

MCQ

1. **Which M code function is used to remove duplicate rows from a table in Power Query Editor?**
 - a) Table.SelectRows
 - b) Table.Distinct
 - c) Table.RemoveMatchingRows
 - d) Table.RemoveDuplicates
2. **In DAX, what is the primary difference between a calculated column and a measure?**
 - a) Calculated columns are computed during data refresh; measures are computed during query time.
 - b) Calculated columns can be used in slicers; measures cannot.
 - c) Measures can be used in slicers; calculated columns cannot.
 - d) There is no difference; both are computed during data refresh.
3. **Which DAX function is used to create a calculated table by filtering rows from an existing table?**
 - a) FILTER
 - b) CALCULATETABLE
 - c) SUMMARIZE
 - d) ADDCOLUMNS
4. **What does the DAX function ALL() do when used in a measure?**
 - a) Removes all filters from the specified table or column.
 - b) Applies all filters to the specified table or column.
 - c) Returns all unique values from a column.
 - d) Calculates the total sum of a column.
5. **In Power Query M code, which function is used to merge two tables based on a common column?**

- a) Table.Join
 - b) Table.Combine
 - c) Table.NestedJoin
 - d) Table.Union
6. **Which DAX function would you use to create a running total in a calculated column?**
- a) SUMX
 - b) CALCULATE
 - c) EARLIER
 - d) TOTALYTD
7. **What is the purpose of the 'RELATED' function in DAX?**
- a) To filter a table based on related tables.
 - b) To retrieve a value from a related table.
 - c) To create a relationship between two tables.
 - d) To remove relationships between tables.
8. **In Power Query M code, how do you change the data type of a column to text?**
- a) Table.TransformColumnTypes
 - b) Table.ChangeType
 - c) Table.ConvertType
 - d) Table.TransformTypes
9. **Which DAX function returns a table with a single column of unique values?**
- a) VALUES
 - b) DISTINCT
 - c) UNION
 - d) INTERSECT

10. What is the result of the DAX expression: **DIVIDE(5, 0, -1)**?

- a) Infinity
- b) 0
- c) -1
- d) Error

Subjective

1. Write a DAX formula to calculate the cumulative total of sales in a 'Sales' table, considering the 'OrderDate' column.
2. Provide a DAX formula to create a calculated column that extracts the year from a date column named 'OrderDate' in the 'Sales' table.
3. How can you create a DAX measure to calculate the average sales amount per customer segment in the 'Sales' table?
4. Write a DAX formula to create a calculated table that contains only the distinct product categories from the 'Products' column.
5. Provide a DAX formula to calculate the percentage of total sales for each product in the 'Sales' table.
6. How would you write a DAX formula to create a calculated column that categorizes sales amounts in the 'Sales' table as 'High' for amounts greater than 1000 and 'Low' otherwise?
7. Provide a DAX formula to calculate the running total of sales for the current year in the 'Sales' table, considering the 'OrderDate' column.
8. Write a DAX formula to create a measure that counts the number of unique customers who purchased in the 'Sales' table.
9. How can you create a DAX measure to calculate the highest sales amount recorded in the 'Sales' table?
10. Provide a DAX formula to create a calculated column that returns the month name from a date column named 'OrderDate' in the 'Sales' table.

11. We have a table in the data model called "**Enhanced Sales Data**" that contains product categories, their respective products, and total sales for each product. Create a calculated table that displays the **percentage contribution of each product to total revenue**.

Note: Refer to the "Enhanced Sales Data" Excel.

Note: In the subjective question, wherever you find as "Sales" tables it means it refers to the "Enhanced Sales Data" excel only.