Time: Three hours

Maximum: 75 marks

SECTION A —  $(10 \times 2 = 20 \text{ marks})$ 

Answer any TEN questions.

- 1. Define DBMS.
- 2. What is physical data independence?
- 3. Mention any two advantages of ER model.
- 4. What is Primary Key?
- 5. What is QBE?
- 6. Define normalization.
- 7. What is Transaction?
- 8. What is DDL?
- 9. Differentiate DROP TABLE and TRUNCATE TABLE, in SQL.
- 10. What is the use of JOIN operation?
- 11. What is Procedure in PL/SQL?
- 12. What is an exception?

SECTION B —  $(5 \times 5 = 25 \text{ marks})$ Answer any FIVE questions.

- 13. Explain the objectives of DBMS.
- 14. Explain the Classification of Entity Sets.
- 15. What are the types of relational calculus? Briefly explain.
- 16. Describe the ACID properties of the DBMS.
- 17. Explain the need for database security.
- 18. What are sub queries? How will you classify them?
- 19. Explain the structure of PL/SQL.

SECTION C —  $(3 \times 10 = 30 \text{ marks})$ 

Answer any THREE questions.

- 20. Describe the five components of database systems.
- 21. Explain the various operations on relational algebra.
- 22. Discuss the various objectives of database design.
- 23. Explain the data types in SQL with examples.
- 24. Explain the looping statements in PL/SQL.

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