

Assignment.

Excel Interview Questions.

Excel Introduction, Basic Excel Functions

Q) What is the difference between a workbook and a worksheet in excel?

→ In Microsoft Excel, the terms workbook and worksheet are closely related but refer to different levels of organization.

Workbook Definition.

→ A workbook is the entire Excel file. It is the main container that holds all the data, worksheets, charts, and other Excel objects.

- * The workbook is saved as a file with extensions like .xlsx, .xls, .xslm, etc.
- * It contains one or many worksheets.
- * When you open Excel and create a new file, you are creating a workbook.

Example:

If you save a file named Student - Record.xlsx, that file itself is a work book.

A workbook is like a book that contains multiple pages.

Worksheet - definition.

→ A worksheet is a single sheet (page) inside a workbook where you enter, calculate, and analyze data.

Points

- * A worksheet consists of rows and columns
- * Each worksheet contains cells (e.g. A1, B2)
- * The worksheets are used to store data such as:
 - * Marks
 - * employee details

* By default worksheets are named Sheet 1, Sheet 2 but we can rename it.

Example

Inside Student-Record.xlsx, you may have:

- Sheet 1 - Student names and Marks
- Sheet 2 - Attendance
- Sheet 3 - Results Summary.

each of these is a worksheet.

A worksheet is like a single page in a book

Q) How do you create a basic formula in excel?

→ A basic formula in excel is used to perform calculations on data entered in worksheet cells.

steps to create a basic formula in excel:

1. Select the cell where you want the result to appear.
2. Type the equal sign (=) to tell excel that you are entering a formula.
3. enter the cell reference and operator (such as +, -, *, /).
example = A1 + B1
- 4) press enter to complete the formula and display the result
5. Excel automatically recalculates the formula wherever the values in the referenced cells change.

Example:

If cell A1 contains 10 and B1 contains 20, entering
 $= A1 + B1$ will give the result 30.

Conclusion:

By starting with =, using cell references, and applying operators, basic formulas can be easily created in excel to perform calculations efficiently.

③ Can you explain how cell referencing works in excel?

→ A cell reference is the address of a cell, formed by the column letter and row number.

example:

- A1 → column A, Row 1

- B5 → Column B, Row 5

when you use a cell reference in a formula, excel takes the value from the cell to perform calculation

Example formula

$$= A1 + B1$$

* Types of cell Referencing

There are Three Types

① Relative cell Referencing

→ A relative cell reference changes automatically when a formula is copied or moved to another cell.

Formula in cell C1

$$= A1 + B1$$

If this is copied to cell C2 it comes

$$= A2 + B2$$

Suitable when performing the same calculation across rows or columns.

② Absolute cell Referencing

→ It remains fixed even when the formula is copied.

use the dollar sign (\$) Example = \$A\$1 * B1
If copied to another cell \$A\$1 does not change.
(uses + tax rate, discount, fixed price)

③ mixed cell referencing.

→ It fixes either the row or the column,
but not both

Types

- \$A1 → column fixed, row changes
- A\$1 → row fixed, column changes

use \$ to fix in fixed reference.

④ What is the purpose of the sum function, and how
do you use it?

→ The sum function in excel is used to add
numerical values in one or more cells quickly
and accurately.

Purpose of the sum function:

1. It calculates the total of numbers in a selected range of cells.
2. It saves time compared to manual addition.
3. It reduces calculation errors.
4. It is commonly used in accounting, sales, and data analysis.

How to use the sum function:

1. Select the cell where the total is required
2. Type = SUM(
3. Select the range of cells to be added.

(e.g. A1:A5)

4. close the bracket) and press enter.

Example:

= SUM(A1:A5)

This formula adds all the values from cells A1 and A5

Conclusion:

The Sum function helps in efficiently calculating total and is one of the most frequently used functions in excel.

⑤ How do you apply the average function to a range of cells?

→ The Average function in Microsoft Excel is used to calculate the arithmetic mean (average) of a set of numerical values in a range of cells.

Steps to apply the Average function:

1. Select the cell where you want the average result to appear.

2. Type the formula starting with an equal sign =

3. Enter the function name Average followed by an opening bracket.

- ④ Specify the range of cells whose average you want to calculate (for example, A1:A10).
5. Close the bracket and press enter.

