

Power BI Interview Questions

Instructions to solve the Questions:

- 1. Explanation for each and every solution must be given in brief.**
 - 2. Screenshot for each and every step must be provided for questions involving practical implementation.**
 - 3. For theory/conceptual questions. Solutions having at least 1 practical implementation will be favoured.**
 - 4. For mcq also, provide the reason for your answer with example to support it.**
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Q-1 What does DAX stands for?

- 1) Demand Analysis Expressions
- 2) Data and Expressions
- 3) Data Analysis Expressions
- 4) Datastructures & Algorithms Expressions

Q-2 Which of the following is not a DAX function?

- 1) Aggregation functions
- 2) Counting functions
- 3) Information functions
- 4) Window functions

Q-3 What does a Data-Source filter do?

- 1) Stops loading the data after a certain memory threshold
- 2) A parameter to filter data before loading into machines
- 3) Connects to the data source and refreshes the data within Power-Bi service, not affecting the local file
- 4) Connects to more databases/files

Q-4 Which of the following lets you receive value from user on live time?

- 1) Variables
- 2) Values
- 3) Parameters (inside power query>>manage parameters)
- 4) Return

Q-5 Which of the following does not use DAX?

- 1) Tableau
- 2) Power Pivot
- 3) Power BI

- 4) SSAS (SQL Server analysis Services)

Q-6 Which of the following will act as a ‘Filter’ in Visualizations?

- 1) Edit Interaction
- 2) Slicer
- 3) Bookmarks
- 4) Drill-Through

Q-7 What is X-velocity in Power Platforms?

- 1) Main Engine used in Power platforms
- 2) Main Database used in Power platforms
- 3) Main RAM of Power platforms

Q-8 Can we have Multiple Active Relationships in Power BI?

- 1) YES
- 2) NO

Q-9 What are Tiles?

- 1) A kind of a Visualization/Graphs
- 2) Grids in a Visualization/Graphs
- 3) Snap-shot of data pinned at Power BI Service
- 4) Actual Tiles (LOL)

Q-10 Which of the Following Language is used in Power Query Editor?

- 1) M-language
- 2) DAX
- 3) SQL
- 4) F# (read F sharp)

Q-11 Which of the following DAX functions can establish both one and bidirectional relationship between tables (like Many to Many)?

- 1) RELATEDTABLE
- 2) INTERSECT
- 3) RELATED
- 4) CROSSFILTER

Q-12 I want to choose a ‘filter’ to change all the graphs on a page. What should I choose ?

- 1) Report Level Filter
- 2) Page level Filter
- 3) Visual Level Filter
- 4) Slicer (Although it does the job, This is not a ‘filter’)

Q-13 For which task is PowerBi not recommended?

- 1) ETL (Extract,Transform,Load)
- 2) Data modelling and Relationships
- 3) Pulling Data/Web Scraping
- 4) Building Reports

Q-14 I want to see some top 10 kind of information/metric. What Visual do you use?

- 1) Pie Chart
- 2) Tree Map
- 3) Scatter Plot
- 4) Bar Chart

Q-15 What is a Z-Order in Power Bi?

- 1) To Calculate z-statistic/z-score of a data point to calculate it's probability of occurrence
- 2) To sort Text data(like names in Descending Order)
- 3) Design Strategy to arrange visual over shapes

Q-16 Which of the following is not an IF-ELSE function?

- 1) If function
- 2) What-If
- 3) Switch function

Q-17 The answer of FORMAT(26-06-2020, "mmmm y") is-

- 1) Jul 2020
- 2) July 20
- 3) July 190
- 4) None of the above

Q-18 The answer of FORMAT(234248.67, "Scientific") is-

- 1) 234248670%
- 2) 2,342,486.70
- 3) 234248(10-02)
- 4) 2.34E+05

Q-19 You want to show overall performance of your Organization(Take for example you have total sales and total cost columns). Which Visual do you use?

- 1) KPI
- 2) Cards (Single/Multilevel)
- 3) Line chart

Q-20 What does Unpivoting option in Power Query do?

- 1) It takes the names from a column and makes a new column for each of name and the values of that column are an aggregation of another column (which we can choose).
- 2) It takes column names of several selected columns and transforms it into attribute -value pairs (2 columns), with attribute of that column being the column names and values being the aggregation.
- 3) Transposes the Data Table (Row <-> Columns)

Q-21 I have 2 columns Customer and Sales and want to calculate sum of sales for a customer named Amit. Which function do you use?

- 1) SUM
- 2) SUMMARIZE
- 3) SUMX

4) CALCULATE

Q-22 Which of these will not ignore logical values (like True(1), False(0)) in a column while calculating minimum?

- 1) MIN
- 2) MINA
- 3) MINX
- 4) MINL

Q-23 Which of these functions can calculate the maximum of 2 scalar expressions?

- 1) MAX
- 2) MAXA
- 3) MAXX
- 4) MAXIMUM

Q-24 I want to count the rows of a column after evaluating a expression which may contain Boolean (Booleans should be counted), Blanks . What do I use?

- 1) COUNT
- 2) COUNTX
- 3) COUNTAX
- 4) COUNTROWS

Q-25 Which of the following functions will work only on Azure SQL and DirectQuery Tables?

- 1) DISTINCTCOUNTNONBLANK
- 2) PRODUCTX
- 3) APPROXIMATEDDISTINCTCOUNT
- 4) NONE

Q-26 I want a table with one column of dates between StartDate and EndDate. What Function do I use?

- 1) CALENDARAUTO
- 2) CALENDAR
- 3) DATE
- 4) TIME

Q-27 Which of the following doesn't return in Datetime Format?

- 1) TODAY
- 2) NOW
- 3) DATE
- 4) YEAR

Q-28 Which of the following functions will ignore all filters BUT does not return a table? (including both inside query and outside query filters)?

- 1) ALL
- 2) ALLEXCEPT
- 3) ALLCROSSFILTERED
- 4) ALLSELECTED

Q-29 Which will retrieve a value for present table from another table irrespective of whether that table is related or not.

- 1) LOOKUPVALUE
- 2) SELECTEDVALUE
- 3) KEYWORDMATCH
- 4) HASONEVALUE

Q-30 Which database can PowerBi not connect to?

- 1) AZURE
- 2) SALESFORCE
- 3) HADOOP
- 4) GOOGLE ANALYTICS

Q-31 What Cloud Architecture is Power BI Service?

- 1) HAAS
- 2) PAAS
- 3) SAAS
- 4) IAAS

Q-32 Where are Time Series Chart Located?

- 1) Filter Pane (where all filters,slicers are located)
- 2) Field Pane (where all visuals are located)
- 3) Get more Visuals (Appsource)

Q-33 Which Visual would you use to show Outliers?

- 1) Clustered Column Bar Chart
- 2) Scatter Plot
- 3) Tree Map
- 4) Line Chart

Q-34 What is Data Granularity?

- 1) Diamond Schema design is granular data
- 2) Data Granularity is the Filter direction between two visuals
- 3) It is level of detail presented in the data
- 4) It is Many-To-Many relationships

Q-35 Define Cardinality?

- 1) Types of Relationships between tables (ex- 1 to 1, 1 to many,etc)
- 2) Number of Rows in data
- 3) Number of Columns in data
- 4) Direction of flow of data in a join between tables

Q-36 Which of the Following is best in terms of Space Complexity of Power BI?

- 1) Calculated column
- 2) Measure

3) Visual Table/Matrix

Q-37 Can DAX be used to modify the data in a table?

- 1) Yes
- 2) No (Dax Query can't replace a table value but creates a new table to store these values)

For the Next 3 Questions Consider a Left Table (1/first) and a Right Table(2/second)

Q-38 _____ gives all from second ,matching from first.

- 1) Right OuterJoin
- 2) Right Anti Join
- 3) Left OuterJoin
- 4) Left Anti Join

Q-39 _____ gives only matching in both.

- 1) Full Outerjoin
- 2) Inner
- 3) Right Outerjoin
- 4) Left Outerjoin

Q-40 _____ gives only from second (excluding the first).

- 1) Left anti join
- 2) Right Anti join
- 3) Left outerjoin
- 4) Right Outerjoin

Q-41 _____ is a join not available in Power Query, but available in SQL.

- 1) Full OuterJoin
- 2) Left Anti Join
- 3) Self-Join
- 4) Left OuterJoin

Q-42 You are creating a measure which utilizes the column from another table. But the problem is the relationship is Inactive. What do you do?

- 1) RELATEDTABLE FUNCTION
- 2) LOOKUPVALUE FUNCTION
- 3) USERELATIONSHIP FUNCTION
- 4) Change the Active relationship in the Modelling tab manually /OR delete one relationship.

Q-43 Calculate a Measure for the sales for previous month, which one can you NOT use -

- 1) CALCULATE AND PREVIOUSMONTH
- 2) CALCULATE AND DATEADD
- 3) CALCULATE AND PARALLELPERIOD

Q-44 What can be achieved by removing unnecessary rows and columns?

- 1) IT is not necessary to remove unnecessary rows. Infact it's good to keep all metadata intact
- 2) Deleting unnecessary rows can lead to damaging the structure of the data model

- 3) Deleting unnecessary rows and column not only reduces the data size and increases speed/performance of report but also it is a good practice to load only necessary data into your data model.

Q-45 Is it possible to create a relationship between two tables on two columns of different data types?

- 1) No, relationship is established on same data type columns only
- 2) Yes, if the direction of flow of data is set to Many-to-Many
- 3) Yes , but it is only available in paid versions of Power BI

Q-46 Which one leads to more Optimized performance?

- 1) Low Cardinality (means less distinct values in a column)
- 2) High Cardinality (means high unique values count)

Q-47 Which chart is useful to compare 2 values which are usually difficult to compare because of difference in scale?

- 1) BAR CHART
- 2) KPI VISUAL
- 3) COMBO CHART
- 4) GAUGE CHART

Q-48 _____ dax function is used in dynamic security.

- 1) USERRELATIONSHIP
- 2) USERPRINCIPALNAME
- 3) USERCULTURE

Q-49 You have 2 tables- A ‘USER’ table containing unique ID’s of Customers and ‘SALES’ table Consisting of their purchases, ID’s and unique id for each of their Purchases. What connection do you establish between the tables? (Direction is USER → SALES)

- 1) ONE TO ONE
- 2) ONE TO MANY
- 3) MANY TO ONE
- 4) MANY TO MANY

Q-50 Now you have the same USER table and a REGION table which has a column of 4 entries of region id from where the customers made orders. They(Tables) both have a common column RegionID. What connection do you establish now? (Direction is USER → REGION)

- 1) ONE TO ONE
- 2) ONE TO MANY
- 3) MANY TO ONE
- 4) MANY TO MANY

Q-51 DAX nested functions is equivalent to SQL what?

- 1) SQL CTE’s
- 2) SQL SUBQUERIES
- 3) SQL JOINS
- 4) SQL BUCKETIZATION

Q-52 What does CONTAINS(TABLE,[FIRST_NAME],'AMIT',[LAST_NAME],'BOSE') does?
(FIRST_NAME,LAST_NAME are columns)

- 1) Returns Row index of Amit Bose in TABLE
- 2) Changes first_name column to AMIT and last_name column to 'BOSE'
- 3) Return True/False whether the columns contains the respective values
- 4) None of the above

Q-53 What is the difference between CONTAINSSTRING (1) AND CONTAINSSTRINGEXACT (2)?

- 1) 1 is not CASE-sensitive whereas 2 is.
- 2) 1 is not ACCENT-sensitive whereas 2 is
- 3) Both 1 & 2

Q-54 A filter in Visual is an _____ filter and filters present in slicers/filter pane is an _____ filter.

- 1) Inner and Outer
- 2) Outer and Inner
- 3) None of the above

Q-55 Consider a SALES table with Q1&Q2 columns (Quarterly sales), Country column, gender column, consider the 2 queries-

TS = SUMX(ALL(SALES),SALES[Q1]+SALES[Q2]) → 1

TS_ = SUMX(ALLSELECTED(SALES),SALES[Q1]+SALES[Q2]) → 2

Now we build a visual (for ex-table/matrix) and put TS, TS_ and Country column inside the visual. Then we take a Slicer and put Gender in it's field. Then,

- 1) TS&TS_ will contain total sales of respective countries and will also show total sales on the basis of gender if slicer is used.
- 2) TS will contain total sales as a whole and will show same value for every country. But will categorise on the basis of slicer. TS_ will also show same totalled sales for all country but will also be unaffected by slicer.
- 3) TS will contain total sales as a whole and will show same value for every country. It will also be unaffected by gender slicer. TS_ will also show same totalled sales for all country but will be affected by slicer.
- 4) None

Q-56 Consider a table Series with columns –Viewers(m) and Series_number –

```
Column =
var temp = Series[Viewers (m)]
RETURN
COUNTRWS(FILTER(ALL(Series),Series[Viewers (m)]>temp))+1
What is this Query doing?
```

- 1) Creating a column of number of viewers for each Series_number
- 2) Creating a ranking of every Series_number by Series[Viewers (m)]
- 3) Sorting the Series_number column itself by Viewers(m)
- 4) None of the above

Q-57 How many VARIABLES OR 'var' can you declare in a dax query?

- 1) Less than 3
- 2) Less than 4
- 3) Unlimited

Q-58 VARIABLE OR 'VAR' in dax is a –

- 1) DAX FUNCTION
- 2) DAX KEYWORD
- 3) DAX DATA-TYPE

Q-59 Is it possible to convert Data-Type using DAX? If yes, then what function can we use to convert for example Text to Integer?

- 1) YES, INT FUNCTION
- 2) YES, CONVERT FUNCTION
- 3) NO not possible

Q-60 What keyword is mandatory in a DAX Query ? (Query here refers to kind of queries we have in SQL. In previous questions we assumed queries to be simple dax expressions)

- 1) DEFINE
- 2) EVALUATE
- 3) ORDER BY
- 4) START AT

Q-61 If an author hides pages at the Power BI desktop level, are they visible in the power Bi service also(to the author) ? Are they also not visible in the Power BI desktop level , right after we hide them?

- 1) YES AND NO
- 2) NO AND YES
- 3) NO AND NO
- 4) YES AND YES

Q-62 Which one is True-

- 1) We need to import Custom visuals every time in a new report.
- 2) We don't need to import them , they are already available under visualization pane
- 3) We need to import them just once, then they are available forever.

Q-63 Which one is the best defined workflow of Power BI?

- 1) Create report in Power BI Mobile → share in PBI Desktop → View/Interact in PBI Service
- 2) Create a report in PBI Service → share it in PBI Mobile → View/Interact in PBI Desktop
- 3) Create a report in PBI Mobile → share in PBI Desktop → View/Interact in PBI Service
- 4) Create a report in PBI Desktop → share in PBI Service → View/Interact in both PBI Service and PBI Mobile

Q-64 What is a collection of ready made visuals and pre-arranged in dashboards and reports is called?

- 1) An App
- 2) A canvas
- 3) A Tile
- 4) Scheduled Refresh

Q-65 Building blocks of Power Bi are-

- 1) Visuals, Dashboards, Reports, Tiles and datasets
- 2) Dashboard, Databases, Mobile Devices and Tiles
- 3) PowerQuery, Power Pivot and DAX
- 4) M language and DAX

Q-66 Which of the following filters are not available?

- 1) Tile level filter
- 2) Drillthrough
- 3) Report Level filter
- 4) Page Level Filter

Q-67 Is analyzing performance of each of your report elements possible in Power BI? Explain also?

- 1) YES, analyzing the metadata
- 2) YES, deleting unnecessary rows and columns in data, removing blanks and null/errors thus reducing the dataset size
- 3) YES, using the performance analyzer
- 4) NO, only way is to manually record Time taken to load and view reports

Q-68 How can we create a slide show like Power Point in Power Bi Report? (HINT: Use Bookmark)

- 1) No Bookmarks cannot be used as they are static
- 2) No Instead of a bookmark we can use a visual/custom visual
- 3) Yes We can use Buttons and set action to Bookmark
- 4) No We should use Power Point instead

Q-69 Output of ABS(-3.556) is-

- 1) -3.0
- 2) -4.0
- 3) -3.556
- 4) 3.556

Q-70 Output of CEILING(-10.3, -3) is-

- 1) -10
- 2) -9
- 3) -7
- 4) -13

Q-71 Which function does not give Variance?

- 1) VAR.P
- 2) VARX.P
- 3) VAR
- 4) VAR.S

Q-72 What does data alert do?

- 1) Alerts the user if the data limit exceeds a certain threshold.

- 2) Alerts the user that the data might be malicious.
- 3) Alerts the user if a certain data points aggregation/metric is above, below or at a certain threshold set by the user.
- 4) Alerts the user for a data refresh if there is a change in the data source.

Q-73 Data Alerts do not work in –

- 1) KPI
- 2) Gauge chart
- 3) Bar chart
- 4) Cards

Q-74 Data Alerts (as features) are only available in -

- 1) Power Bi Mobile
- 2) Power Bi Service
- 3) Power Bi Desktop
- 4) Power Bi Report Server

Q-75 Who can modify the data alert feature?

