

021306T41C1

INDUSTRIAL CONTROLL AND INSTALLATION LEVEL 6

ENG/OS/CR/05/6

Analyze Alternative Energy Systems/ Solar PV

July/August 2025



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

PRACTICAL ASSESSMENT GUIDE

ASSESSOR INSTRUCTIONS

1. Assess the candidate as the practical progresses observing the critical areas.
2. You are required to mark the practical as the candidate performs the tasks.
3. You are required to take pictures and video clips at critical points.
4. Ensure the candidate has a name tag and registration code at the back and front.

Candidate's name & Registration No.			
Assessor's name & Reg. code			
Unit(s) of Competency			
Venue of Assessment			
Date of assessment			
Items to be evaluated: <i>(Award appropriate marks for each item evaluated)</i>	Marks available	Marks obtained	Comments
OBSERVATION CHECKLIST			
1. Wore safety clothing (PPE's) <ul style="list-style-type: none"> • Safety boots <i>(Award 1 or 0)</i> • Apron <i>(Award 1 or 0)</i> 	1 1		
2. Observed colour code <i>(Award 1 or 0)</i>	1		
3. Applied good housekeeping practice <i>(Award 2 or 0)</i>	2		
4. Identified and correctly used tools and equipment <ul style="list-style-type: none"> • Pliers • Side cutter • Tape measure • Spirit level • Screw Driver • Multimeter 	1 1 1 1 1 1		
Sub total	11		
PRODUCT CHECKLIST			
TASK 1			
5. Drew correct wiring diagram as given in figure 1 <ul style="list-style-type: none"> • Lighting <i>(Award 5 or 0)</i> • Power <i>(Award 5 or 0)</i> 	5 5		
Sub total	10		
TASK 2			

6. Used correct dimensions $\pm 2\text{mm}$ (Award 1×3)	3		
7. Fixed components (firm and level) (Award 1×4)	4		
8. PVC sheathed bends (smooth with no kinks) 90° bends (Award 1 or 0)	1		
9. PVC cables (firm and level) <ul style="list-style-type: none"> • Horizontal (Award 1 or 0) • Vertical (Award 1 or 0) 	1 1		
10. Correct connection <ul style="list-style-type: none"> • 3 lamps (Award 2 or 0) • Switches (Award 1 mark for each. Maximum = 2) • Sockets (Award 3 marks for each. Maximum = 6) • CCU(Award 2 or 0) 	3 2 6 2		
Sub total	23		
TASK 3			
11. Performed polarity test(Award 3 or 0)	3		
12. Performed Continuity test(Award 3 or 0)	3		
13. Correct circuit operation <ul style="list-style-type: none"> • Lighting(Award 6 for all correct lighting points or 0) • Power(Award 6 for correct ring circuit) 	6 6		
Total marks	18		
GRAND TOTAL	62		
Percentage = $\frac{x}{62} \times 100$			
The candidate was found to be: (Please tick (√) as appropriate)			

Competent <input type="checkbox"/>	Not yet competent <input type="checkbox"/>
<i>The candidate is competent if s/he gets scores 50% of marks</i>	
<i>Feedback from candidate:</i>	
<i>Feedback to candidate:</i>	
<i>Candidate's signature:</i>	<i>Date</i>
<i>Assessor's signature:</i>	<i>Date</i>

WIRING DIAGRAM

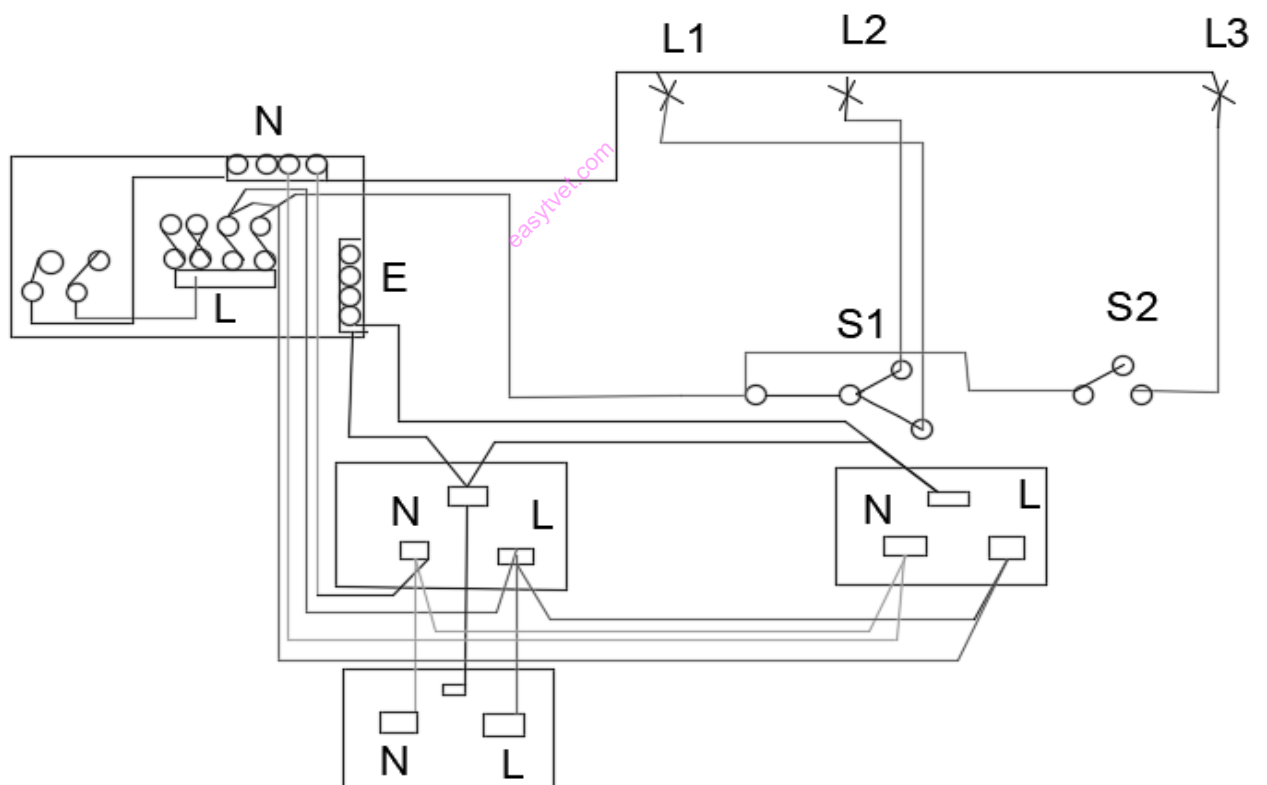


Figure 1

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