Instruction Sheet for the Candidate

Qualification	Back-end Developer **(Mobile App, Web and Game Development)**
Competency Standard	Integrate Database with Server-Side Programming Language
Purpose of Assessment	Formative Assessment
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	**To meet this standard, you are required to complete the following within 03 Hrs. time frame (for practical demonstration & assessment):**
Time: 03 Hrs.	During a practical assessment, under observation by an assessor, you are required to: • Design Database • Populate Database with Test Data • Develop Database APIs • Implement Database Operations • Test Database Operations

Minimum Evidence Required	**Design Database**
	    1. Identify database entities
	    2. Set relationship among database entities
	    3. Create tables fulfilling database requirements
	Populate Database with Test Data
	    1. Collect sample data for database
	    2. Populate database with collected data
	Develop Database APIs
	    1. Write code to establish connection with database
	    2. Write code to implement classes and interfaces
	Implement Database Operations
	    1. Write code to implement database operations
	    2. Implement complex database operations by using already implemented methods, classes and interfaces
	Test Database Operations
	    1. List test cases (unit tests) for database operations
	    2. Execute test cases to validate database operations
	    3. Fix the bugs if found

Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	Back-end Developer **(Mobile App, Web and Game Development)**
Competency Standard	Integrate Database with Server-Side Programming Language
Purpose of Assessment	Formative Assessment
Assessment Task	• Design Database • Populate Database with Test Data • Develop Database APIs • Implement Database Operations • Test Database Operations

I can………………

Performance Criteria	Yes	No
1. Identify database entities		
2. Set relationship among database entities		

3. Create tables fulfilling database requirements		
4. Collect sample data for database		
5. Populate database with collected data		
6. Write code to establish connection with database		
7. Write code to implement classes and interfaces		
8. Write code to implement database operations		
9. Implement complex database operations by using already implemented methods, classes and interfaces		
10. List test cases (unit tests) for database operations		
11. Execute test cases to validate database operations		
12. Fix the bugs if found		

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	Back-end Developer **(Mobile App, Web and Game Development)**
Competency Standard	Integrate Database with Server-Side Programming Language
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Signature: _____
Assessment Outcome	COMPETENT ☐　　　　　　　　NOT YET COMPETENT ☐ **Name of the Assessor**_____ **Assessor's code:** _____ **Signature:** _____

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							

4

Observation Checklist

Assessment Task	• Design Database • Populate Database with Test Data • Develop Database APIs • Implement Database Operations • Test Database Operations			
During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1.	Identify database entities			
2.	Set relationship among database entities			
3.	Create tables fulfilling database requirements			
4.	Collect sample data for database			
5.	Populate database with collected data			
6.	Write code to establish connection with database			
7.	Write code to implement classes and interfaces			
8.	Write code to implement database operations			
9.	Implement complex database operations by using already implemented methods, classes and interfaces			
10.	List test cases (unit tests) for database operations			
11.	Execute test cases to validate database operations			
12.	Fix the bugs if found			

Competent ☐   **Not Yet Competent** ☐

Knowledge Assessment

Qualification	Back-end Developer **(Mobile App, Web and Game Development)**
Competency Standard	Integrate Database with Server-Side Programming Language
Purpose of Assessment	Formative Assessment
Candidate Details	Name: _____ Registration/Roll Number: _____ Candidate Signature: _____
Assessment Outcome	COMPETENT ☐ NOT YET COMPETENT ☐ Name of the Assessor: _____ Assessor's code: _____ Signature of the Assessor: _____

Candidate's response is not required to be identical, but similar concepts and/or keywords must be used. Oral questioning may be used to clarify candidate understanding of topic and its application.

Questions (Candidate confidently answered questions correctly and demonstrated understanding of the topics and their application)	**Satisfactory**	**Not Satisfactory**
1. What does SQL stand for?		
2. Which command (function) is used to connect with database from PHP?		
3. Which SQL command is used to delete a table from the database?		

4.	Which clause is used in SQL query to apply a condition?		

Feedback to the Candidate
Candidate's Signature_____ **Assessor's Signature** _____