

# NBA SAR CRITERION - 1

<b>CRITERION 1</b>	<b>VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES</b>	<b>50</b>
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## 1. VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (50)

### 1.1. State the Vision and Mission of the Department and Institute (5)

#### Vision of the Institute

To provide high quality skill oriented technical education to the rural students to accomplish the global requirements.

#### Mission of the Institute

To provide modern facilities for imparting value based teaching – learning practices, enrich the faculty members with continuous learning and career guidance for the students.

#### Vision of the Department

To empower the students with capabilities of academic, technical and professional competence in the field of Electrical and Electronics Engineering and to nurture them in the emerging areas to serve the society.

#### Mission of the Department

M1-To provide adequate knowledge in the field of Electrical and Electronics Engineering to take the real time challenges with professional skills.

M2- To enhance continuous learning skills to meet employability objectives.

M3- To impart strong ethical qualities among students for serving the society.

### 1.2. State the Program Educational Objectives (PEOs) (5)

**PEO1:** To impart strong educational foundation in the field of Electrical and Electronics Engineering for successful career in industry and higher education.

**PEO2:** To provide technical skills and resources to design, analyze and create innovative solutions for engineering problems in multidisciplinary work environment.

**PEO3:** To inculcate leadership qualities, ethical attitude and competence to excel individually and work with teams.

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## 1.3. Indicate where and how the Vision, Mission and PEOs are published and disseminated among stakeholders (10)

### A. Adequacy in respect of publication and dissemination (2)

The Vision, Mission and PEOs are adequately published as indicated below

- ❖ College wwebsite: [www.papolytechnic.org](http://www.papolytechnic.org)
- ❖ Department page on the college website:  
<http://www.papolytechnic.org/eee.html>
- ❖ Department brochure
- ❖ Department news letter
- ❖ Department academic calendar

The Vision, Mission and PEOs are disseminated as follows

- ❖ HOD's chamber
- ❖ Staff rooms
- ❖ Class rooms
- ❖ Laboratories
- ❖ Department library
- ❖ Department notice board

### B. Process of dissemination among stakeholders (2)

The Vision, Mission and PEOs are published and disseminated among the stakeholders through the following ways

- ❖ Parents meeting
- ❖ Alumni meeting
- ❖ Symposium
- ❖ Guest Lecture/Seminar/Workshop
- ❖ Class committee meetings
- ❖ Orientation program for freshers
- ❖ Other association activities

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## C. Extent of awareness of Vision, Mission & PEOs among the stakeholders (6)

The awareness of Vision, Mission and PEOs are created among the internal and external stakeholders through

### Internal Stake Holders

- ❖ Management
- ❖ Governing council members
- ❖ Faculty members
- ❖ Non-Teaching staff members
- ❖ Students representatives

### External Stake Holders

- ❖ Parents
- ❖ Employers
- ❖ Industrial experts
- ❖ Alumni members

## 1.4. State the process for defining the Vision and Mission of the Department, and PEOs of the program (15)

Considering the institutional Vision and Mission, the Vision and Mission statements of the department are defined by involving the stakeholders.

### A. Description of process involved in defining the Vision and Mission of the Department (10)

The following process was adopted in developing department vision and mission statements:

- ❖ Detailed analysis was conducted by considering internal stakeholders including management and alumni.
- ❖ All the informations were collected, summarized and the faculty listed the most critical areas to be addressed by the department.
- ❖ Based on the feedback given by the stakeholders the departmental faculty developed a strong and meaningful vision and mission. The mission was also finalized based on the following components like Quality education, Professional career, higher education, Innovation and Creativity and Lifelong learning.

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- ❖ A detailed survey on various college websites was done to frame our vision and mission

The above steps are presented in the following flowchart shown in figure 1.4.1

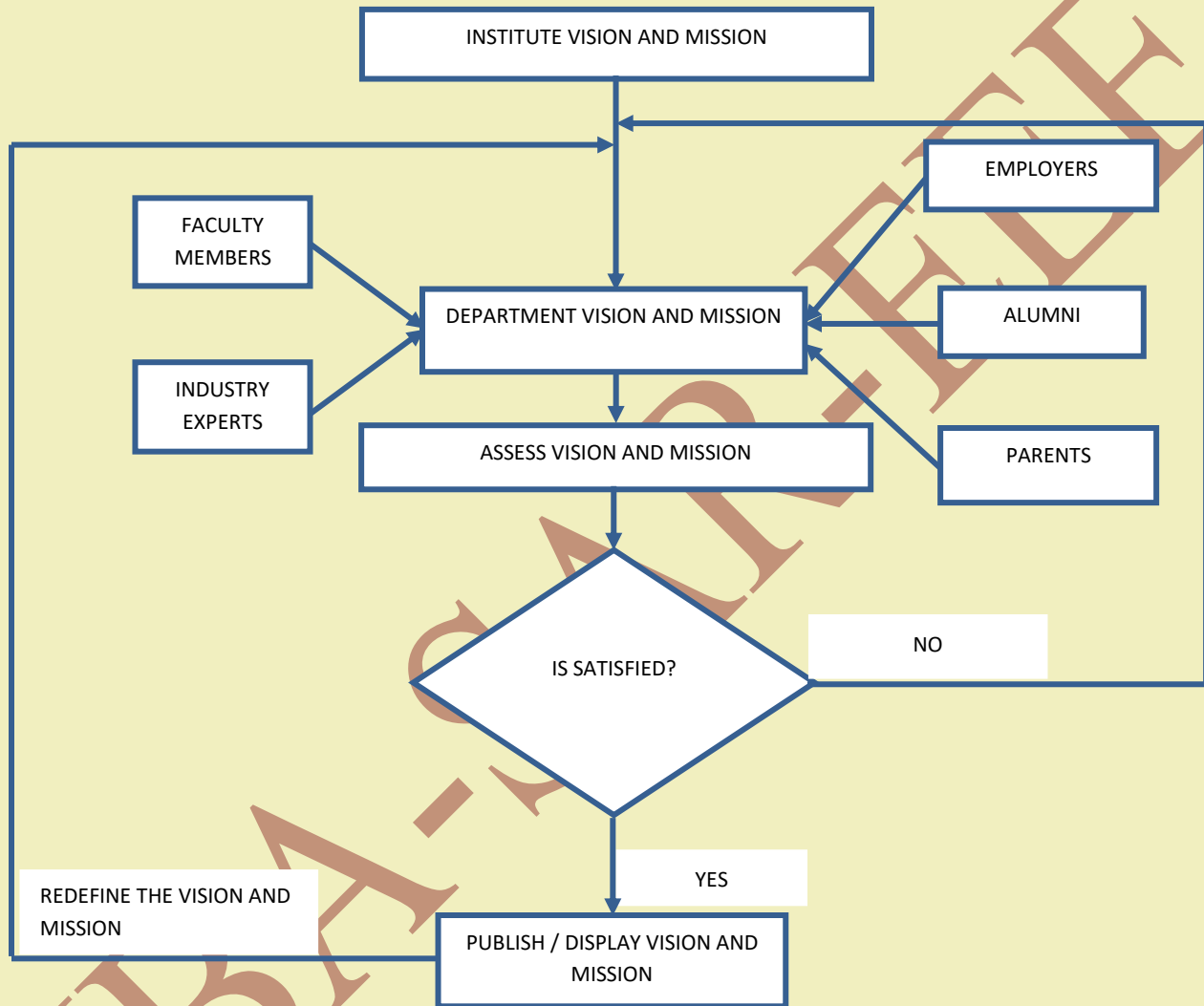


Figure 1.4.1 Process of defining the Vision and Mission of the Department

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## B. Description of process involved in defining the PEOs of the program (15)

The Following process was adopted in developing the PEOs of the program:

A series of discussion was conducted among the Department's faculty members, alumni, students representatives, Industrial experts, Training experts and Department Academic Advisory Board members to finalize the PEOs.

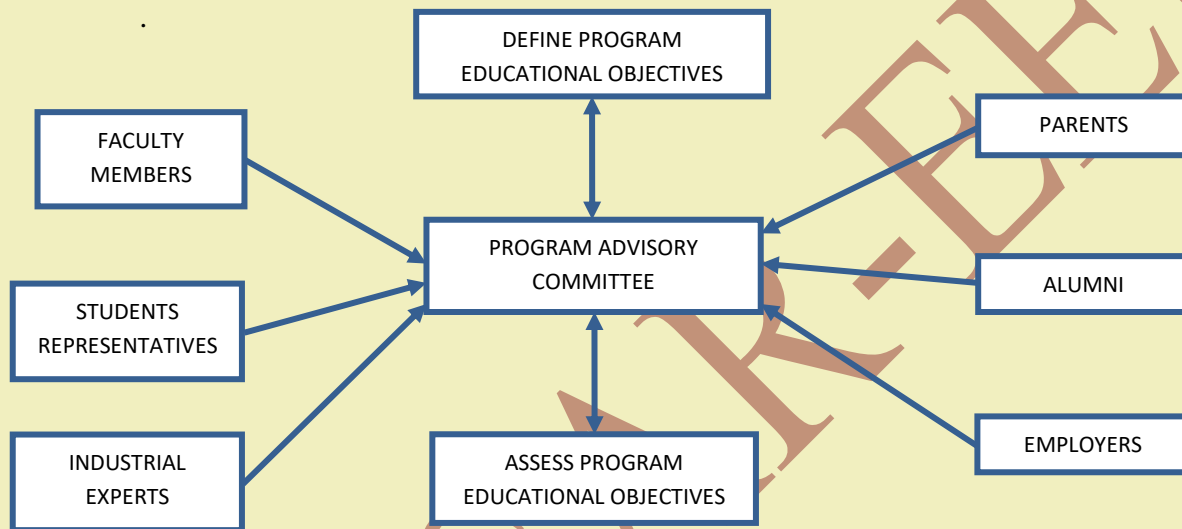


Figure 1.2: Process of defining the PEOs of the Department

## 1.5. Establish consistency of PEOs with Mission of the Department (15)

### A. Matrix of PEOs and elements of Mission statement

PEOs and Mission Mapping:

M1- Technical Knowledge

M2- Skills

M3- Social responsibility

**Note:** M1, M2 and M3 are distinct elements of Mission statement

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Table 1.1 Correlation between PEOs and Mission Elements

PEO Statements	M1	M2	M3
<b>PEO 1:</b> Impart strong educational foundation in the field of Electrical and Electronics Engineering for successful career in industry and higher education.	3	2	2
<b>PEO2:</b> Provide technical skills and resources to design, analyze and create innovative solutions for engineering problems in multidisciplinary work environment.	2	3	2
<b>PEO3:</b> Inculcate leadership qualities, ethical attitude and competence to excel individually and work with teams.	2	2	3

\* Correlation Levels:

1: Slight (Low)            2: Moderate (Medium)            3: Substantial (High)

B. Consistency of co-relation parameters of the above matrix

Justification

Table 1.2 Justifications between PEOs and Mission Elements

PEO STATEMENTS	M1	M2	M3
<b>PEO1:</b> Impart strong educational foundation in the field of Electrical and Electronics Engineering for successful career in Industry and higher education.	Strongly maps with Mission1 Supports M1 by providing strong foundation of technical knowledge in the field of electrical engineering.	Moderately maps with Mission2 Supports M2 by developing career oriented skills through enrichment programs.	Moderately maps with Mission3.Supports M3 by imparting technical knowledge in solving real time problems.
<b>PEO2:</b> Provide technical skills and resources to design, analyze and create innovative solutions for engineering problems in multidisciplinary work environment.	Moderately maps with Mission1.Supports M1 for developing problem solving technical aspects in multi-disciplinary environment.	Strongly maps with Mission2 Supports M2 by providing technical and personality related skills for obtaining innovative solutions.	Moderately maps with Mission3.Supports M3 by providing optimized solutions for real world problems through creativity

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<b>PEO3:</b> Inculcate leadership qualities, ethical attitude and competence to excel individually and work in teams.	Moderately maps with Mission 1 Supports M1 for attaining technical excellence in solving problems for obtaining better solutions.	Moderately maps with Mission2.Supports M2 by inculcating personality and ethical based skills for achieving success in desired stream.	Strongly maps with Mission3.Supports M3 by developing and enhancing skills for work place environment.
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<b>CRITERION 2</b>	<b>PROGRAM CURRICULUM AND TEACHING – LEARNING PROCESSES</b>	<b>200</b>
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## 2 PROGRAM CURRICULUM AND TEACHING – LEARNING PROCESSES

### 2.1 Program curriculum

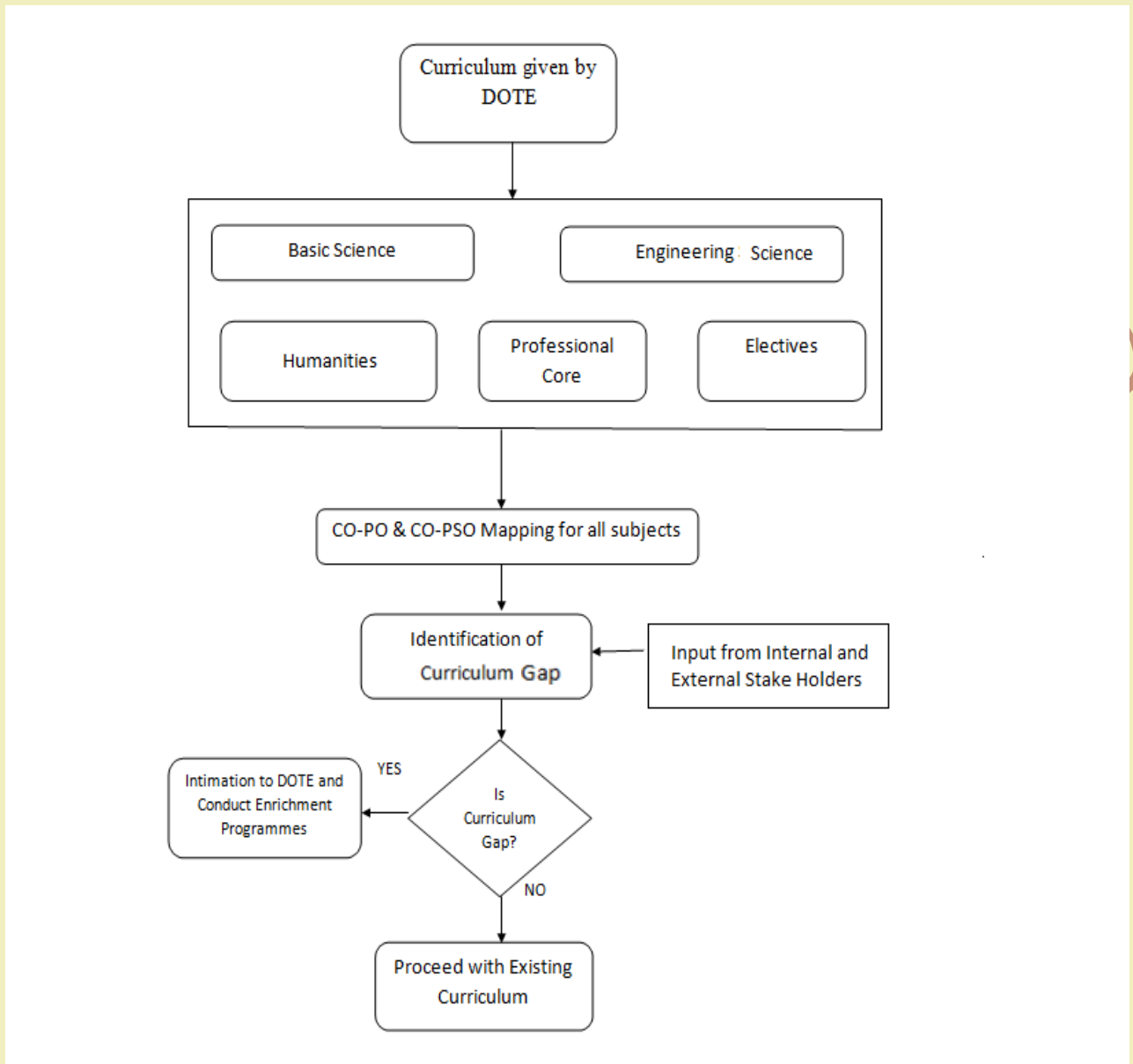
2.1.1. State the process used to identify extent of compliance of the DOTE Curriculum for attaining the Program Outcomes (POs) & Program Specific Outcomes (PSOs), mention the identified Curricular Gaps. If any

**A. Process used to identify extent of compliance of DOTE curriculum for attaining POs & PSOs (15)**

The DOTE Curriculum is categorized under five different domains such as

1. Basic science
  2. Engineering science
  3. Humanities
  4. Professional core
  5. Electives
- ✓ The course objectives and outcomes are framed at the beginning of every new regulation
  - ✓ The process used to identify extent of compliance of DOTE curriculum for attaining the POs and PSOs are
    - Identify Course Outcomes for each course and map each Course Outcome with POs and PSOs.
    - Categorize entire Curriculum into Professional core, Basic Science, and Engineering science, Humanities and Projects / Lab Practices.
    - Identifying Gaps in the curriculum.
    - Compensatory Measures to fill Curriculum Gaps by organizing workshop and seminars.

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*Figure 2.1.1.1 Process used to identify extent of compliance of DOTE curriculum*

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The Distribution of curriculum to various components towards the attainment of POs and PSOs is shown in Table 2.1.1.1

*Table 2.1.1.1 Distribution of Curriculum towards the attainment of POs and PSOs*

S. No.	Categories of Curriculum	Courses	% of Category wise Curriculum Content	Total number of contact hours per week	Relevant POs	Relevant PSOs
1.	Basic Science	Engineering Physics – I	18.18	5	1,2,3,4,5	1,2,3
		Engineering Chemistry –I		5	1,2,3,4	1,2
		Engineering Physics Practical – I		2	1,2,3,4	1,2
		Engineering Chemistry Practical – I		2	1,2,3,4	1,2
		Engineering Physics –II		5	1,2,3,4,5	1,2
		Engineering Chemistry – II		4	1,2,3,4	1,2
		Engineering Physics Practical – II		2	1,2,3,4	1,2
		Engineering Chemistry Practical – II		2	1,2,3,4	1,2
2.	Engineering Science	Engineering Mathematics-I	13.64	8	1,2,3,5	1,2,3
		Engineering Graphics-I		5	1,3,5,6,7	2,3
		Workshop Practical		3	1,3,4,5	1,2,3
		Engineering Mathematics-II		5	1,2,3,5	1,2,3
		Applied Mathematics		5	1,2,3,5	1,2,3
		Engineering Graphics-II		6	1,3,5,6,7	2,3
3.	Humanities	Communication English-I	6.82	5	1,7	1,3
		Communication English-II		5	1,7	1,3
		Life and employability Skills Practical		4	1,7	1,3
4.	Professional core	Electrical Machines-I	52.27	5	1,2,3,4,5,6,7	1,2,3
		Electrical Circuit Theory		6	1,2,3,4,5,6,7	1,2,3
		Electronic Devices and Circuits		6	1,2,3,4,5,6,7	1,2,3
		Electronic Devices and Circuits Practical		5	1,2,3,4,5,6,7	1,2,3
		Electrical Circuits & Machines Practical		5	1,2,3,4,5,6,7	1,2,3
		Electrical workshop practical		3	1,3,4,5,6,7	1,2,3
		Computer Applications Practical		4	1,3,4,5,6,7	1,2,3
		Electrical Machines – II		6	1,2,3,4,5,6,7	1,2,3
		Measurements and Instruments		5	1,4,5,6,7	1,2,3
		Digital Electronics		5	1,2,3,4,5,6,7	1,2,3
		Transducers And Signal Conditioners		4	1,4,5,7	1,2,3
		Electrical Machines And Instrumentation Practical		5	1,2,3,4,5,6,7	1,2,3

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		Integrated Circuits Practical	9.09	5	1,2,3,4,5,6,7	1,2,3
		Generation Transmission And Switch Gear		6	1,2,3,5,7	1,2,3
		Microcontroller		6	1,2,3,4,5,6,7	1,2,3
		Electrical Estimation And Energy Auditing		5	1,2,3,4,5,7	1,2,3
		Computer Aided Electrical Drawing Practical		4	1,2,3,4,5,6,7	1,2,3
		Microcontroller Practical		4	1,2,3,4,5,6,7	1,2,3
		Distribution and utilization		6	1,2,3,5,7	1,2,3
		Operation And Maintenance Of Electrical Equipment		5	1,4,7	1,3
		Wiring and Winding Practical		5	1,2,3,4,5,6,7	1,2,3
		Electrical Circuits Simulation Practical		4	1,2,3,4,5,6,7	1,2,3
		Project Work		4	1,2,3,4,5,6,7	1,2,3
		5. Electives			Control Of Electrical Machines	9.09
Control Of Electrical Machines Practical	4		1,3,4,5,6,7		1,2,3	
Programmable Logic Controller	5		1,2,3,4,6,7		1,2,3	
Programmable Logic Controller Practical	4		1,2,3,4,6,7		1,2,3	
Electrical Machine Design	5		1,2,3,6		1,2	
Electrical Machine Design Practical	4		1,2,3,6		1,2	
Power Electronics	5		1,2,3,4,5,6,7		1,2,3	
Power Electronics Laboratory	5		1,2,3,4,5,6,7		1,2,3	
Bio-Medical Instrumentation	5		1,2,5		1,2	
Bio-Medical Instrumentation Practical	5		1,2,5		1,2	
Computer Hardware and Networks	5		1,2,4,5		1,2	
Computer Hardware and Networks Practical	5		1,2,4,5		1,2	

### Pie Chart

The Pie chart given below represents the distribution of various component of curriculum towards the attainment of POs and PSOs.

1. Basic Science
2. Engineering Science
3. Humanities
4. Professional core
5. Electives

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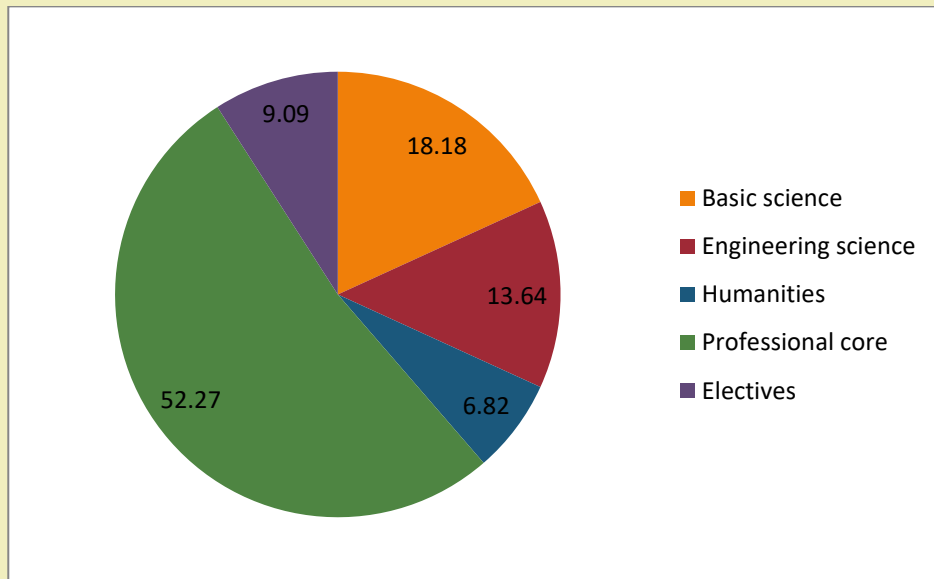


Figure 2.1.1.2 Pie Chart representation for Curriculum distribution

### B. List the curricular gaps for the attainment of POs & PSOs (10)

#### Identified Curriculum Gaps

- ✓ The non Compliance of advanced concepts and industrial requirements are identified as curriculum gaps

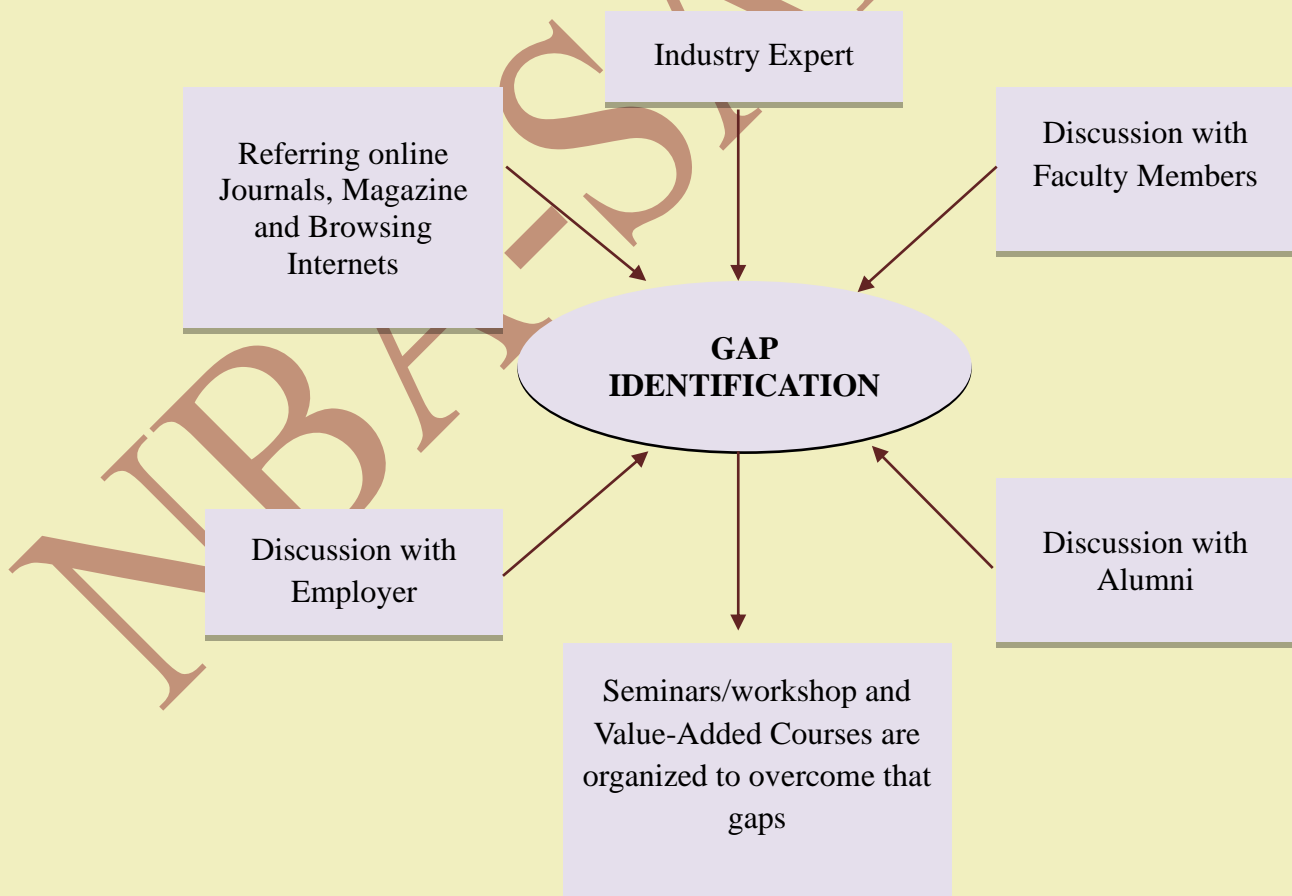


Figure 2.1.1.3 Curricular Gap Analysis

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## Program Outcomes

1. Basic and Discipline specific Knowledge
2. Problem Analysis
3. Design / Development of solutions
4. Engineering Tools, Experimentation and Testing
5. Engineering Practices for society, Sustainability and Environment
6. Project Management
7. Life-Long Learning

## PSO-Program Specific Outcomes

**PSO1:** Ability to understand the basic knowledge and modern technological development in the field of Electrical and Electronics Engineering.

**PSO2:** Ability to analyze and design the basic concepts and to provide solutions for the real time engineering problems.

**PSO3:** Ability to integrate ethical and human values with leadership skills for lifelong learning.

*Table 2.1.1.2 Compliance of DOTE Curriculum with POs*

Total no. of subject: 44

Program Outcomes	Weightage based on Program outcome	Percentage
PO1: Basic and Discipline specific Knowledge	44	100
PO2: Problem Analysis	39	88.64
PO3: Design / Development of solutions	42	95.45
PO4: Engineering Tools, Experimentation and Testing	38	86.36
PO5: Engineering Practices for society, Sustainability and Environment	34	77.27
PO6: Project Management	24	54.54
PO7: Life-Long Learning	32	72.72

$$\text{Percentage of courses mapping with PO} = \frac{\text{No. of courses mapped with PO}}{\text{Total number of courses in curriculum}}$$

If percentage of course mapped with PO's is less than 80%, it is identified as curriculum gap

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Table 2.1.1.3 Compliance of DOTE Curriculum with PSOs

Program Specific Objectives	Weightage based on Program outcome	Percentage
<b>PSO1:</b> Ability to understand the basic knowledge and modern technological development in the field of Electrical and Electronics Engineering	42	95.45
<b>PSO2:</b> Ability to analyze and design the basic concepts and the provide solutions for the real time engineering problems	40	90.90
<b>PSO3:</b> Ability to integrate ethical and human values with leadership skills for lifelong learning	37	84.09

$$\text{Percentage of courses mapping with PSO} = \frac{\text{No.of courses mapped with PSO}}{\text{Total number of courses in curriculum}}$$

If percentage of course mapped with PSOs is less than 80%, it is identified as curriculum gap.

The following POs are identified as curricular gaps are obtained from the table 2.1.2 and 2.1.3 :

- ✓ PO5 Engineering Practices for society, Sustainability and Environment
- ✓ PO6 Project Management
- ✓ PO7 Life-Long Learning

### 2.1.2 Content beyond the Syllabus (15)

#### A.Steps taken to get identified gaps included in the curriculum (2)

- The curriculum prescribed by DOTE is followed in the programme.
- The department continuously motivates the student to enrich their knowledge towards the attainment of POs and PSOs.

#### B. Delivery details of content beyond syllabus (10)

The identified Curriculum gaps are fulfilled by the following process.

- ✓ Workshops/Seminars/Guest Lecture and Symposium
- ✓ Value Added Courses
- ✓ Technical lectures (Internal Academic Experts /External Academic Experts / Industrial Experts)
- ✓ Students Lab practices
- ✓ In-plant Training & Industrial Visits

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### C. Mapping of content beyond syllabus with the POs & PSOs (3)

The enrichment programs conducted in the department are listed below in the Table.2.4

*Table 2.1.2.1 Enrichment Programme conducted in the department fulfilling the gaps*

S. No	Academic Year	Total No. Students Enrichment Programme Conducted	Total No. of Value Added Courses
1.	CAY: 2019-2020	14	03
2.	CAY m1: 2018-2019	12	03
3.	CAY m2: 2017-2018	10	02

S. No.	Gap	Action taken	Date- month- year	Resource Person with designation	% of students	Relevance to POs	Relevance to PSOs
<b>CAY :2019-2020</b>							
1.	PO5, PO6, PO7	Guest Lecture on Super Conductor Lightning Diverter	05.03.20	Mr.S.Manikandan, Project Engineer, Sakthi Electronics and Research Centre, Coimbatore.	91	1,3,5,6,7	1, 2
2.	PO5, PO6, PO7	Significance of Energy Conservation and Impact of Renewable Energy-REC Club	20.02.20	Mr.G.Dhanaraj, Assistant Manager, Energo Products Ltd, Coimbatore.	91	1,3,5,7	1, 2
3.	PO5, PO6, PO7	State Level Technical Symposium "PA TECHARENA 2K20"	05.02.20	Mr.Wonderjoky, Vice President(operation) CIEL HR Coimbatore	91	1,3,5,7	1, 2, 3
4.	PO5, PO6, PO7	Workshop on PLC Programming and its Applications	07.01.20 to 08.01.20	Mr.R.Thirumoorthy M.E AP/EEE P.A College of Engineering and Technology, Pollachi.	91	1,3,6,7	1, 2
5.	PO5, PO6, PO7	Alumni Lecture on "Recent industrial scenario"	22.12.19	Mr. R.Surendar B.E., RS Engineering Coimbatore.	91	1,3,6,7	1, 2
6.	PO5, PO6, PO7	Guest Lecture on E-Vehicles	21.12.19	Dr.Ramareddy, Former Professor, Anna University, Coimbatore.	91	1,3,5,6,7	1, 2

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7.	PO5, PO6, PO7	Guest Lecture on Maintenance of Transformers	04.09.19	Er.K.Dheivasikamani, Assistant Executive Engineer, TNEB, Pollachi.	91	1,3,6,7	1, 2
8.	PO5, PO6, PO7	Renewable Energy Day Celebration and Technical Quiz competition	20.08.19	Mr..Sugumarannupill Co-founder and Chief Technology Officer, Haritham Technologies, Coimbatore.	91	1,7	1, 2, 3
9.	PO5, PO6, PO7	Inauguration of Renewable Energy Club and Guest Lecture on Awareness of Renewable Energy	14.08.19	Mr.S.Manikandan, Project Engineer, Sakthi Electronics and Research Centre, Coimbatore	91	1,3,5,7	1, 2
10.	PO5, PO6, PO7	State level technical symposium “ELECTROFUSION 2K19”	31.07.19	Mr.S.Manikandan M.E Assistant Executive Engineer, TNEB, Udumalpet	91	1,3,5,6,7	1, 2, 3
11.	PO5, PO6, PO7	Hands on Training in Power System	29.07.19	Mr.P.Mariaraja, M.E.,(Ph.D), Assistant Professor/EEE, P. A. College of Engineering and Technology, Pollachi.	91	1,3,5,6,7	1, 2, 3
12.	PO5, PO6, PO7	Association Inauguration and Guest Lecture on “Role of Substation in Power Sector”	15.07.19	Er. V.Suresh M.E Assistant Executive Engineer, TNEB, Aliyar Substation , Pollachi.	91	1,3,5,6,7	1, 2, 3
13.	PO5, PO6, PO7	I year Orientation Program Topic: ”Kalviyum Olukamum”	14.06.19	Mr.S.Dwarakanathan, Ex. Vice president, ( Engg., R&D; HRD), M/s. Brakes India Ltd., TVS Groups, Chennai-600020	36	1,7	1,3
14.	PO5, PO6, PO7	I year Orientation Program Topic: ”I can I will”	13.06.19	Prof.P.Suryanarayanan, Former Professor, Department of English, Govt.Arts College, Coimbatore.	36	1,7	1,3
<b>CAY m1:2018-2019</b>							
1.	PO5, PO6, PO7	State Level Technical Symposium “PA TECHAREA 2K19”	25.01.19	Mr.Thirumalmarugan B.E,MBA, Vice president, Magna castings Pvt. Ltd, Coimbatore.	109	1,3,5,7	1, 2, 3

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2.	PO5, PO6, PO7	Guest Lecture on Energy Conservation	23.01.19	Er. P. Krishnasami, Assistant Executive Engineer, TNEB, Pollachi.	109	1,5,6,7	1,2
3.	PO5, PO6, PO7	Guest lecture on Modern power Generation & Protection	27.12.18	Er. V.Suresh M.E Assistant Executive Engineer, TNEB, Aliyar substation , Pollachi.	109	1,5,6,7	1, 2
4.	PO5, PO6, PO7	Alumni Lecture on “Expectation of Corporate World”	27.12.18	Mr.P K.Manikandan BE Manufacturing Engineer Alstom Transport IndiaPvt.ltd Coimbatore	109	1,5,6,7	1, 2
5.	PO5, PO6, PO7	Workshop on Simulation Software Tools for Power Electronics Applications	29.08.18	Dr.V.Parimala, AP(SG)/EEE, P.A. College of Engineering and Technology, Pollachi.	109	1,3,6,7	1, 2
6.	PO5, PO6, PO7	Guest Lecture on UPS Assembling & Testing	27.08.18	Mr.S.Balachandar, Managing Director, Good Will System, Coimbatore.	109	1,3,4,5,6,7	1, 2, 3
7.	PO5, PO6, PO7	Workshop on PCB Designing	16.07.18	Dr. R.P.MeenaakshiSundhari, Professor –ECE, P.A College of Engineering and Technology, Pollachi.	109	1,3,5,6,7	1, 2, 3
8.	PO5, PO6, PO7	State level technical symposium “ELECTROFUSION 2K18”	27.06.18	Er. E.Jaiganesh Assistant Executive Engineer, TNEB, Kadampari Power House	109	1,3,5,6,7	1, 2, 3
9.	PO5, PO6, PO7	Association inauguration and Guest Lecture on “Power System Protection Practice and Solar Integration”.	22.06.18	Er.D.Babu M.E.,(Ph.D), AEE,TNEB, Ponnapuram, Pollachi.	109	1,3,5,7	1, 2
10.	PO5, PO6, PO7	I year Orientation Program Topic: “Moral Values”	14.06.18	Dr.N.Eswaran, Professor and Head, Akshaya Institute of Management Studies, Coimbatore.	59	1,2,5,7	1,3
11.	PO5, PO6, PO7	I year Orientation Program Topic: “Kalvium Olukamum”	14.06.18	Prof.P.Suryanarayanan, Former Professor, Department of English, Govt.Arts College, Coimbatore.	59	1,5,7	1,3

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12.	PO5, PO6, PO7	I year Orientation Program Topic: "Un EdhirKalam Un Kaiyil"	13.06.18	Mr.S.Dwarakanathan, Ex.Vice president, Brakes India Ltd., TVS Groups, Chennai.	59	1,5,7	1,3
<b>CAYm2:2017-2018</b>							
1.	PO5, PO6, PO7	Guest Lecture on Energy conservation	02.02.18	Er.S.Senthilkumar M.E., AssistantExecutiveEngineer, 230KV Switching Station , TNEB, Myvadi, Udumalpet.	92	1,3,5,7	1,2
2.	PO5, PO6, PO7	State level Technical Symposium "PA TECHARENA 2K19"	04.01.18	Mr.Sridharan E.Padmanaban, Team head( embedded systems group), Altron technologies limited, Coimbatore641035	92	1,3,5,7	1, 2
3.	PO5, PO6, PO7	Role of Electrical Engineers in Technological Development	27.12.17	Dr.S.Thiruvankadam Professor & Head Electrical and Electronics Engineering, PA College of Engineering and Technology, Pollachi.	92	1,5,7	1, 2, 3
4.	PO5, PO6, PO7	Guest lecture on Energy Efficient Environment	30.08.17	Er. E.Jaiganesh Assistant Executive Engineer, TNEB, Kadampari Power House.	92	1,3,5,7	1,2
5.	PO5, PO6, PO7	Alumni Lecture on "Recent trends in industrial automation"	11.08.17	Mr.K.Madhankumar Service engineer HCL Systems Coimbatore	92	1,3,5,7	1,2
6.	PO5, PO6, PO7	Association Inauguration and Guest lecture on Modern Engineering Tool	10.08.17	Mr.J.SridharPrabhu Managing Director All zone system Pvt.Ltd, Coimbatore.	92	1,2,4,6	1,2
7.	PO5, PO6, PO7	State level technical symposium "ELECTROFUSION 2K17"	05.07.17	Er. V.Suresh M.E Assistant Executive Engineer, TNEB, Aliyar Substation , Pollachi.	92	1,3,5,6,7	1,2,3
8.	PO5, PO6, PO7	I year orientation program topic:"Vetrikku Vazhi"	13.06.17	Mr.S.Dwarakanathan, Ex.Vice president, Brakes India Ltd., TVS Groups, Chennai.	59	1,7	1,3

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9.	PO5, PO6, PO7	I year Orientation Program Topic: "Tholviye Thuvakam"	12.06.17	Mr.Siva.S Sathishkumar, Television speaker, NGM College, Pollachi.	59.	1,7	1,3
10.	PO5, PO6, PO7	I year Orientation Program Topic: "Uzhaipom Uyarvom"	09.06.17	Prof.P.Suryanarayanan, Former Professor, Department of English, Govt.Arts College, Coimbatore.	59	1,7	1,3

### Value Added Course Details:

Value added courses are conducted to enrich students skill set. Head of the Department along with coordinator frame the Value Added Courses to be organized for the ensuing semester at the beginning of each semester.

