

073106T4ELC

ELECTRONICS ENGINEERING LEVEL 6

ENG/OS/ET/CR/06/6

Maintain Automation and Radio Frequency Systems

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			
Venue of Assessment			
Date of assessment			
Items to be evaluated: <i>Please award marks as appropriate. Give a brief comment on your observation.</i>	Marks allocat ed	Marks obtaine d	Comments
1. Wore Personal Protective Equipment			
i. Dustcoat/Overall (<i>Award 1 or 0</i>)	1		
ii. Safety boots (<i>Award 1 or 0</i>)	1		
2. Applied housekeeping practice			
i. Ensured clean working area inning working. (<i>Award 1 or 0</i>)	1		
ii. Tidy working area arrangeme 1 or 0)	1		
iii. Proper Waste disposal (<i>Award 1 or 0</i>)	1		
3. Used tools and instruments			
i. Side cutter (<i>Award 1 or 0</i>)	1		
ii. Multi-meter (<i>Award 1 or 0</i>)	1		
iii. Screw drivers (<i>Award 1 or 0</i>)	1		
iv. Soldering gun(<i>Award 1 or 0</i>)	1		
Sub total	9		
TASK 1			

4. Prepared Maintenance checklist including:			
i. Equipment identification – equipment name (Award 1 or 0)	1		
ii. Listed the inspection tasks to be performed (Award 3 or 0)	3		
iii. Listed the maintenance tasks to be performed (Award 1 for each task listed, maximum 3)	3		
iv. Listed the tools and materials required (Award 1 for each tool listed, maximum 3)	3		
v. Notes, comments and/or remarks (Award 3 or 0)	3		
Sub Total	13		
TASK 2			
5. Performed visual inspection (Award 3 or 0)	3		
6. Cleaned the radio components (Award up to 4)	4		
7. Identified and repaired the following f			
i. Speaker Cable (Award up to 5 mark correct termination.)	5		
ii. Power Supply Cable (Award up to 5 marks for correct termination.)	5		
iii. Antenna Cable. (Award up to 5 marks for correct termination.)	5		
Sub Total	22		
TASK 3			
8. Tested radio system operation			
i. Continuity test performed at different test points (Award 5 marks if there is continuity, otherwise 0)	5		
ii. Tested power input	3		
(Award 3 marks if done correctly, otherwise 0)	3		

iii. Tested speaker output (<i>Award 3 marks if done correctly, otherwise 0</i>)	3		
iv. Tested antenna output (<i>Award 3 marks if done correctly, otherwise 0</i>)	6		
v. Radio functioning restored. (<i>Award 6 or 0</i>)			
Sub Total	20		
TASK 4			
9. Wrote Maintenance report			
i. Equipment identification- to list the names of the equipment used. (<i>Award upto 2 marks if indicated, otherwise 0</i>)	2		
ii. Date and time of maintenance (<i>Award up to 2 marks if indicated, otherwise 0</i>)	2		
iii. Identify and list the maintenance tasks performed (<i>Award up to 3 marks if enumerated, o</i>)	3		
iv. Maintenance Personnel who carried out maintenance tasks. (<i>Award up to 2 if indicated, otherwise 0</i>)	2		
v. Tools and materials used to perform the maintenance tasks. (<i>Award up to 2 if indicated, otherwise 0</i>)	2		
vi. Observations and findings made (<i>Award up to 3 if indicated, otherwise 0</i>)	3		
vii. Signature (<i>Award 1 if indicated, otherwise 0</i>)	1		
Sub - Total	15		
GRAND TOTAL	79		
$\frac{x}{79} \times 100$			

ASSESSMENT OUTCOMES

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 candidate:

Feedback to candidate:

Candidate Signature

Date:

Assessor's Signature

Date

APPENDIX: PRINT FOR ASSESSOR ONLY

Create the following faults on the radio system before the start of the practical:

- i. Cut and remove the cable leading to the aerial*
- ii. Remove the cables that lead to the speaker*
- iii. Remove the power supply cable from the dry cells to the motherboard*
- iv. Close the cover and tighten the screws*