

INSTRUMENTATION AND CONTROL OPERATIONS LEVEL 4

ENG/OS/IC/CR/01/4/MA

Perform Electrical Installation

July/August 2025



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

PRACTICAL ASSESSMENT

INSTRUCTIONS TO THE CANDIDATE:

1. This unit of competence shall be assessed in four phases.
2. Each assessment session has the duration included in brackets
3. The fourth phase of the assessment shall include a practical session and an oral assessment session.
4. The assessor will take photos and videos as you perform the tasks at critical points during the assessment.
5. Ensure all required resources for the assessment have been provided before beginning the assessment.

1. SECTION 1 (SESSION 1-2 HOURS): PREPARE LIST OF TOOLS, EQUIPMENT, AND MATERIALS

Element covered

1. Prepare list of tools, equipment, and materials

1.1 Tasks

- Draw the wiring diagram for the circuit in Figure 1.
- Prepare a comprehensive list of required tools, materials, and equipment for a domestic electrical installation.
- Identify and assemble tools/materials as per the given drawing.

2. SECTION 2 (SESSION 2-5 HOURS): CONDUIT & DEVICE INSTALLATION

Element Covered

1. Perform piping and laying of cables

2.1 Tasks

- Interpret conduit layout from the drawing of Figure 1.
- Install and secure conduits to surface.
- Maintain proper alignment and bends.
- Pull the appropriate cables in each case.

3. SECTION 3 (SESSION 3-1 HOUR): WIRING, TERMINATION, TESTING AND DOCUMENTATION

Elements Covered

1. Install electrical components of Figure 1.
2. Terminate electrical installation.
3. Inspect and test installation.
4. Document an electrical installation.

3.1 Tasks

- Mount two switches, two sockets, and CCU on the board/wall as per drawing keeping whilst adhering to IEE standards as per IEE regulations
- Ensure correct height, spacing, and alignment
- Terminate all cables as per IEE regulations
- Test circuit for continuity

- Perform short circuit test
- Prepare a report on continuity and short circuit testing

ORAL ASSESSMENT (1 HOUR)

The assessor will ask questions related to the tasks you performed and the knowledge areas covered in electrical installation. You can choose to either answer them orally or write your answers on the provided answer sheet. For written answers, the assessor can seek for clarification where need be.

Project Figure.

Use the figure below to implement the project

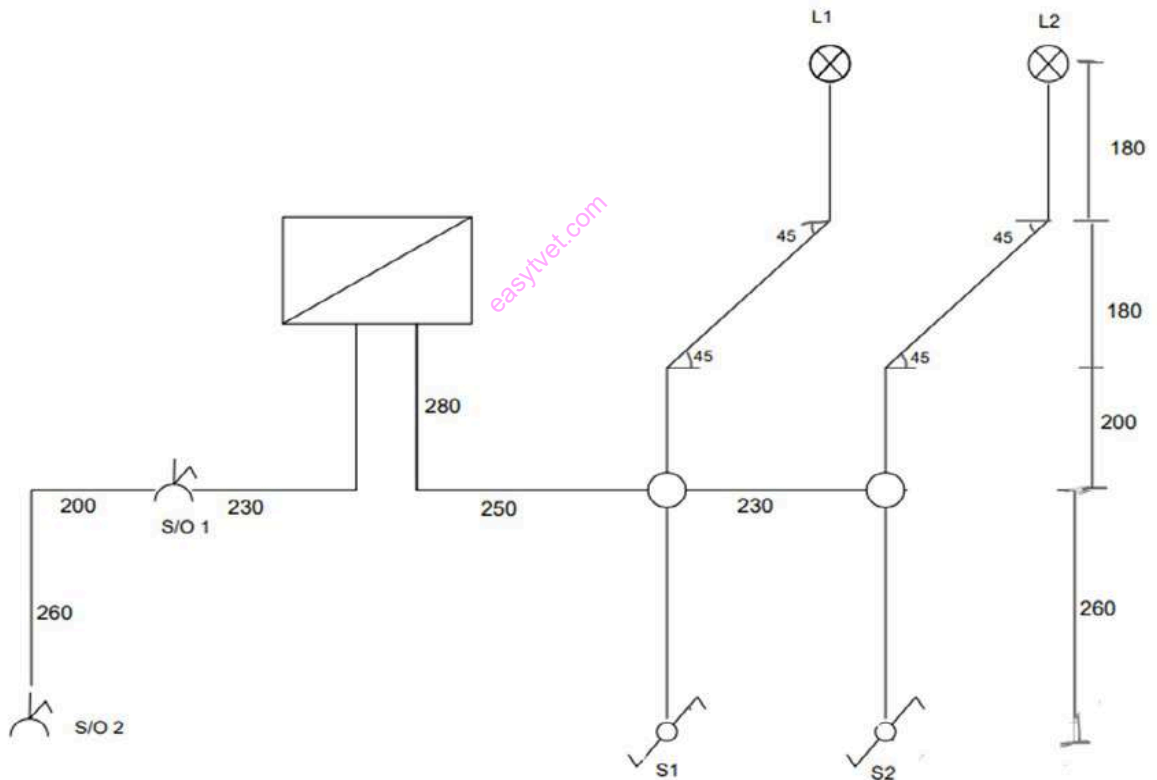


Figure 1.