*Table 2.1.2.2 Value Added Courses*

S. No.	Academic Year	Total No. of Value added Courses Conducted
1.	CAY: 2019-2020	03
2.	CAYm1:2018-2019	03
3.	CAYm2:2017-2018	02

S.No.	Curricular Gap	Action taken	Date	Resource Person with designation	No.of students present	Relevance to PO and PSO
<b>CAY:2019-2020</b>						
1.	PO5, PO6, PO7	Power electronics circuits and variable speed drives	08.01.20	Mr.S.Krishnakumar, Lecturer/EEE, P.A.Polytechnic College, Pollachi	40	POs- 1,2,3,4,5,6,7 PSOs-1,2,3
2.	PO5, PO6, PO7	MATLAB programming for Power electronic Circuits and drives	20.08.19	Mr.R B.Rajeshkumar, Lecturer/EEE, P.A.Polytechnic College, Pollachi	35	POs- 1,2,3,4,5,6,7 PSOs-1,2,3

## NBA SAR CRITERION - 2

3.	PO5, PO6, PO7	Workshop on PLC	10.07.19	Mr.K.Sureshkumar, Senior Lecturer/EEE, P.A.Polytechnic College, Pollachi	35	POs- 1,2,3,4,5,6,7 PSOs-1,2,3
<b>CAYm1:2018-2019</b>						
1.	PO5, PO6, PO7	Introduction to Industrial Electrical Systems	03.01.19	Mr.K.Sureshkumar, Senior Lecturer/EEE, P.A.Polytechnic College, Pollachi	45	POs- 1,2,3,4,5,6,7 PSOs-1,2,3
2.	PO5, PO6, PO7	Programming on Arduino	07.08.18	Mr.R.Karthik, Lecturer/EEE, P.A.Polytechnic College, Pollachi	40	POs- 1,2,3,4,5,6,7 PSOs-1,2,3
3.	PO5, PO6, PO7	Workshop on PLC	10.07.18	Mr.S.Krishnakumar, Senior Lecturer/EEE, P.A.Polytechnic College, Pollachi	40	POs- 1,2,3,4,5,6,7 PSOs-1,2,3
<b>CAY m2:2017-2018</b>						
1.	PO5, PO6, PO7	Industrial automation using PLC	07.02.18	Mr.VR.Shankarganesh, HOD/EEE, P.A.Polytechnic College, Pollachi	30	POs- 1,2,3,4,5,6,7 PSOs-1,2,3
2.	PO5, PO6, PO7	Electrical Components Identification and testing	10.07.17	Mr.K.Sureshkumar, Senior Lecturer/EEE, P.A.Polytechnic College, Pollachi	30	POs- 1,2,3,4,5,6,7 PSOs-1,2,3

### 2.2. Teaching - Learning Processes (160)

#### 2.2.1. Describe Processes followed to ensure / improve quality of Teaching Learning based on following points (25)

The Institution follows various practices for the attainment of Program Outcomes and Program Specific Outcomes in agreement with DOTE curriculum:

##### A. Adherence to Academic Calendar(3)

- ✓ Academic calendar is prepared prior to the commencement of the semester based on institution calendar and DOTE norms.

## **NBA SAR CRITERION - 2**

- ✓ It constitutes working days of the semester, internal test schedule, project reviews, industrial visit and other activities planned for the semester such as guest lectures, seminars, workshops, alumni lectures, project contest, symposium, and parents meeting.
- ✓ The academic calendar is circulated among faculties and students.

NBA-SAR-EEE

# NBA SAR CRITERION - 2

LEARN

WORK

SUCCEED



## P. A. POLYTECHNIC COLLEGE

(Approved by AICTE and Affiliated to Directorate of Technical Education)

POLLACHI – 642 002



### ACADEMIC CALENDAR 2019-2020

#### EVEN SEMESTER

I, II & III YEAR DIPLOMA PROGRAMME

Department of Electrical & Electronics  
Engineering

Website : [www.papolytechnic.org](http://www.papolytechnic.org)

Mail id : paptc@rediffmail.com

**ஞாலம்கருதினும்கைகூடும்காலம்  
கருதிஇடத்தாற்செயின்.**

-வள்ளுவப்பெருந்தகை  
திருக்குறள்[அதிகாரம் 'காலம்அறிதல்'(49.4)]

*(Choose proper time and place, and act  
Even the world you win with ease.)*

## NBA SAR CRITERION - 2

S.No.	DATE	DAY	PROGRAMME	REMARKS
<b>DECEMBER 2019</b>				
1	09.12.2019	MONDAY		<b>REOPEN</b>
2	10.12.2019	TUESDAY		
3	11.12.2019	WEDNESDAY		
4	12.12.2019	THURSDAY		
5	13.12.2019	FRIDAY	HOD meeting at Principal chamber at 5.00PM	
6	14.12.2019	SATURDAY	<b>HOLIDAY</b>	
7	15.12.2019	SUNDAY	<b>HOLIDAY</b>	
8	16.12.2019	MONDAY	Department faculty meeting	
9	17.12.2019	TUESDAY		
10	18.12.2019	WEDNESDAY		
11	19.12.2019	THURSDAY		
12	20.12.2019	FRIDAY	HOD meeting at Principal chamber at 5.00PM	
13	21.12.2019	SATURDAY	Guest lecture	<b>MONDAY ORDER</b>
14	22.12.2019	SUNDAY	<b>HOLIDAY</b>	
15	23.12.2019	MONDAY	<b>UNIT TEST - I</b> Class committee meeting for II & III year	
16	24.12.2019	TUESDAY	<b>UNIT TEST - I</b>	
17	25.12.2019	WEDNESDAY	<b>HOLIDAY</b>	<b>CHRISTMAS</b>
18	26.12.2019	THURSDAY	<b>UNIT TEST - I</b>	
19	27.12.2019	FRIDAY	<b>UNIT TEST - I</b> HOD meeting at Principal chamber at 5.00PM	
20	28.12.2019	SATURDAY	<b>HOLIDAY</b>	
21	29.12.2019	SUNDAY	<b>HOLIDAY</b>	
22	30.12.2019	MONDAY	<b>H A - I</b> Department faculty meeting	
23	31.12.2019	TUESDAY	<b>H A - I</b>	

**JANUARY 2020**

## NBA SAR CRITERION - 2

24	01.01.2020	WEDNESDAY	<b>HOLIDAY</b>	<b>NEW YEAR</b>
25	02.01.2020	THURSDAY	<b>H A – I</b>	
26	03.01.2020	FRIDAY	<b>H A - I</b> HOD meeting at Principal chamber at 5.00PM	
27	04.01.2020	SATURDAY	Department faculty meeting	<b>WEDNESDAY ORDER</b>
28	05.01.2020	SUNDAY	<b>HOLIDAY</b>	
29	06.01.2020	MONDAY		
30	07.01.2020	TUESDAY	Two days workshop	
31	08.01.2020	WEDNESDAY		
32	09.01.2020	THURSDAY		
33	10.01.2020	FRIDAY	HOD meeting at Principal chamber at 5.00PM, Industrial visit for III year	
34	11.01.2020	SATURDAY	<b>HOLIDAY</b>	
35	12.01.2020	SUNDAY	<b>HOLIDAY</b>	
36	13.01.2020	MONDAY	Department faculty meeting	
37	14.01.2020	TUESDAY		
38	15.01.2020	WEDNESDAY	<b>HOLIDAY</b>	<b>PONGAL</b>
39	16.01.2020	THURSDAY	<b>HOLIDAY</b>	<b>THIRUVALLUVAR DAY</b>
40	17.01.2020	FRIDAY	<b>HOLIDAY</b>	<b>UZHAVAR THIRUNAL</b>
41	18.01.2020	SATURDAY		<b>WEDNESDAY ORDER</b>
42	19.01.2020	SUNDAY	<b>HOLIDAY</b>	
43	20.01.2020	MONDAY	Class committee meeting for II & III year	
44	21.01.2020	TUESDAY	<b>CAT – I</b>	
45	22.01.2020	WEDNESDAY	<b>CAT – I</b>	
46	23.01.2020	THURSDAY	<b>CAT – I</b>	
47	24.01.2020	FRIDAY	<b>CAT - I</b> HOD meeting at Principal chamber at 5.00PM	
48	25.01.2020	SATURDAY	<b>HOLIDAY</b>	
49	26.01.2020	SUNDAY	<b>HOLIDAY</b>	<b>REPUBLIC DAY</b>
50	27.01.2020	MONDAY	Department faculty meeting	
51	28.01.2020	TUESDAY	Technical symposium	
52	29.01.2020	WEDNESDAY		
53	30.01.2020	THURSDAY		
54	31.01.2020	FRIDAY	HOD meeting at Principal chamber at 5.00PM	
<b>FEBRUARY 2020</b>				

## NBA SAR CRITERION - 2

55	01.02.2020	SATURDAY	Department faculty meeting	<b>THURSDAY ORDER</b>
56	02.02.2020	SUNDAY	<b>HOLIDAY</b>	
57	03.02.2020	MONDAY	<b>H A -II</b>	
58	04.02.2020	TUESDAY	<b>H A -II</b> State level Technical Symposium	
59	05.02.2020	WEDNESDAY	<b>H A -II</b>	
60	06.02.2020	THURSDAY	<b>H A -II</b> State level technical symposium	
61	07.02.2020	FRIDAY	HOD meeting at Principal chamber at 5.00PM	
62	08.02.2020	SATURDAY	<b>HOLIDAY</b>	
63	09.02.2020	SUNDAY	<b>HOLIDAY</b>	
64	10.02.2020	MONDAY	<b>UNIT TEST - II</b> Department faculty meeting	
65	11.02.2020	TUESDAY	<b>UNIT TEST - II</b>	
66	12.02.2020	WEDNESDAY	<b>UNIT TEST - II</b>	
67	13.02.2020	THURSDAY	<b>UNIT TEST - II</b>	
68	14.02.2020	FRIDAY	HOD meeting at Principal chamber at 5.00PM	
69	15.02.2020	SATURDAY	Department faculty meeting	<b>FRIDAY ORDER</b>
70	16.02.2020	SUNDAY	<b>HOLIDAY</b>	
71	17.02.2020	MONDAY	Industrial visit	
72	18.02.2020	TUESDAY		
73	19.02.2020	WEDNESDAY	Guest lecture	
74	20.02.2020	THURSDAY		
75	21.02.2020	FRIDAY	HOD meeting at Principal chamber at 5.00PM	
76	22.02.2020	SATURDAY	<b>HOLIDAY</b>	
77	23.02.2020	SUNDAY	<b>HOLIDAY</b>	
78	24.02.2020	MONDAY	Department faculty meeting	
79	25.02.2020	TUESDAY	<b>CAT - II</b>	
80	26.02.2020	WEDNESDAY	<b>CAT - II</b>	
81	27.02.2020	THURSDAY	<b>CAT - II</b>	
82	28.02.2020	FRIDAY	<b>CAT - II</b> HOD meeting at Principal chamber at 5.00PM	
83	29.02.2020	SATURDAY	Department faculty meeting	<b>WEDNESDAY ORDER</b>
<b>MARCH 2020</b>				

## NBA SAR CRITERION - 2

84	01.03.2020	SUNDAY	<b>HOLIDAY</b>	
85	02.03.2020	MONDAY		
86	03.03.2020	TUESDAY		
87	04.03.2020	WEDNESDAY	Guest lecture	
88	05.03.2020	THURSDAY		<b>SPORTS DAY</b>
89	06.03.2020	FRIDAY	HOD meeting at Principal chamber at 5.00PM	
90	07.03.2020	SATURDAY	Department faculty meeting	<b>WEDNESDAY ORDER /ANNUAL DAY</b>
91	08.03.2020	SUNDAY	<b>HOLIDAY</b>	
92	09.03.2020	MONDAY		
93	10.03.2020	TUESDAY	<b>H A - III</b>	
94	11.03.2020	WEDNESDAY	<b>H A - III</b>	
95	12.03.2020	THURSDAY	<b>H A - III</b>	
96	13.03.2020	FRIDAY	<b>H A - III</b> HOD meeting at Principal chamber at 5.00PM	
97	14.03.2020	SATURDAY	<b>HOLIDAY</b>	
98	15.03.2020	SUNDAY	<b>HOLIDAY</b>	
99	16.03.2020	MONDAY	Department faculty meeting	
100	17.03.2020	TUESDAY	<b>MODEL</b>	<b>LAST WORKING DAY</b>
101	18.03.2020	WEDNESDAY	<b>MODEL</b>	
102	19.03.2020	THURSDAY	<b>MODEL</b>	
103	20.03.2020	FRIDAY	<b>MODEL</b>	
104	21.03.2020	SATURDAY		<b>TUESDAY ORDER</b>
105	22.03.2020	SUNDAY	<b>HOLIDAY</b>	
106	23.03.2020	MONDAY	<b>COMMENCEMENT OF APRIL 2020 PRACTICAL EXAMS</b>	
107	24.03.2020	TUESDAY		
105	22.03.2020	WEDNESDAY	<b>HOLIDAY</b>	<b>TELUGU NEW YEAR</b>
109	26.03.2020	THURSDAY		
110	27.03.2020	FRIDAY		
111	28.03.2020	SATURDAY	<b>HOLIDAY</b>	
112	29.03.2020	SUNDAY	<b>HOLIDAY</b>	
113	30.03.2020	MONDAY		
114	31.03.2020	TUESDAY		
<b>APRIL 2020</b>				

## NBA SAR CRITERION - 2

115	01.04.2020	WEDNESDAY		
116	02.04.2020	THURSDAY		
117	03.04.2020	FRIDAY	<b>COMMENCEMENT OF APRIL 2020 BOARD THEORY EXAMS</b>	
118	04.04.2020	SATURDAY		
119	05.04.2020	SUNDAY	<b>HOLIDAY</b>	
120	06.04.2020	MONDAY	<b>HOLIDAY</b>	<b>MAHAVEER JAYANTHI</b>
121	07.04.2020	TUESDAY		
122	08.04.2020	WEDNESDAY		
123	09.04.2020	THURSDAY		
125	10.04.2020	FRIDAY	<b>HOLIDAY</b>	<b>GOOD FRIDAY</b>
125	11.04.2020	SATURDAY	<b>HOLIDAY</b>	
126	12.04.2020	SUNDAY	<b>HOLIDAY</b>	
127	13.04.2020	MONDAY		
128	14.04.2020	TUESDAY	<b>HOLIDAY</b>	<b>TAMIL NEW YEAR</b>
129	15.04.2020	WEDNESDAY		
130	16.04.2020	THURSDAY		
131	17.04.2020	FRIDAY		
132	18.04.2020	SATURDAY		
133	19.04.2020	SUNDAY	<b>HOLIDAY</b>	
134	20.04.2020	MONDAY		
135	21.04.2020	TUESDAY		
136	22.04.2020	WEDNESDAY		
137	23.04.2020	THURSDAY		
138	24.04.2020	FRIDAY		
139	25.04.2020	SATURDAY	<b>HOLIDAY</b>	
140	26.04.2020	SUNDAY	<b>HOLIDAY</b>	
141	27.04.2020	MONDAY		
142	28.04.2020	TUESDAY		
143	29.04.2020	WEDNESDAY		
144	30.04.2020	THURSDAY		
<b>CAT I</b>				

## NBA SAR CRITERION - 2

S.No.	YEAR/SEM	DATE	TIME	PORTION
1	II/IV	21.01.2020 TO 24.01.2020	11.15 TO 01.15	I & II UNITS
2	III/VI	22.01.2020 TO 24.01.2020	02.55 TO 04.55	

### CAT II

S.No.	YEAR/SEM	DATE	TIME	PORTION
1	II/IV	25.02.2020 TO 28.02.2020	09.00 TO 11.00	III & IV UNITS
2	III/VI	26.02.2020 TO 28.02.2020	11.15 TO 01.15	

### MODEL

S.No.	YEAR/SEM	DATE	TIME	PORTION
1	II/IV	17.03.2020 TO 20.03.2020	09.00 TO 12.00	5 UNITS
2	III/VI	18.03.2020 TO 20.03.2020	1.55 TO 4.55	

  
PRINCIPAL

*Figure 2.2.1.1 Activities for the academic year 2019-20 even semester*

### B. Use of various Instructional planning and delivery methods(3)

## **NBA SAR CRITERION - 2**

- ✓ The faculty adopts various innovative teaching and learning methodologies to create the best learning environment for students.

### **Instructional Methods**

- ✓ Lecture Methods
- ✓ ICT Based learning
- ✓ Collaborative learning
- ✓ Beginners/ Fresher's connect program

### **Lecture Methods**

- ✓ The institution follows the curriculum and syllabus of the DOTE for preparing academic calendar as well as course plan.
- ✓ Tutorial hours for analytical courses are conducted to have a better analytical perspective in the corresponding courses.
- ✓ The traditional chalk and talk method is followed.
- ✓ Students are also encouraged to actually interact during the lecture hour by getting the doubts clarified on the spot.

### **ICT Based Learning**

- ✓ ICT based learning support, enhance and optimize the delivery of information in the quality of education and teaching.
- ✓ The following ICT based learning tools are adapted in the programme
  1. Multimedia projectors
  2. OHPs
  3. Power point presentation.
- ✓ Seminars hours are allotted in the time table for enhanced learning and also for updating the knowledge with the fast growing technology.

### **Collaborative Learning**

- ✓ Collaborative learning is a situation in which group of students learns and works together to analyze and apply concepts in an interactive manner.
- ✓ Collaborative learning is attained by involving student groups, Technical Quiz and Project works.
- ✓ Learning is also promoted by conducting value added courses where students are given the opportunity to be trained from the industrial experts.

### **Beginners/ fresher's connect program**

## NBA SAR CRITERION - 2

- ✓ At the beginning of every semester newly joined faculty are given orientation towards the methods of teaching.

They are also familiarized with Bloom's taxonomy objectives for betterment in their educational activities.

### C. Methodologies to support weak students and encourage bright students(4)

The students are categorized as bright and weak based on Board results.

#### Guidelines to identify weak students

The Counsellors normally direct gatherings in regards to advance of their understudies and are capable to recognize understudies who scored under 20 marks in their continuous assessment test and less than 30 marks in model examination.

Under the HOD's direction, the students Counsellor evaluates the mark statement of those students who score below 20 marks in three or more subject and below 80 % attendance are considered as academically weak students and same is also intimated to their parents.

#### Mentoring system

Identification Criteria	Actions taken
Students scoring below 20 marks in Continuous Assessment Test.	Student counselor follows their progress regularly advising students about attending classes, making up missed classes Intimating parents to counsel their wards. Conducting Coaching classes.
Diploma Students who entered with less basic science.	Conducting Coaching classes.
Students who failed in semester exams	Conducting of extra classes to those who failed in previous semester subjects.

#### Methodology to support Bright students

- ✓ Awareness provided to appear for entrance examinations for higher studies.

#### Action taken for Bright students

## NBA SAR CRITERION - 2

- ✓ Students securing First and Second rank in Board examination are awarded with certificate of merit and cash prize.
- ✓ Student securing 100% attendances are also awarded by certificate and cash prize.
- ✓ Students are motivated for attending workshops, seminars, paper presentation.
- ✓ Students are motivated to secure high marks in board examination.

### D. Quality of classroom teaching (Observation in a class) (3)

Quality of teaching is a very important factor for quality learning. The following aspects are considered to ensure a good quality classroom teaching:

- ✓ Classroom ambience is made interactive.
- ✓ Smart board is established across the institution for effective delivery.
- ✓ Smart board helps Faculty members to bring lessons to life with rich, powerful activities that grabs student's attention, blending real time assessment and real world experience into the learning process.
- ✓ Complex tutorial problems are solved in the class rooms by the Faculty and students together.
- ✓ Principal and Head of Department regularly visit classes to observe the teaching process and convey their suggestions and appreciations to the Faculty member.
- ✓ Students are motivated to present a topic of their own with 5 minutes Snap talk during class hours.
- ✓ Real components and models are taken by the faculty to the class room to demonstrate the concepts in a clear way to the students.
- ✓ Class committee meetings are conducted in order to monitor and evaluate the quality of class room teaching
- ✓ In each semester, feedbacks from the students are collected for all the courses to evaluate the quality of teaching and learning process.

### E. Conduct of experiments (Observation in a Lab) (3)

- ✓ The students are divided into 2 groups.
- ✓ Each group is divided into batches with 3 to 5 students per batch.
- ✓ Laboratory manuals and course plans are prepared for each laboratory course before the commencement of each semester.
- ✓ The students are instructed about the experimental procedures and safety measures before the commencement of practical session.

## NBA SAR CRITERION - 2

- ✓ The additional experiments beyond the curriculum content are performed by students for increasing their practical knowledge and design capability.
- ✓ The students are encouraged to carryout mini projects to enhance their knowledge.

### F. Continuous Assessment in the laboratory (3)

- ✓ As per DOTE guidelines all practical courses are continuously assessed for a maximum of 20 marks.
- ✓ Students are continuously assessed in the lab through
  - ✓ Completion of the experiment
  - ✓ Periodic submission of observation and record

### G. Student feedback of teaching learning process and actions taken (6)

- ✓ Class committee meeting is carried out periodically and feedback is obtained.
- ✓ The feedbacks are collected from the students at a regular period in order to improve the teaching learning process
- ✓ Students give their feedback regarding the way of course handling by the faculty and other problems in the classroom.
- ✓ The Student feedback form is shown in following figure

FEEDBACK FORM  
EVALUATION OF STAFF BY STUDENTS

# NBA SAR CRITERION - 2



**P. A. POLYTECHNIC COLLEGE**  
 POLLACHI – 642 002  
 Department of Electrical and Electronics Engineering  
 Academic Year 2019 – 2020  
 Even Semester

## FEEDBACK SUMMARY FORM – STUDENTS

AC-16.2  
 09.12.2019

DATE OF REVIEW : 03.02.2020  
 NAME OF THE FACULTY : D. PREMALATHA DEPT : EEE  
 YEAR : 2019 - 2020 SECTION :  
 SUBJECT HANDLED : PE SEMESTER : VI

### PARAMETERS

1. Planning and organizing sessions
2. Punctuality and regularity in holding the class
3. Ability to make student understand the course ( Presentation and Communication skill)
4. Fairness in assessment of students
5. Faculty - Student Relationship

A (10) - Excellent. B (8) - Very Good C (6) - Good D (4) - Satisfactory E (2) - Below Satisfactory

S. NO.	1	2	3	4	5	S. NO.	1	2	3	4	5	S. NO.	1	2	3	4	5
1	6	8	6	8	8	17	10	10	10	10	10	33	10	10	10	10	10
2	10	10	10	10	8	18	10	10	10	6	8	34	10	10	10	8	10
3	10	10	10	10	8	19	8	8	4	4	10	35	10	10	10	10	10
4	6	8	10	10	10	20	8	8	6	8	6	36	10	10	10	10	10
5	6	10	6	6	6	21	8	8	10	10	10	37	10	10	10	10	10
6	10	10	8	10	10	22	10	8	6	8	6	38	10	10	10	10	10
7	10	10	10	10	10	23	10	10	8	6	6	39	10	10	10	10	10
8	8	10	10	10	10	24	10	10	8	6	10	40	10	8	10	8	10
9	8	10	8	10	10	25	10	6	6	8	8	41	10	10	10	10	10
10	10	10	10	10	8	26	4	8	8	8	8	42	10	10	10	10	10
11	10	10	10	10	10	27	10	10	8	10	10	43	10	10	10	10	10
12	10	10	10	10	10	28	8	8	8	8	8	44	10	10	10	10	10
13	10	10	8	10	10	29	8	10	10	6	8	45	10	10	10	10	10
14	10	10	10	10	10	30	10	10	10	10	10	46	10	10	10	10	10
15	8	6	4	6	8	31	6	6	6	6	6	47	10	8	8	6	10
16	10	10	10	10	10	32	6	6	6	6	6	48					
PARAMETER													1	2	3	4	5
AVERAGE SCORE (Max. 10)													9.3	8.5	8.6	8.5	9.5

R.B. Rajan  
 CLASS COUNSELLOR

*[Signature]*  
 HOD

Fig 2.2.1.2 Feedback from Students sample

Consolidated feedback

# NBA SAR CRITERION - 2



**P. A. POLYTECHNIC COLLEGE**  
 POLLACHI - 642 002  
 Department of Electrical and Electronics Engineering  
 Academic Year 2019 - 2020  
 Even Semester

**FEEDBACK FORM - STUDENTS**

AC-16.1

**EVALUATION ON FACULTY BY STUDENTS**

09.12.2019

Please rate every teacher taught you during this semester as classified below  
 Your response should be A, B, C, D or E  
 "A" is Excellent  
 "B" is Very Good  
 "C" is Good  
 "D" is Satisfactory  
 "E" is Below Satisfactory

DEPARTMENT : DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

YEAR : III/III  
 SEMESTER : VI

SECTION :  
 ACADEMIC YEAR : 2019 - 2020

S. No.	PARAMETERS	SUBJECT NAME						
		D&U	O&M	PE	WW Lab	ECS Lab	PE Lab	Project
	NAME OF THE FACULTY	K.Suresh Kumar	R.B. Rajesh kumar	D. Premalatha	K. Suresh Kumar	S. Kowsalya	D. Premalatha	V.R. Shankar Ganesh
1	Planning and Organizing Sessions	A	A	C	A	A	A	A
2	Punctuality And Regularity In Holding The Class	B	A	B	A	A	A	A
3	Ability To Make Student Understand the Course (Presentation and Communication Skill)	B	A	C	A	A	A	A
4	Fairness In Assessment of Students	A	B	B	A	A	A	A
5	Faculty Student Relationship	D	A	B	A	A	A	A

NAME: K. MATHURAYAN  
 (OPTIONAL)

*(Signature)*  
 SIGNATURE  
 (OPTIONAL)

*Fig 2.2.1.3 Feedback Consolidated Report*

## 2.2.2 Initiatives to improve the quality of semester tests and assignments(15)

## NBA SAR CRITERION - 2

### A. Process for internal semester question paper setting and evaluation and effective process implementation (5)

- ✓ The Exam cell prepares the schedule of the test date based on academic calendar.
- ✓ The question paper is framed based on the syllabus completion for each test. The question papers are set by the corresponding subject handling faculties (discussing with the fellow members), verified and approved by the Head of the Department, Principal and handed over to the Exam Cell.
- ✓ Syllabus coverage for internal test is shown in the Table 2.2.2.1

*Table 2.2.2.1 Syllabus Coverage for Internal Test*

CAT-1 Maximum marks:50	CAT-2 Maximum marks:50	MODEL Maximum marks:75
Unit-I and Unit-II	Unit-III and Unit-IV	5 UNITS

- ✓ The internal question papers are prepared based on Board Question paper standard. The question paper pattern is shown in the Table 2.2.2.2

*Table 2.2.2.2 Question Paper Pattern for first year Engineering*

<b>CONTINUOUS ASSESSMENT TEST QUESTION PATTERN</b>		
Engineering Physics – I, Engineering Chemistry –I, Engineering Mathematics-I, Engineering Physics –II, Engineering Chemistry – II, Engineering Mathematics-II, Applied Mathematics.		
<b>PART – A</b>	4 Questions (Answer all the questions)	4 x 2 = 08 Marks
<b>PART – B</b>	4 Questions (Answer all the questions)	4 x 3 = 12 Marks
<b>PART – C</b>	6 Questions (Answer all the questions)	6 x 5 = 30 Marks
<b>TOTAL</b>		50 Marks
<b>MODEL EXAM QUESTION PATTERN</b>		
<b>PART – A</b>	8 Questions (Answer any 5 questions)	5 x 2 = 10 Marks
<b>PART – B</b>	8 Questions (Answer any 5 questions)	5 x 3 = 15 Marks
<b>PART – C</b>	8 Questions (Answer any 2 questions from each part)	5 x 10 = 50 Marks
<b>TOTAL</b>		75 Marks
<b>BOARD EXAMINATION QUESTION PATTERN</b>		

## NBA SAR CRITERION - 2

<b>PART – A</b>	8 Questions (Answer any 5 questions)	5 x 2 = 10 Marks
<b>PART – B</b>	8 Questions (Answer any 5 questions)	5 x 3 = 15 Marks
<b>PART – C</b>	8 Questions (Answer any 2 questions from each part)	5 x 10 = 50 Marks
<b>TOTAL</b>		75 Marks

<b>CONTINUOUS ASSESSMENT TEST QUESTION PATTERN</b> Engineering Graphics-I, Engineering Graphics-II		
<b>PART – A</b>	1 Question	1 x 5 = 05 Marks
<b>PART – B</b>	3 Questions (Answer all the questions)	3 x 15 = 45 Marks
<b>TOTAL</b>		50 Marks
<b>MODEL EXAM QUESTION PATTERN</b>		
<b>PART – A</b>	3 Questions (Answer all the questions)	3 x 5 = 15 Marks
<b>PART – B</b>	6 Questions (Answer any 4 questions)	4 x 15 = 60 Marks
<b>TOTAL</b>		75 Marks
<b>BOARD EXAMINATION QUESTION PATTERN</b>		
<b>PART – A</b>	3 Questions (Answer all the questions)	3 x 5 = 15 Marks
<b>PART – B</b>	6 Questions (Answer any 4 questions)	4 x 15 = 60 Marks
<b>TOTAL</b>		75 Marks
<b>CONTINUOUS ASSESSMENT TESTS QUESTION PATTERN</b> Communication English-I, Communication English-II		
<b>PART – A</b>	Answer all the questions	30 Marks
<b>PART – B</b>	Answer all the questions	10 Marks
<b>PART – C</b>	Answer all the questions	10 Marks
<b>TOTAL</b>		50 Marks

## NBA SAR CRITERION - 2

Table 2.2.2.3 Question Paper Pattern for Second and Third year

<b>CONTINUOUS ASSESSMENT TEST QUESTION PATTERN</b>		
<b>PART – A</b>	4 Questions (Answer all the questions)	4 x 2 = 08 Marks
<b>PART – B</b>	4 Questions (Answer all the questions)	4 x 3 = 12 Marks
<b>PART – C</b>	3 Questions (Answer all the questions)	3 x 10 = 30 Marks
<b>TOTAL</b>		50 Marks
<b>MODEL EXAM QUESTION PATTERN</b>		
<b>PART – A</b>	8 Questions (Answer 5 questions, Q.NO:8 will be compulsory Question)	5 x 2 = 10 Marks
<b>PART – B</b>	8 Questions (Answer 5 questions, Q.NO:8 will be compulsory Question)	5 x 3 = 15 Marks
<b>PART – C</b>	5 Questions (Answer all the questions)	5 x 10 = 50 Marks
<b>TOTAL</b>		75 Marks
<b>BOARD EXAMINATION QUESTION PATTERN</b>		
<b>PART – A</b>	8 Questions (Answer any 5 questions) ( Question no. 8 compulsory)	5 x 2 = 10 Marks
<b>PART – B</b>	8 Questions (Answer any 5 questions) ( Question no. 16 compulsory )	5 x 3 = 15 Marks
<b>PART – C</b>	5 Questions (Answer all the questions)	5 x 10 = 50 Marks
<b>TOTAL</b>		75 Marks

- ✓ The answer key for the internal test is prepared by the concerned faculty.
- ✓ The answer scripts are evaluated by the faculty within 3 working days from the date of test and the result analysis is submitted to the HOD.
- ✓ The evaluated answer scripts are distributed to the students and answers are discussed in the class room

## NBA SAR CRITERION - 2

### B. Process to ensure questions from outcomes/learning levels perspective (5)

- ✓ The question paper is set such that it tests the subject knowledge, analytical skill, design skill and justification skill of the student for all the subjects.

### Continuous Assessment Format for CAT-I & CAT-II

Table 2.2.2.4 CAT & Model Exam Format for first year

Continuous Test Assessment Format for CAT-I & CAT-II (I year)														
Maximum marks (50)														
PART-A (4X2=08)				PART-B (4X3=12)				PART-C (6X05=30)						Marks Obtained
Q1 (2)	Q2 (2)	Q3 (2)	Q4 (2)	Q5 (3)	Q6 (3)	Q7 (3)	Q8 (3)	Q8 (5)	Q8 (5)	Q9 (5)	Q10 (5)	Q11 (5)	Q12 (5)	50
<b>Total</b>														50

### Model Exam Format

Model Exam (I year)																
Maximum marks (50)																
PART-A (5X2=10)					PART-B (5X3=15)					PART-C (6X05=30)						Marks Obtained
Q1 (2)	Q2 (2)	Q3 (2)	Q4 (2)	Q5 (2)	Q6 (3)	Q7 (3)	Q8 (3)	Q9 (3)	Q10 (3)	Q11 (5)	Q12 (5)	Q13 (5)	Q14 (5)	Q15 (5)	Q16 (5)	50
<b>Total</b>																50

## NBA SAR CRITERION - 2

Internal Test Assessment Format for CAT-I & CAT-II for second and third year

Table 2.2.2.5 CAT & Model Exam Format for II & III YEAR


Continuous Test Assessment Format for CAT-I & CAT-II (II & III YEAR)											
Maximum marks (50)											
PART-A (4X2=08)				PART-B (4X3=12)				PART-C (3X10=30)			Marks Obtained
Q1 (2)	Q2 (2)	Q3 (2)	Q4 (2)	Q5 (3)	Q6 (3)	Q7 (3)	Q8 (3)	Q9 (10)	Q10 (10)	Q11 (10)	50
										<b>Total</b>	50

### Model Exam Format

Model Exam Format for II & III YEAR												
Maximum marks (75)												
<b>PART-A ( 5 x2 = 10)</b> Any 5 questions Q 8 compulsory										<b>Marks Obtained</b>		
Q1 (2)	Q2 (2)	Q3 (2)	Q4 (2)	Q5 (2)	Q6 (2)	Q7 (2)	Q8 (2)					10
<b>PART-B ( 5 x3 = 15)</b> any 5 questions Q 16 compulsory										<b>Marks Obtained</b>		
Q9 (3)	Q10 (3)	Q11 (3)	Q12 (3)	Q13 (3)	Q14 (3)	Q15 (3)	Q16 (3)					15
<b>PART-C( 5 x10 = 50) (answer all question each have a or b choice)</b>										<b>Marks Obtained</b>		
Q17 (10)	Q18 (10)	Q19 (10)	Q20 (10)				Q21 (10)					50
										<b>TOTAL</b>	75	

# NBA SAR CRITERION - 2

## Internal Exam Format



**P. A. POLYTECHNIC COLLEGE**  
POLLACHI – 642 002

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**2019-2020**  
**CONTINUOUS ASSESSMENT TEST-II**

Roll No

Programme : <b>DIPLOMA</b>	Date : <b>26.02.2020</b>
Branch : <b>FIRST YEAR ENGINEERING</b>	Time : <b>2.55 TO 4.55</b>
Semester : <b>II</b>	
Sub Code : <b>30023</b>	Duration : <b>2 HOURS</b>
Sub Name : <b>APPLIED MATHEMATICS</b>	Max. Marks : <b>50</b>

**NOTE: ANSWER ALL THE QUESTIONS**

**PART – A (4 x 2 = 8 MARKS)**

1. State the slope of the normal to the curve  $y=x^3$  at (4, -2)
2. Write the conditions for minimum of the function  $y=f(x)$  at  $x=a$ .
3. Write down the auxiliary equation of  $4 \frac{d^2y}{dx^2} - 12 \frac{dy}{dx} + 9y=0$
4. Solve  $(D^2-25)y=0$

**PART – B (4 x 3 = 12 MARKS)**

5. If  $s=ae^t + be^{-t}$ , show that acceleration is always equal to the distance passed over.
6. Find the minimum value of  $y=x^2 - 4x$
7. Find the complementary function of  $(D^2+5D+6)y=2\cos 3x$
8. Find the particular integral of  $(D^2 -3D +2)y = e^{-3x}$


**PART – C (6 x 5 = 30 MARKS)**

9. If the distance time for a particle is given by  $S= 2t^3 + 3t^2 - 72t + 1$ .(i) Find initial velocity  
(ii) Find the acceleration when the velocity is zero.
10. Find the equation of the tangent and Normal to the curve  $y=6+x-x^2$  at (2, 4).
11. Find the maximum and minimum values of  $y=2x^3+3x^2-36x+1$ .
12. solve  $\frac{d^2y}{dx^2} + \frac{dy}{dx} + y = 0$ .
13. Solve  $(D^2+6D +5)y = 2e^{-x}$
14. Solve  $(D^2 +16)y = \sin 9x$

*Fig 2.2.2.1 Sample question paper for CAT-I for First year Engineering*

# NBA SAR CRITERION - 2

## Model Exam Format

	<b>P. A. POLYTECHNIC COLLEGE</b> POLLACHI – 642 002
<b>2019-2020 MODEL EXAM</b>	
Roll No	<input type="text"/>
Programme: <b>DIPLOMA</b>	Date : <b>26.09.2019</b>
Branch : <b>FIRST YEAR ENGINEERING</b>	Time : <b>9.00AM TO 12.00PM</b>
Semester : <b>I</b>	
Sub Code : <b>30014</b>	Duration : <b>3 HOURS</b>
Sub Name : <b>ENGINEERING CHEMISTRY-I</b>	Max. Marks : <b>75</b>

**[NOTE : (1) Answer any five questions in each of PART-A & PART-B and any two divisions of each question in PART-C**  
**(2) Each question carries 2(two) marks in PART-A, 3(three) marks in PART-B and 5(five) marks for each division in PART C**

**PART – A (5 x 2 = 10 MARKS)**

1. Define mole?
2. Define buffer solution. What is its type?
3. Define molarity.
4. What are the importances of nanoparticles?
5. Define promoter.
6. Define electrolessplating.
7. What are the differences between paint and varnish?
8. Define galvanization

**PART – B (5 x 3 = 15 MARKS)**

9. Explain the lewis concept of acid & bases.
10. Explain –What type of bonding is in the formation of ammonia molecule?
11. What are the differences between lyophilic and lyophobic colloids?
12. Explain the application of colloids.
13. Write a note on working and application of solar cell.
14. What are the varieties of glass? Explain
15. How will you prepare oil varnish?
16. Explain special paints.

**PART – C (5 x 10 = 50 MARKS)**

17. a) Derive the relationship between molecular mass and vapour density.  
b) Write the application of  $P^H$  in industries.  
c) Explain ionic bond with suitable example
18. a) Find the mole fraction of solute and solvent in a solution containing 9-2gm of ethyl alcohol ( $C_2H_5 OH$ ) is 180gms of water. (Molecular mass of ethyl alcohol=46).  
b) Explain the properties of colloids.  
c) What are the applications of nanoparticles.  
i) Medicine ii) Electronics and iii) Bio materials.
19. a) Explain the ion-exchange method of softening of hard water.  
b) Define catalyst- Write the industrial application of catalyst.  
c) Explain the manufacture of glass.
20. a) Define electrolysis. Explain it with example.  
b) Explain the formation of Daniel cell.  
c) Explain the construction and working of lead –acid storage cell.

*Fig 2.2.2.2 Sample question paper for Model Exam for First year Engineering*

# NBA SAR CRITERION - 2

## Internal Exam Format



**P. A. POLYTECHNIC COLLEGE**  
POLLACHI – 642 002

**2019-2020**

**CONTINUOUS ASSESSMENT TEST-I**

Roll No

Programme : <b>DIPLOMA</b>	Date : <b>09.07.2019</b>
Branch : <b>ELECTRICAL AND ELECTRONICS ENGG</b>	Time : <b>11.15 AM TO 1.15PM</b>
Semester : <b>V</b>	
Sub Code : <b>33051</b>	Duration : <b>2 HOURS</b>
Sub Name : <b>GENERATION, TRANSMISSION &amp; SWITCH GEAR</b>	Max. Marks : <b>50</b>

**NOTE: ANSWER ALL THE QUESTIONS**

**PART – A (4 x 2 = 8 MARKS)**

1. What is load curve?
2. Mention any 2 conventional sources of power generation
3. What is primary transmission?
4. State any 2 line supports?

**PART – B (4 x 3 = 12 MARKS)**

5. Explain the function of surge tank.
6. Write short notes on co- generation.
7. Explain briefly the skin effect.
8. Explain briefly the Ferranti effect.


**PART – C (3 x 10 = 30 MARKS)**

9. Explain the working of solar energy power plant with neat sketch.
10. Explain the working of thermal power plant with neat sketch
11. An overhead transmission line has a span of 220m and the conductor weight is 604Kg/Km. Calculate the maximum sag if the ultimate tensile strength of the conductor is 5785 Kg. Assume a factor of safety as 2.

*Fig 2.2.2.3 Sample question paper for CAT-I Second and Third year*

# NBA SAR CRITERION - 2

## Model Exam Format

	<b>P. A. POLYTECHNIC COLLEGE</b> POLLACHI – 642 002
<b>2019-2020</b> <b>MODEL EXAM</b>	
Roll No	<input type="text"/>
Programme : <b>DIPLOMA</b> Branch : <b>ELECTRICAL AND ELECTRONICS ENGG</b> Semester : <b>V</b>	Date : <b>20.09.2018</b> Time : <b>1.55 to 4.55PM</b>
Sub Code : <b>33071</b> Sub Name : <b>CONTROL OF ELECTRICAL MACHINES</b>	Duration : <b>3 HOURS</b> Max. Marks : <b>75</b>

**[NOTE:(1) Q.no.8 in PART-A and Q.no.16 in PART-B are compulsory. Answer any FOUR questions from the remaining in each PART – A and PART – B.**  
**(2) Answer division (a) or division (b) of each question in PART – C.**  
**(3) Each question carries 2 marks in PART – A,3 marks in PART – B and 10 marks in PART – C]**

**PART – A (5 x 2 = 10 MARKS)**

1. Name the types of pushbutton switches in the control circuits.
2. List any three starters for AC motor.
3. What is the need for timer relay in star-delta starter?
4. Mention the three motion in a crane control.
5. What is preset time of PLC timer?
6. What are the types of electric oven?
7. List any four modes of operation of PLC.
8. What is examining OFF instruction in PLC?

