

# **Assessment Evidence Guide**

**For**

**“Lab Assistant (Network)”**

**Level-2**

**Perform Basic Computer Installation**

**(Formative Assessment)**



**National Vocational & Technical  
Training Commission**

## Instruction Sheet for the Candidate

|  |   |                |                   |
|--|---|----------------|-------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>   | <b>Level:2</b> | <b>Version:01</b> |
| <b>Competency Standard Title:</b><br>Perform Basic Computer Installation   | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> |                |                   |

|                           |  |
|---------------------------|--|
| Candidate Details         | Name: .....<br><br>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> Candidate is required to install system software and upgrade it as per instructions given by assessor.</p> <p><b>Assessment Task 2:</b> Candidate is required to perform following tasks using operating system</p> <ol style="list-style-type: none"> <li>i. Create a folder and rename it</li> <li>ii. Copy/paste files</li> <li>iii. Move folders/files to different location as per instructions given by assessor.</li> </ol> <p><b>And complete:</b></p> <ol style="list-style-type: none"> <li>1. Knowledge assessment test (Written or Oral)</li> <li>2. Portfolios at the time of assessment (if any)</li> </ol> |
| Minimum Evidence Required | <p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p><b>Assessment Task 1</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: Download and run windows/application patches</p>  |

|  |  |
|--|--|
|  | <p><b>Assessment Task 2</b></p> <p>Performance Criteria 1: Create folders/directories</p> <p>Performance Criteria 2: Copy files, folder/ directories to different location<br/>(Hard drive, external storage, cloud)</p> <p>Performance Criteria 3: Move files, folder/ directories to different location<br/>(Hard drive, external storage, cloud)</p> <p>Performance Criteria 4: Rename files and directories/folder</p> <p>Performance Criteria 5: Search files / folder/directories against various search criterion (File name, date, text etc.)</p> <p>Performance Criteria 6: Perform task manager operations</p> |
|  | <p><b>Portfolios required at the time of assessment (if any) for</b></p>   |

## Assessors Judgment Guide

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

|  |  |    |         |
|--|--|----|---------|
| <b>Assessment Task 1</b>   | <b>Description of Assessment Task 1</b><br>Install system software and upgrade it. |    |         |
| 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. Download and run windows/application patches  |  |    |         |
| Competent <input type="checkbox"/>   | Not Yet Competent <input type="checkbox"/>   |    |         |
| Each Assessment Task (with performance criteria)   |  |    |         |

|  |  |    |         |
|--|--|----|---------|
| <b>Assessment Task 2</b>   | <b>Description of Assessment Task 2</b><br>Perform following tasks using operating system<br><br><div style="margin-left: 20px;"> i. Create a folder and rename it<br/> ii. Copy/paste files<br/> iii. Move folders/files to different location </div> |    |         |
| During the practical assessment, candidate demonstrated the following:                             | Yes  | No | Remarks |
| 1. Create folders/directories  |  |    |         |
| 2. Copy files, folder/ directories to different location<br>(Hard drive, external storage, cloud)  |  |    |         |
| 3. Move files, folder/ directories to different location<br>(Hard drive, external storage, cloud)  |  |    |         |
| 4. Rename files and directories/folder   |  |    |         |
| 5. Search files / folder/directories against various search criterion (File name, date, text etc.) |  |    |         |
| 6. Perform task manager operations   |  |    |         |
| Competent <input type="checkbox"/>   | Not Yet Competent <input type="checkbox"/>   |    |         |

## Knowledge Assessment

|  |  |                    |                       |
|--|--|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>  | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Perform Basic Computer Installation   | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> 30 min |                    |                       |

|                              |  |
|------------------------------|--|
| Guidance<br>for<br>Candidate | <b>To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.</b> |
|------------------------------|--|

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

| <b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application) |  |
|--|--|
| <b>1.</b> Write any 02 Application software names?   |  |
| <b>2.</b> Why update/upgrade of antivirus is necessary?  |  |

|  |  |
|--|--|
| <b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application) |  |
| 3. Write down the MS Word and Excel file extension.  |  |
| 4. Define application software?  |  |
| 5. The process of erasing the disk is called _____?  |  |

**ANSWER KEY**

| <b>Sr.</b> | <b>Answers</b>   |
|------------|--|
| <b>1.</b>  | Presentation Software, Spreadsheet software, Database Software, Word Processing Software |
| <b>2.</b>  | Because computers are regularly threatened by new viruses                                |
| <b>3.</b>  | Microsoft word: .docx<br>Microsoft excel: .xlsx  |
| <b>4.</b>  | A software that performs specific tasks for the end user                                 |
| <b>5.</b>  | Formatting   |



**Assessment Evidence  
Guide  
For  
“Lab Assistant (Network)”  
Level-2  
Configure Hardware Components/Peripheral  
Devices  
(Formative Assessment)**



**National Vocational & Technical  
Training Commission**

## Instruction Sheet for the Candidate

|  |   |                    |                       |
|--|---|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>   | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Configure hardware components/peripheral<br>devices   | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> |                    |                       |

|                                 |  |
|---------------------------------|--|
| Candidate<br>Details            | Name: .....<br><br>Registration/Roll Number: .....   |
| Guidance<br>for<br>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> Candidate is required to configure scanner, install its drivers and perform functional test as per instructions given by assessor.</p> <p><b>Assessment Task 2:</b> Candidate is required to troubleshoot problems during hardware installation as per instructions given by assessor.</p> <p><b>And complete:</b></p> <ol style="list-style-type: none"> <li><b>Knowledge assessment test (Written or Oral)</b></li> <li><b>Portfolios at the time of assessment (if any)</b></li> </ol> |
| Minimum<br>Evidence<br>Required | <p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p><b>Assessment Task 1</b></p> <p>Performance Criteria 1: Configure hardware components / peripheral devices as per manuals.</p> <p>Performance Criteria 2: Select and install drivers.</p> <p>Performance Criteria 3: Perform functional test for the installed Hardware components / peripheral devices.</p> <p>Performance Criteria 4: Update/Upgrade device driver</p>  |

|  |   |
|--|---|
|  | <b>Assessment Task 2</b><br>Performance Criteria 1: Detect hardware errors/problems.<br>Performance Criteria 2: Identify solution of hardware errors.<br>Performance Criteria 3: Execute the hardware trouble shooting. |
|--|---|

