

MODULE 1

ELECTRICAL INSTALLATION TECHNOLOGY LEVEL 3, LEVEL 4

ELECTRICAL ENGINEERING LEVEL 5, LEVEL 6

ENG/OS/EI/CR/01/3/MA

INSTALL PVC SHEATHED CABLE SYSTEM

January-March 2026



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

PRACTICAL ASSESSMENT

INSTRUCTIONS TO THE CANDIDATE:

1. This unit of competence shall be assessed in three phases.
2. Each assessment session has the duration included in brackets
3. The third 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

1. Identify the cable sizes labelled.
 - i. A
 - ii. B
 - iii. C
 - iv. D
 - v. E
2. Produce and solder the following joints.
 - i. Married joint using a 4.0mm^2 stranded cable as shown in figure 1

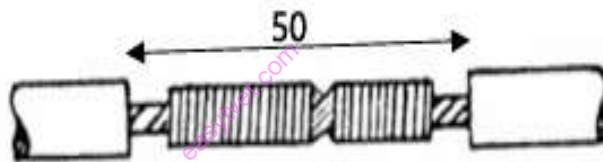


Figure 1

- ii. Britannia straight joint using a 1.5mm^2 single core cable as shown in figure 2

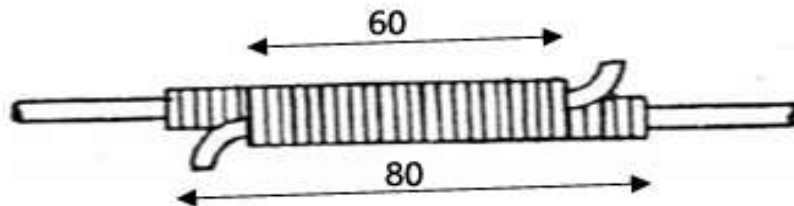


Figure 2

PRACTICAL ASSESSMENT 2 (1 HOURS)

Elements Covered

1. Interpret electrical symbols

TASKS

Figure 3 shows a brock representation of a consumer intake point for a domestic installation

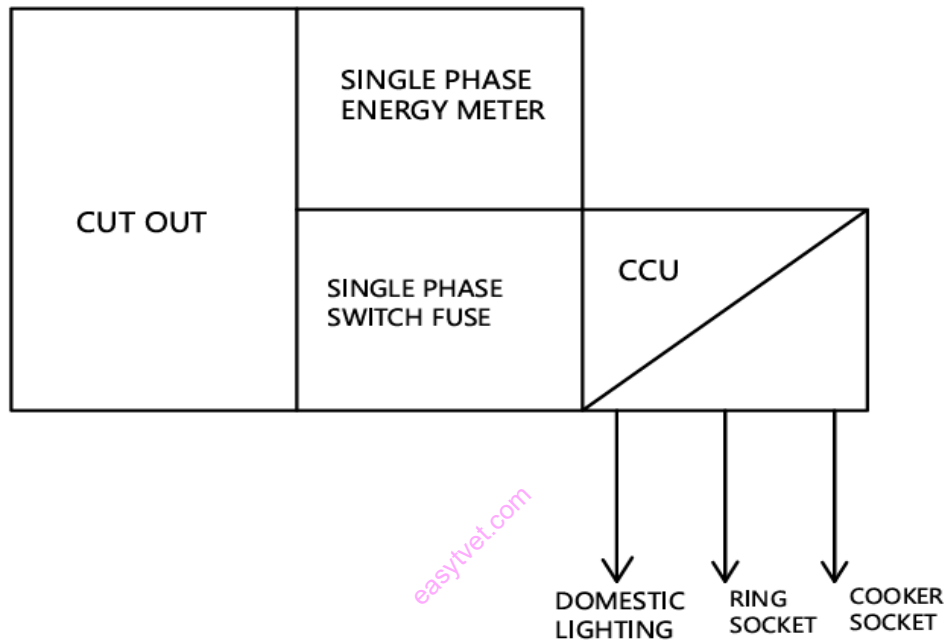


Figure 3

- i. Install on the board the correct sequence of connection.
- ii. Install the correct rated circuit breakers for the indicated outputs

PRACTICAL ASSESSMENT 3 (4 HOURS) AND ORAL ASSESSMENT (1 HOUR)

Elements Covered

1. Fix electrical accessories
2. Perform Test and Inspection

TASKS

Figure 4 shows the layout of a final lighting and power circuit installation.

- i. Draw the wiring diagram for the installation such that:
 - Lamps L1 and L2 are controlled by switch S1 and L3 is controlled by S2.
 - Sockets So1 and So2 are connected in radial.
- ii. Carry out the installation using PVC sheathed cable.

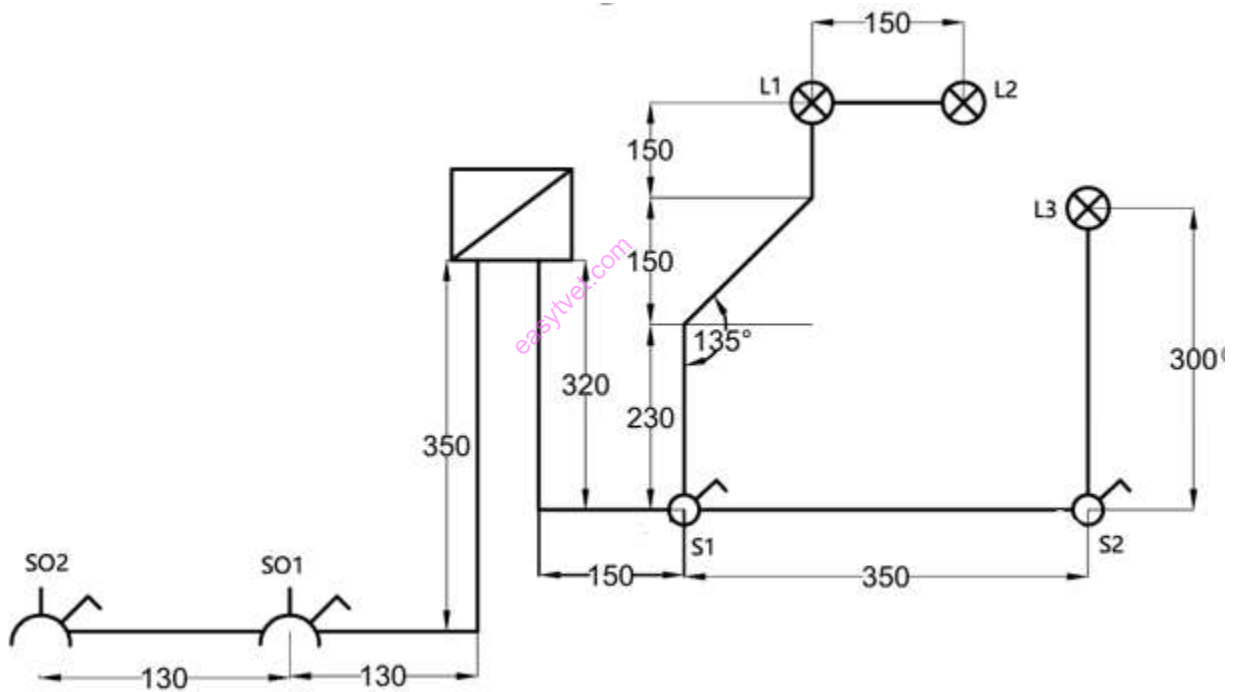


Figure 4

- iii. In the presence of the assessor carry out the following tests;
 - Continuity
 - Polarity
 - Insulation resistance test

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