1) Describe 3-schema ANSI SPARC database architecture? Also, describe various mapping between different levels of data Abstraction.

2) Differentiate between following :-
- 2 tier and 3 tier architecture
- physical and logical Data Independence
- Schema and instance
- procedural and Non-procedural DML
- SQL database and NO-SQL Database.

3) What is Data Model? Describe Relational data model?

4) What is SQL? Why SQL is called as fourth generation language?

5) Who is DBA? Explain the responsibilities of DBA.

6) Categorize different types of Database user? Mention the type of interface used by each user?

7) What do you mean by database languages? Explain various database languages with suitable example.

8) Explain Three levels of Database abstraction?

9) Explain the stages involved in query processing using neat sketch?

10) Describe various domain types in oracle?

11) Describe drawbacks of traditional file processing system? How these drawbacks are overcome by centralize database?

12) Any schema will Given as input identify primary keys and foreign keys in that schema.

13) Explain Basic and additional relational algebra operations.

14) Describe ER-Model? Design ER Model for Banking schema.

15) What do you mean by Strong and weak entity in ER Model. Explain with suitable example.

16) Name any four database platforms you know. Classify them as SQL and No-SQL.

17) Describe Generalization and Specialization in ER Model with suitable example.

18) Differentiate between document database, wide column databases and Graph databases.

19) - Define the terms:
- Physical Database design
- Logical Database design

20) On Given database Schema [Any schema will be given] Write Relational algebra and SQL queries on it.

21) Describe the following terms -
- Transaction Manager.
- Concurrecy Control Manager
- Recovery Manager

22) DDL Compiler ?.
DML —11— ?.

23) Describe Commit and Rollback statements with suitable example.

24) Describe following w.r.t Relation Databases.
- Arity of relation
- union compatability
- n-tuple
- Intension
- Extension
- Tuple
- attribute

25) What is view ? Give application of views?