Discipline:- ELECTRICAL ENGINEERING	Semester: 2ND Sem	**Name of the Faculty:** Anjyadita Acharya	DATE			
Subject: Basic Electronics	**Class per Week Allotted:3**	**No. of Week:**				
WEEK	**Class**	**THEORY TOPICS TO BE COVERED**		**SIGN**	**HOD'S REMARK**	**SIGN OF PRINCIPAL**
1	1	**UNIT-I ELECTRONIC DEVICES** Basic Concept of Electronics and its application.				
	2	Basic Concept of Electron Emission & its types.				
2	1	Classification of material according to electrical conductivity.				
	2	(Conductor, Semiconductor & Insulator) with respect to energy band diagram only.				
3	1	Difference between Intrinsic & Extrinsic Semiconductor.				
	2	Difference between vacuum tube & semiconductor.				
4	1	Principle of working and use of PN junction diode.				
	2	Integrated circuits (I.C) & its advantages.				
5	1	**UNIT-II ELECTRONIC CIRCUITS** Rectifier & its uses.				
	2	Principles of working of different types of Rectifiers with their merits and demerits				
6	1	Functions of filters and classification of simple Filter circuit (Capacitor, choke input and π).				
	2	Working of D.C power supply system (unregulated) with help of block diagrams only(unregulated) with help of block diagrams only				

7	1	Need of biasing and explain different types of biasing with circuit diagram.(only CE configuration)				
	2	Amplifiers(concept)				
8	1	working principles of single phase CE amplifier.				
	2	Electronic Oscillator and its classification.				
9	1	Working of Basic Oscillator with different elements through simple Block Diagram				
	2	**UNIT- III COMMUNICATION SYSTEM** Basic communication system (concept & explanation with help of Block diagram).				
10	1	Concept of Modulation and Demodulation, Difference between them				
	2	Different types of Modulation (AM, FM & PM) based on signal, carrier wave and modulated wave (only concept, No mathematical Derivation)				
11	1	**UNIT-IV TRANSDUCERS AND MEASURING INSTRUMENTS** Concept of Transducer and sensor with their differences.				
	2	Different type of Transducers.				
12	1	concept of active and passive transducer.				
	2	Working principle of photo emissive, photoconductive.				
13	1	Photovoltaic transducer and its application.				
	2	Multimeter and its applications				
14	1	Analog and Digital Multimeter and their differences.				
	2	Working principle of Multimeter with Basic Block diagram				
15	1	CRO				
	2	working principle of CRO with simple Block diagram. Overall Revision.				