

1. ORACLE 11g & 12c DATABASE ARCHITECTURE.

- ✓ Explain user connects to database
- ✓ Introduction to Instance and Database
- ✓ Explain SQL statement's process in the database
- ✓ Oracle data dictionary and its role
- ✓ Oracle database memory components and background process
- ✓ Advance Startup and Shutdown Scenarios.
- ✓ 11g Features and 12c introduced features (CDB and PDBs)
- ✓ Alert log and trace files

2. Oracle database Installation.

- ✓ 11g and 12c installation using real time tools like Putty, winscp, VNC viewer

3. Database creation

- ✓ DBCA Configuration
- ✓ Manual Database creation
- ✓ Creation of Parameter file
- ✓ Executing scripts

4. Managing Database files:

- ✓ Multiplexing control files
- ✓ Multiplexing redo log files
- ✓ Renaming and relocating redo log files
- ✓ Enable/disable archive log mode

5. Basics of Multitenant Container Database and Pluggable Databases

- ✓ Benefits of Multitenant Architecture
- ✓ Configurations
- ✓ Multitenant Container Database
- ✓ Structure of Pluggable Database
- ✓ Creating Multitenant Container Databases and Pluggable Databases

6. Configure and Create a Multitenant Container Database

- ✓ Tools used for Create Database (DBCA,SQL*Plus & SQL Developer)
- ✓ Data Dictionary Views (DBA_XXX, CDB_XXX, V\$XXX Views)
- ✓ Create New PDB from PDB\$SEED
- ✓ Plug a Non-CDB into CDB(Container Database)
- ✓ Clone a PDB into the same CDB
- ✓ Plug Unplugged PDB in to CDB

7. Managing Multitenant Container Databases and Pluggable Databases

- ✓ Connect to a CDB and to a PDB
- ✓ Starting Up, Mounting and Opening a CDB
- ✓ Opening & Closing a PDB
- ✓ Shutting Down a CDB Instance
- ✓ Changing PDB Mode

8. Table Space MANAGEMENT.

- ✓ Overview of managing tablespaces
- ✓ Local vs. dictionary managed tablespaces
- ✓ Bigfile tablespace
- ✓ 12c Online datafile movement
- ✓ Temporary tablespace and issues
- ✓ Undo tablespace management and issues

9. USER and PROFILE MANAGEMENT

- ✓ Create and manage database user accounts
- ✓ Grant and revoke privileges
- ✓ Create and manage roles & Profiles
- ✓ Parameters (Resource and password)

10. AUDITING

- ✓ Importance of Auditing
- ✓ Enable/disable different levels of auditing

11. Networking with Oracle

- ✓ Configure listener.ora, tnsnames.ora and sqlnet.ora
- ✓ Database user connectivity
- ✓ Database links, materialized views

12. ORACLE UTILITIES

- ✓ SQL*Loader
- ✓ Export/import, Datapump
- ✓ 12c datapump new features

13. User managed Backup and Recovery

- ✓ Understanding COLD & HOT backup
- ✓ Using COLD backup and Recovery
- ✓ Using HOT backup and Recovery

14. Flashback Database

- ✓ Describe Flashback technology
- ✓ Flashback Query & Flashback Transaction Query
- ✓ Monitor Flashback Database

15. Database Refresh

- ✓ Using COLD backup Refresh the environment
- ✓ Using HOT backup Refresh the environment

16. Database Backup with RMAN

- ✓ RMAN backup and recoveries
- ✓ Recovery catalog
- ✓ RMAN incremental backups
- ✓ Tuning RMAN backup performance
- ✓ 12c single table restore using RMAN
- ✓ Duplicate a database with RMAN

17. ASM (Automatic Storage Management)

- ✓ Describe the benefits of using ASM
- ✓ Implementing ASM for oracle database
- ✓ Manage the ASM instance
- ✓ Create and drop ASM disk groups
- ✓ Extend ASM disk groups

18. Database Patching and Up-gradation.

- ✓ Overview of Patching
- ✓ Applying patch on the database
- ✓ Upgrading lower versions to 12c

19. PERFORMANCE TUNING

- ✓ Explain different Phases of tuning
 - ✓ Gather statistics
 - ✓ Analyzing AWR, ADDM and ASH reports
- Introduction to Real Application Clusters