Interview Question

Q 1. Give a quick idea of the term RDBMS? (Adobe)

It helps in storing or managing data across multiple tables. The best part is that you can define relationships among different data entries using tables. Relationships are generally expressed through values, not pointers.

Q 2. How will you define a relational database model? (Accenture)

It defines the relationship among different databases and how they are connected. When multiple databases are connected, it creates flexibility and can be used within a software app as needed.

Q 3. What are the components of RDBMS? (Vmware)

Each relation in an RDBMS is given a “Name” that will be unique among others. There are rows and columns in each relation; columns represent attributes and rows as Tuples.
Name => Attributes => Tuples

Q 4. What is an E-R Model? (Infosys)
It consists of entities and relational objects. Entities can be understood by the collection of attributes in the database.

Q 5. Tell me something about various data abstraction levels? (Goldman Sachs)

In RDBMS, data can be abstracted at three different levels.
They are given below -.
Physical Level -> Logical Level -> View 1, View 2 & View 3
The physical level is available at the bottom, giving you a detailed idea of the data storage. The Logical level at the next stage finds the logic among data tables and how to group similar data for easy access. At the top, there is a view level that gives information about the complete database and various views of a database.

Q 6. How are RDBMS preferable options over the DBMS? (Amazon)

It minimizes redundancy and integrity can be maintained. It maintains data consistency and allows data sharing to other databases. It follows a set of rules to satisfy storage standards and maintains security.

Q 7. What are the two specific rules that you should follow for each RDBMS to maintain data integrity? (Flipkart)

These are divided into two categories that are necessary to learn by every RDBMS expert.

- To maintain the integrity of an Entity, the Primary key should never contain the NULL values.
- To maintain referential integrity, the foreign key should be used that is defined as the Primary key for another table.

Q 8. Does RDBMS follow an object-oriented approach or not? (Amazon)

Well, I think RDBMS follows the object-oriented approach. The object-oriented model is defined based on the collection of objects. An object instantiates the value stored in instance variables. If objects are sharing the same properties or methods, then they can be grouped to form a class. The same process is followed in RDBMS as well.

Q 9.What are the different features of an RDBMS?(Oracle)

Name- Every relation in a relational database should have a name which is unique among all other relations.
Attributes- Each column in a relation is called an attribute.
Tuples-Each and every row in a relation is called a tuple. A tuple defines a collection of attribute values.

- The entity integrity constraint states that primary key value can't be null.
- This is because the primary key value is used to identify individual rows in relation and if the primary key has a null value, then we can't identify those rows.
- A table can contain a null value other than the primary key field.