LESSON PLAN

DEPT. OF ELECT. ENGG GOVT. POLY BHADRAK ESTD-2017

SUB: ELECTRICAL MACHINE LAB - I

BRANCH:- ELECTRICAL ENGG.

SEMESTER: 4th

NAME OF FACULTY: NIBEDITA HO

GOVERNMENT POLYTECHNIC, BHADRAK

SESSION:2024-25

Hod-Electrical

HOD (ELECT.)
G.P.BHADRAK

Academic Co-ordinator

Academic Co-ordinator

Principal
Govt. Polytechnic, Bhadrak

Principal
Govt. Polytechnic
Bhadrak

Discipline: Electrical Engg.	Semester: 4th	Name of the Teaching Faculty : Nibedita Ho (Lect. Electrical Engg.)
Subject: Electrical Machine Lab - I	No. of Days/per week class allotted: 6	Semester from date:04.02.2025 – 17.05.2025 No. of Weeks:15
Week	Class Day	Theory
1st	E_1	Identification of different terminals of a DC machine by test lamp method and multimeter method & to measure insulation resistance by megger.
	E_2	Identification of different terminals of a DC machine by test lamp method and multimeter method & to measure insulation resistance by megger.
	E_1	Identification of different terminals of a DC machine by test lamp method and multimeter method & to measure insulation resistance by megger.
	E_2	Identification of different terminals of a DC machine by test lamp method and multimeter method & to measure insulation resistance by megger.
2nd	E_1	Dimensional and material study of various parts of a DC machine.
	E_2	Dimensional and material study of various parts of a DC machine.
	E_1	Dimensional and material study of various parts of a DC machine.
	E_2	Dimensional and material study of various parts of a DC machine.
3rd	E_1	Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.
	E_2	Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.
	E_1	Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.
	E_2	Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.
4th	E_1	Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.
	E_2	Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.
	E_1	Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.
		Plot OCC of a DC shunt generator at constant speed and determine

	E_2	critical resistance from the graph.
5^{th}	E_1	Plot External Characteristics of a DC shunt generator at constant speed.
	E_2	Plot External Characteristics of a DC shunt generator at constant speed.
	E_1	Plot External Characteristics of a DC shunt generator at constant speed.
	E_2	Plot External Characteristics of a DC shunt generator at constant speed.
6^{th}	E_1	Study of Three point starter, connect and run a DC shunt motor & measure the no load current.
	E_2	Study of Three point starter, connect and run a DC shunt motor & measure the no load current.
	E_1	Study of Three point starter, connect and run a DC shunt motor & measure the no load current.
	E_2	Study of Three point starter, connect and run a DC shunt motor & measure the no load current.
7^{th}	E_1	Study of Four point starter, connect and run a DC compound motor & measure no load current.
	E_2	Study of Four point starter, connect and run a DC compound motor & measure no load current.
	E_1	Study of Four point starter, connect and run a DC compound motor & measure no load current.
	E_2	Study of Four point starter, connect and run a DC compound motor & measure no load current.
	E_1	Control the speed of a DC shunt motor by field flux control method & armature voltage control method.

8th	E_2	Control the speed of a DC shunt motor by field flux control method & armature voltage control method.
	E_1	Control the speed of a DC shunt motor by field flux control method & armature voltage control method.
	E_2	Control the speed of a DC shunt motor by field flux control method & armature voltage control method.
9th	E_1	Determine the armature current vs. speed characteristic of a DC motor.
	E_2	Determine the armature current vs. speed characteristic of a DC motor.
	E_1	Determine the armature current vs. speed characteristic of a DC motor.
	E_2	Determine the armature current vs. speed characteristic of a DC motor.
10th	E_1	Determine the efficiency of a DC machine by brake test method.
	E_2	Determine the efficiency of a DC machine by brake test method.
	E_1	Determine the efficiency of a DC machine by brake test method.
	E_2	Determine the efficiency of a DC machine by brake test method.
11th	E_1	Identification of terminals, determination of voltage transformation ratio of a single phase transformer.
	E_2	Identification of terminals, determination of voltage transformation ratio of a single phase transformer.
	E_1	Identification of terminals, determination of voltage transformation ratio of a single phase transformer.
	E_2	Identification of terminals, determination of voltage transformation ratio of a single phase transformer.

12th	E_1	Perform OC Test and SC test of a single phase transformer.
	E_2	Perform OC Test and SC test of a single phase transformer.
	E_1	Perform OC Test and SC test of a single phase transformer.
	E_2	Perform OC Test and SC test of a single phase transformer.
13th	E_1	Perform OC Test and SC test of a single phase transformer.
	E_2	Perform OC Test and SC test of a single phase transformer.
	E_1	Perform OC Test and SC test of a single phase transformer.
	E_2	Perform OC Test and SC test of a single phase transformer.
14th	E_1	Determine the voltage regulation of a single phase transformer at different loads.
	E_2	Determine the voltage regulation of a single phase transformer at different loads.
	E_1	Determine the voltage regulation of a single phase transformer at different loads.
	E_2	Determine the voltage regulation of a single phase transformer at different loads.
15th	E_1	Polarity test of single phase transformer and parallel operation of two single phase transformers.
	E_2	Polarity test of single phase transformer and parallel operation of two single phase transformers.
	E_1	Polarity test of single phase transformer and parallel operation of two single phase transformers.
	E_2	Polarity test of single phase transformer and parallel operation of two single phase transformers.

01.02.25

Signature of Faculty

Lect.in Elect.Engg.
Govt.Poly.Bhadrak