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Name.....

Reg. No.....

**FIRST SEMESTER M.C.A. DEGREE (REGULAR/SUPPLEMENTARY)
EXAMINATION, NOVEMBER 2021**

M.C.A.

MCA 20 105—ADVANCED DATABASE MANAGEMENT SYSTEMS

(2020 Syllabus Year)

Time : Three Hours

Maximum : 100 Marks

*Answer any five full questions.
Each question carries 20 marks.*

1. (A) Define an entity. What is an EER model and how to represent supertype and subtype relationships.
(B) Explain BCNF and 5th normal form with examples. (10 + 10 = 20 marks)
 2. Write a note on :
a) Embedded SQL ; b) Postgres SQL ; c) SQ Lite ; and d) Spatial Databases. (4 × 5 = 20 marks)
 3. (A) Explain the Properties of Transaction
(B) Explain concurrency control in databases. (10 + 10 = 20 marks)
 4. (A) Define SQL, Schema, nested query and group by clause with examples for each.
(B) Explain various data types used in SQL and pL/SQL. (10 + 10 = 20 marks)
 5. (A) Explain advantages and disadvantages of distributed DBMS.
(B) Discuss in detail about integrity rule in relational data model. (10 + 10 = 20 marks)
 6. (A) Explain about DML commands in SQL with examples.
(B) What are the responsibilities of a Database Administrator ? (10 + 10 = 20 marks)
 7. (A) What is the purpose of XML in web service ?
(B) Explain OODBMS concept. (10 + 10 = 20 marks)
- [5 × 20 = 100 marks]