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| Discipline :- MECHANICAL | Semester:- 1st | Name of the Teaching Faculty:- SOUMYA PRAKASH SUTAR |
| Subject:- BASIC ELECTRONIC ENGINEERING (TH.04(b)) | No of Days/per Week Class Allotted :- 02 | Semester From:- 9.11.2020 TO 31.3.2021 |
| Week | Class Day | Theory |
| 1ST | 1 | ELECTRONIC DEVICES: Basic Concept of Electronics and its application |
| | 2 | Electron Emission & different types |
| 2ND | 1 | Classification of material according to electrical conductivity (Conductor, Semiconductor & Insulator) with respect to energy band diagram only. |
| | 2 | Intrinsic & Extrinsic Semiconductor |
| 3RD | 1 | Difference between vacuum tube & semiconductor, Principle of working and use of PN junction diode, |
| | 2 | V-I characteristic of PN junction diode |
| 4TH | 1 | Zener diode and Light Emitting Diode (LED) |
| | 2 | Basic concept of manufacturing integrated circuits (I.C) & its uses. |
| 5TH | 1 | ELECTRONIC CIRCUITS: Define Rectifier & its use |
| | 2 | Principles of working of different types of Rectifiers and their merits and demerits |
| 6TH | 1 | Functions of filters and classification of filter characteristics, D.C power supply system with help of block diagrams only |
| | 2 | Transistor, Different types of Transistor Configuration |
| 7TH | 1 | state output and input current gain relationship in CE, CB and CC configuration. |
| | 2 | Need of biasing and different types of biasing with circuit diagram.(CE configuration) |
| 8TH | 1 | Amplifiers and working principles of single phase CE amplifier |
| | 2 | Electronic Oscillator and its classification |
| 9TH | 1 | Working of Basic Oscillator with different elements through simple Block Diagram |
| | 2 | COMMUNICATION SYSTEM: Basic communication system |
| 10TH | 1 | Concept of Modulation and Demodulation, Difference between them |
| | 2 | Different types of Modulation ,Amplitude modulation concept |
| 11TH | 1 | Concept of frequency and phase modulation |
| | 2 | TRANSDUCERS AND MEASURING INSTRUMENTS: Concept of Transducer and sensor with their differences |
| 12TH | 1 | Different type of Transducers & concept of active and passive transducer |
| | 2 | Working principle of photo emissive, photoconductive |
| 13TH | 1 | photovoltaic transducer and its application |
| | 2 | Multimeter and its applications |

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| 14TH | 1 | Analog and Digital Multimeter and their differences |
| | 2 | Working principle of Multimeter with Basic Block diagram |
| 15TH | 1 | CRO , Block diagram of CRO and applications of CRO |
| | 2 | Previous Year Question Discussion |

Soumya Prakash Sutar
Lecturer in Electronics