

ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES::RAJAMPET

(AN AUTONOMOUS INSTITUTION)

Thallapaka Panchayath, New Boyanapalli, Rajampet, Kadapa Dist, A.P. 516126.

(Approved by A.I.C.T.E, New Delhi & Affiliated to Jawaharlal Nehru Technological University Anantapur, Anantapuramu)

Department of Electrical & Electronics Engineering

Minutes of Meeting of the Board of Studies of EEE Department held on 08.12.2018

Members Present:

1. Dr. M.Padma Lalitha	Chairman
2. Mr.O.Hemakesavulu	Member
3. Mr.P.Bhaskara Prasad	“
4. Mr.P.Suresh Babu	“
5. Dr.K.Sivakumar	“
6. Dr.B.Jagadeesh Chandra Prasad	“
7. Mr.K.Jagan Mohan Reddy	“

Members Absent:

1. Dr. S.Narayana	Member
2. Dr.M.Sydulu	“

Resolutions:

1. Item No: 08-BOS-1:

To prepare scheme of instructions and syllabi for III and IV B.Tech. Courses of 'R17' Regulations.

i) Resolved to change syllabus of “**Power electronics**” subject in III-I Semester according to the suggestions of BOS members as enclosed in Annexure-I.

ii) Resolved to change syllabus of “**Microprocessors And Microcontrollers**” subject in III-II Semester & include new experiments in “**Microprocessors And Microcontrollers lab**” in IV-I Semester according to the suggestions of BOS members as enclosed in Annexure-II.

iii) Resolved to change syllabus of “**Renewable Energy Sources**” subject in IV-I Semester according to the suggestions of BOS members as enclosed in Annexure-III.

iv) Resolved to change syllabus of “**Utilization of Electrical Energy**” subject in IV-II Semester according to the suggestions of BOS members as enclosed in Annexure-IV.

Item No: 08-BOS-2:

To approve Panel of Examiners and Paper Setters from external experts.

- i) Resolved to approve the list of Examiners for **M.Tech and B.Tech** from IITs, NITs, Private Universities and Autonomous Colleges.

Item No: 08-BOS-3:

To discuss scheme of instructions and course structure of students admitting from 2019.

- i) Suggestions have been taken from the subject experts regarding the preparation of R-19 Curriculum as per AICTE model Curriculum.

Item No: 08-BOS-4:

Resolved to send the recommendations for the approval of the Academic Council.

Dr. M.Padma Lalitha
Chairman

Annexure-I

POWER ELECTRONICS (III –I Semester)

The following modifications are incorporated in the syllabus of “POWER ELECTRONICS”

Unit-1

Included R and RC, UJT triggering circuits.

Unit-2

Removed two transistor analogy and Shifted R ,RC & UJT triggering circuits to **Unit-1**.

Unit-3

Unit titled changed from “Phase Controlled Rectifiers “to “AC-DC Converters”

Included uncontrolled single phase rectifier with R & RL load.

Unit-4

Unit title changed from “choppers” to “DC-DC converters”

Principle of buck converter, boost converter and buck-boost converter operation with RLE load included

Unit-5

Unit title changed from “AC-AC inverters” to “DC-AC and AC-AC converters”

Annexure-II

MICROPROCESSORS AND MICROCONTROLLERS (III –II Semester)

The following modifications are incorporated in the syllabus of “MICROPROCESSORS AND MICROCONTROLLERS”

Unit-2

Data Transfer Methods of 8086 are included

Input output interfacing methods are removed as per expert suggestions

Seven segment display, stepper motor, digital to analog and analog to digital converters and 8253programmable interval timer/counter are removed.

Basic structure of SRAM and DRAM cells and memory interfacing are removed in **Unit 3**

Unit-3

Unit-4 of previous Regulation (R15) shifted to **Unit-3 (R17)**

8259 PIC interfacing, Serial communication standards: RS-232C, TTL to RS-232C and RS-232C to TTL Conversions are removed.

Unit-4

Unit-5 of previous Regulation (R15) shifted to **Unit-4 (R17)**

Applications- Relays and optoisolators,DC motor interfacing and PWM, salient features of MCS-96 are removed. Salient features of advance microcontrollers (ARM) shifted to **Unit 5**

Unit-5

Advanced micro controllers, ARM architecture, ARM7, ARM9, features and applications of ARM.

Arduino:Block diagram architecture ,Pin formation, over view of main features such as input & output ports,Timers,Interfacing serial port ,PWM,ADC are included.

MICROPROCESSORS AND MICROCONTROLLERS LAB

Newly Added experiments using embedded boards

1. Switch and LED Interfacing,
2. LCD interfacing,
3. Serial transmission,
4. Serial reception.

Annexure-III

Renewable Energy Sources (IV –I Semester)

The following modifications are incorporated in the syllabus of “Renewable Energy Sources”

Unit-3

As per Expert suggestions this unit syllabus is framed completely on **wind energy**

Introduction -Wind and its properties ,site selection consideration ,basic principles of wind energy conversion systems(WECS),parts of WECS,types of Wind machines, classification of WECS,modes of wind power generation, energy storage ,applications concepts are included.

Unit-4

Ocean energy concepts, Tidal and wave energy concepts in **Unit-3** of previous Regulation (R15) shifted to

Unit-4 (R17).

Unit-5

Biomass and thermal energy concepts in **Unit-4** of previous Regulation (R15) shifted to **Unit-5 (R17)**

Annexure-IV

Utilization of Electrical Energy (IV –II Semester)

Unit-2

Induction cooking topic included.

Unit-3

LED lamps topic is included.

Discharge lamps topic is removed.

Unit-4

This unit Syllabus is framed by combining previous Regulation (R15) syllabus of **Unit-4 & Unit-5**

Review of existing electric traction systems in INDIA, special features of traction motor topics are removed.

Methods of electric braking: plugging, Rheostatic braking, and regenerative braking topics are already present in power semiconductor drives syllabus so these topics are removed.

Unit-5

This unit Syllabus is framed on Electric vehicles .

Introduction to electric vehicles,principle,working and design of electric and hybrid vehicles.history of hybrid and electric vehicles, social and environmental importance of hybrid and electric vehicles, impact of modern drive trains on energy supplies.