#### Section 1

- (Please find the answers)
- Q1) What is Power BI Desktop application?
- Q2) What data sources can Power BI connect with for data exploration?
- Q3) What are content packs?
- Q4) What are all the types of Content packs?
- Q5) What are Building Blocks in Power BI?
- Q6) What is Visualization?
- Q7) What is report in Power BI?
- Q8) What is Dashboard in power BI?
- Q9) What is Tiles in power BI?
- Q10) What are all the different types of filters available in Power BI Reports?
- Q11) What is Visual level filter?
- Q12) What is page level filter?
- Q13) What is report level filter?
- Q14) What are all the parts of Power BI?
- Q15) What is Power BI is a cloud-based business service?
- Q16) What is Excel BI Tool Kit?
- Q17) What are all the types of Data Refresh Options available in Power BI?
- Q18) What is DAX in power BI?
- Q19) Where we can apply DAX functions?

- Q20) Mention some of the most common DAX Functions used?
- Q21) What is unique about the CALCULATE functions?
- Q22) What is the default visual interaction?
- Q23) What are all the connectivity modes available?
- Q24) What is Power Pivot?
- Q25) What are all the benefits of using variables?
- Q26) what are the ways to create a bar chart?
- Q27) What are the types of Data Refresh in Power BI?
- Q28) What is DAX?
- Q29) Write a Sample formula for DAX syntax:
- Q30) Do I need to sign up with my work email?
- Q31) What is xVelocity in-memory analytics engine?
- Q32) Is Power BI available within campus?
- Q33) Where else can we view on-premises?
- Q34) What are the Power BI mobile devices?
- Q35) What are the Connectors to databases and other datasets?
- Q36) What are the Organizational content packs?
- Q37) What are the different BI add ins?
- Q38) What do I need to install in order to use Power BI?
- Q39) Where can you download the Power BI mobile apps?
- Q40) What are the policies for on-premises?

- Q41) Where do I get started with Power BI?
- Q42) How can I buy Power BI?
- Q43) Does Power BI meet national, regional, and industry-specific compliance requirements?
- Q44) What has happened to the Power BI Office 365 experience?
- Q45) How can we create a dashboard?
- Q46) What do you know about Power BI?
- Q47) How Power BI is different from Excel BI toolkit?
- Q48) What do you know about Power BI Desktop
- Q50) What is the need for Power BI?
- Q51) State the features of Power BI.
- Q52) State the advantages of Power BI.
- Q53) What do you mean by Self Service Business Intelligence?
- Q54) What are the data sources supported by Power BI? Explain
- Q55) Explain Content pack in Power BI.
- Q56) What is the use of filters in Power BI reports? Explain.
- Q57) State the differences between Power BI and Tableau.
- Q58) State the differences between Direct Query method and Import method.
- Q59) State the advantages of Direct query method.
- Q60) State the limitations of Direct query method.

- Q61) Tell me about Power pivot.
- Q62) what do you know about Power Pivot data model?
- Q63) what do you mean by DAX?
- Q64) State the differences between Power BI and SSRS.
- Q65) State the differences between Power BI and Power BI PRO.
- Q66) Explain about data modelling in Power BI.
- Q67) how do you create calculated columns in Power BI.
- Q68) how do you define a dataset?
- Q69) what do you mean by dashboards in Power BI?
- Q70) how do you create dashboards in Power BI?
- Q71) what do you mean by reports in Power BI?
- Q72) what do you mean by tiles in Power BI dashboard?
- Q73) what do you know about Power Query?
- Q74) what is the language used in Power query to perform ETL?
- Q75) Explain Focus mode present in Power BI dashboard.
- Q76) as per your knowledge, tell me the platforms, which Power BI application supports?
- Q77) Tell me about Data Gateway in Power BI service.
- Q78) Explain how to create visualizations in Power BI.
- Q79) what do you mean by Combination charts in Power BI?