## Assessors Judgment Guide

(To be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

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

|  |   |   |    |         |
|--|---|---|----|---------|
| <b>Assessment Task 1</b>   |   | <b>Description of Assessment Task 1</b><br>Configure scanner, install its drivers and perform functional test |    |         |
| During the practical assessment, candidate demonstrated the following: |   | Yes   | No | Remarks |
| 1.   | Configure hardware components / peripheral devices as per manuals.                  |   |    |         |
| 2.   | Select and install drivers.   |   |    |         |
| 3.   | Perform functional test for the installed hardware components / peripheral devices. |   |    |         |
| 4.   | Update/Upgrade device driver  |   |    |         |
| Competent <input type="checkbox"/>                                     |   | Not Yet Competent <input type="checkbox"/>  |    |         |

|  |  |  |    |         |
|--|--|--|----|---------|
| <b>Assessment Task 2</b>   |  | <b>Description of Assessment Task 2</b><br>Troubleshoot problems during hardware installation. |    |         |
| During the practical assessment, candidate demonstrated the following: |  | Yes  | No | Remarks |
| 1.   | Detect hardware errors/problems.       |  |    |         |
| 2.   | Identify solution of hardware errors.  |  |    |         |
| 3.   | Execute the hardware trouble shooting. |  |    |         |
| Competent <input type="checkbox"/>                                     |  | Not Yet Competent <input type="checkbox"/>   |    |         |

## Knowledge Assessment

|  |  |                    |                       |
|--|--|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>  | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Configure hardware components/peripheral<br>devices   | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> 30 min |                    |                       |

|                              |  |
|------------------------------|--|
| Guidance<br>for<br>Candidate | <b>To complete your assessment for this Competency Standard, you<br/>need to answer the questions on the following pages successfully.</b> |
|------------------------------|--|

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

| <b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding<br>of the topics and their application) |  |
|---|--|
| 1. Write any 03 main parts<br>of hardware in CPU?   |  |
| 2. Define microprocessor.   |  |
| 3. If sound is not coming,<br>then which component<br>you will check?   |  |

| <b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application) |  |
|--|--|
| 4. What is the function of RAM?  |  |
| 5. What is the purpose of option "Device Manager" in window software?  |  |

### **ANSWER KEY**

| <b>Sr.</b> | <b>Answers</b>  |
|------------|---|
| <b>1.</b>  | Ans: RAM, CD-ROM, Mother board, Network Card (NIC), Processor                         |
| <b>2.</b>  | Ans: An integrated circuit that contains all the functions of CPU of a computer       |
| <b>3.</b>  | Ans: Sound Card   |
| <b>4.</b>  | Ans: RAM is use for the storage of data on the short-term basis.                      |
| <b>5.</b>  | Ans: it displays a graphically view of the hardware that is installed on the computer |



# **Assessment Evidence Guide**

**For**

**“Lab Assistant (Network)”**

**Level-2**

**Draft Office Documents**

**(Formative Assessment)**



**National Vocational & Technical  
Training Commission**

## Instruction Sheet for the Candidate

|  |  |                        |                           |
|--|--|------------------------|---------------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>  | <b>Level:</b><br><br>2 | <b>Version:</b><br><br>01 |
| <b>Competency Standard Title:</b><br>Draft office documents  | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time :</b> |                        |                           |

|                              |   |
|------------------------------|---|
| Candidate<br>Details         | Name: .....<br><br>Registration/Roll Number: .....  |
| Guidance<br>for<br>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> Candidate is required to compose a formatted CV using word processing software as per instructions given by assessor.</p> <p><b>Assessment Task 2:</b> Candidate is required to prepare a detailed marks sheet for the whole class and calculate the following:</p> <ol style="list-style-type: none"> <li>i. Average marks of any two subjects</li> <li>ii. Total marks and percentage of every student as per instructions given by assessor.</li> </ol> <p><b>Assessment Task 3:</b> Candidate is required to prepare a presentation on any topic fulfilling the following requirements</p> <ol style="list-style-type: none"> <li>i. More than 5 slides</li> <li>ii. Pictures and graphs</li> <li>iii. Animation</li> <li>iv. Clipart</li> <li>v. Hyperlink with external files</li> <li>vi. Bullets and Page number</li> </ol> <p>as per instructions given by assessor.</p> <p><b>Assessment Task 4:</b> Candidate is required to convert Word file to pdf using any online file conversion tool as per instructions given by assessor.</p> <p><b>And complete:</b></p> <ol style="list-style-type: none"> <li>1. Knowledge assessment test (Written or Oral)</li> <li>2. Portfolios at the time of assessment (if any)</li> </ol> |

