9	E9	E2	E9	88	E9	88	57	88	E9	
Thu	11	E10	E10	E10	E10	E3	E10	89	E10	89	58	89	E10	
Fri	12	E11	E11	E11	E11	E4	E11	90*	E11	90*	59	90*	E11	*Refer COB Time Table for Semester Exam Dates
Sat	13	E12	E12	E12	E12	E5	E12	E1	E12	E1				
Sun	14													
Mon	15	E13	E13	E13	E13	E6	E13	E2	E13	E2	60*	E1	E12	*Refer COB Time Table for Semester Exam Dates
Tue	16	E14	E14	E14	E14	E7	E14	E3	E14	E3	E1	E2	E13	
Wed	17	E15	E15	E15	E15	E8	E15	E4	E15	E4	E2	E3	E14	
Thu	18						E9		E5	E5	E3	E4	E15	
Fri	19						E10		E6	E6	E4	E5		
Sat	20						E11		E7	E7	E5	E6		
Sun	21													
Mon	22						E12		E8	E8	E6	E7		
Tue	23						E13		E9	E9	E7	E8		
Wed	24						E14		E10	E10	E8	E9		
Thu	25						E15		E11	E11	E9	E10		
Fri	26								E12	E12	E10	E11		
Sat	27								E13	E13	E11	E12		
Sun	28													
Mon	29								E14	E14	E12	E13		
Tue	30								E15	E15	E13	E14		
Wed	31										E14	E15		

E- Tentative End Semester Exam Dates

Annexure-ii

ANALYSIS OF FEEDBACK FROM STAKEHOLDERS 2016-2017

Department of Civil Engineering

Feedback from Students:
- Students felt discomfort their frequent class change to seminar hall for projector.
- Students requested more guest lectures and to organize many events.
- Students expressed their interest towards more field visits.
- Students conveyed their interest for Add on courses.
- Students asked interaction sessions with the resource person after the workshop or any other technical events.
- Students expressed to change Gate Coaching classes timings.
- Students mentioned their inconvenience because of frequent hanging of system during subject registration and faulty selection.

Action Taken Report:
- All class room are fitted with LCD projector.
- 15 events, 7 guest lectures and 6 field visits were organized.
- Add-on courses were conducted.
- 15 interaction session were organized.
- Gate coaching timing modified.
- Steps are taken at the university to ensure registration year wise/ branch wise to avoid inconvenience.

Feedback from Alumni
- Alumni's expressed their expectation for more industrial exposure.
- Alumni's conveyed their regard for more practical teaching.
- Alumni's communicated that student-teacher relation need to be improved.

Action Taken
- The entire curriculum is revamped based on the conclusions drawn from Industrial Advisory Board constituting of 12 experts from field, Government departments and subject experts.
- Students are taken to more number of local visits to see the new techniques adopted in the construction industry. The number of implant training have increased.
- Teacher-Student relation has notable improvement, with students involved themselves in arranging many technical program in the department and common events at the university level.

Feedback from parents (Parents Meet on 11.03.17)
- Parents requested to arrange more motivation classes
- Parents requested to inform if their ward is absent for class.
- Some parents expressed their view regarding the difficulties of their ward to hard to understand the subjects.
- Parents expressed their views towards improving their wards GPA
- Parents expressed their views to avoid two internal test in a day.

- Parents expressed their views to improve their ward's English speaking and writing skills.
- Parents expressed their views towards extra coaching classes for weak students.
- Parents suggested end semester examination must be separate from arrear exams.
- Parents suggested On-duty should be updated in the attendance.

Action Taken
- Coaching class for Gate, Competitive exams and special lectures are arranged for the first time. Four students have qualified in the Gate Exam. Add on courses also being conducted.
- Parents are regularly informed not only their ward absence but also Assessment marks, progress and attendance details thrice a semester.
- Extra classes conducted in the evening/free hours for the benefit of the poor performing students.
- Special efforts are taken to enhance the teaching quality by introducing innovative methods of teaching and field visits

Feedback from employers
- Students lacks basic technical skills and unable to answer the basic questions and didn't try to solve the problems.
- Soft skills need to be improved.
- Students are lack in communication skills, enthusiasm and basic technical knowledge. And suggested, students need to involve in mini projects which helps them face the interview better.
- Students are lacks in utilizing the opportunity and their interaction level need to be improved.
- Student's interview preparation level could be better and communication of individual thoughts might be improved.

Action Taken
- All the feedbacks are relating to IT industry, where the employment to civil students are timely less.
- On the core company side, many workshops, seminars in different areas of civil engineering with field experts and subject experts are conducted which are beneficial to the students. Nearly eighteen such programs were conducted.
- Students are encouraged to take seminars and present papers in the universities and other institutions. So that their communication and preparation level has improved.

Mechanical Engineering

Feedback from Students

- ➢ Students requested to provide equipment needed for the fabrication of SAE competition car.
- ➢ Students asked for application-based questions in the exams

   Action Taken

- ➢ Concerned lab in-charges and lab technicians are instructed to extend their cooperation to students in motivating them to excel in competitions.
- ➢ Faculty members were instructed to ask application-oriented questions.

- As per the request given by the students, a separate project lab has been developed for doing the fabrication of projects.

Feedback from Alumni

Alumni expressed the following as the strengths of the department,
- Opportunity provided for improving communication skills.
- Guidance on personality development and character building
- Input towards attitude improvement (such as self-motivation, level of confidence)
- Teaching on ethical and social responsibilities
- Motivation towards serving society.
- Encouragement received towards higher studies and career enhancement.
- Academic support extended by the faculty.
- Mentoring received from the faculty.
- Opportunity for participating in co-curricular and extra-curricular activities
- Opportunity for interaction with the industry.

They have suggested to implement the following things,
- Mechatronics subject can be made as compulsory subject.
- More industrial visits can be arranged.

Action Taken

- Mechatronics subject has been made as compulsory subject
- Five Industrial visits were arranged.
- Proposal submitted for starting B. Tech. course on 'Mechatronics'.

Feedback from Parents

- Parents expressed their satisfaction over academic instruction and hostel facilities.
- Parents expressed their concern about arrear subjects, some of the students have.
- Parents expressed their interest to make the students involve in more spiritual activities

Action Taken

- Arrear coaching classes were arranged and conducted for those students having arrears.
- Many spiritual activities were conducted and encouraged the students to participate.
- Crash courses are also arranged for the passed out students with arrears for clearing their arrears.

Feedback from Employers

- Employers appreciated the communication skills, professional knowledge, team building capabilities, creativity and leadership qualities in Karunya alumnus.
- They also appreciated the knowledge in general aptitude and technical aptitude and application oriented skills.

Action Taken

- ➢ Students were apprised on the need of improving technical knowledge.
- ➢ Several add-on programmes were conducted and students got benefitted.
- ➢ Mock up tests are periodically being conducted.
- ➢ Gate coaching classes are conducted for interested 3rd and 4th year students every day from 5.30 to 6.30 pm.
- ➢ CAD modelling coaching classes are also conducted for the students in the CAD laboratory.

ECE

S.N.	Criteria	Classification	2016-17
1	Number of Feedback received from Stakeholders	Alumni	134
		Parents	51
		Employers	2
		Students	840

Feedbacks obtained are shown in the above table. All feedbacks were analyzed through Class Committee meetings, Alumni Meet, employers and Parents Meet for the academic year 2016-17. About one hundred and thirty four feedbacks were obtained from our Alumni. Academics, curriculum and other feedbacks were analyzed, summarized and escalated to other coordinators and officials for a closed loop action.About fifty one feedbacks were obtained from Parents during parents meet for the academic year 2016-17. Academics, curriculum and other feedbacks were analyzed, summarized and escalated to other coordinators and officials for a closed loop action.Two feedbacks were obtained from employers were our students are employees. Academics, curriculum and other feedbacks were analyzed, summarized and escalated to other coordinators and officials for a closed loop action.Finally, the students studying, provided eight hundred and forty feedbacks through class committee meetings, mentor meetings etc. All feedbacks related to Academics, curriculum and other issues were analyzed, summarized and escalated to other coordinators and officials for a closed loop action.

