### **Question 1:**

If you have two queries that have different data but the same column headers, and you want to combine both tables into one query with all the combined rows, which operation should you perform?

**Answer**: Append

### **Question 2:**

For example, you might want to place three categories of products in one larger category, or you might want to see sales figures put into sizes of 1000 dollars instead of chunks of 923-dollar sizes. How will you do?

**Answer**: By grouping and binning

## **Question 3:**

Which transformations prevent query folding?

**Answer**: (1) Merging queries based on different sources.

- (2) Appending queries based on different sources.
- (3) Adding index columns.
- (4) Adding custom columns with complex logic.

## **Question 4:**

What is storage mode property in a model? Describe them?

Answer: Storage mode property is a property that you can set on each table in your model and controls how power bi caches the table data.

You set this property to one of these three values.

- (1) import
- (2) directquery
- (3) dual

#### **Question 5:**

In a Power BI Desktop model design, which type of object do you create to connect multiple tables?

**Answer**: Relationship

### **Question 6:**

When connecting to a SQL Server database to get data, what language should you use to extract data?

**Answer**: t-sql

## **Question 7:**

What does Bi-directional cross filtering in Power BI?

**Answer:** Bi-directional cross-filtering enables filters to work on both sides of a relationship.

### **Question 8:**

Which tool would you use to clean your data before building reports?

**Answer**: power query editor

#### **Question 9:**

What is the common flow of activity in Power BI?

<u>Answer</u>: Bring data into Power BI Desktop and create a report, share it to the Power BI service, view and interact with reports and dashboards in the service and Power BI mobile.

### **Question 10:**

What can be achieved by removing unnecessary rows and columns?

Answer: Deleting unnecessary rows and columns will reduce a semantic model size and it's good practice to load only necessary data into your semantic model.

#### Question 11:

What are implicit measures and explicit measures?

**Answer**: Implicit measures are automatic behaviors that allow visuals to summarize model column data.

Explicit measures, also known simply as measures, are calculations that you can add to your model.

#### Question 12:

What is the use of advanced editor in Power bi?

<u>Answer</u>: If you want to observe the code that the Power Query editor is creating with each step, or want to create your own shaping code, you can use the advanced editor.

#### Question 13:

What is difference between cross filtering and cross highlighting?

Answer: Cross-highlighting Selecting a value in one visual highlights the related data in visuals such as column and bar charts. Cross-highlighting doesn't remove the data from those visuals. The unrelated data is still visible but dimmed. Cross-filtering Selecting a value in one visual acts more like a filter in other visuals, such as line charts, scatter charts, and maps. In those visuals, only the related data remains visible. The unrelated data isn't visible, just as you'd see with a filter.

#### Question 14:

Give the answer -

DATEDIFF ( DATE ( 2019, 07, 01), DATE ( 2021, 12, 31 ), MONTH )

**Answer** : 29

#### Question 15:

Give the answer

CALENDAR (DATE (2015, 1, 1), DATE (2015, 1, 5))

**Answer**: 2015-01-01

2015-01-02

2015-01-03

2015-01-04

2015-01-05

### **Question 16:**

Can reports and visualizations be pinned to a dashboard from Power BI Desktop?

Answer: Reports and visualizations can't be pinned to a dashboard from Power BI Desktop. To do that, you'll need to publish to your Power BI site.

#### **Question 17:**

What is Include and exclude filters?

<u>Answer</u>: Include and exclude filters are automatically added to the filter pane when you use the include or exclude functionality for a visual. If you can edit a report, you can delete, lock, hide, or sort this filter in the pane. You can't edit, clear, or rename an include or exclude filter.

#### **Question 18:**

What is the purpose of relationship in Power bi?

<u>Answer</u>: A model relationship propagates filters applied on the column of one model table to a different model table. Filters will propagate so long as there's a relationship path to follow, which can involve propagation to multiple tables.

#### **Question 19:**

What are the requirements to create a date table?

**Answer:** It must have a column of data type Date or date/time, known as the date column.

The date column must contain unique values.

The date column must not contain BLANKs.

The date column must not have any missing dates.

The date column must span full years.

The date table must be indicated as a date table.

#### Question 20:

What is semantic model?

