

Excel Part 1 | Assignment

Question 1: What is the difference between 'Paste' and 'Paste Special' in Excel? Briefly explain with examples.

Answer -> Difference between 'Paste' and 'Paste Special' in Excel:

- Paste- Pastes everything exactly as copied (data, formulas, formatting).

Example: Copy a cell with a formula → Paste → formula remains the same.

- Paste Special- Allows pasting only specific elements like values, formulas, formats, or transposed data.

Example: Copy a formula cell → Paste Special → Values (only the result is pasted).

Question 2: Describe the functions and usefulness of 'Freeze Panes' and 'Split Panes' in Excel.

Answer -> Freeze Panes and Split Panes in Excel:

- Freeze Panes: Keeps selected rows or columns visible while scrolling.

Usefulness: Helpful when working with large datasets.

Example: Freeze top row to always see column headings.

- Split Panes: Divides the worksheet into multiple scrollable sections.

Usefulness: Allows viewing different parts of the same sheet at once.

Example: Compare data from top and bottom of a worksheet.

Question 3: Explain the difference between inserting a new row and inserting a new column in Excel. Can you insert multiple rows or columns at once?

Answer-> Difference between inserting a new row and a new column:

- Insert Row: Adds a new horizontal row; existing rows move down.
- Insert Column: Adds a new vertical column; existing columns move right.
- Multiple rows/columns: Yes, select multiple rows or columns first, then insert.

Example: Select 3 rows → Insert → 3 new rows are added.

Question 4: What are logical functions in Excel? Provide examples of at least two logical functions and their applications.

Answer-> Logical functions in Excel:

Logical functions test conditions and return results based on TRUE or FALSE.

- IF: Returns one value if a condition is true, another if false.

Example: =IF(A1>=40,"Pass","Fail")

- AND: Returns TRUE if all conditions are true.

Example: =AND(A1>50, B1>50)

Question 5: Discuss the purpose of 'XLOOKUP' and how it differs from the traditional 'VLOOKUP' function.

Answer-> Purpose of XLOOKUP and difference from VLOOKUP:

- XLOOKUP: Used to find and return values from any direction in a table.
- Differences from VLOOKUP:

Can search left or right

Does not require column numbers

More flexible and accurate

Example:

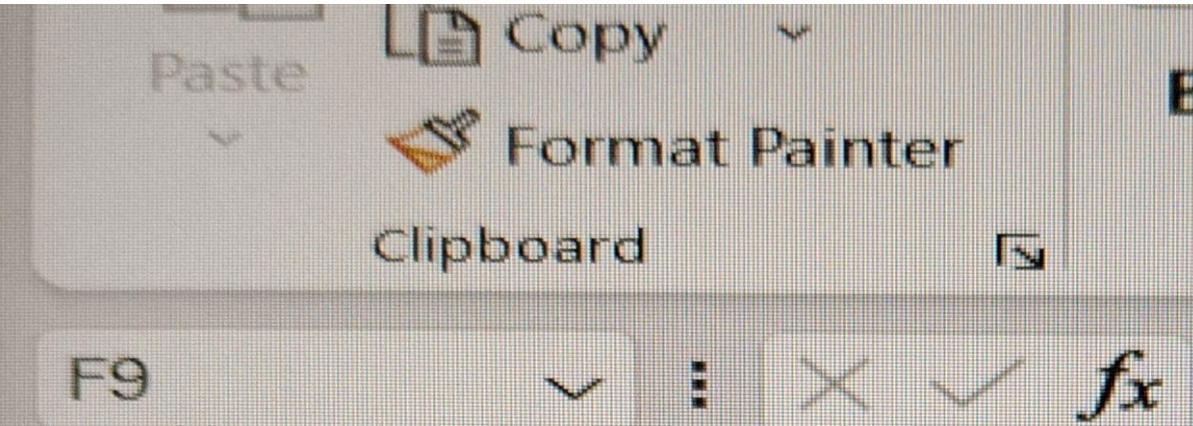
=XLOOKUP(A2, A:A, B:B)

Question 6: Create a worksheet titled 'Employee Data' with columns: Name, Age, Department. Add 5 rows of data.

Format as follows:

- Bold and center-align the header row
- Apply a fill color
- Auto-fit column width

Answer:



A screenshot of the Microsoft Excel ribbon. The 'Clipboard' tab is selected, showing options for 'Copy', 'Format Painter', and 'Clipboard'. Below the ribbon, the formula bar shows 'F9' and other input fields. The main area shows a table with 7 rows and 4 columns. The first row is bolded and has a yellow background. The columns are labeled 'Name', 'Age', and 'Department'.

	Name	Age	Department
1	Raghav	42	Defence
2	Abhilasha	37	Teacher
3	Siddhi	24	Doctor
4	Aarav	21	HR
5	Aarvi	33	Finance
6			

Question 7: Demonstrate how to insert and delete multiple rows and columns in Excel.