EEE

FEEDBACK FROM STAKEHOLDERS

The department has formal and informal mechanisms to obtain feedback from stakeholders through various committees, associations, organization, etc.

Alumni Feedback:

The alumni feedback was collected for all the UG and PG students and following were the overall feedback received.

Merits:
Overall the students have given a feedback that there were ample ambience for them to improve their communication skill, personality development, self motivation, confidence, good mentoring and good academic support extended by faculty. They also mentioned about

the learning management system and the advanced technology used in classes to make the class active.

Demerits:
Encouragement received in the aspect of higher studies and foreign education is required. Required more focus on practices which would improve the ability of the student to identify the problems in Electrical Engineering. Few of them have given few comments about the hostel improvement as well. The alumni also felt that the alumni meeting can be conducted commonly one day every year.

Employers Feedback:

Merits:
Overall the recruiters felt that the students are good in soft skills and fair in technical skills. A special note was made regarding the team building, interpersonal relationship and the good attitude of the students. The presentability and the vocabulary skills of the students were highly appreciated.

Demerits:
Certain domain specialization courses had to be conducted by the university such as Automotive, Basic Engineering fundamentals can be taken much care.
They also mentioned that the student must take more efforts in enhancing the coding skills and computer knowledge.

Feedback from Students through Class Committee Meeting:

- Add on courses have been conducted based on the recent requirements of the Industries
- Gate Coaching Classes have been organised based on the request given by the students
- Improvement in the Practical Oriented theory and Lab classes
- Arrear coaching classes have been started earlier before the examination
- The Lab timings have been increased from two hours to three hours
- Comments from the students feedback forms are given to faculty to improve their teaching methodology

Feedback on Curriculum Aspects

Feedback on Curriculum PO

Merits: Overall the students have given a feedback that they were able to good problem analysis, develop solutions, improve their communication skill, build individual and team work, personality development, self- motivation, good mentoring, good academic support extended by faculty which has enabled them to be a lifelong learner.

Demerits: Required more usage of modern tools which would help the students in the field of Information and Communication Technology platform as well in addition to the complex engineering activities.

Feedback on Curriculum PSO

Merits: The students have given an overall feedback that department has achieved all its program specific objectives to a large extent. The students are provided with a solid foundation required to solve electrical and electronics engineering problems, generation, distribution, transmission and utilization of electric power.

Demerits: Required more usage of modern tools which would help the students in the field of Information and Communication Technology platform as well in addition to the complex engineering activities.

Modification done in the Curriculum

- Elective courses in the emerging field like Smart Grid, Micro Grid and Renewable Energy were introduced in the current academic year. No of courses introduced for B. Tech – EEE: 51, M. Tech – PED: 23, M.Tech – RET: 28.

Actions taken based on the feedback from the students and alumni

- Teaching/ Laboratory facilities upgraded.
- The weekly seminar in the recent trends of Electrical Engineering will be delivered.
- Comments from the Students Feedback forms are given to faculty to improve their teaching methodology.
- Extended timing to the Laboratories for the students during the project duration.
- Exclusive Software Lab equipped with latest Power Engineering Simulators for the use of PG students.

The department obtains feedback from the students at the entry point and at the exit point. It is obtained from the alumni through Email and from the respective Board of Studies.

Opinions and suggestions from academic peers who attend the meeting of the Board of Studies and from those who visit the campus for guest lectures are also obtained. Further, inputs from industries, institutions, and professionals are obtained through students who undergo institutional training and project work. All courses have undergone major syllabus revision incorporating major thrust areas.

The ideas obtained from the various bodies is thoroughly discussed by the experts in the academic bodies and carefully incorporated in the curriculum. Seminars, Group Discussions and Assignments are introduced as encouraging steps for the under-graduate students. These components are made compulsory in the internal assessment for all post-graduate students.

Feedback on Parents

Merits:
- Overall the parents were happy about the hostel stay and felt good with the ambience which has been created for the students.
- Satisfied with hostel food and water facilities.
- Mainly appreciated with 24/7 current supply which enables students to utilize maximum time wisely.

Demerits:

- Lab facility must be improved.
- Student should be made familiar in practical application of what they are learning.
- Placement coaching / preparation classes must be arranged.
- Extra coaching must be given to slow learners.

EIE

Feedback on class committee by the students

The class committee meetings were conducted twice in the odd semester 2016-17 and twice in even semester 2016-17. The Student representative from various classes of UG and PG courses attended the meeting and expressed the difficulties and feedback on academics, hostel and general issues in class committee meetings. Academic issues regarding the subjects, conduction of classes, laboratory issues, feedback on subject teaching were collected from the students. Online feedback system was implemented for all the students so that each individual can give their feedback regarding the subject they have chosen. An online feedback was obtained from staffs also to facilitate students' feedback system. Both the feedback was found effective for the smooth conduction of teaching learning process. Students expressed that they want additional training, guest lecturers etc in addition to the theory classes, and a good industry exposure to enhance core placement. Based on the feedback several steps were taken to conduct trainings, workshops, hands-on training, seminars etc which gave an insight about the relevant application of the course and specialized areas taught. The core companies were identified and training on various skill sets are provided for the students. Hostel issues and general issues in common to all students were also discussed and initiatives were taken to solve the issues. The class committee meetings also serve to address the students discipline and other aspects affecting their curriculum.

Parents Meet

The parents meet for the EIE/BME programme was held on 11th February 2017 in Elohim Auditorium. There were 38 parents participated in the parents meet. The parents were informed about the various events conducted in the department such as placements, Projects, National and International Conference held in the department, Training Program, Workshops etc. The feedbacks given by the parents were to conduct more seminars, internships and to take them for good industries for visit, to send the results of internal marks to the residence, to have industry tie up and give more exposure to students. These feedbacks were considered and many seminars were arranged in the department by the department association to enhance their knowledge on emerging technologies. The students were also taken for industrial visit to companies such as Wipro GE Healthcare, Nandhini Dairy Farm, and Karnataka Soap Factory to have application oriented knowledge. The EIE/BME programme had signed MOU with Salzer, Lancet and Vital Biosystems, Sitra, Staan Biomedical, VI Microsystems.

Alumni Meet

The Alumni Cell of EIE/BME Programme has conducted an Alumni Meet on 22nd April 2017 in the EIE Seminar Hall for the academic year 2016-17. Nearly 30 Alumni from various batches were present for the meet. Discussions were made on Strengthening the Alumni Cell of EIE/BME and to improve placements through the alumni cell. The Final years students posted many questions to the Alumni and they were rightly addressed by them. One of our Alumnus Mr.Winnefred Paul Luke who is currently working in Robert Bosch gave feedback about the subject revamping and his ideas were accepted and even he was called for the Board of Studies meeting. Few Alumni also encouraged students to be career oriented and they insisted the students to concentrate more in core placements. All their comments were addressed by inviting Mr.Wilson Pradeep who is the Alumnus and Adjunct faculty of EIE/BME to give a talk regarding the core placements.

Biotech

Feedback from Students on curriculum

- Laboratory hour has to be increased from 2 to 3 sessions
- Hands on training on specialized techniques shall be provided
- Need changes in the method of assessment for both theory and lab subjects
- Laboratory sessions were found to be informative and enlightening
- Advanced experiments need to be included in Immunology Lab
- Basic knowledge in Molecular Biology was good

Provisions are given for Students to undergo internship in reputed institution/labs during summer vacation. Mini-projects and model presentations were included in the quality assessment in order to have real time practical experience. In Immunology Lab, Fish model experiments will be introduced to learn the newer concepts.

