

Discipline :- ELECTRICAL / CIVIL / MECHANICAL	Semester:- 1ST	Name of the Teaching Faculty:- LINCOLN MOHANTY
Subject:- BASIC ELECTRONIC ENGINEERING (TH.04(b))	No of Days/per Week Class Allotted :- 02	Semester From:- 02nd January, 2019 To:- 15th April, 2019 No of Weeks:- 15
Week	Class Day	Theory
1ST	1	ELECTRONIC DEVICES
	2	Basic Concept of ElectronicsElectron Emission & different types
2ND	1	Classification of material according to electrical conductivity (Conductor, Semiconductor & Insulator) with respect to energy band diagram only.
	2	Intrinsic & Extrinsic Semiconductor
3RD	1	Difference between vacuum tube & semiconductor. Principle of working and use of PN junction diode,
	2	Zener diode and Light Emitting Diode (LED), Liquid Crystal Diode(LCD)
4TH	1	Bipolar junction Transistor(BJT).
	2	Basic concept of manufacturing integrated circuits (I.C) & its uses.
5TH	1	ELECTRONIC CIRCUITS
	2	Define Rectifier & its usePrinciples of working of different types of Rectifiers and their merits and demerits
6TH	1	Functions of filters and classification of filter characteristics
	2	D.C power supply system with help of block diagrams only
7TH	1	Different types of Transistor Configuration and state output and input current gain relationship in CE,CB and CC configuration.
	2	Need of biasing and different types of biasing with circuit diagram.(CE configuration)
8TH	1	Amplifiers and how amplification of signal is achieved by the help of transistor
	2	Working of a single phase RC coupled Amplifier and discuss its frequency response and gain verses bandwidth relationship.
9TH	1	Basic function of Oscillation
	2	Essentials of Transistor oscillators and its classifications
10TH	1	COMMUNICATION SYSTEM
	2	Basic communication system with help of Block diagram, Modulation, Need of Modulation, Different types of Modulation (AM, FM & PM)
11TH	1	Amplitude Modulation & Frequency Modulation (Signal, Carrier Wave & Modulated Wave) (No Mathematical Derivation.), Demodulation.
	2	Working of Super heterodyne Radio Receiver, Block diagram of Radio Transmitter & Receiver
12TH	1	TRANSDUCERS AND MEASURING INSTRUMENTS
	2	Concept of Transducer and Primary sensor, Different type of Transducers & concept of active and passive transducer
13TH	1	Mechanical primary transducers, devices, springs and Bourden tube diaphragm
	2	Working principle and application of LVDT.
14TH	1	Working principle of photo emissive, photoconductive, photovoltaic transducer and its application
	2	Multimeter, types and applications

15TH	1	CRO , Block diagram of CRO and applications of CRO
	2	Basic concept of automatic control system

Teaching Faculty

HOD , ETC

Academic Co-ordinator

Principal

Government Polytechnic, Puri