## **END TERM EXAMINATION**

## FIFTH SEMESTER [MCA] DECEMBER-2013

Paper Code: MCA 325
Subject: Distributed DBMS &
Object Oriented Databases

Time: 3 Hours Maximum Marks: 60

Note: Attempt any five questions.

- Q1. a) Give the advantage and disadvantages of Object Oriented Databases. (6)
  - **b**) Compare and contrast between distributed database and centralized database. (6)
- **Q2.** Briefly explain (any 3): (4\*3)
  - a) Spatial Databases
  - b) Multimedia Databases
  - c) Temporal Databases
  - d) Distributed Databases
- **Q3.** a) Explain how Distributed Query optimization is achieved in Oracle database. (6)
  - b) Write about horizontal and vertical fragmentation. (6)
- **Q4.** a) Discuss in detail about query processing in Distributed Databases. (6)
  - b) Explain the following: (3\*2)
    - 1. Multiples copies of data
    - 2. Transaction Failures
- **Q5**. a) Explain the main factors you need to consider when setting user accounts and roles. (6)
  - b) Using a relevant example explain the concept of Remote Procedure Call in Distributed Database. (6)
- **Q6.** a) Briefly explain how two-phase commit mechanism ensures data integrity. (6)
  - b) Explain the properties of transactions. (6)
- **Q7.** a) How views are important in database. (4)
  - b) What is Selective Replication and Complete Replication. (4)
  - c) Explain Distributed data dictionary management. (4)
- **Q8.** a) What are the various formats of communication. Explain them in brief. (6)
  - b) Briefly explain different types of clock synchronization algorithms. (6)

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