Alumni

Students need to be thorough in basic concepts for career
Motivation towards curricular and extra-curricular activities was found to be good.
Need to increase core company placements

Parents

Preferences to be given to textbooks than power point
Need to include latest techniques in Laboratory
If time permits revisions can be given to all subjects

Employers

Company Name: Fruzyme, Palladam, Tirupur
Students need to equip themselves with current practical knowledge than theoretical knowledge
Inculcate social responsibilities among students
Overall, students need to work hard
Bhat Biotech, Bangalore

Students from the department of biotechnology were good when compared to the students from other institutions

External Expert
Satisfied with the current curriculum and syllabus

Bio info.

Class Committee meetings:

Class Committee meetings have been regularly conducted during the last 2 semesters. Issues such as Placement Training, Arrear Coaching, Student discipline, teaching and learning. The students both U.G. and P.G. are satisfied with the conduct of their classes, and coaching in the case of arrear students. Students reported that syllabus was completed on time, and there were no adverse issues faced by them in the department, campus and the hostels as well.

Alumni Feedback:

Several alumni have given feedback that they have improved their communication skills while they were in Karunya, that they have received encouragement towards pursuing higher studies. Many have joined Karunya to pursue M.Tech. 2 M.Tech students have now joined our Department for Ph.D. research. Students were happy that they were exposed to various industry experts and were glad to have visited Central Research Institutes- National Institute of Oceanography during their study, which helped them gain internships. Ms. Selvanayaki selected for Summer Internship Programme at NIT, Rourkela. Mr.Jobin John and Ms. Geeta S successfully completed his internship at Indian Institute of Technology, Guwahati and Mr. Deniel S successfully completed his internship at Indian Institute of Technology, Bombay. Ms.Boneetha Bose successfully completed her internship at University of South Carolina, USA. Eight students have successfully completed their Internship in Genome Life Sciences (a core Bioinformatics Company) and one student in Harman Technology, Bangalore. Out of Nine students, four of them have placed in the same company. Department of Bioinformatics has good placement record (~98%) in IT Company, Bioinformatics, Biotech and pharmaceutical Industries. An average of 5-7 percent students are going for higher studies in foreign University. Apart from this, many of our students have successfully completed online course based on their interest by opting Courseera, Edex etc.

Parents Feedback:

The Department has received feedback from parents on the Curriculum, and syllabi taught to their wards. Most find that the syllabi and curriculum update is very good. Some parents suggested that they would like to receive emails about higher studies and opportunities abroad on their email or through the myKarunya portal. Parents are happy to see the placement record and spiritual growth of their ward in the department.
.
Employers:

Students need to equip themselves with current practical knowledge in the concerned field for their sustainability. To meet this, students are encouraged to participate in the internships, workshops, training and industrial visits. This is good to hear that last year more than 15 students have completed their internship in industries and research organization.

Food Processing

Feedback from student

The student feedback helped us to identify the issues pertinent to students from formal and informal feedback and complaints. The feedback on the curriculum and syllabi were obtained from the students through class committee meetings and mentor meetings.

Feedback from alumni

The alumni feedbacks were obtained during the alumni meet and by using online forms. The alumni gave feedback on the syllabus and curriculum, teaching and resources available in the department, internships, placements and the campus life. An average rating of 8 points on a scale of 1 to 10 was suggested by the alumni. They also mentioned that they would refer more students to their alma mater and suggest students from our university to their organization.

Feedback from parents

The feedback from the parents helped us to improve the curriculum and syllabi taught to their ward. The feedbacks were obtained by conducting parents meet and through the conversations between mentors and parents. Feedback on academic standards of the department, academic understanding of their ward after completing the programme and the improvement of the communication skills were obtained from the parents.

Feedback from employers

The feedbacks from the employers were obtained by online forms. The feedbacks included the general communication skills, ability to develop practical solutions to work place problems, ability to work as part of a team and their planning and organization skills. Most of the employers suggested to give more practical assignments and the importance of communication and presentation skills for marketing.

Mathematics

Feed back on Curriculum

The faculty members represent the feedbackregarding the number of Theory subjects, core subjects and the subjects having industrial applications for improving employability. The following points were suggested by the faculty members to improve curriculum.

The learning objectives are clear and appropriate to the needs of the students .Mat lab , Latex, SPSS should be included so that it would be helpful for research.Some Applications should be included with problems. For Agricultural related branches curriculum should be modified according to their practical needs. Most of the papers offered have a industrial application, but requires a slight revision pertaining to industry. Some of the papers require syllabus revision. An interaction with Industry people will enlighten to frame a good syllabi. Core related components should be included in the syllabus. Computational Mathematics, Numerical Analysis, probability and Random process gives option to learn industrial applications. Solving problems using excel software can be included in Numerical methods.

More application oriented problems to be included in differentiation, Laplace transforms, Vector calculus and complex function, Graph Theory and Net working. The students gave the feedback regarding Curriculum and syllabi of the M.sc Programme. The following points were suggested by the students on the Curriculum and syllabi of M.Sc Programme.NET Exam related classes can be conducted. Introduce New trends in Matlab, Latex,etc.

Alumni feedback

Feedback form is given to the members to mention their valuable suggestions and to improve the quality of education. All the members given the positive feedback regarding 1) Quality of academic resources namely teachers, course materials, etc 2) Efforts taken by department for overall grooming and personality development 3) Examination system 4) Laboratory facilities 5) Placement facilities 6) Hostel facilities 7) Library facilities 8) Internet facilities 9) Value Inculcation.

Chemistry

Feedback from Stakeholders

Feedback was collected from students, alumni and parents in different formats and an analysis of the feedback is given below.

Feedback from students

1. Overall content of the syllabus with respect to academic load to the student is good
2. Basic facility for doing experiments in each laboratory is good
3. Satisfied with the number of books in the Department library
4. Need coaching for competitive exams
5. More exposure to industries through industrial visits

Feedback from Alumni
1. Quality of academic resources is good
2. Efforts taken by department all overall grooming and personality development is excellent
3. They are happy with the infrastructure provided by the Department.

Nano

The alumni working in foreign universities have been performing well and have gained the confidence of their employer (professors) which has opened up an opportunity for four of our alumni from subsequent batches (2014 to 2017) to join in "The City University of Hong Kong". From the feedback received through alumni, it is recorded that they are satisfied with the quality of academic resources (teachers, course materials etc..,) and the infrastructure. They have also expressed their gratitude for the efforts taken by the department for overall grooming and personality development. The alumni also showed a positive response for the value inculcation during their stay in the university. They said that they were benefitted by the laboratory facilities with high end equipment. The students expressed their gratitude for placements in reputed institutions and campus recruitment by MNC companies like IBM and Sutherland. They happily came forward to stay in touch and encourage their junior batches

with the experience they have gained in their field. Some of the alumni have recommended their own siblings and cousins for the MSc Nanoscience programme, which shows an encouraging response from the stake holders. Class committee meetings were convened on a regular basis by the mentors. The students have responded well in attending these meetings. They expressed their view to make use of the laboratory facilities from 2nd year onwards. They were willing to work even after the office hours to get trained in handling the high end equipment. They also expressed their willingness to work on mini projects and summer schools. The class committee feedback has been taken into consideration and the labs were kept open for the usage of students after office hours, during holidays and vacation.