**Answer**: A semantic model is a collection of data that Power BI uses to create its visualizations.

### Question 21: What is difference between import and direct query connectivity modes?

<u>Answer</u>: Import: A copy of the data from the selected tables and columns imports into Power BI Desktop. As you create or interact with visualizations, Power BI Desktop uses the imported data. To see underlying data changes after the initial import or the most recent refresh, you must import the full semantic model again to refresh the data.

DirectQuery: No data imports into Power BI Desktop. As you create or interact with visualizations, Power BI Desktop queries the underlying data source, so you're always viewing current data.

## **Question 22:**

An iterator function always includes at least two arguments. What are they?

**Answer :** Table and expression

## **Question 23:**

Why do we use dax variables? and what are their benefits?

<u>Answer</u>: You can declare DAX variables in your formula expressions. When you declare at least one variable, a RETURN clause is used to define the expression, which then refers to the variables.

- 1.Improving the readability and maintenance of your formulas.
- 2.Improving performance because variables are evaluated once and only when or if they're needed.

#### **Question 24:**

Which DAX function can summarize a table?

**Answer**: countrows

## **Question 25:**

In what order does an analytic query implement its phases?

**Answer: filter, group, summarize** 

## **Question 26:**

What are the three modalities of Power BI designed to let people create, share, and consume business insights in the way that serves them, or their role, most effectively?

**Answer**: desktop, service and mobile apps

## Question 27: What are different ways to optimize query performance in Power bi?

Answer: - Process as much data as possible in the original data source.

- Use native SQL queries.
- Separate date and time, if bound together.

### **Question 28:**

What are the techniques that you can use to add columns to a model table?

**Answer:** 1. Add columns to a view or table

- 2. Add custom columns to Power Query queries.
- 3. Add calculated columns to model tables.

#### **Question 29:**

You want your report readers to be able to view your bar chart visual for any year that they choose. What tool could you use?

**Answer**: slicer

#### **Question 30:**

What can you do to improve performance when you're getting data in Power BI?

**Answer**: remove unnecessary columns and rows

### **Question 31:**

Which data analyst task has a critical performance impact on reporting and data analysis?

**Answer: model** 

**Question 32:** 

What are the building blocks of Power BI?

**Answer**: Datasets

Visualization

Reports

Dashboards

Tiles

Question 33: Which filter level is analogous to the slicer in a report on the Power BI desktop?

**Answer**: page level filter

### **Question 34:**

Can you explain the concept of data shaping in Power BI?

<u>Answer</u>: Data shaping is transforming and restructuring data to make it suitable for analysis and reporting. In Power BI, data shaping can be performed using Power Query, which provides a wide range of transformation functions, such as filtering, sorting, merging, appending, pivoting, and aggregating data.

#### Question 35:

Explain the difference between Power BI Desktop and Power BI Service.

<u>Answer</u>: Power BI Desktop is a Windows-based application used for creating reports and data models, while Power BI Service is a cloud-based platform for sharing, collaborating, and publishing reports and dashboards.

### **Question 36:**

How can you share a Power BI report with external users?

**Answer**: Sharing a report through the Power BI Service by granting access to specific users or groups.

Publishing a report to the web, which makes it publicly accessible.

### **Question 37:**

What is the difference between a KPI and a card visualization in Power BI?

Answer: A KPI (Key Performance Indicator) visualization displays a single metric, a target value, and an indicator that shows the performance relative to the target.

A card visualization, on the other hand, displays a single metric without any target or performance indicator.

### **Question 38:**

What are the different types of data sources supported by Power BI?

**Answer**: - Relational databases

- Cloud-based services
- File-based sources
- Web-based sources
- On-premises data sources

Question 39: What is the difference between a clustered and a non-clustered column chart in Power BI?

Answer: A clustered column chart displays data separately for each category, with columns grouped by the category axis.

A non-clustered column chart displays data in a single column for each category, with segments stacked on top of each other to represent different data series.

## **Question 40:**

What are the different types of relationships in Power BI?

**Answer:** One-to-one

One-to-many

Many-to-many.

#### **Question 41:**

What is a collection of reports and dashboards called in Power BI?

