



Syllabus for Diploma in Vocation (D.Voc), 3rd Semester

Branch: Electrical Wiring

Subject Name: Electrical appliances Services & Maintenance

Subject Code: 1230806

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	P	OJT		Theory		Tutorial/ Practical		
			University exams (ESE)	Progressive Assessment (PA)	External Practical /viva Exam(ESE)	Internal evaluation Practical /viva Exam(PA)		
0	0	15	15	0	0	100	100	200

L- Lectures; P- Practical; OJT- On Job Training; C- Credit; ESE- End Semester Examination; PA- Progressive Assessment

Course Content:

Unit No.	Content	No. of Hours	% of Weightage
1.	Module–1: Safety, Tools & Basic Practices a. Electrical safety rules and precautions b. Use of PPE (gloves, shoes, goggles) c. Identification and use of hand tools and power tools d. Measuring instruments: Multimeter, Clamp meter, Megger e. Safe handling of appliances during service f. Reading nameplates and service manuals	25	10
2.	Module–2: Wiring, Testing & Fault Finding Basics a. Identification of wires, cables, plugs, sockets b. Testing of switches, sockets, fuses, MCBs c. Continuity testing and insulation testing d. Common wiring faults and rectification e. Earthing methods for appliances	25	20
3.	Module–3: Heating Appliances Service & Maintenance a. Electric iron b. Water heater (Geyser) c. Immersion heater d. Electric kettle e. Toaster, hot plate	30	15
4.	Module–4: Motor-Based Appliances a. Ceiling fan, table fan, exhaust fan b. Mixer grinder c. Washing machine (semi-automatic) d. Water pump (single phase)	35	15

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5	Module-5: Electronic-Controlled Appliances a. Induction cooktop b. Microwave oven (basic) c. Inverter/UPS (domestic) d. Stabilizer	25	15
6	Module-6: Installation, Preventive Maintenance & Customer Handling a. Installation procedures for appliances b. Preventive maintenance schedules c. Energy efficiency and power saving tips d. Customer complaint handling e. Service report preparation and billing basics	20	15
7	Module-7: Industrial Exposure & Assessment <ul style="list-style-type: none"> • On-site service work • Observation of real-time faults • Maintenance logbook preparation • Final practical assessment 	20	10
Total		180	100

Suggested Specification table with Marks (OJT):

Distribution of Theory Marks				
R Level	U Level	A Level	N Level	E Level
45	50	45	40	20

Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate and above Levels (Bloom's Taxonomy)

References :

1. Electrical Appliances: The Complete Guide to Maintenance and Repair by Graham Dixon – covers domestic appliances basics and repair
2. Handbook of Repair & Maintenance of Domestic Electronics Appliances.
3. Troubleshooting, Repairing and Maintaining of Household Appliances by Karl M. Fischer – step-by-step practical tips.

Open source software and website:

1. <https://nptel.ac.in/>
2. <https://www.cstaricalcutta.gov.in/>

