

## LESSON PLAN

<b>Discipline:</b> E & TC Engg.	<b>Semester:</b> Fourth (4 <sup>th</sup> )	<b>Name of the Lab I/C:</b> Er. T. K Swain
<b>Subject:</b> Electrical Machine Lab (Pr 1)	<b>No. of days/week class allotted:</b> Three (3)	<b>Semester from Date:</b> 16.01.24 <b>to Date:</b> 26.04.24 <b>No. of Weeks:</b> 15
<b>WEEK</b>	<b>CLASS DAY</b>	<b>PRACTICAL EXPERIMENTS</b>
1 <sup>st</sup>	1 <sup>st</sup>	Dimensional and material study of various parts of D.C machine.
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	
2 <sup>nd</sup>	1 <sup>st</sup>	Review Class
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	
3 <sup>rd</sup>	1 <sup>st</sup>	Identification of different terminals of a D.C machine by test lamp method and multimeter method and measure insulation resistance by megger.
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Review Class
4 <sup>th</sup>	1 <sup>st</sup>	Plot OCC of D.C shunt generator at constant speed and determine critical resistance from the graph.
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Review Class
5 <sup>th</sup>	1 <sup>st</sup>	Plot external characteristics of a D.C shunt generator at constant speed.
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Review Class
6 <sup>th</sup>	1 <sup>st</sup>	Study of three point starter, connect and run a D.C shunt motor and measure the no load current.
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Review Class
7 <sup>th</sup>	1 <sup>st</sup>	Study of four-point starter, connect and run a D.C compound motor and measure no load current.
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	

8 <sup>th</sup>	1 <sup>st</sup>	Review Class
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	
9 <sup>th</sup>	1 <sup>st</sup>	Control the speed of a D.C shunt motor by field flux control method and armature voltage control method.
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Review Class
10 <sup>th</sup>	1 <sup>st</sup>	Determine the efficiency of a D.C machine by break test method.
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Review Class
11 <sup>th</sup>	1 <sup>st</sup>	Perform OC & SC test of a single phase Transformer.
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Review Class
12 <sup>th</sup>	1 <sup>st</sup>	Determination of voltage regulation of a single phase transformer at different loads.
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	
13 <sup>th</sup>	1 <sup>st</sup>	Review Class
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	
14 <sup>th</sup>	1 <sup>st</sup>	Revision
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	
15 <sup>th</sup>	1 <sup>st</sup>	Revision
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	