Roll No. ☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 09

MCA (2014 Batch)   (Sem.–3)
DATABASE ADMINISTRATION
Subject Code : MCA-301
M.Code : 70772

Time : 3 Hrs.   Max. Marks : 100

INSTRUCTION TO CANDIDATES :

1. **SECTIONS-A, B, C & D contains TWO questions each carrying TWENTY marks each and students have to attempt any ONE question from each SECTION.**
2. **SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**

SECTION-A

1) a) What is Database Administration? Explain in detail the role and responsibilities of DBA.

   b) Discuss various database packages. How can they be installed?

2) What is client server model? What are its advantages? Explain the different types of client server models in detail with examples.

SECTION-B

3) How do you implement :

   a) Database compression

   b) Upgrade strategy and data integrity as a DBA?

4) What is database replication? Provide step by step instructions for setting up and managing replication using various database packages.

SECTION-C

5) a) What is database security? How is it achieved in a database server?

   b) What are user accounts? How can they be created and modified?

6) Discuss the role of database encryption. What is the need of database encryption? How do you implement database encryption in a database?

SECTION-D

7) Explain the different aspects of database tuning in relational databases. How query tuning helps in database tuning.

8) Write short notes on :

   a) Database clustering

   b) Table optimizations

SECTION-E

9) Write briefly :

   a) Compare oracle with MySQL database.

   b) What is a subquery?

   c) Why is database backup required?

   d) What is the use of revoke privileges?

   e) Discuss various communication protocols.

   f) What are the steps involved in database startup?

   g) Define High Availability in database.

   h) What is an index? How can we declare an index with Sql?

   i) What is database mirroring?

   j) How can we identify full table scans?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.