1. What is database?Differentiate between a Database Processing System and file processing system.Illustrate the difference through suitable example .

2. (a) What is E-R modeling? How it is different from SQL?
   (b) Construct on E-R diagram for a car insurance company with a set of customers each of which owns a number of car.Each car has number of recorded accidents associated with it.

3. What is Normalization? Explain and define 1NF,2NF,3NF,BCNF and 4NF by using suitable example for each.

4. Differentiate between the following:
   (a) Logical and Physical data independence
   (b) Join dependency and multi-valued dependency
   (c) Candidate key and Concatenated Key
   (d) DDL and DML

5. What do you understand by Concurrency control? What are the various techniques for concurrency control? Explain.

6. What is RDBMS? Discuss Codd's 12 rule for a DBMS to be accepted as a full fledged RDBMS.

7. What is SQL? Explain the importance of SQL in RDBMS. Explain various SQL expression and operations through suitable examples.

8. (a)Explain the following operations of relational algebra with suitable wxaples:
   (i) Selection (ii) Projection (iii) Join
   (b) Write the Syntex of the following:
    (i) Create a table (ii) Delete a row.