

071306T4ELC

ELECTRONICS TECHNOLOGY LEVEL 6

ENG/OS/ET/CR/01/6/A

Perform Electrical Installation

Nov/Dec 2024



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

PRACTICE

Time: 2 ½ HOURS

INSTRUCTIONS TO CANDIDATE:

1. You are required to perform the following task:
 - i) Install the P.V solar system and final circuits
2. You have been provided with the following resources for the practical tasks:

- 120 W solar module
- 12V 100Ah lead acid battery
- Charge controller at least 8A
- Inverter about 300W
- Consume control unit (CCU 4-way)
- Switched socket outlets
- Incandescent Bulbs
- Mini trunks
- Straight bulb holders
- One gang One way switch
- Single Shallow Pattress boxes
- 6/10A circuit breaker
- 32A Circuit breaker
- Deep Pattress boxes
- Junction box
- 1.5mm² PVC single core cable
- 2.5mm² PVC single core cable R/B/G
- 4.0mm² PVC stranded cable R/B/G
- Wooden screws (assorted)
- Buckle clips
- Tack nails (assorted)
- Electrician's toolbox

Figure 1(a) shows the Layout for the P.V solar installation equipment. Use the layout to:

- i) Draw the wiring diagram for the P.V solar installation equipment
- ii) Install the P.V solar system

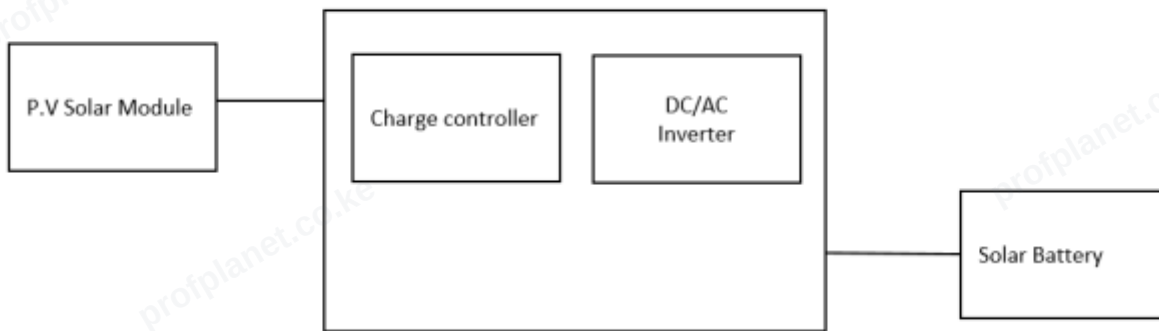
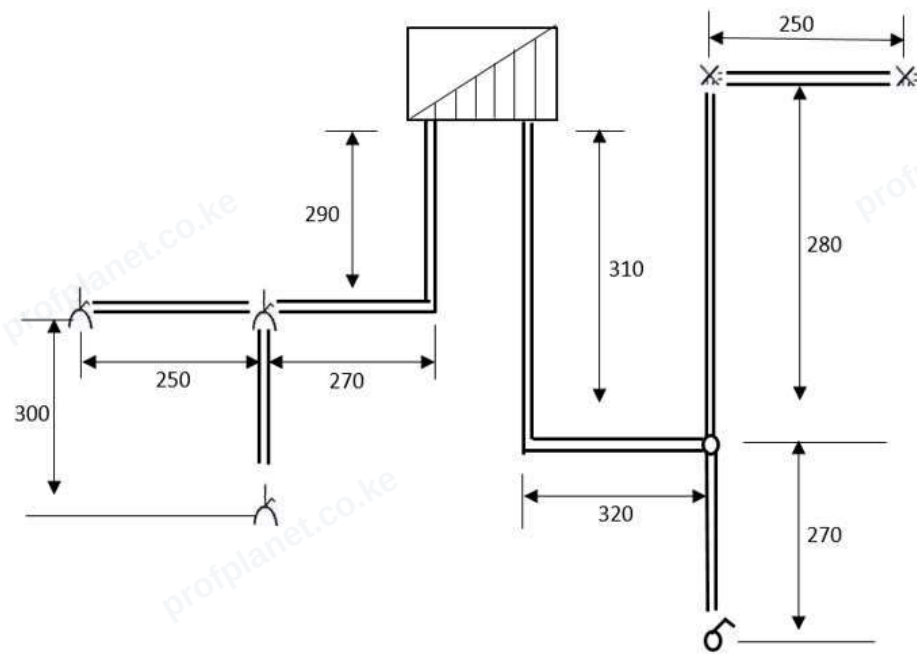


Figure 1(a).

Figure 1(b) shows the layout of two final circuits. use the layout (figure 1b) to:

- i. Draw the wiring diagram such that the:
 - a. Lamps are connected in parallel
 - b. Socket outlet is connected in series
- ii. Install the circuits using the trunking wiring system
- iii. Test the circuit operation using the installed solar-equipment in 1 (a)



THIS IS THE ED PAGE.