

LESSON PLAN

Discipline: EL,CS&ETC Engineering	Semester: First (1 st)	Name of the Faculty: Er. A.K Patra
Subject: Basic Electronic Engineering	No. of days/week class allotted: Three (3)	Semester from Date: 25.10.22 to Date: 31.01.23 No. of Weeks: 15
WEEK	CLASS DAY	THEORY TOPICS
1 st	1 st	Basic concept of electronics & its application.
	2 nd	Basic concept of Electron Emission & its types .
	3 rd	Classification of material according electrical conductivity (Conductor, Semiconductor) with respect to energy band diagram only.
2 nd	1 st	Classification of material according electrical conductivity (Insulator) with respect to energy band diagram only.
	2 nd	Difference between Intrinsic & Extrinsic Semiconductor.
	3 rd	Difference between vacuum tube & semiconductor.
3 th	1 st	Principle of working and use of PN junction diode.
	2 nd	Principle of working and use of Zener diode and Light Emitting Diode (LED).
	3 rd	Integrated circuits (I.C) & its advantages.
4 th	1 st	Review Class.
	2 nd	Rectifier & its uses.
	3 rd	Monthly Test

5 th	1 st	Principles of working of Halfwave Rectifier with their merits and demerits.
	2 nd	Principles of working of Fullwave Rectifier with their merits and demerits.
	3 rd	Functions of filters and classification of simple Filter circuit (Capacitor, choke input and π).
6 th	1 st	Working of D.C power supply system (unregulated) with help of block diagrams only.
	2 nd	Transistor, Different types of Transistor Configuration.
	3 rd	State output and input current gain relationship in CE, CB and CC configuration (No mathematical derivation).
7 th	1 st	Need of biasing and explain different types of biasing with circuit diagram. (only CE configuration).
	2 nd	Amplifiers (concept), working principles of single phase CE amplifier.
	3 rd	Monthly Test.
8 th	1 st	Electronic Oscillator and its classification.
	2 nd	Working of Basic Oscillator with different elements through simple Block Diagram.
	3 rd	Review Class.
9 th	1 st	Basic communication system (concept & explanation with help of Block diagram).
	2 nd	Concept of Modulation and Demodulation, Difference between them.
	3 rd	Different types of Modulation (AM) based on signal, carrier wave and modulated wave (only concept, No mathematical Derivation)

10 th	1 st	Different types of Modulation (FM & PM) based on signal, carrier wave and modulated wave (only concept, No mathematical Derivation)
	2 nd	Review Class.
	3 rd	Monthly Test.
11 th	1 st	Concept of Transducer and sensor with their differences.
	2 nd	Different type of Transducers & concept of active and passive transducer.
	3 rd	Working principle of photo emissive transducer and its application.
12 th	1 st	Working principle of photoconductive transducer and its application.
	2 nd	Working principle of photovoltaic transducer and its application.
	3 rd	Multimeter and its applications.
13 th	1 st	Analog and Digital Multimeter and their differences.
	2 nd	Working principle of Multimeter with Basic Block diagram.
	3 rd	Simple Block diagram of CRO.
14 th	1 st	Working principle of CRO.
	2 nd	Review Class.
	3 rd	Monthly Test.
15 th	1 st	Revision.
	2 nd	Revision.
	3 rd	Revision.