Alumni Feedback

Number of responses: 144
Academic Year: 2016 -17

Legend: ■ Excellent ■ Very good ■ good ■ Average ■ Needs Improvement

Exposure to emerging technologies through industrial lectures: 19%, 63%, 13%, 6%

Motivation for co curricular and extracurricular activities: 19%, 63%, 14%, 3%

Mentoring and follow-up activities: 26%, 55%, 17%, 2%

Academic support extended by the faculty: 26%, 57%, 12%, 6%

Encouragement received towards higher studies and career guidance: 27%, 56%, 13%, 4%

Emphasis provided to fundamentals through teaching learning process: 28%, 57%, 10%, 4%

Encouraged to innovate and develop creative products: 21%, 55%, 17%, 7%

Relevance of curriculum in addressing social needs: 13%, 48%, 35%, 5%

Ethical and social responsibilities: 13%, 69%, 14%, 4%

Attitudinal improvement(self motivation, level of confidence): 26%, 57%, 12%, 6%

Personality development and character building: 26%, 57%, 15%, 1%

Avenues for improving communication skills: 28%, 56%, 14%, 3%

Feedback from Employers – Analysis

Number of feedback received: 27
Academic Year: 2016 -17

Technical Skills:
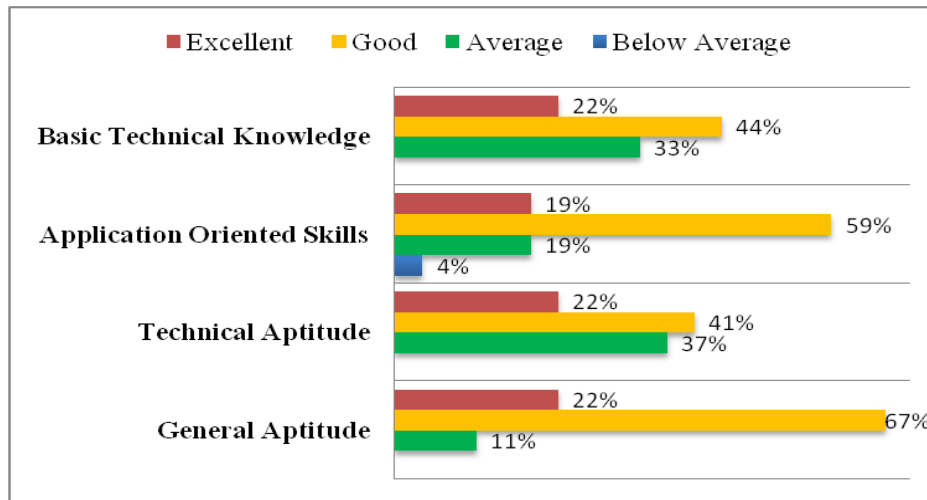
Soft – Skills:
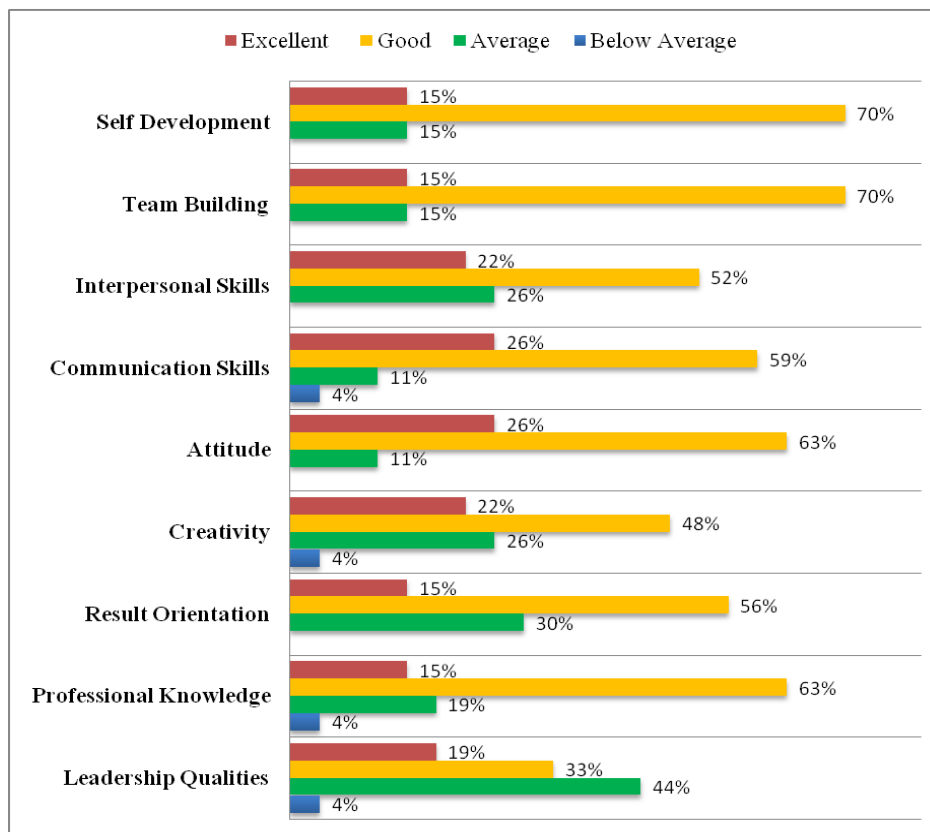
Parents Meet, March 11, 2017

Parents Feedback on the Curriculum and Syllabi of the BTech. /MTech Programme

Q1. Give your Feedback on the academic standards of the University
Q2. How do you find the curriculum and syllabi of the programme?
Q3. After completing the programme, the academic understanding of your Son/daughter
Q4. Support given by Curriculum and syllabi for getting placement to your Son/daughter
Q5. Improvement of communication skills through the academic programme

Parents Feedback on the Curriculum and Syllabi of the BTech. /MTech Programme

	Q1	Q2	Q3	Q4	Q5
■ Very Good	40	26	25	33	37
■ Good	27	38	38	25	29
■ Not Bad	2	4	2	1	1
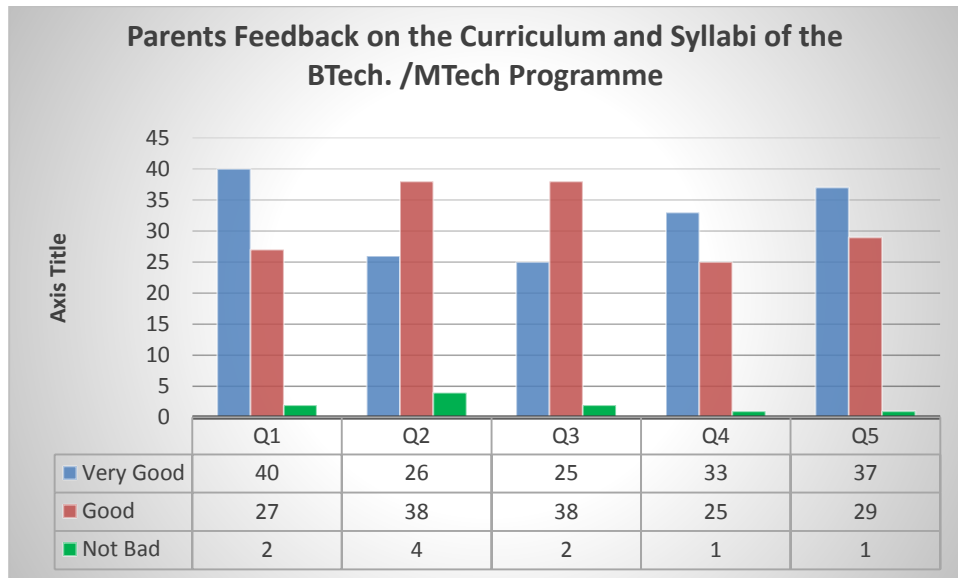
Student Feedback Analysis