- 1) Dashboard owner
- 2) Everyone who has access to dashboard
- 3) Everyone who has access to dashboard and has Power Bi Premium.

Q-76 What does Q&A chart/visual in Power Bi do?

- 1) To take inputs from report(/dashboard) viewers and managers about the report.
- 2) To ask Questions about the loaded data and convert them into visuals
- 3) To ask Power Bi's Artificial Intelligence about various features/options

Q-77 Define Dashboard?

- 1) A Canvas of report elements built in PBI desktop
- 2) A Canvas of report elements built in PBI Service
- 3) Dashboard is built by bringing together a couple of visuals/charts based on the loaded data
- 4) The Data Model tab

Q-78 Differentiate Reports and Dashboards?

- 1) Reports can have multiple pages, whereas in dashboards we have only one page.
- 2) They are same
- 3) Slicers and filters are not available in Reports whereas they are available in Dashboards
- 4) Reports are built in PBI Service whereas Dashboards are built in PBI Desktop

Q-79 Power Bi Paginated reports are created by-

- 1) Power BI Report Server
- 2) Power BI Service
- 3) Power BI Desktop
- 4) Power BI Report Builder

Q-80 What is a Workspace in Power BI?

- 1) Creates a bundle of Dashboards, Reports and data
- 2) The only area in PBI Service where we can edit a Report
- 3) Workspaces are places to collaborate with people/colleagues to create collections of dashboards, reports and paginated reports.

Q-81 You plan to join a fact table named ActivityLog to a Date dimension named ActivityDate. The date value in ActivityLog is a datetime column named ActivityStart.

The date value in ActivityDate is a number column named DateID. DateID is in the 'YYYYMMDD' format.

What should you do in the model before you create the relationship?

- 1) Change the Data Type of ActivityStart to Date.
- 2) Create a measure in ActivityLog that uses the FORMATDAX function.
- 3) Change the Data Type of DateID to Date.
- 4) Create a calculated column in ActivityLog that uses the FORMAT DAX function.

Q-82 Can we perform a join between tables ,taking a column from one table and measure from another?

- 1) Yes
- 2) No

Q-82

	Id	A ^B C	Key	A ^B C 123	Value
1	1	Student	Tom		
2	1	Class	101		
3	1	Score	80		
4	2	Student	Jane		
5	2	Class	101		
6	2	Score	89		
7	3	Student	Larry		
8	3	Class	102		
9	3	Score	95		
10	3	Score	70		

After Pivoting,

1	2	3	Id	ABC 123	Student	ABC 123	Class	ABC 123	Score	ABC 123
1			1	Tom		101		80		
2			2	Jane		101		89		
3			3	Larry		102		Error		

Resolve the error while also preserving all the data.

- 1) Change Data Type of the Value column
- 2) Select the Key column, and then click Remove Duplicates
- 3) Change the Aggregate Value Function of the pivot
- 4) Select the Score column, and then click Remove Errors

Q-83 You have following data

GeoCode	CustomerCount	2014	2015	2016	2017
MA	2300	38885900	40830195	46954724.25	49302460.46
SD	1200	3993773.76	4193461.65	3983788.56	4182977.99
PA	340	89433932.54	93905628.6	98600910.03	103530955.5
NC	890	2000243.76	2100255.15	2289278.15	2403742.01
US	7777	6994777.75	7344515.85	9180644.81	9639677.05

And want to change this to

GeoCode	CustomerCount	Attribute	Value
MA	2300	2014	38885900
MA	2300	2016	46954724.25
MA	2300	2017	49302460.46
SD	1200	2014	3993773.76
SD	1200	2015	4193461.65
SD	1200	2016	3983788.56
SD	1200	2017	4182977.99
PA	340	2014	89433932.54
PA	340	2015	93905628.6
PA	340	2016	98600910.03
PA	340	2017	103530955.5
NC	890	2014	2000243.76
NC	890	2015	2100255.15
NC	890	2016	2289278.15
NC	890	2017	2403742.01
US	7777	2014	6994777.75
US	7777	2015	7344515.85
US	7777	2016	9180644.81
US	7777	2017	9639677.05

What do you do?

- 1) Transpose the data table
- 2) Reverse Rows of the data
- 3) Choose columns 2014 – 2017 and pivot them
- 4) Choose columns Geocode and CustomerCount and unpivot all the others

Q-84 You have two Microsoft SQL Server database servers named SQLProd and SQLDev. SQLDev contains the same tables as SQLProd, but only a subset of the data in SQLProd.

You create a new Power BI Desktop model that uses 120 tables from SQLDev.

You plan to publish the Power BI file to the Power BI service.

You need to connect the model to the tables in SQLProd. The solution must minimize administrative effort.

What should you do from Query Editor before you publish the model?

- 1) Create a new connection to SQLProd, and then import the tables from SQLProd.
- 2) Delete the existing queries, and then add new data sources.
- 3) Configure the Data source settings.
- 4) Edit the source of each table query

Q-85 You have the following table —

Date	Day	Week	Month	Year
2014-12-01	1	27	12	2014
2014-12-02	2	27	12	2014
2014-12-03	3	27	12	2014
2014-12-04	4	27	12	2014

You need to add a column to display the date in the format of December 01, 2014.
Which DAX formula should you use in Power BI Desktop?

- 1) `FORMAT([Date], "MMM") & " " & FORMAT([Date], "DD") & ", " & FORMAT([Date], "YYYY")`
- 2) `FORMAT([Date], "M") & " " & FORMAT([Date], "D") & ", " & [Date].[Year])`
- 3) `[Date].[Month] & " " & FORMAT([Date], "D") & ", " & [Date].[Year])`
- 4) `FORMAT([Date], "MMMM DD, YYYY")`

Q-86 You have a data table. You discover that a column named ErrorCode has several values starting with a space character, and a column named SubStatus contains several non-printable characters. You need to remove all the leading whitespaces from ErrorCode and all the non-printable characters from SubStatus. All other data must be retained.

What should you do on each column?

- 1) ErrorCode – Extract → first characters then in SubStatus Extract → first characters
- 2) ErrorCode – Extract → length then in SubStatus Format → Clean
- 3) ErrorCode – Format → Clean then in SubStatus Format → Trim
- 4) ErrorCode – Format → Trim then in SubStatus Format → Clean

Q-87 You import a data like this

City
UK - London
France - Paris
Spain - Madrid
Canada - Montreal

And now you want this

City
London
Paris
Madrid
Montreal

What do you do?

- 1) Format → Trim
- 2) Extract → Last Characters
- 3) Split Column → Delimiter
- 4) Extract → Text after Delimiter

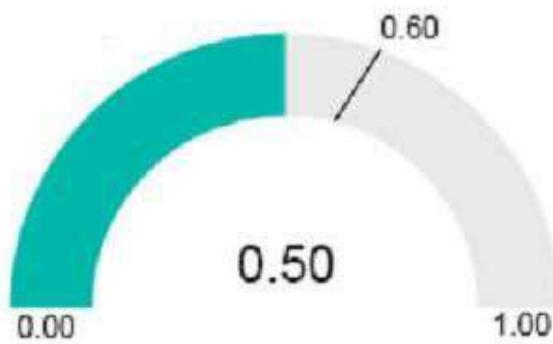
Q-88 What can not be achieved by using the Power Bi service API?

- 1) Retrieve rows from a dataset
- 2) Add rows to a dataset
- 3) Create a dataset
- 4) Refresh an imported dataset



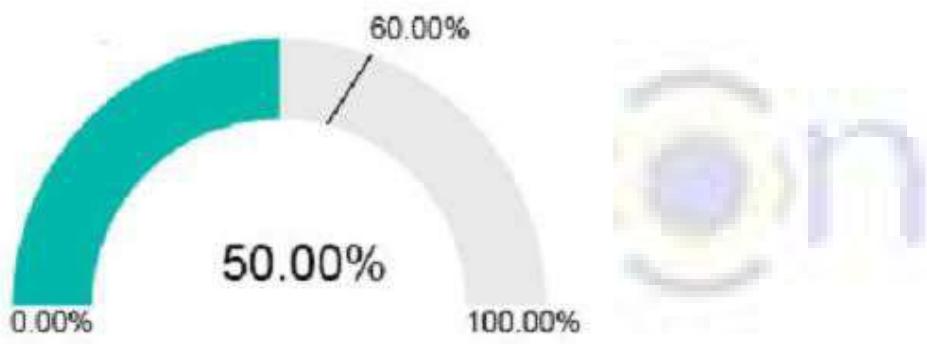
Q-89 Change this

Progress and Target



To this,

Progress and Target



- 1) Create a calculated column that adds '%' to the values
- 2) Create a calculated measure that adds '%' to the values
- 3) Edit the query of data source and change the data type to percentage
- 4) From modelling tab change the data type to percentage.

Q-90 You are importing sales data from a Microsoft Excel file named Sales.xlsx into Power BI Desktop.

You need to create a bar chart showing the total sales amount by region.

When you create the bar chart, the regions appear as expected, but the sales amount value displays the count of sales amount instead of the sum of sales amount each region.

What do you do that data appears correctly?

- 1) Delete the query, import the data into Sql server, then import from it
- 2) Add a calculated column that totals the sales amount column
- 3) Change data-type of sales amount column to numeric

- 4) Try refreshing the data model /OR data source.

Q-91 Consider 3 tables Territory, Sales and Products.

Relationship is Territory → Sales (1 to Many) & Products → Sales(1 to Many). Will a slicer work from a column from Territory on a column from Products?

- 1) Yes
- 2) No

Q-92 State Why for the above question

- 1) Slicers don't work in a 1 to Many relationship
- 2) Slicers only work when there is a direct relationship between two tables
- 3) If Connections made are one way (ex a → b) then a slicer won't work the other way (ex b → a, like in the above case). We must make the connection bidirectional between Product and sales by Edit relationship → Cross filter direction → Set it to both and press OK.

Q-93 Choose the correct option? (Terminology alert: Many → 1 means many side to one side)

- 1) Related when you need to access from 1 → Many, Related-table when you need to access column from Many → 1
- 2) Related when you need to access from Many → 1, Related-table when you need to access column from 1 → Many
- 3) Related when you need to access from Many → Many, Related-table when you need to access column from 1 → Many
- 4) Related when you need to access from 1 → 1, Related-table when you need to access column from 1 → Many

Q-94 Consider the query – ([Total_marks_of_Students] is a measure ,Gender is a column in Student table containing only 'F' & 'M')

CALCULATE(

CALCULATE([Total_marks_of_Students],Student[Gender]='F'),Student[Gender]='M')

What does it return?

- 1) Total marks of students for M/male students
- 2) Total marks of students for F/Female students (As inner Query is given higher preference)

Q-95 You plan to use Power BI Embedded to deliver reports in a web application. You need to ensure that the reports display live data. Which data source you should use?

- 1) Microsoft Azure Data Lake Store
- 2) Microsoft Azure Table Storage
- 3) Microsoft Azure HDInsight
- 4) Microsoft Azure SQL Database

Q-96 You have a Power BI model that contains the following two tables: Sales(Sales_ID, sales_date, sales_amount, CustomerID) Customer(CustomerID, First_name, Last_name) There is a relationship between Sales and Customer. You need to create a measure to rank the customers based on their total sales amount. Which DAX formula should you use?

- 1) RANKX(ALL(Sales), SUMX(RELATEDTABLE(Customer), [Sales_amount]))
- 2) TOPN(ALL(customer), SUMX(RELATEDTABLE(Sales), [Sales_amount]))
- 3) RANKX(ALL(customer), SUMX(RELATEDTABLE(Sales), [Sales_amount]))
- 4) RANK.EQ(Sales[sales_amount], Customer[CustomerID])

Q-97 You embed a Power BI report in a Microsoft SharePoint Online page. A user name User1 can access the SharePoint Online page, but the Power BI web part displays the following error message: "This content isn't available". User1 is unable to view the report. You verify that you can access the SharePoint Online page and that the Power BI report displays as expected. You need to ensure that User1 can view the report from SharePoint Online. What should you do?

(NOTE: **Microsoft SharePoint Online** is a content management system that is part of the Office 365 suite of services. **SharePoint** provides a rich collaboration environment in which internal and external users can work together, manage content, and communicate information using a variety of **SharePoint** intranets and sites.)

- 1) Publish the app workspace.
- 2) Edit the settings of the Power BI web part.
- 3) Modify the members of the app workplace.
- 4) Share the dashboards in the app workspace.

Q-98 In the Power BI service, you create an app workplace that contains several dashboards. You need to provide a user named sudhanshu1@ineuron.com with the ability to edit and publish dashboards. What should you do?

- 1) Modify the members of the app workspace.
- 2) Configure security for the dataset used by the app.
- 3) Share the dashboard, and then modify the Access settings of the dashboard.
- 4) From the app workspace, click Update app, and then configure the Access settings.

Q-99 You have an app workspace named Retail Store Analysis in the Power BI service. You need to manage the members that have access to the app workspace using the least amount of administrative effort. What should you do?

- 1) From the Power BI Admin portal, click Usage metrics .
- 2) From the Office 365 Admin center, click Groups.
- 3) From the Office 365 Admin center, click Users.
- 4) From the Power BI Admin portal, click Tenant settings.

Q-100 You plan to create a dashboard in the Power BI service that retrieves data from a Microsoft SQL Server database. The dashboard will be shared between the users in your organization. You need to ensure that the users will see the current data when they view the dashboard. How should you configure the connection to the data source?

- 1) Import the data by using the Import Data Connectivity mode.
- 2) Deploy an on-premises data gateway
- 3) Import the data by using the DirectQuery Data Connectivity mode.
- 4) Live Connection

Q-101 You created a KPI with a indicator and target variable

For the Trend axis you selected a months column. But you notice that the months are sorted by alphabetical order and not by datetime. What do you do?

- 1) Choose another visual
- 2) Remove the Trend Axis (remove the trend axis, sort by date and then reinsert it)
- 3) Modify visual level filters
- 4) Modify Drillthrough filters

Q-102 You created a stacked column chart visualization that displays ProductName by Date. You discover that the axis for the visualization displays all the individual dates. You need to ensure that the visualization displays ProductName by year and that you can drill down to see ProductName by week and day. What should you do first?

- 1) Configure a visual filter for the Date column that uses an advanced filter.
- 2) Create new columns for the date, year, week, and day.
- 3) Create a new hierarchy in the Sales table.
- 4) Format the virtualization and set the type of the X-Axis to Categorical.

Q-103 You plan to use Power BI Desktop to import 100 CSV files. The files contain data from different stores. The files have the same structure and are stored in a network share. You need to import the CSV files into one table. The solution must minimize administrative effort. What should you do?

- 1) Add a folder data source and use the Combine Files command.
- 2) Add a folder data source and use the Merge Queries command
- 3) Add a Microsoft Excel data source and use the Merge Queries command
- 4) Add text/CSV data sources and use the Append Queries command.

Q-104 Customer table-

CustomerID	CustomerName
1	Customer1
2	Customer2
3	Customer3
4	Customer4

Ordertable-

OrderID	CustomerID	OrderDate	OrderAmount
1	1	12-22-2016	1000
2	1	12-23-2016	1200
3	2	12-24-2016	1100
4	3	12-24-2016	800

Desired result

CustomerID	CustomerName	OrderID	OrderDate	OrderAmount
1	Customer1	1	12-22-2016	1000
1	Customer1	2	12-23-2016	1200
2	Customer2	3	12-24-2016	1100
3	Customer3	4	12-24-2016	800
4	Customer4			

If you consider Customer table as first table, which join will you perform?

- 1) Union
- 2) Left Anti
- 3) Left Outer
- 4) Right Anti
- 5) Right Outer

Q-105 You plan to use Power BI Desktop optimized for Power BI Report Server to create a report. The report will be published to Power BI Report Server. You need to ensure that all the visualization in the report can be consumed by users. Which type of visualizations should you exclude from the report?

- 1) Funnel charts
- 2) Custom Visuals
- 3) R visuals
- 4) Bubble maps

Q-106 Consider this table

Table name	Column name
Sales	OrderID
	Product
	ProductCategory
	ProductSubCategory
	OrderDate
	SalesAmount
Date	DateID
	Date
	Year
	Month
	Week
	Day

You plan to create a report to display TotalSales by ProductCategory and ProductSubCategory.
Create a measure to calculate the % of TotalSales for each ProductCategory.

- 1) `SUM([SalesAmount])/
CALCULATE(SUM([SalesAmount],FILTER(Sales,Sales[ProductCategory]))) * 100`
- 2) `DIVIDE(SUM([SalesAmount]),CALCULATE(SUM([SalesAmount]),
ALL(Sales[ProductCategory],Sales[ProductSubCategory])))`
- 3) `DIVIDE(SUM([SalesAmount]),CALCULATE(SUM([SalesAmount]),
ALLSELECTED(Sales[ProductCategory],Sales[ProductSubCategory])))`
- 4) `DIVIDE(SUM([SalesAmount]),CALCULATE(SUM([SalesAmount]),
ALLEXCEPT(Sales[ProductCategory],Sales[ProductSubCategory])))`

Q-107 Consider the table—

Table name	Column name
Transactions	TransactionID
	TransactionDate
	TransactionQuantity
Date	Date
	Day
	Month
	Year

You need to create a measure to calculate a running total of TransactionQuantity.

