**1. Basics:**

1. What is the difference between Discrete and Continuous Data?

Ans: Discrete data is when you have individual or separate items that cannot be broken down any further. For example, if you are counting the number of cars in a parking lot, that is discrete data because each car is an individual item that cannot be divided.

Continuous data, on the other hand, is when you have a range of values that can take on any numeric value within that range. An example of continuous data is the temperature outside, because it can take on any value between a certain range

1. What is the criteria for data to land into dimensions and measures?

Ans:Data is classified as dimensions or measures based on the type of data it represents. Dimensions are usually categorical data that can be used to categorize or group data..such as segments,products.

Measures are typically numeric data that can be aggregated, such as sales or profit

1. What is Metadata, where is it present in the workbook?

Ans: Metadata is information about the data, such as the field names, data types, and relationships between the data. In Tableau, metadata is present in the "Data Source" tab..

1. What happens when you aggregate or disaggregate the Data?

Ans: Aggregating data means to combine multiple values into a single value, such as calculating the average or sum of a set of data. Disaggregating data means to display the individual values instead of the aggregated value.

1. You are working on a dataset, the client adds in more data to the dataset. What happens to the Visualization that you had created? Give the explanation for both Live and Extracted data.

Ans: If the data is live,then it is connected to the data source directly, then the visualization will update in real-time . If the data is extracted, then the visualization will need to be refreshed in order to include the new data.

1. What are the file extensions in Tableau and how each one is different?

Ans: Tableau has several file extensions that are used for different purposes.

The main file extension is .twb, which is used for Tableau workbook files that contain worksheets and dashboards.

The .twbx extension is used for packaged workbooks that include data sources and other resources needed to open the workbook.

The .tds extension is used for Tableau data source files and .tde extension is used for Tableau data extract files

**2. Text Table, Highlight Tables, Heat Maps, Tree Map:**

1. Create a text table for the Avg (Sales) for each subcategory using Sample Superstore? List which Sub Category is got Avg (Sale) more than $1000? - **Sample Superstore**
2. Create a Heat Table for the order date and Region against the Sub Category based in Count of Sales with two colours diverging that is distinguished by Sum of Profit - **Sample Superstore**
3. Create a Highlight table for the States for the Order Date Year whose highlighting is done based on Sum of profits - **Sample Superstore**
4. Which customer is having maximum of sales in the year 2012? - **Global Superstore**
5. How much is profit share less in Pennsylvania when compared to New York? - **Sample Superstore**
6. Check for the pane wise percentages of sales with Category, Sub- Category and quarter wise order date, also check for the Row wise grand totals and Column wise grand totals. - **Sample Superstore**

**3. Filled Maps, Symbol Maps:**

1. Use Global Superstore. Check Which Western Country in EMEA region has least profit percentage.
2. Use **“Sample Superstore. Xls”,** which state shares boarders only profit for tables
3. Use **“Sample Superstore. Xls”,** which state has no data for Profits for Office Supplies

**4. Bar Charts, Stacked, Side by Side:**

1. Which Customer name & Year is having all the Product Categories sum of profit less than over-all Average profit? - **Sample Superstore**
2. What is the Maximum of Life Expectancy Female for the region Africa & year 2012? - **World Indicators**
3. What is the share of the top 20 customers based on the sales amount compared to the customers based on profit amounts - **Sample Superstore**

**5. Line Graphs, Dual Line, dual axis:**

1. How can you show two different graphs in one view? - **Global Superstore**
2. Which Region is having Sum of Energy Usage>1000000 and sum of Population 65+>10? - **World Indicators**

**6. Trendlines, Cluster, scatter Plot, boxplot, Word Cloud (Packed Bubbles), Histogram:**

1. Draw a trend line for profit as a linear function of sales only for product technology? - **Sample Superstore**
2. Create a histogram showing the number of Sales using Sales Bins of $1000. Which bins have profit ratios of more than 25%? - **Global Superstore**
3. Using “**Sample Superstore”**, use order sheet create a histogram showing the number of orders using sales bins of $1000
4. Using **“Global Superstore**”, use the orders sheet, build a scatter plot showing the sum of sales on the x-axis and sum of profits on the y axis for all products (Product name). What is the equation for linear regression for products in Technology?
5. Use **“World Indicators”.**  Take Health Exp% GDP, Health Exp/Capita, Life Expectancy Male, Female. What are the variables that are considered to create the clusters by default?

