



Code	Subject Title	Cr. Hrs	Semester
IT-403	Database Administration	3	VII
Year	Discipline		
4	Information Technology		

Course Contents:

Introduction to Enterprise Database Systems, Oracle Architectural Components: What is Introduction to Enterprise Database Systems, Responsibilities of Database Administrator. **Oracle Architectural Components:** Oracle Server; Oracle Instance; Physical Structure. **Creating Database and Data dictionary:** Creation Prerequisites; Creating Database; Starting Instance; Data Dictionary; Data Dictionary Contents; Dynamic Performance Views. **Managing Control Files and Redo Log Files:** Control File; Control File Contents; Multiplexing Control File; Using Redo Log Files; Structure of Redo Log File; Adding Redo Log Groups and Members; s. **Managing Tablespaces:** Database Storage Hierarchy; Kinds of Tablespaces; **Managing Data files, Storage Structure and Relationships:** Adding Data files and other Operations with Data files; Types of Segments; **Managing Undo Data:** Undo Segment; Read Consistency; Automatic undo Management;; **Managing Tables, Managing Users:** Creating Users; Managing Users; Creating Tables; Managing Tables. **Managing Indexes:** types of Indexes; Creation and Management of Indexes. **Maintaining Data Integrity:** Types of Constraints; Managing Constraints. **Managing Privileges:** System Privileges; Object Privileges. **Managing Roles:** Assign and Revoke Roles and Roles Management. **Network overview,** Configuring Listener; Sessions. **Client Side Configuration:** Host Naming Method; Local Naming Method; Net Assistant; Configurations of Different Methods. **Usage and Configuration of Oracle Shared Server:** Server Configuration; Dedicated Server Process; Shared Server Process;. **Backup and Recovery overview, Instance and Media Recovery:** Categories of Failure; Defining Backup and Recovery Strategy;. **Configuration of Archive log mode:** Switching to Archive Log Mode; Archive Process. **User Managed Backups:** User Managed backups and Issues. **User Managed Complete Recovery:** How To recover a Database Manually Using Manual Backups. **User Managed Incomplete Recovery:** How to DO an Incomplete Recovery. **Import/Export:** Different export and import modes.

Recommended Books:

- Oracle 9i DBA Fundamentals I (Student Guide, Volume I and II).
- Oracle 9i DBA Fundamentals II (Student Guide, Volume I and II).
- Performance Tuning (Student Guide, Volume I and II).
- Oracle Magazine
- Online Material URL <http://otn.oracle.com>