- 1) SUMX(Transactions[TransactionQuantity],FILTER(Date[Date],Date[Date]<=MAX(Date[Date])))
)
- 2) CALCULATETABLE(SUM(Transactions[TransactionQuantity]),FILTER(ALL(Date[Date]),Date[Date]<=MAX(Date[Date])))
- 3) CALCULATE(SUM(Transactions[TransactionQuantity]),FILTER(ALL(Date[Date]),
Date[Date]<=MAX(Date[Date])))
- 4) None

Q-108 Now Calculate a running total of TransactionQuantity for every 30 days for the same table as above.

- 1) CALCULATE(SUM(Transactions[TransactionsQuantity]),DATESMTD(Date[Date]))
- 2) CALCULATE(SUM(Transactions[TransactionQuantity]),FILTER(ALL(Date[Date]),
Date[Date]>MAX(Date[Date])-30 && Date[Date]<=MAX(Date[Date])))
- 3) CALCULATE(SUM(Transactions[TransactionsQuantity]),PARALLELPERIOD(Date[Date],-
1,Month))
- 4) CALCULATE(SUM(Transactions[TransactionQuantity]),FILTER(ALL(Date[Date]),
Date[Date]<MAX(Date[Date])&& Date[Date]>MAX(Date[Date])+30))

Q-109 You have the following two queries in Power BI Desktop:

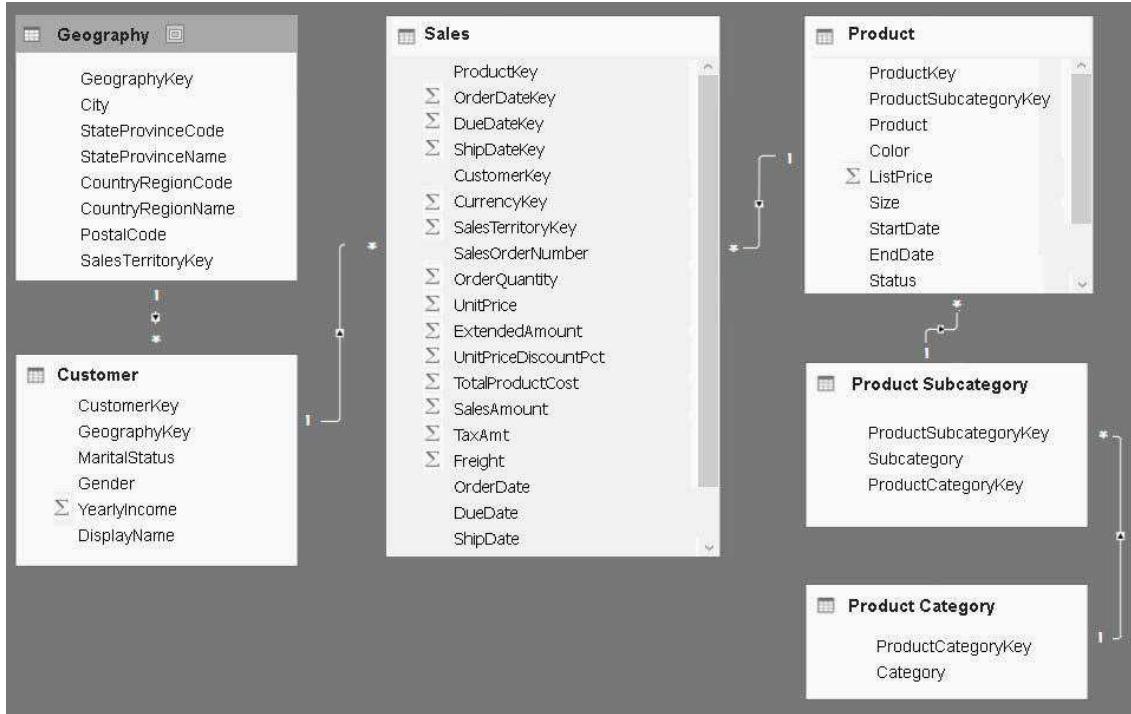
A query named Query1 that retrieves a table named SMB_Customers from a Microsoft SQL Server database

A query named Query2 that retrieves a table named Enterprise_Customers from an Oracle database Both tables have the same columns. You need to combine the data from SMB_Customers and Enterprise_Customers. Which command should you use?

- 1) Combine files

- 2) Merge Columns
- 3) Merge Queries
- 4) Append Queries

Q-110 Consider this DATA MODEL—



You need to add a measure to rank total sales (SalesAmount column) by product. The results must appear as shown in the following table—

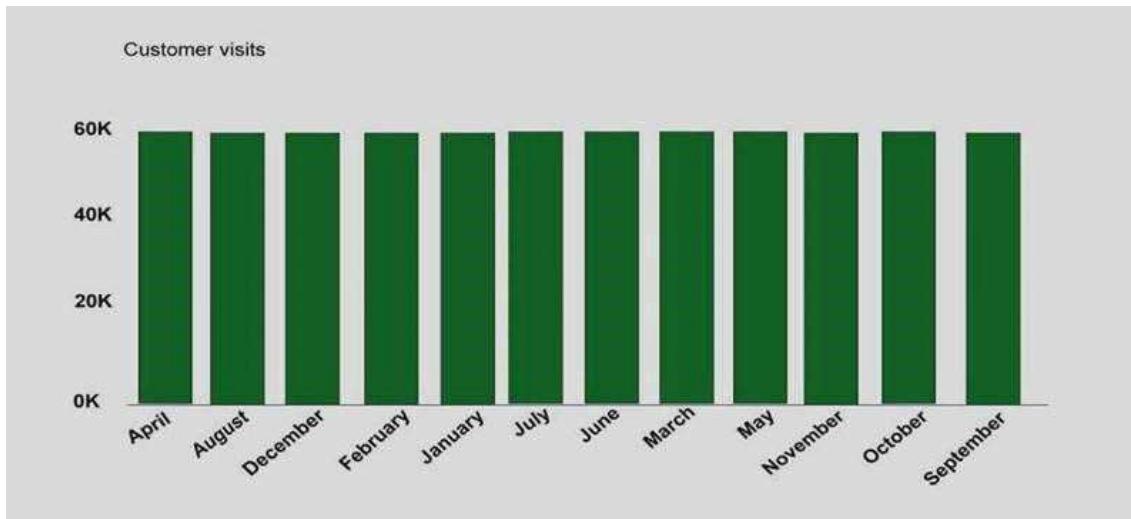
Rank	Product	SalesAmount
1	Product3	13,0000
1	Product2	13,0000
2	Product1	12,0000
3	Product5	10,000
3	Product4	10,000

Which DAX will you use?

- 1) Product Ranking = RANKX(ALL('Product'),
CALCULATE(SUM(Sales[SalesAmount])),,Asc, Dense)
- 2) Product Ranking = RANKX(ALL('Product'), SUM([SalesAmount]),,DESC, Skip)
- 3) Product Ranking = RANKX(ALL('Product'),
CALCULATE(SUM(Sales[SalesAmount])),,DESC, Dense)

- 4) Product Ranking = RANKX(Product, [SalesAmount],,DESC, Skip)

Q-111 You have two tables named CustomerVisits and Date in a Power BI model. You create a measure to calculate the number of customer visits. You use the measure in the report shown below



You discover that the total number of customer visits was 60,000, and that there were only 3,000 customer visits in April. You need to fix the report to display the correct data for each month. What should you do?

- 1) Create a relationship between the CustomerVisits table and the Date table.
- 2) Create a hierarchy in the Date table.
- 3) Modify the n=measure to use the CALCULATE DAX function.
- 4) Modify the measure to use the SUM DAX function.

Q-112 You have a query for a table named Sales. Sales has a column named CustomerID. The Data type of CustomerID is Whole Number. You refresh the data and find several errors. You discover that new entries in the Sales table contain nonnumeric values. You need to ensure that nonnumeric values in the CustomerID column are set to 0. Solution: From Query Editor, select the CustomerID column and click Remove Errors. Does this meet the goal?

- 1) Yes
- 2) No

Q-113 You have a Power BI report that displays a bar chart and a donut chart on the same page. The bar chart shows the total sales by year and the donut chart shows the total sale by category. You need to ensure that when you select a year on the bar chart, the donut remains unchanged. What should you do?

- 1) Set a visual level filter on the bar chart.

- 2) Edit the interactions from the Format menu.
- 3) Set a visual level filter on the donut chart.
- 4) Add a slicer to the page that uses the year column.

Q-114 You have a Power BI model for sales data. You create a measure to calculate the year-to-date sales. You need to compare the year-to-date sales with the previous year for the same time period. Which DAX function should you use?

- 1) LASTDATE
- 2) PREVIOUSYEAR
- 3) PARALLELPERIOD
- 4) SAMEPERIODLASTYEAR

Q-115 You have a query that retrieves sales data. A sample of the data is shown in the following table.

Date	CustomerId	ProductId	Quantity
10/10/2016	8877	8878	5
null	8877	8879	5
null	8877	8880	5
10/11/2016	5723	1234	2
null	5723	1235	3
null	5723	1236	5
null	5723	1237	10
10/12/2016	4356	4401	11
null	5723	4908	2

You need to ensure that the values in the Date column contain a date. Null values must be replaced with the date from the previous row. What should you click on the Transform tab in Query Editor?

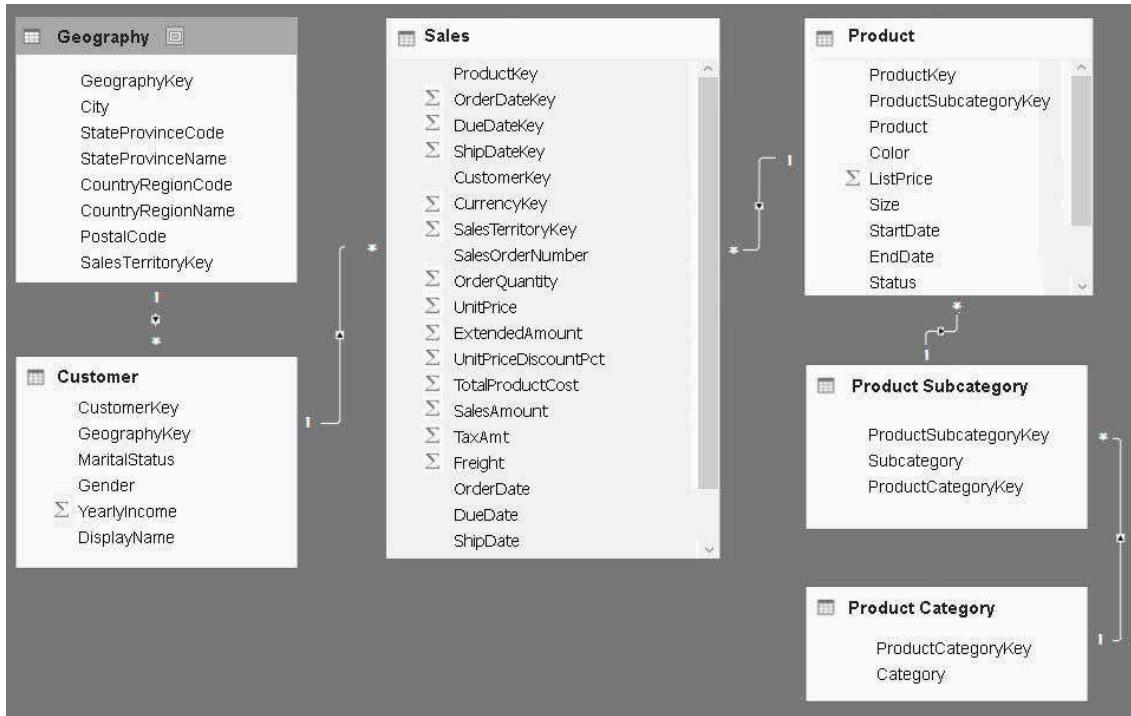
- 1) Date, and then Earliest
- 2) Format, and then Clean
- 3) Fill, and then Down
- 4) Replace Values, and then Replace Errors

Q-116 You need to create a measure of Sales[SalesAmount] where Product[Color] is Red or Product[Size] is 50. Which DAX should you use?

- 1) CALCULATE(SUM([SalesAmount]), ALL('Product'[Color], 'Product'[Size]))
- 2) CALCULATE(SUM([SalesAmount]), 'Product'[Color] = "Red" || 'Product'[Size] = 50)
- 3) CALCULATE(SUM([SalesAmount]), FILTER('Product', 'Product'[Color] = "Red" || 'Product'[Size] = 50))

4) CALCULATE(SUM([SalesAmount]), FILTER('Product'[Color] = "Red" || 'Product'[Size] = 50))

Q-117 Consider the data-model



You add another table named Territory to the model. A sample of the data is shown in the following table.

TerritoryKey	TerritoryName
1	United States
1	USA
2	Canada
2	Can
3	United Kingdom
3	UK

Which function should you use in the query for Territory before you create the relationship?

- 1) Distinct
- 2) IsDistinct
- 3) ReplaceMatchingRows
- 4) RemoveMatchingRows

Q-118 You enable Q&A on the dashboard. You need to provide users with sample questions that they can ask when using Q&A. Which settings should you modify from the Power BI Settings?

- 1) Dashboards
- 2) Subscriptions
- 3) Datasets
- 4) Workbooks

Q-119 You need to calculate the number of orders (Consider a OrderId column with distinct values only). What should you do?

- 1) Create a calculated measure that uses the COUNTA(Order_ID) DAX formula
- 2) Create a calculated measure that uses the SUM (Order_ID) DAX formula
- 3) Create a calculated column that uses the SUM (Order_ID) DAX formula
- 4) Create a calculated column that uses the COUNTA (Order_ID) DAX formula

Q-120 You plan to add a table named Date to the model. The table will have columns for the date, year, month, and end of the last month and will include data from January 1, 2013 to December 31, 2015.

Which DAX functions should you use to create the columns?

- 1) CALENDARAUTO, YEAR, MONTH, and EOMONTH
- 2) CALENDAR, YEAR, MONTH, and ENDOFMONT
- 3) CALENDARAUTO, YEAR, MONTH, and ENDOFMONT
- 4) CALENDAR, YEAR, MONTH, and EOMONTH

Q-121 A data analyst publishes several Power BI visualizations to a blog.

You discover that some of the visualizations contain data that is considered private by your company.

You need to prevent the visualizations from being published to the blog.

What should you do?

- 1) From the Power BI Admin portal, disable the Publish to web setting.
- 2) From the Power BI settings, delete the embedded codes.
- 3) From the Power BI Admin portal, disable the Share content with external users setting.
- 4) From the dashboard settings, modify the Share dashboard settings

Q-122 You create a report in the Power BI service.

You plan to provide external users with access to the report by publishing the report to a public blog.

You need to ensure that the report in the blog post will be updated as the data is refreshed.

What should you do in the Power BI service?

- 1) Publish the app workspace to the entire organization. In the blog post, use the URL of the workspace.
- 2) Share the Report , in the blog post, use the URL of the Dashboard
- 3) Publish the Report to the web . In the Blog-Post, use the Embed-code URL.
- 4) In the blog post, use the URL of the report.

Q-123 You have this FactInternetSales Data.

The screenshot shows the Power BI Query Editor interface. The ribbon at the top has tabs for File, Home, Transform, Add Column, View, and Help. The Home tab is selected. Below the ribbon are various icons for managing data sources, queries, and columns. The main area is titled 'Queries [1]' and contains a table named 'FactInternetSales'. The table has columns: ProductKey, OrderDateKey, OrderQuantity, UnitPrice, and SalesAmount. The data shows seven rows of sales records for ProductKey 528 across different dates and quantities, all with a UnitPrice of 4.99 and a SalesAmount of 4.99.

	ProductKey	OrderDateKey	OrderQuantity	UnitPrice	SalesAmount
1	528	20070807	1	4.99	4.99
2	528	20070808	1	4.99	4.99
3	528	20070808	1	4.99	4.99
4	528	20070809	1	4.99	4.99
5	528	20070810	1	4.99	4.99
6	528	20070811	1	4.99	4.99
7	528	20070815	1	4.99	4.99

You plan to create a bar chart showing the count of sales by year that have a SalesAmount greater than \$1,000.

You need to create a measure that will be used in the bar chart.

Complete the DAX.

Measure = _____ (_____ ('FactInternetSales', 'FactInternetSales'[SalesAmount] > 1000))

- 1) CALCULATE, COUNTX
- 2) COUNTROWS, FILTER
- 3) COUNTX, FILTER
- 4) CALCULATE, COUNT

Q-124 From the Home tab in Power BI Desktop, you click Enter Data and create a table named Sales that contains the following data.

