Oracle Administration Course Details

Department: ICT and Security Management

Presented by Magna Skills Development Institute

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Course Summary

This course is designed to give delegates a firm foundation in basic administration of Oracle Database 11g. In this class, delegates learn how to install and maintain Oracle Database 11g. Delegates gain a conceptual understanding of the Oracle database architecture and how its components work and interact with one another. Delegates learn how to create an operational database and properly manage the various structures in an effective and efficient manner including performance monitoring, database security, user management, and backup/recovery techniques. The lesson topics are reinforced with structured hands-on practices.

Oracle makes some of the most highly-respected and popular database and enterprise software products in the world. Our range of Oracle courses covers vital skills for the administration of Oracle databases, as well as providing an understanding of Oracle's SQL database language and their Discoverer tool-set.

Course Objectives

- Software installation and the creation of new databases.
- An in-depth exploration of the database architecture, including memory, process and data structures, and the management of those structures.
- Management of database files.
- Specialized facilities intended to maximize performance of enterprise-scale transactional applications, such as the shared SQL and PL/SQL cache, the result cache, the database buffer cache, and other similar components.
- Management of security policies and procedures, including administration of user accounts, roles, privileges and profiles.
- Utilization of advanced self-tuning and self-management capabilities, including the use of Oracle-Managed Files, database Advisors and other components of the Management Framework.
- Performance monitoring, problem troubleshooting, and resolving lock and conflict issues.
- Using the Oracle Enterprise Manager and SQL interfaces for administration tasks.
- Control over database support services, including the Database Control, Oracle Net and others.
- A primer on backup and recovery structures and strategies.
- Operating system-specific considerations for various platforms, especially Linux and MS Windows Serve

Course Outline

Oracle SQL Fundamentals Course Outline

Module 1: Relational Database Concepts

- Basic Concepts
- Different Keys and Their Functions

Module 2: Using SQL*Plus and SQL Developer

- Overview of SQL*Plus
- Working with SQL*Plus
- Introducing the SQL Developer
- Components of SQL Developer

Module 3: SQL Functions

- Retrieving Data with the Select Statement
- Using the Aggregate Functions
- Joining Tables
- Numeric Character and Date Functions
- Conversion Functions

Module 4: SQL Parameters

- Parameter Declaration
- Keyword and Parameter Descriptions

Module 5: Using Subqueries

- Subqueries
- Subqueries with the Select Statement
- Subqueries with Insert and Update

Module 6: Managing Data

- About Database Management
- Monitoring Databases
- Administering Databases

Module 7: Managing Tables

- Guidelines for Table Management
- Creating Tables
- Creating a Temporary Table
- Loading Tables
- Automatically Collecting Statistics on Tables
- Altering Tables
- Dropping/Truncating Tables
- Managing External Tables
- Creating External Tables
- Altering External Tables
- Dropping External Tables
- System and Object Privileges for External Tables
- Viewing Information About Tables

Module 8: Managing Indexes and Views

- About Indexes
- Index Management
- About Views
- Creating Views

Module 9: Managing Sequences and Synonyms

- About Sequences
- Creating Sequences
- Altering Sequences
- Dropping Sequences
- About Synonyms
- Creating Synonyms
- Dropping Synonyms

Module 10: Retrieve Data Using Subqueries

- Types of Subqueries

- IN and NOT IN Subqueries

Module 11: Hierarchical Queries, Grouping Features, and Large Data Sets

- Hierarchical Queries
- Enhanced Grouping Features
- Managing Very Large Databases

Module 12: Flashback Technology

- Overview of Oracle Flashback Technology
- Using Flashback Features in Application Development
- Using Flashback Features in Database Administration
- Configuration of Database for Flashback Technology

Module 13: Date, Time, And Time Zone Support

- Introduction to Time Zone Support
- Datetime and Interval Datatypes

Module 14: Regular Expression Support

- Introduction to Regular Expressions
- Implementation of Oracle Database Regular Expressions

Module 15: Manage Objects with the Data Dictionary

- Introduction to Data Dictionary
- Structure of Data Dictionary
- How the Data Dictionary is Used?

Module 16: Manage Schema Objects

- Introduction to Schema Objects
- Creating Multiple Tables and Views in a Single Operation
- Analysing Tables, Indexes, and Clusters
- Schema Object Management Privileges

Module 17: Access Control

- Introduction
- Access Meditation
- Understanding User Authentication
- Securable, Principals, and Permissions

Company Overview

Who We Are: Magna Skills is a premier training and capacity-building organization specializing in professional development for government institutions, NGOs, and the private sector.

Our Mission: To provide world-class training solutions that equip professionals with the expertise needed to excel in their careers and contribute meaningfully to their organizations.

Our Vision: To be the leading provider of professional training and development across Africa, fostering excellence, innovation, and capacity-building in public and private sectors.

Core Values

- **Excellence** – Delivering high-quality training tailored to meet the evolving needs of professionals.
- **Integrity** – Upholding the highest ethical standards in all our engagements.
- **Innovation** – Embracing new technologies and methodologies to enhance learning experiences.
- **Customer-Centric Approach** – Ensuring client satisfaction by providing relevant, practical, and impactful training.
- **Collaboration** – Partnering with industry experts and institutions to provide the best learning opportunities.

Our Training Methodology

We use a blended learning approach that includes instructor-led training, case studies, workshops, and post-training support.

Why Choose Magna Skills?

- Experienced Trainers
- Customized Training Solutions
- Interactive Learning
- Global Recognition
- Proven Track Record

Request for Training Form

Complete the form and share with Magna Skills Support Team on email info@magnaskills.com or Send Whatsapp on: +27630079022

Approval & Authorization	
Applicant Details	**Course Details**
First Name:	Course Name:
Last Name:	Training Venue:
Mobile:	Month:
Email:	Training Method: Onine[_____] Face to Face [____]
Company Name:	Duration:
Country:	Number of Staff Members:

By signing this agreement, both parties confirm their commitment to the terms outlined in this proposal.