|                           |  |
|---------------------------|--|
| Minimum Evidence Required | <p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p><b>Assessment Task 1</b></p> <p>Performance Criteria 1: Create new document / open word document</p> <p>Performance Criteria 2: Save document</p> <p>Performance Criteria 3: Set page Layout</p> <p>Performance Criteria 4: Perform basic Formatting (text, paragraph, page)</p> <p>Performance Criteria 5: Perform insert operation (picture, shapes, charts, tables, smart art, clip art, hyperlinks, page numbers, header/footers, bullets/numbering, columns) in the word document</p> <p>Performance Criteria 6: Check the spellings in the word file through dictionary</p> <p>Performance Criteria 7: Print document</p> |
|                           | <p><b>Assessment Task 2</b></p> <p>Performance Criteria 1: Create / open Spread Sheet</p> <p>Performance Criteria 2: Save Spreadsheet</p> <p>Performance Criteria 3: Set page Layout</p> <p>Performance Criteria 4: Perform basic Formatting</p> <p>Performance Criteria 5: Perform insert operation (picture, charts, smart art, clip art, hyperlinks, page numbers, header/footers, bullets / numbering) in the spread sheet</p> <p>Performance Criteria 6: Insert / use arithmetic functions/formulas</p> <p>Performance Criteria 7: Print Spreadsheet.</p>   |

|  |   |
|--|---|
|  | <p><b>Assessment Task 3</b></p> <p>Performance Criteria 1: Create / open presentation</p> <p>Performance Criteria 2: Save presentation</p> <p>Performance Criteria 3: Set page Layout</p> <p>Performance Criteria 4: Perform basic Formatting</p> <p>Performance Criteria 5: Perform insert operation (slides, picture, shapes, charts, tables, smart art, clip art, hyperlinks, page numbers, bullets/numbering) in the presentation.</p> <p>Performance Criteria 6: Select various template designs</p> <p>Performance Criteria 7: Apply animation to slides</p> <p>Performance Criteria 8: Check the spellings in the presentation through available dictionary</p> <p>Performance Criteria 9: Run presentation</p> <p>Performance Criteria 10: Print presentation</p> |
|  | <p><b>Assessment Task 4</b></p> <p>Performance Criteria 1: Identify file conversion software</p> <p>Performance Criteria 2: Convert files into different formats</p> <p>Performance Criteria 3: Use online convertor to give a practical demonstration</p>  |

## Assessors Judgment Guide

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

|  |  |   |    |         |
|--|--|---|----|---------|
| Each Assessment Task (with performance criteria)                       |  |   |    |         |
| <b>Assessment Task 1</b>   |  | <b>Description of Assessment Task 1</b><br><br>Compose a formatted CV using word processing software. |    |         |
| During the practical assessment, candidate demonstrated the following: |  | Yes   | No | Remarks |
| 1.   | Create new document / open word document   |   |    |         |
| 2.   | Save document  |   |    |         |
| 3.   | Set page Layout  |   |    |         |
| 4.   | Perform basic Formatting (text, paragraph, page)   |   |    |         |
| 5.   | Perform insert operation (picture, shapes, charts, tables, smart art, clip art, hyperlinks, page numbers, header/footers, bullets/numbering, columns) in the word document |   |    |         |
| 6.   | Check the spellings in the word file through dictionary  |   |    |         |
| 7.   | Print document   |   |    |         |
| Competent <input type="checkbox"/>                                     |  | Not Yet Competent <input type="checkbox"/>  |    |         |

|  |  |   |    |         |
|--|--|---|----|---------|
| <b>Assessment Task 2</b>   |  | <b>Description of Assessment Task 2</b>   |    |         |
|  |  | Prepare a detailed marks sheet for the whole class and calculate the following: <ul style="list-style-type: none"> <li>i. Average marks of any two subjects</li> <li>ii. Total marks and percentage of every student</li> </ul> |    |         |
| During the practical assessment, candidate demonstrated the following: |  | Yes   | No | Remarks |
| 1.   | Create / open Spread Sheet   |   |    |         |
| 2.   | Save Spreadsheet   |   |    |         |
| 3.   | Set page Layout  |   |    |         |
| 4.   | Perform basic Formatting   |   |    |         |
| 5.   | Perform insert operation (picture, charts, smart art, clip art, hyperlinks, page numbers, header/footers, bullets / numbering) in the spread sheet |   |    |         |
| 6.   | Insert / use arithmetic functions/formulas   |   |    |         |
| 7.   | Print Spreadsheet.   |   |    |         |
| Competent <input type="checkbox"/>                                     |  | Not Yet Competent <input type="checkbox"/>  |    |         |

|  |   |  |    |         |
|--|---|--|----|---------|
| <b>Assessment Task 3</b>   |   | <b>Description of Assessment Task 3</b>  |    |         |
|  |   | Prepare a presentation on any topic fulfilling the following requirements <ul style="list-style-type: none"> <li>i. More than 5 slides</li> <li>ii. Pictures and graphs</li> <li>iii. Animation</li> <li>iv. Clipart</li> <li>v. Hyperlink with external files</li> <li>vi. Bullets and Page number</li> </ul> |    |         |
| During the practical assessment, candidate demonstrated the following: |   | Yes  | No | Remarks |
| 1.   | Create / open presentation  |  |    |         |
| 2.   | Save presentation   |  |    |         |
| 3.   | Set page Layout   |  |    |         |
| 4.   | Perform basic Formatting  |  |    |         |
| 5.   | Perform insert operation (slides, picture, shapes, charts, tables, smart art, clip art, hyperlinks, page numbers, bullets/numbering) in the presentation. |  |    |         |
| 6.   | Select various template designs   |  |    |         |
| 7.   | Apply animation to slides   |  |    |         |
| 8.   | Check the spellings in the presentation through available dictionary  |  |    |         |
| 9.   | Run presentation  |  |    |         |
| 10.  | Print presentation  |  |    |         |
| Competent <input type="checkbox"/>                                     |   | Not Yet Competent <input type="checkbox"/>   |    |         |

|  |  |  |    |         |
|--|--|--|----|---------|
| <b>Assessment Task 4</b>   |  | <b>Description of Assessment Task 4</b>  |    |         |
|  |  | Candidate is required to convert Word file to pdf using any online file conversion tool. |    |         |
| During the practical assessment, candidate demonstrated the following: |  | Yes  | No | Remarks |
| 1.   | Identify file conversion software                      |  |    |         |
| 2.   | Convert files into different formats                   |  |    |         |
| 3.   | Use online convertor to give a practical demonstration |  |    |         |
| Competent <input type="checkbox"/>                                     |  | Not Yet Competent <input type="checkbox"/>   |    |         |



