Roll No ....

MCADD-603

M.C.A. (Integrated), VI Semester

Examination, May 2024

Advanced DBMS

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Explain the layered architecture model for an object-oriented database.

   b) How are persistent programming languages different from SQL?

2. a) *Discuss the relationship between Specialization and Generalization.*

   b) Explain the rules and facts of Deductive Databases with examples.

3. a) Discuss how concurrency control in distributed transactions prevents data inconsistency?

   b) Write about the critical design issues of parallel databases.

4. a) Define transactions and explain nested, multilevel transactions.

   b) Explain the essential components of a successful transaction workflow.

5. a) Briefly explain types and levels of database recovery techniques.

   b) Event-Condition-Action rules are different from triggers; justify.

6. a) Explain examples and limitations of recursive query processing with SQL statements.

   b) Discuss the challenges and techniques involved in modeling multimedia data.

7. a) Compare and contrast Spatial and Topological Relationships in Content based retrieval.

   b) Write about the significance of different Web databases in commercial systems.

8. Explain any three from the following :
   a) Cache Coherence
   b) Distributed Deadlock
   c) R-tree and k-d tree
   d) Save points and Shared disk systems

******

CADD-603