

Oracle Certified Associate (OCA) – Database Administrator

Exam Topics (Syllabus)

Database Concepts & Architecture

- Understanding database architecture and components
- Oracle instance structure and memory architecture
- Physical and logical storage structures
- System Global Area (SGA) and Program Global Area (PGA) overview

Installation & Database Creation

- Requirements and steps for Oracle installation
- Creating and configuring Oracle databases
- Using Database Configuration Assistant (DBCA)
- Managing initialization parameters

Managing the Oracle Database Instance

- Starting and shutting down a database
- Working with the alert log and trace files
- Using Enterprise Manager and command-line tools

Storage Management

- Tablespaces, data files, and segments
- Managing control files, redo logs, and archive logs
- Space allocation and monitoring

User and Security Management

- Creating and managing database users
- Granting and revoking privileges and roles
- Implementing password policies and authentication

Schema Objects Management

- Creating and managing tables, indexes, and views
- Constraints, sequences, and synonyms
- Managing data integrity and relationships

Backup & Recovery Basics

- Importance of backup and recovery
- Configuring archive log mode
- Performing backups with RMAN

- Recovery scenarios and strategies

Monitoring & Performance Tuning

- Monitoring database performance
- Managing undo tablespaces and temporary segments
- Basic tuning techniques and best practices

Networking & Connectivity

- Oracle Net Services overview
- Configuring listeners and service names
- Troubleshooting connection issues

Basic Troubleshooting & Maintenance

- Handling common database errors
- Patching and upgrading the database
- Health checks and preventive maintenance