## Knowledge Assessment

|  |  |                    |                       |
|--|--|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>  | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Draft office documents  | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> 30 min |                    |                       |

|                              |  |
|------------------------------|--|
| Guidance<br>for<br>Candidate | <b>To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.</b> |
|------------------------------|--|

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

| <b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application) |  |
|--|--|
| 1. Write any 03 drafting software commonly used for office work?   |  |
| 2. Which software can be used for preparing presentation?  |  |
| 3. Extension file “.docx” is used for which drafting application.  |  |

**Questions** (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)

4. Which drafting application you will choose to make your CV.

5. Can you copy Excel table in word or Power point?

### **ANSWER KEY**

| <b>Sr.</b> | <b>Answers</b>   |
|------------|--|
| 1.         | AutoCAD professional design and drafting software is used in architecture, construction, engineering and manufacturing |
| 2.         | PowerPoint, Canva and Google Slides.   |
| 3.         | MS Word, Google docs   |
| 4.         | MS Word  |
| 5.         | Yes  |

**Assessment Evidence  
Guide  
For  
“Lab Assistant (Network)”  
Level-2  
Perform Internet Surfing and Email  
Management  
(Formative Assessment)**



**National Vocational & Technical  
Training Commission**

## Instruction Sheet for the Candidate

|  |   |                    |                       |
|--|---|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>   | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Perform Internet Surfing and Email<br>Management  | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> |                    |                       |

|                                 |  |
|---------------------------------|--|
| Candidate<br>Details            | Name: .....<br><br>Registration/Roll Number: .....   |
| Guidance<br>for<br>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> Candidate is required to collect data on given topic from the internet using any browser and download it as per instructions given by assessor.</p> <p><b>Assessment Task 2:</b> Candidate is required to create an email account on Gmail and send an email with following attachment.</p> <ol style="list-style-type: none"> <li>i. Image</li> <li>ii. Word Document file</li> </ol> <p>as per instructions given by assessor.</p> <p><b>And complete:</b></p> <ol style="list-style-type: none"> <li>3. Knowledge assessment test (Written or Oral)</li> <li>4. Portfolios at the time of assessment (if any)</li> </ol> |
| Minimum<br>Evidence<br>Required | <p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p><b>Assessment Task 1</b></p> <p>Performance Criteria 1: Browse required data.</p> <p>Performance Criteria 2: Download data from the internet</p>  |

|  |   |
|--|---|
|  | <b>Assessment Task 2</b><br>Performance Criteria 1: Create email accounts on various service providers.<br>Performance Criteria 2: Remove Errors while Email configuration<br>Performance Criteria 3: Send and receive emails |
|--|---|

## Assessors Judgment Guide

(to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

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

|  |                                 |  |    |         |
|--|---------------------------------|--|----|---------|
| <b>Assessment Task 1</b>   |                                 | <b>Description of Assessment Task 1</b>  |    |         |
|  |                                 | Collect data on given topic from the internet using any browser and download it. |    |         |
| During the practical assessment, candidate demonstrated the following: |                                 | Yes  | No | Remarks |
| 1.   | Browse required data.           |  |    |         |
| 2.   | Download data from the internet |  |    |         |
| Competent <input type="checkbox"/>                                     |                                 | Not Yet Competent <input type="checkbox"/>                                       |    |         |

|  |   |   |    |         |
|--|---|---|----|---------|
| <b>Assessment Task 2</b>   |   | <b>Description of Assessment Task 2</b>                                       |    |         |
|  |   | Create an email account on Gmail and send an email with following attachment. |    |         |
|  |   | <div style="margin-left: 40px;"> i. Image<br/> ii. Word Document file </div>  |    |         |
| During the practical assessment, candidate demonstrated the following: |   | Yes   | No | Remarks |
| 1.   | Create email accounts on various service providers. |   |    |         |
| 2.   | Remove Errors while Email configuration             |   |    |         |
| 3.   | Send and receive emails                             |   |    |         |
| Competent <input type="checkbox"/>                                     |   | Not Yet Competent <input type="checkbox"/>                                    |    |         |



## Knowledge Assessment

|  |  |                    |                       |
|--|--|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>  | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Perform Internet Surfing and Email<br>Management  | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> 30 min |                    |                       |

|                              |  |
|------------------------------|--|
| Guidance<br>for<br>Candidate | <b>To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.</b> |
|------------------------------|--|

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

| <b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application) |  |
|--|--|
| <b>1.</b> Write Any 03 browsers names  |  |
| <b>2.</b> Name any 02-software used for downloading from internet  |  |
| <b>3.</b> What is the difference between BCC & CC?   |  |
| <b>4.</b> How we set high priority email in Outlook.   |  |

**Questions** (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)

5. What are 02 common methods for sorting of emails.

### **ANSWER KEY**

| <b>Sr.</b> | <b>Answers</b>   |
|------------|--|
| <b>1.</b>  | Google Chrome, Opera, Internet explorer  |
| <b>2.</b>  | Internet Download manager, Internet Browser  |
| <b>3.</b>  | BCC: Blind Carbon copy CC: Carbon copy   |
| <b>4.</b>  | While composing an email, under message tab inside tag section, make sure the "high importance" is selected. |
| <b>5.</b>  | Gmail, Yahoo, Hotmail  |