**PART – B (5 x 3 = 15 MARKS)**

9. What is meant by automatic control of motor?
10. What is preventive interlock? Draw the simple diagram
11. Draw the control circuit of skip hoist
12. Name the trouble spots in control circuit.
13. Describe retentive timer?
14. Discuss about up counter with ladder logic diagram.
15. What is PLC scan? State its types
16. Write the principle of dynamic braking

**PART – C (5 x 10 = 50 MARKS)**

17. A) Briefly Explain the following switches  
i) Pressure switch ii) Limit switch iii) Float switch. (OR)  
B) Explain the circuit diagram the principle of operation of single phase preventer
18. A) With a control circuit, explain the working of automatic Star-Delta Starter. (OR)  
B) With a control circuit, explain the working of 3 step automatic rotor resistance starter.
19. A) with a control circuit, explain the operation of planner machine. (OR)  
B) Explain the control circuit operation of overhead crane.
20. A) Briefly explain the block diagram of PLC.  
B) Explain the Output module of PLC with schematic & Writing diagram (OR)
21. A) Explain the working of automatic star/delta starter using ladder diagram (OR)  
B) Explain the working of rotor resistance starter using ladder diagram.

Fig 2.2.2.4 Sample question paper for Model exam Second and Third year

## NBA SAR CRITERION - 2

### C. Evidence of COs Coverage in class test/Mid-term test and assignments (5)

- ✓ Individual student's Answer book is evaluated and question answered by student is mapped with CO's and PO's

### Quality of CAT-I, CAT-II and MODEL exam its relevance to Cos

Table 2.2.2.6 CAT CAT-I, CAT-II and MODEL exam Pattern

Course Name: Electrical Machines-I		Course Code: EM-I (33032)				
S.No	Title	CO				
		1	2	3	4	5
1	CAT-I	✓	✓			
2	CAT-II			✓	✓	
3	MODEL Exam	✓	✓	✓	✓	✓

### Quality of Assignment and its relevance to COs

Table 2.2.2.7 COs coverage in Assignment - Format

Course Name: EM-I		Course Code: EM-I (33032)				
S.No	Title	CO				
		1	2	3	4	5
1	Assignment-1	✓	✓			
2	Assignment-2		✓	✓		
3	Assignment-3				✓	✓

## NBA SAR CRITERION - 2

<b>Title Page</b>	Assignment Title , Student details
<b>Content</b>	Topics are described with necessary analytical explanations / illustrations as per title

- ✓ At the end of each month an assignment questions will be given to students, and student has to write it & submit within a week and each question is mapped with CO's .So the students will be able to understand course outcome of particular subject.

The assignment pattern and mark allotment are tabulated below:

### Assignment and Evaluation:

Table 2.2.2.8 Assignment Evaluation

Item	Assignment-1	Assignment-2	Assignment-3	Total Marks	Total Marks converted to (5 )
<b>Weightage</b>	20	20	20	60	05

### 2.2.3. Quality of Experiments (15)

#### A. Experimental Methodologies(5)

- ✓ The Experiments are carried out by concerned subject lecturer with the help of laboratory assistant.
- ✓ The maintenance of different equipments are periodically done by lab assistant for better quality of experiments by students.
- ✓ Logbook is maintained by the laboratories throughout the year.
- ✓ The requirements of consumables for laboratory are given before the commencement of every semester, so the practical's will be conducted smoothly.
- ✓ The repair and maintenance related requirement of laboratory is also communicated to Principal, periodically

#### B. Innovative experiments including industry attached practices, virtual labs (5)

- ✓ Experiments beyond the syllabus are conducted for the laboratory courses to improve the practical skills.
- ✓ Well-equipped laboratory is provided to the students for updating their skills in latest technology.

## NBA SAR CRITERION - 2

- ✓ Procedure carried out in the industry is adopted as areal time practice in laboratory wherever possible.
- ✓ Virtual labs containing video lecturers, animated demonstration are created using web sources.

### C. Relevance to outcomes(5)

- ✓ A sample of experiment list and its mapping with respective Course Outcome statement is shown in the table below **2.2.3.1**:

✓ **Table 2.2.3.1 Sample experiments mapping**

C312.1	Construct and test AC phase control circuits using DIAC, TRIAC and UJT.
C312.2	Design and test the SCR commutation circuits.
C312.3	Test the controlled converter circuits for R and L loads.
C312.4	Test and verify the performance of PWM inverters.
C312.5	Illustrate various ideas for DC and AC motor control.

Mapping of laboratory contents of POWER ELECTRONICS PRACTICAL to defined course outcomes

Course Name: Power Electronics Practical Course Code:33086								
Si.No	Title	Type		CO				
		Study	Performance	1	2	3	4	5
1	Line synchronized Ramp trigger circuit using UJT with AC load to measure firing angles	✓	✓	✓				
2	Lamp control circuit using DIAC – TRIAC to measure various output voltage for firing angles	✓	✓	✓				
3	SCR commutation circuits (Class B & Class D)	✓	✓	✓				
4	Single phase semi controlled bridge with R-Load	✓	✓	✓				
5	Single phase fully controlled bridge with RL- Load	✓	✓		✓			

## NBA SAR CRITERION - 2

6	Half wave controlled rectifier with R- Load	✓	✓		✓			
7	DC chopper control circuit using thyristor	✓	✓		✓			
8	Step up chopper	✓	✓			✓		
9	PWM based step down DC chopper using MOSFET/IGBT	✓	✓			✓		
10	Single phase Single pulse / Sinusoidal PWM inverter using MOSFET/IGBT	✓	✓			✓		
11	SMPS using MOSFET/IGBT	✓	✓			✓		
12	Open loop speed control circuit for DC shunt motor	✓	✓			✓		
13	Control circuit using TRIAC for Universal motor	✓	✓				✓	
14	Open loop speed control of Single phase AC motor	✓	✓				✓	
15	Single phase parallel inverter using MOSFET/IGBT	✓	✓					✓
16	Single phase to single phase cyclo converter	✓	✓					✓

## NBA SAR CRITERION - 2

### 2.2.4. Quality of student projects and report writing (35)

#### A. Identification of projects and allocation methodology(3)

Project allocation methodology	
<b>Project Coordinator</b>	At the beginning of the academic year HOD assigns the project coordinator.
<b>Project Team Members</b>	Project Team is formed based on the willingness of the students in their interested field.
<b>Guide Allocation</b>	The area of specialization and field of interest from the faculty members is collected. The project batch is allocated based on the area of specialization of the faculty members.

#### Identification of projects

- ✓ Project coordinator collects the student's willingness and field of interest from each project batch.
- ✓ At the beginning of the academic year, tentative review schedule is prepared by the project coordinator and approved by the Head of the Department. The schedule is displayed on the notice board for the students' reference
- ✓ Students are encouraged to do projects with social and economic relevance
- ✓ The students are instructed to start their preliminary work in 5<sup>th</sup> semester and to work on their project in 6<sup>th</sup> semester
- ✓ The brief idea about the project is presented in the First review by the students to get approval from the Project coordinator.
- ✓ Students are allowed to work for their projects beyond the working hours. They are also allowed to utilize the laboratory facilities for their projects
- ✓ Faculties extend their support in guiding the students beyond the working hours
- ✓ Wi-Fi facility is also made accessible to the students after working hours for the betterment of their project works
- ✓ The Student can select one of the domains which are listed below to do their main project.

## NBA SAR CRITERION - 2

The details of the project domain are given below:

### Project domains:

- ✓ Electrical Machines
- ✓ Power Electronics
- ✓ Electrical Drives
- ✓ Power System
- ✓ Microcontroller
- ✓ Special electrical Machines

### B.Types and Relevance of the Projects and their contribution towards attainments of POs and PSOs (5)

The types of project relevant to the various domains listed below:

#### Major domains:

- ✓ Power Electronics
- ✓ Electrical Machines
- ✓ Electrical Drives
- ✓ Power System
- ✓ Microcontroller
- ✓ Special electrical Machines

Table 2.2.4.1 Project Domains and its Outcome

S.No	Area of Project	Pos	PSOs
1	Electrical Machines	1,2,3,4,5,6,7	1,2,3
2	Power Electronics	1,2,3,4,5,6,7	1,2,3
3	Electrical Drives	1,2,3,4,5,6,7	1,2,3
4	Power System	1,2,3,4,5,6,7	1,2,3
5	Microcontroller	1,2,3,4,5,6,7	1,2,3
6	Special electrical Machines	1,2,3,4,5,6,7	1,2,3

### C. Process for monitoring and evaluation(5)

#### Process for monitoring

- ✓ At the beginning of the academic year, tentative review schedule is prepared by the project coordinator and approved by the HOD. The schedule is displayed on the notice board for student reference

## NBA SAR CRITERION - 2

- ✓ In the time table, weekly 3 hours is allotted for project work
- ✓ During the project hours students should regularly meet the guide regarding their project work
- ✓ Review was conducted as per the schedule with team of panel members

*Table 2.2.4.2 Project Review Shedule*

S. No	Review	Tentative date
1	Review-I	After 6weeks from the commencement of the Semester
2	Review-II	After 12 weeks from the commencement of the Semester

### Process for Evaluation

- ✓ The progression and evaluation of the work is discussed at every review by the project committee members and project coordinator.
- ✓ Students are assessed based on the presentation and the progression of their work.
- ✓ All the review marks are considered for the internal assessment.
- ✓ At the end of every academic year, the best project is awarded in the annual day function.
- ✓ Project evaluation marks are based on DOTE Guidelines.

### DOTE Regulations

*Table 2.2.4.3 Project Mark Allocation*

Review I	Review II	Attendance	Board Examinations		
			Internal (25)	External (75)	
				Report Preparation, Demo, Viva-voce	Written Test
10	10	05	25	65	10

### Evaluation scheme for projects:

*Table 2.2.4.4 Evaluation scheme for projects*

S. No.	Performance Indicator
1	Novelty of the work
2	Tools - Hardware / Software support
3	Methodology
4	Presentation
5	Project Demonstration
6	Project Documentation

## NBA SAR CRITERION - 2

### Best Project Evaluation scheme:

*Table 2.2.4.5 Best Project Evaluation Scheme*

S.No.	Performance Indicator
1	Novel idea
2	Presentation and Answering Queries
3	Project Demonstration

### D. Process to assess individual and team performance (5)

- ✓ Each student in the project team is assessed for their skill set based on the presentation, explanation in concept and their work.
- ✓ Individual and team performance is based on the project presentation, viva voce and progress in their work.
- ✓ The students are encouraged to participate in project exhibitions as it provides common platform to exhibit their innovations and their work towards excellence in latest technology.
- ✓ The completed projects are displayed in the corresponding laboratories.

### E. Quality of deliverable, Working Prototypes (12)

#### Working model

- ✓ Sample projects/prototypes are displayed in the respective laboratories and are listed in the Table 2.2.4.6
- ✓

*Table 2.2.4.6 Working Models*

S.No.	Register Number	Student Name	Project Title	In-House / Industry Project
<b>( 2019-2020)</b>				
1.	17310565	Sankarraman.M	Solar tracking system with automatic panel cleaning mechanism.	In – house
	18311537	Naveen kumar.M		
	18311538	Navin.N		
	18311540	RadhaKrishnan.M		
	18311559	Yogeeswaran.S		
2.	18311504	Aravindkumar.S	Design of intelligent home appliance control system based on ZIGBEE.	In – house
	18311510	Boopathi.M		
	18311514	Gopinath.M		
	18311523	Karthikraja.T		
	18311542	Ramakrishnan.K		
	18311552	Tamizharasan.K		

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3.	18311533	Mohammed akram.I	Design and implementation of remotely located energy meter monitoring with load control and mobile billing through GSM	Industry
	18311549	Sri hari.R		
	18311554	Vignesh.C		
	18311555	Vinoth.T		
	18311557	Visnuprakash.S		
	18311558	Vivekanandhan.S		
4.	18311515	Gowtham.S	Embedded control coach counting and automated signal system in railways using RFID.	In – house
	18311518	Hariprakash.P		
	18311521	Kalidass.J		
	18311530	Manojkumar.S		
	18311536	Nandhakumar.S		
	18311545	Sampathkumar.P		
5.	18311507	Baby salini.T	Adoptive landslide prediction and monitoring system with wireless instrumentation.	In – house
	18311524	Kaviyarasu.K		
	18311526	Kaviyarasu.V		
	18311531	Madhankumar.K		
	18384059	Pavithra.N		
6.	17310571	Shakthi.B	Vehicle theft and misuse identification system by using E - number plate.	In – house
	18311502	Akash.N		
	18311527	Keerthivasan.P		
	18311535	Mythreyan.K		
	18311544	Roshanakthar.J		
7.	18311512	Gnanaprakash.M	Solar operated vehicle.	Industry
	18311543	Rithik.R		
	18311546	Sasitharan.K		
	18311547	Satheshkumar.K		
	18311548	Shanmugam.B		
	18311553	Tharani.M		
8.	18311505	Arunkumar.A	DC motor speed control through parallel DC/DC buck converter.	In – house
	18311506	Arunprasanth.S		
	18311525	Kaviyarasu.K		
	18311541	Rajesh kumar.S		
	18384060	Prem.R		
9.	18311503	Akshaya.S	Improvement of speed and accuracy in switched reluctance motor using Embedded system.	In – house
	18311519	Indira.K		
	18311520	Indraprasath.P		
	18311529	Manigandan.A		
	18311539	Parthini.S		
	18384058	Nagaraj.R		
<b>CAYm1( 2018-2019)</b>				
1.	17310525	Anbarasan.T	Distributed MPPT using model predictive control for PV energy harvesting architecture based on cascade power optimizer	In – house
	17310532	Dhanushvarthan.A		
	17310538	Hariprasath.P		
	17310576	Thamilselvan.K		
	17310578	Utheswaran.P		
2.	17326181	Gowtham.L	Conveyor automation with dimension inspection	Industry
	17310535	Gowrishankar.M		
	17310542	Jegatheesh.R		
	17310548	Manjuladevi.G		

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	17310555	Muhamedriyas.A		
	17310559	Praveen.C		
	17310568	Saravanakumar.D		
3.	16309882	Abishekkumar.A	Electrical substation scrutinizing and controlling device from remote area.	In – house
	17310522	Abinandhan.A		
	17310527	Arunkumar.M		
	17310564	Saiyathtajdeen.S		
	17310573	Sudharsan.K		
	17326182	Manikandan.M		
<b>CAYm1( 2017-2018)</b>				
1.	16309882	Abishekkumar.A	Synchronous Closing Capacitor With Thyristor Switch For Power Factor Improvement	Industry
	16309885	Barathikannan.T		
	16309897	Mahesh.M		
	16309000	Mohamedsharook.K		
	16309912	Sukendar.A		
	16324303	Gokulnath.U		
2.	16309888	Haresh.S	Hybrid Cascaded Modular Multi Level Inverter For Renewable Energy	In – house
	16309891	Jebastinjaysingh.D		
	16309892	Kalaivani.S		
	16309896	Madhuri.P		
	16309905	Saiaddawood.S		
	16309916	Vairamuthu.K		
3.	16309890	Jayaraman.D	Optimization in power system through wireless smart meter using ZIGBEE	In – house
	16309894	Kirubakaran.L		
	16309901	Naveen kumar.N		
	16309903	Poovarasana.E		
	16309904	Sabarigirivasan.S		
	16309915	Thirunavukkarasu.M		
<b>CAYm1(2016-2017)</b>				
1.	15309933	Karthikraj.V	Advanced Load Sharing System For High Load Application	In – house
	15309936	Mohamedsanpar.S		
	15309941	Nishanth.D		
	15309942	Rahulkrisna.A		
	15309949	Sivadhannu.k		
2.	15309924	Boobalakrishnan.L	Circuit Breaker Based Feeder Pillar With Over Current And Earth Fault Protection	In – house
	15309928	Gunasekar.S		
	15309932	Karthick.R		
	15309948	Sathish.M		
	15309951	Sridhar.P		
3.	15309926	Gokulakrishnan.R	Design of Wireless Motor Management System In Industrial Application	In – house
	15309939	Naveenkumar.S		
	15309943	Rajesh.V		
	15309944	Rishab.S		
	15309952	Suryaprakash.S		

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### F. Papers published /Awards/Recognition received by projects at State / National level (5)

#### List of Best Projects

Table 2.2.4.7 Best Projects

S. No.	Student name	Project title	In-house / Industry Project
<b>2019-2020</b>			
1.	Gnanaprakash.M	Solar operated vehicle.	<b>Industry Project</b>
	Rithik.R		
	Sasitharan.K		
	Satheshkumar.K		
	Shanmugam.B		
	Tharani.M		
<b>2018-2019</b>			
1.	Abishekkumar.A	Electrical substation scrutinizing and controlling device from remote area.	<b>Industry Project</b>
	Abinandhan.A		
	Arunkumar.M		
	Saiyathajdeen.S		
	Sudharsan.K		
	Manikansan.M		
<b>2017-2018</b>			
1	Abishekkumar.A	Synchronous Closing Capacitor With Thyristor Switch For Power Factor Improvement.	<b>Industry Project</b>
	Barathikannan.T		
	Mahesh.M		
	Mohamedsharook. K		
	Sukendar.A		
	Gokulnath.U		

#### 2.2.5. Industry Interaction and industry internship/Training (30)

Various activities are initiated for improving the technical skills and all round development of the students

##### A. Industry Supported Labs (2)

- ✓ To strengthen interaction with industries and to keep our students are updated with the latest trends in Electrical and Electronics Engineering.
- ✓ Industry interactions help the students to acquire the practical knowledge. So in order to improve the technical abilities various industrial activities are carried out.
- ✓ The interaction with Industries has also led to the extension of their support to various Laboratories in the Department.

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*Table 2.2.5.1 Industry supported Labs*

<b>CAY: 2019-20</b>		
<b>S No.</b>	<b>Name of the Laboratory</b>	<b>Supported by</b>
1	Transformer Designing	Allzone Systems, Coimbatore
<b>CAYm2:2017-18</b>		
<b>S No.</b>	<b>Name of the Laboratory</b>	<b>Supported by</b>
1	Electrical Panel Wiring	RS Engineering , Coimbatore

### **B. Delivery of Appropriate Course work by industry experts (5)**

- ✓ Head of the department and staff members arrange the value added course, Guest Lecture, Seminar and Workshop for students to develop the technical skills. The courses conducted by professionals and industry experts are given below.

*Table 2.2.5.2 Guest Lecturers/Seminars*

<b>S. No.</b>	<b>Date</b>	<b>Name of the Event</b>	<b>Name of the Speaker(s) With Designation</b>
<b>CAY :2019-2020</b>			
1	05.03.20	Guest Lecture on Super Conductor Lightning Diverter	Mr.S.Manikandan, Project Engineer, Sakthi Electronics and Research Centre, Coimbatore.
2	20.02.20	Significance of Energy Conservation and Impact of Renewable Energy-REC Club	Mr.G.Dhanaraj, Assistant Manager, Energo Products Ltd, Coimbatore.
3	05.02.20	State Level Technical Symposium "PA TECHARENA 2K20"	Mr.Wonderjoky, Vice President(operation) CIEL (HR) , Coimbatore.
4	07.01.20 to 08.01.20	Workshop on PLC Programming and its Applications	Mr.R.Thirumoorthy, AP/EEE P.A College of Engineering and Technology, Pollachi.

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5	22.12.19	Alumni Lecture on “Recent industrial scenario”	Mr. R.Surendar B.E., RS Engineering, Coimbatore.
6	21.12.19	Guest Lecture on E-Vehicles	Dr..Ramareddy, Former Professor, Anna University. Coimbatore.
7	04.09.19	Guest Lecture on Maintenance of Transformers	Er.K.Dheivasikamani, Assistant Executive Engineer, TNEB, Pollachi.
8	20.08.19	Renewable Energy Day Celebration and Technical Quiz competition	Mr.Sugumaranupill Co-founder and Chief Technology Officer, Haritham Technologies, Coimbatore.
9	14.08.19	Inauguration of Renewable Energy Club and Guest Lecture on Awareness of Renewable Energy	Mr.S.Manikandan, Project Engineer, Sakthi Electronics and Research Centre, Coimbatore
10	29.07.19	Hands on Training in Power System	Mr.P.Mariaraja, M.E.,(Ph.D), Assistant Professor/EEE, P. A. College of Engineering and Technology, Pollachi.
11	15.07.19	Association Inauguration and Guest Lecture on “Role of Substation in Power Sector”	Er. V.Suresh M.E Assistant Executive Engineer,TNEB, Aliyar Substation , Pollachi.
12	14.06.19	I year Orientation Program Topic:”Kalviyum Olukamum”	Mr.S.Dwarakanathan, Ex. Vice president, ( Engg., R&D; HRD), M/s. Brakes India Ltd., TVS Groups, Chennai-600020
13	13.06.19	I year Orientation Program Topic:”I can I will”	Prof.P.Suryanarayanan, Former Professor, Department of English, Govt.Arts College, Coimbatore.
<b>CAY m1:2018-2019</b>			
1	25.01.19	State Level Technical Symposium “PA TECHAREA 2K19”	Mr.Thirumalmarugan B.E,MBA, Vice president, Magna castings private ltd, Coimbatore.

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2	23.01.19	Guest Lecture on Energy Conservation	Er. P. Krishnasami, Assistant Executive Engineer, TNEB, Pollachi.
3	27.12.18	Guest lecture on Modern power Generation & Protection	Er. V.Suresh M.E Assistant Executive Engineer, TNEB, Aliyar substation , Pollachi.
4	27.12.18	Alumni Lecture on “Expectation of Corporate World”	Mr.P K.Manikandan BE Manufacturing Engineer Alstom Transport India Pvt.ltd Coimbatore
5	29.08.18	Workshop on Simulation Software Tools for Power Electronics Applications	Dr.V.Parimala, AP(SG)/EEE, P.A. College of Engineering and Technology, Pollachi.
6	27.08.18	Guest Lecture on UPS Assembling & Testing	Mr.S.Balachandar, Managing Director, Good Will System, Coimbatore.
7	16.07.18	Workshop on PCB Designing	Dr. R.P. MeenaakshiSundhari, Professor –ECE, P.A College of Engineering and Technology, Pollachi.
8	22.06.18	Association inauguration and Guest Lecture on “Power System Protection Practice and Solar Integration”.	Er.D.Babu M.E.,(Ph.d), AEE,TNEB, Ponnapuram, Pollachi.
9	14.06.18	I year Orientation Program Topic: “Moral Values”	Dr.N.Eswaran, Professor and Head,Akshaya Institute of Management Studies, Coimbatore.
<b>CAYm2:2017-2018</b>			
1	02.02.18	Guest Lecture on Energy conservation	Er.S.Senthilkumar M.E., AssistantExecutiveEngineer, 230KV Switching Station , TNEB, Myvadi, Udumalpet.
2	04.01.18	State level Technical Symposium “PA TECHARENA 2K19”	Mr.Sridharan E.Padmanaban, Team head( embedded systems group), Altron technologies limited, Coimbatore641035

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3	27.12.17	Role of Electrical Engineers in Technological Development	Dr.S.Thiruvankadam Professor & Head Electrical and Electronics Engineering, PA College of Engineering and Technology, Pollachi.
4	30.08.17	Guest lecture on Energy Efficient Environment	Er. E.Jaiganesh Assistant Executive Engineer, TNEB, Kadampari Power House.
5	11.08.17	Alumni Lecture on “recent trends in industrial automation ”	Mr.K.Madhankumar Service engineer HCL Systems Coimbatore
6	10.08.17	Association Inauguration and Guest lecture on Modern Engineering Tool	Mr.J.SridharPrabhu All zone system Pvt.Ltd, Coimbatore.
7	13.06.17	I year orientation program topic:”Vetrikku Vazhi”	Mr.S.Dwarakanathan, Ex.Vice president, Brakes India Ltd., TVS Groups, Chennai.

### Regular training programs

- ✓ Students are encouraged to undergo inplant training and to visit various Industries for learning the working standards, process and procedures involved in the industries.

### C. Industrial visits / tours for students(3)

#### Initiatives

- ✓ Industrial visit is a part of the engineering curriculum, during which students visit the engineering organizations and get in to the operation process, various technologies used in real time production, challenges in practicing engineering principles and also get the practical aspects of the course. With an aim to go beyond academics, these visits are arranged to attain practical knowledge.
- ✓ Developing contacts, collecting the addresses of the Industries planned for the Industrial Visit.
- ✓ Prepare and send the letters approved by the Head of the Department requesting the Industry concerned to grant permission mentioning the date / time and number of students accompanied by the staff from the department concerned.

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*Table 2.2.5.3 Industrial Visit Details*

S. No.	Academic Year	Total No. of Industries Visited
1	CAY :2019-2020	03
2	CAYm1:2018-2019	02
3	CAYm2:2017-2018	01

S. No.	Year/Sem	Date of visit	Companies Visited	No.of Students Visited
<b>(2019-2020)</b>				
1.	II/IV	14.02.20	Hydro Electric Power Plant, Kundah	40
2.	III/V	05.08.19	Thermal Power Plant, Mettur	47
3.	II/III	20.09.19	Malabar Cements ,Walayar, Kerala	42
<b>(2018-2019)</b>				
1	III/V	23.07.18	Thermal Power Plant, Mettur	55
2.	II/IV	16.02.19	Keltron Controls,Aroor,Kerala	48
<b>(2017-2018)</b>				
1.	III/V	25.07.17	Hydro Electric Power Plant, Kundah	30
2.	II/III	22.07.17	Thermal Power Plant, Mettur	55

### D. Industrial Training / internship (5)

#### Internship

- ✓ The students are encouraged to take industrial training during their semester holidays. Faculty members give their guidelines, suggestions and scope and contact details of an internship. They also help the students by interacting with the industrial experts, provide the students recommendation letters and other necessary supports.
- ✓ The alumni who are working in the industries are requested to provide necessary guidelines and supports for their juniors internship.

#### Inplant Training:

- ✓ Students are motivated to undergo Industrial Trainings during summer /winter holidays for gaining better industrial exposure.

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*Table 2.2.5.4 Inplant Training Details*

S. No	Academic Year	Total No. of industries
1.	CAY: 2019-2020	06
2.	CAY m1: 2018-2019	15
3.	CAY m2: 2017-2018	15

S. No.	Semester	Number of Beneficiary	Name of the Company	Period
<b>(2019-2020)</b>				
1.	III	9	Gayathri Green Power Private Limited, Samathur, Pollachi.	18.11.19 to 29.11.19
2.		10	Qube Aqua Products, Coimbatore.	16.11.19 to 29.11.19
3.		12	M.I.T Transformers, Pollachi.	15.11.19 to 24.11.19
4.	V	12	Star Motors, Sulthanpet.	15.11.19 to 29.11.19
5.		13	Everwin Textile Mills, Pollachi.	16.11.19 to 25.11.19
6.		10	Sri Ragaventhra Textiles, Pollachi.	15.11.19 to 24.11.19
<b>(2018-2019)</b>				
1.	III	9	Gayatri Green Power Private Limited, Samathur, Pollachi.	14.11.2018 to 01.12.2018
2.		9	Sri Raghunanda Paper And Boards Private Limited, Pollachi.	17.11.2018 to 30.11.2018
3.		9	Windcare India PVT. Limited, Udumalpet.	15.11.2018 to 01.12.2018

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4.		9	M.I.T Transformers, Pollachi.	16.11.2018 to 30.11.2018
5.		9	Sakthi Sugars Limited, Pollachi.	17.11.2018 to 01.12.2018
6	IV	9	Qube Aqua Products, Coimbatore.	24.04.2019 to 20.05.2019
7		9	Star Motors, Sulthanpet.	30.04.2019 to 28.05.2019
8		9	Surya Spinning Mills, Pollachi.	25.04.2019 to 29.05.2019
9		9	Gayatri Green Power Private Limited, Samathur, Pollachi.	30.04.2019 to 28.05.2019
10		9	Sri Raghunanda Paper And Boards Private Limited, Pollachi	26.04.2019 to 30.05.2018
11	V	10	Windcare India PVT. Limited, Udumalpet.	15.11.2018 to 03.12.2018
12		10	SPR Electricals and Engineering Works, Sulur, Coimbatore.	19.11.2018 to 30.11.2018
13		10	M.I.T Transformers, Pollachi.	15.11.2018 to 01.12.2018
14		10	Sri Ragaventhra Textiles, Pollachi.	15.11.2018 to 03.12.2018
15		10	Everwin Textile Mills, Pollachi.	17.11.2018 to 30.11.2018
<b>(2017-2018)</b>				
1.	III	10	Everwin Textile Mills , Pollachi.	13.11.17 to 25.11.17
2.		10	Gayatri Green Power Private Limited, Samathur, Pollachi.	13.11.17 to 29.11.17
3.		10	Sri Raghunanda Paper And Boards Private Limited, Pollachi.	14.11.17 to 28.11.17
4.		10	Windcare India PVT. Limited, Udumalpet.	13.11.17 to 26.11.17

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5.		10	Winser Energy Solutions, Udumalpet.	14.11.17 to 24.11.17
6	IV	10	Qube Aqua Products, Coimbatore.	28.04.2018 to 22.05.2018
7		10	Sri Ganesh Wind power engineers PVT.Ltd, Udumalpet.	30.04.2018 to 28.05.2018
8		10	M.I.T Transformers, Pollachi.	24.04.2018 to 30.05.2018
9		10	Sri Raghunanda Paper And Boards Private Limited, Pollachi.	30.04.2018 to 28.05.2018
10		10	Windcare India PVT. Limited, Udumalpet.	25.04.2018 to 30.05.2018
11	V	7	M.I.T Transformers, Pollachi.	20.11.17 to 01.12.17
12		7	Qube Aqua Products, Coimbatore.	20.11.17 to 29.11.17
13		7	Sri Ganesh Wind power engineers PVT.Ltd, Udumalpet.	14.11.17 to 28.11.17
14		7	Star Motors, Sulthanpet.	13.11.17 to 26.11.17
15		7	Surya Spinning Mills, Pollachi.	13.11.17 to 25.11.17

### E. Post training / internship Assessment (10)

- ✓ Post training assessment is done in following manner.
- ✓ Students are asked to submit the inplant training report to the concerned course faculty.
- ✓ The students are required to present the knowledge gained through the training in the form of PPTs.
- ✓ The concerned course teacher then award marks on the basis of attendance, presentation, skill acquired, and knowledge gained.

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### F. Contribution to Community related projects/Activities (5)

Table 2.2.5.5 Inplant Training Details

S. No.	Student name	Project title and Company Name	GUIDE	EFFECTIVENESS
<b>CAY: 2019-2020</b>				
1	Mythreyan K	12HP VFD Based Pressure Booster Panel for Multistage Pump Allzone system Pvt Ltd, Coimbatore	Mr.K.SureshKumar	Used to maintain the constant pressure in industrial application
	Nandhakumar S			
	Naveen N			
	Rajesh kumar S			
	Divya B			
2	Kaviyarasu K	Automated lubrication system for power looms Vi Microsystems Pvt Ltd, Coimbatore	Mr.VR.Shankar Ganesh	Give lubrication to the moving system to increase the performance of the system.
	Mohammed Akram I			
	Tharani M			
	Baby Salini T			
	Sri hari R			
Karthik raja T				
<b>CAYm1: 2018-2019</b>				
1.	Anbarasan T	BLDC Drive for Textile Application MEGA Tech Electronic Instruments Pvt Ltd, Coimbatore	Mr.N.Saravanakumar	This project used in textile industry
	Babu K			
	Abinandhan S			
	Harrish S			
	Manjuladevi G			
2.	Manojh M	Automated Gate System With RFID All zone system Pvt Ltd, Coimbatore	Mr.S.Krishnakumar	Used in Paid parking system in an effective manner.
	Saran S			
	Senthilkumar A			
	Tamil Mani M			
	Manojkumar P			
<b>CAYm2: 2017-2018</b>				
1	Arunkumar P	Wastewater Treatment Control Panel Mighty Electronics Pvt Ltd, Coimbatore.	Mr..K.Sureshkumar	Effective wastewater treatment in metro city.
	Haresh S			
	Deenathayalan A			
	Kalaivani S			
	Mohamed Sharook K			
	Suresh S			

### 2.2.6 Information Access Facilities and Student Centric Learning Initiatives (15)

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## A. Availability of facilities & Effective Utilization (10)

### Department Library:

- ✓ The department has books on all the subjects related to the curriculum and also some books which will help them to gain extra knowledge. These books are issued to the students.

### Videos:

- ✓ Multimedia has many kinds of data such as text, audio, images, animation, video and interactive content. These make the learning complementary with the existing tools.

### Access to other library in our campus:

- ✓ The students also have access to libraries from other college in the campus.

### CDS/DVDS:

- ✓ CD/DVDs contain large amount of data in the form of video, documents and audio. Students can take back up from computer and store it in DVD.

### Wi-Fi campus:

- ✓ The entire campus is Wi-Fi enabled with high speed internet connection to allow the students to access the internet.

### E notes:

- ✓ E notes helps students to complete assignments and study for exams.

**Table 2.2.6.1 Availability of facilities& Effective Utilization**

S. No	Facilities	Year	Subject	No of students profited	Remarks
1.	Department library	II	ECT,EDC,EM-I,EM-II,M&I,DE,T&SC	All students	Seemed to understudies during addresses
		III	GTS,MC,CEM,EE&EA,D U,O&M,PE		
2.	Access to other library in our campus	II	All subjects and Journals	All students	Common with Students
		III			
3.	NPTEL Videos	II	EDC,EM-I, EM-II,MI	All students	Seemed to understudies during addresses
		III	GTS, CEM, DU,O&M,PE		

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4.	PPT	II	Guest lecture, seminar, mini project	All students	Common with Students
		III	Guest lecture, seminar, mini project		
6.	E –notes	II	GTS,MC,CEM,EE&EA,D U,O&M,PE	All students	E Notes are sent to the understudies by faculty
		III	GTS,MC,CEM,EE&EA,D U,O&M,PE		
7.	Website note	II	All students	All students	All the E notes are made available in Website
		III			

### B. Student Centric Learning Initiatives & Effective Implementation (5)

Following ways are incorporated in order to ensure the establishment of student centric system.

Table 2.2.6.2 Student centric learning initiatives & effective implementation

S. No	Activity	Skill Developed
1	<b>Summer/Winter inplant training</b>	Expand the knowledge and understanding of the fields; Contact the network professionals and administrators in the fields; and Gain hands on training and Professional experience.
2	<b>Industry visits</b>	Industry visit is a part of the Education, during which Students visit companies and get insight into the internal working environment of the company.
3	<b>Projects and Field visit</b>	<ul style="list-style-type: none"> <li>✓ Understand their subject better</li> <li>✓ Get practical experience</li> <li>✓ Have a chance to showcase their skills</li> <li>✓ Learn team work, communication skills and responsibilities</li> </ul>
4	<b>Guest Lectures, Seminar &amp; Workshops</b>	As part of academic development, associations of all the departments arrange guest lectures and seminars throughout the year on topics of core subjects, Career oriented lectures, recent technologies and research areas periodically.

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- ✓ Student being soul of the system and objective being outcome based education system every student is treated as special one.
- ✓ A well-defined Mentoring system is implemented in the department to identify and understand the students problem
- ✓ The attendance and the academic progress are monitored every fortnight in order to provide the students with necessary support system. PTT and PST results are analyzed and are discussed with students and parents.
- ✓ Parent-teacher meetings are arranged every semester. Appreciation /awards are given to the students having excellent academic or extracurricular /co-curricular achievements

### 2.2.7 New Initiatives for embedding professional skills (15)

#### A. Employability skill enhancement Initiatives and effective implementation (8)

- ✓ For creating specific ability improvement including correspondence, expert and center employability aptitudes classes on Professional Practices, Development of Life Skills and Entrepreneurship Development are led.
- ✓ Proficient Practice and Entrepreneurship Development are trans-disciplinary scholastic division concentrated on adaptable business related learning inside advanced education.
- ✓ Proficient Practice subject gives a stage to understudies to experience exercises which will empower them to create self-confidence

#### It is accomplished in a few different ways

- ✓ Conducting Seminars
- ✓ Conducting Group Discussions
- ✓ Guest lectures on Communication Skills
- ✓ Preparing report on industrial visits expert lectures
- ✓ Organizing Paper Presentations.
- ✓ Quiz
- ✓ Entrepreneurship development

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Table 2.2.7.1 Activity of skill development

Si. NO.	ACTIVITY	SKILL DEVELOPED
1	Paper presentation	Information Search, Structured writing, Communication , Concentration development
2	Quiz	Alertness, Assertive skill, Building confidence, Ethics
3	Project Exhibition	Working in Team, Task Management, presentation skills, Time management, Leadership
4	Seminar	Listening, Interaction, Group management
5	Workshop	Psychomotor skills, Troubleshoot
6	Value Added Programme	Psychomotor skills, Debugging, Teamwork

### B. Personality development related initiatives & effective implementation (7)

- ✓ Personality development programs are conducted
- ✓ Student centered activities are conducted every semester through the subject professional Practice.
- ✓ Students are taken out for site visits and they are asked to interact with the industry people.
- ✓ Participation in sports, extra-curricular and co-curricular activities is encouraged to improve the different dimension to the personality of student

### 2.2.8 Co-curricular & Extracurricular Activities (10)

#### Types of activities and relevance

For the overall personality development of students, Cultural Activities, Sports Activities, Quiz Competition, Paper Presentation Competition, and Project Competitions are organized.

#### Cultural

After the odd semester exams, students look forward to cultural activities as a welcome change from the routine. Various competitions like singing, dancing, traditional day, sketching, rangoli etc are conducted in and around our institution.

#### Sports

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Sports is not only a great stress buster but also develops many qualities like team work, sportsman spirit etc. Many individual and group sports competitions are conducted for all the students.

### Paper presentation/Tech quiz/Project

Paper/poster presentation, quiz competition etc. are conducted inter department as well as inter-college wise for the students as a part of Engineers Day celebrations and as departmental activities.

### NSS

In each academic year the NSS unit with few students is allowed to take part in NSS activities and is permitted to attend camps organized by them.

