

Oracle 11g R2 OCP Certification (Dev.)

Module:-1 SQL Fundamentals I (Exam No 1Z0-051)

Module:-2 Oracle Database 11g: PL/SQL (Exam No:-1Z0-144)

Module:-3 Oracle Forms Developer Certified Professional (1Z0-141)

=====

Module:-1 SQL Fundamentals I (Exam No 1Z0-051)

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

Oracle Database 11g: PL/SQL (Exam No:-1Z0-144)

Exam Topics

Oracle Database 11g: PL/SQL Fundamentals

Introduction to PL/SQL, Explain the need for PL/SQL, Explain the benefits of PL/SQL, Identify the different types of PL/SQL blocks, Output messages in PL/SQL, Declaring PL/SQL Variables, Recognize valid and invalid identifiers, List the uses of variables, declare and initialize variables, use bind variables, List and describe various data types using the %TYPE attribute, Writing Executable Statements, Identify lexical units in a PL/SQL block, Use built-in SQL functions in PL/SQL and sequences in PL/SQL expressions, Describe when implicit conversions take place and when explicit conversions have to be dealt with, Write nested blocks and qualify variables with labels, Write readable code with appropriate indentation, Interacting with the Oracle Database Server, Create PL/SQL executable blocks using DML and transaction control statements, Make use of the INTO clause to hold the values returned by a SQL statement, Writing Control Structures, Identify the uses and types of control structures (IF, CASE statements and expressions), Construct and identify loop statements, Apply guidelines when using conditional control structures, Working with Composite Data Types, Create user-defined PL/SQL records, Create a record with the %ROWTYPE attribute, Create an INDEX BY table and INDEX BY table of records, Describe the differences among records, tables, and tables of records, Using Explicit Cursors, Distinguish between usage of implicit and explicit cursors, use SQL cursor attributes, Declare and control explicit cursors, use simple loops and cursor FOR loops to fetch data, Declare and use cursors with parameters, Lock rows with the FOR UPDATE clause and reference the current row with the WHERE CURRENT OF clause, Handling Exceptions, Define PL/SQL exceptions, Recognize unhandled exceptions, Handle different types of exceptions (pre-defined exceptions, non-predefined exceptions and user-defined exceptions), Propagate exceptions in nested blocks and call applications, Creating Stored Procedures and Functions ,Differentiate between anonymous blocks and subprograms, Create a simple procedure and invoke it from an anonymous block, Create a simple function, Create a simple function that accepts a parameter, Differentiate between procedures and functions,

Oracle Database 11g: Develop PL/SQL Program Units

Creating Procedures, Differentiate between anonymous blocks and subprograms, use a modularized and layered subprogram design, and identify the benefits of subprograms, Create a simple procedure and invoke it from an anonymous block, Work with procedures , Handle exceptions in procedures, remove a procedure, and display a procedure's information, Creating Functions, Differentiate between a procedure and a function, Describe the uses of functions, Work with functions (create, invoke and remove functions), Creating Packages, Identify the benefits and the components of packages, Work with packages (create package specification and body, invoke package subprograms, remove a package and display package information), Working with Packages, Overload package subprograms, use forward declarations, Create an initialization block in a package body, Manage persistent package data states for the life of

a session and use PL/SQL tables and records in packages, Using Oracle-Supplied Packages in Application Development, Describe how the DBMS_OUTPUT package works, Use UTL_FILE to direct output to operating system files, Describe the main features of UTL_MAIL, Using Dynamic SQL, Describe the execution flow of SQL statements, Use Native Dynamic SQL (NDS), Use the DBMS_SQL package, Design Considerations for PL/SQL Code, Create standard constants and exceptions, Write and call local subprograms, Control the run-time privileges of a subprogram, Perform autonomous transactions, Use NOCOPY hint, PARALLEL ENABLE hint and DETERMINISTIC clause, Use bulk binding and the RETURNING clause with DML, Creating Triggers, Describe different types of triggers and their uses, Create database triggers ,Manage triggers, Creating Compound, DDL, and Event Database Triggers, Create triggers on DDL statements, Create triggers on system events , Using the PL/SQL Compiler, Describe the new PL/SQL compiler and features, Use the new PL/SQL compiler , initialization parameters, Use the new PL/SQL compile time warnings, Managing PL/SQL Code, Describe and use conditional compilation, Hide PL/SQL source code using dynamic obfuscation and the Wrap utility, Managing Dependencies, Track and manage procedural dependencies

Module3:-Oracle Forms Developer Certified Professional (1Z0-141)Duration 40 hours

Exam Topics

Introduction to Oracle Forms Developer and Oracle Forms Services

Describe the components of Oracle9i Developer Suite and the Oracle9i Application Server, Describe the features and benefits of Oracle Forms Services and Oracle Forms Developer, Describe the architecture of Oracle Forms Services, Describe Forms Builder components, Navigate the Forms Builder interface, Customize the Forms Builder session, Use the online help facilities

Running a Forms Developer Application

Describe the run-time environment, Explain the role of each, Modify Forms environment variables, Describe the appearance of a form at run time, Navigate a Forms application, Retrieve both restricted and unrestricted data, Describe the two modes of operation, Insert, update, and delete records, Display database errors

Creating LOVs and Editors

Describe LOVs and editors, Design, create, and associate LOVs with text items in a form module, Describe the relationship between LOVs and record groups, Explain the steps to create an LOV manually, Use the LOV Wizard to create an LOV, Set LOV properties, Create editors and associate them with text items in a form module

Creating Additional Input Items

Describe the item types that allow input, Create a check box, Create a list item, Create a radio group

Creating Noninput Items

Describe item types that do not allow input, Create a display item, Create an image item, Create a button, Create a calculated item, Create a hierarchical tree item, Create a bean area item

Creating Windows and Content Canvases

Define windows, content canvases, and viewports, Describe the relationship between windows and content canvases, Create windows and content canvases, Display a form module in multiple windows and on multiple layouts

Working with Other Canvas Types

Describe the different types of canvases and their relationships to each other, Identify the appropriate canvas type for different scenarios, Create an overlay effect by using stacked canvases, Create a toolbar, Create a tabbed interface

Introduction to Triggers

Define triggers, Describe the different trigger categories, Describe the components of a trigger, Describe the types of statements used in trigger code, Describe the properties that affect the behavior of a trigger

Working in the Forms Developer Environment

Describe the main Forms Developer executables, Describe the main Forms Developer module types, Describe the main objects in a form module, Run a form from within Forms Builder, Start and stop an OC4J instance, Set Forms Builder preferences to use OC4J

Creating a Basic Form Module

Create a form module, Create data blocks, create data blocks with relationships and create control blocks, Use wizards in re-entrant mode to make changes to the data block and layout, Save and compile a form module, Describe Forms file formats and their characteristics, Explain how to deploy a form module, Produce text files and documentation