

1. What is DBMS?

2. What is RDBMS?

3. What is SQL?

SQL stands for Structured Query Language , and it is used to communicate with the Database. This is a standard language used to perform tasks such as retrieval, updating, insertion and deletion of data from a database.

4. What is a Database?

Example: School Management Database, Bank Management Database.

5. What are tables and Fields?

6. What is a primary key?

A primary key is a combination of fields which uniquely specify a row. This is a special kind of unique key, and it has implicit NOT NULL constraint. It means, Primary key values cannot be NULL.

7. What is a unique key?

8. What is a foreign key?

9. What is a join?

10. What are the types of join and explain each?

11. What is normalization?

Normalization is the process of minimizing redundancy and dependency by organizing fields and table of a database.

The main aim of Normalization is to add, delete or modify field that can be made in a single table.

12. What are all the different normalizations?

13. What is a relationship and what are they?(CARDINALITY RATIOS)

Database Relationship is defined as the connection between the tables in a database. There are various data basing relationships, and they are as follows:.

One to One Relationship.

One to Many Relationship.

Many to One Relationship.

Self-Referencing Relationship.

14. What is a query?

A DB query is a code written in order to get the information back from the database.

Query can be designed in such a way that it matched with our expectation of the result set.

Simply, a question to the Database.

15. What is subquery?

A subquery is a query within another query.

The outer query is called as main query, and inner query is called subquery.

SubQuery is always executed first, and the result of subquery is passed on to the main query.

16. What are the types of subquery?

There are two types of subquery ð Correlated and Non-Correlated.

A correlated subquery cannot be considered as independent query, but it can refer the column in a table listed in the FROM the list of the main query.

A Non-Correlated sub query can be considered as independent query and the output of subquery are substituted in the main query.

17. Difference between WHERE and HAVING clause.

18. Difference between SRF and MRF .

19. What is the difference between DELETE and TRUNCATE commands?

DELETE command is used to remove rows from the table, and WHERE clause can be used for conditional set of parameters.

Commit and Rollback can be performed after delete statement.

TRUNCATE removes all rows from the table. Truncate operation cannot be rolled back.

20. What is a constraint?

Constraint can be used to specify the limit on the data type of table.

Constraint can be specified while creating or altering the table statement. Sample of constraint are.

NOT NULL.

CHECK.

UNIQUE.

PRIMARY KEY.

FOREIGN KEY.

21. What is data Integrity?

Data Integrity defines the accuracy and consistency of data stored in a database.

It can also define integrity constraints to enforce business rules on the data when it is entered into the application or database.

22. What is Datawarehouse?

Datawarehouse is a central repository of data from multiple sources of information. Those data are consolidated, transformed and made available for the mining and online processing.

Warehouse data have a subset of data called Data Marts.

23. What is Self-Join?

Self-join is set to be query used to compare to itself.

24. What is Cross-Join?

Cross join defines as Cartesian product where number of rows in the first table multiplied by number of rows in the second table.

25. What is Union, minus and Intersect commands?

UNION operator is used to combine the results of two tables, and it eliminates duplicate rows from the tables.

MINUS operator is used to return rows from the first query but not from the second query. Matching records of first and second query and other rows from the first query will be displayed as a result set.

INTERSECT operator is used to return rows returned by both the queries.

26. What is an ALIAS command?

27. What is the difference between TRUNCATE and DROP statements?

TRUNCATE removes all the rows from the table, and it cannot be rolled back.  
DROP command removes a table from the database and operation cannot be rolled back.

28. What are aggregate functions?

Aggregate functions are used to evaluate mathematical calculation and return single values. This can be calculated from the columns in a table.

29. How can you create an empty table from an existing table?

Example will be -

Select \* into studentcopy from student where 1=2

Here, we are copying student table to another table with the same structure with no rows copied.

30. How to select unique records from a table?

Select unique records from a table by using DISTINCT keyword.

Select DISTINCT StudentID, StudentName from Student.

31. What is the command used to fetch first 5 characters of the string?

There are many ways to fetch first 5 characters of the string -

Select SUBSTRING(StudentName,1,5) as studentname from student

32. Which operator is used in query for pattern matching?

LIKE operator is used for pattern matching, and it can be used as -

% - Matches zero or more characters.

\_ (Underscore) - Matching exactly one character.

33. What are DML statements