**Q-1: What do you understand By Database**

**=> A database is collection of information or data.**

**=> Database refers to related data in a structured form.**

**=> It can be managed through a Database Management System(DBMS).**

**=> An interface for operations like create, delete, update, etc... is provided by DBMS.**

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**Q-2: What is Normalization?**

**=> Normalization is the process of organizing the data in the database.**

**=> Normalization is used to minimize the redundancy from a relation or set of relations.**

**=> It is also used to eliminate undesirable characteristics like Insertion, Update, and Deletion**

**Anomalies.**

**=> There are four types of Normalization**

**1. 1NF (1 Normalization Form)**

**2. 2 NF (2 Normalization Form)**

**3. 3NF (3 Normalization Form)**

**4. BCNF (Boyce Codd Normalization Form)**

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**Q-3: What is Difference between DBMS and RDBMS?**

**DBMS - data are store as a file**

**RDBMS - data are store in a tabular form**

**DBMS - It is used for small organization and deal with small data. (The amount of data stored in small)**

**RDBMS - It is used to handle large amount of data. (A large amount of data is stored)**

**DBMS - Security is less**

**RDBMS - More security measures provided**

**DBMS - does not support client server architecture**

**RDBMS - support client server architecture**

**DBMS - Individual data element access**

**RDBMS - Multiple data element are available at the same time**

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**Q-4: What is MF Cod Rule of RDBMS Systems?**

**=> There are 12 rules in MF Cod of RDBMS System**

**01. The Foundation Rule**

**02. Information Rule**

**03. Guaranteed Access Rule**

**04. Systematic Treatment of Null Values**

**05. Active / Dynamic Online Catalog based on the relational model**

**06. Comprehensive Data Sublanguage Rule**

**07. View Updating Rule**

**08. Relational Level Operation Rule**

**09. Physical Data Independence Rule**

**10. Logical Data Independence Rule**

**11. Integrity Independence Rule**

**12. Distribution Independence Rule**

**13. Non-Subversion Rule**

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**Q-5: What do you understand By Data Redundancy?**

**=> Data redundancy refers to the repetition of data within a database or information system.**

**=> It occurs when the same piece of data is stored in multiple places or multiple times within the**

**same database or across different databases.**

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**Q-6: What is DDL Interpreter?**

**=> DDL - Data Definition Language**

**=> A DDL Interpreter is a component of a DBMS responsible for executing DDL query.**

**=> The most common command types in DDL are CREATE, ALTER and DROP.**

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**Q-7: What is DML Compiler in SQL?**

**=> DML - data manipulation language**

**=> A DML compiler is a component of a DBMS responsible for compiling and executing DML statements.**

**=> A DML refers to a computer programming language that allows you to insert, delete, alter data in a database.**

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**Q-8: What is SQL Key Constraints writing an Example of SQL Key Constraints**

**=> SQL constraints are used to specify rules for the data in a table.**

**=> The following constraints are commonly used in SQL:**

**-> PRIMARY KEY: A combination of a NOT NULL and UNIQUE. Uniquely identifies each row in a table**

**-> FOREIGN KEY: Prevents actions that would destroy links between tables**

**-> UNIQUE KEY: Ensures that all values in a column are different**

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**Q-9 : What is save Point? How to create a save Point write a Query?**

**=> A save point is a point in a transaction in which you can roll the transaction back to a certain**

**point without rolling back the entire transaction.**

**=> Query: save point save point name;**

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**Q-10: What is trigger and how to create a Trigger in SQL?**

**=> A trigger in SQL is a special type of stored procedure that is automatically executed or fired in**

**response to certain events, such as INSERT, UPDATE, or DELETE operations performed on a table.**

**=> create trigger trigger name**

**{before | after} {insert | update | delete}**

**on table name**

**from each row**

**begin**

**#SQL Query**

**end;**