**7. Calculate Fields, Quick table calculations, LOD:**

1. How do you create a profit ratio using the Calculated fields?
2. Global Superstore data set; Region wise year wise sales are ranked. What is the rank of some country when compared to last year?
3. What percent of total profits do the top 10 customers by Sales represent? - **Sample Superstore**
4. Find the customer with the lowest overall profit. What is his/her profit ratio? - **Sample Superstore**
5. Ranking States based on Sales what is the rank of state which has sales crossed $20000. - **Sample Superstore**
6. What is the percent of orders which took more than 7 days on an average to deliver.
7. Use **“World Indicators”.** Without using table calculations what is the proper syntax to build a calculated field which will display overall total GDP on this view?

**8. Filters:**

1. What are the different types of filters and give their working order?

Ans.Extract Filter.

Data Source Filter.

Context Filter.

Dimension Filter.

Measure Filter.

Table Calculation Filter.

2.Create a list of Top 10 Products based on Profits whose sale value is more than $5000? - **Global Superstore**

1. Create a Chart with Customer Name and Profit and check for the Sale Value for top 15 Customers? - **Global Superstore**
2. Apply filter to all the worksheet, filter by year 2011, then find the sum(sales) for the highest subcategory.- **Global Superstore**
3. What is the name of 375th top most customer by sum of profits - **Sample Superstore**

**9. Dashboards & story:**

1. What are the different device type preview that Dashboards can use?

Ans]Desktop ,tablet ,phone, automatic.

1. Create a dashboard using World Indicators showing the all the Actions that can be performed in Tableau.

**10. Time Series:**

1. Use Order date and drill down the information for Quarter and Month level separately and show the line Chart in a Continuous Form- **Global Superstore**

**11. Sets, Parameters, Groups:**

1. Parameters can be used in?

Ans: Parameters in Tableau can be used in a variety of ways to allow users to interact with and control the visualizations they create.

Filtering data: Parameters can be used to filter data based on user-selected values.

Controlling formatting: Parameters can be used to control the formatting of a visualization, such as changing colors or fonts.

Calculations: Parameters can be used in calculations to allow to adjust input values and can see changes in the calculation output.

1. What are the different ways to create a Parameter?

Ans: Using the Create Parameter option: In the Data pane, right-click and select "Create Parameter."

From a worksheet: You can also create a parameter by selecting a worksheet, and then choosing Analysis > Create Parameter.

Drag and drop: You can create a parameter by dragging a field onto the view and then selecting "Create Parameter" from the drop-down menu.

**12. Forecast:**

1. You are provided with the dataset for the past 10yrs. How can you forecast the data for next 4 years, Quarter wise.

Ans: Add the data to the worksheet: Drag and drop the necessary fields onto the Rows and Columns shelves.

Create a forecast:

To create a forecast, right-click on the time dimension on the Columns shelf, and select Add Forecast or go to analytics tab(drag and drop in pane) ,in this case,4 years and set any other relevant options.

View the forecast: Once the forecast is created, Tableau will display a line chart showing the actual data and the forecasted values for the next 4 years.

1. Use **“Sample Superstore”.** What is the Sales Forecast Estimate for the month of September 2018?

**13. Pie Chart:**Create a Pie Chart using regions and sum of sales, sort the pie in ascending order, increase the size in the view and label them with Count of Quantity and Sum of Profits- **Sample superstore**