BHUBANANANDA ORISSA SCHOOL OF ENGINEERING, CUTTACK

ELECTRICAL ENGG.DEPARTMENT

LESSON PLAN

SEMESTER :2nd (A)(CIVIL)

SESSION – summer-(2021-22)

SUBJECT: BEE

NAME OF FACULTY: Sukanta Kumar Nandi

Discipline: **Electrical Engg.**	Semester:**2nd**	Name of the teaching faculty: SUKANTA KUMAR NANDI
Subject-**BEE**	No. of Days/per week class allotted:**02PERIODS /WEEK** **(WED,FRI-1 period each)**	Semester: From Date: **14/03/2022** To Date: **18/06/2022** No. of weeks: **14 WEEKS**
Week	**Class Day**	**Theory/Practical Topics**
1st (14/03/2022-19/03/2022)	16/03/2022	**1. FUNDAMENTALS** 1.1 Concept current flow 1.2 Concept of source and load
		1.3 State OHM's law and concept of resistance 1.4 Relation of V,I and R in series circuit
	18/03/2022	**Dola Purnima**
	19/03/2022	**Holi**
2nd (21/03/2022-26/03/2022)	23/03/2022	1.5 Relation of V,I and R in parallel circuit
	25/03/2022	1.6Division of current in parallel circuit 1.7 Effect of power in series and parallel circuit
3rd (28/03/2022-02/04/2022)	30/03/2022	1.8 Kirchhoff's law 1.9 Simple problems on kirchhoff's law
		2. A.C. THEORY 2.1 Generation of alternating emf. 2.2 Difference between D.C. & A.C..
	01/04/2022	**UTKAL DIWAS**
4th (04/04/2022-09/04/2022)	06/04/2022	2.3 Define Amplitude, instantaneous value, cycle, Time period, frequency, phase angle, phase difference.
	08/04/2022	2.4 State & Explain RMS value, Average value, Amplitude factor & Form factor with Simple problems.

5th (11/04/2022-16/04/2022)	13/04/2022	2.4 State & Explain RMS value, Average value, Amplitude factor & Form factor with Simple problems.
		2.5 Represent AC values in phasor diagrams. 2.6 AC through pure resistance, inductance & capacitance
	14/04/2022	**AMBEDKAR JAYANTI**
	15/04/2022	**GOOD FRIDAY**
6th (18/04/2022-23/04/2022)	20/04/2022	2.7 AC though RL, RC, RLC series circuits. .
	22/04/2022	2.8 Simple problems on RL, RC & RLC series circuits
7th (25/04/2022-30/04/2022)	27/04/2022	2.9 Concept of Power and Power factor 2.10 Impedance triangle and power triangle
	27/04/2022	**CLASSTEST -1**
8th (01/05/2022-07/05/2022)	04/05/2022	3. **GENERATION OF ELECTRICAL POWER** 3.1 Give elementary idea on generation of electricity from thermal , hydro power station with block diagram
	06/05/2022	3.1.1 Electricity from Nuclear power station with block diagram
9th (09/05/2022-14/05/2022)	11/05/2022	4. **CONVERSION OF ELECTRICAL ENERGY (No operation, Derivation, numerical problems)** 4.1 Introduction of DC machines. 4.2 Main parts of DC machines
	12/05/2022	**INTERNAL ASSESSMENT**
	13/05/2022	4.3 Classification of DC generator 4.4 Classification of DC motor. 4.5 Uses of different types of DC generators & motors
10th (16/05/2022-21/05/2022)	**16/05/2022**	**BUDHA PURNIMA**

	18/05/2022	4.6 Types and uses of single phase induction motors. 4.7 Concept of Lumen
	20/05/2022	4.8 Different types of Lamps (Filament, Fluorescent, LED bulb) its Construction and Principle. 4.9 Star rating of home appliances (Terminology, Energy efficiency, Star rating Concept)
11th (23/05/2022-28/05/2022)	25/05/2022	5. WIRING AND POWER BILLING 5.1 Types of wiring for domestic installations. 5.2 Layout of household electrical wiring (single line diagram showing all the important component in the system).
	27/05/2022	5.3 List out the basic protective devices used in house hold wiring. 5.4 Calculate energy consumed in a small electrical installation
12th (30/05/2022-04/06/2022)	**30/05/2022**	**SABITRI AMABASYA**
	01/06/2022	5.3 List out the basic protective devices used in house hold wiring. 5.4 Calculate energy consumed in a small electrical installation
	03/06/2022	**CLASSTEST -2**
13th (06/06/2022 – 11/06/2022)	08/06/2022	6. MEASURING INSTRUMENTS 6.1 Introduction to measuring instruments
	10/06/2022	6.2 Torques in instruments.
14th (13/06/2022-18/06/2022)	17/06/2022	6.3 Different uses of PMMC type of instruments (Ammeter & Voltmeter). 6.4 Different uses of MI type of instruments (Ammeter & Voltmeter)
		6.5 Draw the connection diagram of A.C/ D.C Ammeter, voltmeter, energy meter and wattmeter. (Single phase only).