071306T4EEN

ELECTRICAL ENGINEERING (POWER OPTION) LEVEL 6

ENG/OS/PO/CR/01/6

PERFORM ELECTRICAL INSTALLATION

July /August 2024

Time: 5 Hours



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

PRACTICAL ASSESSMENT

TIME: 5 HOURS

INSTRUCTIONS TO CANDIDATE:

- 1.Do not write on the question paper
- 2.DO NOT switch ON power without assessor permission
- 3. A separate plain paper will be provided
- 4. Return the question paper to the assessor at the end of practical.

This paper consists of THREE (3) printed pages.

Candidate should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

PROJECT 1

Figure 1 shows a layout diagram of lighting and power circuits.

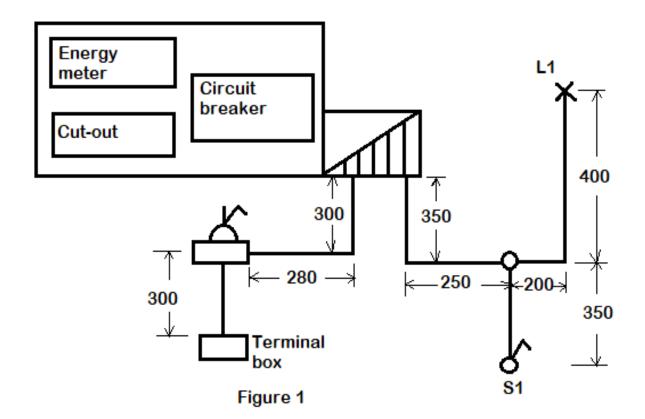
Carry out the following tasks:

TASK 1: Draw a wiring diagram of the final circuits such that:

- i. Lamp L_1 is controlled from switch S_1
- ii. Cooker circuit is wired for correct operation

TASK 2: Install the two final circuits using heavy gauge PVC conduit:

TASK 3: Carry out continuity test on the lighting circuit



PROJECT 2

Figure 2 shows a layout diagram of a call and alarm circuit. Push buttons A and C controls 12V bell while push button B controls 240V bell through 12V relay.

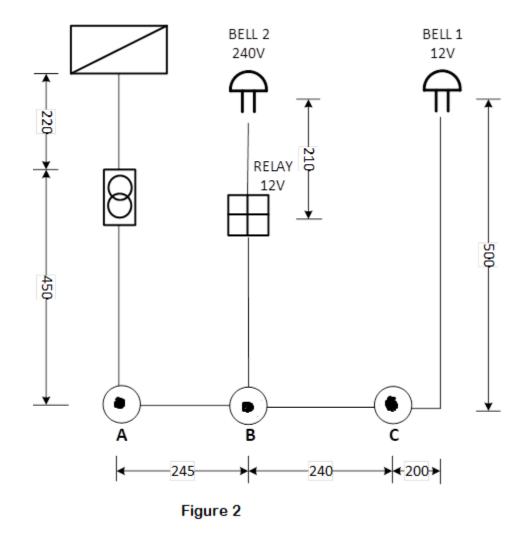
Carry out the follwing tasks:

TASK 1:Draw a neat wiring diagram for the system

TASK 2:Install the system for correct operation using PVC sheathed surface wiring in line with the IEEE regulations.

TASK 3:Tests the complete installation for:

- (i) Continuity;
- (ii) Polarity.



THIS IS THE LAST PRINTED PAGE.