MODULE I

ELECTRICAL INSTALLATION TECHNOLOGY

ENG/OS/EI/CR/01/3/MB

INSTALL PVC SHEATHED CABLE SYSTEM

SEPTEMBER-NOVEMBER 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 two phases.
2. Each assessment session has the duration included in brackets
3. The second 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.

PRACTICAL ASSESSMENT 1 (2 HOURS)

Elements Covered

1. Identify cables and accessories
2. Make cable joints

TASKS

i. Identify the following electrical cables based on their color codes:
   - Live
   - Neutral
   - Earth

ii. Identify the cables provided based on the following cable sizes:
   - 1.0mm^2
   - 1.5 mm^2
   - 2.5 mm^2
   - 4.0 mm^2
   - 6.0 mm^2

iii. Fabricate, solder, and insulate a Tee joint using a 4.0 mm² cable as shown in figure 1.

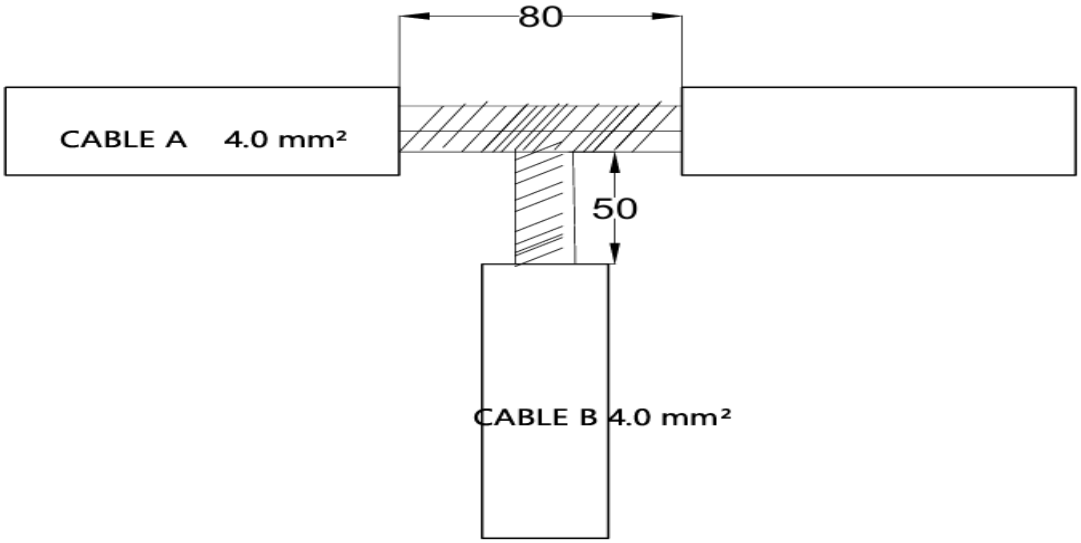

Figure 1

PRACTICAL ASSESSMENT 2 (4 HOURS) AND ORAL ASSESSMENT (1 HOUR)

Elements Covered

3. Interpret electrical symbols
4. Fix electrical accessories
5. Perform Test and Inspection

TASKS

Figure 2 shows the layout of a final lighting and power circuit installation.

- Lamps L1, L2 and L3 are controlled by switch S1 (master), S2 and S3.
- Sockets So1, So2 and So3 are connected in ring.

i. Draw the wiring diagram for the installation.

ii. Carry out the installation using PVC sheathed cable.

iii. In the presence of the assessor carry out the following tests;

- Continuity
- Polarity
- Insulation resistance test

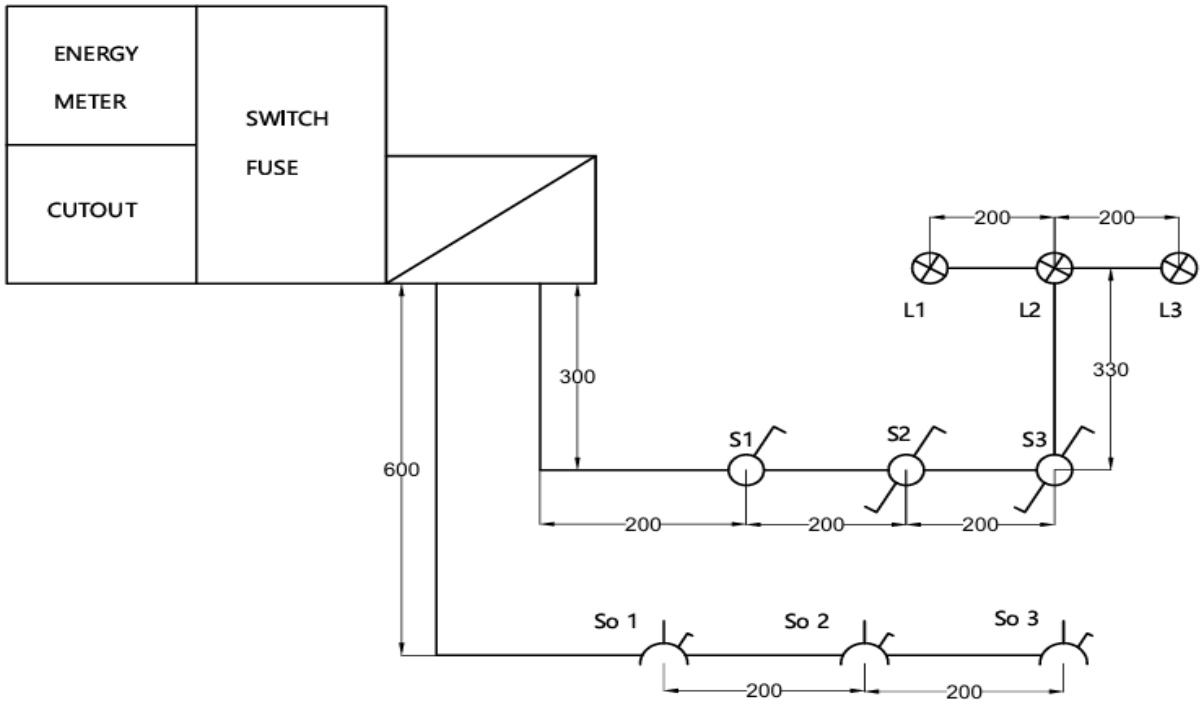

Figure 2

The assessor will proceed to ask you oral questions for 1 hour.