Instruction Sheet for the Candidate

Qualification	Database Administrator **(Mobile App, Web & Game Development)**
Competency Standard	1. Design Database 2. Manipulate database using SQL 3. Implement Database in Firebase 4. Control and monitor database
Purpose of Assessment	Summative Assessment
Candidate Details	Name_____ Registration/Roll Number_____
Guidance for Candidate	**To meet this standard, you are required to complete the following within 04 Hrs. time frame (for practical demonstration & assessment):** • Design a database for a given scenario (Point-of-sale, Exam system, Attendance system etc.) and perform different operations on database to insert record, view record and modify record as per the requirement.
Time: 04 Hrs.	During a practical assessment, under observation by an assessor, you are required to:
Minimum Evidence Required	**Design a database for a given scenario (Point-of-sale, Exam system, Attendance system etc.) and perform different operations on database to insert record, view record and modify record as per the requirement.** 1. Create database with suitable name 2. Identify the table names and their fields 3. Apply normalization rules 4. Create tables with their attributes and suitable datatypes 5. Setup table relationships using appropriate keys 6. Insert test data into the table(s) as per the requirements 7. Modify record(s) as per requirements 8. Retrieve data as per requirement 9. Use where clause to retrieve data 10. Use suitable joins to retrieve data 11. Use aggregate functions in query if needed 12. Use order by, group by, limit, top 5 and/or distinct keywords if needed 13. Create user for Database 14. Check log of user

Self-Assessment Checklist

Candidate Name	
Registration No.	
Qualification	Database Administrator **(Mobile App, Web & Game Development)**
Competency Standard	1. Design Database 2. Manipulate database using SQL 3. Implement Database in Firebase 4. Control and monitor database
Purpose of Assessment	Summative Assessment
Assessment Task	Design a database for a given scenario (Point-of-sale, Exam system, Attendance system etc.) and perform different operations on database to insert record, view record and modify record as per the requirement

I can………………

Performance Criteria	Yes	No
1. Create database with suitable name		
2. Identify the table names and their fields		
3. Apply normalization rules		
4. Create tables with their attributes and suitable datatypes		
5. Setup table relationships using appropriate keys		
6. Insert test data into the table(s) as per the requirements		
7. Modify record(s) as per requirements		
8. Retrieve data as per requirement		
9. Use where clause to retrieve data		
10. Use suitable joins to retrieve data		
11. Use aggregate functions in query if needed		
12. Use order by, group by, limit, top 5 and/or distinct keywords if needed		
13. Create user for Database		
14. Check log of user		

Candidate's Signature_____ Assessor's Signature_____

Date: _____

Assessors Judgment Guide

Qualification	Database Administrator **(Mobile App, Web & Game Development)**
Competency Standard	1. Design Database 2. Manipulate database using SQL 3. Implement Database in Firebase 4. Control and monitor database
Purpose of Assessment	Summative 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							

Observation Checklist

Assessment Task	Design a database for a given scenario (Point-of-sale, Exam system, Attendance system etc.) and perform different operations on database to insert record, view record and modify record as per the requirement.			
During the practical assessment, candidate demonstrated the following:		**Yes**	**No**	**Remarks**
1.	Create database with suitable name			
2.	Identify the table names and their fields			
3.	Apply normalization rules			
4.	Create tables with their attributes and suitable datatypes			
5.	Setup table relationships using appropriate keys			
6.	Insert test data into the table(s) as per the requirements			
7.	Modify record(s) as per requirements			
8.	Retrieve data as per requirement			
9.	Use where clause to retrieve data			
10.	Use suitable joins to retrieve data			
11.	Use aggregate functions in query if needed			
12.	Use order by, group by, limit, top 5 and/or distinct keywords if needed			
13.	Create user for Database			
14.	Check log of user			

Competent ☐	Not Yet Competent ☐

Knowledge Assessment

Qualification	Database Administrator (Mobile App, Web & Game Development)
Competency Standard	1. Design Database 2. Manipulate database using SQL 3. Implement Database in Firebase 4. Control and monitor database
Purpose of Assessment	Summative 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 is ERD?		
2. What is the anomaly in 2nd normal form?		
3. Define CRUD.		

4.	What is referential integrity?		
5.	Differentiate between primary key and foreign key.		
6.	Define Composite Key.		
7.	Differentiate between function and store procedure.		

Feedback to the Candidate

Candidate's Signature_____ **Assessor's Signature** _____