# Q.1 Why Tableau? How does Tableau compare to other BI tools?

Tableau offers better visualization and data transformation, plus faster processing rate.

Tableau can connect to multiple datasources like Hadoop,SAP for better data analytics and reporting.

# Q.2 What data sources can you connect to?How do you connect to them?

We can connect to Hadoop, Microsoft SQL server, SAP, csv files etc.

# Q.3 What are the join types in Tableau?

It has 4 joins Left, Right, Inner and Full outer join

# Q.4 How to join data in Tableau?

Select the datasources you want to join and build a relationship between these 2 tables and apply which joint needs to be be added

# Q.5 What is the difference between joining and blending?

Join combines data from multiple tables by matching values in a common field. The data from the two tables is merged into a single table that contains all the fields from both tables.

Blending does not combine the data from multiple tables into a single table. It link tables together visually, allowing you to see the combined data in views and dashboards, but the data is not merged at the row level.

# Q.6 What is the difference between a live and an extract?

Live is real time data and Extract is scheduling at regular frequencies

# Q.7 What is a dimension vs. a measure?

Dimension is the qualitative information of the data, and Measure is the quantity of the data.

# Q.8 What is a discrete vs. a continuous value?

# Q.9 What is the Order of Operations?

Extract, Data Source, Context, Dimensions, Measures, Table Calculations.

# Q.10 What are parameters, sets, and groups?

Sets are custom fields that define the subset of data based on some conditions/filters.

A parameter holds a value such as an integer, date or string value that can be used to replace a constant value in a calculation.

Groups are created to combine similar members in a field.

# Q.11 What is a calculated field?

It’s a formula which performs some action on one or more other fields in your data source

# Q.12 What is a dual axis?

It’s a visualization in which 2 two types of charts can be seen in a single graph.

# Q.13 What are LOD expressions?

It allows user to express powerful concepts using simple statements.

# Q.14 What are actions?

Actions allows the user to directly interact with the visualizations and control various aspects of the data analysis

# Q.15 How do you restrict access to the data?

On the report go to permissions and add a rule, in which enter the users which can/cannot access the report.

# Q.16 How do you increase the performance of a slow workbook?

# Q.17 Build a chart showing the top five and bottom five sales by customer?

Create a new calculated field and apply the rank functions for both the conditions and apply.

# Q.18 Find the state with the lowest profit ratio ?

Create a visualization and then sort the profit ratio in ascending which will give the lowest value at top.

**SQL**

What are SQL dialects? Give some examples?

SQL is the programming language used to talk to these databases, and each database product has its own variant of SQL. We call these variants SQL dialects

MySQL,PostgreSQL

# Q.2 What are the main applications of SQL?

SQL is used to store, retrieve, and manipulate data in relational databases.

# Q.3 What is an SQL statement? Give some examples?

It is a command which can be used to update/fetch data from the dataset

Distinct: Gives the unique values in the dataset

OrderBy: Orders the values in ascending or descending order.

FullOuterJoin: combines the 2 datasets

# Q.4 What types of SQL commands (or SQL subsets) do you know?Give some examples of common SQL commands of each type?

Distinct: Gives the unique values in the dataset

OrderBy: Orders the values in ascending or descending order.

FullOuterJoin: combines the 2 datasets in a single table

# Q.5 What is a database?What is DBMS, and what types of DBMS do you know?

Database is a collection of structured data

A DBMS serves as an interface between the database and its end users or programs, allowing users to retrieve, update, and manage how the information is organized and optimized.

# Q.6 What are tables and fields in SQL?

Field is the data which is present in the column of the tables.

Table contains all the data in the database

# Q.7 What is an SQL query, and what types of queries do you know?

Distinct: Gives the unique values in the dataset

OrderBy: Orders the values in ascending or descending order.

FullOuterJoin: combines the 2 datasets in a single table

# Q.8 What is a subquery? What types of SQL subqueries do you know?

It is nested inside the main Query to get a more specific data.

# Q.9 What is a constraint, and why use constraints?What SQL constraints do you know?

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

It helps in limiting the type of data which can go into the table

# Q.10 What is a join?What types of joins do you know?

A **JOIN** clause is used to combine rows from two or more tables, based on a related column between them.

Inner Join and Outer Join.Left/Right Join

# Q.11 What is a primary key?What is a foreign key?What is a unique key?

Primary key uniquely identifies the row.

Foreign key are used to link data in one table to another table

Which can uniquely identify data in a relationship

# Q.12 What is an index?What types of indexes do you know?

# Q.13 What is a schema?What is a SQL comment?

# Q.14 What is a SQL operator?What types of SQL operators do you know?

Operators are used to perform arithmetic functions (\*,/,+,-)

# Q.15 What is an alias?What is a clause?

Used to rename a column so that it is easier to understand.

Select Column\_name as New\_name from Table\_Name

# Q.16 What are some common statements used with the SELECT query?

Orderby,Groupby,Where to name a few

# Q.17 How to create a table?How to update a table?How to delete a table from a database?

Updation can be done using the Update Query

Drop query can be used to delete the table

# Q.18 How to select common records from two tables?

Using the Join function

# Q.19 What are entities? Give some examples.What are relationships? Give some examples.What is NULL value? How is it different from zero or a blank space?

# Q.20 What is a function in SQL, and why use functions?What types of SQL functions do you know?What aggregate functions do you know?What scalar functions do you know?What are case manipulation functions? Give some examples. What are character manipulation functions? Give some examples?

COUNT/AVG/MIN/MAX/SUM

LOWER/UPPER/ROUND/LENGTH

LOWER/UPPER are case manipulation functions

CONCAT/TRIM are character manipulation functions