# **Power BI Mock Questions and Answers**

# Q1: What are the key differences between Power BI Desktop, Power BI Service, and Power BI Mobile?

#### **Answer:**

- Power BI Desktop: A desktop application used for data modeling, report building, and creating visualizations.
- Power BI Service: A cloud-based service used for sharing, collaboration, and managing dashboards and reports.
- Power BI Mobile: A mobile application for viewing and interacting with reports and dashboards on-the-go.

# Q2: How do you optimize Power BI reports for performance?

#### **Answer:**

- 1. Use appropriate data granularity for visuals.
- 2. Avoid using too many custom visuals.
- 3. Use relationships and avoid calculated columns where possible.
- 4. Implement aggregation in the database itself, not in Power BI.
- 5. Optimize DAX queries and avoid unnecessary calculated measures.
- 6. Disable auto date/time in model options.

# Q3: How do you create a calculated column in Power BI? Give an example.

#### Answer:

- 1. Go to Modeling > New Column.
- 2. Write a DAX formula for the column.

# **Example:**

To calculate total sales:

Total Sales = 'Sales'[Quantity] \* 'Sales'[Unit Price]

# Q4: Explain the significance of "Power Query Editor" in Power BI.

#### Answer:

Data Transformation: Used for cleaning, reshaping, and transforming data before analysis.

- Merge/Append Queries: Combine multiple datasets.
- Applied Steps: Tracks changes made to the data.
- Custom Columns: Add calculated columns based on business logic.

# Q5: How do you handle many-to-many relationships in Power BI?

#### Answer:

- 1. Use a **bridge table** with unique values to create one-to-many relationships.
- 2. Leverage dual storage mode for optimized queries.

# Q6: How can you implement drill-through functionality in Power BI?

#### Answer:

- 1. Add a drill-through page in the report.
- 2. Add fields to the drill-through section in the visualizations pane.
- 3. Enable users to click on visuals and navigate to a detailed report filtered for their selection.

# Q7: What are Aggregates in Power BI? How are they used?

## Answer:

Aggregates summarize numerical data (SUM, AVERAGE, MIN, MAX).

#### **Example:**

In a visualization, setting a column to **SUM** will show the total of that column.

#### Q1: What is Power BI?

#### Answer:

Power BI is a business analytics tool by Microsoft that allows you to connect to data, transform it, create visualizations, and share insights through interactive dashboards and reports.

# Q2: Name three key components of Power BI.

#### Answer:

- 1. Power BI Desktop
- 2. Power BI Service
- 3. Power BI Mobile

# Q3: What is the difference between a "Report" and a "Dashboard" in Power BI?

#### **Answer:**

- **Report:** A detailed multi-page document with various visualizations, charts, and tables.
- Dashboard: A single-page summary containing pinned visuals from one or multiple reports.

# Q4: What is the purpose of a slicer in Power BI?

# Answer:

A slicer is used to filter data in a report based on selected criteria (e.g., date, category, etc.).

# Q5: How can you import data into Power BI?

#### Answer:

Go to **Home > Get Data**, then select the data source (Excel, SQL Server, Web, etc.), and load the data into Power BI.

# Q6: What are some common visualization types in Power BI?

#### Answer:

- 1. Bar chart
- 2. Line chart
- 3. Pie chart
- 4. Map
- 5. Table

#### Q7: What is DAX in Power BI?

#### Answer:

DAX (Data Analysis Expressions) is a formula language used to create custom calculations and measures in Power BI.

# Q8: How can you apply filters to a report?

## Answer:

Filters can be applied by using the **Filters Pane** or by adding slicers directly to the report canvas.

## Q9: What is a measure in Power BI?

#### Answer:

A measure is a calculated field created using DAX to aggregate data dynamically (e.g., sum of sales, average profit).

# Q10: What is the "Refresh" option in Power BI?

#### Answer:

The "Refresh" option updates the report with the latest data from the data source, ensuring the visuals are up-to-date.

# Q1: What are the types of relationships in Power BI?

#### Answer:

- 1. One-to-One (1:1)
- 2. One-to-Many (1:\* or \*:1)
- 3. Many-to-Many (:)

# Q2: How do you create a new report in Power BI?

#### Answer:

- 1. Open Power BI Desktop.
- 2. Import data using Get Data.
- 3. Drag fields to the canvas and choose a visualization type.

## Q3: What is the use of a line chart in Power BI?

# Answer:

A line chart is used to display trends over time or a continuous data range.

# Q4: What is the "Fields Pane" in Power BI?

#### Answer:

The **Fields Pane** lists all the tables, columns, and measures from the data model that can be dragged onto the canvas for visualizations.

# Q5: How do you rename a column in Power BI?

#### **Answer:**

- 1. Go to **Transform Data** in Power Query.
- 2. Right-click the column header and select **Rename**.

3. Type the new name and press Enter.

# Q6: What is the "Transform Data" feature in Power BI?

#### Answer:

The "Transform Data" feature opens Power Query Editor, which is used for data cleaning, shaping, and transformation before analysis.

#### Q7: What is a KPI visual in Power BI?

#### Answer:

A KPI (Key Performance Indicator) visual displays progress toward a measurable goal using indicators like target values, trends, and actual performance.

## Q8: How do you create a calculated field?

#### Answer:

- 1. Go to the Modeling tab.
- 2. Click New Measure.
- 3. Write the DAX formula, e.g., Profit = [Sales] [Cost].

# Q9: What are hierarchy fields in Power BI?

#### Answer:

Hierarchies group multiple fields into a parent-child structure, e.g., Year > Month > Day for a date hierarchy.

# Q10: Can Power BI connect to live data sources?

# Answer:

Yes, Power BI supports live connections through **DirectQuery** or **Live Connection** for real-time updates.

# Q1: What is a Power BI workspace?

#### Answer:

A workspace in Power BI is a collaborative environment in the Power BI Service where you can share and manage reports, datasets, and dashboards with a team.

# Q2: What is the use of a pie chart in Power BI?

#### Answer:

A pie chart is used to display data in the form of proportional slices, showing percentage or part-to-whole relationships.

# Q3: How do you add a new data source to an existing Power BI report?

#### Answer:

- 1. Click on Home > Get Data.
- 2. Choose the new data source.
- 3. Import or connect to the new data and integrate it into the existing model.

# Q4: What are slicers used for in Power BI?

#### Answer:

Slicers are used to filter data visually on a report or dashboard, providing users with an easy way to explore and analyze data interactively.

## Q5: What file formats can be exported from Power BI?

#### Answer:

Power BI allows exporting to formats like PDF, PowerPoint, and Excel.

# Q6: How do you publish a Power BI report?

#### Answer:

Click on **File > Publish > Publish to Power BI Service**, log in to your account, and select the desired workspace for publishing.

# Q7: What is a data model in Power BI?

#### Answer:

A data model in Power BI organizes data by creating relationships between tables, calculated columns, and measures for effective analysis.

# Q8: What is a card visual used for in Power BI?

## Answer:

A card visual is used to display a single metric or value, like total sales or profit, prominently on the report.

# Q9: How do you create relationships between tables in Power BI?

# Answer:

- 1. Go to the **Model View**.
- 2. Drag and drop fields between tables to create relationships.