ORACLE DBA – SYLLABUS:

1. Introduction to Oracle
2. Understanding the Architecture
   - 2.1. Oracle Server Database and Instance
   - 2.2. Architecture Diagram Representation
   - 2.3. Description of Component
   - 2.4. Understanding Physical Structure, Memory Structure, Process Structure, Logical Structure
   - 2.5. Executing of An SQL Statement
3. Installing Oracle
   - 3.1. Hardware Requirements for Installation
   - 3.2. Operating System Pre-Requisites to Install the ORACLE 11g
   - 3.3. Installation of ORACLE 11g on Linux
4. Creating a Database
   - 4.1. Creating A Database with DBCA command
   - 4.2. Creating A Database with Script File
   - 4.3. Dropping A Database
5. Database Management
   - 5.1. Creating and Managing Initialization Files-PFile & SPFile
   - 5.2. Advantages of SPFile Over PFile
   - 5.3. Database Start up & Shutdown Procedures
   - 5.4. Monitoring Alert Log and Trace Files
6. Tablespaces & Datafiles
   - 6.1. Types of Tablespaces
   - 6.2. Creating, Alter and Drop Tablespace
   - 6.3. Making Offline and Online Tablespaces
   - 6.4. Read Write & Read Only Mode of Tablespace
   - 6.5. Resizing Datafiles
   - 6.6. Adding & Deleting A Datafile to Existing Tablespace
   - 6.7. Creation of Big File Tablespace
   - 6.8. Configuration of Default Tablespace
   - 6.9. Drop a Tablespace
7. User Management (Users & Roles)
   - 7.1. Creating A New User
   - 7.2. Alter & Drop Existing Database Users
   - 7.3. Obtaining User Information
   - 7.4. Lock and Unlock User Accounts
   - 7.5. System Privileges
   - 7.6. Granting and Revoking System Privileges
   - 7.7. Object Privileges
   - 7.8. Creating Roles and Advantages of Roles
   - 7.9. Assigning Roles to Users
   - 7.10. Removing Roles from Users
8. Export and Import
   - 8.1. Main Tasks of Exports and Imports
   - 8.2. Incremental, Cumulative and Complete Export and Import
   - 8.3. Points to Remember before doing Export & Import

9. Data Pump

9.1. Introduction, Advantages of Data Pump
9.2. Data Pump Export & Import Modes
9.3. Transport of Tablespaces in Different Platforms

10. Managing UNDO Segments

10.1. Understanding Oracle Undo Segments, Retention Policy, Retention Guarantee, No Guarantee, Switching Undo Tablespaces

11. Control & Log Files

11.1. Contents, Multiplexing & Backing up of Control File
11.2. Purpose of How Online Redolog Files work with their Associated BG Processes
11.3. Controlling Log Switches and Check Points, Multiplexing and Archiving Online Redo Log files

12. Networking

12.1. Contents, Multiplexing & Backing up of Control File
12.2. Purpose of How Online Redolog Files work with their Associated BG Processes
12.3. Controlling Log Switches and Check Points, Multiplexing and Archiving Online Redo Log files

13. Backups

13.1. ORACLE Recovery Manager Features & Components Repository,
13.2. Channel Allocation,
13.3. Configuring RMAN Environment,
13.4. Complete & Incomplete Recovery,
13.5. Full/Incremental Backups,
13.6. RMAN Compressed Backups

14. Cloning & Patching

14.1. General understanding of Duplicate Database
14.2. Live cloning as per live environment
14.3. Other methods – like restore and simple cp commands
14.4. Opatch utility
14.5. Listing Patch from Inventory
14.6. Understanding Central and local inventory

15. Performance Tuning

15.1. Overview of Tuning Phases,
15.2. Methodology and Common Performance Problems I/O Issues,
15.3. Redo Log File Configuration
15.4. Online Segment Shrinking
15.5. Diagnostic Tuning Tools