**DECEMBER 2024** **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. What is meant by weak entity set?

2. Define cardinality.

3. State the advantages of normalisation process.

4. What is the significance of foreign key?

5. What is relational algebra?

6. What is a trigger?

7. State the difference between an object and a relation.

8. Define DDL and DML.

9. What do you mean by database schema?

10. Define normalization.

11. What do you mean by the term deadlock?

12. What is weak entity set?

PART B — ($5 \times 6 = 30$ marks)

Answer any FIVE questions in 250 words each.

13. What are the responsibilities of the Database Administrator?

14. Write short note on relational algebra.

15. What is referential integrity? Why it is important?

16. What is inheritance? What are its types?

17. Write short note on deadlock prevention and recovery.

18. Differentiate between centralised and distributed database.

19. List out various aggregate functions and explain each with suitable examples.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions in 500 words each.

20. Explain how Entity-Relationship model different from other data models. State the advantages of the E-R model.

21. Define relational model? Compare and contrast it with network and hierarchical model.

22. Explain about distributed databases with suitable illustration.

23. What is object oriented data model? What are its components? Explain the advantages and disadvantages of object oriented data model.

24. Discuss the following:

    (a) Data Models

    (b) Database languages

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