

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

Discipline: COMMON TO ALL BRANCH	Semester: 1st	Name of the Teaching Faculty: DEEPIKA SARKAR(LECT IN ETC)
Subject: BASIC ELECTRONICS ENGG.	No. of days/ per week class allotted: 2	Semester From Date : 11.09.2020 to Date: 15.02.21 REQUIRED No. of Weeks: 15
Week	Class Day	Theory/ Practical Topics
		1. ELECTRONIC DEVICES
1st	1st	1.1 Basic Concept of Electronics and its application.1.2 Basic Concept of Electron Emission & its types.
	2nd	1.3 Classification of material according to electrical conductivity (Conductor, Semiconductor & Insulator) with respect to energy band diagram only .
2nd	1st	1.4 Difference between Intrinsic & Extrinsic Semiconductor
	2nd	1.5 Difference between vacuum tube & semiconductor.
3rd	1st	1.6 Principle of working and use of PN junction diode, Zener diode and Light EmittingDiode (LED)
	2nd	1.7 Integrated circuits (I.C) & its advantages.
		2.ELECTRONIC CIRCUIT
4th	1st	Rectifier & its uses Principles of working of different types of Rectifiers with their merits and demerits
	2nd	2.3 Functions of filters and classification of simple Filter circuit (Capacitor, choke input and π)
5th	1st	2.4 Working of D.C power supply system (unregulated) with help of block diagrams only
	2nd	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)
6th	1st	2.6 Need of biasing and explain different types of biasing with circuit diagram.(only CE configuration)
	2nd	2.7 Amplifiers(concept) , working principles of single phase CE amplifier
7th	1st	2.8 Electronic Oscillator and its classification

	2nd	2.9 Working of Basic Oscillator with different elements through simple Block Diagram
8th		3. COMMUNICATION SYSTEM
	1st	3.1 Basic communication system (concept & explanation with help of Block diagram)
	2nd	3.2 Concept of Modulation and Demodulation, Difference between them
9th	1st	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
	2nd	4.1 Concept of Transducer and sensor with their differences
10th	1st	4.2 Different type of Transducers & concept of active and passive transducer.
	2nd	4.3 Working principle of photo emissive, photoconductive, photovoltaic transducer and its application
11th	1st	4.4 Multimeter and its applications
	2nd	4.5 Analog and Digital Multimeter and their differences.
12th	1st	4.6 Working principle of Multimeter with Basic Block diagram
	2nd	4.7 CRO, working principle of CRO with simple Block diagram

PRINCIPAL

GOVT. POLYTECHNIC, NAWARANGPUR