



## **Certified Associate**

### **Oracle Database SQL Exam 1z0-071**

#### **Using Structured Query Language (SQL)**

- Explain the relationship between a database and SQL

#### **Using Data Manipulation Language (DML) and Transaction Control Language (TCL)**

- Describe the purpose of DML
- Use DML to manage data in tables
- Use TCL to manage transactions

#### **Using Basic SELECT statements**

- Build a SELECT statement to retrieve data from an Oracle Database table
- Use the WHERE clause to the SELECT statement to filter query results

#### **Defining Table Joins**

- Describe the different types of joins and their features
- Use joins to retrieve data from multiple tables
- Use self joins

#### **Using Conversion Functions and Conditional Expressions**

- Use the TO\_CHAR, TO\_NUMBER, and TO\_DATE conversion functions
- Apply general functions and conditional expressions in a SELECT statement

#### **Displaying Data from Multiple Tables**

- Use SELECT statements to access data from more than one table using equijoins and
- Join a table to itself by using a self-join
- View data that generally does not meet a join condition by using outer joins

## Using the Set Operators

- Use a set operator to combine multiple queries into a single query
- Control the order of rows returned

## Using DDL Statements to Create and Manage Tables

- Describe data types that are available for columns
- Create a simple table
- Create constraints for tables
- Describe how schema objects work
- Execute a basic SELECT statement

## Managing Objects with Data Dictionary Views

- Use the data dictionary views to research data on objects
- Query various data dictionary views

## Managing Schema Objects

- Manage constraints
- Create and maintain indexes including invisible indexes and multiple indexes on the same columns
- Drop columns and set column UNUSED
- Perform flashback operations
- Create and use external tables

## Using Data Definition Language (DDL)

- Describe the purpose of DDL
- Use DDL to manage tables and their relationships
- Explain the theoretical and physical aspects of a relational database

## Defining SELECT Statements

- Identify the connection between an ERD and a database using SQL SELECT statements

## Restricting and Sorting Data

- Use the ORDER BY clause to sort SQL query results
- Limit the rows that are retrieved by a query
- Sort the rows that are retrieved by a query
- Use ampersand substitution to restrict and sort output at runtime

## Using Single-Row Functions to Customize Output

- Use various types of functions available in SQL
- Use conversion functions
- Use character, number, and date and analytical (PERCENTILE\_CONT, STDDEV, LAG, LEAD) functions in SELECT statements

## **Reporting Aggregated Data Using the Group Functions**

- Describe the use of group functions
- Group data by using the GROUP BY clause
- Include or exclude grouped rows by using the HAVING clause

## **Using Subqueries to Solve Queries**

- Define subqueries
- Describe the types of problems subqueries can solve
- Describe the types of subqueries
- Use correlated subqueries
- Update and delete rows using correlated subqueries
- Use the EXISTS and NOT EXISTS operators
- Use the WITH clause
- Use single-row and multiple-row subqueries

## **Manipulating Data**

- Insert rows into a table
- Update rows in a table
- Delete rows from a table
- Control transactions

## **Creating Other Schema Objects**

- Create simple and complex views with visible/invisible columns
- Create, maintain and use sequences

## **Controlling User Access**

- Differentiate system privileges from object privileges
- Grant privileges on tables and on a user
- Distinguish between privileges and roles

## **Manipulating Large Data Sets**

- Describe the features of multitable INSERTs
- Merge rows in a table