Ans Q1. A database is like a super organized collection of information.

Database is helpful:

no mistakes, quick searches, no mix-ups-handed more data, keep Secrets

Ans Q2. A file-based storage system is a traditional method of managing and organizing data on a computer.

In this system, data is stored in files, and each file contains information related to a specific task

or application.

Challenges of a file-based storage system are:

Data redundancy, Data isolation, limited data integrity, limited query capabilities

Concurrency issues, Scalability Challenges, Security Concerns.

Ans Q3: DBMS stands for Database Management System. It is software that facilitates the creation,

organization, retrieval management of data in a database.

DBMS arises from the limitations and challenges associated with traditional file-based systems.

Here are some reasons why DBMS become necessary:

(i) Data Integrity and Consistency

(ii)Data Sharing and Accessibility

(iii)Data Independence

(iv)Efficient Data retrieval

(v)Data recovery and backup

Ans Q4: (A)Data Redundancy and inconstient

(i)Challenges in File Based storage

(ii)How DBMS address It

(B)Data Isolation and inflexibity

(i)Challenges in File Based storage

(ii)How DBMS address It

(C)limited Data Retrieval capabilites

(i) Challenges in File Based storage

(ii)How DBMS address It

(D)Concurrency Issues

(i)Challenges in File Based storage

(ii)How DBMS address It

(E)Limited Security Controls

(i)Challenges in File Based storage

(ii)How DBMS address It

Ans Q5: (A)Based on Data Model

(B)Based on Structure

(C)Based on Accessibity

(D)Based on content

(E)Based on application

(F)Based on Usage

(G)Based on Relationships

(H)Based on Deployment

Ans Q6: Data modelling is like creating a blueprint for how data should be organized and used in database.

It helps to design a data structure that makes sense for storing and retrieving information efficiently.

Signifance of Data modelling

(i)organization

(ii)Clarity

(iii)Efficiency

(iv)Communication

Types of Data modelling

(A)Conceptual Data modelling

(B)Logical Data modelling

(C)Physical Data modelling

Ans Q7: Schema architecture along with advantages:

(A)External Schema:

(B)Conceptual Schema

(C)Internal Schema