Region	Sales
Canada	100
Canada	900
Italy	500
Spain	800
US	200
US	1000

You add Region and Sales to visualization and the visualization displays the following data.

Sales	Region
1000	Canada
500	Italy
800	Spain
1200	US

What causes the visualization to display four rows of data instead of six?

- 1) Data Category of Region
- 2) Data type of Sales
- 3) Default Summarization on Sales
- 4) Default Summarization on Region

Q-125 You need to create a custom visualization for Power BI.

What should you install first?

- 1) jQuery
- 2) Node.js
- 3) Microsoft Azure Powershell
- 4) Microsoft.NET

Q-126 You have the following two tables:

Subscriber(SubscriberID, EnrollmentDate, ServicePlan)

Date (Date, Month, Week, Year)

There is a relationship between Subscriber[EnrollmentDate] and Date [Date].

You plan to create a KPI for the number of subscribers enrolled in the current year.

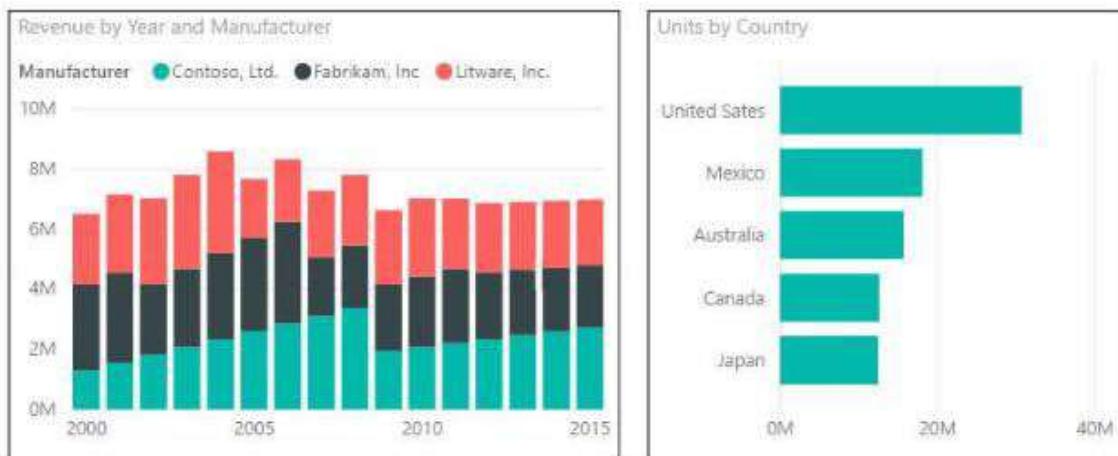
You need to create a goal that is five percent more than the number of subscribers enrolled during the previous calendar year.

Complete the DAX

 (‘Subscriber’[SubscriberID]),
 (‘Date’[Date]))*1.05

- 1) CALCULATE, SUMX, PARALLELPERIOD
- 2) CALCULATE, SUMX, TOTALYTD
- 3) CALCULATE, COUNT, PREVIOUSYEAR
- 4) CALCULATE, SUMX, DATESYTD

Q-127 You are creating a report in Power BI Desktop that has two visualizations on a page as shown—



You need to ensure that when you click the bar of a country, only the values for that country are shown on the Revenue by Year and Manufacturer chart.

- 1) Click the Revenue by Year and Manufacturer chart. On the Format tab, click Edit Interactions. On the Units by Country chart, click Filter.
- 2) Click the Revenue by Year and Manufacturer chart. On the Format tab, click Edit Interactions. On the Units by Country chart, click Highlight.
- 3) Click the Units by Country chart. On the Format tab, click Edit Interactions. On the Revenue by Year and Manufacturer chart, click Filter.
- 4) Click the Units by Country chart. On the Format tab, click Edit Interactions. On the Revenue by Year and Manufacturer chart, click Highlight.

Q-128 Consider this SQL data

Table name	Column name	Data type
Order	Order_ID	Integer
	Order_date	Integer
	Order_amount	Currency
	Customer_ID	Integer
	Order_ship_date	Integer
	Store_ID	Integer
Customer	Customer_ID	Integer
	First_name	Varchar(100)
	Last_name	Varchar(100)
	Customer_photo	Binary
Date	Date_ID	Integer
	Date_name	Datetime
	Month	Integer
	Week	Integer
Monthly_returns	Year	Integer
	Month_ID	Integer
	Total_returns	Float
Store	Store_ID	Varchar(100)
	Name	Varchar(100)
	City	Varchar(100)
	Sales_target	Float

The Order table contains more than one million rows.

The Store table has a relationship to the Monthly_returns table on the Store_ID column. This is the only relationship between the tables.

You plan to use Power BI Desktop to create an analytics solution for the data but you need to import only a sample of the data from the Order table.

What do you do?

- 1) From Query Editor, create a custom column that uses a custom column formula.
- 2) From Query Editor, add a SELECT statement that uses a WHERE clause to the source definition.
- 3) In the Power BI model, create a calculated table.
- 4) From Query Editor, filter the table by Order_date.

Q-129 Consider the previous table only

The Store table has a relationship to the Monthly_returns table on the Store_ID column. This is the only relationship between the tables. You plan to create a chart that displays total Order[Order_amount] by Store[Name].

- 1) Create a relationship between the Order table and the Store table.
- 2) To the Order table, add a measure that uses the COUNTA('Order'[Order_ID]) DAX formula.
- 3) To the Order table, add a measure that uses the COUNT('Order'[Order_amount]) DAX formula.
- 4) None

Q-130 Ouput of SEARCH("n","printer") is-

- 1) True
- 2) False
- 3) 4
- 4) 3

Q-131 You plan to embed Visualizations to a website.

Which one can you Embed?

- Visual 1 : Uses RLS
- Visual 2 : Uses a dataset stored in MS one-drive for business
- Visual 3 : Uses a custom visual
- Visual 4 : Uses a dataset from SSAS (on premise)

Q-132 You have a workspace that contains 10 dashboards. A dashboard named Sales Data displays data from two datasets. You discover that users are unable to find data on the dashboard by using natural language queries.

You need to ensure that the users can find data by using natural language queries.

What should you do?

- 1) From the settings of the workspace, modify the Language Settings.
- 2) From the Sales Data dashboard, set the dashboard as a Favorite.
- 3) From the properties of the datasets, modify the Q&A and Cortana settings.
- 4) From the properties of the dashboard, modify the Q&A settings.

Q-133 Does Q&A work for Multi-Dimensional data?

- 1) Yes
- 2) No

Q-134 You manage a Power BI model that has two tables named Sales and Product.

You need to ensure that a sales team can view only data that has a CountryRegionName (in sales table) value of United States and a ProductCategory (in product table) value of Clothing.
What should you do from Power BI Desktop?

- 1) Add the following filters to a report. CountryRegionName is United States
ProductCategory is Clothing
- 2) From Power BI Desktop, create a new role that has the following filters.
[CountryRegionName] = "United States" [ProductCategory] = "Clothing"
- 3) Add the following filters in Query Editor. CountryRegionName is United States
ProductCategory is Clothing

- 4) From Power BI Desktop, create a new role that has the following filter.
[CountryRegionName] = "United States" && [ProductCategory] = "Clothing"

Q-135 You have a table named Sales. Sales contains the data shown in the following table.

Year	Total Sales
2015	26,250,801.43
2016	32,890,351.72
2017	11,685,099.08

You have the following measure.

Total Sales This Year = SUM([Total Sales])

You plan to create a KPI to compare the current yearly sales to the previous year as shown in the exhibit. (Click the Exhibit button.)

Current Year Sales



You need to create the measure for the goal.

How should you complete the DAX formula?

_____([Total Sales This Year], _____('Date'[Date], -1, YEAR))

- 1) CALCULATE, SAMEPERIODLASTYEAR
- 2) CALCULATE, DATEADD
- 3) CALCULATE, PREVIOUSYEAR
- 4) SUMX, PREVIOUSYEAR

Q-136 You are creating a report in Power BI Desktop.

You have the following tables.

Total name	Column name	Data type
Sales	SalesID	Integer
	SalesDate	Datetime
	TotalPrice	Float
	CustomerID	Integer
	SalesShipDate	Datetime
	StoreID	Integer
Date	Date	Datetime
	DateKey	Integer
	DateName	Datetime
	MonthNumber	Integer
	Week	Integer
	MonthName	Varchar(3)
	Year	Integer

Date[Date] is in the mm/dd/yyyy format. Date[DateKey] is in the ddmmmyyyy format.

Date[MonthNumber] is in the mm format. Date[MonthName] is in the mmm format.

You create the report shown in the exhibit. (Click the Exhibit button.)



You need to ensure that the months appear in the order of the calendar.

How should you sort the MonthName column?

- 1) By MonthNumber
- 2) Ascending
- 3) Descending
- 4) By DateKey

Q-137 You are creating a report in Power BI Desktop.
You are consuming the following tables.

Total name	Column name	Data type
Sales	SalesID	Integer
	SalesDate	Datetime
	TotalPrice	Float
	CustomerID	Integer
	SalesShipDate	Datetime
	StoreID	Varchar(100)
Date	Date	Datetime
	DateKey	Integer
	DateName	Datetime
	MonthNumber	Integer
	MonthName	Varchar(3)
	Year	Integer

You have a new table named Fiscal that has the same schema as the Date table, but contains the fiscal dates of your company.

You need to create a report that displays the total sales by fiscal month and calendar month. What should you do?

- 1) Union Fiscal and Date as one table.
- 2) Add Fiscal to the model and create a one-to-many relationship by using Date[Year] and Fiscal[Year].
- 3) Add Fiscal to the model and create a one-to-one relationship by using Date[Year] and Fiscal[Year].
- 4) Merge Fiscal into the Date table.

Q-138 What type of connection doesn't support any kind of transformations on data?

- 1) Import data connection
- 2) Direct Query connection
- 3) Live connection
- 4) None

Q-139 You need to filter out totals from target figures. Which function does that?

- 1) Table.Filter
- 2) CALCULATETABLE
- 3) Table.SelectRows
- 4) Table.FilterRows

Q-140 Difference between & and && in DAX?

- 1) & checks whether one expression is false and returns false and && checks if both expressions are true then returns true
- 2) & checks if one expression is true and returns true and && checks if both expressions are true then returns true
- 3) & is used to concatenate the strings and && checks if both expressions are true then returns true
- 4) None

Q-141 Data has been scraped from a table on a popular retirement website. However, the Health care quality column's scores were not automatically transformed from text to numbers when Query Editor loaded the table. You thus right-clicked the column header, and selected Change Type > Whole Number to change them.

Unfortunately, the, Health care quality column contains a few ties in states' rankings, which was noted on the website by the word (tie) after their numbers. Query Editor thus reports a few errors.

What is the consequence of using the Remove Errors option (ribbon or the right-click menu option) to resolve this?

- 1) Removes the applied steps that has errors
- 2) Removes the error warnings but keeps all data intact
- 3) Blanks the cell values that have errors
- 4) Removes any rows with errors

Q-142 When you enable Snap objects to grid, all visuals on the Power BI Desktop canvas that you move (or resize) are automatically aligned to the nearest grid axis, making it much easier to ensure two or more visuals align to the same horizontal or vertical location or size.

You can also manage the overlap of each element on the design surface, often referred to as?

- 1) Vertical Stacking
- 2) Stack-Order
- 3) A-order
- 4) Z-order

Q-143 A retail analysis dashboard contains a small collection of datasets including Sales, Items and Stores. You have dragged the Category field from the Item dataset onto the report canvas. You now want to give users the option to select one, many or all Categories to filter the visuals on the report.

Which element should you pick from the visualizations pane?

- 1) Slicer
- 2) Multi-row card
- 3) Funnel
- 4) Card

Q-144 As part of a large HR project you are working with a dataset of company employees, both past and present. The data includes columns for EthnicGroup, PayTypeID, HireDate (the date they started work), TermDate (the date they left) and several other columns. You want to create a new Calculated Column that determines if the person was a bad hire based on a set of rules. If they were a bad hire then the result is 1, otherwise the Calculated Column displays a zero.

The bad hire rule is:

BadHire = If the person stayed at the company less than 61 days

Example: If a person joined the company on 27th June 2013 and left on 21st August 2013, then they would be a bad hire.

Which DAX expression would you use for this Calculated Column?

- 1) IF(OR(((HireDate)-[TermDate])) >= 61,ISBLANK([TermDate])),0,1)
- 2) IF(((HireDate)-[TermDate])*-1) < 61,1,0)
- 3) IF(((TermDate)-[HireDate])*-1) >= 61,0,1)
- 4) None

(Reason: For this expression we must use a combination of IF, OR and ISBLANK. If we forget to use ISBLANK then the difference between a date and a blank date is always 0, causing problems with the numeric comparison and potentially always showing BadHire as 1. Remember some employees won't have left the company and hence have no TermDate value.)

Q-145 You're creating a fancy little dashboard using Power BI Service. The dashboard shows the accumulative increase in the global population over the last several decades. The

dashboard will contain an introductory YouTube video that you have uploaded to the YouTube website. After uploading the video you copy the embed HTML code and paste it into your dashboard.

Unfortunately the video is fixed to 768 pixels wide and you would like it to expand to fit the tile size. What should you do?

- 1) Remove the allowfullscreen parameter from the code
- 2) Change the iFrame width & Height attributes to 100%
- 3) Add an extra outer DIV with a style width:auto and height:auto value
- 4) Videos are fixed size and can't expand to fit tiles

Q-146 Many data modeling and data transformations are available when using DirectQuery, though with some limitations. Which of the following is NOT a limitation of using DirectQuery?

- 1) All tables must come from a single Database
- 2) There is a 1 million row limit for returning data
- 3) Relationship filtering is limited to a single direction, rather than both directions
- 4) 1 GB dataset limitation

Q-147 When you share with people outside your organization, they get an email with a link to the shared dashboard. They need a Power BI Pro license, and they have to sign in to Power BI to see the dashboard.

After they sign in, they see the shared dashboard in its own browser window without the left navigation pane, not in their usual Power BI portal. They have to bookmark the link to access this dashboard in the future.

Which of the following statements is 'FALSE' when sharing visualizations outside of your organisation?

- 1) They can't edit any content in this dashboard or report
- 2) They can change any filters/slicers available on the reports connected to the dashboard and save their changes
- 3) People outside your organization can't see any data if role- or row-level security is implemented on on-premises Analysis Services tabular models
- 4) Only your direct recipients can see the shared dashboard. For example, if you sent the email to Amit@inueron.ai, only Amit can see the dashboard

(Remember : They can use slicers but not save their changes)

Q-148 Some of the most powerful data analysis solutions in Power BI Desktop can be created by using measures. Measures help us by performing calculations on our data as we

interact with our reports. Understanding aggregations is fundamental to understanding measures, because every measure will perform some type of aggregation.

Which of the below is TRUE regarding measures in Power BI?

- 1) You can reference another measure in a DAX expression by just typing an opening bracket ([])
- 2) Every time you interact with your report, you are changing the context in which a measure calculates and displays its results
- 3) You can create a new measure by clicking on the New Measure button in the ribbon on Power BI Desktop's Home tab
- 4) All of the above

Q-149 You can easily add a new custom column of data to your Power BI Desktop model. You can create and rename your custom column using easy buttons to create M formulas that define your custom column.

How would you add a custom column?

- 1) Home → Query Editor → Home → DataSource settings
- 2) Home → External Data → Enter Data
- 3) Home → Relationships → Manage Relationships
- 4) Home → Query Editor → File → Add Column

Q-150 Having created a new blank model you want to load in data from a SQL Server database which is hosted on the same PC as the Power BI Desktop application. You click the Get Date ribbon option and select SQL Server from the drop down list.

What should you enter in the Server textbox?

- 1) Local
- 2) [blank]
- 3) Host
- 4) Localhost

Q-151 The following table contains a Parent-Child hierarchy on the columns: Employee Key and Parent Employee Key. From the table you can see that employee 112 has no parent defined, employee 14 has employee 112 as manager (ParentEmployeeKey), employee 3 has employee 14 as manager and employees 11, 13, and 162 have employee 3 as manager. The

above helps to understand that employee 112 has no manager above her/him and she/he is the top manager for all employees.

Employee Key	Parent Employee Key
112	
14	112
3	14
11	3
13	3
162	3
117	162
221	162
81	162

The PATHLENGTH Function (DAX) returns the number of levels in a given PATH(), starting at current level until the oldest or top most parent level.

What would be the PATHLENGTH value for the third row (values 3 and 14)?

- 1) 2
- 2) 4
- 3) 3
- 4) 1

(REASON: 3 as path will be → 112|14|3)

Q-152 A complicated dashboard for the finance department requires you to combine three separate text fields together to form a concatenation of Country, Region and City. Which DAX expression below would successfully concatenate the three fields together into a single string result?

- 1) CONCATENATE([Country], ", ", [Region], ", ", [City])
- 2) CONCATENATEX([Country], ", ", [Region], ", ", [City])
- 3) [Country] + ", " + [Region] + ", " + [City]
- 4) [Country] & ", " & [Region] & ", " & [City]

Q-153 When you import multiple tables, chances are you're going to do some analysis using data from all those tables. Relationships between those tables are necessary in order to accurately calculate results and display the correct information in your reports.