- Q80) how do you modify colours in charts?
- Q81) how will you add shapes images and text box to your visualization in Power BI.
- Q82) is it possible to create duplicate reports. If yes, how?
- Q83) how do you integrate Microsoft Excel to Power BI?
- Q84) how do you share reports through Power BI Desktop?
- Q85) what do you know about Power BI designer?
- Q86) what are the DAX functions available in Power BI.
- Q87) State the list of aggregate functions and counting functions in DAX?
- Q88) what are the calculation types available in DAX.
- Q89) what are the logical and date functions available in DAX?
- Q90) what are the information and text functions available in DAX.
- Q91) how do you select admin role in Power BI?
- Q92) what are the Power BI versions available and how about the pricings?
- Q93) Tell me about REST API and its association with Power BI.
- Q94) Explain the security level of Power BI.
- Q95) what are the repositories available in Power BI data storage?
- Q96. What do you mean by BI?
- Q97. Mention some of the Power BI components?

- Q98. What are the important parts included in the Microsoft self-service Business Intelligence solution?
- Q99. What do you mean by Power BI?
- Q100. What do you mean by Excel BI Toolkit?
- Q101. What is the difference between Power BI and Power BI Pro?
- Q102. Mention the difference between Self-service BI and managed enterprise BI?
- Q103. Mention the Power BI Cost?
- Q104. What do you mean by Power BI Desktop?
- Q105. Mentions some of the Power BI Building blocks?
- Q106. What are the fundamentals required to use Power BI?
- Q107. What are the formats available for Power BI?
- Q108. Mention the work email address supported currently?
- Q109. Why do you need a content pack?
- Q110. What do you mean by DAX and explain its basic concepts?
- Q111. Mention some of the data type categories?
- Q112. Mention a few data sources in the Get Data menu?
- Q113. What do you mean by 'Get Data' in Power BI?
- Q114. What does Report indicate in Power BI?
- Q115. What are the important capabilities included in the Power BI?
- Q116. Where are the data of Power BI stores?

- Q117. Why do you need a Power BI tool?
- Q118. What are the data types supported by DAX?
- Q119. Mention some of the Power BI applications?
- Q120. What you mean by Grouping and how to use it in BI?
- Q121. Mention some of the Power BI Dashboard features?
- Q122. What is the language used in Power Query?
- Q123. Mention some of the data shaping techniques?
- Q124. Are there any prerequisites to connect to a database in Azure SQL Database?
- Q125. Mention some of the advantages of using variables in DAX?
- 126. What is BI?
- 127. What is Self-Service Business Intelligence?
- 128. What do you know about Power BI?
- 129. List the data sources that Power BI can connect to?
- 130. List the important components of Power BI?
- 131. What are the key components of Power BI?
- 132. What is a Filter and explain different types of Filters available in Power BI?
- 133. What is meant by Content packs in Power BI?
- 134. What are Major Power BI tools?
- 135. What is meant by the term 'Report' in Power BI?
- 136. Explain about Dashboards in Power BI?
- 137. What is a Power BI Service?

- 138. Where the data is basically stored in Power BI?
- 139. What are the various views available in Power BI Desktop?
- 140. What are the different types of data sets available in Power BI?
- 141. Explain about Responsive Slicers?
- 142. What is an Advanced editor in Power BI?
- 143. List two types of Connectivity modes used in Power BI?
- 144. what is DAX?
- 145. List the most commonly used DAX functions?
- 146. What are some benefits that we get from using variables in DAX?
- 147. Explain the different Power BI add-in?
- 148. What is a Power Pivot data model?
- 149. Explain the Power Pivot Data Model?
- 150. What is the xVelocity in-memory analytics engine in Power BI?
- 151. Explain about Power Query?
- 152. List some of the common Power Query Transformations?
- 153. Can we use SQL and Power Query together?
- 154. Which language is used in Power Query?

What are the parts of Microsoft self-service business intelligence solution?

What is self-service business intelligence?

What data sources can Power BI connect to?

What are Building Blocks in Power BI?

#### Section 2

(with Answers)

#### 1. What is BI?

Business intelligence is a technology-driven method. It helps you to analyze data and to provide actionable information which helps corporate executives, business managers, and other users to take decisive business decisions.

