

WEEK	Class	THEORY TOPICS TO BE COVERED	DATE	SIGN	HOD'S REMARK	SIGN OF PRINCIPAL
<b>Discipline:-</b> ELECTRICAL ENGINEERING		<b>Name of the Faculty: Sharmistha Behera</b>				
<b>Subject:</b> Basic Electrical Engineering		<b>No. of Week:</b>				
<b>Semester:</b> 2ND Sem						
<b>Class per Week Allotted:</b> 3						
1	1	<b>UNIT-I FUNDAMENTALS</b> Concept of current flow. Concept of source and load.				
	2	State Ohm's law and concept of resistance. Relation of V, I & R in series circuit.				
2	1	Relation of V, I & R in parallel circuit. Division of current in parallel circuit.				
	2	Effect of power in series & parallel circuit. Kirchhoff's Law.				
3	1	Simple problems on Kirchhoff's law. Unit II- Over all Revision.				
	2	<b>UNIT-II A.C. THEORY</b> Generation of alternating emf. Difference between D.C. & A.C.				
4	1	Define Amplitude, instantaneous value, cycle, Time period, frequency, phase angle, phase difference.				
	2	State & Explain RMS value, Average value, Amplitude factor & Form factor with Simple problems.				
5	1	Represent AC values in phasor diagrams.				
	2	AC through RL, RC series circuits.				
6	1	AC through RLC series circuits, Solving problems.				
	2	Concept of Power and Power factor.				
7	1	Impedance triangle and power triangle. Unit II- Over all Revision				
	2	<b>UNIT- III GENERATION OF ELECTRICAL POWER</b> Give elementary idea on generation of electricity from thermal power station with block diagram.				

8	1	Give elementary idea on generation of electricity from Hydro power station with block diagram.				
	2	Give elementary idea on generation of electricity from Nuclear power station with block diagram. Unit III- Over all Revision				
9	1	<b>UNIT- IV CONVERSION OF ELECTRICAL ENERGY</b> Introduction of DC machines, Main parts of DC machines.				
	2	Classification of DC generator.				
10	1	Classification of DC motor.				
	2	Uses of different types of DC generators & motors.				
11	1	Types and uses of single phase induction motors.				
	2	Concept of Lumen, Different types of Lamps (Filament, Fluorescent, LED bulb) its Construction and principle.				
12	1	Star rating of home appliances (Terminology, Energy efficiency, Star rating Concept). Unit IV - Over all Revision.				
	2	<b>UNIT- V WIRING AND POWER BILLING</b> Types of wiring for domestic installations.				
13	1	Layout of household electrical wiring (single line diagram showing all the important component in the system).				
	2	List out the basic protective devices used in house hold wiring.				
14	1	Calculate energy consumed in a small electrical installation. Unit V- Over all Revision.				
	2	<b>UNIT- VI MEASURING INSTRUMENTS</b> Introduction to measuring instruments. Torques in instruments.				
15	1	Different uses of PMMC type of instruments (Ammeter & Voltmeter).				
	2	Different uses of MI type of instruments (Ammeter & Voltmeter). Draw the connection diagram of A.C/ D.C Ammeter, voltmeter, energy meter and wattmeter. (Single phase only).				