**Answer**: an app

#### Question 42:

What is the difference between a slicer and a filter in Power BI?

<u>Answer</u>: A slicer is a visual element in Power BI that allows users to filter data in a report by selecting specific values or ranges.

On the other hand, filters are applied directly to the data model or individual visualizations and are not visible to the end-user.

### **Question 43:**

What is the difference between a line chart and an area chart in Power BI?

Answer: A line chart displays data as points connected by straight lines, typically used to visualize trends or changes.

An area chart is similar to a line chart but fills the area between the line and the axis with color, emphasizing the magnitude of the changes.

#### **Question 44:**

What is the difference between a matrix and a table visualization in Power BI?

<u>Answer</u>: A matrix visualization displays data in a tabular format with hierarchical row and column headers, allowing data to be grouped and summarized across multiple levels.

A table visualization displays data in a simple tabular format without any hierarchy or summarization.

#### Question 45: What is the role of the Data Gateway in Power BI?

<u>Answer</u>: The Data Gateway is a service that helps you transfer secure data between on-premises data sources and Power BI Service. It acts as a bridge between the two, allowing Power BI to access and refresh data from on-premises sources without exposing the data source directly to the internet..

## **Question 46:**

What is the role of bookmarks in Power BI?

<u>Answer</u>: Bookmarks in Power BI are used to capture the current state of a report, including filters, slicers, and the visibility of visualizations. Bookmarks can be used to create interactive reports with navigation buttons, allowing users to switch between different views or scenarios without modifying the underlying data model.

#### **Question 47:**

What is the role of themes in Power BI?

<u>Answer</u>: Themes in Power BI apply a consistent color scheme, font, and formatting to reports and dashboards. Themes can be applied at the report or Power BI Service levels, allowing organizations to create a consistent look and feel across all their reports and dashboards.

#### Question 48:

What is the difference between a bar chart and a column chart in Power BI?

<u>Answer</u>: A bar chart displays data as horizontal bars, with the length of the bars representing the values. A column chart, on the other hand, displays data as vertical bars, with the height of the bars representing the values..

## **Question 49:**

What should you define in your data model to enable drill-up/down analysis?

**Answer:** a hierarchy

### **Question 50:**

Which kind of visualization should you use to analyze pass rates for multiple exams over time?

**Answer**: a line chart

A table visualization displays data in a simple tabular format without any hierarchy or summarization.

## **Question 51: Explain the concept of data lineage in Power BI?**

<u>Answer</u>: Data lineage is the process of tracking the flow of data from its source to its destination, including all the transformations and relationships along the way.

### **Question 52:**

Explain the concept of conditional formatting in Power BI?

Answer: Conditional formatting is a feature that allows you to apply different formatting styles to data elements based on their values or other conditions.

#### **Question 53:**

What is the difference between a KPI and a card visualization in Power BI?

<u>Answer</u>: A KPI visualization displays a single metric, a target value, and an indicator that shows the performance relative to the target. A card visualization displays a single metric without any target or performance indicator.

#### **Question 54:**

What is the role of Power BI templates?

Answer: Power BI templates are pre-built report structures that include data model schema, visualizations, and formatting but without the actual data.

## **Question 55:**

Explain the term responsive slicers?

Answer: On a report page, you can easily resize a responsive slicer to various sizes and shapes, and the data contained in it should be rearranged according to it.

### **Question 56:**

Why use selection pane in Power BI?

<u>Answer</u>: Selection Pane helps you to take control over visuals which require to be displayed and which should not be displayed. It allows you to combine multiple visual pages in the group.

Question 57: What is grouping? How can you use it?

Answer: Power BI Desktop allows you to group the data into small chunks. For grouping, you should use Ctrl + click to select multiple elements in the visual.

## **Question 58:**

What is Power Pivot?

<u>Answer</u>: Power Pivot is an in-memory component which offers highly compressed data storage. It helps you to build a data model, creating formulas, relationship, calculated columns from various resources.

#### **Question 59:**

What are Tiles in Power BI?

Answer: Tile is an important feature of power BI services and can be said as a picture of the data which can be pinned to the dashboard.

#### **Question 60:**

Explain the term data alerts.