#### 2. What is a Power BI?

Power BI is a Business Intelligence and Data Visualization tool which helps you to convert data from the various data source into interactive dashboards and BI reports. It provides multiple software connectors and services.

## 3. Why use Power BI?

Here are four primary reasons for using Power BI tool:

- Pre-built dashboards and reports for SaaS Solutions.
- Power BI allows real-time dashboard updates.
- Offers Secure and reliable connection to your data sources in the cloud or on-premises

- Power BI offers fast deployment, hybrid configuration, and secure environment.
- Helps you in data exploration using natural language query
- **4. What are the important components of Power BI?** Important components of Power BI are: 1) Data Integration, 2) Data Processing, and 3) Data Presentation

#### 5. What is Dax Function?

It is a formula expression language called (DAX) that can be used with various visualization tools like Power BI. It is also known as a functional language, where the full code is kept inside a function.

### 6. What are the data types of Dax?

Data types of Dax are: 1) Numeric, 2) Boolean, 3) DateTime, 4) String, and 5) Decimal.

### 7. What are the essential applications of the Power BI?

Power BI is mainly used by:

- PMO Project Management Office
- Business & Data Analyst
- Developer & Database Administrator
- IT Team, IT Professional
- Consumer for End User Report
- Data Scientist

## 8. What are the drawbacks of using Power BI?

Here, are the main drawbacks of Power BI:

- Dashboards and reports only shared with users having identical email domains.
- Power Bl does not mix imported data, which is accessed from real-time connections.

- Power BI can't accept file size larger than 1 GB.
- Dashboard does not accept or pass user, account, or other entity parameters.

### 9. Name out three important Power BI tools

Three important power BI tool are:

- Power BI Desktop—It is used for desktop computers
- Power BI service—It is an online software as a service tool
- Mobile Power BI apps—They are used for iOS and Android devices.

## 10. What are the important components of the Power BI toolkit, and what do they do?

- Power Query: It allows you to discover, access, and consolidate information from different sources.
- Power Pivot: A modeling tool.
- Power View: It is a presentation tool for creating charts, tables, and more.
- Power Map: Helps you to create geospatial representations of your data.
- Power Q&A: Allows you to use natural language to get answers to questions.

## 11. What types of data types are available in Power BI?

Important Data sources used in Power BI Desktop are:

- All
- File
- Database
- Power BI
- Azure
- Online Services
- Other

#### 12. What is grouping? How can you use it?

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. Right-click one of those elements which appear in groups window.

### 13. Explain the term responsive slicers.

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. In case if the visual becomes too small to be useful, an icon representing the visual ability to take its place, thus saving the space on the report page.

## 14. Define the term 'M language."

It is a programming language used in Power Query. It's a functional, case-sensitive language which is similar to other programming languages and easy to use.

## 15. What information is required to create a map in Power Map?

Power Map can display visualizations which are geographical in nature. That's why some kind of location data is needed, for example, city, state, country or latitude and longitude.

## 16. What are the important features of Power BI dashboard?

- It allows you to drill through the page, bookmarks, and selection pane.
- It allows you to create various tiles like web content, images, textbox, and integrate URLs.
- Allows you to set report layout to mobile view.

## 17 What are the steps to go to Data Stories Gallery in Power Bi communities?

Steps to go to Data Stories Gallery:

- First, open PowerBI.com in a favorite browser.
- By hovering on Learn
- Click on Community
- Scroll down little, and you will find Data Stories Gallery.
- Anyone can submit her or his Data Story as well.

## 18. Where incremental licensing refresh feature is accessible?

Incremental refresh feature mainly used for high-end scalability of data by publishing only on that workspace in Power BI Service where Premium capacity is needed.

