#### 1. What is Power BI?

Answer: Power BI is a business analytics tool by Microsoft that allows users to visualize data and share insights across the organization.

#### 2. What are the parts of Power BI?

Answer: Power BI Desktop, Power BI Service, Power BI Mobile, Power BI Gateway, Power BI Report Server.

#### 3. What is Power Query?

Answer: Power Query is a data connection technology used in Power BI to clean and transform data.

## 4. Difference between Power BI Desktop and Power BI Service?

Answer: Desktop is for creating reports; Service is for publishing and sharing them online.

#### 5. What is DAX?

Answer: DAX (Data Analysis Expressions) is a formula language used for creating custom calculations in Power BI.

#### 6. What are Measures and Calculated Columns?

Answer: Measure is used for aggregated calculations; Calculated column is evaluated row by row.

## 7. What is a Dashboard in Power BI?

Answer: A single-page summary view with visuals from different reports.

## 8. What are Relationships in Power BI?

Answer: They define how tables are connected using common columns.

#### 9. What are slicers?

Answer: Visual filters used to narrow data in reports.

## 10. What is the difference between direct query and import mode?

Answer: Import stores data in Power BI; DirectQuery fetches data in real-time.

## 11. How would you handle large datasets in Power BI?

Answer: Use aggregations, incremental refresh, and optimize data models.

## 12. How do you schedule a data refresh in Power BI?

Answer: Through the Power BI Service using a data gateway.

## 13. Explain the difference between Star Schema and Snowflake Schema.

Answer: Star schema is simple and fast; Snowflake is normalized and complex.

#### 14. What are bookmarks in Power BI?

Answer: Bookmarks capture the current state of a report for navigation or storytelling.

#### 15. How do you share a Power BI report with others?

Answer: Via Power BI Service - by link, workspace, or embed.

#### 16. What are visualizations in Power BI?

Answer: Graphical representations like bar charts, pie charts, maps, etc.

#### 17. Can we use Excel data in Power BI?

Answer: Yes, Power BI connects directly to Excel files.

#### 18. What is a KPI visual in Power BI?

Answer: It shows performance compared to a target value.

#### 19. What is a drill-through in Power BI?

Answer: Allows users to right-click and view detailed related data on another page.

# 20. What is row-level security (RLS)?

Answer: Restricts data access for users based on filters defined in Power BI.

## 21. What is a hierarchy in Power BI?

Answer: A data structure with levels like Year > Quarter > Month > Day.

#### 22. Can we connect Power BI to SQL Server?

Answer: Yes, it can directly connect to SQL Server databases.

# 23. What is a tooltip in Power BI?

Answer: A small popup showing more data when hovering over a visual.

## 24. What is the use of the Power BI Gateway?

Answer: It connects on-premises data to Power BI Service.

#### 25. What is a custom visual in Power BI?

Answer: Third-party visuals imported from the marketplace.

# 26. How do you handle missing values in Power BI?

Answer: Use Power Query to replace, remove, or fill null values.

## 27. How do you sort a visual by a custom order?

Answer: Create a custom column and use 'Sort by Column'.

#### 28. What is Power BI Dataflow?

Answer: Cloud-based ETL pipelines reusable across reports.

#### 29. What is the difference between a dashboard and a report?

Answer: Dashboard is one page; Report can have multiple pages.

## 30. Can we create relationships manually?

Answer: Yes, using 'Manage Relationships' feature.

## 31. What are quick measures?

Answer: Predefined DAX calculations created with clicks.

## 32. What are common Power BI data sources?

Answer: Excel, SQL Server, SharePoint, Web, CSV, Azure, etc.

# 33. How do you optimize reports for performance?

Answer: Use star schema, aggregations, limit visuals, reduce data size.

# 34. What is incremental refresh?

Answer: Updates only new/changed data to save time.