

**ACADEMIC LESSON PLAN OF SUMMER 2022**

Discipline <b>ELECTRICAL</b>	Semester: -4 <sup>th</sup> <b>(Sec B)</b>	Name of the Teaching Faculty: - <b>Sunita Oram and Biswanita Sahu</b>
Subject: - <b>Electrical Machine Lab-I</b>	No of Days/per Week Class Allotted: <b>2p/week</b>	Semester From: - <b>10<sup>th</sup> March 2022</b> To: <b>10<sup>th</sup> June 2022</b>  No of Weeks: - <b>15 weeks</b>
<b>Week</b>	<b>Class Day</b>	<b>Practical Topics</b>
1 <sup>st</sup>	1 <sup>st</sup> 11/03/2022	1. Identification of different terminals of a DC machine by test lamp method and multi-meter method & to measure insulation resistance by megger.(contd.)
	2 <sup>nd</sup> 16/03/2022	1. Identification of different terminals of a DC machine by test lamp method and multi-meter method & to measure insulation resistance by megger.
2 <sup>nd</sup>	1 <sup>st</sup> 18/03/2022	Holiday
	2 <sup>nd</sup> 23/03/2022	2. Dimensional and material study of various parts of a DC machine.
3 <sup>rd</sup>	1 <sup>st</sup> 25/03/2022	3. Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.(contd.)
	2 <sup>nd</sup> 30/03/2022	3. Plot OCC of a DC shunt generator at constant speed and determine critical resistance from the graph.
4 <sup>th</sup>	1 <sup>st</sup> 1/04/2022	Holiday
	2 <sup>nd</sup> 06/04/2022	4. Plot External Characteristics of a DC shunt generator at constant speed.
5 <sup>th</sup>	1 <sup>st</sup> 08/04/2022	5. Study of Three point starter, connect and run a DC shunt motor & measure the no load current.
	2 <sup>nd</sup> 13/04/2022	6. Study of Four point starter, connect and run a DC compound motor & measure no load current.
6 <sup>th</sup>	1 <sup>st</sup> 15/04/2022	Holiday
	2 <sup>nd</sup> 20/04/2022	6. Study of Four point starter, connect and run a DC compound motor & measure no load current.(cont.)
7 <sup>th</sup>	1 <sup>st</sup> 22/04/2022	7. Control the speed of a DC shunt motor by field flux control method. (Contd.)

	2 <sup>nd</sup> 27/04/2022	7. Control the speed of a DC shunt motor by field flux control method.
8 <sup>th</sup>	1 <sup>st</sup> 29/04/2022	8. Control the speed of a DC shunt motor by armature voltage control method. (Contd.)
	2 <sup>nd</sup> 04/05/2022	8. Determine the armature current vs. speed characteristic of a DC motor (Contd.)
9 <sup>th</sup>	1 <sup>st</sup> 06/05/2022	8. Determine the armature current vs. speed characteristic of a DC motor
	2 <sup>nd</sup> 11/05/2022	9. Determine the efficiency of a DC machine by brake test method. (Contd.)
10 <sup>th</sup>	1 <sup>st</sup> 13/05/2022	9. Determine the efficiency of a DC machine by brake test method. (Contd.)
	2 <sup>nd</sup> 18/05/2022	9. Determine the efficiency of a DC machine by brake test method.
11 <sup>th</sup>	1 <sup>st</sup> 20/05/2022	10. Identification of terminals, determination of voltage transformation ratio of a Single Phase Transformer (Contd.)
	2 <sup>nd</sup> 25/05/2022	10. Identification of terminals, determination of voltage transformation ratio of a Single Phase Transformer (Contd.)
12 <sup>th</sup>	1 <sup>st</sup> 27/05/2022	10. Identification of terminals, determination of voltage transformation ratio of a Single Phase Transformer
	2 <sup>nd</sup> 01/06/2022	11. Perform OC Test of a Single Phase Transformer. (Contd.)
13 <sup>th</sup>	1 <sup>st</sup> 03/06/2022	11. Perform SC test of a Single Phase Transformer. (Contd.)
	2 <sup>nd</sup> 08/06/2022	11. Perform SC test of a Single Phase Transformer.
14 <sup>th</sup>	1 <sup>st</sup> 10/06/2022	12. Determine the voltage regulation of a Single Phase Transformer at different loads. (contd.)
	2 <sup>nd</sup> Extra class	12. Determine the voltage regulation of a Single Phase Transformer at different loads.
15 <sup>th</sup>	1 <sup>st</sup> Extra class	13. Polarity test of single phase transformer and parallel operation of two single phase transformers. (contd.)
	2 <sup>nd</sup> Extra class	13. Polarity test of single phase transformer and parallel operation of two single phase transformers.

Signature of Teaching Faculty

