GOVERNMENT POLYTECHNIC, PURI
DEPARTMENT OF ELECTRICAL ENGINEERING

Discipline:MECHANICALENGINEERING	Semester: 2nd	Name of the Teaching Faculty: **MRS ANANYA IPSITA.**
Subject: BASIC ELECTRONICS ENGINEERING	No. ofdays/per week class allotted:**02**	Semester From date:14.03.2022 To Date:18.06.2022 No.of Weeks:**14**
PRE-REQUISITE	Basic knowledge on electronics and its application in modern era.	
COURSE OUTCOMES	**CO1:** To be familiar with Electronic devices **CO2:** To be familiar with Electronic circuits **CO3:** To be familiar with communication system **CO4:** To be familiar with Electronic measuring instruments	

Week	Class Day	Theory/Practical Topics	DELIVERY METHOD
1ST	1ST	Basic Concept of Electronics and its application, Classification of material	Whiteboard
	2ND	Intrinsic & Extrinsic Semiconductor	Whiteboard
2ND	1ST	Principle of working and use of PN junction diode	Whiteboard
	2ND	Zener diode and Light Emitting Diode (LED)	Whiteboard
3RD	1ST	Integrated circuits (I.C) & its advantages	Whiteboard
	2ND	Rectifier & its uses ,principle of working of half wave rectifier with merit and demerit	Whiteboard
4TH	1ST	Principle of working of Full wave rectifier with merit and demerit	Whiteboard
	2ND	classification of simple Filter circuit (Capacitor, choke input)	Whiteboard
5TH	1ST	Working of D.C power supply system (unregulated) with help of block diagrams only	Whiteboard
	2ND	Different types of Transistor Configuration and state output and input current gain	Whiteboard
6TH	1ST	Need of biasing Fixed biasing for CE configuration	Whiteboard
	2ND	Self biasing for CE configurtion	Whiteboard
7TH	1ST	Voltage devider biasing for CE configuration	Whiteboard
	2ND	Concept of amplifier and working principles of single phase CE amplifier	Whiteboard
8TH	1ST	Electronic Oscillator and its classification Working of Basic Oscillator with different elements through simple Block Diagram	Whiteboard
	2ND	Concept of Basic communication system , Explanation with the help of block diagram	Whiteboard
9TH	1ST	Concept of modulation and demodulation and its application	Whiteboard
	2ND	AM ,FM , PM modulation	Whiteboard
10TH	1ST	Concept of Transducer and sensor with their differences and its types (active, passive)	Whiteboard
	2ND	Working principle of photo emissive transducer	Whiteboard
11TH	1ST	Working principle photoconductive transducer	Whiteboard
	2ND	Working principle of photovoltaic transducer	Whiteboard
12TH	1ST	Multimeter and its applications	Whiteboard
	2ND	Analog and Digital Multimeter and their differences	Whiteboard

13TH	1ST	Working principle of Multimeter with Basic Block diagram	Whiteboard
	2ND	CRO, working principle of CRO with simple Block diagram	Whiteboard
14TH	1ST	PREVIOUS YEAR QUESTIONS DISCUSSION	Whiteboard
	2ND	REVISION	Whiteboard

LEARNINGRESOUCES:

01. Principles of Electronics by V.K Mehta and Rohit Mehta,S Chand Publication
02. Principles of Electronics by S.K. SAHADEV (Dhanpatrai Publication)
03. Electronic devices and circuit theory by Robert L.Boylestad and Louis Nashelsky (Pearson Publication)

Ananya Ipsita
Sign. of Faculty concerned

14/03/2022
Sign.of HOD

Principal
G.P Puri