

ELE/Q3115 - Multi Skill Technician (Electrical) – V2

Review Date - 01/06/2025

Theory:

S No.	Question Text	Choice 1	Choice 2	Choice 3	Choice 4	Correct Choice
1	Which factor should influence the cost informed to the customer for repair and parts replacement?	Personal Preferences of Customer	Market Competitors' Prices	Actual Cost Incurred by the Service Provider	Forecasted Profit Margins	Choice 3
2	What tools and parts should you bring for a customer visit if the identified problem is a faulty power supply?	Multimeter and Power Supply Unit	Screwdriver and Hammer	Keyboard and Mouse	Ethernet Cable and Router	Choice 1
3	If the LED light engine is found faulty, what is the recommended course of action?	Repair the engine using the existing wires	Replace the LED light engine with a DC supply	Replace the LED light cover	Add more LEDs to the existing circuit	Choice 2
4	What is the purpose of using a multimeter in troubleshooting power supply issues?	To measure voltage, current, and resistance	To increase power supply output	To reinstall damaged components	To clean the power supply unit	Choice 1
5	When using a multimeter to check the mains outlet, which setting should be used to measure voltage?	AC Volts	DC Volts	Ohms	Amps	Choice 1
6	Why is it important to follow the manufacturer's instructions when testing a fan as per the service manual?	To avoid voiding the warranty	To show off expertise	To save time	To operate at maximum speed	Choice 1
7	When would you choose to place the water purifier under the sink (UTS)?	When the customer prefers a space-saving option	When the customer wants the purifier to be easily visible	When the customer requests for it to be placed near the kitchen window	When the customer plans to install it in the living room	Choice 1
8	When testing the purifier, which method can be used to detect any leakage at any point?	Pressure Test	Visual Inspection	Listening Test	Smell Test	Choice 1
9	If a customer reports that the mixer/grinder is not starting at all, what should be the initial diagnostic step?	Check power supply	Replace the motor	Clean the blades	Adjust the speed settings	Choice 1
10	How can one confirm that a unit is functioning properly after reassembly?	Listening for unusual sounds	Checking the weather forecast	Changing the unit's size	Smelling the unit	Choice 1

Practical and Viva:

S No.	Question Text	Suggestion Solution	Equipment Required	Question Type
1	Demonstrate how to use a multimeter to dismantle the LED light if no loose, de-soldered wires are found and repair/replace the LED light engine with DC supply if found faulty.	Steps: <ol style="list-style-type: none">1. Connect the black lead to the COM terminal on the multimeter.2. Connect the red lead to the Ω terminal, unless your particular model differs.3. Turn the dial to the diode symbol on the multimeter. This allows for electric current to travel in one direction (the arrow) and not the other.4. Turn the multimeter on. The display window should indicate either 0L or OPEN.5. Choose a regular red LED.6. Connect the black probe to the cathode end of the LED, which usually is the shorter end and/or cut flat at its bottom. Connect the red probe to the anode end of the LED.	<ol style="list-style-type: none">1. Multimeter2. Black lead3. Red lead4. DC supply5. LED light engine6. Regular red LED	Practical
2	Explain the possible reasons why LED lights might flicker.	Steps: <ul style="list-style-type: none">- Loose wire connection- Low quality LED- Loose bulbs- Improper dimmer setup- Power supply broken- High wattage electrical appliance		Viva