©2025 TVET CDACC

**072203T4SPV**

**SOLAR PV INSTALLATION LEVEL 3**

**ENG/OS/SPV/CR/02/3**

**Design a Solar PV installation system**

**July/August 2025**

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

**PRACTICAL ASSESSMENT**

easytvet.com

**Time:** 4 HOURS

**INSTRUCTIONS TO CANDIDATE:**

1. Design PVC conduit wiring system for a solar PV installation that powers a 12V DC lamp of 2 Amperes and one AC socket outlet to power a 50watt equipment in your workshop, both operating for 6 hours a day from Monday to Friday.

   Carry out the following tasks:

**TASK 1:** List any **TWO** Personal Protective Equipment and any **THREE** safety measures to be observed by the installer during installation of the circuit above.

**TASK 2:** Perform load estimation

i. Daily load estimation.

ii. Weekly load estimations

**TASK 3:** Draw a layout diagram for system

**TASK 4:** From the layout diagram develop a wiring diagram for the system

**TASK 5**: Prepare the bill of quantities for the installation

2. You have been provided with the following resources for the practical tasks:
    - Drawing materials
    - Drawing platform
    - Calculator
    - Stationery

easytvet.com