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2504M239

Candidate's Seat No : _____

M.B.A. in B.I. Semester-2 Examination

BI-208

PBI-DV

Time : 1-30 Hours]

April-2024

[Max. Marks : 70

- Instructions :** (1) This paper contains **FIVE** questions.
(2) All questions are compulsory.
(3) Question No. **2, 3, 4** have internal options.
(4) Figures in the right side in parenthesis indicate marks.

Q:1 Choose the correct options (Each question carries 2 marks)

(14)

- 1) In the report editor, which task can you NOT accomplish using drag and drop?
 - A. Add more information to a visualization.
 - B. Create a new visualization.
 - C. Rearrange and resize visualizations.
 - D. All of these tasks can be done with drag and drop.
- 2) Your computer rental dataset includes columns for StartTime, EndTime, and PerHourRate. What two DAX functions could you use to calculate the total earned for rentals?
 - A. DATEDIFF and SUM
 - B. TIMEDIFF and SUM
 - C. DATEDIFF and SUMX
 - D. TIMEDIFF and SUMX
- 3) Bookmarks capture the state of a page. What does this capture state include?
A. sorting B. filtering C. current selection D. properties of visuals
 - A. A, B, C, D
 - B. A, B
 - C. A, B, C
 - D. A, B, D
- 4) Our company's national maintenance team is divided into 12 regions, and the Issues report they use is filtered by the user's region. What report modification would help technicians while using the mobile app on the road? (Select all that apply.)
A. Add a geographic filter to City. B. Add a geographic filter to State. C. Add a geographic filter to Street Address. D.

Add a geographic filter to Country.

- A. A, B, D
- B. A, B, C, D
- C. A, B, C
- D. A, B

5) What are benefits of modifying your Excel data source in the Power Query Editor rather than in Excel? A. You can track the changes you make. B. It is less error prone than manual editing. C. It will not affect other users of the spreadsheet. D. It "locks down" the spreadsheet columns in Excel.

- A. A, B, C, D
- B. A, B, C
- C. A, C, D
- D. B, D

6) Your report is based on imported data from Excel. What is a valid reason to use a slicer rather than a report-level filter? A. A slicer makes it easier for users to filter B. Users should be able to see both filtered and non-filtered values. C. it is more convenient as other option can give wrong answer.

- A. A and B
- B. B and C
- C. A and C

D. There is no reason to use a slicer rather than a report-level filter.

7) What do you call a visualisation that has the single purpose of filtering other visuals in the view?

- A. Waterfall
- B. ArcGIS visual
- C. none of these answers
- D. slicer

Q:2

1) Which of the following choices is not a viewing option in the view selector of Power BI Desktop? (14)

- A. report view
- B. model view
- C. query view
- D. data view

2) You can create multiple active relationships from one table to the same primary key.

- A. True
- B. False
- C. Partially correct
- D. Partially incorrect

3) Generally speaking, what should you avoid using if you have a model

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containing multiple data tables?

- A. Parameters
 - B. Table Relationships
 - C. Two-way filters
 - D. Snow-flake Schemas
- 4) What can you do to prevent users from filtering with invalid fields from a data model?
- A. Politely (firmly) ask them to cut it out
 - B. Threaten them with public humiliation
 - C. Tell them that "There will be consequences" if they do it again, then slowly back out of the room without breaking eye contact
 - D. Activate the "Hide in Report view" option
- 5) Which of the following would be the most likely cause of an "ambiguous relationship" error in a Power BI data model?
- A. Multiple 1-way filter
 - B. Multiple 2-way filter
 - C. Inactive Table relationship
 - D. Multiple data tables
- 6) Which of the following issues are you most likely to see if you try to connect two data tables directly to each other?
- A. Repeating Values
 - B. Many to many relationships
 - C. One to one relationships
 - D. Ambiguous relationship
- 7) You have a data set that includes a column for dates and a column for sales amounts. You want to extract only the sales data from the last 30 days. Which step should you use in the Power Query Editor in Power BI?
- A. Group By
 - B. Merge Queries
 - C. Filter Rows
 - D. Pivot Columns

OR

- Q:2**
- 1) Which feature of Power BI helps you to visualise the data by just asking the question? (14)
- A. Q & A Report
 - B. Adding the sparkline
 - C. Scorecard
 - D. Adding visuals option
- 2) A _____ runs a set of Data Analysis

Expressions (DAX) commands behind the scenes, then presents the results for you to use in your report.

