1. Sql Queries & Relational Queries.(More Practice)
2. ER Diagram (More Practice)
3. Concurrent schedule of transactions T1 and T2 acting on "SUM" is given below:

Schedule	T_1	T_2	Sum
-	-	-	100
$Read_1$ (Sum)	$Read_1$ (Sum)		
Sum = Sum + 10	Sum = Sum + 10		
$Read_2$ (Sum)		$Read_2$ (Sum)	
$Write_1$ (Sum)	$Write_1$(Sum)		
Sum = Sum – 10		Sum = Sum – 10	
$Write_2$ (Sum)		$Write_2$ (Sum)	

4. Analyzing the given concurrent schedule performing following tasks.
   i. What is the final value of "SUM" ?
   ii. Verify that the given schedule is serializable or not. Explain.
5. Define Functional Dependency (FD). Find the valid FD's in the following relation.

Agent	Company	Product_Name
Suneet	ABC	Nut
Raj	ABC	Bolt
Raj	ABC	Nut
Suneet	CDE	Bolt
Suneet	ABC	Bolt

6. Practice following commands
   a. DDL
      DML
   b. DCL
   c. View
   d. Sequence
   e. Indexes
7. Explain File processing system and database System.
8. Determine the output when following operations are applied on relations R1, R2 and R3 given below.
   i. Union (R1 L-) R2)
   ii. Intersection (R1 *n* R2)
   iii. Difference (R1 — R2)
   iv. Cartesian cross - section (R1 x R2)
   v. Division (R1 ± R3)
   vi. Selection
   vii. projection
9. What do you mean by integrity constraints? Briefly describe the various types of integrity constraints.
10. Explain insert, delete and update anomalies for a relation (R), with examples.
11. What is a join in DBMS? Explain three types of join with the help of an example for each.
12. What is DDL? How it is different from DML? Briefly explain guidelines for creation of table.
13. What is view table? Explain restriction of View.
14. What is database recovery? Explain with an example, how system log is used for database recovery.

15. **Explain ANSI SPARC 3 - Level Architecture of DBMS.**
16. **Differentiate between BCNF and 3NF.**
17. **What is the need of Indexing in DBMS? Explain the significance of primary Index with the help of an example.**
18. **What is Data Fragmentation and data replication? Explain type of data fragmentation.**
19. **What are nested queries? Explain with the help of an example.**
20. **Discuss the differences between serial, hashed and indexed sequential file organizations.**
21. **What is a check point? How is the check point information used in recovery operation, following a system crash?**
22. **Explain briefly advantages and disadvantages of Distributed Database Management Systems.**
23. **What is SQL? Explain its important features.**
24. **What is data redundancy in DBMS? How data redundancies are removed?**
25. **Explain deadlock prevention method.**
26. **Explain Multi list file and inverted file.**
27. **Write short notes on following (Any *two)***
    - **a. 2 - Phase locking**
    - **b. Client-server computing.**
    - **c. Concurrency**
    - **d. Data dictionary**
    - **e. Decomposing**
    - **f. Rollback**