1. **What is Power BI, and how is it used?**  
   Power BI is Microsoft’s tool for data visualization and analysis, allowing users to create reports and dashboards.
2. **What are the key components of Power BI?**
   * **Power BI Desktop**: Report building and data modeling.
   * **Power BI Service**: Cloud-based platform for collaboration.
   * **Power BI Mobile**: Mobile report access.
3. **What data sources can Power BI connect to?**  
   It supports various sources, including Excel, SQL Server, Azure, SharePoint, and online services like Google Analytics.
4. **How do you load data into Power BI?**  
   Use the “Get Data” feature, then choose a data source and import or use DirectQuery.
5. **What is the Power Query Editor?**  
   A tool in Power BI for transforming and cleaning data before it’s used in reports.
6. **Explain the difference between Power BI Desktop and Power BI Service.**  
   Power BI Desktop is for creating reports; Power BI Service is for sharing and collaborating on reports online.
7. **What is a dashboard in Power BI?**  
   A collection of visuals from multiple reports presented on a single page for a comprehensive overview.
8. **Describe the use of visuals in Power BI.**  
   Visuals like bar charts, tables, and maps present data insights effectively.
9. **How do you create a report in Power BI?**  
   Import data, transform it using Power Query, and create visuals on the canvas in Power BI Desktop.
10. **What is a Power BI workspace?**  
    An environment in Power BI Service for sharing reports and dashboards with specific users.

Data Modelling

1. **Explain data modeling in Power BI.**  
   Structuring and relating tables for effective data analysis using relationships.
2. **What is a relationship in Power BI?**  
   Links between tables, based on matching fields, allowing data analysis across tables.
3. **How do you create a calculated column?**  
   Use DAX to define new columns using existing data fields.
4. **What are measures in Power BI?**  
   DAX formulas that perform calculations on data, used for aggregating and summarizing.
5. **Explain what a DAX function is.**  
   Data Analysis Expressions (DAX) are formulas used for data modeling and analysis.
6. **Describe the difference between a calculated column and a measure.**  
   Calculated columns store results in the data model; measures perform calculations dynamically.
7. **What is a hierarchy, and how is it used in Power BI?**  
   A structured view of data for drill-down analysis, like year > quarter > month.
8. **Explain what bidirectional cross-filtering is.**  
   Filtering that allows data to flow both ways between related tables.

DAX (Data Analysis Expressions)

1. **What is DAX, and why is it important?**  
   A formula language in Power BI, crucial for custom calculations and complex data analysis.
2. **Name some common DAX functions you’ve used.**  
   Examples: SUM, AVERAGE, CALCULATE, FILTER, and IF.
3. **How do you create a DAX measure?**  
   In Power BI Desktop, use the “Modeling” tab to write a formula using DAX.
4. **Explain the purpose of the CALCULATE function in DAX.**  
   Modifies the context in which a data expression is evaluated, useful for advanced filtering.
5. **What does the FILTER function do in DAX?**  
   Returns a table that only contains rows meeting specified conditions.
6. **How can you use the SUMX function in calculations?**  
   SUMX iterates over a table, performing a row-wise calculation and summing the results.

Data Visualization

1. **What is a slicer, and how do you use it?**  
   An interactive visual that filters data on the report page.
2. **Describe how you would use a scatter chart.**  
   To show the relationship between two numeric values, with optional bubbles for data points.
3. **How do you create a drill-through in a report?**  
   Configure drill-through by setting a field in the target page’s drill-through filter.
4. **Explain the use of conditional formatting in Power BI.**  
   Applies dynamic styling based on field values, like coloring cells or bars by thresholds.
5. **What is a tooltip, and how is it customized?**  
   Tooltips display details when hovering over a visual and can be customized with additional data.
6. **How do you use a card visual?**  
   A single-value visual for displaying key metrics, like total sales or profit.
7. **What is the difference between a report and a dashboard?**  
   A report is a multi-page data analysis view; a dashboard is a one-page summary of insights.

Advanced Topics

1. **What is Row-Level Security (RLS), and how do you implement it?**  
   RLS restricts data access to certain users. It’s implemented in Power BI Desktop by creating roles and in the Power BI Service by assigning roles.
2. **How do you optimize the performance of a Power BI report?**  
   Simplify visuals, reduce data size, optimize DAX, and use aggregations.
3. **What are bookmarks in Power BI, and how are they used?**  
   Bookmarks capture the current view of a report, used for navigation and storytelling.
4. **Explain how DirectQuery differs from Import mode.**  
   DirectQuery retrieves data from the source in real-time; Import mode loads data into Power BI, which is faster but requires refreshes.
5. **What is query folding, and why is it important?**  
   Query folding translates Power Query steps into native queries, improving efficiency for large datasets.
6. **How do you schedule data refresh in Power BI Service?**  
   Use the “Scheduled Refresh” feature to automate data updates at specified intervals.
7. **How do you share reports and dashboards with others?**  
   Through Power BI Service, by publishing to a workspace or sharing links with specific permissions.
8. **What are some limitations of Power BI?**  
   Examples: Data model size restrictions, limitations on DirectQuery connections, and complex DAX formula learning curve.

* **<https://www.testgorilla.com/blog/power-bi-interview-questions/>**
* **<https://www.interviewbit.com/power-bi-interview-questions/>**