

Assessment Evidence Guide

For

**“Jr Programmer/Network
Assistant”**

Level-3

(Summative Assessment)



**National Vocational & Technical
Training Commission**

Instruction Sheet for the Candidate

Title of Qualification: National Vocational Certificate Level 3 in Computer Networking and Cloud Computing (Jr. Programmer/ Network Assistant)	CS Code:	Level:3	Version:01
Competency Standard Title: Install and Configure WAMP Design Database Create Database in MySQL Using WAMP Server Manipulate the Database Using Structured Query Language (SQL) Install / Configure JDK (Java Development Kit) Install / Configure Eclipse IDE and Run Simple Programme Create And Run Graphic User Interface (GUI) Program Using Java Create and Run Spring Boot Application Work in a Team Environment	Assessment Date (DD/MM/YY): Assessment Time: 04Hrs		

Candidate Details	Name: Registration/Roll Number:
Guidance for Candidate	<p>To meet this standard, you are required to complete the following within the given time frame (for practical demonstration & assessment):</p> <p>Assessment Task 1:</p> <p>Candidate is required to</p> <ul style="list-style-type: none"> ✓ Install and configure web testing server(WAMP/XAMPP) and test it on another computer and deploy on network. ✓ Create 2 tables in databse with join and insert record using transaction and backup this database and a simple GUI based calculator limited to 2 digits using Java. <p>As per instructions given by assessor</p>

	<p>And complete:</p> <ol style="list-style-type: none"> 1. Knowledge assessment test (Written or Oral) 2. Portfolios at the time of assessment (if any)
Minimum Evidence Required	<p>During a practical assessment, under observation by an assessor, you will complete:</p> <p>Assessment Task 1</p> <p>Performance Criteria 1: Open the downloaded installer file of WAMP server</p> <p>Performance Criteria 2: Complete installation package as per instructional manual.</p> <p>Performance Criteria 3: Run WAMP server from program menu</p> <p>Performance Criteria 4: Configure WAMP server</p> <p>Performance Criteria 5: List down all the tables required for database</p> <p>Performance Criteria 6: Create primary keys for each table</p> <p>Performance Criteria 7: Develop relationship for each table if required</p> <p>Performance Criteria 8: Assign foreign keys</p> <p>Performance Criteria 9: Make relationship between tables</p> <p>Performance Criteria 10: Create new Database by following the creation wizard</p> <p>Performance Criteria 11: Select the created database</p> <p>Performance Criteria 12: Create primary keys for tables</p> <p>Performance Criteria 13: Insert rows in table</p> <p>Performance Criteria 14: Select the table to insert data</p> <p>Performance Criteria 15: Insert rows by writing SQL query</p> <p>Performance Criteria 16: Perform selection on created table</p> <p>Performance Criteria 17: Select all column from table</p> <p>Performance Criteria 18: Perform select query and show the total count of status in table</p> <p>Performance Criteria 19: Select the database for backup.</p> <p>Performance Criteria 20: Export database in "SQL" file format.</p> <p>Performance Criteria 21: Include the java JDK path in "Environment Variable"</p> <p>Performance Criteria 22: Include the java JRE path in "Environment Variable"</p> <p>Performance Criteria 23: Verify Java runtime environment</p> <p>Performance Criteria 24: Install java plugin in Eclipse</p> <p>Performance Criteria 25: Choose Java Project as instructed</p> <p>Performance Criteria 26: Enter the Java project details</p> <p>Performance Criteria 27: Write the class name as per instructions</p> <p>Performance Criteria 28: Write Java code for program for GUI application</p> <p>Performance Criteria 29: Run project as java application</p> <p>Performance Criteria 30: Verify output result in console</p>

	<p>Portfolios required at the time of assessment (if any) for</p> <ol style="list-style-type: none"> 1. Folder containing printed document of all steps required for project creation in spring boot application as evidence. <p>Performance Criteria 1: Create java spring boot web application</p> <p>Performance Criteria 2: Add “spring web” in dependency as instructed</p> <p>Performance Criteria 3: Import the extracted spring boot project in Eclipse as “Existing Maven Project”</p> <p>Performance Criteria 4: Perform Maven update and clean install commands on project.</p> <p>Performance Criteria 5: Create new class and named it as per instruction</p> <p>Performance Criteria 6: Add properties in the class as per instructions</p> <p>Performance Criteria 7: Create setter and getter method for class properties</p> <p>Performance Criteria 8: Create constructors for Class</p> <p>Performance Criteria 9: Perform maven update command on spring boot project</p> <p>Performance Criteria 10: Compile project successfully using maven in Eclipse</p> <p>Performance Criteria 11: Test REST API by accessing your HTTP GET method</p>
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Assessors Judgment Guide