**Assessment Evidence  
Guide  
For  
“Lab Assistant (Network)”  
Level-2  
Perform Installation and Configuration of  
Network Cables  
(Formative Assessment)**



**National Vocational & Technical  
Training Commission**

## Instruction Sheet for the Candidate

|  |   |                    |                       |
|--|---|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>   | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Perform Installation and Configuration of<br>Network Cables   | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> |                    |                       |

|                                 |  |
|---------------------------------|--|
| Candidate<br>Details            | Name: .....<br><br>Registration/Roll Number: .....   |
| Guidance<br>for<br>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> Candidate is required to prepare crossover and straight network cables for installation as per instructions given by assessor.</p> <p><b>Assessment Task 2:</b> Candidate is required to perform troubleshooting of network cables and conduct test to check data rate and bandwidth of network as per instructions given by assessor.</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<br>Evidence<br>Required | <p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p><b>Assessment Task 1</b></p> <p>Performance Criteria 1: Select cable as per requirement (CAT5, CAT6 etc)</p> <p>Performance Criteria 2: Calculate the length of cable as per requirement</p> <p>Performance Criteria 3: Prepare crossover and straight network cable.</p>   |

|  |  |
|--|--|
|  | <p><b>Assessment Task 2</b></p> <p>Performance Criteria 1: Check the cable connectors with cable tester</p> <p>Performance Criteria 2: Check connectivity between devices (cable and switches/ routers/ hardware components) manually</p> <p>Performance Criteria 3: Repair Cable</p> <p>Performance Criteria 4: Replace the connectors / hardware components if required</p> <p>Performance Criteria 5: Ping all network nodes to check the connectivity</p> <p>Performance Criteria 6: Check the cable connectivity with each network node</p> <p>Performance Criteria 7: Conduct test to check the data rate and bandwidth of network</p> |
|--|--|

## Assessors Judgment Guide

(to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

|                           |   |
|---------------------------|---|
| <b>Candidate Details</b>  | Name: ..... Registration/Roll Number: .....<br>Candidate Signature:.....  |
| <b>Assessment Outcome</b> | COMPETENT <input type="checkbox"/> NOT YET COMPETENT <input type="checkbox"/><br>Name of the Assessor: ..... Assessor's code: .....<br>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                                 |         |      |             |           |           |           |                   |
| Each Assessment Task (with performance criteria)  |         |      |             |           |           |           |                   |

## Observation Checklist

|  |   |  |    |         |
|--|---|--|----|---------|
| <b>Assessment Task 1</b>   |   | <b>Description of Assessment Task 1</b><br>Prepare crossover and straight network cables for installation as per given instructions. |    |         |
| During the practical assessment, candidate demonstrated the following: |   | Yes  | No | Remarks |
| 1.   | Select cable as per requirement (CAT5, CAT6 etc.) |  |    |         |
| 2.   | Calculate the length of cable as per requirement  |  |    |         |
| 3.   | Prepare crossover and straight network cable.     |  |    |         |
| Competent <input type="checkbox"/>                                     |   | Not Yet Competent <input type="checkbox"/>   |    |         |

|  |  |  |    |         |
|--|--|--|----|---------|
| <b>Assessment Task 2</b>   |  | <b>Description of Assessment Task 2</b><br>Perform maintenance and troubleshooting of network cables and conduct test to check data rate and bandwidth of network. |    |         |
| During the practical assessment, candidate demonstrated the following: |  | Yes  | No | Remarks |
| 1.   | Check the cable connectors with cable tester   |  |    |         |
| 2.   | Check connectivity between devices (cable and switches/ routers/ hardware components) manually |  |    |         |
| 3.   | Repair Cable   |  |    |         |
| 4.   | Replace the connectors / hardware components if required                                       |  |    |         |
| 5.   | Ping all network nodes to check the connectivity   |  |    |         |
| 6.   | Check the cable connectivity with each network node  |  |    |         |
| 7.   | Conduct test to check the data rate and bandwidth of network                                   |  |    |         |
| Competent <input type="checkbox"/>                                     |  | Not Yet Competent <input type="checkbox"/>   |    |         |



## Knowledge Assessment

|  |  |                    |                       |
|--|--|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>  | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Perform Installation and Configuration of<br>Network Cables   | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> 30 min |                    |                       |

|                              |  |
|------------------------------|--|
| Guidance<br>for<br>Candidate | <b>To complete your assessment for this Competency Standard, you<br/>need to answer the questions on the following pages successfully.</b> |
|------------------------------|--|

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

| <b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application) |  |
|--|--|
| <b>1.</b> What are the color codes for cross cable?  |  |
| <b>2.</b> Differentiate between shielded and unshielded twisted pair cables?   |  |
| <b>3.</b> Enlist the name of HyperTerminal Software?   |  |
| <b>4.</b> Which cable is used to access the Router/Switch?   |  |

### **ANSWER KEY**

| <b>Sr.</b> | <b>Answers</b>   |
|------------|--|
| <b>1.</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>2.</b>  | Shielded twisted pair cable (STP) has the individual pairs of wires wrapped in foil, which are then wrapped again for double protection.<br>Unshielded twisted pair cable (UTP) has each pair of wires twisted together. Those wires are then wrapped in tubing without any other protection |
| <b>3.</b>  | Tera Term<br>PuTTY<br>KiTTY<br>SmarTTY   |
| <b>4.</b>  | Ethernet cable<br>Fiber Optic  |

**Assessment Evidence  
Guide  
For  
“Lab Assistant (Network)”  
Level-2  
Install Configure and Troubleshoot Switch &  
Router  
(Formative Assessment)**



