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**071305T4EOP**

**ELECTRICAL OPERATION (POWER OPTION) LEVEL 5**

**ENG/OS/PO/CR/07/5/A**

**Perform Electrical Breakdown Maintenance**

**Nov/Dec 2024**

**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION COUNCIL (TVET CDACC)**

easytvet.com

**PRACTICAL ASSESSMENT**

**Time: 3 HOURS**

**INSTRUCTIONS TO CANDIDATE**

*The assessor will be checking how you are performing operations.*

*Do not power the circuit without assessor's permission.*

**The question paper contains three (3) printed pages.**

**The candidate should check to ascertain that all pages are printed as indicated and that no pages or questions are missing.**

Figure 1 shows a layout diagram of an electrical installation project. Lamp L1 is controlled from Switch S1, Lamp L3 is controlled from Switch S3 and Lamp L2 is controlled from three different positions $S_1$, $S_2$ and $S_3$ independently. The socket outlets S01 and S02 are connected in ring and S03 is a spur.

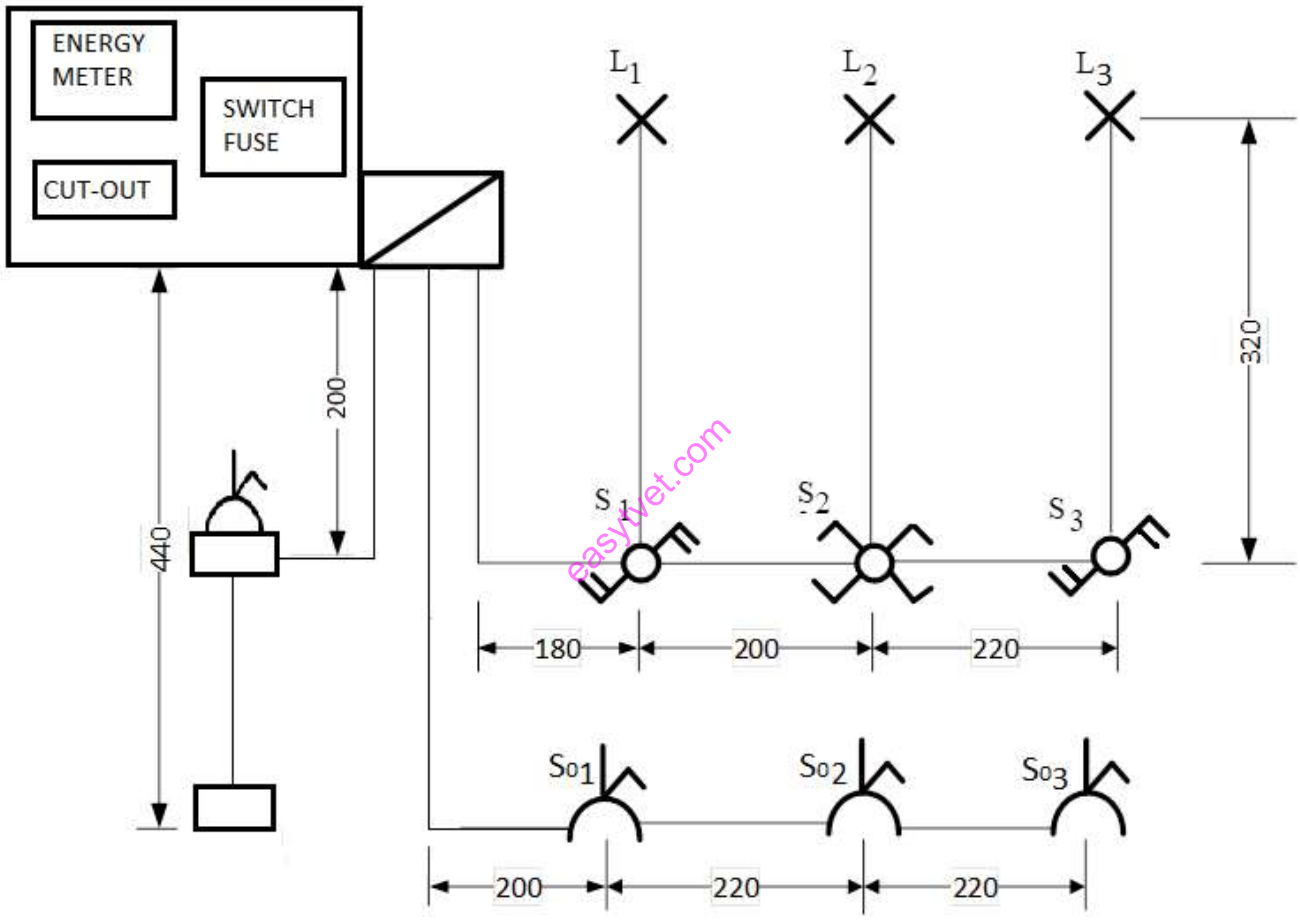



Figure 1: Layout diagram

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You are provided with a pre-installed faulty circuit installation, carry out the following tasks

**TASK 1:** Identify and write down the required tools, equipment and materials required to restore the circuit operation.

**TASK 2:** Draw the wiring diagram.

**TASK 3:** Identify and record the faults at each of the following points;

a. Consumer intake point;
b. lighting circuit;
c. socket outlets circuit;
d. cooker circuit using.

**TASK 4:** Repair the installation and restore the its correct functionality.

**TASK 5:** Carry out the following tests:

a. Continuity test
b. Polarity test
c. Insulation resistance test

**TASK 6:** Write a detailed breakdown maintenance report.

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