Imagine an example of a model that has a Sales actuals table with a lookup table for department and also a budget sales table that records target budget for each department. The department table is connected to both the sales and the budget table.

Which kind of Cross Filter Direction would you use in this example?

- 1) Single
- 2) Both

Q-154 If you want to combine data from multiple sources into a single model, for example, to join some data from a corporate SQL Server database with some local data maintained in an Excel file. Is DirectQuery a good choice for this scenario rather than Import?

- 1) Yes
- 2) No

Q-155 You have loaded data from a database table which contains a list of filenames that have been processed by an internal team. One particular column called filename contains the name of each file processed e.g. enrollment.batch11.xml

Which Transform function would you use to dissect the filename values into two separate columns, one for the filename and the other for the file extension e.g. xml

- 1) Extract - Text before delimiter
- 2) Split Column - Split at Each occurrence of the delimiter
- 3) Extract - Text after delimiter
- 4) Split Column - Split at Right-most delimiter

Q-156 Reports are often confused with dashboards since they too are canvases filled with visualizations. But there are some major differences. Which one allows you to filter, highlight, and slice, and also see dataset tables and fields and values?

- 1) Report
- 2) Dashboards
- 3) Neither
- 4) Both

Q-157 The Union DAX command creates a union (join) table from a pair of tables but which statement below is FALSE regarding Union?

- 1) The two tables must have the same number of columns
- 2) The column names in the return table will match the column names in table_expression1
- 3) Columns are combined by position in their respective tables
- 4) Duplicate rows are removed

Q-158 Which type of visualisation would you choose if you wanted to show relationships between 3 numerical values and turn the horizontal axis into a logarithmic scale? The worksheet data would include grouped sets of values and you wanted to show patterns in large sets of data, for example by showing linear or non-linear trends, clusters, and outliers?

- 1) Scatter plot
- 2) Tree Map
- 3) Bubble Chart
- 4) Pie Chart

Q-159 Output of DAX → IF(ISLOGICAL("true"), "Is Boolean type or Logical", "Is different type") is—

- 1) Is Boolean type or Logical
- 2) Is different type

Q-160 When you share a dashboard with tiles that link to reports, those reports are also shared at the same time. But what if you want to share just a report? Just send the report page URL to your colleagues. As long as they have Power BI Pro licenses, are members of the same distribution group, in the same email domain as you, or have at least one dashboard that links to that same report (the dashboard has tiles that were pinned from that report), they'll be able to open the report.

You want to share a report that is prefiltered on the Store Territory with a value of UP. What should you add to the end of the report URL before you share it?

- 1) ?filter=Store/Territory = UP
- 2) ?filter=Store/Territory eq UP
- 3) ?filter=Store/Territory == UP
- 4) ?filter=Store[Territory] eq UP

Q-161 You want to write a DAX expression that checks if the product code column contains the value "ex". Which DAX function below is the right one to use?

- 1) FIND("ex", [ProductCode])
- 2) SEARCH("ex", [ProductCode])
- 3) CONTAINS(tablename, [ProductCode], "ex")
- 4) NONE

Q-162 With Power BI Publish to web, you can easily embed interactive Power BI visualizations online, such as in blog posts, websites, through emails or social media, on any device.

You have published a visualization but unfortunately changes to the underlying data are not immediately visible to users. What might be wrong?

- 1) We must refresh the data manually to the web
- 2) It takes upto an hour for the data to refresh
- 3) It's not possible to update/refresh the data after publishing on the web, visuals are static
- 4) User is restricted by RLS

Q-163 The DAX FORMAT function is used to convert a value to text according to the specified format that you provide as the second argument to the function. Which DAX expression below would format the number so that it's displayed as 40.00%?

- 1) FORMAT(0.4,"Percent")
- 2) FORMAT(0.4,"p")
- 3) FORMAT(0.4,"%")
- 4) FORMAT(40,"Percent")

Q-164 You have noticed a large spike in your gross-margin between July and august 2020. You want to find out the reason for this though you are not sure what to analyse.

What Feature can you use here?

- 1) Use Q&A visual and ask 'Why have sales increased from July to august 2020?'
- 2) Right click on the month's value, select analyse and choose 'Explain the Increase'
- 3) Use Azure ML visual and drag in the gross margin field to the 'Explain' bucket.
- 4) Call DV (your data analyst)

Q-165 You drag the field into the 'Explain by' bucket of the decomposition tree visual and they don't appear as nodes/leaves in the visual. Why?

- 1) The decomposition tree is a preview visual – once the feature is enabled (under file → options) the field will appear in the visual
- 2) You cannot enter attributes/dimensions in the 'Explain by' bucket – it has to be other measures
- 3) The fields that are entered into 'Explain by' are possible splits that you (or an end user) can then choose from in terms of how to analyse the metric using the visual.
- 4) The field that have been entered are from dimension table which have no relationship with the metric being analysed

Q-166 What is the difference between groups and bins in Power BI?

- 1) You would use groups with text values(Categories/attributes) and bins with numerical values.
- 2) Groups work with dax whereas bins use M
- 3) Groups and bins are identical.
- 4) Groups are grouping of text values and bin is actually a dust-bin for power bi which contains deleted values of data.

Q-167 You create a Bar Chart visual showing Quarter wise sales for year 2020.

(Assume sales on y-axis and bars of Q1,Q2,Q3,Q4 ON xaxis)

You want a separate color for Q1 bar, how do you achieve it?

- 1) Conditional Formatting
- 2) Groups
- 3) Calculated Column
- 4) Calculated Measure

Q-168 Tree map belong to which Visual Segment?

- 1) Comparison
- 2) Composition
- 3) Distribution
- 4) Relation

Q-169 KPI belongs to which visual segment?

- 1) Comparison
- 2) Composition
- 3) Distribution
- 4) Relation

Q-170 You have a line chart , with

Sales on Y-axis and dates on X-axis. The visual shows Jan 2020,Jul 2020,... on X axis instead of Months (like Jan,Feb,Mar....)

What do you do?

- 1) Increase the minimum category width of the X-axis in the formatting pane
- 2) Increase the 'Maximum Size' of the X-axis in the formatting pane
- 3) Change the X-axis from type 'Continuous' to type 'Categorical'
- 4) Reduce the text size on X-axis



SUBJECTIVE QUESTIONS

Q-1 Describe all types of Visual segments with examples.

Q-2 Difference between a report and a Dashboard

Q-3 What are Many-to-Many relationships?

Q-4 DirectQuery vs Import?

Q-5 What are advantages of using Variables?

Q-6 Can SQL be used in Power Query Editor?

Q-7 Define Power BI's Q&A?

Q-8 Define Data Security in Power Bi?

Q-9 Consider functions like SUM,SUMX and AVERAGE,AVERAGEEX. What is this X implying?

Q-10 Why use Calculated measure over Calculated column whenever possible?



Q-11 Explain different types of filters in Power Bi? Is RLS a filter?

Q-12 What is Power BI Embedded?

Q-13 State the difference between COUNT and COUNTD Function?

Q-14 In DAX functions like VAR.S & VAR.P, what are the P&S implying?

Q-15 What is equivalent of Append Queries in DAX? State Syntax also

Q-16 Explain the types of Joins in Power Bi Query editor?

Q-17 What are the types of tables in Power BI?

Q-18 How to represent different levels of hierarchy of data in one single visualization?

Q-19 Name some important charts and state why they are important for you?

Q-20 What is Bookmark? How do you create it?

Q-21 Give an example of a visual from Power BI which serves as a Cross-Table? Is table visual right?

Q-22 How to create Hierarchies in Power BI?

Q-23 What are main three fundamental tabs of Power BI Desktop?

Q-24 Tell all the data-types available in Power BI?

Q-25 Tell two ways to navigate in Reports.

Q-26 How to import/Scrape data from web using Power BI?

Q-27 Can you calculate Correlation using DAX as there is no predefined function for it? Consider Table with columns Sales, Area. Find the correlation coefficient between them. Formula below --

$$r = \frac{1}{n-1} \sum \left(\frac{x - \bar{x}}{s_x} \right) \left(\frac{y - \bar{y}}{s_y} \right)$$

Q-28 You want to create a line chart showing Quantity by the invoice date.

There exists an active relationship between Date Column from the Date table and delivery date column from the Sale table.

Now You notice that there is a relationship between the Date column from the Date table and the Invoice Date Key column from the Sale table, but the relationship is inactive. All other visuals in your report will be analyzing values by delivery date. How should you approach this problem? Give reason for your approach?

Q-29 How can you make sure that each category manager can see sales of their category only and allow the CEO to see all sales in a single report? Your solution must involve minimal effort.

Q-30 Any Difference between Histograms and Bar charts?

TABLEAU Interview Questions

Instructions to solve the Questions:

- 1. Explanation for each and every solution must be given in brief.**
 - 2. Screenshot for each and every step must be provided for questions involving practical implementation.**
 - 3. For theory/conceptual questions. Solutions having at least 1 practical implementation will be favored.**
 - 4. For MCQ's also, provide the reason for your answer with example to support it.**
-

1. Which is not a component of Tableau
 1. VizQLServer
 2. Gateway
 3. Repository
 4. Tiles
2. Which Is a Tableau file extension
 1. .tdl
 2. .tdl
 3. .tde
 4. .tdi
3. Which is not a datatype available in tableau
 1. Text
 2. Date
 3. Region
 4. Character
4. Recognize a filter from tableau
 1. Context Filter
 2. Cross-Drill Filter
 3. Hide Filter
 4. URL Filter
5. Green Pill symbolizes Dimension
 1. True

2. False
6. Which is not a Filter Pane in Tableau
1. Condition Tab
 2. Slicer
 3. Wildcard Tab
 4. Exclude/Include Tab
7. Which of the following is not a Trend Line model
1. Linear Trend Line
 2. Exponential Trend Line
 3. Binomial Trend Line
 4. Logarithmic Trend Line
8. Can the same measure be used twice in a single view
1. No
 2. Yes
9. Which explains the order of data representation in data section
1. Parameters > Sets > Measure > Dimension
 2. Measure > Dimension > Parameters > Sets
 3. Sets > Parameters > Dimension > Measure
 4. Dimension > Measure > Sets > Parameters
10. Sets can be created on Dimensions as well as measures?
1. True
 2. False
11. Tableau cannot hide the unused fields.
1. True
 2. False
12. Story Boards is the key feature of Tableau
1. True
 2. False
13. Which of the following charts is best suited for Comparison
1. Scatter Chart
 2. Pie Chart
 3. Line Chart
 4. Histogram
14. Best Visual for static values
1. Pie Chart
 2. Stocked Column Chart
 3. Scatter Chart
 4. Bubble Chart
15. Which of the following chart will best depict sales of Audi, Mercedes, Bentley for the period of 3 years.
1. Waterfall Chart
 2. Bubble Chart
 3. Line Chart

4. Bar Chart
16. Identify continuous field
1. Region
 2. Address
 3. Profit
 4. Ship Date
17. Which color is the dimension pill
1. Blue
 2. Red
 3. Yellow
 4. Green
18. Tableau uses _____ chart by default to show time values
1. Table
 2. Histogram
 3. Bar
 4. Line
19. Measures can be converted into dimensions
1. True
 2. False
20. To view a discrete set of values in a continuous range of values which is an apt visual?
1. Scatter Plot
 2. Line
 3. Histogram
 4. Waterfall
21. Pick a file extension for tableau projects
1. Tableau Packaged Workbook [.twbx]
 2. Tableau Workbook [.twb]
 3. Tableau Data Source [.tds]
 4. All of the above
22. Which should be picked to place on the colors card
1. PostalCode
 2. Discount
 3. Region
 4. Quantity
23. Do I need to write a separate calculation for viewing top 10 Cities with maximum sales?
1. Yes
 2. No
24. A sheet cannot be used within a story directly.
1. True
 2. False
25. Sets can be created on dimensions?
1. True
 2. False
26. # in tableau shows?
1. Data Literal

- 2. Measure
 - 3. Dimension
 - 4. Parameter
27. Macro is a concept of Tableau
- 1. True
 - 2. False
28. Which does not belong to the Product suite that tableau offers?
- 1. Reader
 - 2. Desktop
 - 3. Private
 - 4. Public
29. Is there a QnA feature in Tableau?
- 1. Yes
 - 2. No
30. Is there a drill up/ drill down feature in tableau?
- 1. Yes
 - 2. No
31. Which is not a join available in tableau?
- 1. Inner
 - 2. Outer
 - 3. Left
 - 4. None of the above
32. DAX functions belong to tableau
- 1. True
 - 2. False
33. Tableau gives you access to additional marketplace?
- 1. Yes
 - 2. No
- 34. What is the meaning of forecast option in analysis menu**
- 1. Used to export an img of the story
 - 2. To show forecast based on available data
 - 3. Is used to set the layout in terms of colors
 - 4. To update the story with latest data from source
35. What is the meaning of maps layers option in the map menu
- 1. To show forecast based on available data
 - 2. To hide and show map layers, such as street names and country borders and add data layers
 - 3. To create new geographic roles and assign them to the geographic fields in your data
 - 4. Is used to create additional fields based on certain calculation on existing fields
36. If you publish your data to tableau public, who can view it?
- 1. Open to everyone
 - 2. Only people with a license

37. Does dashboards contain multiple worksheets which are linked. so the action in any of the worksheet can change the results in the dashboard accordingly?

1. Yes
2. No

38. View could be highlighted using?

1. Filters
2. Aggregations
3. Labelling
4. All of the above.

39. Which is not a shelf from Tableau

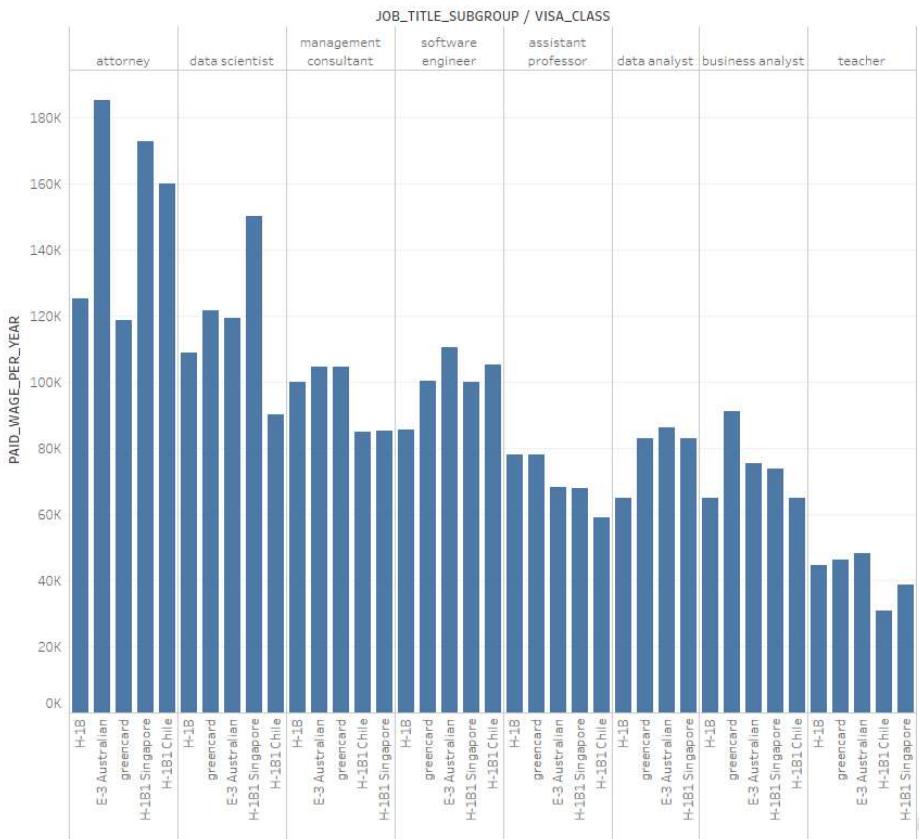
1. Row and Column
2. Filter
3. Parameter
4. Marks

40. What is the meaning of geocoding option in map menu?

1. Is used to export an image of the story
2. To create new geographic roles and assign them to the geographic fields in your data
3. Is used to set the layout in terms of colors and sections of the story
4. To hide and show map layers, such as street names and country borders and add data layers

41. Identify shelf from Tableau

1. Data
2. Pages
3. Report
4. Model



Answer the following questions related to the chart above.

