ACADEMIC LESSON PLAN OF SUMMER 2024

Discipline **ELECTRICAL ENGG.**	Semester: -4th (**Sec A,Grp 1)**	Name of the Teaching Faculty: - **Amit Kumar Bisoyi and Sangeeta Kumari Patra**
Subject: - **Electrical Machine Lab-I**	No of Days/per Week Class Allotted: **2p/week**	Semester From: - 16th January 2024 to 26th April 2024 No. of weeks:15 weeks
Week	**Class Day**	**Practical Topics**
1st	1st	1. Identification of different terminals of a DC machine by test lamp method and multi-meter method & to measure insulation resistance by megger.(contd.)
	2nd	1. Identification of different terminals of a DC machine by test lamp method and multi-meter method & to measure insulation resistance by megger.
2nd	1st	2. Dimensional and material study of various parts of a DC machine.(contd.)
	2nd	2. Dimensional and material study of various parts of a DC machine.
3rd	1st	3.Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.(contd.)
	2nd	3.Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.
4th	1st	4.Plot External Characteristics of a DC shunt generator at constant speed.
	2nd	5. Study of Three point starter, connect and run a DC shunt motor & measure the no load current.(contd.)
5th	1st	5. Study of Three point starter, connect and run a DC shunt motor & measure the no load current.
	2nd	6. Study of Four point starter, connect and run a DC compound motor & measure no load current.
6th	1st	6. Study of Four point starter, connect and run a DC compound motor & measure no load current.
	2nd	7. Control the speed of a DC shunt motor by field flux control method. (Contd.)
7th	1st	7. Control the speed of a DC shunt motor by field flux control method.
	2nd	8.Control the speed of a DC shunt motor by armature voltage control method. (Contd.)
8th	1st	8.Control the speed of a DC shunt motor by armature voltage control method. (Contd.)

	2nd	8. Determine the armature current vs. speed characteristic of a DC motor(Contd.)
9th	1st	9. Determine the efficiency of a DC machine by brake test method. (Contd.)
	2nd	9. Determine the efficiency of a DC machine by brake test method.
10th	1st	10. Identification of terminals, determination of voltage transformation ratio of a Single Phase Transformer(Contd.)
	2nd	10. Identification of terminals, determination of voltage transformation ratio of a Single Phase Transformer
11th	1st	10. Identification of terminals, determination of voltage transformation ratio of a Single Phase Transformer
	2nd	11. Perform OC Test of a Single Phase Transformer.(Contd.)
12th	1st	11. Perform SC test of a Single Phase Transformer.
	2nd	12. Determine the voltage regulation of a Single Phase Transformer at different loads. (Contd.)
13th	1st	12. Determine the voltage regulation of a Single Phase Transformer at different loads.
	2nd	12. Determine the voltage regulation of a Single Phase Transformer at different loads.
14th	1st	Revision Class
	2nd	Revision Class
15th	1st	Revision Class
	2nd	Revision Class

Signature of Teaching Faculty