

Worksheet -4

Subject: - Computer

Class: - VII

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Name: \_\_\_\_\_ Class &amp; Sec: \_\_\_\_\_ Roll No. \_\_\_\_\_

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## Lesson 2: Functions and Manipulation in Excel

<https://youtu.be/qgU2xllewk4> Listen this video carefully

### Using Functions

We know how to enter formulae and do calculations in Excel. But to get quick results and handle large volume of data easily, special inbuilt functions are there in Excel.

**Functions** are the special prewritten formulae and instructions that

- Accept the values as arguments and
- 'Return' the result values in the cell in which they have been typed.

In Excel you will find functions for every purpose whether it is

- Mathematical,
- Statistical, and
- Logical or related to Date and Time.

Just put the arguments inside the brackets of the function in the proper format and you will get the required result. Let us learn about functions and arguments.

**General Syntax (Rule) of a Function:** = Function name (Arguments)

Example (1)    =AVERAGE (A1:A7)  
                   ↓                  ↓  
                   Function name Arguments

Example (2)    = SUM (9, 6, 12)  
                       ↓                  ↓  
                       Function name Arguments

### Types of Argument:

1. **Constants:** These values can be used directly in the function.

Example: = SUM (12, 45, 13)

will return the value 70

$12 + 45 + 13 = 70$
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2. **Cells or Range:** The cell reference or the range of cells can also be specified as the argument.

Example: = SUM (A1:A5)

### Entering the Functions:

1. All Functions begin with an "=" sign.
2. Parentheses (Brackets) are used to 'open' and 'close' the Function like SUM (     ).
3. All Arguments are given inside Parentheses.
4. You can separate the Arguments with a 'comma' or you can also give the cell range.

Example:-

=SUM (A1, A2, A3, A4)            or            =SUM (A1:A4) both are correct

### Function Categories:

Function can be broadly classified in the following categories:

1. Text Functions
2. Mathematical Functions
3. Statistical Functions
4. Date & Time Functions
5. Logical Functions

Each Function type is used for different purpose as indicated by the name of the Function.

Now, answer the following questions:


Q1: Fill in the blanks:

- \_\_\_\_\_ sign is used to begin a Function.
- In the function =SUM(A1:A12), the arugement is SUM. (True / False)
- Functions are the special pre-written formulae and instructions that accept the values as \_\_\_\_\_ and 'return' the values.
- \_\_\_\_\_ values can be used directly in the function.
- All function arguments are given inside \_\_\_\_\_
- \_\_\_\_\_ are inside the Parentheses of a function.

Q2: Answer the following questions:

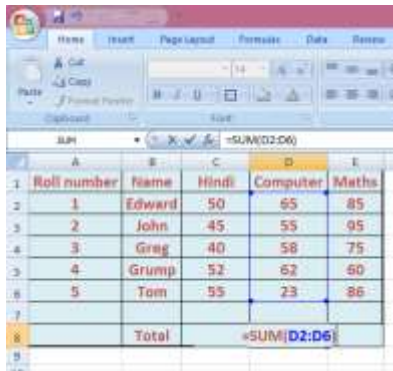
- Write the syntax of a function.
- Which special functions are there in excel to get quick results and handle large volume of data easily?
- What is used to open and close the function?
- What are functions?
- Name the five categories of functions.
- What difference do you find in between a formula and a function?
- Identify the type of argument in the following?

(i)



Roll number	Name	Hindi	Computer	Maths
1	Edward	50	65	85
2	John	45	55	95
3	Greg	40	58	75
4	Grump	52	62	60
5	Tom	35	23	86
		=SUM(50+45+40+52+55)		

(ii)



Roll number	Name	Hindi	Computer	Maths
1	Edward	50	65	85
2	John	45	55	95
3	Greg	40	58	75
4	Grump	52	62	60
5	Tom	35	23	86
Total		=SUM(D2:D6)		

- Enter data as shown in MS Excel, after entering find out total sum by applying both type of arguments. (To open MS Excel → Start Button → Programs → Microsoft Office → MS Excel → Blank workbook)

	A	B	C	D
1	<b>Name</b>	<b>Math</b>	<b>Science</b>	<b>English</b>
2	Arun	30	23	44
3	Saby	90	60	55
4	Ishi	85	56	74
5	Charu	35	34	80
6	Shalini	85	95	9

Answer:

Ans1:

1. = sign
2. False
3. Arguments
4. Constants
5. Parentheses
6. Arguments

Ans2:

**1. General Syntax (Rule) of a Function:** = Function name (Arguments)

Example (1) =AVERAGE (A1:A7)



Function name Arguments

2. In built functions
3. Parentheses (Brackets) are used to 'open' and 'close' the Function like SUM ( )
4. **Functions** are the special prewritten formulae and instructions that accept the vales as arguments and 'return' the result values in the cell in which they have been typed.
5. The five categories of functions are:
  - 1) Text Functions
  - 2) Mathematical Functions
  - 3) Statistical Functions
  - 4) Date & Time Functions
  - 5) Logical Functions
6. Formulae do calculations easily. And Functions is used to get quick results and handle large volume of data easily, special inbuilt functions.
7. (i) Constants  
(ii) Cells or Range
8. =SUM (B2, B3, B4, B5, B6) or =SUM (B2:B6)  
= SUM (C2, C3, C4, C5, C6) or =SUM (C2:C6)  
= SUM (D2, D3, D4, D5, D6) or =SUM (D2:D6)