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Total No. of Pages : 02

Total No. of Questions : 09

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.