

# KIIT POLYTECHNIC, BHUBANESWAR

## LESSON PLAN

<b>Discipline :</b> CSE / ETC / Elect	<b>Semester: 2nd</b>	<b>Name of the Teaching Faculty: Mr Jiban Kumar Jena / Binodini Tripathy</b>
Subject: BETC	No. Of Days/Week Class Allotted 04	Semester From Date: 03/03/2021 To Date: 25/06/2021 No. Of Weeks : 15
<b>Week</b>	<b>Class Day</b>	<b>Theory/Practical Topics</b>
1st	1st	Basic concept of electronics and its application.
	2nd	Basic concept of electron Emission & its types
2 <sup>nd</sup>	1st	Classification of material according to electrical conductivity (Conductor, Semiconductor & Insulator) with respect to energy band diagram only.
	2nd	Difference between Intrinsic & Extrinsic Semiconductor.
3 <sup>rd</sup>	1st	Difference between Vacuum tube & Semiconductor.
	2nd	Principle of working and use of PN junction diode, Zener diode and lighting Emitting Diode (LED)
4 <sup>th</sup>	1st	Integrated circuits (I.C) & its advantages.
	2nd	Rectifier & its uses.
5 <sup>th</sup>	1st	Principles of working of different types of Rectifiers with their merits and demerits.
	2nd	Functions of filters and classification of simple filter circuit (Capacitor, choke input and etc).
6 <sup>th</sup>	1st	Working of D.C power supply system (unregulated) with help of block diagram only.
	2nd	Transistor, Different type of Transistor configuration and state output and input current gain relationship in CE, CB and CC configuration (No mathematical derivation).
7th	1st	QUIZZE
	2nd	Need of biasing and explain different types of biasing with circuit diagram.(only CE configuration).

8 <sup>th</sup>	1st	Amplifiers (concept) working principles of single phase CE amplifier.
	2nd	Electronic oscillator and its classification.
9 <sup>th</sup>	1st	Basic communication system (concept & explanation with help of block diagram).
	2nd	Concept of Modulation and Demodulation, Difference between them.
10 <sup>th</sup>	1st	Different type of Modulation (AM,FM &PM) based on signal, carrier wave and modulation wave (only concept, No mathematical Derivation).
	2nd	Concept of Transducer and sensor with their differences.
11 <sup>th</sup>	1st	Different type of Transducer & concept of active passive transducer.
	2nd	Working principle of photo emissive, photoconductive, photovoltaic, transducer and its application.
12 <sup>th</sup>	1st	Multimeter and its applications.
	2nd	Analog and Digital Multimeter and their differences.
13 <sup>th</sup>	1st	QUIZZE
14 <sup>th</sup>	1st	Working principle of Multimeter with basic block diagram.
	2nd	CRO,working principle of CRO with simple block diagram.
15 <sup>th</sup>	1st	ASSIGNMENT CHECK
	2nd	TEST