

KIIT POLYTECHNIC, BHUBANESWAR

LESSON PLAN Session (2023-2024)

Discipline: Computer Science Engineering.	Semester: 2 nd , Summer/2024	Name of the Teaching Faculty: Abhiram Pradhan Lecturer Email ID: abhiramfet@kp.kiit.ac.in
Subject: Basic Electronics (TH-4 A & B)	No. of Days/Week: 03	Start Date: 29/01/2024 End Date: 14/05/2024

Week	Class Day	Theory Topics
1st	1st	Basic Concept of Electronics and its application.
	2nd	Basic Concept of Electron Emission & its types.
	3rd	Classification of material according to electrical conductivity.
	4th	(Conductor, Semiconductor & Insulator) with respect to energy band diagram only.
2nd	1st	Difference between Intrinsic & Extrinsic Semiconductor.
	2nd	Difference between vacuum tube & semiconductor.
	3rd	Principle of working and use of PN junction diode, Zener diode and Light Emitting Diode (LED).
	4th	Integrated circuits (I.C) & its advantages
3rd	1st	Rectifier & it's uses.
	2nd	Principles of working of different types of Rectifiers with their merits and demerits.
	3rd	Functions of filters and classification of simple Filter

		circuit.
	4th	Explain Capacitor, choke input and π filter.
4th	1st	Working of D.C power supply system (unregulated) with help of block diagrams only.
	2nd	Transistor, Different types of Transistor Configuration and state output and input.
	3rd	current gain relationship in CE, CB and CC configuration (No mathematical derivation).
	4th	Need of biasing and explain different types of biasing with circuit diagram. (only CE configuration).
5th	1st	Amplifiers(concept) , working principles of single phase CE amplifier.
	2nd	Electronic Oscillator and its classification.
	3rd	Working of Basic Oscillator with different elements through simple Block Diagram.
	4th	Basic communication system (concept & explanation with help of Block diagram).
6th	1st	Concept of Modulation and Demodulation, Difference between them.
	2nd	Different types of Modulation (AM, FM & PM) based on signal, carrier wave and
	3rd	modulated wave (only concept, No mathematical Derivation).
	4th	Concept of Transducer and sensor with their differences.
7th	1st	Different type of Transducers & concept of active and passive transducer.
	2nd	Working principle of photo emissive, photoconductive, photovoltaic transducer and its application.
	3rd	Multimeter and its applications
	4th	Analog and Digital Multimeter and their differences.
8th	1st	Working principle of Multimeter with Basic Block diagram.
	2nd	CRO, working principle of CRO with simple Block diagram.

Signature of Concern Teacher