Example:

=AVERAGE(A1:A10)

This formula calculates the Average of all numerical values present in cells A1 to A10.

- * The Average function ignores empty cells and text values.
- * Multiple ranges or individual cells can also be included eg. =AVERAGE(A1:A5, C1:C5).

The Average function provides a quick and efficient way to find the mean of a range of numbers in excel.

- ⑤ What is a relative cell reference, and how does it differ from an absolute cell reference?

→ Relative cell reference

A relative cell reference changes automatically when a formula is copied from one cell to another. It is written without any dollar signs (\$).

Example

- If you enter the formula $=A1+B1$ in cell C1, excel adds the values from cells A1 and B1. When this formula is copied to cell C2, it automatically changes to $=A2+B2$.

why this happens:

- Excel adjusts the row and column references relative to the new position of the formula.

Absolute cell reference:

- It remains fixed even when the formula is copied or moved to another cell. It is written using dollar signs (\$) before the column letters and the row number.

Example: $\$A\1 is an absolute reference.

- If the formula $=A1 * \$B\1 is entered in cell C1 and copied to C2, the formula becomes $=A2 * \$B\1 .

Here, $\$B\1 does not change, while A1 changes to A2.

uses of absolute references:

- Referring to constant values like tax rates, discount percentages, or fixed prices.
- Applying the same reference across multiple formulas.

① How do you quickly sum a row or column of numbers?

→ Summing a row or a column of numbers can be done quickly using built-in features. The most common and efficient method is by using the Auto Sum tool.

→ using the Auto Sum Button
(fastest method)

Steps:

1. Select the cell below a column of numbers, or to the right of a row of numbers

2. Click the Auto Sum (Σ) button on the Home tab or formulas tab.
3. Excel highlights the range to add
4. Press enter to get the total.

example:

= SUM(A1:A5)

② Using the Sum function manually:

You can also type the sum formula yourself

Steps:

1. Click the cell where you want the result.
2. Type = SUM(.
3. Select the range of cells with the mouse or type the range.
4. Close the bracket and press enter.
= SUM(B1:B10)

⑧ Explain how to use the Auto Sum feature.

→ What is Auto Sum?

Auto Sum is a built-in Excel function represented by the Σ (sigma) symbol on the ribbon.

Steps to use the Auto Sum feature.

1. Select the cell where you want the total to appear.
 - * For a column, select the cell below the number.
2. Go to the Home tab on the Ribbon.
3. In the editing group, click on the Auto Sum (Σ) button.
4. Excel will automatically highlight the range of cells it thinks you want to add.
5. Check the selected range to ensure it is correct.
6. Press Enter to confirm.

Example

If numbers are entered in cells A1 to A5, click on cell A6 and press Auto Sum.

Excel will insert the formula.

$=SUM(A1:A5)$

using Autosum with keyboard shortcut.

* Alt + = keyboard key pressed with shift +

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⑨ How do you insert and delete rows and columns in excel?

Inserting Rows in excel:

1. Select the row number below where you want to insert a new row.
2. Right - click on the selected row number.
3. Click Insert from the menu.
4. A new blank row is inserted above the selected row.

Alternative method:
→ Go to the Home tab → cells group → click Insert
→ select insert sheet Rows.

Deleting Rows in excel

1. Select the row number you want to delete.
2. Right - click and choose Delete.
3. The entire row is removed from the worksheet.

Deleting columns in excel

1. Select the column letter you want to delete.
2. Right - click and select delete.
3. The selected column is removed.

⑩ What are some common uses of excel in a business environment?

→ excel used in businesses because it is a powerful tool for organizing, analyzing and presenting data.

① Data organization and record-keeping.

- * Rows and columns help keep data structured for easy access and analysis.

② Financial analysis and budgeting:

- * Businesses use Excel to track income, expenses, and profits.

③ Reporting and visualization:

- * Excel allows creating charts, graphs, and dashboards to present business data visually.

④ Data analysis and calculations:

- * Excel's formulas and functions (like sum, average, vlookup, and IF) help perform quick calculations and analyze large datasets.

⑤ Inventory and sales management:

- * Excel is used to track stock levels, sales performance, and order histories.