SYNERGY SCHOOL OF ENGINEERING
DEPARTMENT OF ELECTRICAL ENGINEERING

Discipline :EE/ME	Semester:- 1ST sem	Name of the teaching faculty:- PRAJNAPARAMITA KABI
Subject:- basic electronics	No. of Days/week class Allotted:-2	No. of weeks:-15 SESSION-2023-2024 WINTER
No. of week	No. of class	Topic to be Taught
1	1st	Introduction class
	2nd	Basic Concept of Electronics
2	1st	Electron Emission & different types
	2nd	Classification of material according to electrical conductivity
3	1st	Conductor, Semiconductor & Insulator) with respect to energy band diagram only
	2nd	Intrinsic & Extrinsic Semiconductor
4	1st	Difference between vacuum tube & semiconductor.
	2nd	Principle of working and use of PN junction diode, Zener diode and Led
5	1st	Basic concept of manufacturing integrated circuits (I.C) & its uses.
	2nd	Define Rectifier & its use
6	1st	Principles of working of different types of Rectifiers and their merits and demerits
	2nd	Functions of filters and classification of filter characteristics
7	1st	D.C power supply system with help of block diagrams
	2nd	Different types of Transistor Configuration and state output and input current gain relationship in CE,CB and CC configuration
8	1st	Need of biasing and different types of biasing with circuit diagram.(CE configuration
	2nd	Amplifiers and how amplification of signal is achieved by the help of transisto
9	1st	Working of a single phase RC coupled Amplifier and discuss its frequency response and gain verses bandwidth relationship
	2nd	Basic function of Oscillation
10	1st	Essentials of Transistor oscillators and its classifications
	2nd	Basic communication system with help of Block diagram Modulation
11	1st	Different types of Modulation (AM, FM & PM)
	2nd	Working of Super heterodyne Radio Receiver

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12	1st	Block diagram of Radio Transmitter & Receiver
	2nd	Concept of Transducer and Primary sensor
13	1st	Different type of Transducers & concept of active and 34passive transducer
	2nd	Mechanical primary transducers, devices, springs and Bourden tube diaphr3agm
14	1st	Working principle and application of LVDT
	2nd	Working principle of photo emissive, photoconductive, photovoltaic transducer and its application
15	1st	Multimeter, types and applications
	2nd	CRO , Block diagram of CRO and applications of CRO.
	3rd	Basic concept of automatic control system

30/8/23

Signature of the faculty

HOD,EE

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