Section-A

Answer All the Questions: **15X1=15**

1. Define DBMS.

2. Define ER-Model.

3. What is an Entry?

4. What is Relationship?

5. What is Entity set?

6. What is an attribute?

7. What is domain?

8. What is key constraint?

9. What is relational Algebra?

10. Define Trigger.

11. What is schema?

12. What is sorting?

13. Define hashing.

14. Define Normalization.

15. What is two-phase commit protocol?

Section – B

Answer any Five Questions: **5X6=30**

16. a. Define DBMS & explain various types of DBMS.

(Or)

    b. Explain briefly about Relational database models.

17. a. Explain the various DDL statements of SQL

(Or)

    b. Briefly Explain about Relational Algebra.

18. a. Write about sequential file organization.

(Or)

    b. Write about hash based Indexing.

19. a. Explain the basic steps involved in processing a query

(Or)

    b. What is De-normalization? Explain with an example.

20. a. Briefly explain about crash recovery in databases.

(Or)

    b. Briefly explain about basic transaction concepts.

Section – C

Answer any Two Questions: **2X15=30**

21. Write Down the advantages of DBMS over file based systems.

22. Write short notes on a.
    a. Referential Integrity constraint
    b. Domain key constraint
    c. Entity integrity constraint.

23. Briefly explain about B^+ tree Indexing concept

24. Explain in detail about query optimization?

25. Briefly explain about concurrency control.