1)Define database management systems and its applications.

Database Management Systems (DBMS) are software systems used to store, retrieve, and run queries on data. A DBMS serves as an interface between an end-user and a database, allowing users to create, read, update, and delete data in the database.

2) Show the disadvantages of file processing system.

The disadvantages of file processing system :

Poor Data security.

Poor Data integrity.

Wastage of Space.

Redundant data.

Slow access time.

Inconsistent data.

3) What is data model and mention its types?

Data models are visual representations of an enterprise's data elements and the connections between them

Three primary data model types are relational, dimensional, and entity-relationship (E-R).

4)

Difference Between DDL and DML Command in SQL

DDL	DML
DDL Stand For Data Definition Language	DML Stand for Data Manipulation Language
It is used to create the database schema	It is used to populate and manipulate database
It is not classified further	It is further classified as Procedural and Non-Procedural DMLs
CREATE, ALTER, DROP, TRUNCATE AND COMMENT and RENAME, etc	SELECT, INSERT, UPDATE, DELETE, MERGE, CALL, etc
SQL Statement can't be rollback	SQL Statement can be rollback
DDL Command affect the entire database or the table	Command affect one or more records in a table

5) Summarize the role of Database Administrator.

Database backup

Database availability

Database restore

Database design

Data move

Database upgrade

Database security

Database monitoring

Capacity planning

6) What is a Strong Entity?

A strong entity is an entity that is not dependent on any other entity. It has a primary key, or a table includes a primary key.

What is a Weak Entity?

Unlike a strong entity, a weak entity is not independent as it is reliant on another strong entity. It has to rely on other entities to ensure its existence.

7) Outline the concept of keys and mention its types.

A key in DBMS is an attribute or a set of attributes that help to uniquely identify a tuple (or row) in a relation (or table). Keys are also used to establish relationships between the different tables and columns of a relational database. Individual values in a key are called key values

8) List out the types of integrity constraints in ER model.

NOT NULL constraints. …

Unique constraints. …

Primary key constraints. …

(Table) Check constraints. …

Foreign key (referential) cconstraints

9)define schema and instance

Schema refers to the overall description of any given database. Instance basically refers to a collection of data and information that the database stores at any particular moment.

10) Compare procedural and non procedural languages.

Object Oriented Programming	Procedural Programming
In OOP, the program is broken into tiny components called objects.	In Procedural Programming, the program is broken into tiny components known as functions.
Object oriented programming follows bottom-up approach.	Procedural programming follows top-down approach.
Object-oriented programming has access specifiers such as private, public, protected, etc.	In procedural programming, there is no access specifier.
Adding new data and functionality is easy.	Adding new data and functionality is not easy.
Examples: C, FORTRAN, Pascal, Basic etc.	Examples: C++, Java, Python, C# etc.

11) List out the Aggregate function supported by SQL.
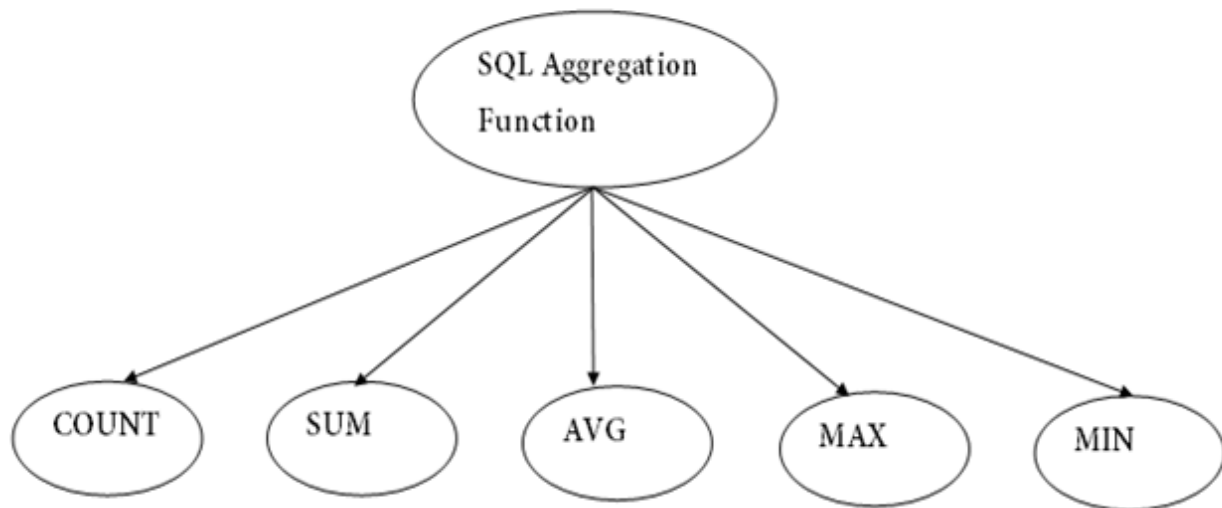
12) How modifications are done on database?

The modification of a database has three commands, namely:

DELETE : **This command helps us to remove rows from the table**
INSERT: This command helps us to insert rows into the table.

UPDATE: This command helps us to modify columns in table rows.