## 19. How can you analyze Power BI reports data in excel?

You need to follow the below-given steps:

- Open Power BI Admin portal, go to tenant settings and select -> Analyze.
- Check that Power BI Administrator has enabled Excel option or not.
- Then at the upper right corner, click settings to download and install Excel updates.
- Next, go to the left-hand side navigation pane, go to the workspace, click on the dataset, click on Eclipses (three dots) and select Analyze in Excel.
- Download ODC file, save, and double click on it.
- After that needs to provide power BI user id and password.

## 20. What is Power Pivot, and what are the filter writes in Power BI?

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.

Filters are applicable in:

- Visualization level
- Page Level
- Report Level

#### 21. How can you perform Dynamic filtering in Power BI?

Dynamic Filtering in Power BI is done using the following steps:

- Once all the data are set up, publish a detail report to Power BI.
- Publish it to group workspace.
- Create a filter link
- Create a DAX calculated column.
- Public overview report

#### 22. What is Power Pivot Data Model?

It is a model that contains data writes, tables, sections, and table relations. These data tables help you to develop for holding data for a business substance.

## 23. What is Power Query?

Power query is an ETL tool which helps you to clean, shape, and modify data utilizing instinctive interfaces without doing anything.

## 24. Which programming language is used in Power Query?

M-code is a new programming language that is used in power query. It is similar to other programming languages and easy to use.

## 25. List out benefits of using Variables in DAX.

Here, are benefits of using DAX function:

- By declaring and evaluating a variable, the variable can be reused multiple times in a DAX expression, which helps you to avoid additional queries of the source database.
- Variables can make DAX expressions more useful and logical.
- Variables is only scoped, which should be measure or query which can't be among measures.

#### 25. What are Tiles in Power BI?

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.

### 26. What is on-premise gateway?

On-premise gateway acts as a bridge which helps you to transfer the data, which is on-premise (not on the cloud) safely and securely.

### 27. Name two types of connectivity modes in Power BI?

Two types of connectivity modes used in Power BI are:

- Import
- Direct Query

## 28. Explain the term data alerts.

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

#### 29. What is the calculated column?

It is a calculating expression of DAX which allows calculation on data stored in a new column.

## **30.** What is query collapsing?

The process of converting the steps in power query editor to SQL and executing it by the source database is called query collapsing.

## 31. Explain data source filter.

It is a parameter to filter the data into machines.

## 32. What is content packs?

These are pre-built solutions build for popular services as a major part of the Power BI experience.

## 33. What are the types of filters available in Power BI Reports?

Important filters of Power BI reports are:

- Visual-level Filters
- Page-level Filters
- Report-level Filters

#### 34. What is Bookmark?

Bookmark in Power BI helps you to capture the configured view of a report page in a specific time. This includes filter and state of visual which can use a short cut to come back to the report that you can add as a bookmark.

### 35. What are the advantages of using a variable in Power BI?

Variables help you to create more logical Queries and which should be used for multiple DAX functions.

## **36.** Why use selection pane in Power BI?

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 and is also used in bookmarking.

## 37. How to handle Many to Many relationships in Power BI?

You can use Crossfiltering option in Power BI to address the Many to Many relationships.

## 38. Explain x-velocity in memory.

It is the main engine which is used in power pivot. It allows you to load the large set of data into Power BI data.

## 39. Explain the term Custom Visuals.

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

## 40. Is it possible to have created multiple active relationships in Power BI?

No, we can't set multiple active relationships in Power BI.

## 41. State the main difference between District() and Values() in DAX?

The only difference between two functions is that with District help you to calculate the null values.

## 42. State the major differences between MAX and MAXA functions

If you want to calculate numeric values, then use MAX. However, if it is for non numeric values, then you should use MAXA.

## 43. Is on-premise access possible in Power BI?

No, it is not possible to access Power BI services on private or internal service cloud. However, by using Power BI desktop, you can connect with the on-premises data sources.

## 44. What is the major difference between the old version and a new version of Power BI tool?

The latest version has more robust features, and it is famous with the name Power BI Desktop. This is an all in one solution for Power View, Power Pivot, and Power Query in the backend. Power BI offers many add-ins for Excel, which is useful for better visualizations.