### Co-curricular

**Table 2.2.8.1 Co-curricular Activities & Extracurricular Activities**

S. No.	Name of the Student	Event Description	Event Level (Inter- institute / State/National)	College Name	Awards
<b>CAY (2019-2020)</b>					
1	D.Anantha raksan	One-day workshop	State	APA Polytechnic College, Palani	Participated
2	T.Dhanasekar	One-day workshop	State	APA Polytechnic College, Palani	Participated
3	K.Rajeev	Paper presentation	State	PA College of Engineering and Technology, Pollachi	III prize
4	M.Sethu	Paper presentation	State	PA College of Engineering and Technology, Pollachi	III prize
5	V.J. Deepak	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	I prize
6	M.Praveenkumar	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	I prize
7	M.Gopinath	One day seminar	State	CIT sandwich polytechnic college, Coimbatore	Participated
8	V.Kaviyarasu	One day seminar	State	CIT sandwich polytechnic college, Coimbatore	Participated

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9	S.Manojkumar	One-day workshop	State	PSG Institute of Technology and Applied Research, Coimbatore	Participated
10	N.Navin	One-day workshop	State	PSG Institute of Technology and Applied Research, Coimbatore	Participated
11	K.Mythreyan	One-day workshop	State	PSNA College of Engineering and Technology, Dindigul	Participated
12	S.Rajeshkumar	One-day workshop	State	PSNA College of Engineering & Technology	Participated
13	M.Abinesh kumar	Paper presentation	State	Arulmurugan Polytechnic college, Karur	Participated
14	V.J.Deepak	Paper presentation	State	Arulmurugan Polytechnic college, Karur	Participated
15	M.Abinesh kumar	Project Exhibition	Inter-Institute	PA Polytechnic college, Pollachi	I Prize
16	K.Ajay Vignesh	Project Exhibition	Inter-Institute	PA Polytechnic college, Pollachi	I Prize
17	S.Arun prasanth	Paper presentation	State	Karpagam College of Engineering, Coimbatore	II prize
18	S.Nandha kumar	Paper presentation	State	Karpagam College of Engineering, Coimbatore	II Prize
19	T.Babysalini	Quiz competition	State	CIT sandwich polytechnic college, Coimbatore	Participated
20	K.Indira	Quiz competition	State	CIT sandwich polytechnic college, Coimbatore	Participated
21	S.Keerthivasan	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	I prize
22	M.S.Arulkumaran	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	I prize
23	K.Dharun	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	I prize
<b>CAYm1 (2018-2019)</b>					
1.	S.Akshaya	One-day workshop	State	PSNA College of Engineering and Technology, Palani	Participated

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2	K.Indira	One-day workshop	State	PSNA College of Engineering and Technology, Dindigul	Participated
3	K.Mythreyan	Paper presentation	State	KSR polytechnic college, Thiruchengode	II prize
4	P.SampathKumar	Paper presentation	State	KSR polytechnic college, Thiruchengode	II prize
5	K.SathishKumar	Paper presentation	State	Karpagam College of Engineering, Namakkal	I prize
6	B.Shanmugam	Paper presentation	State	Karpagam College of Engineering, Namakkal	I prize
7	K.Babu	One day seminar	State	APA Polytechnic College, Palani	Participated
8	V.Karthik Kumar	One day seminar	State	APA Polytechnic College, Palani	Participated
9	G.Manjuladevi	One-day workshop	State	Sri Ramakrishna polytechnic college, Coimbatore	Participated
10	B.Tamilarasi	One-day workshop	State	Sri Ramakrishna polytechnic college, Coimbatore	Participated
11	V.Gowarnajayasri	One-day workshop	State	PA College of Engineering and Technology	Participated
12	G.Manjuladevi	One-day workshop	State	PA College of Engineering and Technology, Pollachi	Participated
13	S.Arun prasanth	Paper presentation	State	Arulmurugan Polytechnic college, Karur	I prize
14	S.Nandha kumar	Paper presentation	State	Arulmurugan Polytechnic college, Karur	I prize
15	S.Gowtham	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	II prize
16	M.Gopinath	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	II prize
17	R.Srihari	Quiz competition	State	CIT sandwich polytechnic college, Coimbatore	II prize
18	N.Navin	Quiz competition	State	CIT sandwich polytechnic college, Coimbatore	II prize
19	D.Saravana Kumar	Paper presentation	State	Sri Eshwar College of Engineering, Kinathukadavu	Participated

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20	M.Tamil Mani	Paper presentation	State	Sri Eshwar College of Engineering, Kinathukadavu	Participated
21	B.Tamilarasi	Paper presentation	State	Sri Ramakrishna polytechnic college, Coimbatore	I prize
22	V.Gowarnajayasri	Paper presentation	State	Sri Ramakrishna polytechnic college, Coimbatore	I prize
<b>CAYm2 (2017-2018)</b>					
1.	K.Babu	One-day Seminar	State	PA College of Engineering and Technology, Pollachi	Participated
2.	M.Tamil Mani	One-day Seminar	State	PA College of Engineering and Technology, Pollachi	Participated
3.	G.Manjuladevi	Two days workshop	State	Nachimuthu polytechnic college, Pollachi	Participated
4.	V.Gowarnajayasri	Two days workshop	State	Nachimuthu polytechnic college, Pollachi	Participated
5.	S.Saiyath Tajdeen	Paper presentation	State	Sri Ramakrishna engineering college, Coimbatore	II prize
6.	S.Saran	Paper presentation	State	Sri Ramakrishna engineering college, Coimbatore	II prize
7.	V.Mano	One day seminar	State	Nachimuthu polytechnic college, Pollachi	Participated
8.	S.Haresh	One day seminar	State	Nachimuthu polytechnic college, Pollachi	Participated
9.	P.Madhuri	One-day workshop	State	Mahendra engineering college	Participated
10.	J.Mallika	One-day workshop	State	Mahendra engineering college	Participated
11.	S.Kalaivani	One-day workshop	State	Hindustan institute of technology, Coimbatore	Participated
12.	G.Shreedevi	One-day workshop	State	Hindustan institute of technology, Coimbatore	Participated
13.	K.Babu	Quiz competition	State	Arulmurugan Polytechnic college, Karur	I prize
14.	V.Karthik Kumar	Quiz competition	State	Arulmurugan Polytechnic college, Karur	I prize

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15.	B.Tamilarasi	Quiz competition	State	PSNA College of Engineering and Technology, Dindigul	III prize
16.	V.Gowarnajayasri	Quiz competition	State	PSNA College of Engineering and Technology, Dindigul	III prize
17.	D.Saravana Kumar	Paper presentation	State	KSR polytechnic college, Thiruchengode	II prize
18.	S.Saran	Paper presentation	State	KSR polytechnic college, Thiruchengode	II prize
19.	D.Jebastin Jaysingh	Paper presentation	State	APA Polytechnic College, Palani	III prize
20.	S.Sabarigirivasan	Paper presentation	State	APA Polytechnic College, Palani	III prize
21.	K.Mohamed Sharook	Paper presentation	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	Participated
22.	V.Mano	Paper presentation	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	Participated

### CAYm3 (2016 – 2017)

1.	K.Vairamuthu	Paper presentation	State	Sri Krishna Polytechnic college, Coimbatore	Participated
2.	A.N.Manickam	Paper presentation	State	Sri Krishna Polytechnic college, Coimbatore	Participated
3.	R.Gokula Krishnan	Paper presentation	State	Sri Krishna Polytechnic college, Coimbatore	Participated
4.	R.Gokula Krishnan	Circuit debugging	State	Sri Eshwar College of Engineering, Kinathukadavu	III prize
5.	R.Gokula Krishnan	Technical quiz	State	Sri Eshwar College of Engineering, Kinathukadavu	Participated
6.	R.Gokula Krishnan	Brain maestro	State	Sri Eshwar College of Engineering, Kinathukadavu	III prize
7.	R.Gokula Krishnan	Paper presentation	State	Sri Eshwar College of Engineering, Kinathukadavu	Participated
8.	L.Boobalakashnan	Paper presentation	State	Sri Eshwar College of Engineering, Kinathukadavu	III prize
9.	P.M.Nirmal	Paper presentation	State	Sri Eshwar College of Engineering, Kinathukadavu	III prize
10.	S.Harish	Paper presentation	State	Sri Eshwar College of Engineering, Kinathukadavu	III prize

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11.	S.MohamedSanpar	Technical quiz	State	Sri Eshwar College of Engineering, Kinathukadavu	II prize
12.	S.Sandhya Devi	Technical quiz	State	Sri Eshwar College of Engineering, Kinathukadavu	II prize
13.	R.Gokula Krishnan	Model project & Posters	State	P.A College of Engineering and Technology, Pollachi	I prize
14.	R.Gokula Krishnan	Quiz	State	P.A College of Engineering and Technology, Pollachi	III prize

### Extra Curricular:

Table 2.2.8.2 Co-curricular Activities & Extracurricular Activities

S. No	Name of the Student	Event Description	Event Level (State/National)	College Name	Awards
<b>CAY (2019-2020)</b>					
1.	T.Baby salini	Rangoli	Intra polytechnic	P.A. Polytechnic College, Pollachi	I prize
2.	S.Akshaya	Rangoli	Intra polytechnic	P.A. Polytechnic College, Pollachi	I prize
3.	K.Kaviyarasu	Running	Intra polytechnic	P.A. Polytechnic College, Pollachi	II prize
4.	S.Arunprasanth	Tamil Poetry	Intra polytechnic	P.A. Polytechnic College, Pollachi	Participated
5.	B.Shanmugam	Tamil Poetry	Intra polytechnic	P.A. Polytechnic College, Pollachi	Participated
6.	T.Baby Salini	Tamil speech	Womens development Cell	PA Institutions	II prize
7.	M.Tharani	Mehandi	Womens development Cell	PA Institutions	III prize
8.	B.Gokul kumar	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	II prize
9.	K.Mohamed Elyash	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	II prize
10.	D.Anantharaksan	Volley Ball	Intra polytechnic	P.A. Polytechnic College, Pollachi	II prize
11.	A Karthikeyan	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	II prize
12.	C Kesavamoorthi	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	III prize

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13.	C.Gokulprasath	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	Participated
14.	J.Jayakumar	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	Participated
15.	S.Ramaprakash	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	Participated
16.	S.Sanjay	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	Participated
<b>CAYm1 (2018-2019)</b>					
1.	P.SampathKumar	Shotput	Intra polytechnic	P.A. Polytechnic College, Pollachi	Participated
2.	S.Saiyath Tajdeen	Long Jump	Intra polytechnic	P.A. Polytechnic College, Pollachi	Participated
3.	S.Saran	Long Jump	Intra polytechnic	P.A. Polytechnic College, Pollachi	II prize
4.	B.Tamilarasi	Inter polytechnic Athletic meet	Divisional	APA Polytechnic College, Palani	III prize
5.	S.Akshaya	Inter polytechnic Athletic meet	Divisional	APA Polytechnic College, Palani	III prize
6.	M.Tharani	Inter polytechnic Athletic meet	Divisional	APA Polytechnic College, Palani	III prize
7.	S.Parthini	Rangoli	Intra polytechnic	P.A. Polytechnic College, Pollachi	II prize
8.	T.Babysalini	Rangoli	Intra polytechnic	P.A. Polytechnic College, Pollachi	II prize
9.	M.Abineshkumar	Inter polytechnic Athletic meet	Divisional	APA Polytechnic College, Palani	II prize
10.	E.S.Aswin	Inter polytechnic Athletic meet	Divisional	APA Polytechnic College, Palani	II prize
<b>CAYm2 (2017-2018)</b>					
1.	S.Haresh	Volley ball	Divisional	Sri Ranganathar Institute of Polytechnic College, Coimbatore	III prize
2.	R.Vignesh	Volley ball	Divisional	Sri Ranganathar Institute of Polytechnic College, Coimbatore	III prize
3.	M.Mahesh	Volley ball	Divisional	Sri Ranganathar Institute of Polytechnic College, Coimbatore	III prize

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4.	V.Sarankumar	Basket ball	Divisional	PSG Polytechnic College, Coimbatore	III prize
5.	M.Gowri Shankar	Volley ball	Divisional	Sri Ranganathar Institute of Polytechnic College, Coimbatore	III prize
6.	T.Babysalini	Poster painting	Womens development cell	PA institutions	Participated
7.	S.Parthini	Nail art	Womens development cell	PA institutions	II prize
8.	M.Tharani	Mehandi hand art	Womens development cell	PA institutions	Participated
9.	K.Indira	Tamil speech	Womens development cell	PA institutions	III prize
10.	S.Akshaya	English speech	Womens development cell	PA institutions	Participated
<b>CAYm3 (2016-2017)</b>					
1.	D.Nirmal	Volley ball	Divisional	Sri Ranganathar Institute of Polytechnic College, Coimbatore	IV prize
2.	S.Haresh	Basket ball	Divisional	APA Polytechnic College, Palani	IV prize
3.	N.NaveenKumar	Long Jump	Divisional	P.A. Polytechnic College, Pollachi	IV prize
4.	S.Kalaivani	Dance	Womens development cell	PA institutions	III prize
5.	M.Jothilakshmi	Kolam	Womens development cell	PA institutions	III prize
6.	A.M.Manickam	Circuit debugging	Inter polytechnic	Sri Ramakrishna Polytechnic College, Coimbatore	I prize

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S.no	Name of the student	Programme	Conducted area
<b>CAY (2019-20)</b>			
1	P.Sampathkumar	Youth for Cleanliness (NSS Camp)	Kallipalayam
2	V.Kaviyarasu		
3	K.Mathankumar		
4	D.Anantharakshan		
5	M.S.Arasumadhavan		
6	E.S.Aswin		
7	T.Dhanasekar		
8	V.Kowsikkumar		
9	K.Mohamedelyas		
10	R.Ranjith		
11	P.Sathish		
12	M.Sethu		
13	M.Praveenkumar		
<b>CAY (2018-19)</b>			
1	V.Kaviyarasu	Youth for Cleanliness (NSS Camp)	Kallipalayam
2	K.Mathankumar		
3	T.Babysalini		
4	N.Pavithra		
5	D.Anantharakshan		
6	V.Kowsikkumar		
7	M.Abineshkumar		
8	P.Sampathkumar		
9	K.MohamedElyas		
10	M.S.Arasumadhavan		
11	T.Dhanasekar		
<b>CAY (2017-18)</b>			
1	S.Abinandhan	Youth for Cleanliness (NSS Camp)	Kallipalayam
2	M.Arun		
3	M.Gowrishankar		
4	S.Harish		
5	V.Karthikkumar		
6	D.Saravanakumar		
7	P.Sampathkumar		
8	S.Nandhakumar		

# NBA SAR CRITERION - 3

<b>CRITERION 3</b>	<b>COURSE OUTCOMES AND PROGRAM OUTCOMES</b>	<b>100</b>
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## 3. COURSE OUTCOMES AND PROGRAM OUTCOMES (100)

### 3.1. Establish the correlation between the courses and the Program Outcomes (pos) and Program Specific Outcomes (psos) (20)

#### Program Outcomes:

- PO 1:** Basic and Discipline specific Knowledge
- PO 2:** Problem analysis
- PO 3:** Design/Development of solutions
- PO 4:** Engineering Tools, Experimentation and Testing
- PO 5:** Engineering Practices for society, Sustainability and Environment
- PO 6:** Project Management
- PO 7:** Life-long learning

#### PSO - Program Specific Outcomes

- PSO1:** Ability to understand the basic knowledge and modern technological development in the field of Electrical and Electronics Engineering.
- PSO2:** Ability to analyze and design the basic concepts and to provide solutions for the real time engineering problems.
- PSO3:** Ability to integrate ethical and human values with leadership skills for lifelong learning.

### 3.1.1. Course Outcomes (COs) (SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses) (05)

Table 3.1.1 Course Outcomes (CO)

The Students can able to

Course Name	C103 ENGINEERING PHYSICS - I	Course Year	2016-2017	Semester	1
C103.1	Describe SI units and various forces acting on a rest body.				
C103.2	Determine the bending of beams. Discuss applications of viscosity and surface tension.				
C103.3	Explain the concept of projectile circular and simple harmonic motion.				
C103.4	Explain the concept of rotational motion of rigid bodies, Gravitation and uses of artificial satellites.				
C103.5	Describe wave motion and acoustics of buildings and importance of magnetism.				

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Course Name	C112– ENGINEERING PHYSICS - II	Course Year	2016-2017	Semester	2
C112.1	Describe properties of good and poor conductor and kinetic theory of gases.				
C112.2	Explain the basic laws of thermodynamics and classification of energy sources.				
C112.3	Explain the concept of laser, optical fiber and RADAR.				
C112.4	Acquire knowledge in the field of heating, chemical and magnetic effects of electric current.				
C112.5	Obtain the knowledge of capacitors, semiconductor, integrated circuits and logic gates.				

Course Name	C201 – ELECTRICAL CIRCUIT THEORY	Course Year	2017-2018	Semester	3
C201.1	Describe the concept of electrostatics and capacitance effect and to identify the circuit elements and energy sources to suit the basic laws.				
C201.2	Recall and apply the concept of node and mesh analysis for different network theorems in DC circuits.				
C201.3	Analyze and differentiate the single phase circuits using resistor, inductor and capacitor.				
C201.4	Formulate and design series-parallel resonant behavior of circuit.				
C201.5	Identify balanced three phase circuits and analyze the three phase power measurement.				

Course Name	C209 – MEASUREMENTS AND INSTRUMENTS	Course Year	2017-2018	Semester	4
C209.1	Discuss the measurement terms and different operating forces and effects used in instruments.				
C209.2	Understand the construction and working of MC, MI instruments, CT, PT, electrostatic voltmeter, measurement of resistance.				
C209.3	Explain the single phase, three phase power measurement and energy meter calibration.				
C209.4	Describe about the construction and working of power factor meters, phase sequence indicator and frequency meter.				
C209.5	Explain about the measurement of inductance, capacitance and CRO.				

Course Name	C304 – CONTROL OF ELECTRICAL MACHINES	Course Year	2018-2019	Semester	5
C304.1	Know about the electrical control circuit elements.				
C304.2	Summarize the AC motor control circuits.				
C304.3	Explain the different control circuits for industrial applications.				
C304.4	Understand the basics of programmable logic controller.				
C304.5	Describe the PLC Programming.				

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Course Name	C308 – DISTRIBUTION AND UTILIZATION	Course Year	2018-2019	Semester	6
C308.1	Analyze the different types of substation arrangements and different schemes of distribution system.				
C308.2	Explain the basic operation of industrial drives and suitability for different applications.				
C308.3	Study the performance of various systems of track electrification, traction mechanics and traction motor control.				
C308.4	Describe the design of lighting scheme and sources of light.				
C308.5	Explain the working of electric heating, furnace and electric welding equipments.				

### 3.1.2. CO-PO matrices of courses selected in 3.1.1 (Four matrices to be mentioned; one per semester from 1st to 6th semester) (05)

Course Name	C103 - ENGINEERING PHYSICS - I			Course Year	2016-17	Semester	1
PO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C103.1	3	1	-	-	2	-	2
C103.2	3	2	2	-	2	2	2
C103.3	3	2	-	-	2	-	2
C103.4	3	1	1	2	2	2	2
C103.5	2	-	2	2	2	1	2
C103	2.8	1.5	1.7	2	2	1.7	2

PSO CO	PSO1	PSO2	PSO3
C103.1	3	2	2
C103.2	3	2	2
C103.3	3	2	2
C103.4	3	2	2
C103.5	3	2	2
C103	3	2	2

Course Name	C112 –ENGINEERING PHYSICS-II			Course Year	2016-17	Semester	2
PO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C112.1	2	2	-	-	2	-	2
C112.2	3	-	-	-	2	2	2
C112.3	2	-	-	2	2	-	-
C112.4	3	2	-	-	-	-	-
C112.5	3	1	-	2	2	1	2
C112	2.6	1.7	-	2	2	1.5	2.0

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PSO CO	PSO1	PSO2	PSO3
C112.1	3	1	2
C112.2	3	1	2
C112.3	3	2	2
C112.4	3	3	2
C112.5	3	3	2
C112	3	2	2

Course Name	C201 – ELECTRICAL CIRCUIT THEORY			Course Year	2017-18	Semester	3
PO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C201.1	3	3	3	2	-	1	3
C201.2	3	3	3	2	-	1	3
C201.3	3	3	3	2	-	1	2
C201.4	3	3	2	2	1	-	2
C201.5	3	3	2	1	1	2	2
C201	3	3	2.6	1.8	1	1.25	2.4

PSO CO	PSO1	PSO2	PSO3
C201.1	3	2	1
C201.2	3	2	1
C201.3	3	2	1
C201.4	3	2	1
C201.5	3	2	1
C201	3	2	1

Course Name	C209–MEASUREMENTS AND INSTRUMENTS			Course Year	2017-18	Semester	4
PO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C209.1	3	1	1	1	-	-	1
C209.2	3	2	2	2	2	1	1
C209.3	3	2	1	2	2	2	2
C209.4	3	2	1	2	2	1	2
C209.5	3	2	1	1	2	2	2
C209	3	1.8	1.2	1.6	2	1.5	1.6

PSO CO	PSO1	PSO2	PSO3
C209.1	3	1	-
C209.2	3	1	1
C209.3	3	1	1
C209.4	3	1	1
C209.5	3	1	1
C209	3	1	1

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Course Name	C304 – CONTROL OF ELECTRICAL MACHINES			Course Year	2018-19	Semester	5
PO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C304.1	3	-	-	-	2	2	2
C304.2	3	-	2	2	2	2	2
C304.3	3	2	2	2	2	2	2
C304.4	3	2	2	2	2	2	2
C304.5	3	2	2	2	2	2	2
C304	3	2	2	2	2	2	2

PSO CO	PSO1	PSO2	PSO3
C304.1	3	2	-
C304.2	2	2	2
C304.3	2	2	2
C304.4	2	2	2
C304.5	2	2	-
C304	2.2	2	2

Course Name	C308–DISTRIBUTION AND UTILIZATION			Course Year	2018-19	Semester	6
PO CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C308.1	3	2	3	3	2	-	1
C308.2	3	1	3	3	2	3	2
C308.3	3	1	3	3	2	3	2
C308.4	3	2	3	3	2	3	2
C308.5	3	1	-	-	2	3	2
C308	3	1.4	3	3	2	3	1.8

PSO CO	PSO1	PSO2	PSO3
C308.1	3	3	2
C308.2	3	3	2
C308.3	3	3	2
C308.4	3	3	2
C308.5	3	3	-
C308	3	3	2

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## 3.1.3 Program level Course-PO matrix of all courses INCLUDING first year courses (10)

**Table 3.1.3 COURSE-PO-PSO Matrix**

2016-2019

Course	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
C101	Communication English-I	0	0	0	0	2	1.6	2	0	0	1.8
C102	Engineering Mathematics –I	1.8	1.6	1.8	0	0	0	1	1.8	2	2
C103	Engineering Physics-I	2.8	1.5	1.7	2	2	1.7	2	3	2	2
C104	Engineering Chemistry-I	2.2	2	2	2	2	2.3	3	2	2	2
C105	Engineering Graphics-I	2.6	2	2	1.6	2	2	2	2	2	2
C106	Engineering Physics Practical-I	2	2	2	1.6	2	0	2	1.4	1.7	1.3
C107	Engineering Chemistry Practical-I	2	2	1	2	2	2	2	1.8	1.5	2
C108	Workshop Practice	3	2	3	2	0	1.5	2	2.2	1.6	2
C109	Communication English-II	0	0	0	0	2	1.6	3	0	0	2
C110	Engineering Mathematics –II	1.6	1.2	1.2	0	0	0	1	1	1	0
C111	Applied Mathematics	1.8	1.6	2	0	0	0	1	2	1	1
C112	Engineering Physics-II	2.6	1.7	0	2	2	1.5	2	3	2	2
C113	Engineering Chemistry-II	2	2	1	0	2	0	2	1.4	2	1.7
C114	Engineering Graphics-II	3	1.6	2	1.8	0	2	2	1.5	2	1.5
C115	Engineering Physics Practical-II	2.4	2	1.5	1.6	0	0	1	3	3	3
C116	Engineering Chemistry Practical-II	2	0	1	0	1.6	2	1.8	2	1.2	1
C201	Electrical Circuit Theory	3	3	2.6	1.8	1	1.25	2.4	3	2	1
C202	Electrical Machines-I	2.4	1.8	2	1.8	1	1.8	2	3	2	2
C203	Electronic Devices and Circuits	3	1.2	1.4	1	1	1.6	2	3	2	2
C204	Electrical Circuits and Machines Practical	2.6	2.2	2	2.8	2	2	2	3	2	2
C205	Electronic Devices and Circuits Practical	2.4	3	3	2	2	1	2	3	2	2
C206	Electrical Workshop Practical	2.4	1	1	2	2	2	2	3	2	1
C207	Computer Applications Practical	2.6	2	1.2	2.2	2	2.6	3	2	1	1
C208	Electrical Machines-II	3	2.25	1	1.4	2	1.4	2	3	2	1.2
C209	Measurements and Instruments	3	1.8	1.2	1.6	2	1.5	1.6	3	1	1
C210	Digital Electronics	3	1.8	2	1	1	1.4	2.4	1.6	2	1.3
C211	Transducers and Signal Conditioners	2	1	1.4	1	2	1	1	2.8	2	2
C212	Electrical Machines and Instrumentation Practical	3	2.8	2	3	2	1.6	1.8	3	2	2

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C213	Integrated Circuits Practical	2.4	3	3	2	1	2	2	2	0	2
C214	Life and Employability Skills Practical	0	0	0	0	2	3	2.2	0	3	3
C301	Generation Transmission and Switchgear	3	2	1.75	1.2	2	1.2	2	3	2	1
C302	Microcontroller	3	1.8	2.2	1.5	2	1.5	1.2	2	2	1
C303	Electrical Estimation and Energy Auditing	2.6	1.6	1.6	1.25	2	2.2	1.4	2.2	2	2
C304	Control of Electrical Machines	3	2	2	2	2	2	2	2.2	2	2
C305	Computer Aided Electrical Drawing Practical	2	1.2	2	2	1	2	2	2	2	1
C306	Microcontroller Practical	3	3	2.7	3	1	2	1.6	2	2	1
C307	Control of Electrical Machines Practical	2.4	2	2.4	3	2	2	2	3	2	2
C308	Distribution and Utilization	3	1.4	3	3	2	3	1.8	3	3	2
C309	Operation and Maintenance of Electrical Equipment	3	1.8	2	2	2	3	2.4	3	3	2
C310	Power Electronics	3	1	2.4	2	2	2.6	1.8	3	3	2
C311	Wiring and Winding Practical	3	1	3	3	2	1	3	3	3	2
C312	Electrical Circuits Simulation Practical	3	3	3	3	2	2.6	1.8	3	3	2
C313	Power Electronics Practical	3	3	3	3	1	2.6	3	3	3	2
C314	Project Work	3	3	3	3	2	3	2	3	3	2
<b>Direct Target</b>		2.60	1.95	2.00	2.03	1.78	1.92	1.96	2.46	2.07	1.74
<b>Indirect Target</b>		2.50	2.30	2.02	1.66	1.57	1.78	1.68	2.47	2.29	1.56
<b>Total Target</b>		2.58	2.02	2.00	1.96	1.74	1.89	1.90	2.46	2.12	1.70

### 3.2. Attainment of Course Outcomes (40)

#### 3.2.1. Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10)

##### Course Performance – BOARD Examination Assessment

The Board examination is conducted for the courses for maximum of 75 Marks with 3 hours duration by DOTE. The performance of the students in the board examination is considered as the major part of attainment of course outcomes of each course. The Class Counsellor will collect the result obtained by each student in every course from the DOTE web portal and prepare result analysis. The attainment is analyzed based on the DOTE mark analysis.

##### Course Performance – Internal Examination Assessment

An Internal assessment is carried out based on the marks scored by student from Continuous Assessment Test (CAT) by the department. A series of two Continuous Assessment Test and one Model Exam are conducted in accordance with the academic calendar. Continuous assessment test will carry 50 marks and 75marks in Model Exam. The

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Continuous Assessment Test I addresses the CO1 and CO2, Continuous Assessment Test II will address the CO3 and CO4 and Model Exam will address CO1 to CO5. The assessment is carried out by the course faculty in-charge once the Continuous Assessment Test is completed.

The evaluation pattern for all the courses consists of continuous internal assessment and Board examination with 25% and 75 % weightage respectively. The internal assessment comprises of 25 marks which is

CAT Exam	-	5 Marks
Model Exam	-	5 Marks
Home Assignment	-	5 Marks
Seminar	-	5 Marks
Attendance	-	5 Marks

Question pattern for the Continuous Assessment Tests, Model examination and Board Examination are framed as follows,

**Table 3.2 Question Pattern**

<b>CONTINUOUS ASSESSMENT TEST QUESTION PATTERN</b> Engineering Physics – I, Engineering Chemistry –I, Engineering Mathematics-I, Engineering Physics –II, Engineering Chemistry – II, Engineering Mathematics-II, Applied Mathematics.		
<b>PART – A</b>	4 Questions (Answer all the questions)	4 x 2 = 08 Marks
<b>PART – B</b>	4 Questions (Answer all the questions)	4 x 3 = 12 Marks
<b>PART – C</b>	6 Questions (Answer all the questions)	6 x 5 = 30 Marks
<b>TOTAL</b>		50 Marks
<b>MODEL EXAM QUESTION PATTERN</b>		
<b>PART – A</b>	8 Questions (Answer any FIVE questions)	5 x 2 = 10 Marks
<b>PART – B</b>	8 Questions (Answer any FIVE questions)	5 x 3 = 15 Marks
<b>PART – C</b>	5 Questions	5 x 10 = 50 Marks
<b>TOTAL</b>		75 Marks
<b>BOARD EXAMINATION QUESTION PATTERN</b>		
<b>PART – A</b>	8 Questions (Answer any FIVE questions)	5 x 2 = 10 Marks
<b>PART – B</b>	8 Questions (Answer any FIVE questions)	5 x 3 = 15 Marks
<b>PART – C</b>	5 Questions	5 x 10 = 50 Marks
<b>TOTAL</b>		75 Marks
<b>CONTINUOUS ASSESSMENT TEST QUESTION PATTERN</b> Engineering Graphics-I, Engineering Graphics-II		
<b>PART – A</b>	1 Question	1 x 5 = 05 Marks
<b>PART – B</b>	3 Questions (Answer all the questions)	3 x 15 = 45 Marks
<b>TOTAL</b>		50 Marks

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MODEL EXAM QUESTION PATTERN		
<b>PART – A</b>	3 Questions (Answer all the questions)	3 x 5 = 15 Marks
<b>PART – B</b>	6 Questions (Answer any FOUR questions)	4 x 15 = 60 Marks
<b>TOTAL</b>		75 Marks
BOARD EXAMINATION QUESTION PATTERN		
<b>PART – A</b>	3 Questions (Answer all the questions)	3 x 5 = 15 Marks
<b>PART – B</b>	6 Questions (Answer any FOUR questions)	4 x 15 = 60 Marks
<b>TOTAL</b>		75 Marks

CONTINUOUS ASSESSMENT TEST QUESTION PATTERN		
<b>PART – A</b>	4 Questions (Answer all the questions)	4 x 2 = 08 Marks
<b>PART – B</b>	4 Questions (Answer all the questions)	4 x 3 = 12 Marks
<b>PART – C</b>	3 Questions (Answer all the questions)	3 x 10 = 30 Marks
<b>TOTAL</b>		50 Marks
MODEL EXAM QUESTION PATTERN		
<b>PART – A</b>	8 Questions (Answer any FIVE questions) ( Question no. 8 compulsory)	5 x 2 = 10 Marks
<b>PART – B</b>	8 Questions (Answer all FIVE questions) ( Question no. 16 compulsory )	5 x 3 = 15 Marks
<b>PART – C</b>	5 Questions (Answer all the questions)	5 x 10 = 50 Marks
<b>TOTAL</b>		75 Marks
BOARD EXAMINATION QUESTION PATTERN		
<b>PART – A</b>	8 Questions (Answer any FIVE questions) ( Question no. 8 compulsory)	5 x 2 = 10 Marks
<b>PART – B</b>	8 Questions (Answer all FIVE questions) ( Question no. 16 compulsory )	5 x 3 = 15 Marks
<b>PART – C</b>	5 Questions (Answer all the questions)	5 x 10 = 50 Marks
<b>TOTAL</b>		75 Marks

### Assignment:

Assignments are given to the students to enhance learning and understanding. The assignments are evaluated once in a month by the Faculty in-charge.

### Seminar:

Seminar topics are given to the students to showcase their understanding of the subject which is recorded by the Faculty in-charge.

### Laboratory Experiments:

Laboratory experiments will address the CO of the respective group of experiment. The results of such experiments are included for assessment process by the Faculty in - charge.

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Internal marks (25) are evaluated for the lab course as

- ✓ Observation - 10 Marks
- ✓ Record Writing - 10 Marks
- ✓ Attendance - 5 Marks
- ✓ Total - 25 Marks

### Assessment process for Projects

Students are divided into groups, wherein each group has a maximum of 5 students. Each group is supervised by a faculty and the reviews are conducted and the students will be reviewed by review committee members. Internal marks are awarded based on their performance in project reviews.

Review I Pattern			Review II Pattern		
Presentation skills	=	20 marks	Presentation skills	=	05 marks
Status of Report	=	20 marks	Status of Report	=	20 marks
Technical skills	=	20 marks	Technical skills	=	20 marks
Model Assembly	=	20 marks	Model Assembly	=	20 marks
Viva voce	=	20 marks	Viva voce	=	20 marks
<b>Total</b>	=	<b>100 marks</b>	<b>Total</b>	=	<b>100 marks</b>

\*Each Review Marks are converted to 10.

### 3.2.2 Record the attainment of Course Outcomes of all courses with respect to set attainment levels (40)

- ✓ **Attainment Level 1:** 30 - 39% of the students scoring > 50% of marks in direct assessment method.
- ✓ **Attainment Level 2:** 40 - 49% of the students scoring > 50% of marks in direct assessment method.
- ✓ **Attainment Level 3:**  $\geq$  50% of the students scoring > 50% of marks in direct assessment method.

**Table 3.2.2 Overall Course Outcome Attainments**

Course	Course Name	CO1	CO2	CO3	CO4	CO5	Total Attainment	ATTAINMENT LEVEL
C101	Communication English-I	79.7	79.7	79.7	78.0	76.3	78.6	3
C102	Engineering Mathematics -I	72.9	74.6	78.0	74.6	74.6	74.9	3
C103	Engineering Physics-I	50.8	49.2	49.2	49.2	47.5	49.2	2
C104	Engineering Chemistry-I	62.7	62.7	61.0	59.3	57.6	60.7	3

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C105	Engineering Graphics-I	80.7	80.7	82.5	82.5	82.5	81.8	3
C106	Engineering Physics Practical-I	62.7	62.7	62.7	62.7	62.7	62.7	3
C107	Engineering Chemistry Practical-I	57.6	57.6	59.3	57.6	57.6	58.0	3
C108	Workshop Practice	61.0	61.0	61.0	61.0	61.0	61.0	3
C109	Communication English-II	69.5	69.5	69.5	69.5	69.5	69.5	3
C110	Engineering Mathematics -II	77.2	73.7	73.7	73.7	71.9	74.0	3
C111	Applied Mathematics	70.2	68.4	68.4	70.2	66.7	68.8	3
C112	Engineering Physics-II	49.1	47.4	45.6	47.4	45.6	47.0	2
C113	Engineering Chemistry-II	61.0	61.0	59.3	61.0	59.3	60.3	3
C114	Engineering Graphics-II	71.9	70.2	73.7	71.9	70.2	71.6	3
C115	Engineering Physics Practical-II	61.0	61.0	61.0	61.0	61.0	61.0	3
C116	Engineering Chemistry Practical-II	57.6	57.6	59.3	57.6	59.3	58.3	3
C201	Electrical Circuit Theory	22.0	20.3	20.3	20.3	20.3	20.7	0
C202	Electrical Machines-I	16.9	16.9	15.3	16.9	16.9	16.6	0
C203	Electronic Devices and Circuits	22.0	20.3	20.3	20.3	20.3	20.7	0
C204	Electrical Circuits and Machines Practical	62.7	62.7	62.7	62.7	62.7	62.7	3
C205	Electronic Devices and Circuits Practical	62.7	62.7	62.7	62.7	62.7	62.7	3
C206	Electrical Workshop Practical	62.7	62.7	62.7	62.7	62.7	62.7	3
C207	Computer Applications Practical	59.3	59.3	59.3	59.3	61.0	59.7	3
C208	Electrical Machines-II	71.2	69.5	71.2	71.2	69.5	70.5	3
C209	Measurements and Instruments	39.0	39.0	39.0	39.0	39.0	39.0	1
C210	Digital Electronics	35.6	35.6	35.6	35.6	35.6	35.6	1
C211	Transducers and Signal Conditioners	39.0	39.0	40.7	40.7	39.0	39.7	1
C212	Electrical Machines and Instrumentation Practical	50.8	52.5	52.5	54.2	54.2	52.9	3
C213	Integrated Circuits Practical	54.2	54.2	54.2	55.9	55.9	54.9	3
C214	Life and Employability Skills Practical	62.7	62.7	62.7	62.7	62.7	62.7	3
C301	Generation Transmission and Switchgear	49.1	49.1	49.1	49.1	47.4	48.8	2.0
C302	Microcontroller	50.9	49.1	50.9	52.6	47.4	50.2	3
C303	Electrical Estimation and Energy Auditing	36.8	36.8	36.8	36.8	28.1	35.1	1.00

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C304	Control of Electrical Machines	47.4	49.1	43.9	47.4	43.9	46.3	2
C305	Computer Aided Electrical Drawing Practical	100	100	100	100	98.2	99.6	3
C306	Microcontroller Practical	63.2	63.2	63.2	63.2	63.2	63.2	3
C307	Control of Electrical Machines Practical	64.9	64.9	64.9	64.9	64.9	64.9	3
C308	Distribution and Utilization	57.1	57.1	57.1	57.1	57.1	57.1	3
C309	Operation and Maintenance of Electrical Equipment	39.3	39.3	39.3	39.3	37.5	38.9	1
C310	Power Electronics	44.6	44.6	42.9	42.9	39.3	42.9	2
C311	Wiring and Winding Practical	66.1	66.1	66.1	66.1	67.9	66.4	3
C312	Electrical Circuits Simulation Practical	58.9	58.9	60.7	60.7	60.7	60.0	3
C313	Power Electronics Practical	62.5	62.5	62.5	60.7	60.7	61.8	3
C314	Project Work	65.5	65.5	0.0	0.0	0.0	65.5	3

### Overall Course Outcome attainment

Overall attainment level is calculated based on 80% weightage of direct assessment and 20% weightage of indirect assessment.

### Sample showing the course attainment for the course

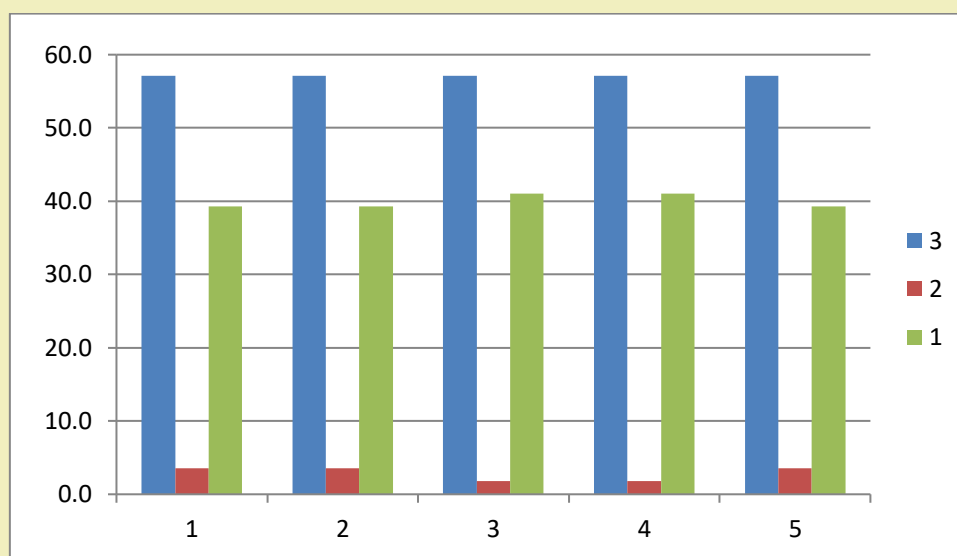
**Subject:** Distribution and Utilization

### C308 Distribution and Utilization

Table 3.2.2.1 Sample Attainment

CO	% of Attainment	Average Grade on Scale of 3	Target $\geq$ 50%	% of Grade attainment Distribution		
				3.0	2.0	1.0
CO1	57.1	3	Y	57.1	3.57	39.2
CO2	57.14	3	Y	57.1	3.57	39.3
CO3	57.14	3	Y	57.1	1.78	41.1
CO4	57.14	3	Y	57.1	1.78	41.1
CO5	57.14	3	Y	57.1	3.57	39.3

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**Figure 1 Course Attainment for Distribution and Utilization**

### 3.3. Attainment of Program Outcomes and Program Specific Outcomes (40)

#### 3.3.1. Describe assessment tools and processes used for assessing the attainment of each Program Outcomes (POs) and Program Specific Outcomes (PSOs) (10)

The Assessment methods for attainment of POs and PSOs are

- ✓ Direct method
- ✓ Indirect method

#### Direct Method

For all the courses, direct attainment method involves the assessment of students through examinations (Both Internal and Board).

#### Indirect Method

Indirect attainment is determined based on survey among Students, Employer, Alumni, Parents, Exit Survey and Industrial Visits.