42. What should be placed in the row shelf?

1. PAID_WAGE_PER_YEAR
2. VISA_CLASS
3. JOB_TITLE_SUBGROUP
4. Cannot comment

43. What should be placed on the column field

1. PAID_WAGE_PER_YEAR
2. VISA_CLASS
3. JOB_TITLE_SUBGROUP
4. Cannot comment

44. Which visual chart is used?

1. Basic Bar Chart
2. Combo Bar Chart
3. Dual Axis Bar Chart
4. Clustered Bar Chart

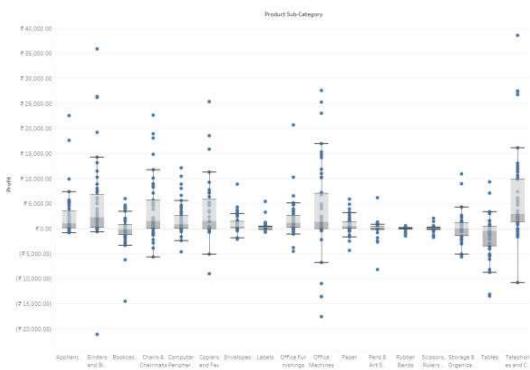
45. Which is a valid statement

1. Citizen with green card have the highest paid wages

2. Data Scientist with green card are paid more wages than combined avg of H1B1-Singapore and H1B1-Chile
3. Data Analyst with E3-Australian Visa is paid the least
4. None of the above
46. Data Analyst with E3-Australian Visa is paid the highest
1. True
 2. False
47. After which Layer does tableau fit in the below option
1. Database Layer
 2. Data Interaction Layer
 3. Data Modelling Layer
 4. Service Layer
48. Personal Version is preferred for Big Data.
1. True
 2. False
49. Tableau Server is Located in
1. Europe
 2. Australia
 3. Dubai
 4. Canada
50. Discrete Variables are also called as Measures
1. True
 2. False
51. Continuous Variables are also called as Measures
1. True
 2. False
52. Dependent Variables are usually all Measures
1. True
 2. False
53. Tableau provides a default model view
1. True
 2. False
54. Creation of Custom Filters is possible with Tableau?
1. True
 2. False
55. Best way to find Outliers is?
1. Manually search in the table
 2. Filter directly on the data source and delete
 3. Using trend analysis by forming groups & filters
 4. Does not affect the analysis
56. Sum[x,y] falls under which type of calculation
1. Number
 2. Aggregate

- 3. Logical
 - 4. User
57. Variables in calculation field are represented with
- 1. Orange
 - 2. Green
 - 3. Blue
 - 4. Red
58. Blue fields in the calculations are aggregates
- 1. True
 - 2. False
59. # represents _____ in Tableau.
- 1. Parameter
 - 2. Group
 - 3. Calculation Field
 - 4. Dimension
60. Newly created Calculated Fields are listed under Dimension
- 1. True
 - 2. False
61. Newly created Calculated Fields are listed under Measures
- 1. True
 - 2. False
62. The data source uploaded initially is always
- 1. External data source
 - 2. Primary Data Source
 - 3. Secondary Data Source
 - 4. Internal Data Source
63. Tableau allows dynamic selection of primary and secondary data sources?
- 1. True
 - 2. False
64. Dashboard is a feature unique to tableau?
- 1. True
 - 2. False
65. A good reason to use bullet graph is?
- 1. Displaying sales growth
 - 2. Adding data to bins and calc. Count measure
 - 3. Analyzing the trend for a time period
 - 4. Comparing the actual against the target sale
66. The icon associated with the field that has been grouped is a _____
- 1. Paper Clip
 - 2. Set
 - 3. Hash
 - 4. Equal To
67. What is the meaning of the cell size option in format menu
- 1. To customize the size of the cells displaying data
 - 2. To assign a title and caption

- 3. To create additional fields based on calc.
 - 4. Apply theme to the entire workbook
68. What does publishing data source mean?
- 1. To export an image of story
 - 2. To publish the workbook in the server used by others
 - 3. To publish the source data used in the workbook
 - 4. Used to give a chance to user for dynamically changing data members at runtime.
69. Can you create your own Hierarchy in tableau?
- 1. True
 - 2. False
70. Can we create different worksheets to create different view on the same data or different data.
- 1. Yes
 - 2. No
71. .Twb format allows the stakeholders to directly view the report with data imports?
- 1. True
 - 2. False
72. Which of the following is not an advantage of tableau?
- 1. Widely used by Data Analyst
 - 2. Story Feature
 - 3. Multiple visual creation on the same sheet
 - 4. Wide option available to import large dataset
73. Which is not a practice around dimensions and measures
- 1. Double Click
 - 2. Drag and Drop
 - 3. Point and Click
 - 4. None of the above
74. Is a manual sort possible in Tableau
- 1. True
 - 2. False
75. Visual Chart suggestion is not a default feature of Tableau
- 1. True
 - 2. False
76. Customization of Axis Header is possible with Tableau
- 1. True
 - 2. False
77. At a time only a single field can be created using highlighter.
- 1. True
 - 2. False
78. Screen Dimension are customizable in Tableau
- 1. True
 - 2. False
79. Tableau is best fit for?
- 1. Visual Drag n Drop operation
 - 2. Data Discovery

3. Statistical Modelling
 4. ETL Operations
80. Is it possible to deploy a URL action on a dashboard object to open a Web Page within a dashboard rather than opening the system's web browser?
1. True, with the use of Tableau Server
 2. True, with the use of a Web Page object
 3. False, not possible
 4. True, requires a plug-in
81. A sheet cannot be used within a story directly. Either sheets should be used within a dashboard, or a dashboard should be used within a story.
1. True
 2. False
82. Sets can be created on Measures.
1. True
 2. False
83. Tableau is not capable to?
1. Wizard driven visual analysis
 2. Centralized server
 3. Ad-hoc discovery
 4. None of the above
84. For creating variable size bins we use _____
1. Calculation Fields
 2. Sets
 3. Groups
 4. Table Calculation
85. What is the below graph called?
- 
1. Candle Plot
 2. Scatter Line Plot
 3. Box Plot
 4. Cylinder Plot
86. Longitude and Latitude are to be created externally by the analyst?
1. True
 2. False
87. Sales/Profit can be considered as a continuous field?
1. True

2. False
88. Swapping rows with columns on a dual axis graph will throw an error.
1. True
 2. False
89. Customizing donut chart is a default feature in tableau.
1. True
 2. False
90. Can Measures can be converted to dimensions ?
1. True
 2. False
91. By default all numeric values are listed under measures
1. True
 2. False
92. Which is not a strength of Tableau
1. Mobility
 2. Self Service BI
 3. Big Data Connectivity
 4. Enterprise Deployment
93. Treemaps are static, No grouping of categories is possible.
1. True
 2. False
94. Customizing tooltip to visuals on hover is a feature available in Tableau
1. True
 2. False
95. R functions and R models are used in Tableau?
1. True
 2. False
96. Data blending is used for?
1. To merge data from the same source
 2. To merge data two different folders in the same location.
 3. To merge data placed in different locations.
 4. None of the above
97. Can you automate the tableau reports?
1. Using Tableau Public
 2. Using Tableau Online
 3. Using Tableau Desktop
 4. Using Tableau Server
98. Which function is used to check the current date and time?
1. ISDATE()
 2. CURRENTDATE()
 3. NOW()
 4. DATE()
99. Which is not a valid file extension for tableau
1. .tds
 2. .tbd

- 3. .tdl
 - 4. .tps
100. Which is not a data type in tableau?
- 1. String
 - 2. Text
 - 3. Number
 - 4. Date
101. Which of these methods saves all worksheets in your visualization
- 1. Worksheets
 - 2. Workbooks
 - 3. Bookmarks
 - 4. Dashboards
102. Can one visual chart have two x-axis or y-axis?
- 1. Yes
 - 2. No
103. Tableau supports live data connection
- 1. Yes
 - 2. No
104. Drill down can be only performed if there is an existing hierarchy in the workspace?
- 1. Yes
 - 2. No
 - 3. May be
105. Extraction of data after filtering from a data source is possible?
- 1. Yes
 - 2. No
106. Groups can be formed random like clusters?
- 1. True
 - 2. False
107. Sets is used for individual clustering while creating a visual
- 1. Yes
 - 2. No
108. Grouping is limited to columns with hierarchy?
- 1. True
 - 2. False
109. What does creating alias in tableau mean?
- 1. Creating same columns with different column names
 - 2. Having same column name but different name for column elements
 - 3. Means to rename measure
 - 4. None of the above
110. Which is a license that tableau offers
- 1. Tableau Desktop License
 - 2. Tableau Public License
 - 3. Tableau Viewer License

- 4. Tableau CAL License
- 111. Alias should be created with measure.
 - 1. True
 - 2. False
- 112. Alias are used under dimensions usually?
 - 1. True
 - 2. False
- 113. Grouping is best defined as?
 - 1. Collection of similar elements
 - 2. Customized collection of elements
 - 3. Unique collection of elements.
 - 4. Random collection of elements
- 114. Group icon is
 - 1. HashTag
 - 2. Paperclip
 - 3. Tree
 - 4. Abc
- 115. Tableau supports data extracts from?
 - 1. MySql
 - 2. Postgres
 - 3. MS Sql Server
 - 4. All of the above
- 116. Grouping will overwrite the existing values of that particular dimension.
 - 1. True
 - 2. False
- 117. Grouping can be used as a normal dimension
 - 1. True
 - 2. False
- 118. Grouping in measure is possible?
 - 1. True
 - 2. False
- 119. Sets can be combined?
 - 1. True
 - 2. False
- 120. Joining of sets is same as data blending
 - 1. Yes
 - 2. No
- 121. Data type of both set must be same is a requirement of Tableau
 - 1. Yes
 - 2. No
- 122. Shared axis in Tableau is for ?
 - 1. Two Measures
 - 2. Two Dimensions
 - 3. Two Sets
 - 4. Two Group

123. Which of the following is not a filtering option in tableau
1. Top
 2. Condition
 3. Wildcard
 4. None of the Above
124. Default aggregation used for tree map
1. Sum
 2. Avg
 3. Count
 4. Count Distinct
125. Tableau is supported on a mobile device
1. True
 2. False
126. Tableau allows you to join multiple as per your flexibility
1. Yes there is no limit
 2. Yes but the limit is 27
 3. There is a possibility but the limit is above 50 Tables
 4. No is not feasible, the limit is 32
127. Testing is a latest add on feature offered by tableau before the visualization stage
1. True
 2. False
128. Tableau supports SQL queries?
1. Yes
 2. No, not yet added.
129. Select the one that census info in geocoding option
1. Tableau Server
 2. Longitude, Latitude
 3. Metadata
 4. Data Layer in geospatial analysis
130. Cascading filters are same as joining of sets
1. Yes
 2. No
131. Tableaus performance is dependent on?
1. Data source
 2. Data Geographical location
 3. Time the data source takes to execute query
 4. None of the above
132. Select one which is compatible with Tableau
1. Python 2
 2. Python 3
 3. Java
 4. R
133. Tableau SDK is downloaded within the tableau set up file
1. True
 2. False

134. Tableau SDK is an add on kit for?
1. Building RESTful API
 2. Connect to a data source
 3. Eclipse, Visual Studio
 4. All of the above
135. Which is included in Tableau SDK
1. Extract API
 2. Server API
 3. Both
 4. None of the above
136. Tableau SDK supports?
1. C, C++
 2. Python 2.x and Python 3.x
 3. Java
 4. All of the above
137. Tableau SDK does not work on
1. Fedora
 2. CentOS
 3. Ubuntu
 4. None of the above
138. Tableau SDK is compatible with which OS
1. Windows
 2. Linux
 3. Mac OS X
 4. All of the above
139. Updates from the data source
1. Is it auto updated
 2. Manual updation is required
 3. We can customize the option
 4. None of the above
140. Custom geocoding can be used to plot data on the map?
1. Yes
 2. No
141. In Mobile views dynamic scrolling can be attained
1. True
 2. False
142. Tableau follows which schema
1. Hybrid
 2. Snowflake
 3. Star
 4. None of the above
143. Which filter is applied at the data source level?
1. Context Filter
 2. Quick Filter
 3. Local Filter

4. Global Filter
144. Which table calculation shows the rate of change?
1. Percentage difference from
 2. Difference from
 3. Percent from
 4. Percentage of total
145. What is an invisible filter?
1. Can be applied to view but not exposed to user
 2. Filter is only displayed with correct data blending
 3. Type of filter in Tableau used for dashboard design
 4. None of the above
146. Which of the following allow users to select or input a value in a view and that value can then in turn be used in calculations, and subsequently, filters.
1. Calculated fields
 2. Captions
 3. Parameters
 4. Tooltips
147. Dashboard layout containers allow you to _____
1. Create an area in the dashboard where objects automatically adjust their size and position based on the other objects in the container
 2. Create an area in the dashboard where objects maintain its predetermined size and position.
 3. Add sheets and other objects in the dashboard without affecting any formatting
 4. Add a dashboard within a dashboard
148. Where can the list of parameters not be used
1. Filters
 2. Binned Measures
 3. Reference Line
 4. Pages
149. Sorted field is denoted in?
1. Green
 2. Blue
 3. Italic
 4. Bold
150. Containers for shelves, legends and other controls are represented as?
1. Cards
 2. Shelves
 3. Marks
 4. Page
151. Which shelf allows you to encode data by assigning different shapes to the marks in a data view
1. Icon shelf
 2. Shape shelf
 3. Label shelf
 4. Page shelf

152. Displays the fields of the data sources to which Tableau is connected. The fields are divided into dimensions and measures. It also displays custom fields such as calculations, binned fields, and groups
1. Data Window
 2. Dashboard
 3. Data Source
 4. Bookmarks
153. Text tables is well known as
1. Axis
 2. Cell
 3. Caption
 4. Cross Tab
154. Is a representation of your data in a Tableau worksheet or dashboard.
1. Dimensions
 2. Data Window
 3. Data view
 4. Data source
155. What is a secondary Table calculations
1. Calculations performed from the results of the previous calculations
 2. Calculations that applies to all of the data in the table
 3. Another name for calculated field
 4. Calculations performed at the data source level
156. In dual axis which is a good practice
1. Edit Axis
 2. Dual Axis
 3. Sync Axis
 4. Format Reference Line
157. What is presentation mode?
1. A view from a user's perspective.
 2. Removes legends, quick filters, parameter controls to allows easy integration with Power Point
 3. Read only version of your view
 4. Hides the data window, toolbars, workspace controls, and view cards
158. Tableau supports all browsers
1. True
 2. False
159. Which is an option for wildcard filter
1. Contains
 2. Starts with
 3. Ends with
 4. All of the above
160. Calculated fields are represented as an equals
1. True
 2. False
161. All items in the data pane must have unique value

1. True
 2. False
162. Parameters can have the same names?
1. Yes
 2. No
163. Count and CountD null values are included
1. True
 2. False
164. When using DATEPART, which of the following is not a valid value?
1. Months
 2. Days
 3. Dayofyear
 4. Is-Weekday
165. DATE(2018-12-11 22:12:09) is a valid expression?
1. True
 2. False
166. ZN function returns?
1. Zero when TRUE
 2. Returns value if exist else returns NULL
 3. Returns value if exist else returns zero when Null
 4. Returns 1 if is a value else returns null
167. Which is not a valid function
1. RUNNING_COUNT
 2. RUNNING_COUNTD
 3. RUNNING_SUM
 4. RUNNING_AVG
168. SCRIPT_function returns result from an external service
1. True
 2. False
169. IF part of an expression can return a different data type from the ELSE part.

1. True
 2. False
170. The LOOKUP function
1. Returns the number of rows from the current row to the first row in the partition.
 2. Returns the value of the expression in a target row, specified as a relative offset from the current row.
 3. Returns the number of rows from the current row to the last row in the partition.
 4. Returns the value of this calculation in the previous row.



Subjective Questions :

1. What Are the Filters? Name the Different Filters in Tableau.
2. There Are Three Customer Segments in the Superstore Dataset. What Percent of the Total Profits Are Associated with the Corporate Segment?
3. Different joins available in Tableau?
4. What is the Difference Between Joining and Blending?
5. Is There a Difference Between Sets and Groups in Tableau?
6. What is a Parameter in Tableau? Give an Example.
7. What is the Rank Function in Tableau?
8. Define aggregation and disaggregation in tableau?
9. What is a context filter and what are its limitations?
10. What are Schedules and Extracts in a Tableau server?
11. Name the components of the dashboard?
12. What is the page shelf?
13. What is the maximum number of tables that can be joined?
14. What are shelves and sets?
15. Display top 5 and last 5 records in a single view?
16. Why we Need Actions in Tableau?
17. Difference between parameters and filters
18. What is the difference between the quick filter and the normal filter in Tableau?
19. How can we combine a database and the flat file data in Tableau Desktop?
20. How do we use parameters in Tableau?
21. What is a blended axis?
22. List the various datatypes in Tableau?
23. Difference between data joining and data blending
24. What are context filters?
25. Explain the term filter actions
26. Bar graph vs Histogram
27. What are the types of Tableau combined sets?
28. Explain the classification of tableau
29. TreeMap Vs Heat Map
30. What is the use of a blended axis?
31. What is the use of dual-axis?
32. Explain bin

SQL Interview Questions

Instructions to solve the Questions:

- 1. Explanation for each and every solution must be given in brief.**
 - 2. Screenshot for each and every step must be provided for questions involving practical implementation.**
 - 3. For theory/conceptual questions. Solutions having at least 1 practical implementation will be favored.**
 - 4. For MCQ's also, provide the reason for your answer with example to support it.**
-

- 1) What is the role of SQL?
 - a) Store data
 - b) Manipulate data
 - c) store, manipulate and retrieve data
 - d) Create table



- 2) Identify the primary key

- a) Customer name
- b) Phone number
- c) CustomerID
- d) Postal code

- 3) What does CREATE INDEX do?