Academic Year: 2016- 2017
Number of Responses: 107
Subject: 14CS2007 - Computer Networks
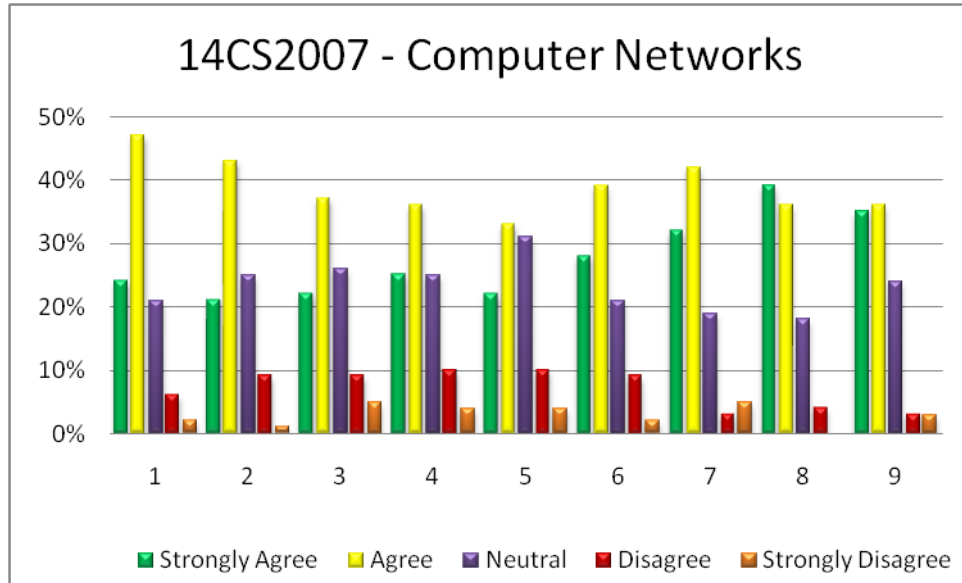
14CS2001 - Analysis of Algorithms

Academic Year: 2016- 2017
Number of Responses: 107
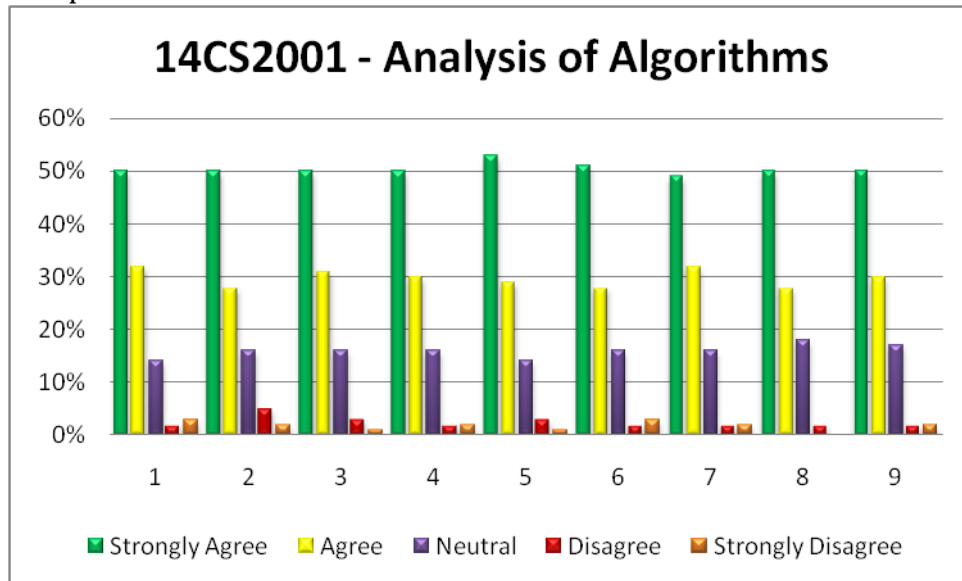
14CS2035 - Object Oriented Programming in C++
Academic Year: 2016- 2017
Number of Responses: 107
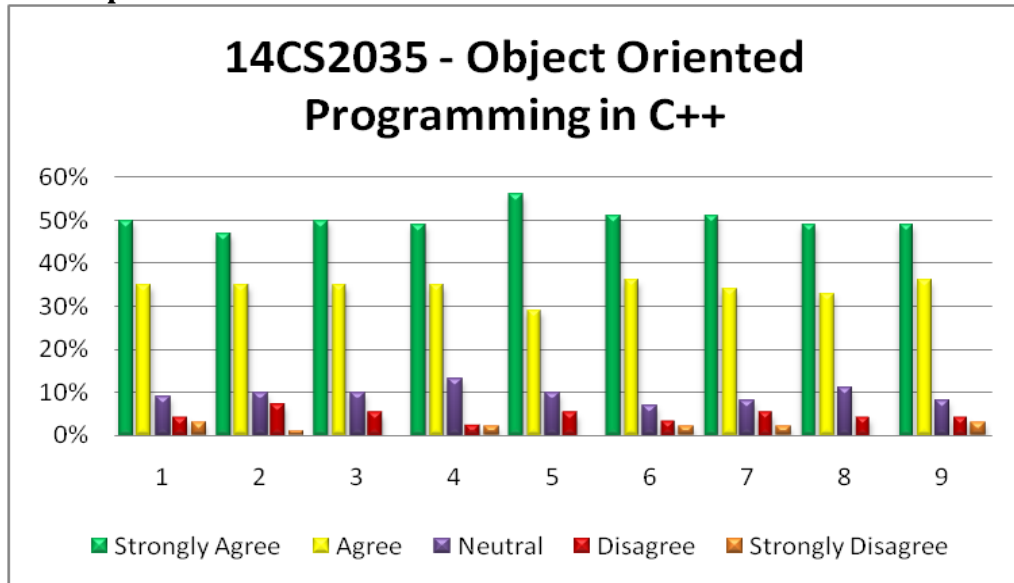
14CS2037 - Operating Systems
Academic Year: 2016- 2017
Number of Responses: 107
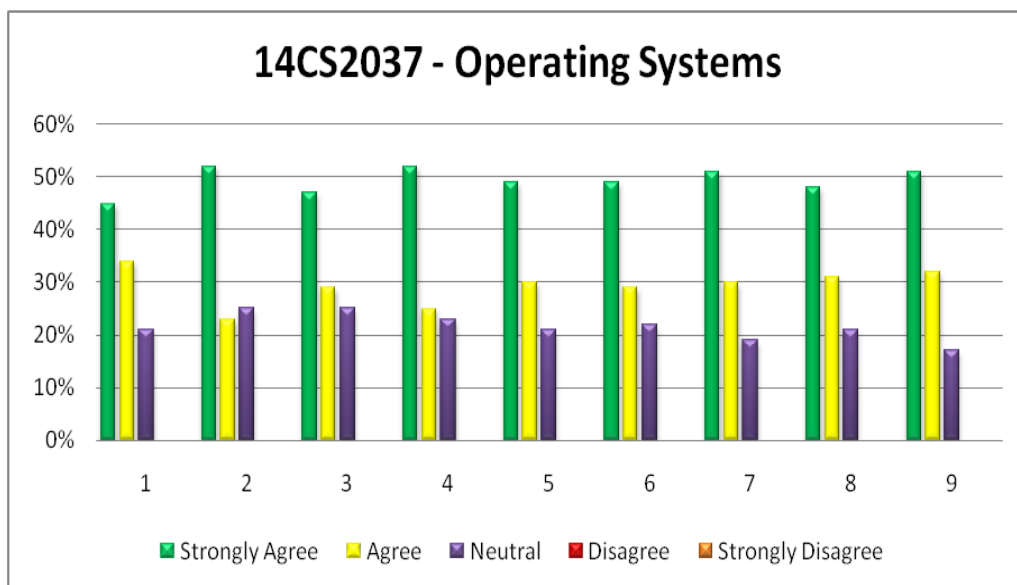
Academic Year: 2016- 2017
Number of Responses: 71
14CS2047 - Theory of Computation