**Table 3.3 Assessment Type**

Assessment Type	Assessment Tool	Decision Criteria	Data Collection Frequency
Direct	Course Performance – Board Examination	Number of Students Passed	Once in every Semester
	Course Performance – Internal Examination	Students Performance	Once in a month
	Laboratory		After completion on exercise
Indirect	Exit Survey	80% of students get satisfied	At the end of the Program
	Employer feedback Survey	70% of Employer Participated in survey get satisfied	Yearly
	Alumni feedback Survey	70% of Alumni participated	Yearly

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		in survey get satisfied	
	Parents feedback Survey	70% of Parents participated in survey get satisfied	Once in a Semester
	Student feedback Survey	90% of Students get satisfied	On completion of Semester
	Industrial Visit feedback	80% of students get satisfied	On Completion of Industrial Visit

The attainment of PO and PSO for each course is calculated using the direct and indirect assessment and also the CO- PO correlation Weightage. This is done by the following formula.

$$\text{Attainment} = (\text{CO / PO Mapping Weightage} * \text{Assessment Weightage}) / 3$$

### 3.3.2. Provide results of evaluation of each PO & PSO (40)

The evaluation result of each POs and PSOs are shown in the Table 3.3.2

**Table 3.3.2 Program Outcome Attainment CAYm1 2016-2019**

	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
C101	Communication English-I	0	0	0	0	2	1.6	2	0	0	1.8
C102	Engineering Mathematics – I	1.8	1.6	1.8	0	0	0	1	1.8	2	2
C103	Engineering Physics-I	2.1	1.1	1.1	1.3	1.5	1.1	1.5	2.2	1.5	1.5
C104	Engineering Chemistry-I	2.2	2	2	2	2	2.3	2.2	2	1.6	1.6
C105	Engineering Graphics-I	2.6	2	2	1.6	2	2	2	2	2	2
C106	Engineering Physics Practical-I	2	2	2	1.6	2	0	2	1.4	1.7	1.3
C107	Engineering Chemistry Practical-I	2	2	1	2	2	2	2	1.8	1.5	2
C108	Workshop Practice	3	2	3	2	0	1.5	2	2.2	1.6	2
C109	Communication English-II	0	0	0	0	2	1.6	3	0	0	2
C110	Engineering Mathematics – II	1.6	1.2	1.2	0	0	0	1	1	1	0
C111	Applied Mathematics	1.8	1.6	2	0	0	0	1	2	1	1
C112	Engineering Physics-II	1.7	1.1	0.0	1.3	1.3	1.0	1.3	2.0	1.3	1.3
C113	Engineering Chemistry-II	2	2	1	0	2	0	2	1.4	2	1.7
C114	Engineering Graphics-II	3	1.6	2	1.8	0	2	2	1.5	2	1.5
C115	Engineering Physics Practical-II	2.4	2	1.5	1.6	0	0	1	3	3	3
C116	Engineering Chemistry Practical-II	2	-	1	0	1.6	2	1.8	2	1.2	1
C201	Electrical Circuit Theory	0	0	0	0	0	0	0	0	0	0
C202	Electrical Machines-I	0	0	0	0	0	0	0	0	0	0
C203	Electronic Devices and	0	0	0	0	0	0	0	0	0	0

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	Circuits										
C204	Electrical Circuits and Machines Practical	2.6	2.2	2	2.8	2	2	2	3	2	2
C205	Electronic Devices and Circuits Practical	2.4	3	3	2	2	1	2	3	2	2
C206	Electrical Workshop Practical	2.4	1	1	2	2	2	2	3	2	1
C207	Computer Applications Practical	2.6	2	1.2	2.2	2	2.6	3	2	1	1
C208	Electrical Machines-II	3	2.25	1	1.4	2	1.4	2	3	2	1.2
C209	Measurements and Instruments	1	0.6	0.4	0.5	0.7	0.5	0.53	1	0.3	0.3
C210	Digital Electronics	1	0.6	0.7	0.3	0.3	0.47	0.8	0.53	0.7	0.4
C211	Transducers and Signal Conditioners	0.9	0.5	0.7	0.5	1.1	0.5	0.5	1.3	0.9	0.9
C212	Electrical Machines and Instrumentation Practical	3	2.8	2.0	3	2	1.6	1.8	3	2	2
C213	Integrated Circuits Practical	2.4	3	3	2	1	2	2	2	0	2
C214	Life and Employability Skills Practical	0	0	0	0	2	3	2.2	0	3	3
C301	Generation Transmission and Switchgear	2.0	1.3	1.2	0.8	1.3	0.8	1.3	2.0	1.3	0.7
C302	Microcontroller	2.6	1.5	1.9	1.2	1.8	1.3	1.0	1.7	1.7	0.8
C303	Electrical Estimation and Energy Auditing	0.9	0.6	0.5	0.4	0.7	0.8	0.5	0.8	0.8	0.7
C304	Control of Electrical Machines	2.0	1.3	1.3	1.3	1.3	1.3	1.3	1.5	1.3	1.3
C305	Computer Aided Electrical Drawing Practical	2	1.2	2	2	1	2	2	2	2	1
C306	Microcontroller Practical	3	3	2.7	3	1	2	1.6	2	2	1
C307	Control of Electrical Machines Practical	2.4	2	2.4	2	2	2	2	3	2	2
C308	Distribution and Utilization	3	1.4	2	1.5	2	3	1.8	3	3	2
C309	Operation and Maintenance of Electrical Equipment	1.0	0.6	0.7	0.7	0.7	1.0	0.8	1.0	1.0	0.7
C310	Power Electronics	1.8	0.5	1.4	1.2	1.3	1.5	1.1	1.8	1.8	1.2
C311	Wiring and Winding Practical	3	1	3	3	2	1	3	3	3	2
C312	Electrical Circuits Simulation Practical	3	3	3	3	2	2.6	1.8	3	3	2
C313	Power Electronics Practical	3	3	3	3	1	2.6	3	3	3	2
C314	Project Work	3	3	3	3	2	3	2	3	3	2
<b>Direct attainment</b>		2.22	1.72	1.75	1.76	1.59	1.69	1.70	2.08	1.79	1.52
<b>Indirect attainment</b>		2.41	2.18	1.90	1.54	1.44	1.69	1.60	2.38	2.15	1.43
<b>Total Attainment</b>		2.26	1.81	1.78	1.72	1.56	1.69	1.68	2.14	1.86	1.50

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<b>CRITERION 4</b>	<b>STUDENTS' PERFORMANCE</b>	<b>200</b>
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### Intake Information:

Item	CAY (2019- 2020)	CAYm1 (2018- 2019)	CAYm2 (2017- 2018)	CAYm3 (2016- 2017)	CAYm4 (2015- 2016)	CAYm5 (2014- 2015)
Sanctioned intake strength of the program (N)	60	60	60	60	60	60
Total number of students admitted through state level counseling (N1)	30	30	31	30	29	31
Number of students admitted through Institute level quota (N2)	8	29	28	29	9	3
Number of students admitted through lateral entry (N3)	0	6	04	06	03	04
Total number of students admitted in the Program (N1 + N2 + N3)	38	65	63	65	41	38

## NBA SAR CRITERION - 4

Year of entry	N1 + N2 + N3 (As defined above)	Number of students who have successfully graduated without backlogs in any semester/year of study (Without Backlog means no compartment or failures in any semester/year of study)		
		I Year	II Year	III Year
CAY (2019-20)	30+8 + NA= 38	-	-	-
CAY <sub>m1</sub> (2018-19)	30+29+6 = 65	21	-	-
CAY <sub>m2</sub> (2017-18)	31+28+4=63	19	12	-
CAY <sub>m3</sub> (2016-17)	30+29+6 =65	29	10	9
CAY <sub>m4</sub> (2015-16)	29+9+3 = 41	24	15	14
CAY <sub>m5</sub> (2014-15)	31+3+4 =38	25	21	16

Year of entry	N1 + N2 + N3 (As defined above)	Number of students who have successfully graduated (Students with backlog in stipulated period of study)		
		I Year	II Year	III Year
CAY (2019-20)	30+8 + NA= 38	-		
CAY <sub>m1</sub> (2018-19)	30+29+6 = 65	48	-	
CAY <sub>m2</sub> (2017-18)	31+28+4=63	49	50	-
CAY <sub>m3</sub> (2016-17)	30+29+6 =65	55	59	21
CAY <sub>m4</sub> (2015-16)	29+9+3 = 41	38	35	18
CAY <sub>m5</sub> (2014-15)	31+3+4 =38	33	37	17

## NBA SAR CRITERION - 4

### Enrolment Ratio (20) = 18

Enrolment Ratio=  $(N1+N2) / N = (156/180) = 86.66\%$

Item (Students enrolled at the First Year Level on average basis during the previous three academic years including the current academic year)	Marks
>=90% students enrolled	20
>=80% students enrolled	<b>18</b>
>=70% students enrolled	16
>=60% students enrolled	12
>=50% students enrolled	08
Otherwise	0

Year	N1	N2	N	Enrolment ratio= (N1+N2)/N	Percentage
CAY (2019 – 2020)	30	8	60	$(30+8)/60 = 0.6333$	63.33%
CAYm1 (2018 – 2019)	30	29	60	$(30+29)/60 = 0.9833$	98.33%
CAYm2 (2017 – 2018)	31	28	60	$(31+28)/60 = 0.9833$	98.33%
<b>Average</b>				<b>0.8666</b>	<b>86.66%</b>

### Success Rate in the stipulated period of the program (60)

### Success rate without backlogs in any year of study (40)

$SI = (\text{Number of students who have passed from the program without backlog}) / (\text{Number of Students admitted in the first year of that batch plus actually admitted in 2nd year via lateral entry})$

Average SI = Mean of Success Index (SI) for past three batches

Success rate without backlogs in any year of study =  $40 \times \text{Average SI} = 40 \times 0.3 = 12$

Item	LYG (2016 -2017)	LYGm1 (2015 – 2016)	LYGm2 (2014 – 2015)
Total number of students (admitted through state level counseling + admitted through institute on level quota + actually admitted through lateral entry) (N1+N2+N3)	65	41	38
Number of students who have passed without backlogs in the stipulated period	9	14	16
<b>Success Index (SI)</b>	0.138	0.341	0.421
<b>Average Success Index</b>	<b><math>(0.138+0.341+0.421)/3 = 0.3</math></b>		

## NBA SAR CRITERION - 4

### Success rate with backlog in stipulated period of study (20)

$SI = (\text{Number of students who have passed from the program in the stipulated period of course duration}) / (\text{Number of students admitted in the first year of that batch plus actually admitted in 2nd year via lateral entry})$

Average SI = mean of Success Index (SI) for past three batches

Success rate =  $20 \times \text{Average SI} = 20 \times 0.403 = 8.06$

Item	LYG (2016 -2017)	LYGm1 (2015 – 2016)	LYGm2 (2014 – 2015)
Total number of students (admitted through state level counseling + admitted through Institute on level quota+ actually admitted through lateral entry) (N1 + N2 + N3)	65	41	38
Number of students who have passed with backlog in the stipulated period	21	18	17
<b>Success Index (SI)</b>	0.323	0.439	0.447
<b>Average Success Index</b>	<b><math>(0.323+0.439+0.447)/3= 0.403</math></b>		

### Academic Performance in First Year (25)

Academic Performance =  $2.5 * \text{Average API (Academic Performance Index)} = 13.38$

Academic Performance Level =  $2.5 * \text{Average API} = 2.5 * 5.35 = 13.38$

API = ((Mean of 1st Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in First Year/ 10)) x (successful students/number of students appeared in the examination).

Successful students are those who are permitted to proceed to the second year.

Academic Performance	CAYm1 (2018-2019)	CAYm2 (2017-2018)	CAYm3 (2016-2017)
Mean of CGPA or Mean Percentage of all successful students (X)	5.95	6.20	5.50
Total no. of successful students (Y)	48	49	55
Total no. of students appeared in the examination (Z)	59	59	59
API = $X * (Y/Z)$	4.84	5.15	6.06
<b>Average API = <math>(AP1 + AP2 + AP3)/3</math></b>	<b>5.35</b>		

## NBA SAR CRITERION - 4

### Academic Performance in Second Year (20)

Academic Performance Level =  $2.0 * \text{Average API} = 2 * 5.33 = 10.66$

API = ((Mean of 2nd Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Second Year/ 10)) x (successful students/number of students appeared in the examination)

Successful students are those who are permitted to proceed to the final year

Academic Performance	CAYm2 (2017-2018)	CAYm3 (2016-2017)	CAYm4 (2015-2016)
Mean of CGPA or Mean Percentage of all successful students (X)	5.29	5.81	6.30
Total no. of successful students (Y)	50	59	35
Total no. of students appeared in the examination (Z)	53	61	41
API = $X * (Y/Z)$	4.99	5.62	5.38
Average API = $(AP1 + AP2 + AP3)/3$	<b>5.33</b>		

### Academic Performance in Final Year (15)

Academic Performance Level =  $1.5 * \text{Average API (Academic Performance Index)} = 1.5 * 3.47 = 5.20$

API = (Mean of Final Year Grade Point Average of all successful Students on a 10 point scale) or (Mean of the percentage of marks of all successful students in Final Year/10) x (successful students/number of students appeared in the examination)

Successful students are those who passed in all the final year courses

Academic Performance	Last Year Graduate (2016-2017)	Last Year Graduate m1 (LYGm1) (2015-2016)	Last Year Graduate m2 (LYGm2) (2014-2015)
Mean of CGPA or Mean Percentage of all successful students (X)	7.44	7.99	7.95
Total no. of successful students (Y)	21	18	17
Total no. of students appeared in the examination (Z)	59	35	37
API = $X * (Y/Z)$	2.65	4.11	3.65
Average API = $(AP1 + AP2 + AP3)/3$	<b>3.47</b>		

## NBA SAR CRITERION - 4

### Placement, Higher Studies and Entrepreneurship (40)

Assessment Points =  $40 \times \text{Average placement} = 40 \times 0.91 = 36.40$

Item	Last Year Graduate (2016-2017)	Last Year Graduate m1 (LYGm1) (2015-2016)	Last Year Graduate m2 (LYGm2) (2014-2015)
Total No. of Final Year Students (N)	59	35	37
No. of students placed in companies or Government Sector (X)	36	22	22
No. of students admitted to higher studies (Y)	10	4	6
No. of students turned entrepreneur in the respective field of engineering/technology (Z)	-	-	-
$1.25X + Y + Z$	55	31.50	33.50
Placement Index (P) : $(1.25X + Y + Z)/N$	<b>0.93</b>	<b>0.90</b>	<b>0.91</b>
<b>Average placement = <math>(P1 + P2 + P3)/3</math></b>	<b>0.91</b>		

a. Provide the placement data in the below mentioned format with the name of the program and the assessment year (separately for CAYm1, CAYm2 and CAYm3):  
Programs Name and Assessment Year

Electrical and Electronics Engineering				
S. No.	Name of the student placed	Enrolment no.	Name of the Employer	Appointment No.
<b>CAY m1 (2018-2019)</b>				
1	T.Adithyaprabhu	17310523	Avalon Technologies, Chennai	AT/19PAEE01
2	G.Ananthakrishnan	17310524	Lucas TVS, Chennai	PAEEE/01/19/TVSL
3	T.Anbarasan	17310525	Avalon Technologies, Chennai	AT/19PAEE02
4	M.Arunkumar	17310527	Lucas TVS, Chennai	PAEEE/02/19/TVSL
5	A.Bharath	17310530	Avalon Technologies, Chennai	AT/19PAEE03
6	K.Chandru	17310531	Lucas TVS, Chennai	PAEEE/03/19/TVSL
7	A.Dhanush Varthan	17310532	Lucas TVS, Chennai	PAEEE/04/19/TVSL
8	P.Gokul Krishnan	17310533	Lucas TVS, Chennai	PAEEE/05/19/TVSL
9	M.Gowri Shankar	17310535	Lucas TVS, Chennai	PAEEE/06/19/TVSL

## NBA SAR CRITERION - 4

10	S.Hariharasudhan	17310536	MAGNA Electro Castings Pvt Ltd, Coimbatore	AO/01/PAEE2019
11	S.Hariharan	17310537	Avalon Technologies, Chennai	AT/19PAEE04
12	P.Hariprasath	17310538	MAGNA Electro Castings Pvt Ltd, Coimbatore	AO/02/PAEE2019
13	R.Jegatheesh	17310542	Avalon Technologies, Chennai	AT/19PAEE05
14	S.Kalai Arasan	17310543	MAGNA Electro Castings Pvt Ltd, Coimbatore	AO/03/PAEE2019
15	N.Kirupasankar	17310545	MAGNA Electro Castings Pvt Ltd, Coimbatore	AO/04/PAEE2019
16	R.Mahendiran	17310546	Avalon Technologies, Chennai	AT/19PAEE06
17	R.Maheshkumar	17310547	Avalon Technologies, Chennai	AT/19PAEE07
18	M.Manojh	17310549	Lucas TVS, Chennai	PAEEE/07/19/TVSL
19	N.Manojkumar	17310550	Lucas TVS, Chennai	PAEEE/08/19/TVSL
20	K.Naveenprabhu	17310557	MAGNA Electro Castings Pvt Ltd, Coimbatore	AO/05/PAEE2019
21	N.Poovarasu	17310558	MAGNA Electro Castings Pvt Ltd, Coimbatore	AO/06/PAEE2019
22	A.G.Prem	17310560	Avalon Technologies, Chennai	AT/19PAEE08
23	S.Priyadharshan	17310561	Lucas TVS, Chennai	PAEEE/09/19/TVSL
24	A.Ranjithkumar	17310562	Avalon Technologies, Chennai	AT/19PAEE09
25	S.Saiyath Tajdeen	17310564	MAGNA Electro Castings Pvt Ltd, Coimbatore	AO/07/PAEE2019
26	S.Saran	17310567	Avalon Technologies, Chennai	AT/19PAEE10
27	A.Senthilkumar	17310570	MAGNA Electro Castings Pvt Ltd, Coimbatore	AO/08/PAEE2019
28	K.Sudharsan	17310573	MAGNA Electro Castings Pvt Ltd, Coimbatore	AO/09/PAEE2019
29	S.Thenarasan	17310577	MAGNA Electro Castings Pvt Ltd, Coimbatore	AO/10/PAEE2019
30	M.Tamil Mani	17310574	Lucas TVS, Chennai	PAEEE/10/19/TVSL
31	T.Vasanth	17310579	Avalon Technologies, Chennai	AT/19PAEE11
32	V.Vignesh	17310580	Avalon Technologies, Chennai	AT/19PAEE12
33	A.Ajaykumar	17326179	Lucas TVS, Chennai	PAEEE/11/19/TVSL
34	M.Aravindsamy	17326180	Lucas TVS, Chennai	PAEEE/12/19/TVSL
35	L.Gowtham	17326181	Lucas TVS, Chennai	PAEEE/13/19/TVSL

## NBA SAR CRITERION - 4

36	P.Manojkumar	17326183	Lucas TVS, Chennai	PAEEE/14/19/TVSL
<b>CAYm2 (2017-18)</b>				
1	R.Ajay	16309883	Triphase Technologies, Bangalore	2K18 PA-01/EEE
2	P.ArunKumar	16309884	Lucas TVS, Chennai	PAEE/01/18/TVSL
3	T.Barathi Kannan	16309885	Triphase Technologies, Bangalore	2K18 PA-02/EEE
4	A.Deenathayalan	16309886	Avalon Technologies, Chennai	AT/18PAEE01
5	R.Durkesh Kannan	16309887	Triphase Technologies, Bangalore	2K18 PA-03/EEE
6	D.Jebastin Jaysingh	16309891	Avalon Technologies, Chennai	AT/18PAEE02
7	S.Kalaivani	16309892	Lucas TVS, Chennai	PAEE/02/18/TVSL
8	G.Kalingaraj	16309893	Triphase Technologies, Bangalore	2K18 PA-04/EEE
9	L.Kirubakaran	16309894	MAGNA Electro Castings Pvt Ltd, Coimbatore	AO/01/PAEE/2018
10	M.Mahesh	16309897	Lucas TVS, Chennai	PAEE/03/18/TVSL
11	J.Mallika	16309898	Lucas TVS, Chennai	PAEE/04/18/TVSL
12	N.Naveen Kumar	16309901	Avalon Technologies, Chennai	AT/18PAEE03
13	S.Parthiban	16309902	Lucas TVS, Chennai	PAEE/05/18/TVSL
14	E.Poovarasam	16309903	Lucas TVS, Chennai	PAEE/06/18/TVSL
15	S.Sabarigirivasan	16309904	Lucas TVS, Chennai	PAEE/07/18/TVSL
16	G.Shreedevi	16309908	Triphase Technologies, Bangalore	2K18 PA-05/EEE
17	K.Srihariharan	16309909	Triphase Technologies, Bangalore	2K18 PA-06/EEE
18	S.Sivakumar	16309910	Avalon Technologies, Chennai	AT/18PAEE04
19	S.Suresh	16309913	Triphase Technologies, Bangalore	2K18 PA-07/EEE
20	M.Thirunavukkarasu	16309915	Avalon Technologies, Chennai	AT/18PAEE05
21	K.Vairamuthu	16309916	Triphase Technologies, Bangalore	2K18 PA-08/EEE
22	U.Gokulnath	16324303	Avalon Technologies, Chennai	AT/18PAEE06
<b>CAYm3 (2016-17)</b>				
1	P.Aravintha Kumar	15309923	Tractors And Farm Equipments, Madurai	AO17/TAFE/POL-EE01

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2	L.Boobalakrishnan	15309924	Lucas TVS, Chennai	PAEE/01/17/TVSL
3	C.Gokulkumar	15309927	Lucas TVS, Chennai	PAEE/02/17/TVSL
4	S.Gunasekar	15309928	KYB Motor Cycle, Chennai	KYB/16-17/PAEE01
5	D.Hari Shankar	15309929	KYB Motor Cycle, Chennai	KYB/16-17/PAEE02
6	S.Harish	15309930	Tractors And Farm Equipments, Madurai	AO17/TAFE/POL-EE02
7	M.Jeevanantham	15309931	Tractors And Farm Equipments, Madurai	AO17/TAFE/POL-EE03
8	S.Mohamed Sanpar	15309936	Tractors And Farm Equipments, Madurai	AO17/TAFE/POL-EE04
9	P.M.Nirmal	15309940	Triphase Technologies, Bangalore	2K17PA-01/EE
10	D.Nishanth	15309941	NOKIA Solutions Networks, Chennai	EST-AO/NOKIA- PA17EE01
11	V.Rajesh	15309943	Tractors And Farm Equipments, Madurai	AO17/TAFE/POL-EE05
12	S.Sandhya Devi	15309946	Tractors And Farm Equipments, Madurai	AO17/TAFE/POL-EE06
13	K.Sivadhannu	15309949	Lucas TVS, Chennai	PAEE/03/17/TVSL
14	S.Sivanesan	15309950	KYB Motor Cycle, Chennai	KYB/16-17/PAEE03
15	P.Sridhar	15309951	Tractors And Farm Equipments, Madurai	AO17/TAFE/POL-EE07
16	S.Surya Prakash	15309952	NOKIA Solutions Networks, Chennai	EST-AO/NOKIA- PA17EE02
17	N.Thiyagaraj	15309953	KYB Motor Cycle, Chennai	KYB/16-17/PAEE04
18	M.Vigneshwaran	15309954	NOKIA Solutions Networks, Chennai	EST-AO/NOKIA- PA17EE03
19	M.Vijay	15309955	NOKIA Solutions Networks, Chennai	EST-AO/NOKIA- PA17EE04
20	G.Aravindh	15324717	Tractors And Farm Equipments, Madurai	AO17/TAFE/POL-EE08
21	A.M.Manickam	15324719	Lucas TVS, Chennai	PAEE/04/17/TVSL
22	K.Prakashraj	15324720	Lucas TVS, Chennai	PAEE/05/17/TVSL

# NBA SAR CRITERION - 4

## Professional Activities (20)

### Professional societies / student chapters and organizing technical events (10)

#### A. Availability of Professional Societies/Chapters & Relevant activities (05)

Year	Name of the Professional Society	Number of Events Organized
2019-2020	Institute of Engineers India	03

S.No	Date	Name of the Event	Name of the Resource Person with Designation
1.	21.12.19	Guest Lecture on E-Vehicles	Dr.Ramareddy, Former Professor, Anna University, Coimbatore.
2.	04.09.19	Guest Lecture on Maintenance of Transformers	Er.K.Dheivasikamani, Assistant Executive Engineer, TNEB, Pollachi.
3.	29.07.19	Hands on Training in Power System	Mr.P.Mariaraja,M.E.,(Ph.D), Assistant Professor/EEE, P. A. College of Engineering and Technology, Pollachi.

1. Association of Electrical and Electronics Engineering
2. Renewable Energy Club – PAPTC-REC

#### Association of Electrical and Electronics Engineering

Office Bearers for the year CAY (2019-2020)			
S.No	Name of the Student	Designation	Class
1.	N.Navin	Students Chairman	III/EEE
2.	V.Kowsik Kumar	Students Vice Chairman	II/EEE
3.	K.Mythreyan	Secretary	III/EEE
4.	T.Dhanasekar	Joint Secretary	II/EEE
5.	S.Nandha Kumar	Treasurer	III/EEE
6.	M.Tharani	Joint Treasurer	III/EEE
7.	T.Babysalini	Executive Member	III/EEE
8.	S.Parthini	Executive Member	III/EEE
9.	V.Kaviyarasu	Executive Member	III/EEE
10.	K.Kaviyarasu	Executive Member	III/EEE
11.	K.Mathan Kumar	Executive Member	III/EEE
12.	K.Akilan	Executive Member	II/EEE

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13.	K.Ajay Vignesh	Executive Member	II/EEE
14.	K.Haridass	Executive Member	II/EEE
15.	N.Jagadhes Kumar	Executive Member	II/EEE
16.	M.Sethu	Executive Member	II/EEE
17.	S.Keerthivasan	Executive Member	I/EEE
18.	M.S.Arulkumaran	Executive Member	I/EEE

### Office Bearers for the year CAYm1 (2018-2019)

S.No	Name of the Student	Designation	Class
1.	S.Abinandhan	Students Chairman	III/EEE
2.	T.Babysalini	Students Vice Chairman	II/EEE
3.	M.Arun	Secretary	III/EEE
4.	S.Parthini	Joint Secretary	II/EEE
5.	V.Gowarnajayasri	Treasurer	III/EEE
6.	M.Gowri Shankar	Joint Treasurer	III/EEE
7.	S.Harrish	Executive Member	III/EEE
8.	G.Manjuladevi	Executive Member	III/EEE
9.	M.Tamilmani	Executive Member	III/EEE
10.	T.Vasanth	Executive Member	III/EEE
11.	P.ManojKumar	Executive Member	III/EEE
12.	N.Navin	Executive Member	II/EEE
13.	M.Tharani	Executive Member	II/EEE
14.	K.Mythreyan	Executive Member	II/EEE
15.	V.Kaviyarasu	Executive Member	II/EEE
16.	S.Nandha Kumar	Executive Member	II/EEE
17.	K.Ajay Vignesh	Executive Member	I/EEE
18.	M.Sethu	Executive Member	I/EEE

### Office Bearers for the year CAYm2 (2017-2018)

S.No	Name of the Student	Designation	Executive Members
1.	R.Ajay	Students Chairman	III/EEE
2.	S.Abinandhan	Vice Chairman	II/EEE
3.	A.Deenathayalan	Secretary	III/EEE
4.	M.Arun	Joint Secretary	II/EEE
5.	S.Kalaivani	Treasurer	III/EEE
6.	K.Mohamed Sharook	Joint Treasurer	III/EEE
7.	M.Thirunavukkarasu	Executive Member	III/EEE
8.	K.Vairamuthu	Executive Member	III/EEE
9.	V.Mano	Executive Member	III/EEE
10.	D.Jebastin Jaysingh	Executive Member	III/EEE
11.	U.Gokulnath	Executive Member	III/EEE
12.	V.Gowarnajayasri	Executive Member	II/EEE
13.	M.Gowri Shankar	Executive Member	II/EEE
14.	S.Harrish	Executive Member	II/EEE
15.	G.Manjuladevi	Executive Member	II/EEE
16.	M.Tamilmani	Executive Member	II/EEE

## NBA SAR CRITERION - 4

17.	N.Navin	Executive Member	I/EEE
18.	T.Babysalini	Executive Member	I/EEE
<b>Office Bearers for the year CAYm3 (2016-2017)</b>			
S.No	Name of the Student	Designation	Class
1	P.AjithKumar	Students Chairman	III/EEE
2	R.Ajay	Students Vice Chairman	II/EEE
3	L.Boobalakrishnan	Secretary	III/EEE
4	A.Deenathayalan	Joint Secretary	II/EEE
5	R.Gokulakrishnan	Treasurer	III/EEE
6	P.M.Nirmal	Joint Treasurer	III/EEE
7	N.Sadaiyasabarmathy	Executive Member	III/EEE
8	S.Sandhya Devi	Executive Member	III/EEE
9	M.Jothilakshmi	Executive Member	III/EEE
10	A.N.Manickam	Executive Member	III/EEE
11	K.Prakashraj	Executive Member	III/EEE
12	S.Kalaivani	Executive Member	II/EEE
13	K.Mohamed Sharook	Executive Member	II/EEE
14	M.Thirunavukkarasu	Executive Member	II/EEE
15	K.Vairamuthu	Executive Member	II/EEE
16	V.Mano	Executive Member	II/EEE
17	S.Abinandhan	Executive Member	I/EEE
18	V.Gowarnajayasri	Executive Member	I/EEE

### Renewable Energy Club:

Renewable energy club, was established in 2019-2020 with the main objective of creating awareness among students towards sustainable use of energy. To propagate and promote the use of renewable energy resources, every year this club organizes several activities like, seminars, guest lectures etc. for students.

Renewable energy club, organized a motivational talk titled “Significance of Energy Conservation and Impact of renewable Energy” on 20/02/2020. Mr.G.Dhanaraj was invited as the key speaker. He addressed the rising need and future prospects of renewable energy sources in India and also motivated students to involve the projects on renewable energy in their academic activities.

Faculty Coordinators	Student Co-ordinators
VR. Shankar ganesh	S.Manojkumar
R.B.Rajeshkumar	S.Nandhakumar
	V.Kowsikkumar

## NBA SAR CRITERION - 4

### B. Number, quality of engineering events (05) (Level – Institute / State / National / International)

S. No.	Academic Year	Level	Number of engineering events
1.	2019-2020	State	2
		Institute	14
2.	2018-2019	State	2
		Institute	11
3.	2017-2018	State	2
		Institute	9
4.	2016-2017	State	1
		Institute	8

#### Engineering events organized at institute:

S. No.	Date	Event Title	Level
<b>CAY (2019-2020)</b>			
1	05.03.2020	Guest lecture on Super conductor Lightning Diverter	Institute
2	20.02.2020	Significance of Energy Conservation and Impact of renewable Energy-REC Club	Institute
3	14.02.2020	Visit to hydro power plant, Kundah, Nilgiris	Institute
4	05.02.2020	State level technical symposium “PA TECHARENA 2K20”	State
5	07.01.2020 to 08.01.2020	Workshop on PLC programming and its applications	Institute
6	21.12.2019	Guest lecture on E-Vehicles	Institute
7	20.09.2019	Visit to Malabar Cements Ltd, Walayar, Kerala	Institute
8	04.09.2019	Guest Lecture on Maintenance of Transformers	Institute
9	20.08.2019	Renewable energy day celebration and technical quiz competition	Institute
10	14.08.2019	Inauguration of renewable energy club and guest lecture on awareness of renewable energy	Institute
11	05.08.2019	Visit to Thermal power plant, Mettur	Institute

## NBA SAR CRITERION - 4

12	31.07.2019	State level technical symposium "ELECTROFUSION2K19"	State
13	29.07.2019	Hands on training in power system	Institute
14	15.07.2019	Association inauguration and Guest Lecture on "Role of sub-station in power sector"	Institute
15	14.06.2019	I year orientation program topic: "Kalviyum Olukamum"	Institute
16	13.06.2019	I year orientation program topic: "I can I will"	Institute
<b>CAYm1 (2018-19)</b>			
1	16.02.2019	Visit to keltron controls Ltd, Aroor, Kerala	Institute
2	25.01.2019	State level technical symposium "PA TECHARENA 2K19"	State
3	23.01.2019	Guest lecture on Energy conservation	Institute
4	27.12.2018	Guest lecture on Modern power generation & protection	Institute
5	29.08.2018	Workshop on simulation Software Tools for power electronics applications	Institute
6	27.08.2018	Guest lecture on UPS Assembling & Testing	Institute
7	23.07.2018	Visit to thermal power plant, Mettur	Institute
8	16.07.2018	Workshop on PCB Designing	Institute
9	27.06.2018	State level technical symposium "ELECTROFUSION2K18"	State
10	22.06.2018	Association inauguration and Guest lecture on "Power system protection practice and solar integration".	Institute
11	14.06.2018	I year orientation program topic: "Kalviyum Olukamum"	Institute
12	14.06.2018	I year orientation program topic: "Moral Values"	Institute
13	13.06.2018	I year orientation program topic: "Un Edhir Kalam Un Kaiyil"	Institute
<b>CAYm2 (2017-18)</b>			
1	02.02.2018	Guest Lecture on Energy conservation	Institute
2	04.01.2018	State level Technical Symposium "PA TECHARENA 2K18"	Institute
3	27.12.2017	Role of Electrical Engineers in Technological Development	Institute

## NBA SAR CRITERION - 4

4	30.08.2017	Guest lecture on Energy Efficient Environment	Institute
5	10.08.2017	Association Inauguration and Guest lecture on Modern Engineering Tool	Institute
6	25.07.2017	Visit to hydro power plant, Kundah, Nilgiris	State
7	22.07.2017	Visit to thermal Power Plant, Mettur	Institute
8	05.07.2017	State level technical symposium "ELECTROFUSION2K17"	State
9	13.06.2017	I year orientation program topic:"VetrikkuVazhi"	Institute
10	12.06.2017	I year Orientation Program Topic:"Tholviye Thuvakam"	Institute
11	09.06.2017	I year Orientation Program Topic:"UzhaippmUyarvom"	Institute
<b>CAYm3 (2016-2017)</b>			
1.	03.11.2016 to 04.11.2016	Workshop on PLC	Institute
2.	20.09.2016	Guest lecture on modern power generation and production	Institute
3.	18.08.2016	Industrial visit to hydro electric power plant, Aliyar, Pollachi	Institute
4.	10.08.2016	State level technical symposium "ELECTROFUSION2K16"	State
5.	28.07.2016	Guest lecture on need of renewable energy sources	Institute
6.	29.06.2016	Association inauguration guest lecture on engineering in modern society	Institute
7.	14.06.2016	I year orientation program topic:"You Can"	Institute
8.	13.06.2016	I year orientation program topic:"Vedic Mathematics"	Institute
9.	10.06.2016	I year orientation program topic:"Discipline and Education"	Institute

## NBA SAR CRITERION - 4

Publication of technical magazines, newsletters, etc. (05)

A. Quality & Relevance of the contents and Print Material (03)

Newsletters:

Name of the Newsletter	Editors		Publication details
<b>CAY (2019-2020)</b>			
FUSION 2K19 – Annual News Letter	Chief Editor:	Mr.VR.Shankarganesh HOD/EEE	Volume 5 March 2020
	Editor:	Faculty Members & Students Associations of EEE	Faculty Members & Students Associations of EEE
<b>CAYm1 (2018-2019)</b>			
FUSION 2K18 – Annual News Letter	Chief Editor:	Mr.VR.Shankarganesh HOD/EEE	Volume 4 May 2019
	Editor:	Faculty Members & Students Associations of EEE	Faculty Members & Students Associations of EEE
<b>CAYm2 (2017-2018)</b>			
FUSION 2K17 – Annual News Letter	Chief Editor:	Mr.VR.Shankarganesh HOD/EEE	Volume 3 April 2018
	Editor:	Faculty Members & Students Associations of EEE	Faculty Members & Students Associations of EEE
<b>CAYm3 (2016-2017)</b>			
FUSION 2K16 – Annual News Letter	Chief Editor:	Mr.VR.Shankarganesh HOD/EEE	Volume 2 May 2017
	Editor:	Faculty Members & Students Associations of EEE	Faculty Members & Students Associations of EEE

## NBA SAR CRITERION - 4

### B. Participation of Students from the program (02)

#### Participation in Newsletter:

S. No.	Name of the Students	Class	Title
<b>CAY (2019-2020)</b>			
1.	M.Gopinath	III EEE	Recent trends in transmission lines
2.	K.Indira	III EEE	Microcontroller evolution
3.	T.Karthikraja	III EEE	Control of DC motors using PLC
4.	S.Manojkumar	III EEE	High speed electric vehicles
5.	S.Nandhakumar	III EEE	Special electrical machines
6.	N.Navin	III EEE	Electrical drives and control
7.	M.Abineshkumar	II EEE	Special purpose transformers
8.	V.J.Deepak	II EEE	Measuring instruments in space applications
9.	G.Karthick	II EEE	AC motor control using PLC
10.	V.Kowsikkumar	II EEE	Transducers and sensors
11.	K.Dharun	I EEE	Essay writing
12.	D.Dinesh	I EEE	Physical challenges in engineering
<b>CAYm1 (2018-2019)</b>			
1	S.Abinandhan	III EEE	Bio medical instrumentation
2	K.Babu	III EEE	Wind energy conversion systems
3	S.Harrish	III EEE	Smart grid
4	N.Manojkumar	III EEE	HVAC transmission
5	S.Saran	III EEE	Power converters for PV applications
6	K.Indira	II EEE	Engineering Mechanics
7	K.Mythreyan	II EEE	DC motor applications in aeronautics
8	S.Nandhakumar	II EEE	Biomass resources for electricity
9	M.Tharani	II EEE	Thermal power plants in India
10	M.Sethu	I EEE	Electric vehicles
11	N.Jegathes Kumar	I EEE	Essay witing
<b>CAYm2 (2017-2018)</b>			
1	R.Ajay	III EEE	Electric traction
2	D.Jebastin Jaysingh	III EEE	Operational amplifier
3	P.Madhuri	III EEE	List of important article of the constitution of India
4	K.Mohamed Sharook	III EEE	Nuclear power plant
5	P.Tamilarasan	III EEE	PLC
6	D.Saravanakumar	II EEE	Static speed control for AC machines

## NBA SAR CRITERION - 4

7	S.Saran	II EEE	List of satellites launched by India
8	G.Manjuladevi	II EEE	Top 10 Hydropower plants
9	M.Gowri Shankar	II EEE	Ayurveda
10	T.Karthikraja	I EEE	Electrical drawings
11	K.Kaviyarasu	I EEE	Poem writing
<b>CAYm3 (2016-2017)</b>			
1.	L.Boobalakashnan	III EEE	History of Physics
2.	D.Harishankar	III EEE	Locomotive
3.	S.Mohamed Sanpar	III EEE	Who was the first electrical engineer?
4.	D.Nirmal	III EEE	Illumination
5.	S.Kalaivani	II EEE	Valve type lightening arrester
6.	N.Naveen Kumar	II EEE	15 Famous scientists and their inventions
7.	K.Babu	I EEE	Essay writing
8.	D.Saravanakumar	I EEE	Electrical Engineering

**Participation in inter-institute/state/national events by students of the program of study (05)  
(The Department shall provide a table indicating participation, award, and recognition.)**

### A. Events

S. No.	Academic year	No. of students Participated (Co-Curricular)	No. of students Participated (Extra Curricular)
1.	2019-20	23	16
2.	2018-19	22	10
3.	2017-18	22	10
4.	2016-17	14	06

### B. Prizes/awards received in such events:

S. No.	Academic year	No. of students Awarded (Co-Curricular)	No. of students Awarded (Extra Curricular)
1.	2019-20	11	10
2.	2018-19	12	08
3.	2017-18	10	07
4.	2016-17	09	06

## NBA SAR CRITERION - 4

### Co - Curricular:

S. No.	Name of the Student	Event Description	Event Level (Inter- institute / State/National)	College Name	Awards
<b>CAY (2019-2020)</b>					
1	D.Anantha raksan	One-day workshop	State	APA Polytechnic College, Palani	Participated
2	T.Dhanasekar	One-day workshop	State	APA Polytechnic College, Palani	Participated
3	K.Rajeev	Paper presentation	State	PA College of Engineering and Technology, Pollachi	III prize
4	M.Sethu	Paper presentation	State	PA College of Engineering and Technology, Pollachi	III prize
5	V.J. Deepak	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	I prize
6	M.Praveenkumar	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	I prize
7	M.Gopinath	One day seminar	State	CIT sandwich polytechnic college, Coimbatore	Participated
8	V.Kaviyarasu	One day seminar	State	CIT sandwich polytechnic college, Coimbatore	Participated
9	S.Manojkumar	One-day workshop	State	PSG Institute of Technology and Applied Research, Coimbatore	Participated
10	N.Navin	One-day workshop	State	PSG Institute of Technology and Applied Research, Coimbatore	Participated
11	K.Mythreyan	One-day workshop	State	PSNA College of Engineering and Technology, Dindigul	Participated
12	S.Rajeshkumar	One-day workshop	State	PSNA College of Engineering & Technology	Participated
13	M.Abinesh kumar	Paper presentation	State	Arulmurugan Polytechnic college, Karur	Participated
14	V.J.Deepak	Paper presentation	State	Arulmurugan Polytechnic college, Karur	Participated

## NBA SAR CRITERION - 4

15	M.Abinesh kumar	Project Exhibition	Inter-Institute	PA Polytechnic college, Pollachi	I Prize
16	K.Ajay Vignesh	Project Exhibition	Inter-Institute	PA Polytechnic college, Pollachi	I Prize
17	S.Arun prasanth	Paper presentation	State	Karpagam College of Engineering, Coimbatore	II prize
18	S.Nandha kumar	Paper presentation	State	Karpagam College of Engineering, Coimbatore	II Prize
19	T.Babysalini	Quiz competition	State	CIT sandwich polytechnic college, Coimbatore	Participated
20	K.Indira	Quiz competition	State	CIT sandwich polytechnic college, Coimbatore	Participated
21	S.Keerthivasan	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	I prize
22	M.S.Arulkumaran	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	I prize
23	K.Dharun	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	I prize

### CAYm1 (2018-2019)

1.	S.Akshaya	One-day workshop	State	PSNA College of Engineering and Technology, Palani	Participated
2.	K.Indira	One-day workshop	State	PSNA College of Engineering and Technology, Dindigul	Participated
3.	K.Mythreyan	Paper presentation	State	KSR polytechnic college, Thiruchengode	II prize
4.	P.SampathKumar	Paper presentation	State	KSR polytechnic college, Thiruchengode	II prize
5.	K.SathishKumar	Paper presentation	State	Karpagam College of Engineering, Namakkal	I prize
6.	B.Shanmugam	Paper presentation	State	Karpagam College of Engineering, Namakkal	I prize
7.	K.Babu	One day seminar	State	APA Polytechnic College, Palani	Participated
8.	V.Karthik Kumar	One day seminar	State	APA Polytechnic College, Palani	Participated
9.	G.Manjuladevi	One-day workshop	State	Sri Ramakrishna polytechnic college, Coimbatore	Participated

