DECEMBER 2022

P/ID 17615/ PCA4M/PCATC

Time : Three hours Maximum : 80 marks

SECTION A — (10 × 2 = 20 marks)

Answer any TEN questions

1. List few applications of database system.
2. What is data isolation?
3. What is called domain relational calculus?
4. Define the term mapping cardinalities.
5. Write a note on First Normal Form.
6. State the structured types in E-R designs.
7. What is B-Tree?
8. What is a cost based optimizer?
9. Define the term transaction.
10. Give the two approaches of deadlock prevention.
11. What is meant by parallel system?
12. Write a note on homogeneous database.

SECTION B — ($5 \times 6 = 30$ marks)

Answer any FIVE questions

13. Discuss about relational algebra.

14. Write short notes on embedded SQL.

15. Explain about weak entity sets in E-R Diagrams.

16. Describe about table inheritance.

17. Narrate on file organization.

18. Explain the basic concepts of buffer management.

19. Discuss about directory system.

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

Answer any THREE questions

20. Elaborate on set operations in SQL.

21. Illustrate about decomposition using functional dependencies in relational database design.

22. Explain about B Tree index files.

23. Write a detailed notes on serializability.

24. Explain the parallel systems.

———————