

021306T41C1

INDUSTRIAL CONTROL AND INSTALLATION LEVEL 6

ENG/OS/CR/05/6

Analyze Alternative Energy/ Pv Solar Energy

July/August 2025



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

PRACTICAL ASSESSMENT

Time: 4 HOURS

INSTRUCTIONS TO CANDIDATE:

1. You are required to perform the following tasks

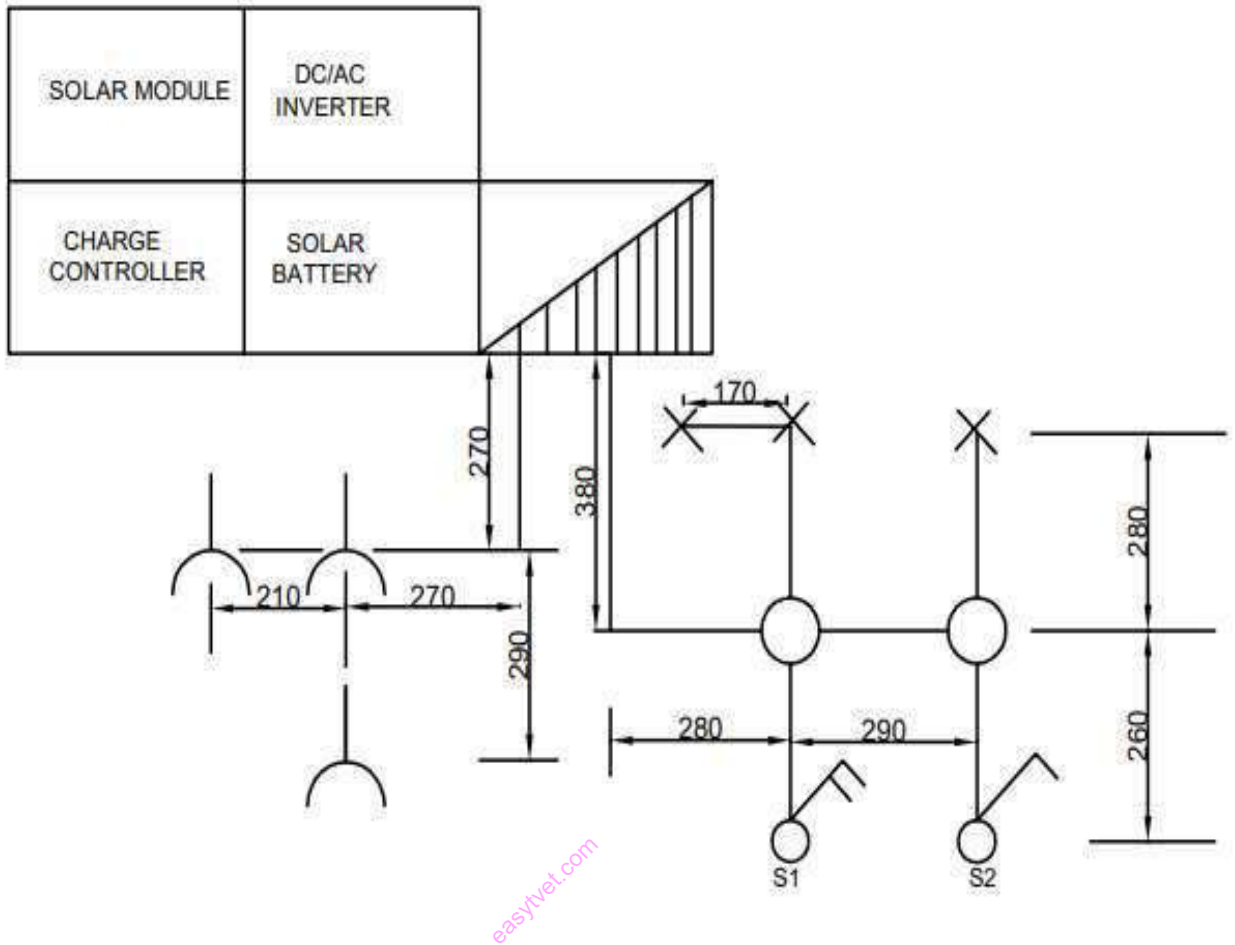
TASK 1: Draw the wiring diagram for the installation

TASK 2: Carry out the solar installation Using PVC sheathed wiring system, such that:

- i. Switch S1 controls lamp L1 & L2 and switch S2 controls L3
- ii. Socket outlets are wired in ring.

TASK 3: Carry out the following installation tests

- i. Continuity test
- ii. Polarity test



2. You have been provided with the following resources for the practical tasks:

- DC/AC inverter
- Charge Controller
- 12V Solar battery
- 3 50Watts lamps
- 1 One gang one-way switch
- 1.5mm PVC cable
- 2.5mm PVC cable
- Trunking
- Cable clips
- 2 Joint boxes
- 1 two way switch
- Solar module