**National Vocational & Technical  
Training Commission**

## Instruction Sheet for the Candidate

|  |   |                    |                       |
|--|---|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>   | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Install Configure and Troubleshoot Switch &<br>Router   | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> |                    |                       |

|                              |  |
|------------------------------|--|
| Candidate<br>Details         | Name: .....<br><br>Registration/Roll Number: .....   |
| Guidance<br>for<br>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> Candidate is required to install network router/switch and connect it with proper networking cables according to the layout provided as per instructions given by assessor.</p> <p><b>Assessment Task 2:</b> Candidate is required to assign IP address to the networking device as per IP plan provided as per instructions given by assessor.</p> <p><b>Assessment Task 3:</b> Candidate is required to configure dynamic routing protocols as per requirements as per instructions given by assessor.</p> <p><b>Assessment Task 4:</b> Candidate is required to perform maintenance by checking network connectivity and troubleshoot all common networking problems as per instructions given by assessor.</p> <p><b>And complete:</b></p> <ol style="list-style-type: none"> <li><b>Knowledge assessment test (Written or Oral)</b></li> <li><b>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><b>Assessment Task 1</b></p> <p>Performance Criteria 1: Install the network switch/ router according to layout diagram</p> <p>Performance Criteria 2: Connect the switches and routers with network cables</p>   |
|                           | <p><b>Assessment Task 2</b></p> <p>Performance Criteria 1: Check the network connectivity</p> <p>Performance Criteria 2: Assign IP Addresses as per IP plan</p> <p>Performance Criteria 3: Assign Network addresses</p>   |
|                           | <p><b>Assessment Task 3</b></p> <p>Performance Criteria 1: Run the desired/instructed Dynamic Routing Protocols</p> <p>Performance Criteria 2: Advertise the network &amp; Perform Convergence</p> <p>Performance Criteria 3: Perform Network Address Translation</p> <p>Performance Criteria 4: Ping the destination</p>   |
|                           | <p><b>Assessment Task 4</b></p> <p>Performance Criteria 1: Check the network connectivity</p> <p>Performance Criteria 2: Rectify duplex and speed mismatch problems</p> <p>Performance Criteria 3: Diagnose common network problems</p> <p>Performance Criteria 4: Identify the IP addresses assigned to your computer and your network</p> <p>Performance Criteria 5: Detect the faults of normal operational behavior</p> <p>Performance Criteria 6: Integrate the PCs into Local Area Network (LAN) or WAN</p> |

## Assessors Judgment Guide

(to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

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

|  |  |   |    |         |
|--|--|---|----|---------|
| <b>Assessment Task 1</b>   |  | <b>Description of Assessment Task 1</b><br>Install network router/switch and connect it with proper networking cables according to the layout provided. |    |         |
| During the practical assessment, candidate demonstrated the following: |  | Yes   | No | Remarks |
| 1.   | Install the network switch/ router according to layout diagram |   |    |         |
| 2.   | Connect the switches and routers with network cables           |   |    |         |
| Competent <input type="checkbox"/>                                     |  | Not Yet Competent <input type="checkbox"/>  |    |         |

|  |                                    |  |    |         |
|--|------------------------------------|--|----|---------|
| <b>Assessment Task 2</b>   |                                    | <b>Description of Assessment Task 2</b><br>Assign IP address to the networking device as per IP plan provided. |    |         |
| During the practical assessment, candidate demonstrated the following: |                                    | Yes  | No | Remarks |
| 1.   | Check the network connectivity     |  |    |         |
| 2.   | Assign IP Addresses as per IP plan |  |    |         |
| 3.   | Assign Network addresses           |  |    |         |
| Competent <input type="checkbox"/>                                     |                                    | Not Yet Competent <input type="checkbox"/>   |    |         |

|  |  |   |    |         |
|--|--|---|----|---------|
| <b>Assessment Task 3</b>   |  | <b>Description of Assessment Task 3</b><br>Configure dynamic routing protocols as per requirements. |    |         |
| During the practical assessment, candidate demonstrated the following: |  | Yes   | No | Remarks |
| 1.   | Run the desired/instructed Dynamic Routing Protocols |   |    |         |
| 2.   | Advertise the network & Perform Convergence          |   |    |         |
| 3.   | Perform Network Address Translation                  |   |    |         |
| 4.   | Ping the destination                                 |   |    |         |
| Competent <input type="checkbox"/>                                     |  | Not Yet Competent <input type="checkbox"/>  |    |         |

|  |  |   |    |         |
|--|--|---|----|---------|
| <b>Assessment Task 4</b>   |  | <b>Description of Assessment Task 4</b>   |    |         |
|  |  | Perform maintenance by checking network connectivity and troubleshoot all common networking problems. |    |         |
| During the practical assessment, candidate demonstrated the following: |  | Yes   | No | Remarks |
| 1.   | Check the network connectivity                                       |   |    |         |
| 2.   | Rectify duplex and speed mismatch problems                           |   |    |         |
| 3.   | Diagnose common network problems                                     |   |    |         |
| 4.   | Identify the IP addresses assigned to your computer and your network |   |    |         |
| 5.   | Detect the faults of normal operational behavior                     |   |    |         |
| 6.   | Integrate the PC's into Local Area Network (LAN) or WAN              |   |    |         |
| Competent <input type="checkbox"/>                                     |  | Not Yet Competent <input type="checkbox"/>  |    |         |



## Knowledge Assessment

|  |  |                    |                       |
|--|--|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>  | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Install Configure and Troubleshoot Switch &<br>Router   | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> 30 min |                    |                       |

|                              |  |
|------------------------------|--|
| Guidance<br>for<br>Candidate | <b>To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.</b> |
|------------------------------|--|

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

| <b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application) |  |
|--|--|
| <b>1.</b> What are different types of servers?   |  |
| <b>2.</b> What are different components of network?  |  |
| <b>3.</b> What is the difference between switch and router?  |  |
| <b>4.</b> What are the types of networks?  |  |