- a) Creates a Search key
- b) Creates a primary key
- c) Creates a foreign key
- d) Select the file

- 4) What does this operator <> signify?
- a) Between a certain range
 - b) Not equal
 - c) Specifies multiple values in column
 - d) Search in a table
- 5) Which of the following syntax is correct?
- a) SELECT * FROM customerorderbycountry
 - b) SELECT Customer_name from Customer ORDER BY Country DESC;
 - c) SELECT * FROM Customer ORDER BY Country DESC
 - d) SELECT Customer_name FROMCustomer ORDER BY Country DESC;
- 6) Which of the following syntax is correct?
- a) INSERT INTO Country(Country_name, City, State);
 - b) INSERT INTO Country (Country_name, City, Region)VALUES (India, Mumbai, Maharashtra);
 - c) INSERT INTO Country (Country_name, City, Region)VALUES ('India',' Mumbai', 'Maharashtra')
 - d) INSERT INTO Country (Country_name, City, Region)VALUES ('India',' Mumbai', 'Maharashtra');
- 7) If we omit the where clause in UPDATE. What will happen?
- a) No change
 - b) All records will be updated
 - c) Error
 - d) Updates the database

8) Which database system supports ROWNUM?

- a) Oracle
- b) MySQL
- c) NoSQL
- d) DBMS

9) What does LIKE 'a__% means?

- a) Finds a values that's starts with a
- b) Finds a values which have a in any position
- c) Finds a values that starts with a and are at least 2 character in length
- d) Finds a values that starts with a and are at least 3 character in length

10) Which of the following is a wildcard character?

- a) =
- b) <
- c) >
- d) %

11) What does % represents

- a) Returns the modulus
- b) Divide the function
- c) Represents zero or more characters
- d) Returns percentage

12) What does _ represents

- a) Represents a single character
- b) Represents a break
- c) Represents a null value
- d) Represents a break between 2 characters

13) What does [] represents

- a) Represents a range of characters
- b) Represents any single character within the bracket
- c) Represents any single character
- d) Represents a null value

14) What does ^ represents

- a) Represents any character not in the bracket
- b) Represents any character
- c) Represents a single character
- d) Represents the whole word

15) What does - represents

- a) Represents a single character
- b) Represents any character
- c) Represents a range of characters
- d) Represents a null character

16) Alias exists

- a) For the duration of the query

- b) Permanently
- c) Till the system is shutdown
- d) Temporary
- 17) How is alias used in SQL. Identify the correct statement.
- a) SELECT Customer_name ALIAS name FROM Customer;
- b) SELECT Customer_name ALIAS_NAME name FROM Customer;
- c) SELECT Customer_name ALIAS_NAME AS name FROM Customer;
- d) SELECT Customer_name AS name FROM Customer;
- 18) CASE statement is similar to which statement?
- a) SWITCH
- b) IF THEN ELSE
- c) WHILE
- d) FOR
- 19) If there is no ELSE clause in CASE statement and no conditions are true, it returns:
- a) Error
- b) NULL
- c) Default value
- d) 0
- 20) What does COALESCE() function does
- a) Close the database
- b) Return the all null value in a list
- c) Return the first non-null value in a list

d) Return the all non-null value in a list

21) What is a stored procedure?

- a) A procedure that helps to store SQL queries
- b) A function that return the amount of storage
- c) A SQL code that you can save so that code can be reused over gain
- d) Return stored functions

22) What does “*” signifies

- a) Multiplication
- b) Select
- c) Power off
- d) AND operator

23) What does LIKE operator does

- a) Search for the presence of a similar row in a specified table that meets certain criteria.
- b) Search for the presence of a row in a specified table that meets certain criteria.
- c) It is used to compare a value to a list of literal values that have been specified.
- d) It is used to compare a value to similar values using wildcard operators.

24) How to back up a SQL database

- a) BACKUP DATABASE Customer
- b) BACKUP DATABASE Customer;
- c) BACKUP DATABASE Customer TO DISK = ‘filepath’;
- d) BACKUP DATABASE Customer TO PATH = ‘filepath’;

25) What does a differential back up do?

- a) Reduces the backup time
- b) Increases the backup time
- c) Reduces the backup time by eta time
- d) None of the above

26) Which datatype can hold letters and numbers

- a) String
- b) Varchar
- c) Character
- d) Var

27) Which datatype can hold numbers

- a) Number
- b) Integer
- c) Int
- d) Num

28) What is the range of tinyint in SQL

- a) 0 to 150
- b) 0 to 250
- c) 0 to 255
- d) 0 to 215

29) What is the storage capacity of tinyint

- a) 1 byte

b) 2 byte

c) 3 byte

d) 4 byte

30) What is the storage capacity of int

a) 2 byte

b) 4 byte

c) 8 byte

d) 16 byte

31) What is the storage capacity of bigint

a) 4 byte

b) 16 byte

c) 8 byte

d) 256 byte

32) What is the storage capacity of smallint

a) 4 byte

b) 1 byte

c) 3 byte

d) 2 byte

33) Select the odd one out

a) NOT NULL

b) UNIQUE

c) DISTINCT

d) CHECK

34) What is foreign key

- a) It is a field in one table that refers to the primary key in another table.
- b) It is external key
- c) It is a candidate key
- d) It is a primary key

35) Identify the correct statement

- a) CREATE INDEX Id_name;
- b) CREATE INDEX Id_name ON Customer (Name)
- c) CREATE INDEX Id_name ON Customer (Name);
- d) CREATE INDEX Id_name IN Customer (Name)

36) VIEW can be deleted with which command

- a) Delete
- b) Drop
- c) Alter
- d) Viewdelete

37) Out of these which is the least powerful database system

- a) Oracle
- b) MySQL
- c) Access
- d) MS SQL Server

38) Select the odd one out

- a) Primary key
- b) Unique
- c) Null
- d) Default

39) Select the odd one out

- a) Primary key
- b) Foreign key
- c) Drop
- d) Index

40) Select the odd one out

- a) NOT NULL
- b) UNIQUE
- c) CHECK
- d) ISNULL

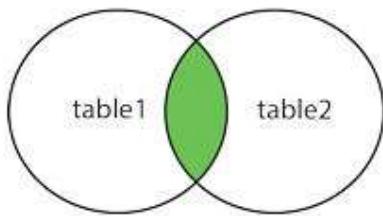
41) Select the option which is used to select discrete values

- a) COUNT
- b) SELECT
- c) SELECT DISTINCT
- d) WHERE

42) Which of these is used to return the number of records

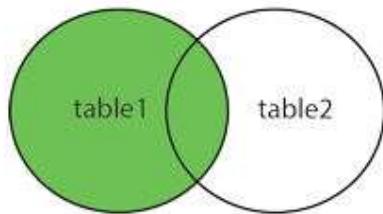
- a) WHERE

- b) SELECT TOP
 - c) SELECT
 - d) Index
- 43) Which of the following is used to specify different values in a WHERE clause
- a) IN
 - b) Foreign key
 - c) LIKE
 - d) Index
- 44) Which of the following is used to select values in the given range
- a) IN
 - b) SELECT
 - c) GROUP BY
 - d) BETWEEN
- 45) Which of the following is used with WHERE clause to add aggregate functions in SQL queries?
- a) HAVING
 - b) IN
 - c) SELECT
 - d) Index
- 46) Which JOIN does this figure represent:



- a) JOIN
- b) CENTER JOIN
- c) INNERJOIN
- d) UNION

47) Which JOIN does this figure represent:

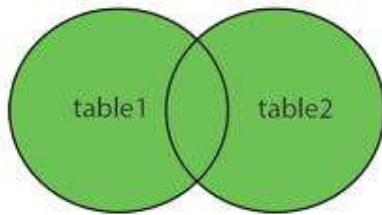


- a) LEFT JOIN
- b) JOIN
- c) SELF JOIN
- d) FULL JOIN

48) Which operator is used to combine two or more queries

- a) IN
- b) UNION
- c) JOIN
- d) FULL JOIN

49) Which JOIN does this figure represent:



- a) JOIN
- b) FULL JOIN
- c) UNION
- d) SELF JOIN

50) Which of the operator is used to test for the existence of a record in a sub query

- a) EXIST
- b) EXISTS
- c) IN
- d) WHERE



51) Which of the operator is used to limit the value range that can be placed in a column

- a) CHECK
- b) WHERE
- c) BETWEEN
- d) Index

52) Which of the following database system is powerful and robust?

- a) MS SQL Server
- b) Oracle
- c) MySQL

d) All of the above

53) Which of the following is used to insert values

- a) INSERT
- b) INSERT IN
- c) INSERT INTO
- d) INSERT TO

54) What does “*” indicate in a SQL query

- a) Select
- b) Select all the columns from the table
- c) Select a particular column from the table
- d) None of the above

55) Write a SQL query to select all records from the Customer table select customer_name column with age greater than 50

- a) SELECT * FROM Customer WHERE age>16;
- b) SELECT Customer_name FROM Customer WHERE age>50;
- c) SELECT Customer_name FROM Customer;
- d) SELECT Customer_name FROM Customer WHERE age>19;

56) Write a SQL query to select all records from the Customer table where the customer_name ends with “a”

- a) SELECT * FROM Customer WHERE Customer_name LIKE '%a';
- b) SELECT * FROM Customer WHERE Customer_name LIKE '%a%';
- c) SELECT * FROM Customer WHERE Customer_name LIKE 'a%'
- d) SELECT * FROM Customer WHERE Customer_name LIKE '%%a';

57) Write a SQL query to select all records from the Customer table where the customer_name is "Raj" and age = 20

- a) SELECT * FROM Customer WHERE customer_name = "Raj" AND age=20;
- b) SELECT * FROM Customer WHERE customer_name = "Raj" OR age=20;
- c) SELECT * FROM Customer WHERE customer_name > "Raj" AND age=20;
- d) SELECT * FROM Customer WHERE customer_name <>"Raj" AND age<>20;

58) Write a SQL query to select all records from the Customer table where the age is between 20 to 30

- a) SELECT * FROM Customer WHERE age BETWEEN 20 OR 30;
- b) SELECT * FROM Customer WHERE age BETWEEN 20 AND 30;
- c) SELECT * FROM Customer WHERE age = (20 AND 30);
- d) SELECT age>20 AND age<30 FROM Customer;

59) Select the operator used for sorting the columns

- a) GROUP BY
- b) SORT
- c) ORDER BY
- d) SORT BY

60) Write a SQL query to select Customer_name from the Customer table sorted in ascending order according to age

- a) SELECT * FROM Customer;
- b) SELECT Customer_name FROM Customer ORDER BY age;
- c) SELECT Customer_name FROM Customer GROUP BY age;
- d) SELECT Customer_name FROM Customer;

61) Write a SQL query to select all records from the Customer table where customer_name has "am" in any position

- a) SELECT * FROM Customer WHERE Customer_name LIKE "%am";
- b) SELECT * FROM Customer WHERE Customer_name LIKE "%am%";
- c) SELECT * FROM Customer WHERE Customer_name LIKE "am%";
- d) SELECT * FROM Customer WHERE Customer_name LIKE "%a%";

62) Write a SQL query to select all records from the Customer table where customer_name start with "a" and are at least 3 characters in length

- a) SELECT * FROM Customer WHERE Customer_name LIKE "%a";
- b) SELECT * FROM Customer WHERE Customer_name LIKE "a__%";
- c) SELECT * FROM Customer WHERE Customer_name LIKE "%a__";
- d) SELECT * FROM Customer WHERE Customer_name LIKE "%__a";

63) Write a SQL query to select all records from the Customer table where customer_name start with "a" and ends with "a"

- a) SELECT * FROM Customer WHERE Customer_name LIKE "a%a";
- b) SELECT * FROM Customer WHERE Customer_name LIKE "%a";
- c) SELECT * FROM Customer WHERE Customer_name LIKE "%a%";
- d) SELECT * FROM Customer WHERE Customer_name LIKE "a%";

64) Write a SQL query to select all records from the Customer table where customer_name has "a" in the second position '_r%'

- a) SELECT * FROM Customer WHERE Customer_name LIKE "%a";
- b) SELECT * FROM Customer WHERE Customer_name LIKE "%_a";
- c) SELECT * FROM Customer WHERE Customer_name LIKE "a_%";
- d) SELECT * FROM Customer WHERE Customer_name LIKE "_a%";

65) Write a SQL query to create aliases of Customer_name as name and region as area from Customer table

- a) SELECT Customer_name ALIASES name, region ALIASES area FROM Customer;
- b) SELECT Customer_name ALIASES NAME name, region ALIASES NAME area FROM Customer;
- c) SELECT Customer_name AS name, region AS area FROM Customer;
- d) SELECT Customer_name ALIASES name AND region ALIASES area FROM Customer;

66) Write a SQL query to create aliases of Cust_name as Customer name from Customer table

- a) SELECT Cust_name ALIASES Customer name FROM Customer;
- b) SELECT Cust_name AS Customer name FROM Customer;
- c) SELECT Cust_name ALIASES NAME Customer name FROM Customer;
- d) SELECT Cust_name AS [Customer name] FROM Customer;

67) Write a SQL query to create aliases of Contact that includes email_address and phone_number from Customer table

- a) SELECT CONCAT(email_address, phone_number) AS Contact FROM Customers;
- b) SELECT CONCAT(email_address, ', ', phone_number) AS Contact FROM Customers;
- c) SELECT CONCAT(email_address AND phone_number) AS Contact FROM Customers;
- d) SELECT (email_address + phone_number) AS Contact FROM Customers;

68) Write a SQL query to selects all customers that are from the same City as the Salesperson

- a) SELECT * FROM Customers WHERE City IN (Salesperson);
- b) SELECT * FROM Customers WHERE City IS EQUAL TO City IN Salesperson;
- c) SELECT * FROM Customers WHERE City IN (SELECT * FROM Salesperson);
- d) SELECT * FROM Customers WHERE City IN (SELECT City FROM Salesperson);

69) Write a SQL query to selects all customers that are in IT and Bank

- a) SELECT * FROM Customers WHERE Job IN ('IT', 'Bank');
- b) SELECT * FROM Customers WHERE Job = ('IT', 'Bank');
- c) SELECT * FROM Customers WHERE Job == ('IT', 'Bank');
- d) SELECT * FROM Customers WHERE Job EQUAL TO ('IT', 'Bank');

70) Write a SQL query to selects all customers with a Customer_name starting with "a", "s", or "r"

- a) SELECT * FROM Customers WHERE Customer_name START '[asr]%' ;
- b) SELECT * FROM Customers WHERE Customer_name = '[asr]%' ;
- c) SELECT * FROM Customers WHERE Customer_name == '[asr]%' ;
- d) SELECT * FROM Customers WHERE Customer_name LIKE '[asr]%' ;

71) Which of the following is used to create and modify the tables in SQL

- a) Data definition language
- b) Data manipulation language
- c) Data query language
- d) Data control language

72) Which of the following is used to get some schema relation in SQL

- a) Data definition language
- b) Data manipulation language
- c) Data query language
- d) Data control language

73) Which of the following is used for manipulation in SQL

- a) Data definition language
- b) Data manipulation language
- c) Data query language

d) Data control language

74) Which of the following is used to deal with rights and permission in SQL

- a) Data definition language
- b) Data manipulation language
- c) Data query language
- d) Data control language

75) Which of the following is used to deal with transaction in SQL

- a) Data definition language
- b) Transaction control language
- c) Data query language
- d) Data control language

76) Which of the following is not a Data definition language command

- a) CREATE
- b) RENAME
- c) DROP
- d) SELECT

77) Which of the following is not a Data query language command

- a) CREATE
- b) RENAME
- c) DROP
- d) SELECT

78) Which of the following is not a Data manipulation language command

- a) INSERT
- b) UPDATE
- c) ALTER
- d) DELETE

79) Which of the following is a Data control language command

- a) GRANT
- b) REVOKE
- c) ALL OF THE ABOVE
- d) NONE

80) Which of the following is not a Transaction control language command

- a) COMMIT
- b) ROLLBACK

- c) SAVEPOINT
- d) CONTROL

81) Which of the following operator is used for searching the matching keyword in the database

- a) EXISTS
- b) LIKE
- c) SELECT
- d) WHERE

82) Which of the following operator is used for searching the void value in the database

- a) WHERE
- b) SELECT
- c) EXISTS
- d) IS NULL

83) Which of the following operator is used for selecting maximum value in the database

- a) SELECT
- b) MAX
- c) TOP
- d) IN

84) What is a view

- a) Virtual table based SQL query
- b) A command to view tables
- c) A command to see database
- d) None

