

Exam Topics

Retrieving Data Using the SQL SELECT Statement

- List the capabilities of SQL SELECT statements
- Execute a basic SELECT statement

Restricting and Sorting Data

- 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

- Describe various types of functions available in SQL
- Use character, number, and date functions in SELECT statements

Using Conversion Functions and Conditional Expressions

- Describe various types of conversion functions that are available in SQL
- Use the TO_CHAR, TO_NUMBER, and TO_DATE conversion functions
- Apply conditional expressions in a SELECT statement

Reporting Aggregated Data Using the Group Functions

- Identify the available 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

Displaying Data from Multiple Tables

- Write SELECT statements to access data from more than one table using equijoins and nonequijoins
- Join a table to itself by using a self-join
- View data that generally does not meet a join condition by using outer joins
- Generate a Cartesian product of all rows from two or more tables

Using Subqueries to Solve Queries

- Define subqueries
- Describe the types of problems that the subqueries can solve
- List the types of subqueries
- Write single-row and multiple-row subqueries

Using the Set Operators

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

Manipulating Data

- Describe each data manipulation language (DML) statement
- Insert rows into a table
- Update rows in a table
- Delete rows from a table
- Control transactions

Using DDL Statements to Create and Manage Tables

- Categorize the main database objects
- Review the table structure
- List the data types that are available for columns
- Create a simple table
- Explain how constraints are created at the time of table creation
- Describe how schema objects work

Creating Other Schema Objects

- Create simple and complex views
- Retrieve data from views
- Create, maintain, and use sequences
- Create and maintain indexes
- Create private and public synonyms