



Course Brochure

ORACLE 10g-11g-12c

Overview	<ul style="list-style-type: none">•This course will introduce participants to the importance of good initial database design, and the methods used to tune a production of Oracle 10g,11g,12c database. The focus is on Database and Instance tuning rather than specific operating system performance issues. This course counts towards the Hands-on course requirement for the Oracle 10g, 11g,12c OCA Certification.
Pre-requisites	<ul style="list-style-type: none">•Knowledge of Operating System.Preferably knowledge of C Language.
Applications	

COURSE CONTENTS

INTRODUCTION

- ❖ Introduction to Database And RDBMS
- ❖ Introduction to Oracle
 - Versions
 - Editions
 - Installation, Uninstallation
 - Directory Structure

SQL

- ❖ Introduction to SQL.
- ❖ Classifications of SQL
- ❖ Languages of SQL
 - DQL/DRL, DML, DDL, TCL, DCL, SCL
- ❖ Oracle Data Types
- ❖ Operators
- ❖ Functions
 - Character
 - Number
 - Date
 - Data Conversion
 - Ranking/Window
- ❖ Joins
 - SQL Joins
 - ANSI Joins
- ❖ Tree Walking
- ❖ Sub Queries
 - Some/Any, All, Exists Not Exists

Database Objects

- ❖ Tables
 - Dictionary Tables
 - User Defined Tables
 - Temporary Tables
 - Table Partitions
 - Large Objects(LOBs)
- ❖ Constraints
 - Normalization And
 - Denormalization

- ❖ Views
- ❖ Synonyms
- ❖ Sequences
- ❖ Index
- ❖ Clusters

PL/SQL

- ❖ Introduction to PL/SQL
- ❖ Data types
- ❖ Control Statements
- ❖ Exceptions
 - Built-In Exceptions
 - User defined Exceptions
 - Pragma Exceptions
- ❖ Cursors
- ❖ Sub-Programs
 - Procedures
 - Functions
- ❖ **AUTONOMOUS TRANASCTIONS**
 - Packages
 - Triggers
- ❖ **BULK BINDS**
 - Advantages
 - Using for All Statement
 - Using bulk collect clause
 - Bulk Fetches
 - Bulk Returns

10g FEATURES

- ❖ Grid Computing Technology
- ❖ Flashback Table (Undrop table)
- ❖ Faster Dump & Pump Operations for Backup & Recovery
- ❖ Regular Expressions Support
- ❖ Merge command Enhancements
- ❖ SQLPLUS enhancements
- ❖ Enhancements to DBMS_OUTPUT
- ❖ Enhancements in ORDBMS

COURSE CONTENTS

11g Features

- ❖ New Data Type Enhancements
- ❖ Read only tables
- ❖ Invisible indexes
- ❖ Virtual columns
- ❖ Sequence Assignment
- ❖ Common table expression (CTE)
- ❖ PIVOT & UNPIVOT
- ❖ Dynamic SQL Enhancements
- ❖ CONTINUE statement
- ❖ Trigger Enhancements
- ❖ Configuring and Working With SQL Developer Tool

12c Features

- ❖ Online table partition or sub-partition migration
- ❖ Invisible column
- ❖ Multiple indexes on a single column
- ❖ DDL logging

- ❖ Table partitions maintenance enhancements
- ❖ Truncate table cascade
- ❖ Limiting ROWS for TOP-N query results
- ❖ Session level sequences
- ❖ SQL Plus enhancements

ORDBMS

- ❖ Introduction to ORDBMS
- ❖ Data Types
- ❖ Object Types
- ❖ Working With Methods
- ❖ Method Overloading
- ❖ Collections
 - VArray
 - Nested Table
 - Indexed Array