### **ANSWER KEY**

| <b>Sr.</b> | <b>Answers</b>  |
|------------|---|
| <b>1.</b>  | Proxy Server.<br>Mail Server.<br>Server Platforms.<br>Web Server.<br>Application Server.<br>Real-Time Communication Server.<br>FTP Server.<br>Collaboration Server.   |
| <b>2.</b>  | Some important network components are NIC, switch, cable, hub, router, and modem  |
| <b>3.</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>4.</b>  | Types of Computer Networks Explained <ul style="list-style-type: none"><li>• Personal Area Network (PAN)</li><li>• Local Area Network (LAN)</li><li>• Wireless Local Area Network (WLAN)</li><li>• Metropolitan Area Network (MAN)</li><li>• Wide Area Network (WAN)</li><li>• Storage Area Network (SAN)</li><li>• Virtual Private Network (VPN)</li></ul> |

**Assessment Evidence  
Guide  
For  
“Lab Assistant (Network)”  
Level-2  
Install System Software on The Devices  
(Formative Assessment)**



**National Vocational & Technical  
Training Commission**

## Instruction Sheet for the Candidate

|  |   |                    |                       |
|--|---|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>   | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Install System Software on The Devices  | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> |                    |                       |

|                           |  |
|---------------------------|--|
| Candidate Details         | Name: .....<br><br>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> Candidate is required to install following software in the computer</p> <ol style="list-style-type: none"> <li>i. Video card driver</li> <li>ii. Antivirus</li> </ol> <p style="padding-left: 100px;">as per instructions given by assessor.</p> <p><b>Assessment Task 2:</b> Candidate is required to check and update BIOS firmware as per instructions given by assessor.</p> <p><b>And complete:</b></p> <ol style="list-style-type: none"> <li>1. Knowledge assessment test (Written or Oral)</li> <li>2. Portfolios at the time of assessment (if any)</li> </ol> |
| Minimum Evidence Required | <p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p><b>Assessment Task 1</b></p> <p>Performance Criteria 1: Select Utility &amp; device drivers.</p> <p>Performance Criteria 2: Install application software</p> <p>Performance Criteria 3: Install utility programs to improve functionality</p> <p>Performance Criteria 4: Perform product activation</p> <p>Performance Criteria 5: Check utility software working in proper manner.</p>   |

|  |  |
|--|--|
|  | <b>Assessment Task 2</b><br><br>Performance Criteria 1: Check for firmware update.<br>Performance Criteria 2: Download the firmware<br>Performance Criteria 3: Update the firmware<br>Performance Criteria 4: Check software working in proper manner. |
|--|--|

## Assessors Judgment Guide

(To be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

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

|  |   |  |         |
|--|---|--|---------|
| <b>Assessment Task 1</b>   | <b>Description of Assessment Task 1</b><br>Install following software in the computer<br><div style="margin-left: 40px;">i. Video card driver<br/>ii. Antivirus</div> |  |         |
| During the practical assessment, candidate demonstrated the following: | Yes   | No   | Remarks |
| 1. Select Utility & device drivers.                                    |   |  |         |
| 2. Install application software  |   |  |         |
| 3. Install utility programs to improve functionality                   |   |  |         |
| 4. Perform product activation  |   |  |         |
| 5. Check utility software working in proper manner.                    |   |  |         |
| Competent <input type="checkbox"/>                                     |   | Not Yet Competent <input type="checkbox"/> |         |

|  |  |  |         |
|--|--|--|---------|
| <b>Assessment Task 2</b>   | <b>Description of Assessment Task 2</b><br>Check and update BIOS firmware. |  |         |
| During the practical assessment, candidate demonstrated the following: | Yes  | No   | Remarks |
| 1. Check for firmware update.  |  |  |         |
| 2. Download the firmware   |  |  |         |
| 3. Update the firmware   |  |  |         |
| 4. Check software working in proper manner.                            |  |  |         |
| Competent <input type="checkbox"/>                                     |  | Not Yet Competent <input type="checkbox"/> |         |

## Knowledge Assessment

|  |  |                    |                       |
|--|--|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud<br>Computing (Lab Assistant (Network)) | <b>CS Code:</b>  | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Install System Software on The Devices  | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> 30 min |                    |                       |

|                              |  |
|------------------------------|--|
| Guidance<br>for<br>Candidate | <b>To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.</b> |
|------------------------------|--|

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

| <b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application) |  |
|--|--|
| 1. Write the names of some utility software?   |  |
| 2. Types of Backup Software?   |  |
| 3. What are the functions of antivirus?  |  |
| 4. What is an application software?  |  |



### **ANSWER KEY**

| <b>Sr.</b> | <b>Answers</b>   |
|------------|--|
| <b>1.</b>  | Several types of utility software are as follows: <ul style="list-style-type: none"><li>• Antivirus.</li><li>• File Management System.</li><li>• Disk Management tools.</li><li>• Compression tools.</li><li>• Disk cleanup tool.</li><li>• File Management System.</li><li>• Disk Defragmenter.</li><li>• Backup utility.</li></ul> |
| <b>2.</b>  | In short, there are three main types of backups: <ol style="list-style-type: none"><li>1) Full Backup</li><li>2) Incremental Backup</li><li>3) Differential Backup</li></ol>   |
| <b>3.</b>  | Antivirus is a kind of software used to prevent, scan, detect and delete viruses from a computer. -  |
| <b>4.</b>  | Application software is a type of computer program that performs a specific personal, educational, and business function.  |

