LESSON PLAN

Subject name: Basic Electronics	**Faculty Name: Mrs. Niharika Sethy** **No of Classes per week: 2** **Commencement of classes: From 25.10.2022 to 31.01.2023**	
Week No.	**Topics to be covered**	**Status**
W1	**ELECTRONIC DEVICES** 1.1 Basic concept of Electronics& its applications. 1.2 Basic concept of Electron Emission and its type.	
W2	1.3 Classification of material according to electrical conductivity (Conductor, Semiconductor & Insulator) with respect to energy band diagram only. 1.4 Intrinsic & Extrinsic Semiconductor.	
W3	1.5 Difference between vacuum tube & semiconductor. 1.6 Principle of working and use of PN junction diode, Zener diode	
W4	Light Emitting Diode (LED), Basic concept of integrated circuits (I.C) & its uses.	
W5	**ELECTRONIC CIRCUITS** 2.1 Define Rectifier & its use. 2.2 Principles of working of different types of Rectifiers and their merits and demerits	
W6	2.3 Functions of filters and classification of filter characteristics 2.4 D.C power supply system with help of block diagrams only	
W7	2.5 Different types of Transistor Configuration and state output and input current gain relationship in CE,CB and CC configuration. 2.6 Need of biasing and different types of biasing with circuit diagram.(CE configuration)	
W8	2.9 Basic function of Oscillation 2.10 Essentials of Transistor oscillators and its classifications.	
	COMMUNICATION SYSTEM	

W9	3.1 Basic communication system with help of Block diagram 3.2 Modulation, Demodulation.	
W10	3.3 Need of Modulation 3.4 Different types of Modulation (AM, FM &PM)3.5 Amplitude Modulation & Frequency Modulation (Signal, Carrier Wave & Modulated Wave) (No Mathematical Derivation.)	
W11	**TRANSDUCERS AND MEASURING INSTRUMENTS** 4.1 Concept of Transducer and Primary sensor and differences. 4.2 Different type of Transducers & concept of active and passive transducer	
W12	4.3 Working principle of photo emissive, photoconductive, photovoltaic transducer and its application.	
W13	4.4 Multimeter, types and applications 4.5 Analog and digital multimeter and their differences	
W14	4.6 Working principle of Multiameter with basic block diagram.	
W15	4.7 CRO , Block diagram of CRO and applications of CRO