

**Assessment Evidence Guide**  
**For**  
**“Lab Assistant (Network)”**  
**Level-2**  
**(Summative Assessment)**



**National Vocational & Technical**  
**Training Commission**

## Instruction Sheet for the Candidate

<b>Title of Qualification:</b>	<b>CS Code:</b>	<b>Level:2</b>	<b>Version:01</b>
National Vocational Certificate Level 2 in Computer Networking and Cloud Computing (Lab Assistant (Network))			
<b>Competency Standard Title:</b>	<b>Assessment Date (DD/MM/YY):</b>		
Perform Basic Computer Installation			
Install and configure hardware components/peripheral devices			
Draft office documents			
Perform Internet Surfing and Email Management			
Perform installation and configuration of network cables			
Install Configure and Troubleshoot Switch & Router			
Install System Software on The Devices			
Configure Hardware Raid (Redundant Array of Independent Disk)			
Follow Safety Rules at Site			
Perform Basic Communication Skills			
	<b>Assessment Time: 04Hrs</b>		

Candidate Details	Name: .....  Registration/Roll Number: .....
Guidance for Candidate	<p><b>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration &amp; assessment):</b></p> <p><b>Assessment Task 1:</b></p> <p>Candidate is required to Install OS, hardware specific drivers and antivirus. Configure network between minimum two PCs and one switch and test the network.</p> <p><b>And complete:</b></p> <ol style="list-style-type: none"> <li><b>1. Knowledge assessment test (Written or Oral)</b></li> <li><b>2. Portfolios at the time of assessment (if any)</b></li> </ol>

Minimum Evidence Required	<p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p>Performance Criteria 1: Prepare drive/partitions before OS installation.</p> <p>Performance Criteria 2: Format mass storage on a PC/computer.</p> <p>Performance Criteria 3: Perform Partitioning of hard drive</p> <p>Performance Criteria 4: Install operating system in the PC/computers according to given instructional manual.</p> <p>Performance Criteria 5: Install application software in the PC/computers according to instruction manual.</p> <p>Performance Criteria 6: Select and install drivers.</p> <p>Performance Criteria 7: Select cable as per requirement (CAT5, CAT6 etc)</p> <p>Performance Criteria 8: Calculate the length of cable as per requirement</p> <p>Performance Criteria 9: Prepare crossover and straight network cable.</p> <p>Performance Criteria 10: Check the cable connectors with cable tester</p> <p>Performance Criteria 11: Check connectivity between devices (cable and switches/ routers/ hardware components) manually</p> <p>Performance Criteria 12: Ping all network nodes to check the connectivity</p> <p>Performance Criteria 13: Conduct test to check the data rate and bandwidth of network</p> <p>Performance Criteria 14: Connect the switches and routers with network cables</p> <p>Performance Criteria 15: Check the network connectivity</p> <p>Performance Criteria 16: Assign Network addresses</p> <p>Performance Criteria 17: Run the desired/instructed Dynamic Routing Protocols</p> <p>Performance Criteria 18: Advertise the network &amp; Perform Convergence</p> <p>Performance Criteria 19: Perform Network Address Translation</p> <p>Performance Criteria 20: Identify the IP addresses assigned to your computer and your network</p> <p>Performance Criteria 21: Integrate the PCs into Local Area Network (LAN) or WAN</p>
	<p><b>Portfolios required at the time of assessment (if any) for</b></p> <p>1. Folder includes presentation on “Work Related Health &amp; Safety”.</p> <p>Performance Criteria 1: Set page Layout</p> <p>Performance Criteria 2: Perform basic Formatting</p>

	<p>Performance Criteria 3: Perform insert operation (slides, picture, shapes, charts, tables, smart art, clip art, hyperlinks, page numbers, bullets/numbering) in the presentation.</p> <p>Performance Criteria 4: Select various template designs</p> <p>Performance Criteria 5: Identify risk associated with job to be done</p> <p>Performance Criteria 6: Identify different types of communication hand signals.</p>
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## Assessors Judgment Guide

<b>Candidate Details</b>	Name: ..... Registration/Roll Number: ..... Candidate Signature:.....
<b>Assessment Outcome</b>	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/> Name of the Assessor: ..... Assessor's code: ..... Signature of the Assessor: .....