## 45. Explain the term incremental refresh?

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

#### 46. Is the Power BI tool available for free?

You can access Power BI for free. However, if you wish to use all the feature of Power BI, then you can use its pro subscription account. The subscription account offers an enhanced version of several features that are available with Power Bi free account.

## 47. What kind of data can you store in Power BI?

In Power BI, you can store mainly two types of data.

#### **Fact Tables:**

The central table in a star schema of a data warehouse is a fact table that stores quantitative information for analysis, which is not normalized in most cases.

#### **Dimension Tables:**

It is a table in the star schema which helps you to store attributes and dimensions which describe objects that are stored in a fact table.

#### 48. State the main difference between Filter and Slicer.

If you are using the normal filter user cannot interact with the dashboard. On the other hand, slicer allows users to have an interaction with Reports as well as Dashboards.

#### 49. What is the Embed Code?

Power BI online contains an option for publishing on web that will generate a link address for the Power BI report. You can share these links to others, which is called embed code.

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

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.

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

You need to use Gauge chart to compare two different measure.

## **52.** Can you create multiple dynamic connections between two tables?

No, we can't create more that one multiple dynamic connections.

#### 53. What is the use of Power BI designer?

Power BI Designer allows users to create intuitive reports and dashboards, easily and quickly. It also helps users to change visual views of their data at fingertips for better analytics and informed decision-making.

## 54. Can you refresh Power BI reports after they are published to the cloud?

Yes, it is possible. Gateways can be used to do so.

- For SharePoint: Data Management Gateway
- For Powerbi.com: Power BI Personal Gateway

#### **55.** What is Custom Visuals?

Custom Vizual are those visual which are not available in BI desktop, which are imported from the market for the purpose of better visualization.

### 56. What are the gateways that available in Power BI?

The two gateway method available in Power BI are:

- On-premises information door
- On- premises information door ( personal mode)

## 57. What is natural language search choice?

The natural language search choice is language-based learning for communicating with information as a part of Power BI suite for Office 365 advertising.

## 58. Can you join two unique information source in the same Power BI dashboard?

Yes, we can join two unique information source in the same Power Bi dashboard. We can also merge comparable reports in your Power Bi account into using single dashboard.

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

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

### 60. Explain the collect function.

Collect function excludes null value. It does aggregate spatial values. You can't transform data to another format.

## 61. How can you differ COVAR and COVARP?

The main difference between the two is that: COVAR directly gives the same co-variance, whereas COVARP is the population covariance.

### 62. How can you assign SSRS with Power BI?

Here are the steps to integrate SSRS with Power BI:

- SSRS Report Items like charts can be pinned to Power BI dashboards.
- A subscription is created to keep the snapshot of data in dashboard refreshed.
- Power BI reports will soon able to publish to SSRS portal.

## 63. Explain z-order in Power BI?

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.

## 64. What is the only prerequisite for connecting to a database in Azure SQL Database?

The only prerequisite for before connecting to a database is that the user need to configure firewall setting to allows remote connections.

## 65. Name out some important DAX functions used in Power BI.

Sum, Max, AVG, Distinct, Count, Calculate, Datediff are some important widely used DAX functions.

## 66. What is X-speed in-memory investigation motor used for Power Pivot?

The primary motto behind power turn is the x Velocity in-memory analytics engine. It allows dealing with the various measures of information as it stores data in the columnar database.

### 67. Name widely recognized information forming systems.

The most widely recognized information forming systems are:

- Removing columns and rows
- Adding indexes
- Applying for a sort order

## 68. What happens by clicking on a single information point in one of the various visual in a report?

When you click on single information point data gets select and copied to the clipboard. Moreover, the copied data can be pasted in any place according to your requirement.

#### 69. What is CORR function? When we use it?

CORR is a correlation function. It gives a correlation between two variables. It mostly ranges from -1 to 1.

#### 70. State the difference between Count and CounD function.

Count function returns to count, excluding NULL values whereas Countd returns distinct values which exclude NULL values.

