Oracle Database SQL | 1Z0-071

Exam Title : Oracle Database SQL Exam Number : 1Z0-071

Duration: 100 minutes No of Questions: 73 Passing Score: 63%

Syllabus

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

<u>Using Conversion Functions and Conditional Expressions</u>

- 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 non equijoins
- 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

<u>Using Subqueries to Solve Queries</u>

- 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