

# Chapter:-2 Calculation in MS Excel 2013

## ➤ Important terms:-

### Words to Know

- **Formula:** An expression in Excel containing constants, cell references, functions and/or operators that let you perform calculations in a worksheet.
- **AutoSum:** A feature in Excel using which you can add numbers arranged in contiguous rows or columns quickly.
- **Functions:** Pre-defined formulas that can be applied directly to perform calculations in Excel.

### RECAP ZONE



- A formula can be defined as an equation of values, cell references, functions, and/or operators that let you perform calculations in your worksheet.
- Cell references are the addresses of the cells that contain values to be used for calculations.
- Operators specify the type of operation you want to perform.
- The different types of operators include the arithmetic and text operators.
- Functions are predefined formulas that can be applied directly to perform calculations in Excel.
- Some commonly used functions in Excel include Sum, Average, Count, Product, Max and Min.

### ASSESSMENT ZONE



#### A. Choose the correct answer.

1. Which of the following is the symbol for multiplication in Excel?

a) /

b) ^

c) \*

d) &

### Answers of Assessment Zone:-

(1)- c

1.

BY:- BRAJESH KUMAR (TGT COMPUTER)

2. An error that occurs when a formula contains invalid data is
  - a) #VALUE!
  - b) #NAME?
  - c) #DIV/0!
  - d) #####
3. Which of the following is the correct way of specifying arguments to a function?
  - a) =SUM[A1:A5]
  - b) =SUM(A1:A5)
  - c) =SUM(A1:A5)
  - d) =SUM(A1-A5)
4. Which is the correct way to concatenate two text values contained in cells A1 and B1 in Excel?
  - a) =A1 & B1
  - b) =A1 + B1
  - c) A1 & B1
  - d) A1+ B1

**Answers:-** (2)- a (3)- c (4)- a

**B. Fill in the blanks using the words given in the box.**

#NAME?    count    AutoSum    arguments    Operators    product

1. The cell references containing values to be used for calculations passed to the function are called \_\_\_\_\_.
2. Excel displays the error value \_\_\_\_\_ when a formula is not spelt correctly.
3. The \_\_\_\_\_ function is used to multiply the contents of the cells.
4. \_\_\_\_\_ specify the type of operation you want to perform.
5. The \_\_\_\_\_ feature is particularly useful when you want to add numbers in a contiguous row or a column quickly.
6. To calculate the number of numeric entries in a range of cells, you use the \_\_\_\_\_ function.

**Answers of Fill in the blanks:-**

(1)Arguments (2)#NAME? (3)Product (4)Operators (5)AutoSum (6)Count

**C. Write the formula to calculate the following.**

1. To add the contents of cells B2, B3, B4 and B5 and divide the sum by the contents of cell C7.
2. To multiply the contents of the cells C12 and C13 and then divide the product by the contents of the cell D18.
3. To subtract the contents of the cell A6 from the contents of the cell B6 and then multiply the difference with the contents of the cell C6.
4. Selecting the maximum value out of a range A1 to B20.
5. Calculating average of marks entered in cells E5, F5, G5, H5 and I5.
6. Calculating total expenses incurred if expenses are given month-wise in cells A1, B1, C1 and D1.

**Answers of "C" Section:-**

Q No.	Formula
(1)	=SUM(B2:B5)/C7
(2)	=PRODUCT(C12:C13)/D18
(3)	=(B6-A6)*C6
(4)	=MAX(A1:B20)
(5)	=AVERAGE(E5:I5)
(6)	=SUM(A1:D1)

**D. Answer the following questions:-****1. Define formulas.**

**Answer:-** An expression in Excel containing constants, cell references, functions and/or operators that let you perform calculations in a worksheet.

**2. What are operators? List the use of some operators used for calculations in Excel.**

**Answer:-** Operators are the special symbols such as +, -, &, etc., used for specifying the type of operation to be performed.

The different types of operators include the

1. Arithmetic Operators.
2. Text operators.

**3. What is the significance of AutoSum feature? Name the tab containing this option.**

**Answer:-** When using AutoSum for calculation, select the next available blank cell towards the right if adding row-wise or next available blank cell immediately below the numbers if adding column-wise.

The AutoSum feature let us calculate the sum of data arranged in contiguous rows or columns quickly.

1. In the editing Group on the Home tab.
2. In the function Library group on the Formulas tab.

**4. Define Functions. Discuss its structure.**

**Answer:-** It is Pre-defined formulas that can be applied directly to perform calculations in Excel.

❖ A function in Excel has three parts.

1. Equal to sign (=): All functions must start with an equal to sign
2. Function Name: It is the name of the function that help us in specifying the type of operation to be performed on the values.
3. Arguments: The cell references containing values passed to a function to be used for calculations are called Arguments can be numbers or text values. The arguments are always written between opening '(' and closing parentheses as shown below.