## 71. Explain DATEDD function in Power BI.

DATEDD function helps you to convert any input to a date format. This input can number, string, or a data type input.

#### 72. What does DATENAME function do?

DATENAME function shows the name of the specific part of the date that is given.

#### 73. What is the DATEPART function?

It returns date function as an integer. However, DATENAME function does the same thing, except it returns the name of the part of the date.

#### 74. What does DATEDIFF function do?

This function gives a difference between 2 dates based on the specified Date part.

#### 75. What is the use of ENDSWITH function?

ENDSWITH function helps you to return the logical result to the given string. In case If the sub-string is available at the end of the sub string, then it returns TRUE.

#### 76. What is IFNULL function?

If the value is not NULL iFNULL function result is the first expression, if it is not, then it will return the second expression.

#### 77. What is the use of INDEX Function in Power BI?

INDEX function helps you to retrieve the index of the respective row.

#### 78. What is the main difference between LTRIM and RTRIM?

LTRIM function helps you to remove the white space from the LEFT of the string. RTRIM helps you to remove it from the right the last index.

#### 79. What is the use of MID function?

MID function returns the string character from the specified index position.

## 80. How can you apply percentile function in Power BI?

PERCENTILE function allows you to returns the data value of the specific percentile number.

#### 81. What is the SIGN function?

Sign function returns the direction of the values. If it returns 1, if positive then 1, if 0 then 0.

#### 82. What is the use of statewith function?

This function returns the logical answers TRUE if the sub-string is the starting string for the superstring. If it is not, it will return false.

### 83. What is the use of split function?

SPLIT function is used to split the string database on the given delimiter.

## 84. What is the need of signing up with business email?

Power BI is not supporting, the email address given by telecommunications or consumer email service providers. Thus, there is need for signing up with work email.

## 85. Name the market place where you can download the Power BI mobile apps.

- App store
- Google Play
- Window Store

## 86. In which year Microsoft invented Power BI Embedded?

In, the year 2016 Microsoft discharged new administration which is named as Power BI Embedded.

## 87. What area do you go to change and reshape data in Power BI?

Data Editing helps you to change and reshape data in Power BI.

## 88. Data Category settings should be used for mapping information to geographic areas in Power BI?

Scope and Longitude (e.g. 47.6080, - 122.3351)

## 89. What do you use as a consolidate inquiry in Power BI?

Join Queries are used as a consolidate inquiries in Power BI

## 90. What is the option to unpivot data in the question proofreader?

Unpivot line is a choice to unpivot any data in the question proofreader.

## 91. What is the process to refresh Power BI reports when it is uploaded into the cloud?

Power BI, reports can be refresh using Data management, gateway, and Power BI Personal Gateway.

## 92. What visual would you need to use to show solitary esteem?

Disseminate Plat is a visual you should use to show solitary esteem.

# 93. Which of the following Power BI memberships allows you the right permit to see Power BI content with the various Power BI applications?

Power BI Premium P1 is an application which gives this type of solutions for you.

## 94. Which field composes can be added to the Field well of a Slicer visual?

Computing segments should be made with a DAX articulation.

## 95. What is the M dialect capacity to sort a segment in inquiry supervisor?

The command for this purpose is Sort-> Table

## 96. Which Power in BI visual is ideal for estimating execution against an objective?

Projectile Power Bi visual is most fitting for this purpose.

### 97. What context style is allowed by Power BI DAX?

Power BI DAX content style is both Row and Filter.

### 98. In, Power Bi, where do you discover the Q&A highlight?

You will get at the highest point of a report in the Power BI benefit.

## 99. How can you dynamically change the value measure to show multiple measures?

You can do this by using harvesting measure and switch function.

## 100. What is self-service business intelligence?

Self-service Business Intelligence SSBI is a method to deal with data investigation which empowers business clients to channel, fragment, and break down their data, without top to the bottom specific information.

## 101. What is Power BI DAX style?

It is both Row and Filter Context

## 102. How can I purchase Power BI suite?

You can purchase Power BI licenses version directly from their website www.powerbi.com.