# Oracle Database 12c: Database Administration (DBA) - (Evening)



Length: 98 days Format: Bootcamp Time: Evening



### **About This Course**

Oracle Database 12c: Database Administration (DBA) training program covers the following courses:

Oracle 12c: Introduction to SQLOracle 12c: Administration WorkshopOracle 12c; Backup and Recovery Workshop

#### You will learn to:

- \* Understand the basic concepts of relational databases ensure refined code by developers.
- \* Create reports of sorted and restricted data.
- \* Run data manipulation statements (DML).
- \* Control database access to specific objects.
- \* Manage schema objects.
- \* Manage objects with data dictionary views.
- \* Retrieve row and column data from tables.
- \* Control privileges at the object and system level.
- \* Create indexes and constraints; alter existing schema objects.
- \* Create and manage an Oracle Database Instance.
- \* Create and manage Storage Structures.
- \* Configure the Oracle Network Environment.
- \* Create and manage users.
- \* Monitor the database and manage performance.
- \* Learn basic information on backup and recovery techniques.
- \* Use the Oracle Support Workbench and My Oracle Support to update your Oracle Database software.
- \* Develop backup and recovery procedures to address your business needs.
- \* Implement backup and recovery settings and perform backup operations to disk and tape.
- \* Employ Oracle Database recovery procedures to recover from media and other failures.
- \* Diagnose and repair data failures.
- \* Use Flashback Technologies and data duplication to complement backup and recovery procedures.
- \* Secure the availability of your database by appropriate backup and recovery strategies.
- \* Gain an understanding of the Oracle Database Cloud Service.

# Required Exams

1Z0-051: Introduction to SQL/

1Z0-052: Oracle Database 11G Administration Workshop I/

1Z0-053: Oracle Database 11G Administration Workshop II

### **Audience Profile**

This course is designed for the following audiences:

- \* Database Administrators
- \* Technical Administrator
- \* Support Engineer
- \* Technical Consultant

# **Course Objectives**

After completing this course students will be able to:

- \* Identify the major structural components of the Oracle Database 12c
- \* Create reports of aggregated data
- \* Write SELECT statements that include queries
- \* Retrieve row and column data from tables
- \* Run data manipulation statements (DML) in Oracle Database 12c
- \* Create tables to store data
- \* Utilize views to display data
- \* Control database access to specific objects
- \* Manage schema objects
- \* Display data from multiple tables using the ANSI SQL 99 JOIN syntax
- \* Manage objects with data dictionary views
- \* Write multiple-column sub-queries
- \* Employ SQL functions to retrieve customized data
- \* Use scalar and correlated sub-queries
- \* Create reports of sorted and restricted data
- \* Back up, restore, and patch DBCS database deployments
- \* Describe the DBaaS and on-premises Oracle Database architectures
- \* Manage database instances
- \* Manage UNDO data
- \* Move data between databases
- \* Implement basic backup and recovery procedures
- \* Monitor and tune database performance
- \* Tune SQL to improve performance
- \* Manage resources with Oracle Database Resource Manager
- \* Create pluggable databases (PDBs)
- \* Configure the Oracle network environment

- \* Administer user security and implement auditing
- \* Create and manage tablespaces
- \* Manage storage space
- \* Create and manage Database as a Cloud Service (DBCS) database deployments
- \* Register databases and manage performance with Enterprise Manager Cloud Control
- \* Use the Data Recovery Advisor to diagnose and repair failures.
- \* Use Oracle Flashback Technologies to recover from human error.
- \* Use Oracle Flashback Technologies to recover from human error.
- \* Perform an encrypted database backup and restore.
- \* Perform tablespace point-in-time recovery.
- \* Describe additional high availability features such as Oracle Data Guard.
- \* Gain an understanding of the Oracle Database Cloud Service
- \* Describe Oracle Database backup methods and recovery operations that can be used to resolve database failure.
- \* Describe the Oracle Database architecture components related to backup and recovery operations.
- \* Plan effective backup and recovery procedures.
- \* Configure the database for recoverability.
- \* Use Recovery Manager (RMAN) to create backups and perform recovery operations.

## Outline

- \* Introduction
- \* Retrieving Data using the SQL SELECT Statement
- \* Restricting and Sorting Data
- \* Using Single-Row Functions to Customize Output
- \* Using Conversion Functions and Conditional Expressions
- \* Reporting Aggregated Data Using the Group Functions
- \* Displaying Data from Multiple Tables Using Joins
- \* Using Subqueries to Solve Queries
- \* Using the SET Operators
- \* Managing Tables using DML statements
- \* Introduction to Data Definition Language
- \* Introduction to Data Dictionary Views
- \* Creating Sequences, Synonyms, Indexes
- \* Creating Views
- \* Managing Schema Objects
- \* Retrieving Data by Using Subqueries
- \* Manipulating Data by Using Subqueries
- \* Controlling User Access
- \* Managing Data in Different Time Zones
- \* Exploring Oracle Database Architecture
- \* Managing Database Instances
- \* Creating PDBs
- \* Configuring the Oracle Network Environment
- \* Administering User Security
- \* Creating and Managing Tablespaces

- \* Managing Storage Space
- \* Managing UNDO Data
- \* Moving Data
- \* Backup and Recovery Concepts
- \* Monitoring and Tuning Database Performance
- \* SQL Tuning
- \* Oracle Database Resource Manager
- \* Enterprise Manager Cloud Control
- \* Introduction to Oracle Database Cloud Service
- \* Creating DBCS Database Deployments
- \* Managing DBCS Database Deployments
- \* Backing Up and Restoring DBCS Database Deployments
- \* Patching DBCS Database Deployments
- \* Creating Master Encryption Keys for PDBs
- \* Tablespace Encryption by Default
- \* Configuring for Recoverability
- \* Using the RMAN Recovery Catalog
- \* Backup Strategies and Terminology
- \* Performing Backups
- \* Improving Your Backups
- \* Using RMAN-Encrypted Backups
- \* Diagnosing Database Failures
- \* Restore and Recovery Concepts
- \* Performing Recovery, Part 1
- \* Performing Recovery, Part 2
- \* RMAN and Oracle Secure Backup
- \* Performing Tape Backups and Restores
- \* Using Flashback Technologies
- \* Using Flashback Database
- \* Managing Backup Space or Transporting Data
- \* Duplicating a Database
- \* RMAN Performance and Tuning
- \* Backup and Recovery Workshop
- \* Oracle Database Cloud Service: Overview