Roll No ....

MCTA - 104
M.E./M. Tech., I Semester
Examination, June 2014
Advance DBMS

Time : Three Hours

Max. Marks : 70

Note: i)   Attempt one question from each unit
ii)   All questions carry equal marks.

Unit - I

1.   a)   What are the responsibilities of database administrator? Explain in brief.
b)   Define the following with respect to an E-R diagram
i)   Relationship set   iii)   Aggregation
ii)   Multivalued attribute

OR

2.   a)   Explain the difference between a file oriented and a database oriented system
b)   What are the advantage and disadvantage of network model?

Unit - II

3.   a)   Differentiate between deferred update and immediate update techniques of recovery.
b)   What is query optimization? Discuss various steps of optimization.

OR

4.   a)   Explain different types of transactional model
b)   Explain the two phase locking protocol and show that it guarantees serializability

Unit - III

5.   a)   Write the difference between specialization and generalization.
b)   Explain the concept of object identity in the object oriented model differs from the concept of tuple equality in the relational model

OR

6.   a)   Write short note on object oriented database design.
b)   What are the main difference between designing a relational database and an object database?

Unit - IV

7.   a)   What is deductive database system? How does it differ from expert database systems or knowledge base systems?
b)   Write short note on temporal database

OR

8.   a)   What is web server? Explain its common features
b)   Write short note on XML database

Unit - V

9.   a)   Write explanatory note on multimedia databases. Explain the similarity based retrieval and continuous media data.
b)   Explain Quadtrees in detail

OR

10.   Write short note (any four)
i)   Color histogram
ii)   Normalization
iii)   Distributed deadlock
iv)   Concurrency control
v)   Content based retrieval

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