Roll No ...

MCIT - 105

M.E./M.Tech., I Semester

Examination, June 2014

Advance DBMS

Time : Three Hours

Maximum Marks : 70

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

1. a) List the various data abstractor concept and the corresponding modeling concept in the EER model. 7

   b) Discuss the entity integrity and referential integrity constraints. Why is each considered important? 7

2. a) What is the minimal normal form that a relation must satisfy? And why? 7

   b) Describe the concept of transitive dependency and explain how this concept is used to define 3 NF. 7

3. a) Explain how heuristic query optimization is performed with an example. 7

   b) Discuss the rules for transformation of query trees and identify when each rule should be applied during optimization. 7

4. a) Discuss the reasons for converting SQL query into relational algebra query before optimization is done. 7

   b) Give a brief note on distributed query processing. 7

5. a) What are the function that need to be provided by distributed databases in addition to those of a centralized DBMS. 7

   b) How is vertical partitioning of a relational specified? How can a relation be put back together from a complete vertical partitioning? 7

6. a) What is the function of object definition language and the object manipulation language in the ODMG standard? 7

   b) Describe the built in structured literals of the ODMG object model and the operation of each. 7

7. a) What are the association rules as a type of knowledge? Give a definition of support and confidence and use them to define an association rules. 7

   b) Write short note on :

   r-tree, kd tree, Quadtree. 7

8. a) What are PHP auto global variables? How is a function variable passed in PHP? 7

   b) What are place holder? How are they used in PHP database programming? 7