Assessment Summary (to be filled by the assessor)							
Activity	Method					Result	
Nature of Activity	Written	Oral	Observation	Portfolio	Role Play	Competent	Not Yet Competent
Practical Skill Demonstration			✓				
Knowledge Assessment	✓	✓					
Other Requirement				✓			

Observation Checklist				
Assessment Task 1		Description of Assessment Task 1		
		Install OS, hardware specific drivers and antivirus. Configure network between minimum two PCs and one switch and test the network.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Prepare drive/partitions before OS installation.			
2.	Format mass storage on a PC/computer.			
3.	Perform Partitioning of hard drive			
4.	Install operating system in the PC/computers according to given instructional manual.			
5.	Install application software in the PC/computers according to instruction manual.			
6.	Select and install drivers.			
7.	Select cable as per requirement (CAT5, CAT6 etc)			
8.	Calculate the length of cable as per requirement			
9.	Prepare crossover and straight network cable			
10.	Check the cable connectors with cable tester			
11.	Check connectivity between devices (cable and switches/ routers/ hardware components) manually			
12.	Ping all network nodes to check the connectivity			
13.	Conduct test to check the data rate and bandwidth of network			
14.	Connect the switches and routers with network cables			
15.	Check the network connectivity			
16.	Assign Network addresses			
17.	Run the desired/instructed Dynamic Routing Protocols			
18.	Advertise the network & Perform Convergence			
19.	Perform Network Address Translation			

20.	Identify the IP addresses assigned to your computer and your network			
21.	Integrate the PCs into Local Area Network (LAN) or WAN			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

Portfolio		Description of Portfolio		
		1. Folder includes presentation on “Work Related Health & Safety”.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Set page Layout			
2.	Perform basic Formatting			
3.	Perform insert operation (slides, picture, shapes, charts, tables, smart art, clip art, hyperlinks, page numbers, bullets/numbering) in the presentation.			
4.	Select various template designs			
5.	Identify risk associated with job to be done			
6.	Identify different types of communication hand signals.			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

## Knowledge Assessment

<b>Title of Qualification:</b> National Vocational Certificate Level 2 in Computer Networking and Cloud Computing (Lab Assistant (Network))	<b>CS Code:</b>	<b>Level:</b> 2	<b>Version:</b> 01
<b>Competency Standard Title:</b> Perform Basic Computer Installation  Install and configure hardware components/peripheral devices  Draft office documents  Perform Internet Surfing and Email Management  Perform installation and configuration of network cables  Install Configure and Troubleshoot Switch & Router  Install System Software on The Devices  Configure Hardware Raid (Redundant Array of Independent Disk)  Follow Safety Rules at Site  Perform Basic Communication Skills	<b>Assessment Date (DD/MM/YY):</b>   <b>Assessment Time:</b> 30 min		

Guidance for Candidate	<b>To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.</b>
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Candidate Details	Name:..... Registration/Roll Number:  Candidate Signature:.....
Written Assessment Outcome	COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/>  Name of the Assessor: ..... Assessor's code:  Signature of the Assessor: .....



<b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	
<b>1.</b> Define application software?	
<b>2.</b> What is the purpose of option "Device Manager" in window software?	
<b>3.</b> What are the color codes for cross cable?	
<b>4.</b> Enlist the name of HyperTerminal Software?	
<b>5.</b> What is the difference between switch and router?	
<b>6.</b> What are different components of network?	
<b>7.</b> What are different booting resources?	

### **ANSWER KEY**

<b>Sr.</b>	<b>Answers</b>
<b>1.</b>	A software that performs specific tasks for the end user
<b>2.</b>	It displays a graphically view of the hardware that is installed on the computer
<b>3.</b>	A crossover has one end with the orange set of wires switched with the green set. Odd numbered pins are always striped, even numbered pins are always solid colored. Looking at the RJ-45 with the clip facing away from you, Brown is always on the right, and pin 1 is on the left.
<b>4.</b>	Tera Term PuTTY KiTTY SmarTTY
<b>5.</b>	Router and Switch are both networks connecting devices. Router works at network layer and is responsible to find the shortest path for a packet whereas Switch connects various devices in a network. Router connects devices across multiple networks.
<b>6.</b>	Some important network components are NIC, switch, cable, hub, router, and modem
<b>7.</b>	Hard drive, floppy disk drive, CD-ROM drive, DVD drive, and USB