Candidate Details	Name: Registration/Roll Number: Candidate Signature:.....
Assessment Outcome	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		
		<ul style="list-style-type: none"> ✓ Install and configure web testing server(WAMP/XAMPP) and test it on another computer and deploy on network. ✓ Create 2 tables in database with join and insert record using transaction and backup this database and a simple GUI based calculator limited to 2 digits using Java. 		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Open the downloaded installer file of WAMP server			
2.	Complete installation package as per instructional manual.			
3.	Run WAMP server from program menu			
4.	Configure WAMP server			
5.	List down all the tables required for database			
6.	Create primary keys for each table			
7.	Develop relationship for each table if required			
8.	Assign foreign keys			
9.	Make relationship between tables			
10.	Create new Database by following the creation wizard			
11.	Select the created database			
12.	Create primary keys for tables			
13.	Insert rows in table			
14.	Select the table to insert data			
15.	Insert rows by writing SQL query			
16.	Perform selection on created table			
17.	Select all column from table			
18.	Perform select query and show the total count of status in table			
19.	Select the database for backup.			
20.	Export database in "SQL" file format.			
21.	Include the java JDK path in "Environment Variable"			
22.	Include the java JRE path in "Environment Variable"			
23.	Verify Java runtime environment			
24.	Install java plugin in Eclipse			
25.	Choose Java Project as instructed			

26.	Enter the Java project details			
27.	Write the class name as per instructions			
28.	Write Java code for program for GUI application			
29.	Run project as java application			
30.	Verify output result in console			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

Portfolio		Description of Portfolio		
		Folder containing printed document of all steps required for project creation in spring boot application as evidence.		
During the practical assessment, candidate demonstrated the following:		Yes	No	Remarks
1.	Create java spring boot web application			
2.	Add “spring web” in dependency as instructed			
3.	Import the extracted spring boot project in Eclipse as “Existing Maven Project”			
4.	Perform Maven update and clean install commands on project.			
5.	Create new class and named it as per instruction			
6.	Add properties in the class as per instructions			
7.	Create setter and getter method for class properties			
8.	Create constructors for Class			
9.	Perform maven update command on spring boot project			
10.	Compile project successfully using maven in Eclipse			
11.	Test REST API by accessing your HTTP GET method			
Competent <input type="checkbox"/>		Not Yet Competent <input type="checkbox"/>		
Each Assessment Task (with performance criteria)				

Knowledge Assessment

Title of Qualification: National Vocational Certificate Level 3 in Computer Networking and Cloud Computing (Jr. Programmer/ Network Assistant)	CS Code:	Level: 3	Version: 01
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Guidance for Candidate	To complete your assessment for this Competency Standard, you need to answer the questions on the following pages successfully.
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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:

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	
1. How to check WAMP server is running normal?	
2. What is the purpose of UML (Unified Modeling Language) diagram?	
3. What is truncate function in SQL?	
4. What is MySQL?	
5. What is the difference between inner join and right outer join?	
6. What is the difference between SQL and CSV format?	
7. What are the components of JDK?	
8. Is SDK a library?	

ANSWER KEY

Sr.	Answers
1	The small green W icon in your toolbar. If it is red, WAMP services are stopped, green means everything is running while orange means some services are running.
2	The main aim of UML is to define a standard way to visualize the way a system has been designed
3	It is used to remove all records from a table.
4	MySQL Database Service is a fully managed database service to deploy cloud-native applications.
5	Inner join returns only the matching rows between both the tables. Right Join or Right Outer Join returns only the matching rows between both the tables, plus non-matching rows from the right table.
6	CSV is a simple file format used to store tabular data, SQL is a domain-specific language used in programming and designed for managing data held in a relational database management system,
7	Java Virtual Machine (JVM) Java Runtime Environment (JRE) Java Development Kit (JDK)
8	An SDK (software development kit) is a library (often with extra tool applications, data files and sample code) that aid you in developing code.