LESSON PLAN OF ELECTRICAL MACHINE LAB-1

Name of the Faculty: Mr.R.Hansda
Discipline : Electrical.
Semester : 4th sem
Subject : Pr1. ELECTRICAL MACHINE LAB-I
Duration : 15 week Sessional -25 II End Semester Examination: 50
Work load per week : 6

WEEK	EXPERIMENT	
	LECTURE DAY	TOPIC
1	1	1. Identification of different terminals of a DC machine by test lamp method and multimeter method & to measure insulation resistance by megger
	2	1. Identification of different terminals of a DC machine by test lamp method and multimeter method & to measure insulation resistance by megger
2	1	2. Dimensional and material study of various parts of a DC machine.
	2	2. Dimensional and material study of various parts of a DC machine.
3	1	3.Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.
	2	3.Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.
4	1	4. Plot External Characteristics of a DC shunt generator at constant speed.
	2	4. Plot External Characteristics of a DC shunt generator at constant speed.
5	1	5. Study of Three point starter, connect and run a DC shunt motor & measure the no load current.
	2	5. Study of Three point starter, connect and run a DC shunt motor & measure the no load current.
6	1	6. Study of Four point starter, connect and run a DC compound motor & measure no load current.
	2	6. Study of Four point starter, connect and run a DC compound motor & measure no load current.
7	1	7. Control the speed of a DC shunt motor by field flux control method & armature voltage control method.
	2	7. Control the speed of a DC shunt motor by field flux control method & armature voltage control method.
8	1	8. Determine the armature current vs. speed characteristic of a DC motor
	2	8. Determine the armature current vs. speed characteristic of a DC motor
9	1	9. Determine the efficiency of a DC machine by brake test method.
	2	9. Determine the efficiency of a DC machine by brake test method.
10	1	10. Identification of terminals, determination of voltage transformation ratio of a single phase transformer.
	2	10. Identification of terminals, determination of voltage transformation ratio of a single phase transformer.
11	1	11. Perform OC Test and SC test of a single phase transformer.
	2	11. Perform OC Test and SC test of a single phase transformer.
12	1	12. Determine the voltage regulation of a single phase transformer at different loads.
	2	12. Determine the voltage regulation of a single phase transformer at different loads.
13	1	13. Polarity test of single phase transformer and parallel operation of two single phase transformers.
	2	13. Polarity test of single phase transformer and parallel operation of two single phase transformers.
14	1	
	2	
15	1	
	2	

15-09-21

HOD 15/09/21