Reg. No. : ....

Name : ....

V Semester Master of Computer Application (M.C.A.)/ (M.C.A.) Lateral Entry Degree (Reg./Suppl./Imp.) Examination, November - 2019

(2014 Admission Onwards)

MCA 5C26 : ADVANCED DATABASE MANAGEMENT SYSTEMS

Time : 3 Hours   Max. Marks : 80

SECTION - A

Answer any **ten** questions. Each question carries **three** marks.

(10 x 3=30)

1. What is a trigger? How to create it?

2. List out the features of advanced aggregation?

3. Is B+ tree, a multi-level indexing? How does it differ from B-tree?

4. Distinguish between query processing and query optimization.

5. What are the uses of choice of evaluation plans?

6. What are long duration transactions?

7. What are timestamp based protocols? Give example.

8. List out the various forms of parallelism. Give example.

9. Give any three advantages of implementing a distributed database system.

10. Write a short note on the handoff management in mobile database system.

11. Define the terms

    a) Object identifier

    b) Atomic objects

12. List out the different complex data types.

P.T.O.

SECTION - B

Answer all questions. Each carries ten marks. **(5x10=50)**

13. a) Define transaction and explain desirable properties of transactions. **(10)**

(OR)

b) i) Explain what a trigger is used for and how it differs from a traditional declarative integrity constraint. **(5)**

ii) Describe how a Trigger differs from a stored procedure, another procedural extension to SQL. **(5)**

14. a) Illustrate and Explain the different types of joins in SQL. **(10)**

(OR)

b) Explain in detail the operations involved in query processing with suitable example. **(10)**

15. a) Discuss the concept of failure classification and buffer management in recovery system with example. **(10)**

(OR)

b) Explain the concept of transaction and concurrency control with suitable example. **(10)**

16. a) Explain the problems associated with achieving a true distributed database in practice. **(10)**

(OR)

b) Explain in detail the components of a Distributed Database with suitable example. **(10)**

17. a) Explain in detail the concept of object-oriented versus object-relational database with example. **(10)**

(OR)

b) Explain the concept of inheritance in object-based database with suitable example. **(10)**

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