Answer: Alert works on data that is refreshed, Power BI looks for an alert, and it reaches the alert threshold or the limit then the alert will be triggered.

## **Question 61:**

What are the method to hide and unhide a specific report in Power BI?

Answer: To hide and unhide specific report, you have to go to selection Pane in the menu bar, and press hides/unhide toggle button to bookmark.

### **Question 62:**

How can you compare Target and Actual Value from a Power BI report?

**Answer**: You need to use Gauge chart to compare two different measure.

### **Question 63: Explain the term Custom Visuals.**

**Answer**: Graphs or visual which are not included in Power BI desktop are imported for better visualization.

## **Question 64:**

Explain the term incremental refresh?

**Answer:** Increment refresh is a newly added data so that there is no need to truncate or load the entire data.

### **Question 65:**

Why is TOP N not accessible for the Page and Report Level Filter?

**Answer**: TOP N is not accessible for the Page and Report Level Filters because their channels are associated with different visuals.

### **Question 66:**

Explain z-order in Power BI?

<u>Answer</u>: Z-order is a design strategy which is used for arranging visual over shapes. It can be defined as an implementation method which can be applied whenever reports have multiple elements.

## **Question 67:**

What is Interactions in Power BI?

Answer: The term interactions refers to the ability of visual elements used in a report to interact with each other in a way that shows how they are related. When you interact with one visualization, it can dynamically influence the data displayed in other visuals on the same report page.

#### **Question 68:**

How can we maintain/pass slicer values across bookmarks?

Answer: For that, you can uncheck/deselect the Data Option in the bookmark option. Do it for all applicable bookmarks.

Question 69: Describe what a star schema is and how it works?

<u>Answer</u>: A star schema is made up of a central fact table and multiple dimension tables branching off this fact table, giving the appearance of a star. A fact table is made up of values that can be aggregated, as well as one or more keys that link to the dimension tables.

### **Question 70:**

What is the difference between DAX functions, expressions, and variables?

**Answer:** DAX functions are pre-built definitions that allow you to perform calculations on your data.

DAX expressions are made up of one or more DAX functions.

Variables store the results of a DAX expression for use within a particular DAX expression.

#### **Question 71:**

What are the different views that Power BI Desktop contains?

**Answer**: Report View

**Data View** 

**Model View** 

#### Question 72:

How is data security implemented in Power BI?

**Answer** Power BI applies models with Row Level Security.

Dynamix security involves using USERNAME functions in definitions.

### **Question 73:**

what is difference between power bi report server and power bi service?

Answer: Power BI Report Server is designed for on-premises deployment and caters to organizations that prefer to host their BI infrastructure internally. In contrast, the Power BI Service is a cloud-based platform managed by Microsoft, offering additional features such as automatic updates, scalable storage, and built-in collaboration tools.

### **Question 74:**

What are query parameters in power bi?

<u>Answer</u>: Query parameters are the parameters which we can use as/in queries in Power BI query editor. We can create new parameters in Power BI Desktop and later use them in queries, data models and reports. Query parameters contain a selected set of data values from the entire dataset.

**Question 75: Which table functions will you use to group data in Power BI?** 

<u>Answer</u>: There are two main DAX functions which we can use to group data in Power BI; SUMMARIZE() and SUMMARIZECOLUMNS.

### **Question 76:**

Tell us about query folding in Power Query.

<u>Answer</u>: Query folding is the process of converting or translating the code in Power Query Editor into SQL. Query folding is needed when codes or queries are getting executed by the source database instead of the client machine.

#### **Question 77:**

What are the different types of data refreshes in Power BI?

**Answer**: Package refresh

Model or Data refresh

Tile refresh

Visual container refresh

#### **Question 78:**

In what ways can you shape or organize data in Power BI?

**Answer** Removing the columns and rows from a data table.

Adding indexes for the data tables.

Applying a Sort Order on the values of a data table.

### **Question 79:**

What gateways are available in Power BI and why use them?

#### Answer:

Personal Gateway: Data can be imported and valid on Power BI Service only. Also, this gateway can only be used by a single person.

On-premises Gateway: This gateway is the advanced form of Personal gateway. It supports Direct Query, and multiple users can use this for refreshing data.