14CS2047 - Theory of Computation
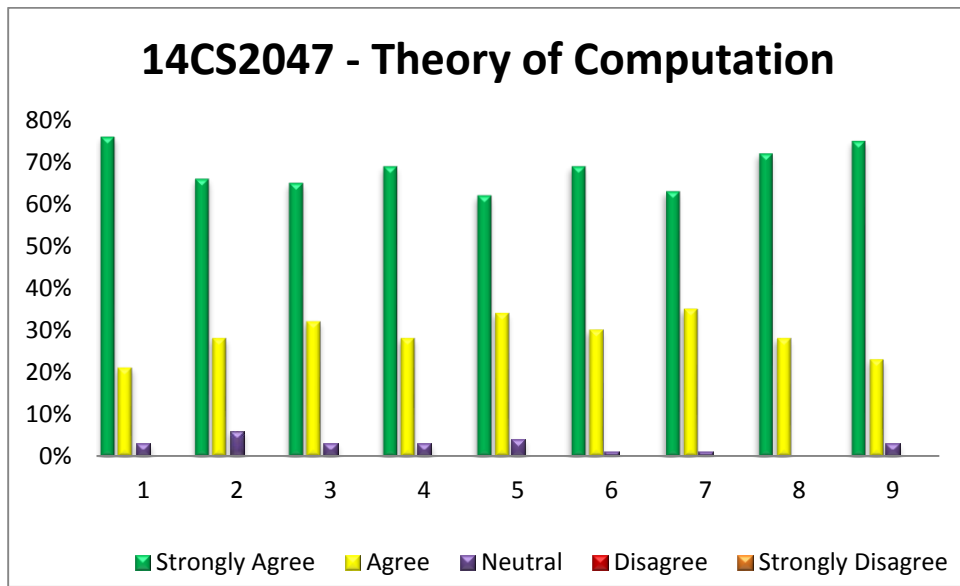
Academic Year: 2016- 2017
Number of Responses: 71
14CS2050 - UNIX Architecture

14CS2050 - Unix Architecture
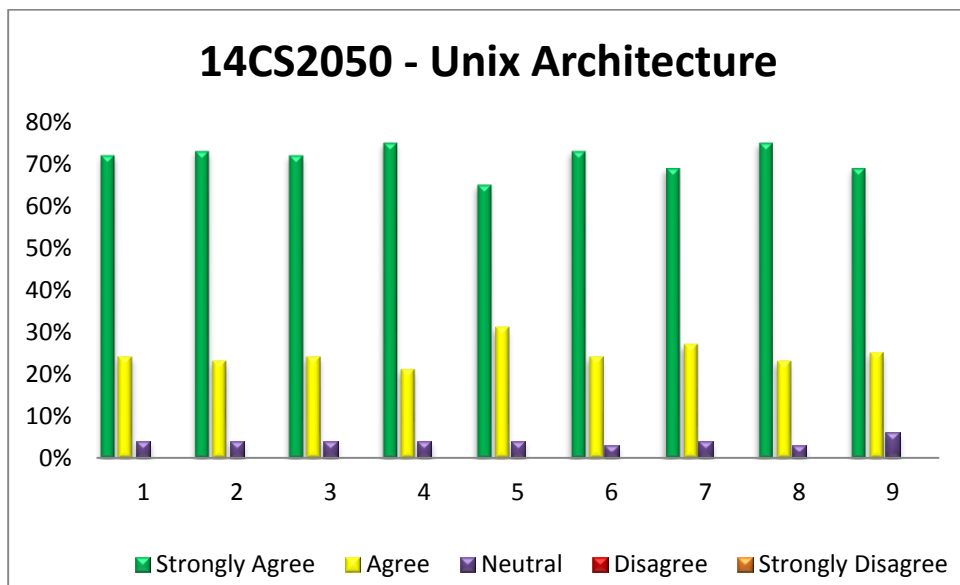
Academic Year: 2016- 2017
Number of Responses: 71
14CS2011 – Database Management System

14CS2011 - Database Management System
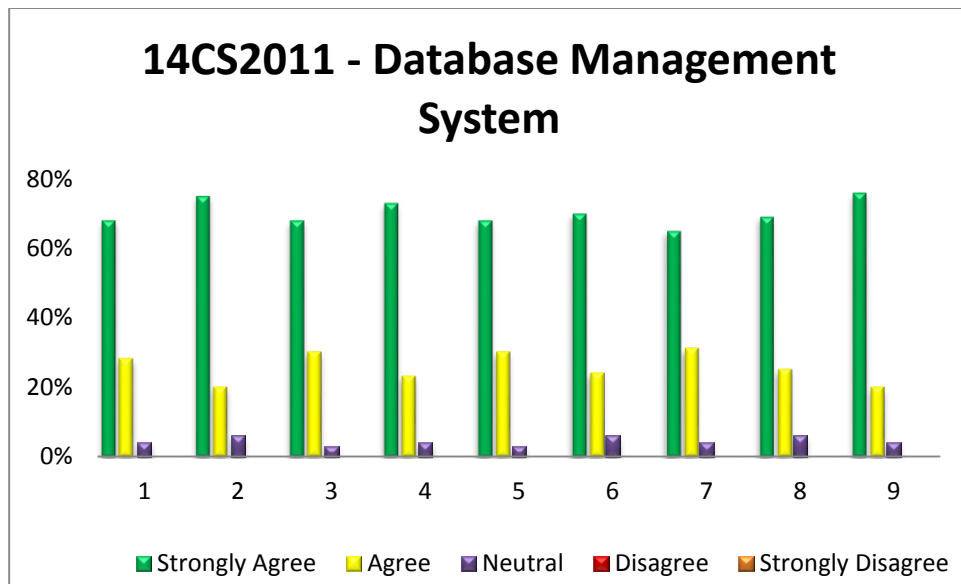
Academic Year: 2016- 2017
Number of Responses: 71
14CS2034 - Object Oriented Analysis and Design

14CS2034 - Object Oriented Analysis and Design

Academic Year: 2016- 2017
Number of Responses: 71
14CS2038 - Principles of Compiler Design
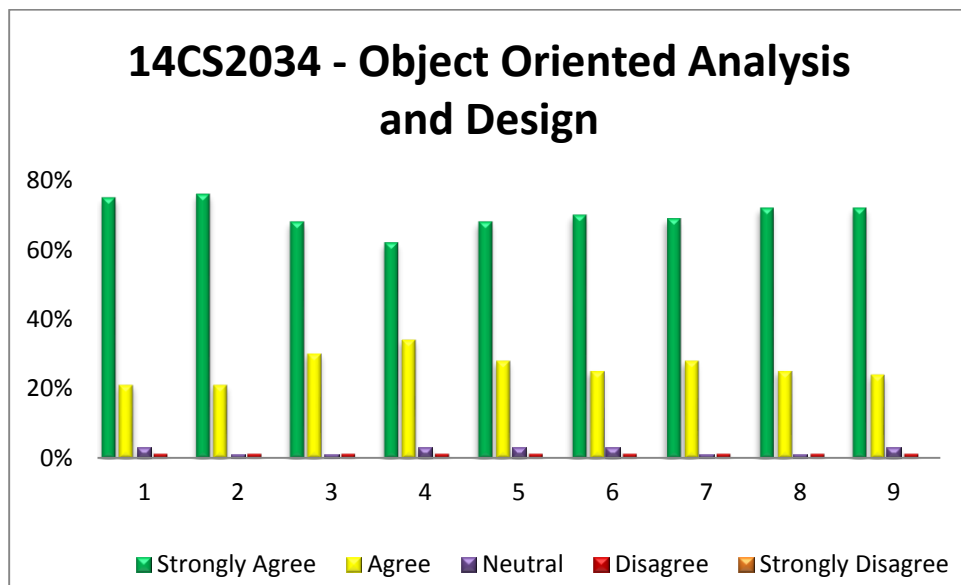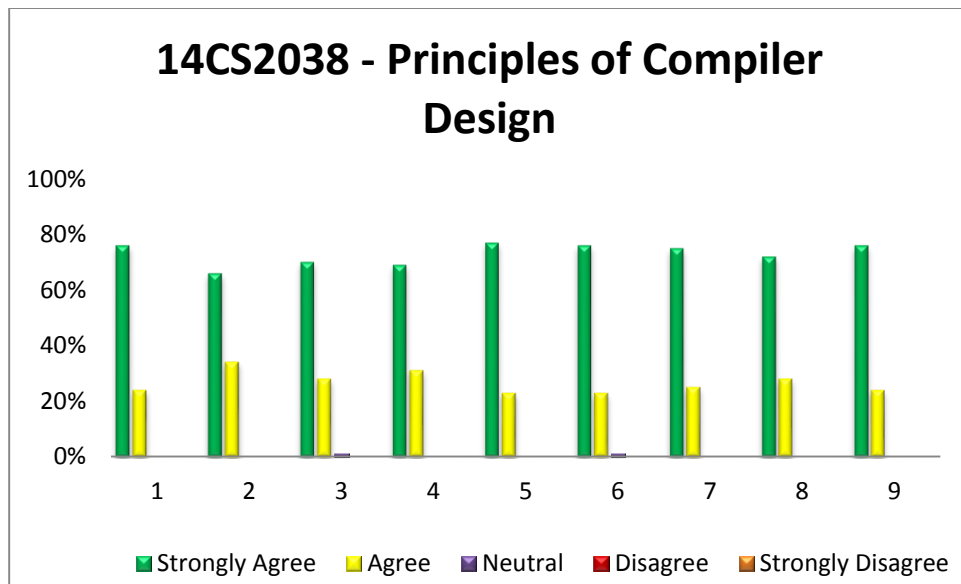
Action Taken