- Before the changes:

	A	B	C
1	Id	Name	Marks
2	1	Anika	88
3	2	Siddhi	92
4	3	Ahaan	94
5			

After the changes:

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▼ : X V

	A	B	C	D
1	Id	Name	Age	Marks
2				
3				
4	1	Anika	20	88
5	2	Siddhi	22	92
6	3	Ahaan	18	94
7				

	A	B	C
1	Id	Name	
2	1	Anika	
3	2	Siddhi	
4	3	Ahaan	

Question 8: Use Excel's 'Find and Replace' feature to update department names in a sample table.

- Before changes:

	A	B	C	D
1	Id	Name	Age	Department
2	101	Raghav	42	Teacher
3	102	Abhilasha	37	Defence
4	103	Siddhi	24	Teacher
5	104	Aarav	21	IT
6	105	Aarvi	33	Teacher
7				

- Find and Replace the data from ‘Teacher to Doctor’:

	A	B	C	D
1	Id	Name	Age	Department
2	101	Raghav	42	Doctor
3	102	Abhilasha	37	Defence
4	103	Siddhi	24	Doctor
5	104	Aarav	21	IT
6	105	Aarvi	33	Doctor
7				

Question 9: Create a small numerical dataset and apply the following functions:

- **AVERAGE**
- **MAX**
- **MIN**

1. Average:

The screenshot shows a spreadsheet interface with a toolbar at the top. The toolbar includes buttons for Clipboard, Font, and a formula entry field containing '=AVERAGE(A2:A6)'. Below the toolbar is a grid of cells. Row 1 contains the header 'Marks' in cell A1. Rows 2 through 6 contain numerical values: 45, 60, 75, 55, and 90 respectively. Row 7 is empty. Row 8 contains the value 65 in cell A8, which is highlighted with a green border. The column headers are A, B, C, D, and E.

		Clipboard	Font	
A8		⋮	X ✓ fx	=AVERAGE(A2:A6)
1	Marks	B	C	D
2	45			
3	60			
4	75			
5	55			
6	90			
7				
8	65			

2. Max:

A9							=MAX(A2:A6)
	A	B	C	D			
1	Marks						
2	45						
3	60						
4	75						
5	55						
6	90						
7							
8	65						
9	90						

3. Min:

The screenshot shows a Microsoft Excel interface. The formula bar at the top has "A10" in the reference field, a dropdown arrow, and a button bar with a red X, a green checkmark, and an "fx" icon. To the right of the button bar is the text "=MIN(A2:A6)". Below the formula bar is a grid of data. The first column is labeled "A" and contains numerical values from 1 to 10. The second column is labeled "Marks" and contains the following data: Row 2: 45, Row 3: 60, Row 4: 75, Row 5: 55, Row 6: 90, Row 7: blank, Row 8: 65, Row 9: 90, Row 10: 45. The cell A10 is highlighted with a green border, indicating it is the active cell.

A	Marks
1	
2	45
3	60
4	75
5	55
6	90
7	
8	65
9	90
10	45

Question 10: You're working with a dataset that contains missing values. As a Data Scientist, explain how you'd detect and handle missing data using Excel.

Mention tools like:

- Go To Special
- ISBLANK
- COUNTBLANK

1. Go to special-> It highlights all blank cells in the marks column.

	A	B
1	Students	Marks
2	Abhi	87
3	Aarvi	
4	Aarav	99
5	Raghav	
6	Siddhi	95
7		

2. ISBLANK Result->

The screenshot shows a Microsoft Excel interface. The formula bar at the top displays "C6" and the formula "=ISBLANK(B6)". The main area shows a table with columns "Students" and "Marks". Row 6 contains the value "Siddhi" in the "Students" column and "95" in the "Marks" column. The formula result "FALSE" is displayed in cell C6, which is highlighted with a green border.

	A	B	C	D	E
1	Students	Marks			
2	Abhi	87	FALSE		
3	Aarvi		TRUE		
4	Aarav	99	FALSE		
5	Raghav		TRUE		
6	Siddhi	95	FALSE		
7					

3.COUNTBLANK Function-> It shows there are 2 missing values in the marks column.

The screenshot shows a Microsoft Excel interface. The formula bar at the top displays "B8" and the formula "=COUNTBLANK(B2:B6)". The main area shows a table with columns "Students" and "Marks". The formula result "2" is displayed in cell B8, which is highlighted with a green border.

	A	B	C	D	E	F
1	Students	Marks				
2	Abhi	87	FALSE			
3	Aarvi		TRUE			
4	Aarav	99	FALSE			
5	Raghav		TRUE			
6	Siddhi	95	FALSE			
7						
8		2				
9						

4. Handling missing values-> After detection, missing data can be handled by 'filling with average value'.

	A	B
1	Students	Marks
2	Abhi	87
3	Aarvi	93.66
4	Aarav	99
5	Raghav	93.66
6	Siddhi	95
7		