## NBA SAR CRITERION - 4

10.	B.Tamilarasi	One-day workshop	State	Sri Ramakrishna polytechnic college, Coimbatore	Participated
11.	V.Gowarnajayasri	One-day workshop	State	PA College of Engineering and Technology	Participated
12.	G.Manjuladevi	One-day workshop	State	PA College of Engineering and Technology, Pollachi	Participated
13.	S.Arun prasanth	Paper presentation	State	Arulmurugan Polytechnic college, Karur	I prize
14.	S.Nandha kumar	Paper presentation	State	Arulmurugan Polytechnic college, Karur	I prize
15.	S.Gowtham	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	II prize
16.	M.Gopinath	Quiz competition	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	II prize
17.	R.Srihari	Quiz competition	State	CIT sandwich polytechnic college, Coimbatore	II prize
18.	N.Navin	Quiz competition	State	CIT sandwich polytechnic college, Coimbatore	II prize
19.	D.Saravana Kumar	Paper presentation	State	Sri Eshwar College of Engineering, Kinathukadavu	Participated
20.	M.Tamil Mani	Paper presentation	State	Sri Eshwar College of Engineering, Kinathukadavu	Participated
21.	B.Tamilarasi	Paper presentation	State	Sri Ramakrishna polytechnic college, Coimbatore	I prize
22.	V.Gowarnajayasri	Paper presentation	State	Sri Ramakrishna polytechnic college, Coimbatore	I prize

### CAYm2 (2017-2018)

1.	K.Babu	One-day Seminar	State	PA College of Engineering and Technology, Pollachi	Participated
2.	M.Tamil Mani	One-day Seminar	State	PA College of Engineering and Technology, Pollachi	Participated

## NBA SAR CRITERION - 4

3.	G.Manjuladevi	Two days workshop	State	Nachimuthu polytechnic college, Pollachi	Participated
4.	V.Gowarnajayasri	Two days workshop	State	Nachimuthu polytechnic college, Pollachi	Participated
5.	S.Saiyath Tajdeen	Paper presentation	State	Sri Ramakrishna engineering college, Coimbatore	II prize
6.	S.Saran	Paper presentation	State	Sri Ramakrishna engineering college, Coimbatore	II prize
7.	V.Mano	One day seminar	State	Nachimuthu polytechnic college, Pollachi	Participated
8.	S.Haresh	One day seminar	State	Nachimuthu polytechnic college, Pollachi	Participated
9.	P.Madhuri	One-day workshop	State	Mahendra engineering college	Participated
10.	J.Mallika	One-day workshop	State	Mahendra engineering college	Participated
11.	S.Kalaivani	One-day workshop	State	Hindustan institute of technology, Coimbatore	Participated
12.	G.Shredevi	One-day workshop	State	Hindustan institute of technology, Coimbatore	Participated
13.	K.Babu	Quiz competition	State	Arulmurugan Polytechnic college, Karur	I prize
14.	V.Karthik Kumar	Quiz competition	State	Arulmurugan Polytechnic college, Karur	I prize
15.	B.Tamilarasi	Quiz competition	State	PSNA College of Engineering and Technology, Dindigul	III prize
16.	V.Gowarnajayasri	Quiz competition	State	PSNA College of Engineering and Technology, Dindigul	III prize
17.	D.Saravana Kumar	Paper presentation	State	KSR polytechnic college, Thiruchengode	II prize
18.	S.Saran	Paper presentation	State	KSR polytechnic college, Thiruchengode	II prize
19.	D.Jebastin Jaysingh	Paper presentation	State	APA Polytechnic College, Palani	III prize
20.	S.Sabarigirivasan	Paper presentation	State	APA Polytechnic College, Palani	III prize
21.	K.Mohamed Sharook	Paper presentation	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	Participated

## NBA SAR CRITERION - 4

22.	V.Mano	Paper presentation	State	Sri Ranganathar Institute of Polytechnic College, Coimbatore	Participated
<b>CAYm3 (2016 – 2017)</b>					
1.	K.Vairamuthu	Paper presentation	State	Sri Krishna Polytechnic college, Coimbatore	Participated
2.	A.N.Manickam	Paper presentation	State	Sri Krishna Polytechnic college, Coimbatore	Participated
3.	R.Gokula Krishnan	Paper presentation	State	Sri Krishna Polytechnic college, Coimbatore	Participated
4.	R.Gokula Krishnan	Circuit debugging	State	Sri Eshwar College of Engineering, Kinathukadavu	III prize
5.	R.Gokula Krishnan	Technical quiz	State	Sri Eshwar College of Engineering, Kinathukadavu	Participated
6.	R.Gokula Krishnan	Brain maestro	State	Sri Eshwar College of Engineering, Kinathukadavu	III prize
7.	R.Gokula Krishnan	Paper presentation	State	Sri Eshwar College of Engineering, Kinathukadavu	Participated
8.	L.Boobalakrishnan	Paper presentation	State	Sri Eshwar College of Engineering, Kinathukadavu	III prize
9.	P.M.Nirmal	Paper presentation	State	Sri Eshwar College of Engineering, Kinathukadavu	III prize
10.	S.Harish	Paper presentation	State	Sri Eshwar College of Engineering, Kinathukadavu	III prize
11.	S.MohamedSanpar	Technical quiz	State	Sri Eshwar College of Engineering, Kinathukadavu	II prize
12.	S.Sandhya Devi	Technical quiz	State	Sri Eshwar College of Engineering, Kinathukadavu	II prize
13.	R.Gokula Krishnan	Model project & Posters	State	P.A College of Engineering and Technology, Pollachi	I prize
14.	R.Gokula Krishnan	Quiz	State	P.A College of Engineering and Technology, Pollachi	III prize

## NBA SAR CRITERION - 4

### Extra Curricular:

S. No	Name of the Student	Event Description	Event Level (State/National)	College Name	Awards
<b>CAY (2019-2020)</b>					
1.	T.Baby salini	Rangoli	Intra polytechnic	P.A. Polytechnic College, Pollachi	I prize
2.	S.Akshaya	Rangoli	Intra polytechnic	P.A. Polytechnic College, Pollachi	I prize
3.	K.Kaviyarasu	Running	Intra polytechnic	P.A. Polytechnic College, Pollachi	II prize
4.	S.Arunprasanth	Tamil Poetry	Intra polytechnic	P.A. Polytechnic College, Pollachi	Participated
5.	B.Shanmugam	Tamil Poetry	Intra polytechnic	P.A. Polytechnic College, Pollachi	Participated
6.	T.Baby Salini	Tamil speech	Womens development Cell	PA Institutions	II prize
7.	M.Tharani	Mehandi	Womens development Cell	PA Institutions	III prize
8.	B.Gokul kumar	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	II prize
9.	K.Mohamed Elyash	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	II prize
10.	D.Anantharaksan	Volley Ball	Intra polytechnic	P.A. Polytechnic College, Pollachi	II prize
11.	A Karthikeyan	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	II prize
12.	C Kesavamoorthi	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	III prize
13.	C.Gokulprasath	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	Participated
14.	J.Jayakumar	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	Participated
15.	S.Ramaprakash	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	Participated
16.	S.Sanjay	Inter polytechnic Athletic meet	Divisional	Arulmurugan Polytechnic college, Karur	Participated

## NBA SAR CRITERION - 4

CAYm1 (2018-2019)					
1.	P.SampathKumar	Shotput	Intra polytechnic	P.A. Polytechnic College, Pollachi	Participated
2.	S.Saiyath Tajdeen	Long Jump	Intra polytechnic	P.A. Polytechnic College, Pollachi	Participated
3.	S.Saran	Long Jump	Intra polytechnic	P.A. Polytechnic College, Pollachi	II prize
4.	B.Tamilarasi	Inter polytechnic Athletic meet	Divisional	APA Polytechnic College, Palani	III prize
5.	S.Akshaya	Inter polytechnic Athletic meet	Divisional	APA Polytechnic College, Palani	III prize
6.	M.Tharani	Inter polytechnic Athletic meet	Divisional	APA Polytechnic College, Palani	III prize
7.	S.Parthini	Rangoli	Intra polytechnic	P.A. Polytechnic College, Pollachi	II prize
8.	T.Babysalini	Rangoli	Intra polytechnic	P.A. Polytechnic College, Pollachi	II prize
9.	M.Abineshkumar	Inter polytechnic Athletic meet	Divisional	APA Polytechnic College, Palani	II prize
10.	E.S.Aswin	Inter polytechnic Athletic meet	Divisional	APA Polytechnic College, Palani	II prize
CAYm2 (2017-2018)					
1.	S.Haresh	Volley ball	Divisional	Sri Ranganathar Institute of Polytechnic College, Coimbatore	III prize
2.	R.Vignesh	Volley ball	Divisional	Sri Ranganathar Institute of Polytechnic College, Coimbatore	III prize
3.	M.Mahesh	Volley ball	Divisional	Sri Ranganathar Institute of Polytechnic College, Coimbatore	III prize
4.	V.Sarankumar	Basket ball	Divisional	PSG Polytechnic College, Coimbatore	III prize
5.	M.Gowri Shankar	Volley ball	Divisional	Sri Ranganathar Institute of Polytechnic College, Coimbatore	III prize
6.	T.Babysalini	Poster painting	Womens development cell	PA institutions	Participated

## NBA SAR CRITERION - 4

7.	S.Parthini	Nail art	Womens development cell	PA institutions	II prize
8.	M.Tharani	Mehandi hand art	Womens development cell	PA institutions	Participated
9.	K.Indira	Tamil speech	Womens development cell	PA institutions	III prize
10.	S.Akshaya	English speech	Womens development cell	PA institutions	Participated
<b>CAYm3 (2016-2017)</b>					
1.	D.Nirmal	Volley ball	Divisional	Sri Ranganathar Institute of Polytechnic College, Coimbatore	IV prize
2.	S.Haresh	Basket ball	Divisional	APA Polytechnic College, Palani	IV prize
3.	N.NaveenKumar	Long Jump	Divisional	P.A. Polytechnic College, Pollachi	IV prize
4.	S.Kalaivani	Dance	Womens development cell	PA institutions	III prize
5.	M.Jothilakshmi	Kolam	Womens development cell	PA institutions	III prize
6.	A.N.Manickam	Circuit debugging	Inter polytechnic	Sri Ramakrishna Polytechnic College, Coimbatore	I prize

# NBA SAR CRITERION - 5

<b>CRITERION 5</b>	<b>FACULTY INFORMATIONS AND CONTRIBUTIONS</b>	<b>150</b>
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S. No.	Name of the faculty Member	Qualification	University and Year of Graduation	Designation And Date of Joining the Institution	Distribution of Teaching Load (%)			Academic Research		Years of experience	Nature of Association (Regular/ Contract)	Date of Leaving
					a	b	c	Research Paper Publications	Faculty Receiving M.Tech / Ph.D. During the Assessment Year			
<b>CAY (2019-2020)</b>												
1.	Mr.A.Ponnambalam	M.E	Anna University	2010	Principal 01.06.2011	100	-	-	2010	21 Years	Regular	-
2.	Mr.VR.Shankarganesh	M.E	Karpagam University	2014	HOD 16.05.2007	100	-	-	2014	13 years 5 Months	Regular	-
3.	Mr.S Krishnakumar	B.E	Madurai Kamaraj University	2003	Sr. Lecturer 01.04.2008	26.32	-	73.68		12 Years 6 Months	Regular	-
4.	Mr.K.Sureshkumar	M.E	Karpagam University	2018	Sr. Lecturer 20.05.2009	100	-	-	2018	11 Years 5 Months	Regular	-
5.	Mr.R.Karthik	B.E	Anna University	2013	Lecturer 11.11.2013	50.00	-	50.00		6 Years 10 Months	Regular	-
6.	Mr.N.Saravana Kumar	B.E	Anna University	2011	Sr. Lecturer 23.11.2012	30.77	-	69.23		7 Years 11 Months	Regular	-
7.	Ms.S.Kowsalya	B.E	Anna University	2018	Lecturer 01.06.2018	46.43	-	53.57		2 Years 3 Months	Regular	-
8.	Mr.R.B.Rajeshkumar	M.E	Anna University	2018	Lecturer 17.06.2019	33.33	-	66.67	2018	5 Years 8 Months	Regular	-
9.	Mrs.D.Premalatha	M.E	Anna University	2015	Lecturer 09.12.2019	100	-	-	2015	10 Months	Regular	-
10.	Mrs.N.Kavitha	M.Sc (Chemistry)	Bharathiar University	2001	Sr. Lecturer 06.07.2006	50.00	-	50.00		14 Years 2 Months	Regular	-
11.	Mr.R.Kabilmurugan	M.Sc (Maths)	Bharathiar University	2012	Lecturer 20.11.2013	-	-	100		6 Years 10 Months	Regular	-
12.	Mrs.G.SriVidhya	M.Sc (Chemistry)	Bharathiar university	2000	Lecturer 03.05.2013	100	-	-		5 Years	Regular	30.05.2020
13.	Mrs.S.Priyatharsini	M.E	Anna University	2019	Sr. Lecturer 21.11.2011	-	14.81	85.19	2019	8 Years 10 Months	Regular	-
14.	Mrs.R.Gowri	B.E	Anna University	2011	Sr. Lecturer 24.05.2013	-	41.67	58.33		7 Years 4 Months	Regular	-
15.	Mr.Karuppusamy	B.E	Anna University	2014	Lecturer 02.06.2017	-	51.72	48.28		3 Years 4 Months	Regular	-

## NBA SAR CRITERION - 5

16.	Mrs.N.Parimala	M.A (English)	Bharathiar University	1991	Sr. Lecturer 01.06.2016	-	11.76	88.24			11 Years	Regular	-
17.	Ms.D.Binnijenifer	M.A (English)	Bharathiar University	2016	Lecturer 01.06.2016	-	41.18	58.82			4 Years	Regular	30.05.2020
18.	Mrs..N.Dhamayanthi	M.Sc (Maths)	Bharathiar University	2010	Sr. Lecturer 08.06.2011	-	65.00	35.00			9 Years 2 Months	Regular	-
19.	Mrs.A.Devi	M.Phil	Bharathidasan University	2004	Sr. Lecturer 05.06.2006	-	50.00	50.00			14 Years 2 Months	Regular	-
20.	Mrs.M.Bharathi	M.Sc (Maths)	Bharathiar University	2012	Sr. Lecturer 01.06.2012	-	20.83	79.17			8 Years 2 Months	Regular	-
CAYm1 (2018-2019)													
1.	Mr.A.Ponnambalam	M.E	Anna University	2010	Principal 01.06.2011	100	-	-		2010	20 Years	Regular	-
2.	Mr.VR.Shankarganesh	M.E	Karpagam University	2014	HOD 16.05.2007	100	-	-		2014	12 years 5 Months	Regular	-
3.	Mr.S.Krishna Kumar	B.E	Madurai Kamaraj University	2003	Lecturer 01.04.2008	71.43	-	28.57			11 Years 6 Months	Regular	-
4.	Mr.K.Sureshkumar	M.E	Karpagam University	2018	Sr. Lecturer 20.05.2009	39.39	-	60.61	1	2018	10 Years 5 Months	Regular	-
5.	Mr.R.Karthik	B.E	Anna University	2013	Lecturer 11.11.2013	100	-	-			5 Years 10 Months	Regular	-
6.	Mr.N.Saravana Kumar	B.E	Anna University	2011	Sr. Lecturer 23.11.2012	100	-	-			6 Years 11 Months	Regular	-
7.	Ms.S.Kowsalya	B.E	Anna University	2018	Lecturer 01.06.2018	50.00	-	50.00			1 Year 3 Months	Regular	-
8.	Mrs.N.Kavitha	M.Sc (Chemistry)	Bharathiar University	2001	Sr. Lecturer 06.07.2006	50.00	-	50.00			13 Years 2 Months	Regular	-
9.	Mr.R.Kabilmurugan	M.Sc (Maths)	Bharathiar University	2012	Lecturer 20.11.2013	-	-	100			5 Years 10 Months	Regular	-
10.	Mrs.G.SriVidhya	M.Sc (Chemistry)	Bharathiar university	2000	Lecturer 03.05.2013	-	-	100			4 Years	Regular	30.05.2020
11.	Mrs.K.Karthikadevi	M.Phil	Madurai Kamaraj University	2000	Sr. Lecturer 25.09.2009	-	11.11	88.89			11 Years 4 Months	Regular	-
12.	Mrs.N.Parimala	M.A (English)	Bharathiar university	1991	Sr. Lecturer 01.06.2016	-	27.78	72.22			10 Years	Regular	-
13.	Mrs.A.Kosaladevi	M.Sc (Maths)	Madurai Kamaraj university	2007	Lecturer 01.06.2011	-	59.09	40.91			7 Years	Regular	30.04.2019
14.	Mr.L.Karthikkumar	B.E	Anna University	2012	Lecturer 21.05.2014	-	15.15	84.85			4 Years	Regular	30.04.2019
15.	Mr.S.Mohana venkatesh	B.E	Anna University	2018	Lecturer 01.06.2018	-	9.09	90.91			1 Month	Regular	30.04.2019
16.	Mr.D.Rammohan	M.Phil	Alagappa university	2005	Sr. Lecturer 01.07.2006	-	27.78	72.22			13 Years 3 Months	Regular	-
17.	Mr.T.Nagaraj	M.Phil	PRIST university	2017	Lecturer 01.06.2016	-	26.32	73.68			5 Years 6 Months	Regular	-

## NBA SAR CRITERION - 5

CAYm2 (2017-2018)													
1.	Mr.A.Ponnambalam	M.E	Anna University	2010	Principal 01.06.2011	100	-	-		2010	19 Years	Regular	-
2.	Mr.VR.Shankarganesh	M.E	Karpagam University	2014	HOD 16.05.2007	100	-	-		2014	11 years 5 Months	Regular	-
3.	Mr.S.Krishna Kumar	B.E	Madurai Kamaraj University	2003	Lecturer 01.04.2008	68.5 7	-	31.43			10 Years 6 Months	Regular	-
4.	Mr.K.Sureshkumar	M.E	Karpagam University	2018	Sr. Lecturer 20.05.2009	42.86	-	57.14		2018	9 Years 5 Months	Regular	-
5.	Mrs.N.Saranya	B.E	Anna University	2011	Lecturer 25.05.2012	100	-	-			4 Years	Regular	30.04.2018
6.	Mr.R.Karthik	B.E	Anna University	2013	Lecturer 11.11.2013	57.14	-	42.86			4 Years 10 Months	Regular	-
7.	Mr.N.Saravanakumar	B.E	Anna University	2011	Sr. Lecturer 23.11.2012	68.57	-	31.43			5 Years 11 Months	Regular	-
8.	Mrs.N.Kavitha	M.Sc (Chemistry)	Bharathiar University	2001	Sr. Lecturer 06.07.2006	-	-	100			12 Years 2 Months	Regular	-
9.	Mr.R.Kabilmurugan	M.Sc (Maths)	Bharathiar University	2012	Lecturer 20.11.2013	48.15	-	51.85			4 Years 10 Months	Regular	-
10.	Mrs.G.SriVidhya	M.Sc (Chemistry)	Bharathiar university	2000	Lecturer 03.05.2013	50.00	-	50.00			3 Years	Regular	30.05.2020
11.	Mrs.K.Karthikadevi	M.Phil	Madurai Kamaraj University	2000	Sr. Lecturer 25.09.2009	-	38.89	61.11			10 Years 4 Months	Regular	-
12.	Mr.T.Nagaraj	M.Phil	PRIST university	2017	Lecturer 01.06.2016	-	50.00	50.00			4 Years 6 Months	Regular	-
13.	Mr.A.Narendrakumar	B.E	Anna University	2012	Lecturer 01.06.2012	-	19.23	80.77			6 Years 4 Months	Regular	-
14.	Mr.S.Hari Kavi Shankar	M.E	Karpagam University	2014	Lecturer 25.05.2016	-	7.69	92.31			1 Year	Regular	31.05.2019
15.	Mrs.P.Umasekari	M.Phil	Periyar University	2006	Lecturer 01.06.2016	-	18.52	81.48			1 Year	Regular	30.04.2019
16.	Mr.T.Manikandan	B.E	Anna University	2013	Lecturer 01.06.2016	-	14.63	85.37			5 Years 4 Months	Regular	-

## NBA SAR CRITERION - 5

### Student-Faculty Ratio (SFR) (25)

Year	N	F	SFR=N/F
2019-2020	180+10 =190	9.30	20.43
2018-2019	180+9 = 189	7.88	23.98
2017-2018	180+7 = 187	7.91	23.64
Average SFR for all three assessment years			22.68

Provide the information about the regular and contractual faculty as per the format mentioned below:

Year	Total number of regular faculty in the department	Total number of contractual faculty in the department
CAY(2019-2020)	20	0
CAYm1(2018-2019)	23	0
CAYm2(2017-2018)	22	0

### Faculty Qualification (25)

#### Faculty Qualification Index (20)

Year	X	Y	F	FQ=2.0 x [(10X +7Y)/F]
2019-2020	5	15	7	44.29
2018-2019	5	18	7	50.29
2017-2018	5	17	7	48.29
Average Assessments				47.62

## NBA SAR CRITERION - 5

Availability of Faculty/principal of that discipline with PhD. Qualification (05)

NIL

Faculty Retention (20)

Sl. No.	Year	Total No. of Faculty Available	Total No. of Faculty Retained	Percentage of Faculty Retention
1	2019 – 2020 (CAY)	18	22	82
2	2018 – 2019 (CAY m1)	19	22	86
Average percentage of Faculty Retention				84.09

Faculty as participants in Faculty development/training activities (42)

Sl.No	Name of the Faculty	CAYm2 (2017-18)	CAYm1 (2018-19)	CAY (2019-20)
1	Mrs.M.Bharathi	1	1	2
2	Ms.D.Binnijenifer	-	1	1
3	Mrs.A.Devi	1	1	2
4	Mrs..N.Dhamayanthi	1	1	1
5	Mrs.R. Gowri	2	2	3
6	Mr.S.Hari Kavi Shankar	1	1	-
7	Mr.R.Kabilmurugan	1	2	1
8	Mr.R.Karthik	2	2	1
9	Mrs.K.Karthikadevi	1	1	2
10	Mr.L.Karthikkumar	1	2	-
11	Mr.R.Karuppusamy	2	3	3
12	Mrs.N.Kavitha	1	2	1
13	Mrs.A.Kosaladevi	1	2	-
14	Ms.S.Kowsalya	-	4	1

## NBA SAR CRITERION - 5

15	Mr.S.Krishnakumar	1	2	2
16	Mr.T.Manikandan	1	1	2
17	Mr.T.Nagaraj	1	1	2
18	Mr.A.Narendrakumar	1	1	1
20	Mrs.N.Parimala	-	2	1
21	Mr.A.Ponnambalam	5	2	1
22	Mrs.D.Premalatha	-	-	3
24	Mrs.S.Priyatharsini	2	5	1
25	Mr.R.B.Rajeshkumar	-	-	3
26	Mr.D.Rammohan	5	1	2
27	Ms.N.Saranya	2	-	-
28	Mr.N.Saravanakumar	1	2	1
29	Mr.VR.Shankarganesh	5	2	3
30	Mrs.G.Srividhya	1	1	0
31	Mr.K.Sureshkumar	1	5	3
32	Mrs.P.Umasekari	-	1	-
<b>Sum</b>		<b>41</b>	<b>51</b>	<b>43</b>
<b>RF= Number of Faculty required to comply with 25:1 Student Faculty ratio as per 5.1</b>		<b>7.48</b>	<b>7.56</b>	<b>7.60</b>
<b>Assessment = <math>6 \times (\text{Sum}/0.5\text{RF})</math> (Marks limited to 30)</b>		<b>30.00</b>	<b>30.00</b>	<b>30.00</b>
<b>Average assessment over three years (Marks limited to 30)</b>		<b>30.00</b>		

## NBA SAR CRITERION - 5

a. Organized/ Conducted FDPs and STTP by this department at State / National Level (12)

S. No	Academic Year	Total No. of Programme conducted
1.	2019-2020	3
2.	2018-2019	3
3.	2017-2018	2
<b>Total</b>		<b>8</b>

S.No	Date	Name of the event	Name of the Programme	Name of the Resource Person
<b>CAY (2019-2020)</b>				
1	28.01.2020 to 02.02.2020	FDP	Electronics For Space Applications	Mr.M.Balu, Maintenance Manager, LECS, Coimbatore Mr.V.R. Shankar Ganesh, HOD/EEE Ms.S.Kowsalya, Lecturer/EEE
2	16.01.2020 to 21.01.2020	STTP	Emerging trends in Energy Efficient Electrical Machines	Mr.P.Mariaraja, Assistant Professor/EEE, P. A. College of Engineering and Technology, Pollachi. Mr.V.R. Shankar Ganesh, HOD/EEE Mr.M.Balu, Maintenance Manager, LECS, Coimbatore
3	24.06.2019 to 26.06.2019	FDP	Evolution in Power Systems	Mr.S.Manikandan, AEE, TANGEDCO Mr.V.R. Shankar Ganesh, HOD/EEE Mr.K.Sureshkumar, Senior Lecturer/EEE

## NBA SAR CRITERION - 5

CAYm1 (2018-2019)				
1	17.01.2019 to 22.01.2019	STTP	Recent Trends In Variable Speed Drives	Mr.S.Manikandan, AEE, TANGEDCO
				Mr.R.Karthik, Lecturer/EEE
				Ms.S.Kowsalya, Lecturer/EEE
2	06.12.2018 to 10.12.2018	FDP	Recent Trends In Energy Auditing	Mr.D.Babu, AEE, TANGEDCO
				Mr.K.Sureshkumar, Senior Lecturer/EEE
3	16.07.2018 to 20.07.2018	FDP	Electrically operated vehicles	Mr.D.Babu, AEE, TANGEDCO
				Mr.K.Sureshkumar, Senior Lecturer/EEE
				Mr.R.Karthik, Lecturer/EEE
CAYm2 (2017-2018)				
1	30.11.2017 to 04.12.2017	STTP	Substation automation	Er. V.Suresh M.E AEE,TNEB, Aliyar Substation
				Mr.P.Mariaraja, Assistant Professor/EEE, P. A. College of Engineering and Technology, Pollachi.
				Ms.N.Saranya, Lecturer/EEE
2	01.06.2017 to 05.06.2017	FDP	Power Plant Components and their Efficiency	Mr.Balu, Maintenance Manager, LECS, Coimbatore
				Mr.V.R. Shankar Ganesh, HOD/EEE
				Mr.R.Karthik, Lecturer/EEE

## NBA SAR CRITERION - 5

### Product development, Consultancy, Manufacturing contracts, testing contracts (8)

Sl.No	Academic Year	Project Title	Duration	Funding agencies	Budget
1	2019-2020	12HP VFD Based Pressure Booster Panel for Multistage Pump	3 Months	All zone system Pvt Ltd, Coimbatore	10,500
2	2018-2019	BLDC Drive for Textile Application	3 Months	MEGA Tech Electronic Instruments Pvt Ltd, Coimbatore	11,000
		Automated Gate System with RFID	4 Months	All zone system Pvt Ltd, Coimbatore	9,000
3	2017-2018	Waste water Treatment Control Panel	3 Months	Mighty Electronics Pvt Ltd, Coimbatore	10,500

### Faculty Performance Appraisal and Development System (FPADS) (30)

#### A. A well-defined FPADS instituted for all the assessment years (05)

The assessment is based on:

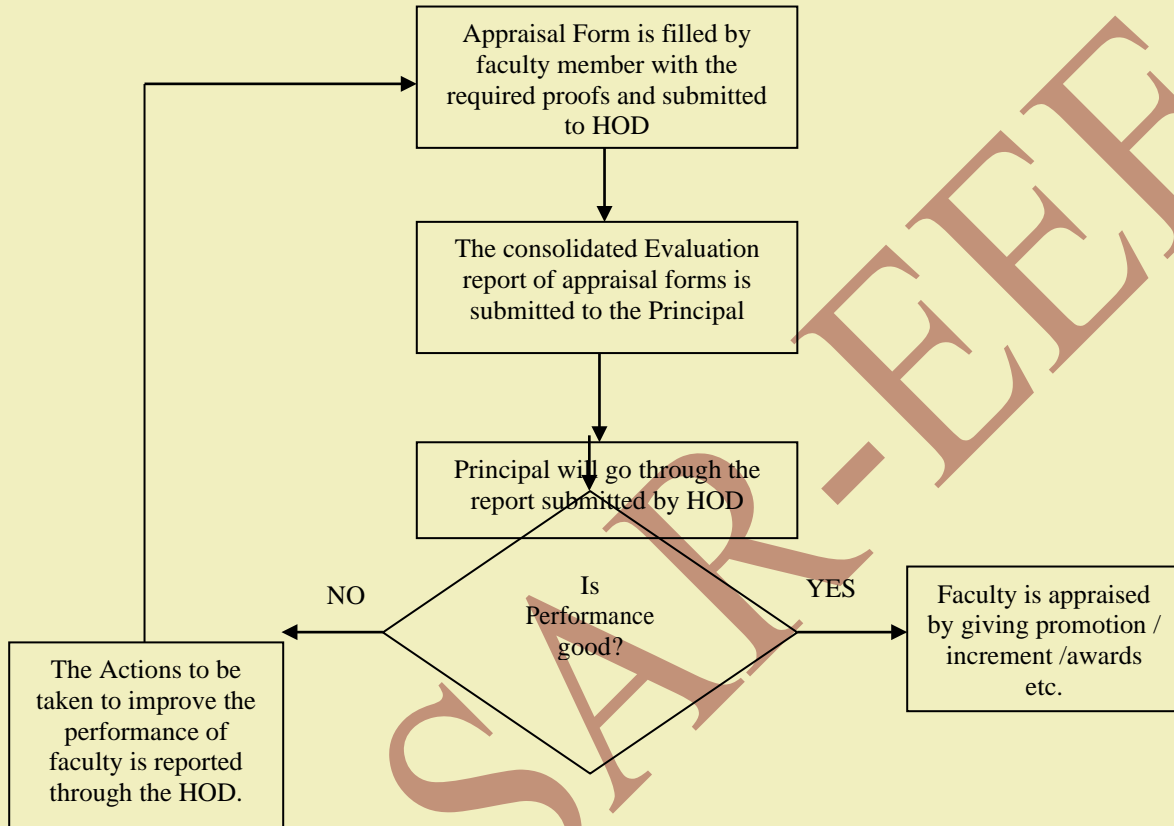
- A well-defined system for faculty appraisal for all the assessment years.

The Department makes use of the following form for evaluating the performance of faculty.

<b>FACULTY SELF APPRAISAL FORM</b>	
1. Technical papers published in journals/conferences(national international level)	(03 points)
2. Achievements (Project sanctions, prizes and Awards)	(03 points)
3. Seminars/workshops/STTP/FDP/Conferences/Industrial Training etc attended/conducted	(02 Points)
4. Value added courses Conducted	(02 Points)
5. Books/Notes Published	(02 Points)
6. Subject(Theory) Handled and Board Examination Results	(04 Points)
7. Contribution to the Institute other than Academic activities	(02 Points)
8. Any other Achievements/Information	(02 Points)
<b>Total: 20 Points</b>	
** Kindly add separate sheets if necessary	
Signature of the Staff	Principal
HoD	

# NBA SAR CRITERION - 5

## B. Its implementation and effectiveness (15)



### • Its implementation and effectiveness (15)

The innovations and self updating skills of the faculty members are evaluated through the appraisal form shown above. To fulfill all the fixations in the appraisal form faculty member required to do the following:

- Need to publish more papers in refereed/SCI Journals in their specialization.
- Need to Conduct / attend more number of Seminars/workshops /STTP/FDP/ Conferences/Industrial Training
- Publish Books / Notes
- Better Performance in academics
- Get sanctions from various funding agencies for Research / Seminars.

## NBA SAR CRITERION - 5

The above said activities will indirectly stimulate the skills of faculty members. This will also enrich the knowledge of students to become competitive in the modern world.

### C. Details of qualification up-gradation of faculty (10)

S.No	Name of the faculty with designation and department	Degree	Year of joining	Year of completion	Name of the College/University
1	Mr.K.Sureshkumar, Senior Lecturer/EEE	M.E	2015	2018	Karpagam University, Coimbatore
2	Mrs.N.Saranya Lecturer/EEE	M.E	2016	2019	Anna University
3	Mrs.S.Priyatharsini Senior Lecturer/ECE	M.E	2016	2019	Anna University

Conference/paper publishing details:

S.No	Name of the faculty with designation	Date	Degree	Name of the Paper	Name of the College/University
1	Mr.K.Sureshkumar, Senior Lecturer/EEE	20.04.2018	M.E	Multi Converter Unified Power Quality Conditioning (MC-UPQC) for various Loads with ANN Approach to Two Source Concept	Karpagam University, Coimbatore

## NBA SAR CRITERION - 6

<b>CRITERION 6</b>	<b>FACILITIES AND TECHNICAL SUPPORT</b>	<b>100</b>
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Availability of adequate, well-equipped classrooms to meet the curriculum requirements (10)

ROOM DESCRIPTION	CLASS ROOM NUMBER	USAGE	SHARED/ EXCLUSIVE	CAPACITY (SQ.M)	(REQUIRED) ADEQUACY AS PER NORMS	AVAILABLE FACILITIES
Class room	MB-202	I-EEE	EXCLUSIVE	75 Sq.m	66 Sq.m	Black board, Notice Board, Different Charts, Benches, Fans, Lights, Dustbin.
	MB-203	II-EEE	EXCLUSIVE	72 Sq.m	66 Sq.m	Black board, Notice Board, Different Charts, Benches, Fans, Lights, Dustbin.
	MB-205	III-EEE	EXCLUSIVE	72 Sq.m	66 Sq.m	Black board, Notice Board, Different Charts, Benches, Fans, Lights, Dustbin.
Drawing Hall	P2-301	I-EEE	SHARED	156Sq.m	132 Sq.m	Black board, Notice Board, Different Charts, Benches, Fans, Lights, Dustbin.
Smart Class	MB-202	EEE dept.	EXCLUSIVE	75 Sq.m	66 Sq.m	LCD Projector, one computer, LAN Connectivity, Audio system, Smart Board, White board, Notice Board, Different Charts, Chairs, Fans, Lights, Dustbin.
Seminar Hall	P2-001	All dept.	SHARED	150 Sq.m	156 Sq.m	LCD Projector, one computer, LAN Connectivity, Audio system, Smart Board, White board, Notice Board, Different Charts, Chairs, Fans, Lights, Dustbin.
Auditorium	MPH	All dept.	SHARED	842 Sq.m	842 Sq.m	One computer, LAN Connectivity, Audio system, Air Conditioner, White board, Teapoy, Chairs, Fans, Lights, Dustbin.

Availability of adequate and well-equipped workshops, Laboratories and Technical manpower to meet the curriculum requirements (40)

## NBA SAR CRITERION - 6

### a) Adequacy of laboratory (10)

All Laboratories are furnished with efficient equipments for students to do their practical work during the working hours as per the time table and beyond the working hours according to their own interest. All experiments prescribed in curriculum Dote are conducted as per separate Lab schedule and some more experiments apart from syllabus were also taught to the students.

Equipments and Consumables are storing their respective racks for easy accessibility of the faculty, Technician and also students.

All the laboratories are provided with adequate display boards for necessary information to students and sufficient furniture facilities.

Table 6.2.1 Adequacy of laboratory

s.n o.	Name of the Laboratory	No. of students per Setup (Batch Size)	Weekly utilization status (all the courses for which the laboratory is utilized)
1.	Electrical workshop Laboratory	33	10 Hours/ week
2.	Electrical Machines Laboratory	33	10 Hours/ week
3.	Electrical Drives and Control	33	32 Hours/ week
4.	Electronics Laboratory	33	18 Hours/ week
5.	Project Laboratory	33	04 Hours/ week
6.	Computer Laboratory	33	18 Hours/ week

### b. Quality of laboratory: (20)

Laboratories are given more importance than theoretical class work became the students are doing all the application oriented practical work in Labs.

Every Lab is provided with separate faculty incharge and adequate facilities for the development of complete practical knowledge to the students.

The quality of every laboratory depends on its effective utilization by the students.

Observation notes are also written by the student and the sign of faculty is obtained on the same day itself.

## NBA SAR CRITERION - 6

Every practical work is done by the students himself under the guidance of concerned faculty member and the students have to write the record of the work and submit the same on next practical class.

For every Lab, the cleanliness and effectiveness is maintained for the welfare of students to fulfill their satisfied atmosphere.

For that, the safety measures like, water can, first aid boxes, fire extinguisher are maintained periodically, and students are strictly invited to wear shoes and uniform which is monitored scrupulously.

Also the display boards like DO's and DON'T's, List of experiments( Syllabus), specification of every equipment are also displayed for improving awareness of students about every technical experiments.

### c. Technical manpower support –Eligible & Adequate (10)

Table 6.2.2 Laboratory and Technical Manpower support

S. No	Name of the Laboratory	Technical Manpower support		
		Name of the technical staff	Designation	Qualification
1.	Electrical workshop lab	V.Sathyaseelan	Lab Assistant	DEEE
2.	Electrical Machines Laboratory	K.Baranidharan	Lab Assistant	DEEE
3.	Electrical Drives and Control	Mohammad Arafath.J	Lab Assistant	DEEE
4.	Electronics Laboratory	Mohammad Arafath.J	Lab Assistant	DEEE
5.	Project Laboratory	R.Kathick	Lab Assistant	DEEE
6.	Computer Laboratory	M.Malathi	Lab Technician	DCSE

## NBA SAR CRITERION - 6

### Additional facilities created for improving the quality of learning experience in laboratories (20)

#### A. Facilities(10)

##### FACILITY

Table 6.3.1 Facility

S.NO	NAME OF THE FACILITY	YEAR OF ESTABLISHMENT
1.	Electrical panel Wiring laboratory	2017-2018
2.	Transformer Designing laboratory	2019-2020

#### B. Effective Utilization (5)

##### EFFECTIVE UTILIZATION:

Table 6.3.2 Effective Utilization

S.NO	NAME OF THE FACILITY	YEAR OF ESTABLISHMENT	EFFECTIVE UTILIZATION
1.	Electrical panel Wiring laboratory	2017-2018	By using this laboratory students are understand the basic electrical panel wiring connections and testing.
2.	Transformer Designing laboratory	2019-2020	To understand the various types of transformer designs.

#### C. RELEVANCE TO PO's and PSO's (5)

##### RELEVANCE TO PO's and PSO's

Table 6.3.3 RELEVANCE TO PO's and PSO's

S.NO	NAME OF THE FACILITY	YEAR OF ESTABLISHMENT	RELEVANCE TO PO'S	RELEVANCE TO PSO'S
1.	Electrical panel Wiring laboratory	2017-2018	POs: 1,2,4,5,7	PSOs: 1,2,3
2.	Transformer Designing laboratory	2019-2020	POs: 1,2,3,4,5,7	PSOs: 1,2,3

## NBA SAR CRITERION - 6

### Laboratories: Maintenance and overall ambiance (10)

- All laboratories are equipped with hardware and software as per the requirement of curriculum and syllabus.
- Periodic service and maintenance are taken care.
- All laboratories are provided with uninterruptible power supply.
- Numbering of personal computers is done for easy maintenance and identification.
- Based on the requirement software and system up gradation will be done.
- In order to keep computers healthy, Antivirus software were installed and virus signature files are updated regularly.
- All laboratories are maintained with IN-OUT entry registers.
- Consumables are purchased for every academic year for smooth conduct of laboratories.
- Consumable issue registers are maintained for easy handling of stock.
- Internal Stock verification is conducted every year and action taken report is prepared.
- Laboratories are available beyond the working hours if necessary.
- All laboratories have good light and ventilation with tubes and fan arrangement.
- Laboratory manuals are prepared and made available to students for reference.
- All the laboratories are displayed with technical informative charts.
- Innovative projects are displayed in laboratories to motivate the students.
- All laboratories are displayed with practical session time tables, list of experiments, and list of equipment and safety measures.

### Availability of computing facility in the department (10)

No. of Computer terminals	Students Computer Ratio	Details of Legal Software	Details of Networking	Details of Printers, Scanners etc
44	4:1	Multisim 14.0 MATLAB Autocad Siemens - Logo	100 Mbps	CANON LPB 2900B Laser Printer

## NBA SAR CRITERION - 6

### Language lab (10)

The ability to communicate effectively has become a pre-requisite for anyone ventures into new profession, the need for developing such a skill is a much-felt phenomenon today. Both Governmental and Private institutions focus their attention on students to develop their Communicative Skills. As technology has entered into every aspect of human life, it has extended its advanced products into the field of communication.

In dot curriculum, life and employability skill practical present in Fourth and Fifth semester.

It establishes the learning, reading, writing and speaking skills to the students through audio and video systems.

Students are improving their personality, reading skill through language lab.