Feedback is obtained from students on course to improve the quality of courses. The questionnaires used for analysis are given below.

Student feedback Questions:

1. The Course objectives are clear and specific
2. The Course workload is manageable throughout the course
3. The Course is well organized and structured (e.g. content flow, inclusive of important matter. etc.)
4. The Course is well structured to achieve the learning outcomes (there was a good balance of lectures, tutorials, practical etc.)
5. The learning and teaching methods encouraged participation.
6. Learning materials (Lesson Plans, Course Notes etc.) are relevant and useful.
7. Recommended reference books are relevant and appropriate
8. The provision of learning resources in the library was adequate and appropriate
9. The provision of learning resources on the Web is adequate and appropriate

The learning and teaching methods encouraged participation

Mode of feedback: online (Google form)
Number of responses: 178

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
56%	36%	8%	0%	0%

The results show that the Students are generally satisfied with their learning experience.

Over all Student Satisfaction
Mode of feedback: online (Google form)
Number of responses: 178

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
58%	31%	11%	0%	0%

Overall, students are satisfied with the course content is relevant to future employment. It was found ranging good to excellent in terms of score .But in few courses it was noticed neutral and it can be improved for excellent grade.

Action Taken

Based on the feedback collected from students, the department has planned to conduct many technical events though various academic clubs which are running under ACE association.

- Department has more concern to keep the students fully occupied with academic works. Apart from the regular class slots, the free slots were efficiently handled by the subject expert for giving an exposure to the latest trends in the field of Computer Science.
- Special hands on sessions for the subject "Object oriented programming in C++" were arranged by the department during 1st week of August, 2017. This session is aimed to improve their problem solving skills using programming.
- Based on the feedback of the pre final year students, the career guidance cell of CST organized placement preparation activities for the pre final year CSE students in the month of July, 2017 and helped the students in preparing technical aptitude
- Research labs were set up to boost up the research activities of the student and faculty of the department and it is being used by staff and students.
- To impart application oriented knowledge, various Technical Events (Mind craft, Techagon, etc..,) were organized by the university and department every year and many students get benefit out of it.
- The tradition of using observation notebooks and record note books for laboratory exercises are scrapped by introducing E- based systems for lab exercises and lab exercises evaluation. In connection to the E-based system for the lab exercises, Students used any open source tool or other freeware tools for recording the demo of the experiment. They used Google drive or Youtube to upload the videos (use Karunya mail ID). After uploading, share the video link in courses.karunya.edu. Faculty will evaluate the experiment and give comments and grade in courses. However, uploading videos in Youtube will give you more visibility and recognition.
- Faculty were given training on 'Effective teaching methodologies" though KCDC, Karunya university.

Annexure iii

A REPORT ON THE PARENTS MEET HELD IN NEW DELHI ON 12.11.2016

Members Present:

1. Dr.C.Joseph Kennady, Registrar
2. Mr.G.Asirvatham, Director
3. Mr.Aldin Justin, Asst.Prof/Aero
4. Mr.J.Jebasingh, Section Officer

Parents Meet for the academic year 2016-2017 was held in CNI Diocesan Resource Centre, New Delhi on the 12th November 2016 from 2.20 pm to 4.30 pm.

The meeting started with a Word of Prayer by Mr.Asirvatham. Due to smog at Delhi and banning of high denomination currencies, less number of parents attended the parents' meet. The Registrar in his welcome address informed about the activities that are progressing in KU. He highlighted that many research projects are going on and KU is Liasoning with Government organizations. He briefed about the activities planned and executed on the occasion of 30th Year Celebrations from 4th October 2016 such as inauguration of IAS Academy, Thanksgiving ceremony, Farmer's Meet, planting of saplings, Inauguration of Incubation Centre, Inauguration of Agricultural Research Centre and Karunya School of Agriculture and Biosciences, Smart class, and so on.

Then the Registrar requested the parents to express their opinions/suggestions/feedback so as to serve the student community better. Most of the parents commented that KU is having a nice campus with all needed infrastructure.

S.No.	Questions / Suggestions by parents	Reply given by the Management
1	Leadership qualities to be developed among students and the need of a team to give training. In this modern World, students are shy and with this they cannot shine like stars.	Assembly is the best platform to develop leadership qualities. Karunya Competency Development Centre (KCDC) is fully equipped with video conference hall to the tune of Rs.50 lakhs and has plans to train students too.
2	Theft occurrences are taking place in the hostels	CCTV Cameras are installed in all residences. Students are not properly locking their rooms.
3	Requested to organise training camps to students during summer vacation and they should be in industry for atleast 20 days	KU is giving bonafide certificates to students and the students are sent to different companies for inplant training. Requested parents also can encourage them to go for Industrial training.
4	IT companies are only visiting for placement & for Mechanical Engg, few core companies are available for placement.	Core companies like Microsoft, IBM, KPIT, Salzer, etc are visiting KU regularly. One company offered Rs.11 lakhs p.a. for MBA students. Students are advised to write GATE as all the public sector companies are taking GATE qualified candidates.

5	Nanosciene department is not recognized during the 30th year celebrations. Since Nano is a new field, this should be exposed for development; Project work to be done during holidays, especially for girls; Mess fees breakup to given, such details of addl. tokens, etc. No single girl student is allowed to work in the lab;	Nano tech department got Rs.3.20 crores project from Government and their labs are equipped with modern equipments. Summer trainings are being arranged. Open invitation was given to all departments with regard to 30th year celebrations. Since, it a yearlong celebrations, the Nano students can participate in the remaining events to be held in our campus. It is our duty to protect the students, especially girls. We are working out a policy to simplify the procedure for getting approval by the students from girl's hostels.
6	Transport facility to be provided during weekends and holidays.	Though the University authorities have arranged TNSTC bus to drop the students at the railway station & bus stand, the students preferred to travel by call taxi with their friends. But the TNSTC bus officials are expecting a minimum crowd in order to operate special bus. (one way trip is empty)
7	Dinner not available in the hostels after completing the lab session by 8.30 pm and something to be available for the students who come late.	If he/she informs in advance about the lab session to the hostel mess, the mess people will preserve food for the late comers.
8	Technology to be upgraded and KU to interface with industry	For the benefit of students, we have signed lots of MOUs and around 10 companies are started by the students in the KU campus. Industrial Advisory Committee also constituted. Curriculum are upgraded regularly. KU is having Ties up with CSIR, Biocon, Mazumdar, etc

Annexure-iv

Best Practice - I

Activity based learning

1. Introduction

In the era of rapid application development and out of box innovative solution deployment it is imperative to switch to agile teaching methodologies which shall rise up the students to perform well under such demanding situations. However, the traditional methods cannot be done away with and are to be still carried out, but at the other had the demands of the current production environments are to be met.

