071305T4ELC

ELECTRONICS ENGINEERING LEVEL 5

ENG/OS/ET/CR/02/5/A

Install Power Supply Systems

March/April 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			
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**
1. Wore Personal Protective Equipment i. Dustcoat/Overall *(Award 1 or 0)* ii. Safety boots *(Award 1 or 0)* iii. Safety glasses *(Award 1 or 0)*	 1 1 1		
2. Applied good housekeeping practice i. Ensured clean working area before beginning working. *(Award 1 or 0)* ii. Tidy working area arrangement *(Award 1 or 0)* iii. Proper Waste disposal *(Award 1 or 0)*	 1 1 1		
3. Identified and used tools and equipment i. CRO *(Award 2 or 0)* ii. Soldering iron *(Award 2 or 0)* iii. Multimeter *(Award 2 or 0)* iv. Strip board *(Award 2 or 0)*	 2 2 2 2		
Sub-Total	**14**		
PRODUCT CHECKLIST			
TASK 1: CIRCUIT			
4. Component identification *(Award 1 or 0 for each, Maximum 12 marks)*	12		

5. Connected the components on the strip board. i) Diodes *(Award 4 or 0)* ii) Zener diode *(Award 1 or 0)* *iii)* Transistor *(Award 1 or 0)* *iv)* Capacitors *(Award 2 or 0)* *v)* Resistors *(Award 2 or 0)* *vi)* Transformer *(Award 3 or 0)*	 4 1 1 2 2 3		
6. Neatness *(Award 2 marks for neat well mounted components , 0 marks otherwise)*	2		
7. Economy of the strip board *(Award 2 or 0 for ¾ use of the strip board)*	2		
8. Fixed components (Firmness) *(Award any 8 x 1components)*	8		
9. Soldering (Shiny not lumped) *(Award any 7 joints x 1)*	7		
10. Jumper wires are properly insulated. *(Award any 3X1)*	3		
Sub-Total	**45**		
TASK 2: MEASUREMENT OF VOLTAGES			
11. Measured the voltages at the test points *i)* *TP1=12*$\pm$0.5*V* *ii)* *TP2=12*$\pm$0.5*V*	 **3** **3**		
Sub-Total	**6**		
TASK 3: WAVEFORMS			
12. Drew the waveforms as observed in the oscilloscope at: i) TP1	**5**		

ii) TP2	**5**		
Sub-Total	**10**		
GRAND TOTAL	**75**		
$\frac{x}{75} \times 100$	**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:**

_____ _____

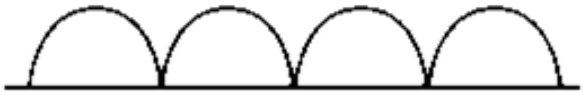
Assessor's Signature **Date**

_____ _____

For assessor use only

Waveforms at Test Points

i) TP 1



ii) TP 2