

2: ELECTRICAL TECHNOLOGY (FC)

Scheme of Examination

Std. XI

Paper	Title of the Paper	Theory		Practical		Term work	Project work	I.V.*	Total Marks
		Marks	Time (Hrs)	Marks	Time (Hrs)				
3	Electrical Machines	80	3	80	3	20	10	10	200

* IV = Industrial Visits ** OJT = On Job Training

Electrical Machines(FC)

Practical

Sr. No.	List of Practical's	Periods
1.	Measure the power of single phase resistive load by V.I method	12
2.	To test single phase energy meter with the help of standard wattmeter & stopwatch	8
3.	Identical of magnetic & non – magnetic materials	8
4.	Verification of target & development in current carrying coil in a magnetic field	8
5.	Connection of D.C motor to suitable starter & measure current, voltage & speed	8
6.	Identical of terminal by measuring resistance of field & armature of D.C motor	12
7.	Practical on simple transformer test, continuity short circuit & earth of primary & secondary winding	12
8.	Practice on small / transformer rewinding & verify voltage and current ratio	16
9.	Measure the insulation resistance between winding to core of single-phase transformer	8
10.	Identification of starting and running winding of single phase motor by measuring resistance with the help of multimeter	8
11.	Measure the insulation resistance of single phase motor by using & megger	8
12.	To study the parts of single phase motor, test capacitor by screw driver & multimeter method	12
13.	To start run reverse capacitor start & capacitor run motor measure the current voltage & speed	8

14.	Dismantle and study of carbon brush, and commulotor of universal motor reassemble it, start run reverse universal motor measure the current voltage speed.	8
15.	Visit to rewinding shop & prepare detailed report	8
16.	Nothing data of burnt motor and remove burnt coils and clean the slot	8
17.	Insulate the slot and prepare new coils as per old coils test the rewinded motor & insert wedges in the slots	16
18.	Find out start and end terminals & tapping, binding shaping of coils	
19.	Inserting the coils and making connection as per developed diagram, varnishing & baking	16
20.	Assembling a motor and start it after rewinding	12
21.	Study concentric winding in split phase motor	12
22.	Market survey the cost size and specification of winding materials	12
23.	Estimation, costing & billing of single phase AC motor winding	12
24.	Visit to winding and repairing shop of motor	8
	Total	240