DECEMBER 2023 **P/ID 16303/PIT1C**

Time : Three hours Maximum : 80 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. Define relation schema.

2. State the use of Null values.

3. What are structured data types?

4. How is multivalued dependency denoted?

5. What is meant by tertiary storage?

6. Define static hashing.

7. Expand CLR.

8. List the two-phase locking protocol.

9. Mention about logical clock.

10. List the importance of bully algorithm.

11. List the types of embedded SQL.

12. What is data persistent?

PART B — ($5 \times 6 = 30$ marks)

Answer any FIVE questions.

13. Write about recursive queries with suitable example.

14. State the advantages of object based database. Give a suitable example.

15. Elaborate the factors to be taken into account in choosing RAID level.

16. Mention about early lock release and logical undo operations.

17. Explain the purpose of concurrency control in database.

18. Give an explanation on multidatabase system which supports two types of transactions.

19. Draw a different types of network with detail explanation.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

20. Explain in detail about advanced SQL and its features.

21. Give a detail explanation decomposition using functional dependencies.

22. Explain the goal of buffer manager and give detail on buffer replacement policies.

23. Explain why log records for transactions on the undo-list must be processed in reverse order. Give a detail explanation.

24. Give a detail study on homogeneous and heterogeneous database.
