

## Exam Topics

### Exploring the Oracle Database Architecture

- Explain the Memory Structures
- Describe the Process Structures
- Overview of Storage Structures

### Preparing the Database Environment

- Identify the tools for Administering an Oracle Database
- Plan an Oracle Database installation
- Install the Oracle software by using Oracle Universal Installer (OUI)

### Creating an Oracle Database

- Create a database by using the Database Configuration Assistant (DBCA)

### Managing the Oracle Instance

- Setting database initialization parameters
- Describe the stages of database startup and shutdown
- Using alert log and trace files
- Using data dictionary and dynamic performance views

### Configuring the Oracle Network Environment

- Configure and Manage the Oracle Network
- Using the Oracle Shared Server architecture

### Managing Database Storage Structures

- Overview of tablespace and datafiles
- Create and manage tablespaces
- Space management in tablespaces

### Administering User Security

- Create and manage database user accounts
- Grant and revoke privileges
- Create and manage roles
- Create and manage profiles

### Managing Data and Concurrency

- Monitor and resolve locking conflicts

### Managing Undo Data

- Overview of Undo
- Transactions and undo data
- Managing undo

### Implementing Oracle Database Security

- Database Security and Principle of Least Privilege
- Work with Standard Database Auditing

### Database Maintenance

- Use and manage optimizer statistics
- Use and manage Automatic Workload Repository (AWR)
- Use advisory framework
- Manage Alerts and Thresholds

### Performance Management

- Use Automatic Memory Management
- Use Memory Advisors

- Troubleshoot invalid and unusable objects

#### Intelligent Infrastructure Enhancements

- Use the Enterprise Manager Support Workbench
- Managing Patches

#### Backup and Recovery Concepts

- Identify the types of failure that can occur in an Oracle database
- Describe ways to tune instance recovery
- Identify the importance of checkpoints, redo log files, and archived log files
- Overview of flash recovery area
- Configure ARCHIVELOG mode

#### Performing Database Backups

- Create consistent database backups
- Back up your database without shutting it down
- Create incremental backups
- Automate database backups
- Manage backups, view backup reports and monitor the flash recovery area

#### Performing Database Recovery

- Overview of Data Recovery Advisor
- Use Data Recovery Advisor to Perform recovery (Control file, Redo log file and Data file)

#### Moving Data

- Describe and use methods to move data (Directory objects, SQL\*Loader, External Tables)
- Explain the general architecture of Oracle Data Pump
- Use Data Pump Export and Import to move data between Oracle databases