

Roll No.

Total No. of Pages : 02

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MCA (2015 & Onwards) (Sem.-3)
DATABASE ADMINISTRATION

Subject Code : MCA-301

M.Code : 74073

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

- 1. SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students has 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. What is database administration? Define the roles and responsibilities of Data Base Administrator (DBA). As a DBA, write the procedure to install and configure a database package (MS- SQL/MySQL/Oracle).
2. a) What is a database package? Introduce **any five** packages.
b) What are communication protocols? Explain any two.

SECTION-B

3.
 - a) Describe the issues of data export and import in multiple servers.
 - b) What is a DBA can do to manage database integrity?
4. Discuss the Database replication and its importance in the context of managing database servers.

SECTION-C

5. **What are the steps taken to ensure secure User Access to the database? How is user activity monitoring helpful to ensure database security?**
6. **What are the main goals of the RAID technology? How does it achieve them?**

SECTION-D

7. Write short notes on :
- a) Optimize the performance of the database
 - b) Performance Tuning
 - c) Re-writing SQL queries
8. a) How do Indexes help in improving database performance? Give suitable examples.
- b) What is table optimization? How is it important for monitoring the performance of database?

SECTION-E

9. Write briefly :

- a) What do you understand by the word “**views**” in the context of databases?
- b) What is the use of table functions?
- c) What are steps involved in Database startup?
- d) What is an indexes?
- e) What is database encryption? Why is it important?
- f) What is the difference between a database schema and a database instance?
- g) What is the use of GROUP BY clause in SQL? Give example.
- h) What are the types of failure?
- i) What is privilege management? Why is it important?
- j) How do you audit user activity in a database environment?

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.