ELECTRICAL WORKSHOP PRACTICE

L	T	P
-	-	6

Subject Code - 083002

RATIONALE

An electrical diploma holder will be required to inspect, test and modify the work done by skilled workers working under him. In addition, many a times, it will become necessary for him to demonstrate the correct method and procedure of doing a job. In order to carry out this function effectively, in addition to conceptual understanding of the method or procedure, he must possess appropriate manual skills. The subject aims at developing special skills required for repairing, fault finding, wiring in electrical appliances and installations.

DETAILED CONTENTS

1. To Study of electrical safety measures as mentioned in the Electricity Rules and shock treatment including first aid
2. Types of wiring and to make different light control circuits in the following types of wiring Casing and capping, (PVC) conduit batten wiring
3. Study of ISI standard for MCBs and ELCBs Conduct one test on MCB on above basis
4. Wiring of main distribution board with four outgoing circuits for light and fan loads including main switch and MCBs Types of wiring and to make different light control circuits in the following types of wiring.
   - 4.1 Casing and Capping (PVC) wiring
   - 4.2 Conduit wiring (surface/concealed)
5. Construction of distribution and extension board with two 5A sockets and two I5A sockets, a fuse and indicator with series test lamp provision controlled by their respective switches.
6. Testing of domestic wiring installation using meggar.
7. Fault finding and repair of a tube light circuit.
8. Carry out pipe/ plate earthing for a small house and 3 phase induction motor. Testing the earthing using earth tester.
9. Connection of single phase and three phase motors through an appropriate starter.
10. Winding/ rewinding of a fan (ceiling and table) and choke.
11. Repair of domestic electric appliances such as electric iron, geyser, fan, heat convector, desert cooler, room heater, electric kettle, electric oven, electric furnace and weighing machine

Note: Students may be asked to study control circuit of a passenger lift, automatic milling machine, etc. using relays.