Excel Assignment - 7

1. Using Insert Function, give examples of any function available in the

different dropdowns present in the function library. For example

AutoSum, Recently Used, Text, Date & Time, etc.

Answer:

AutoSum (Recently Used dropdown):

- SUM: Adds up a range of cells.
- AVERAGE: Calculates the average of a range of cells.
- COUNT: Counts the number of cells that contain numbers in a range.
- MAX: Returns the largest value in a range.
- MIN: Returns the smallest value in a range.

Financial (All dropdown):

- PMT: Calculates the periodic payment for a loan based on constant payments and a constant interest rate.
- FV: Returns the future value of an investment.
- NPV: Calculates the net present value of an investment based on a series of cash flows and a discount rate.

Logical (Recently Used dropdown):

- IF: Checks whether a condition is true or false and returns different values based on the result.
- AND: Checks multiple conditions and returns TRUE if all conditions are TRUE.
- OR: Checks multiple conditions and returns TRUE if at least one condition is TRUE.
- NOT: Reverses the logical value of a cell, returning TRUE if the value is FALSE, and vice versa.

Text (Recently Used dropdown):

- CONCATENATE: Joins together multiple text strings into one.
- LEN: Calculates the number of characters in a text string.
- UPPER: Converts text to uppercase.

- LOWER: Converts text to lowercase.
- PROPER: Capitalizes the first letter of each word in a text string.

Date & Time (All dropdown):

- TODAY: Returns the current date.
- DATE: Creates a date value based on the specified year, month, and day.
- YEAR: Extracts the year from a date.
- MONTH: Extracts the month from a date.
- DAY: Extracts the day from a date.

Lookup & Reference (Recently Used dropdown):

- VLOOKUP: Searches for a value in the leftmost column of a table and returns a value from a specified column in the same row.
- HLOOKUP: Searches for a value in the top row of a table and returns a value from a specified row in the same column.
- INDEX: Returns the value of a cell in a given row and column of a range.
- MATCH: Searches for a specified value in a range and returns the relative position of the value within the range.

2. What are the different ways you can select columns and rows?

Answer:

1. Click and Drag: To select a column, position your mouse cursor on the column header (the letter at the top of the column) and click and drag to select the entire column. To select multiple columns, click and drag across the column headers of the desired columns. For rows, click and drag on the row number (the number on the left side of the row) to select the entire row or multiple rows.

2. Keyboard Shortcuts:

- To select a column: Press the "Ctrl" key on your keyboard and click on any cell within the column. This will select the entire column.

- To select a row: Press the "Shift" key on your keyboard and click on any cell within the row. This will select the entire row.

3. Select All: To select the entire worksheet, you can use the "Select All" shortcut. Click on the cell that

intersects the column and row headers (top-left corner of the sheet), or press "Ctrl+A" on your keyboard to select everything in the current sheet.

4. Range Selection: To select a specific range of cells, click and drag to highlight the cells you want to include in the selection. You can also use keyboard shortcuts. For example:

- Hold the "Shift" key and use the arrow keys to extend the selection in the desired direction.

- Hold the "Ctrl" key and click on individual cells to add them to the selection.

5. Name Box: The Name Box, located next to the Formula Bar, allows you to enter a cell reference or range directly. You can type a column or row label (e.g., "A," "B," "1," "2") and press "Enter" to select the entire column or row.

6. Go To Special: The "Go To Special" feature in Excel allows you to select specific types of cells, such as constants, formulas, blanks, or visible cells. You can access this feature by pressing "Ctrl+G" or by going to the "Home" tab, clicking on "Find & Select," and then choosing "Go To Special."

3. What is AutoFit and why do we use it?

Answer:

How AutoFit works for columns and rows:

1. AutoFit Columns: When you use AutoFit on a column, Excel resizes the column width to match the widest cell content in that column. This ensures that all the data in the cells of the column is fully visible, and there is no need to scroll horizontally to see the complete content.

2. AutoFit Rows: When you use AutoFit on a row, Excel resizes the row height to fit the tallest cell content in that row. This ensures that all the data in the cells of the row is fully visible, and there is no need to scroll vertically to see the complete content.

We use AutoFit in Excel for the following reasons:

1. Improved Data Visibility: AutoFit ensures that all the data in the cells is fully visible without truncation or hiding any content. This is particularly useful when working with large datasets, as it makes it easier to read and analyze the information.

2. Aesthetic Formatting: AutoFit helps to create a visually appealing and well-organized spreadsheet. It eliminates unnecessary white spaces and ensures that the cells are appropriately sized to accommodate their content.

3. Enhanced Readability: By automatically adjusting the column or row width/height, AutoFit makes it easier to read and comprehend the data without the need for manual adjustments.

4. Time-Saving: Manually adjusting column widths or row heights can be time-consuming, especially when dealing with numerous columns or rows. AutoFit streamlines this process, saving time and effort.