- A. quick measure
 - B. measure value
 - C. field observation
 - D. visualization report
- 3) If the input dataset of a Python visual has a column that contains a string value longer than 32,766 characters, then how those values are handled.
- A. That value is truncated
 - B. The size of that value is compresses
 - C. value is saved
 - D. no special care needed as it is supported in power BI
- 4) When does the python visual gets refreshed?
- A. upon data updates
 - B. filtering
 - C. highlighting
 - D. All the mentioned options are correct
- 5) Which of the following is a common use case for scatter charts?
- A. Show changes in values over time
 - B. Show patterns in large sets of data
 - C. Show comparisons across categories
 - D. All of the above
- 6) Which of the following filter options applies only to the specific visual in which it is defined?
- A. Visual level
 - B. Page level
 - C. Report level
 - D. Drill through
- 7) Which filter setting would you use if you wanted to return the top 3 categories by total profit?
- A. Basic
 - B. Advance
 - C. Top N
 - D. Dynamic
- Q:3** 1) What object could you add to a dashboard if the user would like an (14) interactive way to sort and filter the data using dates?
- A. Categorical Slicer
 - B. Date Slicer
 - C. Top N filter
 - D. Report Level Filter

- 2) Which visual allows you to break down a measure across multiple dimensions?
 - A. Decomposition Tree
 - B. Line Chart
 - C. Scatterplot
 - D. Tree Map
- 3) The _____ visualization helps you provide a quick text summary of visuals and reports. It provides relevant innovative insights that you can customize.
 - A. smart narrative
 - B. Summary view
 - C. decomposition tree
 - D. Data View
- 4) Which three tabs in the Query Editor contain data shaping and transformation tools?
 - A. Home, Transform, Add Column
 - B. Transform, Load, Add Column
 - C. Load, Transform, Analyze
 - D. Transform, Design, Analyze
- 5) Which of the following could represent a valid hierarchy?
 - A. Country > City > State
 - B. Peach > Pear > Plum
 - C. Zip Code > State > Department
 - D. Product Category > Product Brand > Product
- 6) Which type of database schema could be described as containing a central data table surrounded by individual lookup tables?
 - A. Star
 - B. Snowflake
 - C. Snowball
 - D. Spiral
- 7) A _____ operation joins two existing tables together based on matching values from one or multiple columns.
 - A. merge queries
 - B. recent queries
 - C. applied queries
 - D. append queries

OR

- Q:3** 1) In Power Query, which option is used to divide column of text into multiple columns and in a number of different ways to achieve the results you want. (14)

- A. Split Column
 - B. Merge Column
 - C. Group By
 - D. DirectQuery
- 2) Your company uses Microsoft Excel to track sales data. You want to create a report to visualize the data, but you also want the report to automatically update whenever new data is added to the Excel file. What should you do?
- A. Import the Excel file into Power BI and create a report using the imported data
 - B. Connect to the Excel file directly from Power BI and create a report using the connected data
 - C. Copy and paste the data from Excel into Power BI and create a report using the pasted data
 - D. None of the above
- 3) You work for a retail company that has stores in multiple locations. You want to create a report that shows the sales data for each store, but you also want to be able to filter the data by region. What should you do?
- A. Create a separate report for each store and region
 - B. Use a slicer to filter the data by region in a single report
 - C. Use a filter to only show data for a specific store in a single report
 - D. None of the above
- 4) You have a table that contains data on product sales, including the product name and the sales amount. You want to create a measure that calculates the sales percentage for each product relative to the total sales. Which DAX function should you use?
- A. DIVIDE
 - B. PERCENTILE
 - C. RANKX
 - D. MAXX
- 5) You have a table of customer data that includes the customer ID and the customer name. You also have a table of orders that includes the customer ID and the order date. You want to create a visualization that shows the total number of orders for each customer name. Which DAX expression should you use?
- A. COUNT(Orders[Order Date])
 - B. RELATED(Customers[Customer Name])
 - C. SUMX(Customers, Orders[Order Date])
 - D. AVERAGE(Customers[Customer Name])
- 6) You have a report with two pages: Sales and Profit. Both pages have a slicer that filters data by region. You want to ensure that when a user selects a

region on one page, the slicer on the other page is automatically updated to show the same region. What should you do in Power BI?

- A. Create a bookmark for each region
- B. Use the "Edit interactions" feature to synchronize the slicers
- C. Use the "Drillthrough" feature to synchronize the slicers
- D. Use the "Conditional formatting" feature to synchronize the slicers

7) Can you apply multiple Bookmarks to the same visualization in Power BI?

- A. Yes, you can create multiple Bookmarks for the same visualization with different filters and states
- B. No, you can only create one Bookmark per visualization
- C. It depends on the type of visual being used
- D. d) None of the above

Q:4

1) What's the best way to "connect" two data tables within the same model? (14)

- A. Deduplicate the foreign keys in one table to create a one-to-many relationship
- B. Deduplicate the foreign keys in both tables
- C. Match the row-level granularity in order to define a one-to-one relationship
- D. Relate them through shared lookup tables

2) Which type of table generally contains foreign keys?

