

061306T4CSC

COMPUTER SCIENCE LEVEL 6

ICT/OS/CS/CR/07/6/A

ICT/OS/CS/CR/07/6/B

Understand Networking and Distributed Systems

July/August 2025



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

OBSERVATION CHECKLIST

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. 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
TASK 1: Perform Network Configuration and Security			
1. Observed computer laboratory rules (Award 2 mark or 0)	2		
2. Prepared two ethernet cables using T568B wiring standard. (Award 3 marks for each cable or 0)	6		
3. Tested the cables. (Award 2 marks or 0)	2		
4. Configured IPV4 address, subnet mask and gateway on Computer A. (Award 2 marks each or 0)	6		
5. Configured IPV4 address, subnet mask and gateway on Computer B (Award 2 marks each or 0)	6		
6. Verified network connectivity between both computers (Award 3 marks or 0)	3		
SUB-TOTAL	25		
File sharing.			
7. Shared the “Documents” folder on Computer A with correct permissions. (Award 3 marks or 0)	3		
8. Shared the “Documents” folder on Computer B with correct permissions (Award 3 marks or 0)	3		
9. Created a word file called ‘Test 1’ and saved it in shared Documents in computer A (Award 3 marks or 0)	3		
10. Accessed the shared document from computer B (Award 3 marks or 0)	3		
11. Verified ability to create, modify, and delete files from shared folders (Award 3 marks or 0)	3		
SUB-TOTAL	15		
User Account Security			
12. Created strong passwords for user accounts on Computer A	4		

(Award 4 marks or 0)			
13. Created strong passwords for user accounts on Computer B (Award 4 marks or 0)	4		
14. Verified password strength compliance (uppercase, lowercase, numbers, symbols) (Award 3 marks or 0)	3		
15. Used Wireshark software to capture network traffic (Award 4 marks or 0)	4		
16. Took a screenshot of the network traffic and saved it on the desktop of computer A (Award 4 marks or 0)	4		
SUB-TOTAL	19		
Task 2: Perform Network Monitoring			
17. Launched Wireshark software successfully on Computer A (Award 2 marks or 0)	2		
18. Selected the correct active network interface for packet capture (Award 3 marks or 0)	2		
19. Initiated packet capture and let it run for approximately 1 minute (Award 3 marks or 0)	2		
20. Monitored live traffic and ensured packets were captured during the session (Award 3 marks or 0)	3		
21. Stopped the capture after 1 minute without errors (Award 3 marks or 0)	3		
Took a clear screenshot of the captured packets window	2		
Saved the screenshot correctly on the Desktop of Computer A	2		
SUB-TOTAL	13		
Task 2: Troubleshoot a Network			
22. Checked physical Ethernet cable connection from user's PC to switch (Award 3 marks or 0)	3		
23. Verified that the network adapter on the affected computer is enabled (Award 3 marks or 0)	3		

24. Checked for correct IP address assignment (via ipconfig or ifconfig) (Award 3 marks or 0)	3		
25. Attempted to ping the gateway (e.g., router IP) from the user's PC (Award 3 marks or 0)	3		
26. Attempted to ping a public website (e.g., 8.8.8.8 or google.com) (Award 3 marks or 0)	3		
27. Verified DNS settings and ensured DNS resolution is functioning (Award 3 marks or 0)	3		
28. Swapped Ethernet cable and/or changed port on switch to isolate hardware issue (Award 3 marks or 0)	3		
29. Confirmed internet connectivity restored on the user's PC (Award 3 marks or 0)	3		
30. Documented the troubleshooting process solution provided (Award 1 mark for each solution)	9		
SUB-TOTAL	33		
Task 3: Perform Network Monitoring			
31. Launched Wireshark software successfully on Computer A (Award 2 marks or 0)	2		
32. Selected the correct active network interface for packet capture (Award 3 marks or 0)	3		
33. Initiated packet capture and let it run for approximately 1 minute (Award 3 marks or 0)	3		
34. Monitored live traffic and ensured packets were captured during the session (Award 3 marks or 0)	3		
35. Stopped the capture after 1 minute without errors (Award 3 marks or 0)	3		
36. Took a clear screenshot of the captured packets window (Award 3 marks or 0)	3		

37. Saved the screenshot correctly on the Desktop of Computer A (Award 3 marks or 0)	4		
SUB-TOTAL	21		
Task 4: Network topologies			
1. Star topology correctly implemented, with all computers connecting through the switch. (Award 2 marks or 0)	2		
2. Router shown at the top or central node, labeled as "Router". (Award 2 marks or 0)	2		
3. Ethernet switch shown in diagram, properly labeled, with a clear cable to the router. (Award 2 marks or 0)	2		
4. Each desktop computer is drawn and labeled (Computer 1 to Computer 5). (Award 2 marks or 0)	2		
5. All computers connected using individual lines to the switch. (Award 2 marks or 0)	2		
6. Router shown to be the point of interne optionally labeled as "Internet" or WAN. (Award 2 marks or 0)	2		
7. Cables correctly drawn without crossing unnecessarily or being confusing. (Award 2 marks or 0)	2		
8. Clean, organized layout showing logical structure and legibility. (Award 2 marks or 0)	2		
SUB-TOTAL	14		
GRAND TOTAL	140		
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