85) Which of the following is not an aggregate function

- a) AVG
- b) STDEV
- c) VAR
- d) LEN

86) Which of the following operator is used to save the transactions in the database

- a) SAVEPOINT
- b) COMMIT
- c) COMMITS
- d) UPDATE

87) Which of the following operator is used to sets a checkpoint within the transactions in the database

- a) SAVE
- b) CHECKPOINT
- c) SET CHECKPOINT
- d) SAVEPOINT

88) Which of the following operator is used to specify the details of the transactions in the database

- a) DETAILS
- b) SET TRANSACTION
- c) TRANSACTION
- d) CHECK

89) Which of the following operator is used to withdraw user privileges in the database

- a) WITHDRAW
- b) REVOKE
- c) UPDATE
- d) NONE

90) Which of the following operator is used to give user privileges in the database

- a) GIVE
- b) GRANT
- c) USER
- d) PRIVILEGES

91) Write a SQL query to select countries with wind speed equal to 5

- a) SELECT Countries WHERE Wind_speed=5;
- b) SELECT World WHERE Wind_speed =5;
- c) SELECT Countries, Wind_speed FROM World WHERE Wind_speed=5;
- d) SELECT Countries, Wind_speed FROM World WHERE Wind_speed <>5;

92) Write a SQL query to select countries and sort them according to population

- a) SELECT Countries FROM World SORT BY Population;
- b) SELECT Countries FROM World ORDER BY Population;
- c) SELECT Countries ORDER BY Population;
- d) SELECT SORT BY (Countries) FROM World;

93) Write a SQL query to select countries where weather is neither rainy nor warm

- a) SELECT Countries, Weather FROM WORLD WHERE Weather NOTIN("rainy", "warm");
- b) SELECT Countries, Weather WHERE Weather NOT IN("rainy", "warm");
- c) SELECT Countries, Weather FROM WORLD WHERE Weather iIN("rainy", "warm");
- d) SELECT Countries, Weather FROM WORLD WHERE Weather;

94) Write a SQL query to select countries where weather is neither rainy nor warm or wind speed is equal to 5

- a) SELECT Countries, Weather, Wind_speed FROM WORLD WHERE Weather IN ("rainy", "warm") OR Wind_speed = 5;
- b) SELECT Countries, Weather, Wind_speed FROM WORLD WHERE Weather BETWEEN ("rainy", "warm") OR Wind_speed = 5;
- c) SELECT Countries, Weather, Wind_speed FROM WORLD WHERE Weather NOT IN ("rainy", "warm") AND Wind_speed = 5;
- d) SELECT Countries, Weather, Wind_speed FROM WORLD WHERE Weather NOT IN ("rainy", "warm") OR Wind_speed = 5;

95) Write a SQL query to select countries where wind speed is equal to India

- a) SELECT Countries FROM World WHERE Wind_speed = ("India");
- b) SELECT Countries FROM World WHERE Wind_speed = (SELECT Wind_speed FROM World WHERE Countries = India);
- c) SELECT Countries FROM World WHERE Wind_speed = (WHERE Countries = India);
- d) SELECT Countries FROM World WHERE Wind_speed = India;

96) Innerjoin is also called as

- a) Equijoin
- b) Leftjoin
- c) Centerjoin
- d) None

97) Write a SQL query to delete a Customer_id column from Customer table

- a) ALTER TABLE Customer DELETE COLUMN Customer_id;
- b) Customer DROP COLUMN Customer_id;
- c) ALTER TABLE Customer DROP COLUMN Customer_id;
- d) FROM TABLE Customer DROP COLUMN Customer_id;

98) Write a SQL query to insert a Customer_id column from Customertable

- a) ALTER TABLE Customer ADD COLUMN Customer_id;
- b) ALTER TABLE Customer ADD Customer_id;
- c) From Customer ADD COLUMN Customer_id;
- d) TABLE Customer ADD COLUMN Customer_id;

99) Which command is used to specify the limits in the table

- a) CHECK
- b) SPECIFY
- c) WHERE
- d) SELECT

100) Write a SQL query to delete Customer table

- a) DROP TABLE Customer;
- b) DELETE TABLE Customer;
- c) TRUNCATE TABLE Customer;
- d) ALTER TABLE Customer;

101) Which of the command is used with Wildcard

- a) IN
- b) WHERE
- c) LIKE
- d) SELECT

102) SQL role is to

- a) Create tables
- b) Create database
- c) Modify tables
- d) All of them

103) Select the correct SQL query

- a) SELECT * FROM Customer WHERE age>10 AND <20;
- b) SELECT * FROM Customer WHERE age>10 AND age<20;
- c) SELECT * FROM Customer WHERE age>10, <20;
- d) SELECT * FROM Customer;

104) Which of the following operator is used to count the number of rows

- a) COUNT()
- b) SUM()
- c) COUNT(*)
- d) TOTALROWS(*)

105) Which of the following operator deletes all the rows in a table

- a) TRUNCATE
- b) DELETE
- c) ALTER
- d) DROP

106) Write a SQL query to count all the not null rows in Customer table

- a) SELECT TOTAL() FROM Customer;
- b) SELECT TOTALROWS() FROM Customer;
- c) SELECT COUNT() FROM Customer;
- d) SELECT COUNT(*) FROM Customer;

107) What is the role of ALTER

- a) Add
- b) Delete
- c) Modify
- d) All of the above

108) What is the role of UPDATE

- a) Update more than one row at a time
- b) Update the table
- c) Update the deleted row
- d) Update one row at a time

109) Write a SQL query to update the name from Ram to Rita in Customer table

- a) UPDATE SET Name = "Rita" WHERE Name = "Ram";
- b) MODIFY Customer SET Name = "Rita" WHERE Name = "Ram"
- c) ALTER SET Name = "Rita" WHERE Name = "Ram"
- d) UPDATE Customer SET Name = "Rita" WHERE Name = "Ram"

110) Write a SQL query to sort the Customer table according to age

- a) SELECT * FROM Customer GROUP BY age;
- b) SELECT * FROM Customer SORT BY age;
- c) SELECT * FROM Customer ORDER BY age;
- d) SELECT * FROM Customer SORT age;

111) How many tables can be joined by using JOIN clause

- a) 1
- b) 2
- c) 3
- d) All

112) How many total JOIN can be made on r tables

- a) $(r-1)/2$
- b) $r-1$
- c) $r-2$
- d) $(r-2)/2$

113) How many types of views does SQL has

- a) 1
- b) 3
- c) 4
- d) 2

114) Syntax for view is

- a) ALTER VIEW AS SELECT
- b) CREATE VIEW AS SELECT
- c) UPDATE VIEW AS SELECT
- d) MODIFY VIEW AS SELECT

115) Which of the following is the correct syntax to delete view

- a) DELETE VIEW
- b) DROP VIEW
- c) UPDATE VIEW
- d) ALTER VIEW

116) Write a SQL query to select all records with of Customer table where product equal to jam

- a) SELECT * FROM Customer WHERE Product=jam;
- b) SELECT Customer WHERE Product=jam;
- c) SELECT * FROM Customer WHERE Product="jam";
- d) SELECT * FROM Customer, Product="jam";

117) Write the output of this SUBSTR('DOCTOR', 1,4)

- a) OCTO
- b) DOCT
- c) DCOD
- d) DT

118) Write an SQL query to extract substring from Customer_name, starting from 1 with length 4 in Customer table

- a) SELECT SUBSTR(Customer_name, 1, 4) FROM Customer;
- b) SELECT SUBSTR(Customer_name, 1, 4) AS ExtractString;
- c) SELECT SUBSTR(Customer_name, 1, 4);
- d) SELECT SUBSTR(Customer_name, 1, 4) AS ExtractString FROM Customer;

119) Which of the following function returns the length of the string

- a) LEN()
- b) STRLEN()
- c) CHAR_LENGTH()
- d) CHAR_LEN()

120) Which of the following function returns the index position of a value

- a) INDEX()
- b) FIELD()
- c) POSITION()

d) INDEXPOSITION()

121) The FIELD() function perform which type of search

- a) Case sensitive
- b) Case insensitive
- c) None
- d) Both

122) Which of the following operators returns the position of a string within a list of strings

- a) FIND()
- b) INDEX()
- c) CHECK()
- d) FIND_IN_SET()

123) Which of the following functions adds two or more expressions together

- a) ADD()
- b) +
- c) CONCAT()
- d) ADDEXP()

124) Which of the following functions returns the index position of a value in a list of values

- a) INDEX()
- b) FIELD()
- c) POSITION()
- d) INDEXPOSITION()

125) What is the output of the following query SELECT FIELD("c", "a", "b");

- a) a
- b) b
- c) c
- d) 0

126) What is the output of the following query SELECT FIND_IN_SET("a", null);

- a) a
- b) 0
- c) NULL
- d) None

127) What is the output of the following query SELECT FIND_IN_SET("a", "");

- a) NULL
- b) a

- c) 0
- d) None

128) Which of the following function returns the position of the first occurrence of a string in another string

- a) INDEX()
- b) POSITION()
- c) INSTR()
- d) RETURN()

129) Which of the following is true for INSTR()

- a) It is case insensitive
- b) It is case sensitive
- c) It inserts the value in a string
- d) None

130) What is the output of the query SELECT LPAD("SQLQUIZ", 15, "PQR");

- a) PQR PQR PSQLQUIZ
- b) PQR PQR PSQLQUIZ
- c) PQRSQL QUIZ
- d) PQRSQLQUIZ

131) What is the output of the query SELECT LTRIM(" INTERVIEW");

- a) INTERVIEW
- b) INTERVIEW
- c) interview
- d) WEIVRETNI

132) Which of the following function extracts a substring from a string

- a) MID()
- b) STR()
- c) STRING()
- d) None

133) Which of the following function returns the position of the first occurrence of a substring in a string

- a) POSITION()
- b) INDEX()
- c) STR()
- d) INSTR()

134) What is the output of the query SELECT REPLACE("RAMSHARMA", "RAM", "RAJ");

- a) RAJ
- b) RAM
- c) RAJ SHARMA
- d) RAM SHARMA

135) What is the output of the query `SELECT STRCMP("RAMSHARMA", "RAJ SHARMA");`

- a) 0
- b) NULL
- c) FALSE
- d) -1

136) Which of the following function returns the arccosine of a number

- a) COSINE()
- b) COS()
- c) ACOS()
- d) NONE

137) What is the output of the query `SELECT CEIL(25.1);`

- a) 25
- b) 24
- c) 26
- d) 25.1

138) What is the output of the query `SELECT FLOOR(25.7);`

- a) 25
- b) 26
- c) 25.7
- d) 24

139) Which of the following functions returns the natural logarithm of a number

- a) LN()
- b) LOGARITHM()
- c) EXP()
- d) NONE

140) Which of the following function returns the current date

- a) DATE()
- b) CURDATE()
- c) CURRENT_DATE()
- d) Both b and c

141) What is the output of the query `SELECT TRUNCATE(25.265, 2);`

- a) 25
- b) 26
- c) 25.26
- d) 25.37

142) Which of the following functions returns the number of days between two date values

- a) DATE
- b) DAYS
- c) DAYS_IN_BETWEEN
- d) DATEDIFF

143) What is the output of the query SELECT DATEDIFF("2020-01-25", "2020-01-5");

- a) 20
- b) 25
- c) 5
- d) 22

144) What is the output of the query SELECT DATE_ADD("2020-01-25 03:45:25", INTERVAL -2 HOUR);

- a) 2020-01-25 05:45:25
- b) 2020-01-25 04:45:25
- c) 2020-01-25 01:45:25
- d) 2020-01-25 06:45:25

145) What is the output of the query SELECT DATE_FORMAT("2020-01-25", "%M");

- a) 2020
- b) 01
- c) 1
- d) January

146) What is the output of the query SELECT DATE_FORMAT("2020-01-25", "%M %Y");

- a) January 2020
- b) Jan 2020
- c) 01 2020
- d) 1 2020

147) What is the output of the query SELECT DATE_SUB("2020-01-25", INTERVAL 10 DAY);

- a) 2020/01/15
- b) 2020-01-15
- c) 2020/01/14
- d) 2020/01/10

148) What is the output of the query `SELECT EXTRACT(MONTH FROM "2020-06-15");`

- a) June
- b) Jun
- c) 6
- d) 06

149) Which of the following functions returns a date from a numeric date value

- a) DATE()
- b) DATE_NUM()
- c) FROM_DAYS()
- d) FROM_DAY()

150) What is the output of the query `SELECT LAST_DAY("2020-06-25");`

- A) 2020-06-25
- B) 2020-06-30
- C) 31
- D) 176

151) Which of the following functions returns the current date and time.

- a) CURRENT_DATE()
- b) CURR_DATE()
- c) LOCALTIME()
- d) DATE_TIME()

152) Which of the following creates and returns a date based on a year and a number of days value

- a) CREATE_DATE()
- b) MAKEDATE()
- c) CREATEDATE()
- d) None

153) What is the output of the query `SELECT MAKEDATE(2020, 3);`

- a) 2020-01-03
- b) 2020-03-01
- c) 2020-03-03
- d) None

154) What is the output of the query `SELECT MAKETIME(05, 30, 6);`

- a) 05:30:06
- b) 05-30-06
- c) 5:30:6
- d) None

155) Which of the following functions adds a specified number of months to a period

- a) ADDMONTHS()
- b) MONTHS()
- c) PERIOD_ADD()
- d) ADD()

156) Which of the following functions returns the difference between two periods

- a) PERIOD_DIFF()
- b) DIFF()
- c) DIFFERENCE()
- d) PERIOD()

157) What is the output of the query SELECT QUARTER("2020-08-25");

- a) 2
- b) 3
- c) 4
- d) August

158) What is the output of the query SELECT SEC_TO_TIME(256);

- a) 00:04:00
- b) 00:04:16
- c) 00:02:00
- d) 00:02:16

159) Which of the following functions returns a date based on a string and a format

- a) DATEFORMAT()
- b) DATE_FORMAT()
- c) STR_TO_DATE()
- d) None

160) Which of the following functions compares two expressions and returns NULL if they are equal

- a) NULL()
- b) CHECK()
- c) NULLIF()
- d) IFNULL()

161) Which of the following functionS returns 1 or 0 depending on whether an expression is NULL

- a) NULLIF()
- b) IFNULL()
- c) NULL()
- d) ISNULL()

162) Which of the following statement goes through conditions and return a value

- a) CONDITION()
- b) WHERE
- c) CASE
- d) RETURN

163) Which of the following functions converts a value to a binary string

- a) BIN
- b) BINARY_STRING
- c) BINARYSTRING
- d) BINARY

164) Which of the following functions converts a value into the specified datatype

- a) CONVERT_TYPE()
- b) CAST()
- c) CONV()
- d) DATATYPE()

165) Write a SQL query to reverse the value in Customer_name column

- a) SELECT REVERSE(Customer_name);
- b) SELECT REVERSE(Customer_name) FROM Customer;
- c) REVERSE(Customer_name) FROM Customer;
- d) SELECT Customer_name FROM Customer WHERE REVERSE(Customer_name);

166) Write a SQL query to replace a "s" with "r" in a string "sql questions"

- a) SELECT REPLACE("sql questions", "s", "r");
- b) REPLACE("sql questions", "s", "r");
- c) SELECT REPLACE("s", "r");
- d) SELECT REP("sql questions", "s", "r");

167) Write a SQL query to add these several string together "East", "West"

- a) SELECT CONCAT("East ", "West ");
- b) CONCAT("East ", "West ");
- c) SELECT ADD("East ", "West ");
- d) "East " + "West "

168) Write a SQL query to convert the text to lowercase

- a) SELECT LOWERCASE("SQL");
- b) SELECT LOWER_CASE("SQL");
- c) SELECT LCONVERT("SQL");
- d) SELECT LCASE("SQL");

169) Write a SQL query to find the length of the string

- a) SELECT LEN("SQL");
- b) SELECT LENGTH("SQL");
- c) LENGTH("SQL");
- d) SELECT STRLEN("SQL");

170) Write a SQL query to compare SQL and NOSQL

- a) SELECT CMP("SQL", "NOSQL");
- b) SELECT STR_CMP("SQL", "NOSQL");
- c) SELECT STRCMP("SQL", "NOSQL");
- d) SELECT COMPARE("SQL", "NOSQL");

Subjective Questions

1. Is semicolon used after sql? If yes/No, please justify the reason.
2. Difference between JOIN and UNION
3. Difference between order by and group by.
4. SELECT Person.Name, COUNT(Sales.SalesID) AS NumberOfSales FROM Sales INNER JOIN Person ON Sales.Person.ID=Person.PersonID WHERE Name = 'Ram' GROUP BY Name HAVING COUNT(Sales.SalesID) > 15;
5. Is SQL case sensitive
6. What does drop function does
7. What does truncate function does
8. What is a candidate key?
9. When can you compare the dates in SQL
10. What is the view? Explain with syntax
11. A view can be updated with which command
12. What is SQL injection
13. When does SQL injection occurs