To use AutoFit in Excel:

- AutoFit Columns: Double-click on the right edge of the column header (the line between column letters). Alternatively, you can select the column, go to the "Home" tab in the ribbon, and click on the "Format" button in the "Cells" group. Then choose "AutoFit Column Width."

- AutoFit Rows: Double-click on the bottom edge of the row header (the line between row numbers). Alternatively, you can select the row, go to the "Home" tab, click on the "Format" button in the "Cells" group, and then choose "AutoFit Row Height."

Using AutoFit ensures that your data is well-presented, easily accessible, and properly formatted, contributing to a more professional and organized Excel worksheet.

4. How can you insert new rows and columns into the existing table?

Answer:

To insert new rows and columns into an existing table in Microsoft Excel, follow these steps:

1. Select the cell within the table where you want to insert the new row or column. This cell will determine the position of the inserted row or column.

2. To insert a new row:

   - Right-click on the selected cell.

   - In the context menu that appears, choose "Insert" and then select "Entire Row."

   Alternatively, you can use the "Insert" button on the Home tab of the ribbon:

   - Select the cell within the table where you want to insert the new row.

   - Go to the "Home" tab in the Excel ribbon.

   - In the "Cells" group, click on the "Insert" button.

   - Select "Insert Sheet Rows."

3. To insert a new column:

   - Right-click on the selected cell.

   - In the context menu that appears, choose "Insert" and then select "Entire Column."

5. How do you hide and unhide columns in excel?

Answer:

Hiding Columns:

Select the column(s) you want to hide. You can do this by clicking on the column letter at the top of the column. To select multiple columns, click and drag across the column letters or hold the "Ctrl" key while clicking on individual column letters.

Right-click on the selected column(s).

In the context menu that appears, click on "Hide" (Excel will only show "Hide" if you have selected one or more columns).

Alternatively, you can use the "Format" option in the Home tab of the ribbon:

Select the column(s) you want to hide.

Go to the "Home" tab in the Excel ribbon.

In the "Cells" group, click on the "Format" button.

Select "Hide & Unhide," then choose "Hide Columns."

Unhiding Columns:

To unhide a single column, click and drag to select the columns on either side of the hidden column(s).

Right-click on the selected columns.

In the context menu that appears, click on "Unhide."

Alternatively, you can use the "Format" option in the Home tab of the ribbon:

Select the columns on either side of the hidden column(s).

Go to the "Home" tab in the Excel ribbon.

In the "Cells" group, click on the "Format" button.

Select "Hide & Unhide," then choose "Unhide Columns."

If you have multiple hidden columns, and you are not sure which ones are hidden, you can use the "Unhide Columns" option in the context menu directly. To do this, right-click on any column letter, hover over "Unhide," and Excel will display a list of hidden columns. Click on the column you want to unhide from the list.

6. Create an appropriate table within the worksheet and use different

functions available in the AutoSum command.

Answer:

| Product | Sales (in USD) |

|--------------|---------------|

| Product A | 500 |

| Product B | 750 |

| Product C | 300 |

| Product D | 900 |

1. To calculate the total sales using the AutoSum command:

- Click on the cell below the "Sales" column (e.g., cell B6).

- Click on the "AutoSum" button (Σ) in the "Editing" group on the Home tab of the ribbon. The AutoSum button is usually located next to the column you want to sum (in this case, next to cell B5).

- Excel will automatically select the range of cells above the selected cell (B2:B5) and display the sum in cell B6, which is the total sales.

2. To calculate the average sales using the AutoSum command:

- Click on the cell below the "Sales" column where you want to display the average (e.g., cell B7).

- Click on the "AutoSum" button (Σ) in the "Editing" group on the Home tab of the ribbon.

- Excel will automatically select the range of cells above the selected cell (B2:B5).

- Press the "Enter" key on your keyboard. Excel will display the average of the selected range in cell B7.

3. To find the maximum sales using the AutoSum command:

- Click on the cell below the "Sales" column where you want to display the maximum value (e.g., cell B8).

- Click on the "AutoSum" button (Σ) in the "Editing" group on the Home tab of the ribbon.

- Excel will automatically select the range of cells above the selected cell (B2:B5).

- Now, press the "Up Arrow" key on your keyboard to select the maximum value from the range (B5, which contains 900) and press "Enter." Excel will display 900 in cell B8.

4. To find the minimum sales using the AutoSum command:

- Click on the cell below the "Sales" column where you want to display the minimum value (e.g., cell B9).

- Click on the "AutoSum" button (Σ) in the "Editing" group on the Home tab of the ribbon.

- Excel will automatically select the range of cells above the selected cell (B2:B5).

- Now, press the "Down Arrow" key on your keyboard to select the minimum value from the range (B3, which contains 300) and press "Enter." Excel will display 300 in cell B9.

By using the AutoSum command, we can quickly calculate the sum, average, maximum, and minimum values for the sales data in the table. Excel makes it easy to perform these calculations without having to write complex formulas manually.