This challenging situation forced us to see beyond the traditional methodologies and bring in "activity based learning" in the portals of Karunya University.

The following are few methodologies which are followed to ensure that the students have understood the subjects and are able to deploy them in real-time problems:

i) Mini-projects for each subject
ii) Presentation
iii) Quiz
iv) E-Record and submission of laboratory exercises through video mode
v) Internships
vi) Seminars and hands-on workshops

2. Objectives of the Practice

Objectives

1. To ensure that all students have understood the subjects they have learned
2. The students will be able to judge and implement the concepts in the real-time situations.

Intended Outcome

- The ultimate objective of joining the University is accomplished.
- The student understands the real-time implementation of the concepts learned and gets a real feel of how job environments are going to be.

Underlying Principles / Concepts of this practice

- By carrying out projects/internships, application oriented learning is inculcated.

- Technological updates are at a very high pace and the students are to be kept updated with the current scenario.

3. The context

The field of engineering and technology is witnessing a drastic change currently. The need of on-demand solutions are highly demanding. The industries do not have the time to train the students who are recruited due to the challenging demand to deliver the products. This sudden demand in the global production environment has forced the industries to train the students while they are in the University.

The University has taken it as a mandate to introduce "Activity Based Learning" a methodology which ensures that the student is well equipped to join a real time production environment seamlessly.

4. Practice

For each subject various components are decided by the faculty member. The activities are given to students who are divided in groups. Having the students in groups give them the effect of working in the real time scenario.

5. Evidence of Success

The Evidence of success is evident with each batch walking out from the portal of the department. Some of the key highlights are listed below:

- Students are enjoying the class
- Creating their own videos
- Doing Mini-projects in the Centre of excellence which are established in the University Campus.
- Students are able to get internships / jobs in world renowned companies.

6. Problems encountered and Resources required

- Financial constraints
- Technological demands

Best Practice II

1. Title of the Practice

Solid Waste Management in Karunya University Campus

2. Objectives of the Practice

a) To give a total solution for waste handling by implementing viable projects and to make Karunya a 'Green & Zero Garbage Campus';

b) To divert biodegradable waste from the main waste stream so that the biodegradable wastes can be converted into 'organic compost', a commercial product (Waste into Wealth).

c) Production of Bio-gas using the food waste and night soil to reduce the consumption of LPG and subsequent cost savings;

d) Minimize waste that needs to be disposed in centralized landfills;

e) To comply with the statutory requirements of Government bodies on environment and pollution control;

f) Maintain pure surface, ground water, healthy soils, and clean air;

g) To create awareness on waste handling among the residents of Karunya University in order to ensure a healthy livelihood;

3. The Context

Waste Management is the "generation, prevention, characterization, monitoring, treatment, handling, reuse and residual disposition of solid wastes". Being an Educational Institutional Campus, Karunya University houses around 10,000 residents in campus. So a huge waste of all kinds is generated. Accumulation of uncollected mixed garbage paves way for the spread of perilous diseases and contamination of natural resources such as water, air and land. Hence it is imperative that the waste generated has to be handled in a professional way in order to ensure an environmental friendly residential campus. Implementation of an effective solid waste management project shows a way to 'Zero Garbage Zone' and prevents us from the ill effects of garbage.

4. The Practice

A) Segregation & Collection of Wastes:

For the purpose of segregation of waste at source and collecting the same, "Waste Bins' are kept at designated locations in the University, Residences and Quarters.

B) Paper recycling plant

- A typical Business Office or Educational Institution office generates about 600 gm of wastepaper per employee per day.
- Financial businesses generate over 1.0 kg per employee per day.
- Nearly half of typical office paper waste is comprised of high grade office paper for which there is strong recycling demand.
- Eliminating office paper from waste stream can cut waste bill by 50% or more
- Every recycled ton of paper saves approximately 17 trees.
- Also it saves approximately 462 gallons of oil.
- Recycling paper reduces the air and water pollution from paper manufacturing unit
- Handmade paper from recycled materials is one of the dreams of our father of nation Mahatma Gandhi. And it is our duty to join hands to make his dream come true.

The quantity of waste paper generated in the Karunya Campus as given by M/s Hand in Hand is around 200 - 250 kg/day (6,00,000 - 7,50,000 kg for 300 days in a year) (Karunya University campus, Karunya Residences and Schools). Making use of the above quantity of waste paper, a **Paper Recycling Plant** is under installation process for producing some

value added products like files, office covers, etc. which will enable more revenue generation/savings to the University than selling them to scrap vendors.

C) Bio gas project

Currently, around 30% of the night soil and 20 % of the food waste generated in the hostel zones (both ladies and gents) of Karunya Campus are treated by existing biogas plant of 120 m^3 capacity in JMR. The treated effluent from biogas plant is diverted to Bethany STP for storage and utilized for irrigation/gardening. The gas generated is utilized for cooking purpose. Also, the sludge obtained from STP is disposed of on the land, which can be utilized as bio-fertilizer after composting.

With this background, three biogas plants are under operation to treat the organic waste generated from kitchen and toilets in all Ladies hostels and Gents hostels (Hebzipha&Angelina, FDR and Bethany).

d) Vermicomposting

- By practicing vermicomposting, **we comply with the statutory requirements of Government bodies** on environment and pollution control;
- As a **corporate and socially responsible organization** by practicing vermicomposting we go for **"sustainable practice**" i.e. to preserve and protect our environment for the needs of present and future generations, which includes, use of resources, reduction at source, reuse, recycling and resource recovery.
- A total solution is given for degradable waste handling by implementing vermicomposting projects and make Karunya a **'Green & Zero Garbage Campus';**
- Substantial quantity of wealth is generated **out of this waste** and can have a sustainable income from this waste, by adopting vermicomposting.
- Valuable and **economically important organic agricultural products can be produced** by adopting the vermiculture and vermin-composting of these organic solid wastes.
- Successful practice of vermicomposting and vermiculture in Karunya University campus **creates awareness on waste handling and ensure a healthy livelihood** among the residents of the University.
- **Karunya University as a socially responsible organization** by implementing/standardizing this vermin-composting project in our campus, on a later date this can be replicated in the **neighbourhoods as awareness camps and as Consultancy projects.**

e. Evidence of Success
- Green and clean campus
- Improved hygiene and environmental health
- Biofertizer from sludge and reuse of treated effluent for gardening
- Less operational and maintenance cost of STP
- Reduction in CO_2 Emission

f. Problems Encountered and Resources Required
- Creating awareness
- Training the personnel adopting to traditional methods
- Initial investments

g. A Novel Volume Measurement Method for Automotive Fuel Tanks

With a plethora of integrated, Electronic Control Units (ECU) throughout the car, There is virtually no area of a modern car that has not benefited in some way from these advances. Except for maybe the Fuel gauge.

The ordinary fuel gauge continues to give you -- at best -- a vague estimate of how much fuel you have in the tank.

* Volume of fuel added to the tank cannot be measured with reasonable accuracy.

* Fuel siphoning can be detected.

In the developed volume measurement system, fuel in the fuel tank can be measured with an accuracy of less than 5% accuracy (in the lab proto-type). The Main advantage being the measurement system can be connected to the existing impedance based float level sensors. The volume indication output is corrected for any tilt in the tank, as encountered in the automobile fuel tank.

➢ The nonlinear curve fitting is done using *Artificial Intelligence Algorithm*.
➢ *Kalman filter* is used to reduce the noise induced measurement error.

Experimental set up of The Volume indicator for an irregular shaped tank.