### FACILITIES

Table 6.6.1 Facilities

Room description	Name of lab	Usage	Shared / exclusive	Available facilities
Language lab	Communication lab	All Dept	Shared	Echo-free room, Projector, Mics , Computers with Internet facility, Black board, T.V., White Board, Media player with home theatre, Newspapers & Magazines.

Table 6.6.2 Computing facilities

No. of Computer terminals	Student Computer ratio	No. of hours per Week	Beneficiaries
30	1:1	04	Second and Third year Students

## NBA SAR CRITERION - 7

<b>CRITERION 7</b>	<b>CONTINUOUS IMPROVEMENT</b>	<b>75</b>
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### 7.1. Actions taken based on the results of evaluation of each of the POs & PSOs (25)

- A. Documentation of POs and PSOs attainment levels (10)
- B. Identification of gaps/shortfalls (5)
- C. Plan of action to bridge the gap and its Implementation (10)

#### POs & PSOs Attainment Levels and Actions for improvement CAYm1 (2016-2019):

Batch: 2016-2019			
POs	Target Level	Attainment Level	Observations
<b>PO 1: Basic and Discipline specific knowledge:</b> Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.			
<b>PO1</b>	2.58	<b>2.26</b>	Fundamental Engineering knowledge is nearly achieved in order to apply them in solving complex problems.
<b>Action 1:</b> Videos from NPTEL relevant to the topics is utilized to enhance the knowledge of the students. <b>Action 2:</b> Periodic Assignments is given to assess the performance of students. <b>Action 3:</b> Technical programs are arranged for the students to have an insight of the current industrial trends.			
<b>PO 2: Problem analysis:</b> Identify and analyse well defined engineering problems using codified standard methods.			
<b>PO2</b>	2.02	<b>1.81</b>	Analyzing, modeling, processing and solving the problems are moderately achieved.
<b>Action 1:</b> Tutorial classes are conducted to improve the problem solving skills. <b>Action 2:</b> More focus is given to the students on analyzing various interpretations in lab courses.			
<b>PO 3: Design/development of solutions:</b> Design solutions for well defined technical problems and assist with the design of systems components or processes to meet specified needs.			
<b>PO3</b>	2.00	<b>1.78</b>	Students acquired necessary skills to design solutions for the engineering problems are moderately achieved.
<b>Action 1:</b> Students are motivated to do assignments and analyze case studies for finding solutions to real time problems. <b>Action 2:</b> Students are encouraged to propose innovative ideas and projects for the welfare of society. <b>Action 3:</b> Students are encouraged to do mini projects to improve their designing skills.			
<b>PO 4: Engineering Tools, experimentation and testing:</b> Apply Modern Engineering Tools And Appropriate Technique to Conduct Standard Tests And Measurements.			
<b>PO4</b>	1.96	<b>1.72</b>	Competent usage of modern tool is moderately achieved. It is observed that up-gradations of tools and resources are necessary to meet the industry standards and research.
<b>Action 1:</b> Modern tools are demonstrated to the students for their enrichments to specify fulfillment of engineering applications in new industrial Area. <b>Action 2:</b> Additional practical classes are conducted for the students to analyze technical issues.			
<b>PO 5: Engineering practice for society, sustainability and environment:</b> Apply appropriate technology in context of society, sustainability, environment and ethical practices.			
<b>PO5</b>	1.74	<b>1.56</b>	The students' awareness towards professional engineering practices is reasonably achieved.

## NBA SAR CRITERION - 7

<b>Action 1:</b> Students are motivated to carryout projects which caters to societal needs, health monitoring, safety aspects in hazardous environments.			
<b>Action 2:</b> Students are advised to be members in professional societies like IETE, IE (I) etc. to build relationship with outside world and contribute to the needs of society.			
<b>PO 6: Project management:</b> Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well- defined engineering activities			
<b>PO6</b>	1.89	<b>1.69</b>	Guidance in planning, allocating responsibilities and setting timelines to meet goals and management skills are moderately attained.
<b>Action 1:</b> Leadership qualities are inculcated in students by allowing them to participate in project contest and other technical events.			
<b>PO 7: Life-long learning:</b> Ability to analyze individual needs and engage in updating in the context of technological changes			
<b>PO7</b>	1.90	<b>1.68</b>	Emphasis is made based on the up-gradation of knowledge and modern technologies are moderately achieved.
<b>Action 1:</b> Students are motivated to undergo online courses.			
<b>Action 2:</b> Students are encouraged to participate in various technical competitions and events.			
<b>Action 3:</b> Students are motivated to carry out self learning and self discussion.			

### Programme Specific Outcomes (PSO) CAYm1 (2016-19):

Batch: 2016-2019			
PSOs	Target Level	Attainment Level	Observations
<b>PSO1:</b> To make the students to understand, model, analyze and design of electrical science and apply them to electrical and electronics engineering problems			
<b>PSO1</b>	2.46	<b>2.14</b>	The skill set of students in modeling and designing in the field of electrical engineering are moderately attained.
<b>Action 1:</b> More technical programmes are conducted to gain knowledge through association activities and technical forums.			
<b>Action 2:</b> Students are inspired to participate in technical events to strengthen their knowledge and to propose innovative ideas.			
<b>PSO2:</b> To review, prepare and present technological developments			
<b>PSO2</b>	2.12	<b>1.86</b>	Involvement of modern tool usage among students is considerably achieved.
<b>Action 1:</b> Students are encouraged to participate in workshops and hands-on training programme to enrich their practical skills.			
<b>Action 2:</b> More value added courses are initiated for the students to have clear idea on the modern tool.			
<b>PSO3:</b> To exhibit a commitment to professional and ethical practices, and prepare themselves for lifelong learning			
<b>PSO3</b>	1.70	<b>1.50</b>	Student's responsibilities among societal activities are reasonably attained.
<b>Action 1:</b> Students are motivated to include all technical parameters and constraints according to National and International safety norms and to address environmental concerns.			

## NBA SAR CRITERION - 7

### 7.2. Improvement in Success Index of students without backlog(10)

Items	LYG(2016-17)	LYGm1(2015-16)	LYGm2(2014-15)
Success index	0.14	0.34	0.42

### 7.3. Improvement in Placement, Higher Studies (10)

Assessment is based on improvement in:

- Placement: number, quality placement, core industry, pay packages etc.
- Higher studies: admissions in premier institutions.

Item	Last Year Graduate (2016-2017)	Last Year Graduate m1 (LYGm1) (2015-2016)	Last Year Graduate m2 (LYGm2) (2014-2015)
Total No. of Final Year Students (N)	59	35	37
No. of students placed in companies or Government Sector (X)	36	22	22
No. of students admitted to higher studies (Y)	10	4	6
No. of students turned entrepreneur in the respective field of engineering/technology (Z)	-	-	-
$1.25X + Y + Z$	55	31.50	33.50
Placement Index (P) : $(1.25X + Y + Z)/N$	<b>0.93</b>	<b>0.90</b>	<b>0.91</b>
<b>Average placement= <math>(P1 + P2 + P3)/3</math></b>	<b>0.91</b>		

A. Placement: number, quality placement, core industry, pay packages etc:

CAYm1: 2018-2019:

S.No.	Name of the Company	Nature of Company	Salary package offered (lakhs/annum)	Number of students Placed
1	AVALON TECHNOLOGIES	Core	1.08	12
2	LUCAS TVS	Core	1.32	14
3	MAGNA ELECTRO CASTINGS PVT LTD	Core	1.32	10
<b>Total No of offers</b>				<b>36</b>
<b>Total Number of Students Placed</b>				<b>36</b>

## NBA SAR CRITERION - 7

### CAYm2: 2017-2018:

S.No.	Name of the Company	Nature of Company	Salary package offered (lakes/annum)	No of students Placed
1	TRI PHASE TECHNOLOGIES	Core	1.44	08
2	AVALON TECHNOLOGIES	Core	0.76	06
3	MAGNA ELECTRO CASTING	Core	1.20	01
4	LUCAS TVS	Core	1.32	07
<b>Total no of offers</b>				<b>22</b>
<b>Total Number of Students Placed</b>				<b>22</b>

### CAYm3: 2016-2017:

S.No.	Name of the Company	Nature of Company	Salary package offered (lakhs/annum)	No of students Placed
1	LUCAS TVS	Core	1.32	05
2	KYB Motor Cycle Suspension India Limited	Core	1.38	04
3	TRACTORS AND FORM EQUIPMENTS	Core	1.20	08
4	NOKIA SOLUTIONS NETWORKS	Core	1.26	04
5	TRI PHASE TECHNOLOGIES	Core	1.44	01
<b>Total no of offers</b>				<b>22</b>
<b>Total Number of Students Placed</b>				<b>22</b>

### B. Higher studies:

#### CAYm1 (2018-2019):

Batch : 2016-2019			
S.No.	Name of the Student	University/College	Degree
1.	S.Abinandhan	P. A. College of Engineering and Technology, Pollachi.	B.E
2.	M.Arun	Akshaya College of Engineering and Technology, Kinathukadavu	B.E
3.	K.Babu	Hindusthan College of Engineering and Technology, Coimbatore	B.E
4.	V.Gowarnajayasri	P. A. College of Engineering and Technology, Pollachi	B.E
5.	S. Harrish	Sri Eshwar College of Engineering and Technology, Kinathukadavu	B.E

## NBA SAR CRITERION - 7

6.	V.Karthik Kumar	P. A. College of Engineering and Technology, Pollachi	B.E
7.	G Manjuladevi	Sri Eshwar College of Engineering and Technology, Kinathukadavu	B.E
8.	V.Saran Kumar	Sona College of Technology, Selam	B.E
9.	D.Saravana Kumar	P. A. College of Engineering and Technology, Pollachi	B.E
10.	B.Tamilarasi	P. A. College of Engineering and Technology, Pollachi	B.E

### CAYm2 (2017-2018):

Batch : 2015-2018			
S.No.	Name of the Student	University/College	Degree
1.	S.Haresh	Dr. Mahalingam College of Engineering and Technology, Pollachi	B.E
2.	K.Mohamed Sharook	Dr. Mahalingam College of Engineering and Technology, Pollachi	B.E
3.	V.Mano	P. A. College of Engineering and Technology, Pollachi	B.E
4.	P.Tamilarasan	P. A. College of Engineering and Technology, Pollachi	B.E

### CAYm3 (2016-2017):

Batch : 2014-2017			
S.No.	Name of the Student	University/College	Degree
1.	P.Ajith Kumar	Dr. Mahalingam College of Engineering and Technology, Pollachi	B.E
2.	R.Gokulakrishnan	P. A. College of Engineering and Technology, Pollachi	B.E
3.	N.Sadaiyasabarmathy	Pollachi Institute of Engineering and Technology, Pollachi	B.E
4.	M.Jothilakshmi	Pollachi Institute of Engineering and Technology, Pollachi	B.E
5.	P.Karunakaran	Dr. Mahalingam College of Engineering and Technology, Pollachi	B.E
6.	N.Mukil	P. A. College of Engineering and Technology, Pollachi	B.E

## NBA SAR CRITERION - 7

### 7.4. Improvement in academic performance in final Year (10)

Assessment is based on improvement in:

Items	LYG(2016-17)	LYGm1(2015-16)	LYGm2(2014-15)
Academic performance index	2.65	4.11	3.65

### 7.5. Internal Academic Audits to Review Complete Academics & to Implement Corrective Actions on Continuous Basis (10)

Items	2018-19( CAYm1)	2017-18 (CAYm2)	2016-17 (CAYm3)
Internal Academic Audits	2	2	2

### 7.6. New Facility created in the program (10)

Assessment is based on improvement in:

Items	2018-19(CAYm1)	2017-18(CAYm2)	2016-17(CAYm3)
New Facility Created	Smart classroom	Electrical panel	Internet and wifi

# NBA SAR CRITERION - 8

<b>CRITERION 8</b>	<b>STUDENT SUPPORT SYSTEMS</b>	<b>(50)</b>
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## 8. STUDENT SUPPORT SYSTEMS (50)

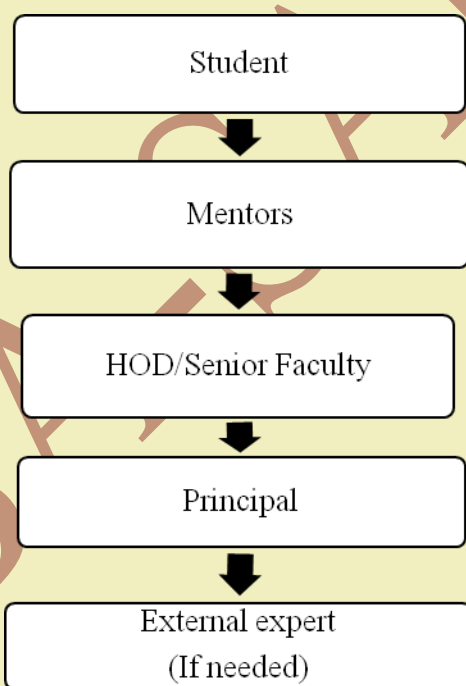
### Mentoring system to help at individual level (10)

#### A. Details of the mentoring system that has been developed for the students for various purposes and also the efficacy of such system (10)

##### a. Type of Mentoring:

- P.A.Polytechnic College consistently aspires to provide value based technical education in support and progression of students for holistic development.
- Professional guidance, personal counseling and career guidance are provided to the students for over all development.

The Figure 8.1.1 shows flow of students mentoring system of our institution



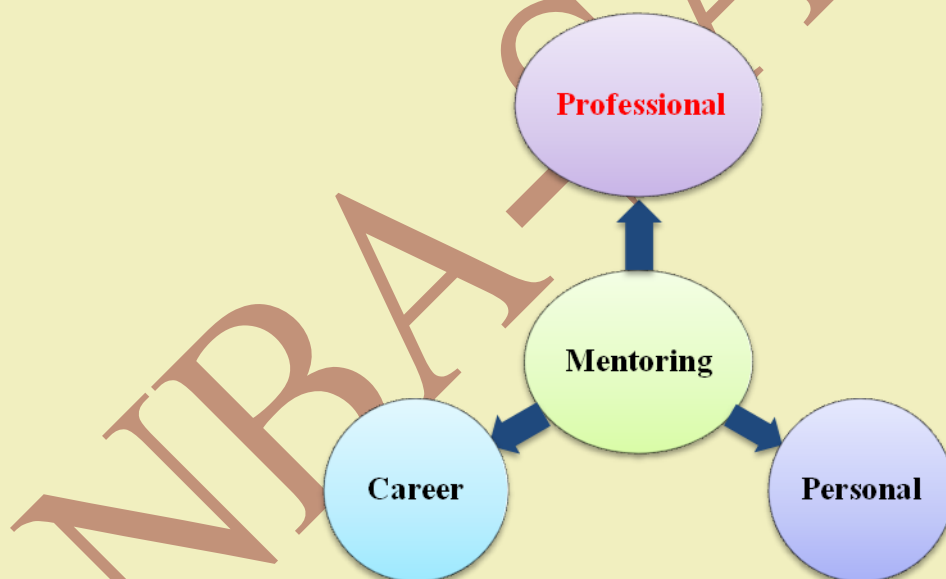
**Figure 8.1.1 Student Mentoring System**

## NBA SAR CRITERION - 8

- In addition to this, Anti-ragging committee, Anti-ragging squad, student grievance redressal cell and women's anti-sexual harassment cell have been formed to support and monitor students. If any misbehavior is found, disciplinary action will be taken.
- The Class counselors play a lead role in mentoring students in respect to academic career and personality development.
- Contact hour is scheduled to each faculty after college hours to counsel the students and understand their difficulties and provide solutions to their academic and other problems.

### **Mentoring to the students is given at all levels:**

Mentoring to the students is given in various levels on need basis. Figure 8.1.2 shows the various mentoring levels given to the students.



**Figure 8.1.2 Student Support Systems**

# NBA SAR CRITERION - 8

## 1. Professional guidance

The mentors discuss the issues related to academics. If students need any special care to improve their academic performance, special classes are arranged with immediate effect. The available financial support from the Institution in the form of fee waiver and scholarships from state government and central government is informed to the students.

### a. Personal

Personal problems of students, emotional disturbances and family related problems are discussed and counseled. Counseling is also provided by understanding the specific needs of the students and to support them.

Orientation programme is conducted for the first year students to bridge the gap between secondary education and technical education. For hostel students, when they are staying away from home for the first time, counseling is provided to enhance their confidence level. Whenever required, parents are also invited for counseling.

**Outcome:** Students are able to focus more on academic and other activities.

### b. Skill based

Counseling is provided to the students to enroll in additional courses and In-plant training which help them to develop their skills to succeed professionally.

Skill development Programmes such as Aptitude Training, C Language Training, Communication Skills, Advanced Java Programming, PLC programming, Embedded system, 3D Printing, Industrial visit and value added courses are organized to excel in placement.

**Outcome:** Students will become industry-ready.

## 2. Career advancement / Higher studies

Students are educated about the needs of the industry and awareness on the opportunities for higher studies and competitive exams.

Students are encouraged to appear for Bachelor level engineering, State and Central Government Services like TNPSC and RRB to enhance their employment prospects and higher studies.

## NBA SAR CRITERION - 8

**Outcome:** It helps the students to identify new options and opportunities for placement and higher studies.

### 3. Course work specific / Laboratory specific

Mentors encourage students to participate in activities like attending conferences, paper presentation, symposiums and Publishing articles in Newsletters.

Mentors mold students to participate in Project development and creating models in laboratory.

**Outcome:** It helps students to improve their knowledge, attitude and skills to uplift their career.

### 4. All round development

The mentoring provided by the faculty enables students to change their attitude and become socially active by participating in programmes such as NSS, RRC, Blood donation camp, Tree plantation, Yoga and Meditation.

**Outcome:** It helps the students to develop positive attitude, improves their social responsibilities and also sets goal for their future.

- **Number of faculty mentors** : Two per class
- **Number of students per mentor** : 30
- **Frequency of meeting** : Once in a month / Need based

# NBA SAR CRITERION - 8

## Feedback analysis and reward /corrective measures taken, if any (10)

### A. Methodology being followed for feedback collection, analysis and its effectiveness (05)

Feedback collected for all courses: Yes

#### Feedback collection process

Feedback from the students is collected by the following ways:

##### ➤ Direct Feedback from the Students

Every department has constituted class committees for each semester with six student representatives. The student members express their views on each subject and their needs during the meeting. The feedback is collected and submitted to the Principal through Head of the Department for further action.

##### ➤ Interactive Feedback

The Principal will chair Principal - Student meeting with the students twice in a semester regarding their academic, other activities and facilities. In this meeting, the feedback on the faculty members is also taken into consideration.

##### ➤ Feedback form

Feedback is collected directly from the students through feedback form. It constitutes with the following parameters and ratings:

#### Parameters:

- Planning and organizing sessions
- Punctuality and regularity in handling the class
- Ability to make student understand the course (Presentation and Communication skill)
- Fairness in assessment of students
- Faculty - Student Relationship

#### Ratings:

- A (10) -Excellent
- B (8) - Very Good
- C (6) - Good
- D (4) - Satisfactory
- E (2) - Below Satisfactory

The students give feedback about the faculty members who handle the subjects for them.

## NBA SAR CRITERION - 8

### c. Percentage of students who participated: 80% and above

### d. Feedback analysis process:

Feedback form is prepared based on various parameters and cumulatively calculated for 10 points. Each and every department obtains feedback from the students at the end of the semester. The sample copy of student feedback form and consolidated report is shown through the Figure 8.2.1 and Figure 8.2.2. The feedback form is given to students who rate the faculty on the given parameters. Each department compiles the feedback and calculates as per numerical rating. In case of any deviation in the rating, corrective action is initiated by the Head of the Department and the Principal. These points are discussed in the Management Review meeting.

### Outcome:

- Appraisal of faculty by students
- Betterment of Teaching-Learning process

# NBA SAR CRITERION - 8



**P. A. POLYTECHNIC COLLEGE**  
POLLACHI - 642 002

DEPARTMENT OF ELECTRONICS AND COMMUNICATION  
ENGINEERING

DEE/AC-16.1
9.12.19

2019-2020 - Even Semester

## FEEDBACK FORM - STUDENTS

### EVALUATION ON FACULTY BY STUDENTS

Please rate every teacher taught you during this semester as classified below

Your response should be A, B, C, D or E

- "A" is Excellent
- "B" is Very Good
- "C" is Good
- "D" is Satisfactory
- "E" is Below Satisfactory

DEPARTMENT:

YEAR : III/III ✓

SECTION : ECE

SEMESTER : VI

ACADEMIC YEAR : 2019-2020

S. No	NAME OF THE FACULTY	SUBJECT NAME						
		PARAMETERS						
		CHSN	BMI	MC	CHSN (Lab)	PCB (Lab)	ES (Lab)	Proj. eut.
		N.MATHI VINAYAN	S. SIVAKUMAR	P. KATHI RAJENDRAN	M. SIVAKUMAR	P. PRIYA	M. SINGH	P. SATHI RAJENDRAN
1	Planning and Organizing Sessions	A	B	A	B	B	D	B
2	Punctuality And Regularity In Holding The Class	B	B	A	B	A	B	D
3	Ability To Make Student Understand the Course (Presentation and Communication Skill)	A	A	A	A	B	A	A
4	Fairness In Assessment of Students	A	A	A	A	A	A	B
5	Faculty Student Relationship	A	A	A	A	A	B	A

NAME: V. VEERAMUTHU  
(OPTIONAL)

SIGNATURE: *V. Veeramuthu*  
(OPTIONAL)

Fig.8.2.1 Feedback Form

# NBA SAR CRITERION - 8



**P. A. POLYTECHNIC COLLEGE**  
POLLACHI - 642 002

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

2019-2020 - Even Semester

**FEEDBACK SUMMARY FORM - STUDENTS**

DECE/AC -16.2
09.12.2019

DATE OF REVIEW:  
NAME OF THE FACULTY:  
S.PRIYATHARSINI  
YEAR:II  
SUBJECT HANDLED:IE

DEPT : *FCE*

SECTION :  
SEMESTER : *IV*

**PARAMETERS**

1. Planning and organizing sessions
  2. Punctuality and regularity in holding the class
  3. Ability to make student understand the course ( Presentation and Communication skill)
  4. Fairness in assessment of students
  5. Faculty - Student Relationship
- A (10) - Excellent. B (8) - Very Good C (6) - Good D (4) - Satisfactory E (2) - Below Satisfactory

S. NO	1	2	3	4	5	S. NO	1	2	3	4	5	S. NO	1	2	3	4	5
1	10	10	10	8	10	17	10	10	10	10	10	33					
2	10	10	10	10	10	18	8	10	8	8	8	34					
3	10	10	10	8	10	19	10	10	10	10	10	35					
4	6	8	8	6	10	20	10	8	10	10	8	36					
5	8	8	10	10	8	21	10	10	10	8	10	37					
6	10	10	10	10	10	22	10	10	10	10	10	38					
7	8	8	8	8	8	23	10	10	10	8	10	39					
8	10	10	10	10	10	24	8	8	8	6	10	40					
9	10	10	10	10	10	25	10	10	10	10	10	41					
10	10	10	10	10	10	26						42					
11	10	10	8	10	10	27						43					
12	10	10	10	8	10	28						44					
13	8	8	8	8	10	29						45					
14	10	8	10	6	10	30						46					
15	10	8	10	6	10	31						47					
16	10	10	10	8	10	32						48					

PARAMETER

1 2 3 4 5  
9.4 9.4 9.5 8.6 9.7

AVERAGE SCORE (Max. 10)

CLASS COUNSELLOR

HOD

# NBA SAR CRITERION - 8

## B. Record of Corrective Measures taken (05)

### a. Rewards:

- ✓ Feedback is considered for faculty appraisal.
- ✓ Recommended for **Best Faculty** award in Annual Day function

### b. Corrective Measures:

- ✓ The Faculty members who score less than 7.5 out of 10 will be counseled by the Head of the Department and the Principal for improving their academic performance.
- ✓ The deficiencies are rectified through counseling and the performance is recorded in the faculty appraisal.
- ✓ Feedback helps to make appropriate changes in the teaching methodologies of the particular faculty.
- ✓ Faculty members are encouraged to participate and organize Faculty Development Programme, workshops, seminars and conferences.

### c. Indices used for measuring quality of teaching-learning and summary of index values for all courses/teachers:

S.No	Performance Indices	Index value
1	Planning and organizing sessions	10
2	Punctuality and regularity in handling the class	10
3	Ability to make student understand the course (Presentation and Communication skill)	10
4	Fairness in assessment of student	10
5	Faculty - Student Relationship	10

Average rating achieved in feedback summary form is used as indices.  
It is available for all faculty members at department level.

# NBA SAR CRITERION - 8

**d. Number of corrective actions taken:** Once in a Semester / Need based

## 8.3. Feedback on facilities (5)

### A. Student feedback on facilities, analysis and corrective action taken (05)

Through the effective feedback system, the facilities required for the students, parents and staff are provided. The following methods are adopted to collect the feedback.

- The suggestion box is placed in all the departments and the College office wherein students post their feedback regarding facilities and other issues.
- Feedback on all aspects is collected from alumni during Alumni Meet. Feedback is analyzed and corrective actions are taken.
- Feedback is obtained from parents during parents meeting and it is reviewed by the respective Head of the Department who proposes action for the improvement.
- Any issues related to basic amenities, sports and games are reported to the Principal through the faculty advisor and the Head of the Department for necessary action.

#### 1. Infrastructure

Class committee meeting is held thrice in a semester wherein students give feedback on any issues related to class rooms, laboratories and internet facilities. The addressed issues will be rectified. Provisions made in the infrastructure for physically challenged students are,

- ✓ Ramp at vantage points.
- ✓ Accommodation is provided on the ground floor.

#### 2. Library

Suggestion Register and library advisory committee are available for the faculty and students to provide feedback and appropriate corrective actions are taken.

#### 3. Transport

Suggestions related to transport facilities brought by students / parents as well as faculty are reported to the Principal for further action.

# NBA SAR CRITERION - 8

## 4. Housekeeping

The campus is maintained as clean, green and eco - friendly environment.

## 5. Hostel

Hostel committee meetings are conducted for hostellers regarding water, food, electricity and other facilities and brought to the notice of the Deputy Warden and the Warden for further action.

Anti-ragging squad visits the hostels for interaction with the students.

## 6. Medical assistance

First aid box, Vehicle in case of emergency and health insurance are provided to students and staff.

## Corrective Action Taken

Listed below are the major issues that were resolved for the benefit of the students.

- New bus routes are arranged due to students requested to facilitate their transport destination
- Food court space has been expanded
- Additional facilities for sports and games
- Gymnasium has been renovated.
- Internet speed has been enriched upto 100 Mbps.
- Wi-Fi connectivity has been provided.
- Dust bins are provided at more places
- Renovation of toilet and bathrooms

## 8.4 CAREER GUIDANCE, TRAINING, PLACEMENT (20)

### A. Availability (05)

The Institution has a dedicated Training and Placement Cell and Higher Education Cell through which Training and Placement and awareness to Higher Education are provided to the students.

# NBA SAR CRITERION - 8

## B. Management (10)

### 1. Career guidance

- Career counseling guidance is offered by the senior academicians and industry experts.
- Human Resource personnel are invited regularly to interact with students.
- Students are guided to get admission in reputed Higher Education Institutions.

The following Table 8.4.1 and 8.4.2 shows list of events organized by the Institution.

Table 8.4.1 List of events organized for career guidance

Sl. No.	Event Organized	Resource Person	Date
1.	Soft Skills for Successful Career	Mr.Wonder Joky, Vice President (Operations), CIEL HR, Coimbatore.	05.02.2020
2.	Career planning and Development	Mr.S.Dwarakanathan, Ex. Vice President, Engg.R&D Brakes India Limited, Chennai.	16.08.2019
3.	C Programming	Mr.J.Santhosh, Lecturer/Computer Engineering, P.A.Polytechnic College, Pollachi.	08.02.2019
4.	Team Work and Stress Management	Mr.Sugumaran uppili, Co-Founder and Chief Technology Officer, Haritham Technologies , Coimbatore.	25.01.2019

## NBA SAR CRITERION - 8

5.	Aptitude and soft skills	Mr. M. Thanikachalam, Director , AWAKE IAS/IPS Academy, Coimbatore.	14.12.2018
		Mrs.K.Karthika devi, Senior lecturer/English, P.A.Polytechnic college, Pollachi.2	
6.	Awareness Programme on competitive examinations	Mr. K.Krishnamoorthy, Deputy Superintendent of Police, SDO,Pollachi.	08.02.2018
7.	Leadership Skills and Time Management	Thiru.M. Malmarugan, Vice president(Operations) Magna Electro Castings Ltd, Coimbatore.	30.12.2016
8.	“How Do I Find the Right Career for Me”	Prof.P.Surya narayanan, Former professor, Department of English, Government Arts College, Coimbatore.	10.06.2016

Table 8.4.2 List of events organized for Higher Education Cell

S.No	Event Organized	Resource Person	Date
1.	1.Level of education and employment 2.Online e-learning	Dr.T.Varunkumar HoD/Mechanical engineering, P.A College of engineering and Technology, Pollachi.	26.02.2019
2.	Leadership is the context of higher education.	Dr.L.Murali, HoD /Electronics and communication Engineering, P.A College of Engineering and Technology, Pollachi.	17.09.2018

## NBA SAR CRITERION - 8

3.	Integrating practical knowledge into the education system	Thiru.S.Manikandan, Executive Engineer, TANGEDCO(FORMER LY TNEB), Consumer Grievance Redressal Forum, Udumalpet EDC, Udumalpet .	04.01.2018
4.	Life Innovation	Dr.D.Sentthilkumar, Professor, Mechanical engineering, P.A College of engineering and Technology, Pollachi.	06.03.2017

### 2. Training and Placement Cell

An exclusive Training and Placement Cell is functioning for providing continuous training and placement assistance to the students during their course of study.

#### a. Training Facilities

- Impart training on Soft Skills, Confidence – building and Personality Development.
- Professional experts engage and train students in a proactive way.
- Students are encouraged to meet industry personnel directly to explore opportunities.
- For improving their employability, skill based trainings, soft skills, technical, analytical and logical skills are provided by internal trainers and industry experts.
- The list of regular training programmes offered by the Institute is given in the Table 8.4.3

## NBA SAR CRITERION - 8

Table 8.4.3 List of training programmes offered by the institution

S.No	Training Provided to the Students	Name of the Expert/Faculty Members
1.	Aptitude Training	Mr. M. Thanikachalam, Aptitude Trainer, Coimbatore.
2.	Technical skills and Group discussion	Mr.S.Krishnaraj,Lecturer/ Mechanical Mr.A.Udhayakumar, Lecturer/ Mechanical Mr.R.Venkatraman, Lecturer/ Automobile Mr.R.B.Rajeshkumar, Lecturer/EEE Mrs.S.Priyadharshini, Lecturer/ ECE Mr.S.Jayaprakash, Lecturer/ CE Mr.T.Manikandan, Lecturer/Civil P.A Polytechnic college, Pollachi.
3.	C Programming	Mr.S.Jayaprakash Lecturer/ Computer Engineering P.A.Polytechnic College, Pollachi.
4.	Communication Skills	Mrs.K.Karthika devi, Senior Lecturer/English Ms.M.Vaitheeswari , Lecturer/English First year Engineering, P.A.Polytechnic college, Pollachi.
5.	Ethical values	Dr. D.Ganeshkumar, Professor/ Department of Electronics and Communication and Engineering, P.A. College of Engineering and Technology, Pollachi.

## NBA SAR CRITERION - 8

- Apart from training, to enhance the innovative thinking and managerial skills of young minds, students are encouraged to organize and participate in various events like paper presentations, technical symposia and project displays.
- Also, each department conducts value added courses in their areas of specialization to overcome the curriculum gap. The list of courses offered in each department is given in the Table 8.4.4

Table 8.4.4 List of Value added courses offered by the Departments

S.No.	Department	Name of the course
1	Computer Engineering	<ul style="list-style-type: none"> <li>➤ C Programming</li> <li>➤ Mobile phone servicing</li> <li>➤ Hardware and Networking</li> <li>➤ Cloud Computing</li> <li>➤ Data base and SQL</li> <li>➤ Emerging Wireless Technology</li> <li>➤ Data ware housing and industries standards</li> </ul>
2	Electronics and Communication Engineering	<ul style="list-style-type: none"> <li>➤ Embedded system</li> <li>➤ PCB Designing and Fabrication</li> <li>➤ VLSI Design</li> <li>➤ C programming</li> <li>➤ HDL language for VLSI design</li> <li>➤ Mobile phone servicing</li> </ul>
3	Electrical and Electronics Engineering	<ul style="list-style-type: none"> <li>➤ Power electronics circuits and variable speed drives</li> <li>➤ MATLAB programming for Power electronic Circuits and drives</li> <li>➤ Workshop on PLC</li> <li>➤ Introduction to Industrial Electrical Systems</li> <li>➤ Programming on Arduino</li> <li>➤ Industrial automation using PLC</li> <li>➤ Electrical Components Identification and testing</li> </ul>

## NBA SAR CRITERION - 8

4	Mechanical Engineering	<ul style="list-style-type: none"><li>➤ Solid works</li><li>➤ 3D printing</li><li>➤ Solar PV Technology</li><li>➤ CNC &amp; Robot Technology</li><li>➤ Design for Production &amp; Quality Program</li><li>➤ “NDT”</li></ul>
5	Civil Engineering	<ul style="list-style-type: none"><li>➤ Revit Architecture</li><li>➤ STADD Pro</li><li>➤ CAD</li><li>➤ Total station-Survey</li><li>➤ Quantity survey</li></ul>
6.	Automobile Engineering	<ul style="list-style-type: none"><li>➤ CAD Modelling</li><li>➤ 3D printing</li><li>➤ Computerized wheel alignment and wheel balancer.</li><li>➤ CNC &amp; Robot Technology</li><li>➤ Two wheeler servicing</li></ul>

### Facilities for training and placement:

- Air Conditioned Multimedia enabled auditorium
- Air Conditioned Conference hall and Seminar hall
- Group Discussion and Interview/Counselling Chambers.


### b. Placement activities

- In each department, two coordinators are appointed to cater the needs for career guidance and training. Training and Placement Officer (TPO) of the Institution along with the department coordinators works out to achieve goal.
- Placement coordinators provide industry database to the students for opting their career.

The following Table 8.4.5 shows the list of our recruiters.

# NBA SAR CRITERION - 8

Table 8.4.5 List of Recruiters

<p><b>AVALON TECHNOLOGIES</b></p>	
<p><b>KYB MOTOR CYCLE SUSPENSION INDIA PVT LTD.</b></p>	
<p><b>TRIPHASE TECHNOLOGIES</b></p>	
<p><b>RENAULT NISSAN</b></p>	
<p><b>CALIBER INTERCONNECT SOLUTIONS (P) LTD</b></p>	
<p><b>HUNDAI MOTORS</b></p>	
<p><b>ANUGRAHA VALVE CASTINGS LTD, COIMBATORE.</b></p>	
<p><b>DAEBU AUTOMOTIVE SEAT INDIA PVT,LTD, SRIPERAMBUDUR.</b></p>	
<p><b>LUCAS TVS PADI</b></p>	
<p><b>MAGNA ELECTRO CASTINGS PVT,LTD, KINATHUKADAVU</b></p>	
<p><b>CAMERON</b></p>	
<p><b>INTEGRA AUTOMATION</b></p>	

# NBA SAR CRITERION - 8

## C .Effectiveness (05)

The following Table 8.4.6 shows our student placement record.

Table 8.4.6 Placement Details

Academic Year	Department	Number of final Year Students	Total Number of final year Students	Number of Students Placed	Number of Students admitted to Higher Studies	Number of Students turned Entrepreneur	Total Number of Students	%
2018-2019	CE	32	470	14	11	-	321	68.29
	ECE	36		20	2	1		
	EEE	59		36	10	-		
	MECH	250		145	47	1		
	AE	60		20	4	1		
	CIVIL	33		-	9	-		
2017-2018	CE	22	419	10	9	-	298	71.12
	ECE	28		18	9	1		
	EEE	35		22	4	1		
	MECH	244		141	41	-		
	AE	58		22	12	2		
	CIVIL	32		-	6	-		
2016-2017	CE	16	404	7	5	-	278	68.81
	ECE	20		13	5	-		
	EEE	37		22	6	-		
	MECH	237		122	58	1		
	AE	51		17	14	-		
	CIVIL	43		-	8	-		

# NBA SAR CRITERION - 8

## 8.5. Entrepreneurship Cell /Technology Business Incubator (05)

### A. Availability (01)

Entrepreneurship Initiatives:

The College has identified the entrepreneurship development as one of the important needs in the context of growing opportunities for enterprises in India. Therefore, as a part of entrepreneurship, P.A. Polytechnic College established an Entrepreneurship Development Cell (EDC) to develop significant percentage of students towards technocrat entrepreneurs who will become a vital role for generation of wealth and employment to our country.

### B. Management (02)

The responsibility of EDC is to develop the entrepreneurial skills among the students through conducting/organizing programs like Entrepreneurship Awareness Camp (EAC), workshops, guest lectures, seminars, skill development and hands-on training programme. Successful entrepreneurs, first generation entrepreneurs, academicians, experts from banking and financial organization are invited to share their experiences and ideas with the students. Also, industry visits are arranged with a view to know more about the products being manufactured, plant layout, best practices in industries, manufacturing facilities and processes. The Table 8.5.1 shows the constitution of EDC.

**Table 8.5.1 EDC Committee Members**

S.No.	Name	Designation/Department	Portfolio
1.	Mr.A.Ponnambalam	PRINCIPAL	Convener
2.	Mr.S. Balakrishnan	Sr. Lecturer/Automobile	Co-convener
3.	Mr. N.Devakarhik	Sr. Lecturer/ Mechanical	Coordinator
4.	Mr. K.Sureshkumar	Sr. Lecturer /Electrical and Electronics	Member
5.	Mr.S.Krishnaraj	Lecturer/ Mechanical	Member
6.	Mr. S.Jayaprakash	Sr. Lecturer /Computer	Member
7.	Mr .T. Manikandan	Sr. Lecturer/ Civil	Member
8.	Mrs.S.Priyadharshini	Sr. Lecturer/ Electronics and Communication	Member
9.	Ms.M.Vaitheeswari	Lecturer/First Year	Member

## NBA SAR CRITERION - 8

The EDC established in our institution is determined to acquire the following objectives:

- To conduct/organize entrepreneurship awareness program for students every year
- To initiate student entrepreneurship competency
- To produce quality entrepreneurs
- To organize project exhibition towards entrepreneurship development

The following Table 8.5.2 shows the list of events organized by EDC.

**Table 8.5.2 List of events organized by EDC**

<b>2019-2020</b>				
<b>S. No</b>	<b>Event organized</b>	<b>Date</b>	<b>Resource person with designation</b>	<b>Number of Students benefited</b>
1.	Essential qualities for Entrepreneur	27.09.2019	Mr.S.Vignesh, Sr.Hr.Manager Integra Automation Systems private Limited, Kurunalli palayam, Pollachi.	386
2.	Entrepreneur ship- Opportunities and challenges	31.01.2020	Mr.M.Muthuraj, Managing Director, Profenna Industrial Training centre, Coimbatore.	390
<b>2018-2019</b>				
1.	Entrepreneurship Awareness Camp	25.09.2018	Mr .A. Ponnambalam, Principal, P.A Polytechnic College, Pollachi.	448

## NBA SAR CRITERION - 8

			Dr.S.Suresh Assistant Professor/Computer Science Engineering, P.A.College of Engineering and Technology, Pollachi.	
			Dr.D.Senthilkumar Prof essor/ Mechanical Engineering, P.A.College of Engineering and Technology, Pollachi.	
			Mr.N.Senthilkumar, HoD/Mechanical Engineering, P.A.Polytechnic College, Pollachi.	
2.	Guest lecture on Business start up	25.02.2019	Mr.A.K.Muthusamy, Managing Director, ARTIN Builders, Pollachi .	451
<b>2017 – 2018</b>				
1.	How to become an Entrepreneur	08.09.2017	Mr.J.Sridhar Prabhu, All zone systems private limited, Coimbatore.	405
2.	One day seminar on Entrepreneurship : Launching your start-up	26.02.2018	Mr.M. Manthrachalam, Senior Manager-Personal, Magna Electro Castings limited, Coimbatore.	384
2016-2017				
1.	Essentials of Start-up	02.09.2016	Mr. V. Angappa, Proprietor, Mega tech scientific instruments limited, Coimbatore.	383

## NBA SAR CRITERION - 8

2.	Opportunities in Government sector for entrepreneur	10.02.17	Mr.M.Sathish kumar, Maxlab systems technologies unlimited, Coimbatore.	391
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### C. Effectiveness (02)

**Data on Students benefitted:** The following Table 8.5.3 shows the list of PAPTC Alumni turned as Entrepreneurs.

**Table 8.5.3 Entrepreneur details**

Department	Batch	Name of the Entrepreneur
Computer Engineering	2019-2020	-
	2018-2019	Mr.R.Mark Brighten
	2017-2018	-
	2016-2017	-
Electrical and Electronics Engineering	2019-2020	-
	2018-2019	-
	2017-2018	K.Lokesh prabu
	2016-2017	-
Electronics and Communication Engineering	2019-2020	S.S Alagar mrithuanj
	2018-2019	B.Abishake
	2017-2018	N.S Selva Vishal
	2016-2017	-
Mechanical Engineering	2019-2020	-
	2018-2019	A.Vijaya Ragavan
	2017-2018	-
	2016-2017	-

## NBA SAR CRITERION - 8

Automobile Engineering	2019-2020	-
	2018-2019	M.Ranjith kumar
	2017-2018	K.Thangaraj D.Hari prasanth
	2016-2017	-

NBA-SAR-EET

# NBA SAR CRITERION - 9

<b>CRITERION 9</b>	<b>GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES</b>	<b>75</b>
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## 9.1 ORGANIZATION, GOVERNANCE AND TRANSPARENCY ( 25 )

### 9.1.1 State the Vision and Mission of the Institute ( 5 )

#### Vision of the Institute

To provide high quality skill oriented technical education to the rural students to accomplish the global requirements.

