



## **Introduction**

1. Overview of Oracle Database 12c and Related Products
2. Overview of relational database management concepts and terminologies
3. Introduction to SQL and its development environments
4. What is Oracle SQL Developer?
5. Starting SQL\*Plus from Oracle SQL Developer

### **Retrieving Data using the SQL SELECT Statement**

1. Capabilities of the SELECT statement
2. Arithmetic expressions and NULL values in the SELECT statement
3. Column aliases
4. Use of concatenation operator, literal character strings, alternative quote operator, and the DISTINCT keyword
5. Use of the DESCRIBE command

### **Restricting and Sorting Data**

1. Limiting the Rows
2. Rules of precedence for operators in an expression

### **Using Single-Row Functions to Customize Output**

1. Describe the differences between single row and multiple row functions
2. Manipulate strings with character function in the SELECT and WHERE clauses
3. Manipulate numbers with the ROUND, TRUNC and MOD functions
4. Perform arithmetic with date data
5. Manipulate dates with the date functions



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

1. Describe implicit and explicit data type conversion
2. Use the TO\_CHAR, TO\_NUMBER, and TO\_DATE conversion functions
3. Nest multiple functions
4. Apply the NVL, NULLIF, and COALESCE functions to data
5. Use conditional IF THEN ELSE logic in a SELECT statement

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

1. Group Functions
2. Creating Groups of Data
3. Restricting Group Results

## **Displaying Data From Multiple Tables Using Joins**

1. Introduction to JOINS
2. Types of Joins
3. Natural join
4. Self-join
5. Non equijoins
6. OUTER join

## **Using Subqueries to Solve Queries**

1. Introduction to Subqueries
2. Single Row Subqueries
3. Multiple Row Subqueries

## **Using the SET Operators**

1. Set Operators
2. UNION and UNION ALL operator
3. INTERSECT operator



4. MINUS operator
5. Matching the SELECT statements
6. Using ORDER BY clause in set operations

### **Managing Tables using DML statements**

1. Data Manipulation Language
2. Database Transactions

### **Introduction to Data Definition Language**

1. Data Definition Language