PNS SCHOOL OF ENGG. & TECH., MARSHAGHAI DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

LESSON PLAN

| LESSON PLAN | | | | | | |
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| BRANCH: ELECTRICAL ENGINEERING | SEMESTER : 1ST | NAME OF THE TEACHING FACULTY : Er. ADITYA NARAYAN JENA | | | | |
| SUBJECT : BASIC ELECTRONICS ENGG. | No. of Days / Week Class Allotted : 2 | SEMESTER FROM : 16.08.2023 TO 11.12.2023 | | | | |
| WEEK | CLASS DAY | THEORY TOPICS | | | | |
| 1st | 1st | MODULE 1:ELECTRONIC DEVICES: | | | | |
| | | Basic Concept of Electronics and its Application | | | | |
| | 2nd | Basic Concept of Electron Emission and its Types | | | | |
| 2nd | 1st | Classification of Materials according to Energy Band | | | | |
| | 2.1 | Diagram(Insulator,Semiconductor,Conductor) | | | | |
| | 2nd | Difference between Intrinsic and Extrinsic Semiconductor | | | | |
| | | Difference between Vacuum tube and Semiconductor | | | | |
| 3rd | 1st | Principle of Working and use of PN-Junction diode | | | | |
| | 2nd | Working of Zener Diode & Working and use of LED | | | | |
| 4th | 1st | Integrated Circuits(IC) and its advantages | | | | |
| | 2nd | MODULE 2:ELECTRONIC CIRCUITS: Rectifier and Its uses | | | | |
| | 1st | Working of Half Wave Rectifier with merits and demerits, Working of Center tapped | | | | |
| 5th | | FWR with merits and demerits | | | | |
| | 2nd | Working of Full wave Bridge rectifier with merits and demerits | | | | |
| 6th | 1st | Functions of Filters, Types of Filters (Capacitor, Choke input and π) | | | | |
| | 2nd | Working of Unregulated DC Power supply system with help of Block diagram | | | | |
| 7th | 1st | TRANSISTOR, Types of Transistor, Symbols & Working of PNP and NPN Transistor | | | | |
| | 2nd | Different types of Transistor Configuration(CE,CB,CC) | | | | |
| 8th | 1st | Current gain relationship in CB,CE,CC Connection | | | | |
| | 2nd | Transistor biasing, Need of Biasing, Types of Biasing with Circuit diagram(Only CE | | | | |
| 9th | 1st | Concept of Amplifier, Working of Single Phase CE Amplifier | | | | |
| | 2nd | Electronic Oscillator,Its Types | | | | |
| 10th | 1st | Working of Basic Oscillator with simple Block Diagram | | | | |
| | 2nd | MODULE 3:COMMUNICATION SYSTEM: | | | | |
| | | Block Diagram of basic Communication system | | | | |
| | 1st | Concept of Modulation and Demodulation; Difference between them. Different types of | | | | |
| | | Modulation(AM,FM,PM) based on Signal, Carrier wave and Modulated Wave. | | | | |
| 11th | | | | | | |
| | 2nd | MODULE 4:TRANSDUCERS AND MEASURING INSTRUMENTS:Concept of | | | | |
| | | Transducer and Sensor,Difference between them. | | | | |
| 12th | 1st | Types of Transducer, Concept of Active and Passive Transducer | | | | |
| | 2nd | Working Principle of Photo emissive, Photoconductive Transducer; Application. | | | | |
| 13th | 1st | Working Principle of PhotoVoltaic Transducer; Application | | | | |
| | 2nd | Multimeter,its Application | | | | |
| 14th | 1st | Analog multimeter and Digital multimeter, Difference between them. | | | | |
| | 2nd | Working Principle of Multimeter with Basic Block diagram | | | | |
| 15th | 1st | CRO,Its Application | | | | |
| | 2nd | Working of CRO With Block diagram | | | | |

Amarendre Soha

Signature of Lecturer

Signature of HOD