

ADVANCED DATABASE ADMINISTRATION

Paper Code: ETIT-427

Paper: Advanced Database Administration

L	T/P	C
3	0	3

INSTRUCTIONS TO PAPER SETTERS:

MAXIMUM MARKS: 75

1. Question No. 1 should be compulsory and cover the entire syllabus. This question should have objective or short answer type questions. It should be of 25 marks.
2. Apart from Question No. 1, rest of the paper shall consist of four units as per the syllabus. Every unit should have two questions. However, student may be asked to attempt only 1 question from each unit. Each question should be of 12.5 marks.

Objective: The objective of the paper is to facilitate the student with the advancements in the Database Administration that are required for the student to become a DBA.

UNIT-I

Creating a Database – Database configuring Assistant (DBCA), Password management, Using DBCA to delete a database.

Managing the database instance – Management framework, starting and stopping database control, Initialising parameter files, starting up and shutting down database instance.

Managing Database storage structure – Storage structure, How table data is stored? Tablespaces and data files, Space Management in Tablespaces, Tablespace management.

[T1][T2][No. of Hrs. 11]

UNIT-II

Database user security – Creating a user, Authenticating users, Unlocking a user account and resetting the password, Privileges and role, System privileges, object privileges.

Managing Schema Objects – Table types, Action with tables, creating views, sequences, What is partition and why use it? Creating a Partition, Partitioning method, Index organised tables and heap tables, creating index-organised tables, cluster, cluster types, sorted hash cluster.

Managing data and concurrency – Manipulating with data through SQL, function procedure, packages, Triggers, locking concepts, detecting and resolving lock conflicts.

[T1][T2][No. of Hrs. 11]

UNIT-III

Managing undo Data – Monitoring Undo, Administering Undo, Configuring Undo Retention, Sizing Undo tablespace.

Implementing database security – database transparent encryption (TDE), TDE Process, Implementing TDE.

Performance management - troubleshooting, tuning.

[T1][T2][No. of Hrs. 10]

UNIT-IV

Performing Backup and Recovery – Configuring Recovery Manager, using Recovery manager, Recovering from noncritical Losses , recovery from loss of control file , data file and redo file.

Performing flashback – Flashback database , Flashback database Architecture, Configuring flashback Database using enterprise manager, Monitoring Flashback database

Moving data- General Architecture , Loading data with SQL *loader , Data pump , Data pump export and import.

[T1][T2][No. of Hrs. 11]

Text Books:

[T1] Sam R. Alapati “ Expert Oracle Database 11G Administration “ Dreamtech Press.

[T2] Darl Kuhn “Pro Oracle Database 11g Administration”, Apress

References Books:

[R1] Ken Simmons, Sylvester, Carstarphen” Pro SQL Server 2012 Administration”, Dreamtech Press

[R2] Sheeri K Cabral, Keith Murphy,” MySQL Administrator's Bible” John Wiley & Sons

[R3] Steve Fogel, Paul Lane, “Oracle Database Administrator’s Guide, 10g” Oracle

[R4] Craig S. Mullins, “Database Administration”, Addison-Wesley