# **Assessment Evidence Guide**

**For**

**“Lab Assistant (Network)”**

**Level-2**

**Configure Hardware Raid (Redundant Array  
of Independent Disk)**

**(Formative Assessment)**



**National Vocational & Technical  
Training Commission**

## Instruction Sheet for the Candidate

|  |  |                    |                       |
|--|--|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>  | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Configure Hardware Raid (Redundant Array<br>of Independent Disk)  | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time :</b> |                    |                       |

|                                 |  |
|---------------------------------|--|
| Candidate<br>Details            | Name: .....<br><br>Registration/Roll Number: .....   |
| Guidance<br>for<br>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> Candidate is required to install and configure hardware RAID tool to the computer according to the requirement as per instructions given by assessor.</p> <p><b>Assessment Task 2:</b> Candidate is required to change boot drive from BIOS as per instructions given by assessor.</p> <p><b>And complete:</b></p> <ol style="list-style-type: none"> <li>1. Knowledge assessment test (Written or Oral)</li> <li>2. Portfolios at the time of assessment (if any)</li> </ol> |
| Minimum<br>Evidence<br>Required | <p><b>During a practical assessment, under observation by an assessor, you will complete:</b></p> <p><b>Assessment Task 1</b></p> <p>Performance Criteria 1: Choose hardware and software RAID based controller</p> <p>Performance Criteria 2: Configure required RAID Levels work for HDD (Hard disk drive)</p> <p>Performance Criteria 3: Configure required RAID Levels work for Solid State Drives (SSD) media</p>   |

|  |  |
|--|--|
|  | <b>Assessment Task 2</b><br>Performance Criteria 1: Select boot drive<br>Performance Criteria 2: Start Booting process<br>Performance Criteria 3: Check RAID's speed by (Timing, Frequency, Data rate) as guided<br>Performance Criteria 4: Check the performance of individual drives<br>Performance Criteria 5: Check the Speed affecting factor of RAID |
|--|--|

## Assessors Judgment Guide

(to be completed by the Assessor and signed both by the assessor and the candidate after the assessment)

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

|  |  |  |    |         |
|--|--|--|----|---------|
| <b>Assessment Task 1</b>   |  | <b>Description of Assessment Task 1</b><br>Install and configure hardware RAID to the computer according to the requirement. |    |         |
| During the practical assessment, candidate demonstrated the following: |  | Yes  | No | Remarks |
| 1.   | Choose hardware and software RAID based controller                     |  |    |         |
| 2.   | Configure required RAID Levels work for HDD (Hard disk drive)          |  |    |         |
| 3.   | Configure required RAID Levels work for Solid State Drives (SSD) media |  |    |         |
| Competent <input type="checkbox"/>                                     |  | Not Yet Competent <input type="checkbox"/>   |    |         |

|  |  |   |    |         |
|--|--|---|----|---------|
| <b>Assessment Task 2</b>   |  | <b>Description of Assessment Task 2</b><br>Change boot drive from BIOS. |    |         |
| During the practical assessment, candidate demonstrated the following: |  | Yes   | No | Remarks |
| 1.   | Select boot drive  |   |    |         |
| 2.   | Start Booting process  |   |    |         |
| 3.   | Check RAID's speed by (Timing, Frequency, Data rate) as guided |   |    |         |
| 4.   | Check the performance of individual drives                     |   |    |         |
| 5.   | Check the Speed affecting factor of RAID                       |   |    |         |
| Competent <input type="checkbox"/>                                     |  | Not Yet Competent <input type="checkbox"/>                              |    |         |

## Knowledge Assessment

|  |  |                    |                       |
|--|--|--------------------|-----------------------|
| <b>Title of Qualification:</b><br>National Vocational Certificate Level 2 in<br>Computer Networking and Cloud Computing<br>(Lab Assistant (Network)) | <b>CS Code:</b>  | <b>Level:</b><br>2 | <b>Version:</b><br>01 |
| <b>Competency Standard Title:</b><br>Configure Hardware Raid (Redundant Array<br>of Independent Disk)  | <b>Assessment Date (DD/MM/YY):</b><br><br><b>Assessment Time:</b> 30 min |                    |                       |

|                                   |  |
|-----------------------------------|--|
| Guidance<br>for<br>Candidate<br>e | <b>To complete your assessment for this Competency Standard, you<br/>need to answer the questions on the following pages successfully.</b> |
|-----------------------------------|--|

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

| <b>Questions</b> (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application) |  |
|--|--|
| 1. What is RAID and why it is used?  |  |
| 2. What are different types of RAIDS?  |  |
| 3. What are different booting resources?   |  |
| 4. Define RAID 5?  |  |
| 5. What are the storage types?   |  |

### **ANSWER KEY**

| <b>Sr.</b> | <b>Answers</b>  |
|------------|---|
| 1.         | Redundant Array of Independent/Inexpensive Disks (RAID) is a technology that allows storing data across multiple hard drives. The purpose of RAID is to achieve data redundancy to reduce data loss and, in a lot of cases, improve performance   |
| 2.         | The most common types are RAID 0 (striping), RAID 1 (mirroring) and its variants, RAID 5 (distributed parity), and RAID 6 (dual parity).  |
| 3.         | Hard drive, floppy disk drive, CD-ROM drive, DVD drive, and USB   |
| 4.         | RAID 5 is a redundant array of independent disks configuration that uses disk striping with parity. RAID 5 groups have a minimum of three hard disk drives (HDDs) and no maximum.   |
| 5.         | <ol style="list-style-type: none"><li>1) External HDDs and SSDs</li><li>2) Flash memory devices</li><li>3) Optical Storage Devices</li><li>4) Floppy Disks</li><li>5) Primary Storage: Random Access Memory (RAM)</li><li>6) Secondary Storage: Hard Disk Drives (HDD) &amp; Solid-State Drives (SSD)</li><li>7) Hard Disk Drives (HDD)</li><li>8) Solid-State Drives (SSD)</li></ol> |