Answer Q1:-
Database exactly means collection of data in a particular area or location that storage part is Called Database.

Example:-
Lets understand why we should need database?

Suppose take a example that if we need to store the data and want to use this data in future then how and where store the data and use the data in future. If you this is thing comes in your mind that we will written the data in notebook to use the data in future that is also one form of database. Because database work is to store the data and through this we can use the data in future.

Answer Q2:-

File base storage system is also a database . this is also used in past we can say that in 100 year ago . now a we are using database management system like mangoDB , oracle etc . these all the database is used in nowaday . so lets move to file base storage system . file based storage system means we will store the data in file format like we

will create the specific folder and inside the folder we will put the file , all file contains the data and these data can be use in future. We can store multiple of file inside the folder or we can create multiple of folder . so, lets move to the challenges .

Challenges of file base storage system:-

1. We will store the multiple same data in multiple folder that why we face data redundancy
2. If we want to change some data in a folder of any particular organisation like MNC then we do not have access of all the file we only access of some specific file and we can only change the data of that particular file through this we can say more complexity is arises to use the data for specific work.
3. If you want to communicate with the database like file base storage system then you have to learn more complex programing language that is really very hard for non tech background person at that he will face the program for doing any work.

Answer Q3:-

DBMS stands for database management system it is a software . inside this we have two part first one is management layer and other one is database inside the database we have store the data and use the data in future.

Why we need for DBMS:-
The simple answer is if you have essential thing that will actually used in future how will u store the data and from where u will used the data in future when u need this data.

Answer Q4:-

5 challenges of file-based storage system which was tackled by DBMS:-

1. Inside the FBSS there data redundancy . This problem is solved by DBMS.
2. Inside the FBSS there is difficulty to communicate with database . This problem is solved by DBMS through easy programing language like sql.
3. Inside the FBSS there is security problem .

But This problem is also solved by DBMS through providing multiple level of security authentication.

4. Inside the FBSS there is difficulty of concurrent image .this problem is also solved byDBMS.
5. Inside the FBSS there is lots of chance to face the Bugs . this problem also solve by DBMS through less number of bugs arise in DBMS.

Answer Q5:-

the different types of classification in DBMS:-

1. Classification based on data model
2. Classification based on number of users
3. Classification based on database distribution

Classification based on data model:-

1. Relational Data Model
2.
3. Hierarchical Data Model
4. Network Data Model
5.

6. Object Oriented Data Models

Classification based on number of users:-

- ★ Single User Database
- ★
- ★ Multi User Database

Classification based on database distribution:-

- Centralized systems
-
- Distributed database system

Answer Q6:-

Data Modelling means it is Abstraction type of behaviour means we are using the database management system we can only the see the storing part and computation part on the screen of this but we can not able to see the exact behaviour of behind the seen that is actual meaning and behaviour of Data Modelling.

Mainly Data Modelling type is

1. High Level Conceptual Data Models
2. Record based logical data models
3. Relational Data Model
4. Physical Data Model

Answer Q7:-
3 schema architecture :- Schema stands for blueprint of database . there is 3 schema architecture and its parts is internal schema, conceptual schema and external schema.

Working these 3 schema architecture part is :-

1 internal schema:- this internal schema work is how data is store inside the schema and how data will fetch from hardware.
2. Conceptual schema :- this conceptual schema work is how logic is define to store the data and which relationship is define between the entities which is store inside the schema .

3.External Schema:- this conceptual schema work is to deliver the data to the user want exactly he wants the data.

Advantage of Schema:-

1 logical Data Independence
2 Physical Data Independence