MAY 2025 **P/ID 78002/RMBS1**

Time : Three hours Maximum : 80 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions in 50 words each.

1. Define database.

2. What are the different types of attributes in E-R model?

3. List out few aggregate functions.

4. What is primary key and unique key?

5. Elaborate on the purpose of operators.

6. Define the functional dependency.

7. What are multi valued dependencies?

8. Define BCNF.

9. What is client-server system?

10. What do you mean by distributed database?

11. What is transaction model?

12. Define File server.

PART B — (5 × 6 = 30 marks)

Answer any FIVE questions in 250 words each

13. How is dependent entity represented in an E-R diagram? Explain.

14. How will you create views in SQL? Provide examples.

15. State and explain integrity and referential integrity.

16. Explain the attribute types allowed in the object model.

17. Write short note on deadlock prevention and recovery.

18. Differentiate between centralised and distributed database.

19. Explain the database security issues?

PART C — (3 × 10 = 30 marks)

Answer any THREE questions in 500 Words each.

20. Define relational algebra. Explain the various traditional set operations and relational operations of it.

21. List the operations of relational algebra and explain the purpose of each

22. State and prove Armstrong's axioms for functional dependency.

23. What are the components of the object model? How they differ from components of the relational model?

24. Explain the advantages and disadvantages of client-server architecture.

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