



LESSON PLAN FOR SUMMER SEMESTER JANUARY 2024
Dept. of Electronics & Telecommunication, Govt. Polytechnic, Balasore
Name of the Faculty: Yogasakti Yogamaya
BASIC ELECTRONICS

Course Code: TH4 (B)

Class start:29/01/24

Theory : 2 P/W

Branch:2st sem Civil and Electrical Enggl

WEEK	PERIOD	TOPIC
1 st	1 st	1. ELECTRONIC DEVICES 1.1 Define Electronics & its application. 1.2 Define Electronic Emission & different types of Emission.
	2 nd	1.3 Classification of Solid according to electrical conductivity (Conductor, Semiconductor & Insulator) with respect to energy band diagram only.
2 nd	1 st	1.4 Difference between Intrinsic & Extrinsic Semiconductor.
	2 nd	1.5 Difference between vacuum tube & semiconductor.
3 rd	1 st	1.6 Principle of working and use of PN junction diode
	2 nd	1.6 Zener diode
4 th	1 st	1.6 Light Emitting Diode (LED)
	2 nd	1.7 Integrated circuits (I.C) & its advantages.
5 th	1 st	2. ELECTRONIC CIRCUITS 2.1 Rectifier & its uses. 2.2 Principles of working of different types of Rectifiers with their merits and demerits
	2 nd	2.2 Principles of working of different types of Rectifiers with their merits and demerits
6 th	1 st	2.3 Functions of filters and classification of simple Filter circuit (Capacitor, choke input and π)
	2 nd	2.4 Working of D.C power supply system (unregulated) with help of block diagrams only
7 th	1 st	2.5 Transistor, Different types of Transistor Configuration and state output and input current gain relationship in CE,CB and CC configuration(No mathematical derivation)
	2 nd	2.5 Transistor, Different types of Transistor Configuration and state output and input current gain relationship in CE,CB and CC configuration(No mathematical derivation)
8 th	1 st	2.6 Need of biasing and explain different types of biasing with circuit diagram.(only CE configuration)
	2 nd	2.7 Amplifiers(concept), working principles of single phase CE amplifier
9 th	1 st	2.8 Electronic Oscillator and its classification 2.9 Working of Basic Oscillator with different elements through simple Block diagram
	2 nd	3. COMMUNICATION SYSTEM 3.1 Basic communication system (concept & explanation with help of Block diagram)
10 th	1 st	3.2 Concept of Modulation and Demodulation, Difference between them
	2 nd	3.3 Different types of Modulation (AM, FM & PM) based on signal, carrier wave and modulated wave (only concept, No mathematical Derivation)

11 th	1 st	4. TRANSDUCERS AND MEASURING INSTRUMENTS 4.1 Concept of Transducer and sensor with their differences.
	2 nd	4.2 Different type of Transducers & concept of active and passive transducer.
12 th	1 st	4.3 Working principle of photo emissive, photoconductive, photovoltaic transducer and its application
	2 nd	4.3 Working principle of photo emissive, photoconductive, photovoltaic transducer and its application
13 th	1 st	4.4 Multimeter and its applications
	2 nd	4.5 Analog and Digital Multimeter and their differences
14 th	1 st	4.6 Working principle of Multimeter with Basic Block diagram
	2 nd	4.6 Working principle of Multimeter with Basic Block diagram
15 th	1 st	4.7 CRO, working principle of CRO with simple Block diagram
	2 nd	4.7 CRO, working principle of CRO with simple Block diagram

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12/1/24
(Lect in E&Tc)

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