Total No. of Questions :8]   [Total No. of Printed Pages :2

Roll No ....

MCIT - 105
M.E./M.Tech., I Semester
Examination, June 2016
Advance DBMS

Time : Three Hours

Maximum Marks : 70

Note : Attempt any five questions. All questions carry equal marks.

1. a) Explain the ACID properties of transactions.   7
   b) Describe the concept of transitive dependency and explain how this concept is used to define 3MF.   7

2. a) Draw ER diagram for Railway Reservation system.   7
   b) What is decomposition and how does it address redundancy? What problem may be caused by the use of decomposition?   7

3. a) What do you mean by query processing and optimization and discuss the tools and technique for query processing.   7
   b) Discuss deadlock detection in distributed database contrast the centralized, hierarchical and time out approaches.   7

4. a) Explain the difference between data replication in a distributed system and the maintenance of a remote backup site.   7
   b) What is a commit protocol and why is it required in distributed database? Describe and compare two phase and three phase commit.   7

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5. a) Compare RDBMS with ORDBMS. Describe an application scenario for which you would choose an RDBMS and explain why?   7
   b) Discuss the concept of aggregation. Give any two examples to illustrate the use of this concept.   7

6. a) Explain image and multimedia databases. Give the proper example of R tree.   7
   b) Write difference between spatial and Geographical data.   7

7. a) Explain mobile database in detail.   7
   b) Describe about tools for accessing the web database.   7

8. Write short note on :   14
   a) Web server
   b) Quad trees
   c) Generalization
   d) Colour Histograms

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