

LESSON PLAN FOR BASIC ELECTRONICS ENGINEERING [Th 4(a)]

Discipline: Electrical Engineering	Semester: 1st	Name of the Teaching Faculty: PRADOSH KUMAR PANDA
Subject: BASIC ELECTRONICS ENGG.	No. of days/ per week class allotted: 2	Semester From Date : 25/10/2021 to Date: 31/01/2022 No. of Weeks: 15
Week	Class Day	Theory/ Practical Topics
		1. ELECTRONIC DEVICES
1st	1st	1.1 Basic Concept of Electronics and its application.
	2nd	1.2 Basic Concept of Electron Emission & its types.
2nd	1st	1.3 Classification of material according to electrical conductivity (Conductor, Semiconductor & Insulator) with respect to energy band diagram only
	2nd	1.4 Difference between Intrinsic & Extrinsic Semiconductor
3rd	1st	1.5 Difference between vacuum tube & semiconductor
	2nd	1.6 Principle of working and use of PN junction diode
4th	1st	1.6 Principle of working and use of PN junction diode, Zener diode and Light Emitting Diode (LED)
	2nd	1.7 Integrated circuits (I.C) & its advantages.
		2. ELECTRONIC CIRCUITS
5th	1st	2.1 Rectifier & its uses
	2nd	2.2 Principles of working of different types of Rectifiers with their merits and demerits
6th	1st	2.3 Functions of filters and classification of simple Filter circuit (Capacitor, choke input and π)
	2nd	2.4 Working of D.C power supply system (unregulated) with help of block diagrams only
7th	1st	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)
	2nd	2.6 Need of biasing and explain different types of biasing with circuit diagram.(only CE configuration)
8th	1st	2.7 Amplifiers(concept) , working principles of single phase CE amplifier
	2nd	2.8 Electronic Oscillator and its classification
9th	1st	2.9 Working of Basic Oscillator with different elements through simple Block Diagram
		3. COMMUNICATION SYSTEM
	2nd	3.1 Basic communication system (concept & explanation with help of Block diagram)
10th	1st	3.2 Concept of Modulation and Demodulation, Difference between them
	2nd	3.3 Different types of Modulation (AM, FM & PM) based on signal, carrier wave and modulated wave (only concept, No mathematical Derivation)
		4. TRANSDUCERS AND MEASURING INSTRUMENTS
11th	1st	4.1 Concept of Transducer and sensor with their differences
	2nd	4.2 Different type of Transducers & concept of active and passive transducer.
12th	1st	4.3 Working principle of photo emissive, photoconductive, photovoltaic transducer and its application

	2nd	4.4 Multimeter and its applications
13th	1st	4.5 Analog and Digital Multimeter and their differences.
	2nd	4.6 Working principle of Multimeter with Basic Block diagram
14th	1st	4.7 CRO, working principle of CRO with simple Block diagram
	2nd	REVISION & DOUBT CLEARING CLASS
15th	1st	REVISION & DOUBT CLEARING CLASS
	2nd	REVISION & DOUBT CLEARING CLASS

PRINCIPAL
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