071306T4EEN

ELECTRICAL ENGINEERING (POWER OPTION) LEVEL 6

ENG/OS/PO/CR/04/6

Demonstrate Understanding of Electronics

July/August 2025

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

PRACTICAL ASSESSMENT

INSTRUCTIONS TO ASSESSOR

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

OBSERVATION CHECKLIST

Candidate's Name & Registration Code			
Assessors Name & Registration Code			
Unit(s) of Competency	**Demonstrate Understanding of Electronics**		
Venue of Assessment			
Date of Assessment			
Items to be Evaluated: *Please award marks as appropriate. Give a brief comment on your observation.*	**Marks Available**	**Marks Obtained**	**Comments**
OBSERVATION CHECKLIST			
1. Adhered to prescribed safety as per workplace procedures i. Wore PPEs (overall, safety boots) **(Award 2 or 0)** ii. Observed workplace safety) **(Award 2 or 0)**	**2** **2**		
2. Observed environmental safety (waste disposal, adequate ventilation and lighting) **(Award 2 or 0)**	**2**		
3. Assembled tools, equipment and materials (Award 2 or 0)	**2**		
Subtotal 1	**8**		
TASK 1: Component Identification			
4. Identified component for mounting. **(2 mark for each of any 6 components)**	**12**		
Sub-Total 2	**12**		
TASK 2: Circuit fabrication			
5. Mounted components on the PCB. **(1 mark for each components)**	**6**		

6. Soldered components **(I mark for each of the 14 joints)**	**14**		
7. Economical use of the copper strip board**. (Award 5 or 0)**	**5**		
Subtotal 3	**25**		
Task 3: Circuit measurements			
8.Measured voltages TP1 ≈ 3V **(Award 5 or 0)** TP2≈ 2.3V **(Award 5 or 0)** TP3≈10V **(Award 5 or 0)** TP4 ≈0V **(Award 5 or 0)** TP5≈7.5V **(Award 5 or 0)**	**3** **3** **3** **3** **3**		
9. Measured voltages as per the established procedures. **(Award 5 or 0 for each)**	**5**		
10. Neatness	**5**		
Subtotal 4	**25**		
GRAND TOTAL	**70**		
Percentage = $\frac{x}{70}$ **× 100**			

ASSESSMENT OUTCOME

The candidate was found to be:

Competent ☐ Not yet Competent ☐

(Please tick as appropriate)

(The candidate is competent if the candidate obtains at least 50%)

Feedback from the Candidate:

Feedback to the Candidate:	
Candidate Signature _____	**Date:** _____
Assessor's Signature _____	**Date** _____