- A. Lookup Tables
- B. Data tables
- C. Dimension Tables
- D. All tables

3) Why might you normalize a data model?

- A. to make it more efficient
- B. to minimize the risk of error during filtering
- C. to simplify queries and analysis
- D. all of these

4) When you are editing an object, in which drop-down menu would you find the option to link to a report bookmark?

- A. Outline
- B. Icon
- C. Action
- D. Title

5) Which interaction mode would you enable to highlight sub-segments of a chart based on filter context??

- A. Filter
- B. Cross-filter
- C. Sub-filder

- D. Highlight
- 6) Which traditional Excel function operates like a DAX iterator?
- SUMIFS
 - SUMPRODUCT
 - COUNTIF
 - REPT
- 7) What is the purpose of the following function: `=CALCULATE([Profit], Territories[Country]="USA")`
- Calculates a measure named "Profit" across the entire Territories table
 - Sums the "Profit" column for rows where Country = "USA"
 - Creates a new column named "Profit" which is calculated for all rows where Country = "USA"
 - Evaluates the "Profit" measure for rows where Country = "USA" in the Territories table

OR

- Q:4**
- Which formula could you use to replace one word or character in a text string with another? **(14)**
 - SWITCH
 - SUBSTITUTE
 - SEARCH
 - FIND
 - Which of the following would the COUNTA function count?
 - Non-blank cells (numerical or non-numerical)
 - Numerical values only
 - Distinct values only
 - Text values only
 - How do you create a chart visual in Power BI Desktop Report view?
 - Click New Visual on the Home tab.
 - Select a chart visual in the Visualizations pane.
 - Click New Visual on the Data Tools tab.
 - Select a field that contains values.

Select the appropriate options.

 - A, B, or D
 - A or B
 - B or D
 - B or C
 - What daily sales number does this DAX measure formula calculate?
`CALCULATE(SUM([Sales]), DATESMTD([Date]))`

- A. rolling average over 12 months of sales
 - B. total sales for the entire month
 - C. running total sales in each month that starts over each month
 - D. running total in entire year for the entire month
- 5) You need to add a required color to a bar chart. How can you add an exact color value to an existing bar chart?
- A. Click the color in the visual (e.g., the bars) and right-click to select the color.
 - B. You cannot select custom colors in a bar chart or related visual.
 - C. Select the value closest to this color from the color formatting options.
 - D. Enter the hex value into the color formatting options.
- 6) What can you do within the Power BI Desktop Query Settings pane? (Select all that apply.)
- A. Rename a query step.
 - B. Delete a query step.
 - C. Delete from one query step to the end.
 - D. Reorder the steps.
- a) B, C, D
 - b) A, B, C, D
 - c) A, B, D
 - d) A, B, C
- 7) One of your data columns includes the city, state, and postal code line of a mailing address. You need to separate the fields so you can access the geospatial elements for a map visualization. What transformation should you apply?
- A. Replace values
 - B. Split column
 - C. Modify data type
 - D. Best fit geospatial
- Q:5** 1) What should you do to increase the readability of a report? **(14)**
- A. all the options
 - B. Remove unnecessary field labels.
 - C. Select the most appropriate visualization.
 - D. Use borders.
- 2) You have a treemap visualization that groups by sales territory. To allow users to further analyze data for a specific territory, what filter should you apply?
- A. Visual level
 - B. Page level

- C. Drillthrough
D. Expand down
- 3) The iterator functions SUMX and AVERAGEX are used to perform calculations _____.
- A. for Power BI mobile apps
 - B. in the context of a record
 - C. in Power BI service rather than Power BI desktop
 - D. for very large datasets
- 4) In Power BI Desktop Model view, what type of join will yield all results from Table 1 and any matching results from Table 2?
- A. Right Outer Join
 - B. Left Outer Join
 - C. Left Inner Join
 - D. Right Inner Join
- 5) If you delete a dataset in the Power BI service, what happens to the dashboards and reports supported by the dataset?
- A. They will be deleted.
 - B. They will be converted to image files.
 - C. They will be stored as static dashboards and reports.
 - D. Nothing—they will be unchanged.
- 6) Your data model includes two related tables, Customers and Orders. To determine the number of customers that have placed orders, create a measure on _____ the _____ table using the _____ function.
- A. Orders; DISTINCTCOUNT
 - B. Customers; COUNT
 - C. Orders; COUNT
 - D. Customers; DISTINCTCOUNT
- 7) You have two columns of numerical data and want to create a visual to help determine if there is a relationship between them. What kind of chart is designed to do this?
- A. bar chart
 - B. bubble chart
 - C. scatter chart
 - D. line chart

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