ELECTRICAL MACHINE LAB- I (Pr- 01)

Date of Commencement of classes: 14.03.2022 **Date of Closing of classes:** 11.06.2022

LIST OF MONTH WISE AVAILABLE WEEKS

Sl. No.	Month	Week-wise no. of academic days available					Total no. of weeks
		Week- 1	Week- 2	Week- 3	Week- 4	Week- 5	
1	March	--	--	4	6	3	03
2	April	2	5	4	4	6	05
3	May	5	4	4	5	2	05
4	June	3	6	--	--	--	02
Total		**10**	**15**	**12**	**15**	**11**	**15**

NO. OF AVAILABLE CLASSES PER WEEK/ MONTH

Sl. No.	Month	No. of available weeks	Week-wise no. of Lab Classes available					Total no. of Lab Classes
			Week- 1	Week- 2	Week- 3	Week- 4	Week- 5	
1	March	03	--	--	1	1	1	03
2	April	05	1	1	1	1	1	05
3	May	05	1	1	1	1	1	05
4	June	02	1	1	--	--	--	02
Total		**15**	**3**	**3**	**3**	**3**	**3**	**15**

EXPERIMENT-WISE DISTRIBUTION OF PERIODS

Sl. No.	Name of the Experiment	Required no. of Lab Classes	Expected Marks
01	Dimensional and material study of various parts of D.C machine.	01	2.5
02	Identification of different terminals of a D.C machine by test lamp method and multimeter method and measure insulation resistance by megger.	01	2.5
03	Plot OCC of D.C shunt generator at constant speed and determine critical resistance from the graph.	01	2.5
04	Plot external characteristics of a D.C shunt generator at constant speed.	01	2.5
05	Study of three point starter, connect and run a D.C shunt motor and measure the no load current.	01	2.5
06	Study of four-point starter, connect and run a D.C compound motor and measure no load current.	01	2.5
07	Control the speed of a D.C shunt motor by field flux control method and armature voltage control method.	02	2.5
08	Determine the efficiency of a D.C machine by break test method.	01	2.5
09	Perform OC & SC test of a single phase Transformer .	02	2.5
10	Determination of voltage regulation of a single phase transformer at different loads.	01	2.5
	TOTAL	**12**	**25**

Sign of Lab I/C **Sign of HOD** **Sign of AIC** **Sign of Vice Principal**

LESSON PLAN

Name of the Month	Week No.	Class day	Details of Practical Topics
MARCH	3rd	1st	Dimensional and material study of various parts of D.C machine.
	4th	1st	Identification of different terminals of a D.C machine by test lamp method and multimeter method and measure insulation resistance by megger.
	5th	1st	Plot OCC of D.C shunt generator at constant speed and determine critical resistance from the graph.
APRIL	1st	1st	Plot external characteristics of a D.C shunt generator at constant speed.
	2nd	1st	Study of three point starter, connect and run a D.C shunt motor and measure the no load current.
	3rd	1st	Study of four-point starter, connect and run a D.C compound motor and measure no load current.
	4th	1st	Control the speed of a D.C shunt motor by field flux control method and armature voltage control method.
	5th	2nd	
MAY	1st	1st	Determine the efficiency of a D.C machine by break test method.
	2nd	1st	Perform OC & SC test of a single phase Transformer .
	3rd	2nd	
	4th	1st	Determination of voltage regulation of a single phase transformer at different loads.
	5th	1st	Practice
JUNE	1st	1st	Practice
	2nd	1st	Practice