#### Mission of the Institute

To provide modern facilities for imparting value based teaching-learning practices, enrich the faculty members with continuous learning and career guidance for the students.

#### The Vision and Mission are disseminated at

- Chairman and Principal Chamber
- College Office
- Training and Placement Cell
- Head of the Department Cabin
- Staff rooms
- Class rooms
- Laboratories
- Workshops
- Library
- Notice Boards
- Hostel
- Food court

#### The Vision and Mission are adequately published as indicated below

- College Website
- Institute Calendar and Handbook
- Course Log books

## NBA SAR CRITERION - 9

### 9.1.2 Governing body, administrative setup, functions of various bodies, service rules, procedures, recruitment and promotional policies ( 5 )

Governance is the key activity that connects the management and staff with the stakeholders ie., the students, parents, recruiters and the community at the large. To ensure its efficiency and effectiveness, a number of administrative, academic, co-curricular and general bodies have been constituted with their duties and responsibilities.

#### Administrative bodies - Governing council

The governing council takes policy decisions on the administration of employees, development of infrastructure and facilities, fixing of fees as per Government norms, institute scholarships, faculty recruitment, leave and promotional rules, budget allotment etc.,

The Governing council meets every six months, where the Principal presents information on the academic performance, activities carried out and the achievements of the faculty and students during the previous semester. Discussions and deliberations are held and decisions are taken on Policy changes if any, budgetary allocations and on any other issue that needs to be addressed for the forthcoming semester.

<b>Governing Council Members</b>					
<b>S. No.</b>	<b>Name</b>	<b>Position</b>	<b>Educational Qualification</b>	<b>Present Designation/ Occupation</b>	<b>Contact Address</b>
1	Dr. P. Appukutty	Chairman	M.E., F.I.E., F.I.V.,	Chairman & Managing Trustee P. A. Institutions	BC 59/72, Elango Street, Mahalingapuram, Pollachi- 642 002. Ph. No. 9842263995 <a href="mailto:kuttygounder@yahoo.com">kuttygounder@yahoo.com</a>
2	Dr.Lakshmi Appukutty	Member	M.A., M.Ed., M.Phil., Ph.D.	Vice- Chairperson & Trustee P. A. Institutions	BC 59/72, Elango Street, Mahalingapuram, Pollachi- 642 002. Ph. No. 9842263995 <a href="mailto:Slakshmi6899@gmail.com">Slakshmi6899@gmail.com</a>

## NBA SAR CRITERION - 9

3	Tmt. A. Poongothai Arul Ramesh	Member	B.Com.,M.C.A	Secretary & Trustee P. A. Institutions	60, Periyathottam, Maniyakkaranpalayam, Coimbatore- 641 006. Ph. No. 9865899222 <a href="mailto:deepaooongs@gmail.com">deepaooongs@gmail.com</a>
4	Tmt. Y.Banurekha	Member	B.A	Trustee P. A. Institutions.	60, Periyathottam, Maniyakkaranpalayam, Coimbatore- 641 006. Ph. No. 9865899222
5	Mr. A. Muthusamy	Member	B.E	Chairman, KPM Group of Companies Coimbatore	621 B, Trichy Road, Coimbatore -641 005. Ph. No. 9842215567 <a href="mailto:ifo@essemengineering.com">ifo@essemengineering.com</a>
6	Dr .K.Ramesh	State Government Nominee	M.E., Ph.D.	Mechanical /Assistant Professor ( Sr.Gr), GCT, Coimbatore	Mechanical /Assistant Professor ( Sr.Gr), Government College of Technology, Thadagam road, Coimbatore – 641013. Ph. No. 0422-2432221
7	Dr. T. Manigandan	Member Secretary	M.E., Ph.D.	C.E.O P. A. Institutions,	Principal Quarters, P. A. College of Engineering and Technology, Pollachi. Ph. No. 9443584648 <a href="mailto:manigandan_t@yahoo.com">manigandan_t@yahoo.com</a>
8	Mr.A.Ponnambalam	Member	M.E.,	Principal P. A. Polytechnic College.	36,Krishnasamy Nagar, T.Kottampatti Mahalingapuram (PO) Pollachi 642002, <a href="mailto:ponnambalam@gmail.com">ponnambalam@gmail.com</a>

# NBA SAR CRITERION - 9

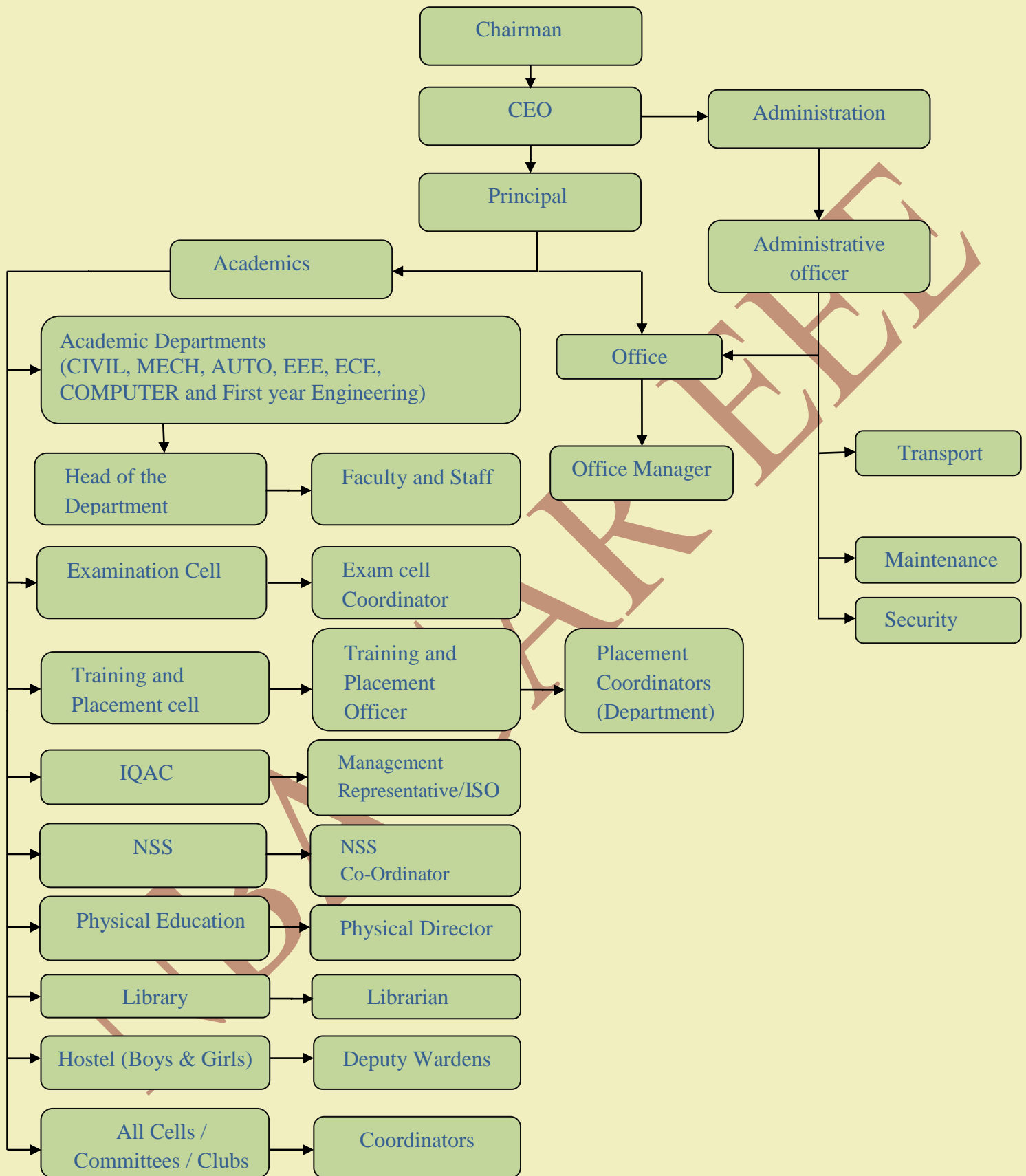


Figure 9.1.2.1 Administrative chart shows the hierarchy setup in the college

## NBA SAR CRITERION - 9

### A. Administrative Bodies

The details of committees along with the names of coordinators as well as the responsibilities of each committee are given below:


S. No.	Name of committee	Coordinators	Functions and Responsibilities	Frequency of Meetings
1	<b>Planning and Monitoring Board</b>	Mr.A.Ponnambalam Principal	<ul style="list-style-type: none"> <li>Holding discussions on plan of action related to academics and other activities</li> <li>Suggesting corrective measures if required</li> </ul>	Twice in a year
2	<b>Program Advisory Committee</b>	Head of the Departments	<ul style="list-style-type: none"> <li>Organizing symposium, conferences and alumni lectures periodically</li> <li>Inviting scholars, academicians and industrialists for guest lectures</li> </ul>	Once in a month
3	<b>Counselling and Career Guidance</b>	Mr.N.Devakarthick Sr.Lecturer	<ul style="list-style-type: none"> <li>Counselling students in academics and psychological aspects</li> <li>Discussing with parents regarding attendance, academic performance and discipline</li> </ul>	Twice in a year
4	<b>SC/ST Cell</b>	Mrs.S.Yogalakshmi Sr.Lecturer	<ul style="list-style-type: none"> <li>Ensuring welfare of SC/ST students</li> <li>Guidance and grievance redressal of SC/ST students</li> </ul>	Twice in a year
5	<b>Training and Placement Cell</b>	Mr.P.Kathiravan HoD / ECE	<ul style="list-style-type: none"> <li>Organizing training programme on professional skills, Aptitude and English Communication Skills.</li> <li>Arranging Placement drives.</li> <li>Industry Institute Collaborative activities</li> </ul>	Twice in a semester
6	<b>Entrepreneurship Development Cell</b>	Mr.S.Balakrishnan HoD i/c / AUTO	<ul style="list-style-type: none"> <li>Encouraging entrepreneurial culture among the Students</li> <li>Developing entrepreneurship student groups and motivating them to start up their business</li> <li>Exploring new business establishment opportunities</li> </ul>	Twice in a semester
7	<b>Higher Education Cell</b>	Mrs.S.Priyatharsini Sr.Lecturer	<ul style="list-style-type: none"> <li>Guiding &amp; motivating the students for higher education</li> <li>Providing exposure to appear in competitive examinations</li> </ul>	Twice in a year
8	<b>Internal Quality Assurance Cell</b>	Mr.P.Kathiravan HoD / ECE	<ul style="list-style-type: none"> <li>Auditing the implementation of teaching learning process within the College</li> <li>Reviewing the strategic issues</li> <li>Implementing review of strategic issues.</li> </ul>	Twice in a year
9	<b>Grievance Redressal Committee</b>	Mr.VR.Shankarganesh HoD / EEE	<ul style="list-style-type: none"> <li>Encouraging the faculty and students to convey their grievances.</li> <li>Addressing the grievances and taking corrective measures for the improvement of the Institution and Individual.</li> </ul>	Twice in a year

## NBA SAR CRITERION - 9

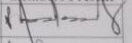
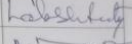
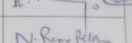
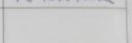
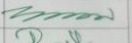
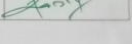
10	<b>Anti- Ragging Committee</b>	Mr.A.Ponnambalam, Principal	<ul style="list-style-type: none"> <li>• Monitoring discipline in the College and hostel premises</li> <li>• Collection of undertaking forms from all students in the presence of their parents/guardians at the time of admission.</li> </ul>	Twice in a year
11	<b>Women Anti-Sexual Harassment Committee</b>	Mrs.A.Devi. Sr.Lecturer	<ul style="list-style-type: none"> <li>• Encouraging the women to address their problem to the mentors</li> <li>• Monitoring using CCTV cameras in vantage points of the Institution and necessary actions are taken if any.</li> </ul>	Twice in a year
12	<b>Examination Cell</b>	Mr.S.Mahalingam Sr.Lecturer	<ul style="list-style-type: none"> <li>• Preparing Academic Calendar</li> <li>• Conducting Internal and Board exams as per the guidelines laid down by DOTE</li> </ul>	Twice in a year
13	<b>Library Advisory Committee</b>	Mrs.N.Kavitha Sr.Lecturer	<ul style="list-style-type: none"> <li>• Focusing on new subscription of journals and periodicals.</li> <li>• Guiding the implementation and upgradation of book distribution system.</li> <li>• Advising titles for purchase of new books as per requirements.</li> </ul>	Once in a semester
14	<b>Alumni Association</b>	Mr.N.SenthilKumar HoD / MECH	<ul style="list-style-type: none"> <li>• Maintaining database of the alumni of the Institution</li> <li>• Maintaining interaction with alumni</li> <li>• Getting alumni feedback and representing their views</li> </ul>	Once in a year
15	<b>Hostel Committee</b>	Mr.A.Ponnambalam Principal	<ul style="list-style-type: none"> <li>• Identifying shortcomings and problems faced by students in hostel and taking corrective actions</li> <li>• Discussing with students about the food menu</li> <li>• Monitoring with the help of CCTV cameras</li> <li>• Ensuring medical facilities for students in time</li> </ul>	Twice in a semester
16	<b>Sports Committee</b>	Mr.M.Radhakrishnan Physical Director	<ul style="list-style-type: none"> <li>• Organising sports events</li> <li>• Conducting annual sports meet at the end of every even semester.</li> </ul>	Twice in a year
17	<b>Cultural Committee</b>	Mrs.N.Kavitha Sr.Lecturer	<ul style="list-style-type: none"> <li>• Identifying the spirit and talent of students and motivating them to participate in cultural events</li> <li>• Organising cultural programme</li> </ul>	Twice in a year

# NBA SAR CRITERION - 9

## B. Minutes of meetings and action - taken reports

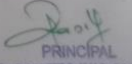
**P.A. Polytechnic college**  
Pollachi- 642002

Governing Council meeting held on 10<sup>th</sup> April 2019 at Conference Hall.


Sl. No	Name of the Member	Designation	Signature of the members Present
1.	Prof. P. Appukutty, M.E., FIE, FIV	Chairman & Managing Trustee, P. A. Educational Institutions.	
2.	Dr. Lakshmi Appukutty, M.A., M.Ed., M.Phil., Ph.D	Trustee, P. A. Educational Institutions.	
3.	Mrs. Poongothai Arulamesh B.Com., M.C.A	Secretary & Trustee, P. A. Educational Institutions.	
4.	Mrs. Banurekha	Trustee, P. A. Educational Institutions.	
5.	Mr. A. Muthusamy	Chairman, KPM Group of Companies, Coimbatore	
6.	Dr. T. Manigandan, M.E., Ph. D	CEO P. A. Institutions	
7.	Mr.A.Ponnambalam, M.E.,	Principal P. A. polytechnic College	

The Following points were discussed and the resolution has been passed.

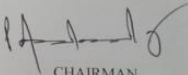
Discussions	Resolutions
To confirm the minutes of the last meeting of the Governing body held on 12 <sup>th</sup> September 2018.	Confirmed
To report the action taken on the minutes of the last meeting of the Governing body held on 12 <sup>th</sup> September 2018.	Discussed and noted
The Governing council discussed about the Admission plan to be implemented for the Academic year 2019-20. For getting better admission it is suggested to put more efforts by way of creating awareness among the students about the placement, academic performance etc.,	Discussed and approved
The Governing council insisted about the importance of providing the quality education to achieve better academic performance.	Discussed and approved
Reviewed and insisted for up gradation of recent trends by the faculty members for effective academic performance.	Discussed and approved
Proposed to extend the trust scholarship to the students securing high marks with suitable scholarship during the academic year 2019-20.	Discussed and approved
The Governing council appreciated the Principal and Placement cell for having achieved an effective placement during this academic year. Also insisted to take	Discussed and approved

  
PRINCIPAL  
P.A. POLYTECHNIC COLLEGE

# NBA SAR CRITERION - 9

 **P.A. Polytechnic college**  
Pollachi- 642002

<b>Discussions</b>	<b>Resolutions</b>
effective measures to achieve more placements to the students. The required training in all the areas has to be provided to the students.	
The Governing council insisted to strictly adhere to the norms stipulated by DOTE and AICTE. The equipments and consumables required as per the revised curriculum if necessary have to be procured.	Discussed and approved
The Governing council discussed about the budget allocation for the academic year 2019-20 and informed to follow the routine schedule in this regard	Discussed and approved
The Governing council discussed about applying for ISO status to the Institution and suggested to look out the norms and guidelines of the same.	Discussed and approved
The Governing council approved for conducting the Nava Chandi Yagam in the Institution campus in a fitting manner as done in the past.	Discussed and approved
The Governing council discussed about Women's Day celebrations during March 2019, and extended approval for conducting the same.	Discussed and approved

  
CHAIRMAN  
Governing Council

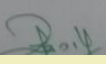


Figure 9.1.2.2 Governing council Minutes of the Meeting

## NBA SAR CRITERION - 9

### C. Service Rules, Policies and Procedures with year of publication ( with effect from june 2019 )

#### Staff Leave Policies

S. No.	Leave	Teaching	Non Teaching
1.	<b>Casual Leave (CL)</b>	<ul style="list-style-type: none"> <li>• 12 Days/Year</li> </ul>	<ul style="list-style-type: none"> <li>• 12 Days/Year</li> </ul>
2.	<b>Medical Leave (ML)</b>	<ul style="list-style-type: none"> <li>• 8Days/year (can be accumulated up to 90 Days)</li> </ul>	<ul style="list-style-type: none"> <li>• 8Days/year (can be accumulated up to 90 Days)</li> </ul>
3.	<b>Maternity Leave (MAL)</b>	<ul style="list-style-type: none"> <li>• 3 months with half pay for 3-6 years experience 3 months with full pay for above 6 years of experience</li> </ul>	<ul style="list-style-type: none"> <li>• 3 months with half pay for 3-6 years experience 3 months with full pay for above 6 years of experience</li> </ul>
4.	<b>Vacation Leave (VL)</b>	<ul style="list-style-type: none"> <li>• Winter – 2 weeks</li> <li>• Summer – 3 weeks</li> </ul>	<ul style="list-style-type: none"> <li>• Winter – 1 week</li> <li>• Summer – 2 weeks</li> </ul>
5.	<b>On Duty(OD)</b>	<ul style="list-style-type: none"> <li>• As per govt order such as exam duty, valuation etc./ institution order such as for purchase of items, seminar ,workshop, training, conference etc.,</li> <li>• As applicable</li> </ul>	<ul style="list-style-type: none"> <li>• As per govt order such as exam duty, approval work etc./ institution order such as for purchase of items, workshop, training etc.,</li> <li>• As applicable</li> </ul>
6.	<b>Special leave(SL)</b>	<ul style="list-style-type: none"> <li>• In case of any accident in working environment. Minimum of half day and maximum up to 2 months</li> <li>• In case of staff members pursuing higher studies in part time mode, on exam days</li> </ul>	<ul style="list-style-type: none"> <li>• In case of any accident in working environment. Minimum of half day and maximum up to 2 months</li> <li>• In case of staff members pursuing higher studies, on exam days</li> </ul>
7.	<b>Compensation Leave(CoL)</b>	<ul style="list-style-type: none"> <li>• As allowed by Head of Institution for compensation of working hours in holidays, equal to his/her hours of work.</li> </ul>	<ul style="list-style-type: none"> <li>• As allowed by Head of Institution for compensation of working hours in holidays, equal to his/her hours of work.</li> </ul>

## NBA SAR CRITERION - 9

### Recruitment Procedure

- Teachers are recruited as per DOTE and AICTE norms.
- Before the commencement of each semester, vacancy positions are identified by the concerned Head of the Departments and the same is submitted to the Management for recruitment through the Principal.
- Advertisements are published in the leading daily Tamil and English Newspapers.
- Applications are invited from eligible candidates and they are scrutinized by the respective Head of the Departments and the Principal.
- Shortlisted candidates are called for personal interview.
- The interview panel comprises of Chairman, CEO, Principal, Head of the Departments, Professors and subject experts.
- Based on their performance in interview, faculty members are recruited
- Finally they will be issued appointment orders by the Chairman.

### Promotion Policies

The promotion policies are followed as per AICTE norms.

The following factors are taken into account:

- Potential to assume higher responsibilities
- Promotion and increment is given to staff based on experience, overall performance and self appraisal.
- Annual increments and promotions in the grades are implemented by the management.

The Management takes effective decisions and provides appraisal details to the concerned staff member by incorporating the decisions in the proceedings of the meetings of the managing committee to make them aware of the improvements and action plan of the Institution.

## NBA SAR CRITERION - 9

### 1. Principal ( Rs.37400 -1600-67000 )

#### Minimum Qualification

- a. Bachelor's and Master's degree of appropriate branch in Engineering / Technology with First Class or equivalent either in Bachelor's or Master's level
- b. Minimum of 20 years relevant experience in teaching / research / industry

OR

Minimum 16 years of experience with PhD or equivalent in which at least 3 years as Post PhD experience.

### 2. Head of the Department, ( Rs.16400-450-20900 -500-22400)

#### Minimum Qualification

- a. Bachelor's and Master's degree in appropriate branch in Engineering / Technology with First Class or equivalent either in Bachelor's or Master's level.

AND

- b. Minimum of 10 -12 years relevant experience in teaching / research / industry

### 3. Lecturer (Selection Grade) (Rs.16400-450-20900)

#### Minimum Qualification

#### Engineering and Technology

- a. Qualification as prescribed for lecturer necessarily with Master's degree and Minimum of 10-12 years experience in teaching / research / industry

#### Science and Humanities

- b. Qualification as prescribed for lecturer and clear the NET/SLET/SET and Minimum of 10 years experience in teaching / research / industry

### 4. Lecturer (Senior Scale) (Rs.12000-420-18300)

#### Minimum Qualification

#### Engineering and Technology

- c. Qualification as prescribed for lecturer and Minimum of 5- 6 years experience in teaching / research / industry

#### Science and Humanities

- d. Qualification as prescribed for lecturer and Minimum of 5-6 years experience in teaching / research / industry

### 5. Lecturer (Rs.10000-325-15200)

#### Minimum Qualification

#### Engineering and Technology

- a. Bachelor's degree in Engineering / Technology in the relevant branch with First Class or equivalent.

OR

If candidate has Master degree, first class or equivalent is required at bachelor's or Master degree.

#### Science and Humanities

- a. Masters degree in appropriate subject with first class or equivalent at Bachelor's or Master's level

## NBA SAR CRITERION - 9

### 6. Assistant Librarian (Rs.10000-325-15200)

#### Minimum Qualification

Masters degree in Library Science / Information Science / Documentation Science

OR

An Equivalent professional degree with at least First class with knowledge of computerization of library

### 7. Physical Director (Rs.10000-325-15200)

#### Minimum Qualification

b. Masters degree in Physical Education with first class or equivalent at Bachelor's or Master's level

OR

An Equivalent degree with at least First class with recognized University / Institution

### 8. Instructor (Rs.8000–275- Rs.13500)

#### Minimum Qualification

a. Diploma / B.Sc in appropriate branch

b. First Class or equivalent Grade in Diploma or B.Sc.,

### 9. Lab Technician (Rs. 5000 –200- Rs.8000)

#### Minimum Qualification

Diploma / ITI / B.Sc in appropriate branch

### D. Extent of awareness among the employees/ students

Information related to the governing bodies, policies, rules and various processes are disseminated through college website and various meetings.

## NBA SAR CRITERION - 9

### 9.1.3 Decentralisation in working and grievance redressal mechanism ( 5 )

Various committees and cells are composed and governed by representatives from stakeholders HOD, faculty, students and management. Decisions are taken collectively.

- The Institution believes in promoting a culture of decentralized governance.
- Refining and redefining activities by keeping in view the deliberations of internal quality assurance and class committee.
- Organization of several activities by students to enhance the capabilities of students under the mentorship of faculty member, hone their event management skills.
- Empowering HOD to distribute work load to faculty, to identify the content beyond syllabus and to organize various faculty, student empowerment programs with the help of members of class committee, teaching and non-teaching faculty of the department.
- Allocation of budget on the basis of the proposals received from the department.

#### A. Administrators/ Decision makers

The following members of the faculty have been assigned with administrative responsibilities.

S. No.	Name of the Faculty member	Basic Academic Designation	Administrative Responsibilities
1	Mr. A.Ponnambalam	Principal	Principal
2	Mr.R.Palanisami	Associate Professor	Administrative Officer
3	Mr.N.Senthil kumar	HoD	HoD/Mech
4	Mr.P.Kathiravan	HoD	HoD / ECE, Training and Placement officer
5	Mr. V.R.Shankarganesh	HoD	HoD / EEE
6	Mr.S.Balakrishnan	Sr.Lecturer	HoD i/c /Automobile
7	Mr.N.Mathivanan	HoD	HoD / COMP
8	Mr.T.Manikandan	Sr.Lecturer	HoD i/c / CIVIL
9	Mr.D.Rammohan	Sr.Lecturer	HoD / First year Engineering

## NBA SAR CRITERION - 9

### B. Mechanism and Composition of Grievance Redressal Cell including Anti Ragging Committee & Sexual Harassment Committee

#### Grievance Redressal Committee

##### *Mechanism of Grievance Redressal Committee*

- Grievance Redressal committee is formed comprising of the Principal, Head of the Departments and staff members.
- All grievances and suggestions found in the suggestion box are analyzed by the Grievance Redressal Cell and suitable measures are taken.
- Guidelines of the AICTE are followed
- Regular meetings are conducted and Grievances raised are addressed.

##### Composition of Grievance Redressal Committee

S. No.	Name	Position	Designation
1.	Mr.A.Ponnambalam	Chairman	Principal
2.	Mr.V.R.Shankarganesh	Convener	HOD / EEE
3.	Mr.D.Rammohan	Member	HOD / First Year
4.	Mrs.S.Yogalakshmi	Member	Sr.Lecturer / Computer
5.	Mr.N.Devakarthik	Member	Sr.Lecturer / Mech
6.	Mrs.N.Kavitha	Member	Sr.Lecturer / Chemistry

#### Anti-ragging Committee

##### *Mechanism of Anti-ragging Committee*

- The Anti-ragging Committee is headed by the Principal.
- Institution collects undertaking form from all the students and parents/guardians at the time of admission.
- The contact numbers of the committee members are available in the Hand Book, Display Board and Institution website.
- Anti-ragging display boards are placed in important locations at Institution and hostel.
- Anti –ragging squad is formed and visits are held at food court, bus stops, rest rooms, hostel and vehicle stand etc.,
- CCTV cameras are installed at vantage points and monitored.

## NBA SAR CRITERION - 9

### *Composition of Anti-ragging Committee*

S.No.	Name	Position (Chairman/Member)	Designation
1.	Mr.A.Ponnambalam	Chairman	Principal
2.	Mr.G.Thanigaivel	Member	Tahsildar
3.	Mr.M.Mahendran	Member	Sub Inspector of Police
4.	Mr.K.Nandhakumar	Member	Parent
5.	Mr.M.Rajendran	Member	Parent
6.	Mr.R.K.Thirumugan	Member	Student
7.	Ms.N.Lekha	Member	Student
8.	Mr.S.Mahalingam	Member	Sr.Lecturer / ECE
9.	Mr.M.Manikandan	Member	Lecturer / CSE
10.	Mr.S.Sriraman	Member	Instructor

### *Composition of Anti-ragging Squad*

S. No.	Name	Position (Chairman/Member)	Designation
1.	Mr.A.Ponnambalam	Chairman	Principal
2.	Mr.P.Kathiravan	Member	HOD/ECE
3.	Mr.N.Senthilkumar	Member	HOD/MECH
4.	Mr.S.Balakrishnan	Member	HOD i/c /Automobile
5.	Mrs.N.Kavitha	Member	Sr.Lecturer/ Chemistry
6.	Mrs.S.Kavitha	Member	Sr.Lecturer/ ECE
7.	Mr.M.Radhakrishnan	Member	Physical Director
8.	Mr.P.Sivakumar	Member	Sr.Lecturer / Mech
9.	Mr.S.Jayaprakash	Member	Lecturer / CSE

## NBA SAR CRITERION - 9

### Women Anti-sexual Harassment Cell

- Anti-sexual Harassment Cell functions in the Institution with senior women faculty members as presiding member and mentors.
- It spreads awareness and follows the guidelines prescribed by AICTE
- Any student, staff member who are victim of the harassment can approach the committee any time and immediate and strict corrective measures are undertaken
- It conducts awareness through meetings to encourage complaints against any suppression.

### Composition of Women Anti-sexual Harassment Cell

S.No.	Name of the Member	Position
1.	Mrs.A.Devi Sr. Lecturer/ Physics	Convener
2.	Mrs.S.Rakini Sr.Lecturer / Maths	Co-convener
3.	Mrs.S.Priyatharasini Sr.Lecturer / ECE	Member
4.	Miss.S.Kowsalya Lecturer / EEE	
5.	Miss.S.Vijaya Surya Lecturer / Mech	
6.	Ms.M.Vaitheeswari Lecturer / English	
7.	Mrs.V.Subashini Instructor /Civil	

### 9.1.4 Delegation of Financial Powers ( 5 )

The college operates on a democratic and decentralized administration. A number of committees have been formed for effective governance and to develop leadership qualities among staff members.

These committees and such a delegation of power has led to not only a sense of involvement of faculty members but also for speed and effective administration.

## NBA SAR CRITERION - 9

S. No.	Designation	Particulars	Limit to Sanction
1	Principal	Procurement of Equipments, Service and Maintenance and promotion of academic and development activities.	Rs 25,000
2	HoDs	Procurement of laboratory Consumables, Stationeries, Service and Maintenance	Rs 15,000
3	Training and Placement officer	To Spend for student career and professional development activities	Rs 15,000
4	Coordinators	To spend for their committee activities	Rs 10,000

### 9.1.5 Transparency and Availability of Correct / Unambiguous Information in Public Domain ( 5 )

Information related to the institutional policies, rules and various processes are disseminated through college website.

Notice Boards are available in main block through which information is made available to the staff and students and circulars are sent to the classrooms.

## NBA SAR CRITERION - 9

### 9.2. Budget Allocation, Utilization, & Public Accounting at Institute Level (10)

The summary of current financial year's budget and actual expenditure incurred (for the Institution exclusively) for the previous three financial years are as follows:

The Institution's budget allocation procedure is as follows:

1. College budget is prepared in the month of February / March of every year for the ensuing academic year, which starts from June.
2. Heads of the departments and office under the guidance of the Principal will prepare the budget according to the requirements of each and every department covering major heads listed below:
  - Lab equipments
  - Computers and software
  - Lab consumables
  - Maintenance and service
  - Research and Development
  - Academic related expenses
  - Printing and stationery expenses
3. The budget is sent to the Management through Principal for approval and fund allocation.
4. Based on the approval, Principal allocates budget to each department under various heads.

## NBA SAR CRITERION - 9

### For Current Financial Year minus1 2018-19

Total Income: 3,63,96,403				Actual expenditure: 3,02,45,885			Total No. of students: 1427
Fee	Govt.	Grant (s)	Other Sources (Bank Interest & FD)	Recurring including Salaries	Non-recurring	Special projects/Any other, specify	Expenditure per student
2,75,77,283	80,96,500	-	7,22,620	3,01,67,720	78,166	-	21,195

### For Current Financial Year minus2 2017-18

Total Income: 3,50,98,256				Actual expenditure: 3,28,68,337			Total No. of students: 1414
Fee	Govt.	Grant (s)	Other Sources (Bank Interest & FD)	Recurring including Salaries	Non-recurring	Special projects/Any other, specify	Expenditure per student
2,80,15,320	37,38,000	-	33,44,936	2,99,20,461	29,47,875	-	23,245

### For Current Financial Year minus3 2016-17

Total Income: 3,64,44,132				Actual expenditure: 3,57,67,646			Total No. of students: 1373
Fee	Govt.	Grant (s)	Other Sources (Bank Interest & FD)	Recurring including Salaries	Non-recurring	Special projects/Any other, specify	Expenditure per student
2,85,82,951	71,10,270	-	7,50,911	3,53,87,226	3,80,420	-	26,051

## NBA SAR CRITERION - 9

### 9.2.1. Adequacy of budget allocation (4)

Allocation of fund is made as per the availability of funds. The fund would be spent from the approved budget and the spending is monitored by the accounts section. The budgets are adequate for the Departments and the Institution.

Additional allocations are made in special cases, if arise. The Institution carefully monitors the expenses, so that the necessities are met without affecting the smooth working of the Institution. The Management has been providing adequate budget since the inception of the College.

### 9.2.2. Utilization of allocated funds (4)

The head of the each department is empowered to utilize the approved budget under the heads projected by them as and when required within the academic year.

The funds are allocated by the administrative team headed by the Principal. The funds are utilized by the Principal and the Head of the Departments as per the allocation. Any additional funds requirement beyond the budget allocations is approved by the Chairman as and when required.

Actions for procurement of lab equipment, up-gradation of existing lab facilities, purchase of consumables etc. are initiated from the respective department heads and the funds are released from the office on approval by the Principal.

During the last three years, the budget was utilized to meet expenses such as staff salary, infrastructure development, purchase of equipment, expenses towards consumables and contingencies, travel etc.

#### Utilization of allocated funds

S. No.	Financial Year	Budget Sanctioned	Actual Expenditure	Utilization %
1	2018 – 2019	3,19,22,000	3,02,45,885	94.75
2	2017 – 2018	3,47,01,000	3,28,68,337	94.72
3	2016 – 2017	3,76,77,000	3,57,67,646	94.93

## NBA SAR CRITERION - 9

### 9.2.3. Availability of the audited statements on the Institution's website (2)

The audited statements of accounts of the college made available on the College website.

CFYm1 2018 – 19: URL: <http://www.papolytechnic.org/auditedstatementfy3.html>

CFYm2 2017 – 18: URL: <http://www.papolytechnic.org/auditedstatementfy2.html>

CFYm3 2016 – 17: URL: <http://www.papolytechnic.org/auditedstatementfy1.html>

## NBA SAR CRITERION - 9

### 9.3 Department Specific Budget Allocation, Utilization (5)

The Head of the Department of our programme receives the budget proposals under 'recurring' and 'non-recurring' heads from each lab of the Department before the commencement of the financial year and submitted to the Head of the Institution for approval.

#### Electrical and Electronics Engineering:

##### For Current Financial Year 2019-20

<b>Total Budget :</b> 1,06,000		<b>Actual expenditure :</b> 97,041		<b>Total No. of students:</b> 103
<b>Non recurring</b>	<b>Recurring</b>	<b>Non recurring</b>	<b>Recurring</b>	<b>Expenditure per student</b>
0	1,06,000	0	97,041	942

##### For Current Financial Year minus1 2018-19

<b>Total Budget :</b> 1,21,000		<b>Actual expenditure :</b> 1,11,660		<b>Total No. of students:</b> 114
<b>Non recurring</b>	<b>Recurring</b>	<b>Non recurring</b>	<b>Recurring</b>	<b>Expenditure per student</b>
0	1,21,000	0	1,11,660	979

##### For Current Financial Year minus2 2017-18

<b>Total Budget :</b> 4,81,000		<b>Actual expenditure :</b> 4,61,836		<b>Total No. of students:</b> 92
<b>Non recurring</b>	<b>Recurring</b>	<b>Non recurring</b>	<b>Recurring</b>	<b>Expenditure per student</b>
3,80,000	1,01,000	3,72,329	89,507	5020

##### For Current Financial Year minus3 2016-17

<b>Total Budget :</b> 2,01,000		<b>Actual expenditure :</b> 1,84,865		<b>Total No. of students:</b> 74
<b>Non recurring</b>	<b>Recurring</b>	<b>Non recurring</b>	<b>Recurring</b>	<b>Expenditure per student</b>
1,00,000	1,01,000	97,803	87,062	2498

#### 9.3.1 Adequacy of budget allocation (2)

Allocation of fund is made as per the Department Proposed Budget. The allocated fund is spent for meeting out the expenses and the spending is monitored by the Budget In charge of the department.

The allocated budget is adequate for the department. Additional allocations are made in special cases, if arise.

## NBA SAR CRITERION - 9

### 9.3.2. Utilization of allocated funds (3)

The funds are utilized for procurement of lab equipment, up-gradation of existing lab facilities, Purchase of Consumables, for conducting Seminar, Workshop, Conference, Symposium etc., on approval by the Principal.

The allocated fund is utilized efficiently by the department.

S. No.	Financial Year	Budget proposed (Rs.)	Budget Sanctioned (Rs.)	Actual Expenditure (Rs.)	Utilization %
1.	2019 – 2020	1,34,000	1,06,000	97,041	91.5
2.	2018 – 2019	1,49,000	1,21,000	1,11,660	92.3
3.	2017 – 2018	5,39,000	4,81,000	4,61,836	96.0
4.	2016 – 2017	2,34,000	2,01,000	1,84,865	92.0

# NBA SAR CRITERION - 9

## 9.4 Library and Internet (20)

### 9.4.1 Quality of learning resources (hard/soft) (10)

- AICTE Zero deficiency reports were received for all the assessment years.

#### Quality of learning resources (hard/soft)

##### a. Available learning resources

- Number of titles : 2065 / 916
- Number of volumes : hard- 11800/ soft -10862
- Reference Books : 246
- CDs : 569
- Student Project reports : 391
- International / National journals : 25
- NPTEL resources.

#### Digital Library:

- Availability of digital library content : yes
- Availability of an exclusive server : yes
- Availability over Intranet/Internet : yes
- Availability of exclusive space/room : yes
- Number of users per day : 25
- Number of E-books : 10862

##### b. Accessibility to students:

- The library works on all days of the year (excluding Government holidays) to the students.
- Journals are subscribed at regular intervals.
- Search can be done by using AUTOLIB.
- NPTEL lessons are available and can be accessed through internet.
- Books for TNPSC, SSC and Civil Service Examination are available.

## NBA SAR CRITERION - 9

### Titles and volumes:

Academic Year	Books			Journals/ Magazines
	Total No. of Volumes	Total No. of Titles	No. of New Editions Added	Total No.
2020 - 21	11800	2065	266	25
2019 - 20	11544	2065	500	25
2018 - 19	11044	1978	544	25
2017 - 18	10500	1882	500	25
2016 - 17	10000	1800	600	25

### 9.4.2 Internet (10)

Name of the Internet provider	BSNL (Leased Line)
Available bandwidth	100 Mbps
Wi-Fi availability	Campus / Hostels are Wi-Fi enabled
Internet access in labs, class rooms, library and offices of all Departments	yes
Security arrangements	Yes -Sonic Wall NSA 4500

### 9.5 Institutional Contribution to the Community Development/ Go-green (05)

Students and Staff members are encouraged to organize the Programmes such as

- Blood Donation Camp
- Tree Plantation
- Blood donation & Blood grouping Camp
- Yoga & Meditation
- Road safety awareness program
- HIV/AIDS awareness program
- Corona Virus awareness program

## NBA SAR CRITERION - 9

### National Service Scheme

It ensures that everyone who is needy gets help to enhance their standard of living and lead life of dignity.

NSS is the right platform for the students to actively contribute their services for the cause of community, nation and to become responsible citizen of India.

In addition to general service-one week NSS Camp have been conducted at Kallipalayam village with 48 students consisting of the following programs with NSS Co-ordinators.

1. Self employment training to rural women
2. Basic Technical training to rural youths
3. Road safety awareness program
4. Medical Camp
5. Renovation of rain water harvesting structures.
6. Eradication of plastic awareness program
7. Tree plantation.
8. Voters awareness campaign.
9. HIV/AIDS awareness program.

### 9.6 Alumni Performance and Connect (10)

Alumni association has been established and all the alumni students are the members of it. It helps to develop the institution and to encourage the students to be successful in their respective field.

- Every Academic Year, meeting is held to interact with alumni to share their views for the benefit of the Institution.
- Improving the infrastructure of the institution after getting the feedback of alumni.
- Involving alumni in giving the lectures to our students in improving their attitude
- Conducting workshop and training programs with distinguished alumni for improving the knowledge of students in their respective fields.