Roll No ....

MCADD-305

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

Examination, November 2019

Database Management System

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) What are the advantages and disadvantages of DBMS?

   b) Explain the overall architecture of Data Base Management System.

2. a) What are Data models? Explain relational model in detail and its advantages.

   b) Define the terms:
      i)   Data Independence
      ii) Schema

3. a) Explain E-R Model in detail by taking example.

   b) What is the need of generalization and specialization? Explain.

4. Define the keys given below by taking suitable examples.

   i)   Primary key   ii) Foreign key
   iii) Candidate key   iv) Super key

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5. a) Explain Normalization. Discuss 1NF and 2NF.

   b) Explain:
      i) Functional dependency
      ii) Multivalued dependency
      iii) Join dependency

6. a) Explain Integrity Rules.

   b) Discuss the basic concepts of transaction and write ACID properties.

7. a) Explain various types of join.

   b) Write the syntax of SQL DDL. Create table statement. How can you declare primary key?

8. Write short notes on any three:
   i) Distributed database
   ii) RAID
   iii) Relational Algebra
   iv) Non loss decomposition
   v) Reduction of ER to tables.

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