



LITTERA PUBLIC SCHOOL

CLASS – 6 COMPUTER

CHAPTER – 6

MS EXCEL : FORMATTING, FORMULAS AND FUNCTIONS

- **What is Microsoft Excel?**

Ans :- Microsoft Excel is a spreadsheet program used to record and analyse numerical and statistical data. Microsoft Excel provides multiple features to perform various operations like calculations, pivot tables, graph tools, macro programming, etc. It is compatible with multiple OS like Windows, macOS, Android and iOS.

A Excel spreadsheet can be understood as a collection of columns and rows that form a table. Alphabetical letters are usually assigned to columns, and numbers are usually assigned to rows. The point where a column and a row meet is called a cell. The address of a cell is given by the letter representing the column and the number representing a row.

- **Why Should I Learn Microsoft Excel?**

Ans :- we all deal with numbers in one way or the other. We all have daily expenses which we pay for from the monthly income that we earn. For one to spend wisely, they will need to know their income vs. Expenditure. Microsoft Excel comes in handy when we want to record, analyse and store such numeric data.

• **Formatting Cells :-**

In Excel, you can format numbers in cells for things like currency, percentages, decimals, dates, phone numbers, or social security numbers.

Step 1 :- Select a cell or a cell range.

Step 2 :- On the Home tab, select Number from the drop-down.

Or, you can choose one of these options:

Press CTRL + 1 and select Number.

Right-click the cell or cell range, select Format Cells... , and select Number.

Select the small arrow, dialog box launcher, and then select Number.

Step 3 :- Select the format you want.

Number formats

To see all available number formats, click the Dialog Box Launcher next to Number on the Home tab in the Number group.

• **General :-**

The default number format that Excel applies when you type a number. For the most part, numbers that are formatted with the General format are displayed just the way you type them. However, if the cell is not wide enough to show the entire number, the General format rounds the numbers with decimals. The General number format also uses scientific (exponential) notation for large numbers (12 or more digits).

• **Number :-**

Used for the general display of numbers. You can specify the number of decimal places that you want to use, whether you want to use a thousands separator, and how you want to display negative numbers.

- **Currency :-**

Used for general monetary values and displays the default currency symbol with numbers. You can specify the number of decimal places that you want to use, whether you want to use a thousands separator, and how you want to display negative numbers.

- **Accounting :-**

Also used for monetary values, but it aligns the currency symbols and decimal points of numbers in a column.

- **Date :-**

Displays date and time serial numbers as date values, according to the type and locale (location) that you specify. Date formats that begin with an asterisk (*) respond to changes in regional date and time settings that are specified in Control Panel. Formats without an asterisk are not affected by Control Panel settings.

- **Time :-**

Displays date and time serial numbers as time values, according to the type and locale (location) that you specify. Time formats that begin with an asterisk (*) respond to changes in regional date and time settings that are specified in Control Panel. Formats without an asterisk are not affected by Control Panel settings.

- **Percentage :-**

Multiplies the cell value by 100 and displays the result with a percent (%) symbol. You can specify the number of decimal places that you want to use.

- **Fraction :-**

Displays a number as a fraction, according to the type of fraction that you specify.

- **Scientific :-**

Displays a number in exponential notation, replacing part of the number with E+n, where E (which stands for Exponent) multiplies the preceding number by 10 to the nth power. For example, a 2-decimal Scientific format displays 12345678901 as 1.23E+10, which is 1.23 times 10 to the 10th power. You can specify the number of decimal places that you want to use.

- **Text :-**

Treats the content of a cell as text and displays the content exactly as you type it, even when you type numbers.

- **Special :-**

Displays a number as a postal code (ZIP Code), phone number, or Social Security number.

- **Custom :-**

Allows you to modify a copy of an existing number format code. Use this format to create a custom number format that is added to the list of number format codes. You can add between 200 and 250 custom number formats, depending on the language version of Excel that is installed on your computer. For more information about custom formats, see Create or delete a custom number format.

- **Formulas :-**

A formula in Excel is used to do mathematical calculations. Formulas always start with the equal sign (=) typed in the cell, followed by your calculation.

Formulas can be used for calculations such as:

=1+1

=2*2

=4/2=2

It can also be used to calculate values using cells as input.

Let's have a look at an example.

Now we want to do a calculation with those values.

Step by step:

1. Select C1 and type (=)
2. Right click A1
3. Type (+)
4. Right click A2
5. Press enter

You have successfully calculated $A1(2) + A2(4) = C1(6)$.

Lets change from addition to multiplication, by replacing the (+) with a (*). It should now be =A1*A2, press enter to see what happens.

You got C1(8), right?

Excel is great in this way. It allows you to add values to cells and make you do calculations on them.

• **Arithmetic Operators :-**

To perform basic mathematical operations, arithmetic Operators are used. For example , + (plus sign) for addition, - (minus sign) for subtraction, * (asterisk sign) for multiplication, / (forward slash) for division, % (percentage sign) for percentage and (^) carat for exponents.

• **Comparison and Relational Operators :-**

Relational or comparison operators are used to compare the values within an expression, such as to check if the value held by a variable matches the value held by another variable. Most operators use mathematical notation.

The expressions in which these operators are applied evaluate to either True or False. The pieces of data (e.g. values, variables, or other expressions) on which the program performs the operations are called operands.

• **Writing Simple Formula :-**

You can create a simple formula to add, subtract, multiply or divide values in your worksheet. Simple formulas always start with an equal sign (=), followed by constants that are numeric values and calculation operators such as plus (+), minus (-), asterisk(*), or forward slash (/) signs.

Let's take an example of a simple formula.

On the worksheet, click the cell in which you want to enter the formula.

Type the = (equal sign) followed by the constants and operators (up to 8192 characters) that you want to use in the calculation.

For our example, type =1+1.

• **Using Compound Formula :-**

A function in Excel is a preset formula, that helps perform mathematical, statistical and logical operations. Once you are familiar with the function you want to use, all you have to do is enter an equal sign (=) in the cell, followed by the name of the function and the cell range it applies to.

• **Logical Function :-**

Microsoft Excel offers inbuilt logical functions to perform logical operations on Excel data. Logical functions are basically used to perform comparisons on data. Logical functions offered by MS Excel are – AND, OR, XOR, NOT, TRUE, FALSE, IFNA, etc. Using these logical functions, you can compare data in different ways.

All the logical functions return a Boolean result depending on the data and function you use. It can be either TRUE or FALSE. In this chapter, we will help you to discuss and use each logical function in brief. Each of these functions works to be used in different situations.

MS Excel provides found logical functions (AND, OR, NOT, XOR) to work with logical values. These functions help when the user wants to test or compare more than one condition in the formula. As these are logical functions, they return a Boolean value (TRUE or FALSE) after evaluation.

Following is a list of all logical functions that you will see inside the Logical Functions dropdown list inside the Formula tab in the Microsoft Excel –

AND

FALSE

IF

IFERROR

IFNA

NOT

OR

TRUE

XOR