#### **Question 80:**

What is Power View?

<u>Answer</u>: Power View is a technology for data visualization that allows users to create interactive graphs, charts, maps, and other visualizations that help bring data to life.

**Question 81: Explain the filled map in Power BI.** 

**Answer**: A filled map will show you data points in geospatial areas instead of just showing points on a map.

## **Question 82:**

Which is a single-page canvas that uses visualizations to depict a story?

**Answer**: The single-page canvas used for storytelling through visualizations in Power BI is known as a Power BI Dashboard.

### **Question 83:**

How to perform query tasks on the Power BI desktop?

<u>Answer</u>: Query tasks in Power BI Desktop are executed using the Power Query editor. This involves opening the editor, connecting to data sources, applying transformations, and finalizing the changes to the data model.

## **Question 84:**

Why should general formatting be applied to data in Power BI?

<u>Answer</u>: Applying general formatting to data in Power BI is essential for data clarity and precision. It includes creating custom columns using specific formulas, which enhance the dataset's analytical value.

### **Question 85:**

What are the differences between a Power BI dataset, a Report, and a Dashboard?

Answer: Visualizations present data graphically, datasets are collections of data, reports compile visualizations, dashboards provide a snapshot view of metrics.

### Question 86:

Is it possible to create multiple dynamic connections between two tables?

Answer: It is not feasible to establish more than one dynamic connection between two tables at a time in Power BI.

**Question 87: How to use Power BI on mobile devices?** 

<u>Answer</u>: Power BI is accessible on mobile devices through apps compatible with iOS, Android, and Windows 10. These apps can be downloaded from respective app stores and offer on-the-go data interaction and visualization.

## **Question 88:**

How to schedule refresh feature work?

<u>Answer</u>: The schedule refresh feature in Power BI allows for automated data updates on a regular or weekly basis at selected times. Without a Power BI subscription, a maximum of one refresh can be scheduled. Users can set the frequency and timing through the scheduled refresh menu options.

#### Question 89:

What are paginated reports?

<u>Answer</u>: A paginated report is an organized, document style page to page report. Paginated reports are saved as paged documents where we can expand the document vertically and horizontally to view the complete data. These reports are pixel-perfect with a fixed layout. They can be the best options when we want to print a report from a PDF or Word file. The extension used for paginated files are .RDL.

#### **Question 90:**

How can we use a gateway for Power BI?

<u>Answer</u>: Install a gateway in your system.Add users to the gateway who need to access data from on-premises data sources. Connect to on-premises data sources. This step is important because this is how users can use data from on-premises data sources for data analysis and report generation.

## **Question 91:**

How are relationships defined in Power BI Desktop?

Answer: Manually: Users can manually define relationships between tables using primary and foreign keys.

With the autodetect feature: When enabled, this inherent feature of Power BI detects relationships between tables and creates them automatically.

### **Question 92:**

Why and how would you use a custom visual file?

**Answer**: A custom visual file helps users if none of the already existing visuals fit the needs of the business.

**Question 93: What is Power Pivot Data Model?** 

Answer: The Power Pivot Data Model encompasses a range of integral elements such as data tables, data types, table relationships, and columns.

## **Question 94:**

What is the way to present a story in Power BI?

**Answer:** In Power BI, stories are presented through the Dashboard, where each chart or report is displayed on a single page.

### **Question 95:**

What is a risk of having null values in a numeric column?

**Answer**: That function AVERAGE of data will be incorrect.

### **Question 96:**

Which statement about calculated columns is true?

**Answer**: Calculated column formulas are evaluated by using row context.

## **Question 97:**

Which of the following capabilities is unique to the Filters pane?

**Answer: Top N filtering** 

**Question 98:** 

Which of the following capabilities is unique to slicers?

**Answer**: Horizontal orientaton

Question 99: What is the use of sensitivity labels in Power BI?

<u>Answer</u>: Sensitivity labels are applied to Power BI reports, dashboards, datasets, and dataflow to secure the content against unauthorized users and requests.

Question 100: Where does the data get stored in Power BI?

**Answer**: Two places data can get stored in Power BI tables:

**Fact Tables** 

**Dimension Tables**