**BASICS OF EXCEL FUNCTIONS**

**Introduction to Excel Formulas**

★ In Excel, a formula is an expression used to perform calculations or manipulate data

within a spreadsheet.

★ Formulas are used to automate calculations, making it easy to perform repetitive

tasks and analyze data efficiently.

★ Every formula in Excel starts with an equals sign (=) to indicate that it is a formula.

★ Formulas are constructed using operators and built-in functions.

★ Operators are used for basic arithmetic operations and logical comparisons.

★ While functions are predefined formulas that perform specific calculations and

tasks. Examples of common functions include SUM, AVERAGE, MAX, MIN, and COUNT

**SUM FUNCTION :**

the sum function in excel is a powerful tool for performing calculations by adding up value in a range of cells .

* Syntax : ‘ =sum (number 1, [number 2],……..)

**MIN and MAX :**

The MIN and MAX functions in Excel are valuable tools for performing

calculations related to finding the minimum and maximum values within

a range of cells.

★ Syntax of MIN: ‘= MIN(number1, [number2], ...)’.

★ Syntax of MAX: ‘= MAX(number1, [number2], ...)’.

**COUNT FUNCTION** :

The COUNT function in Excel is very useful for performing calculations

related to counting the number of cells in a range that contain numbers.The COUNT function counts cells that contain any numeric value, including integers and decimals . ★ Syntax: ‘=COUNT(value1, [value2], ...)’.

**COUNTA FUNCTION** :

COUNTA function is used to count the number of cells in a range that are

not empty or blank. It counts cells that contain any type of data, including text, numbers.

★ Syntax of COUNTA: ‘=COUNTA(value1, [value2], ...)’

**AVERAGE FUNCTION** :

The AVERAGE Function in Excel is a powerful tool for calculating the

average of a range of numeric values.

arithmetic mean. It helps you find the central tendency of a dataset by providing the

Average|Mean = (sum of all values) ➗ (total number of values)

★ Syntax: ‘=AVERAGE(number1, [number2], ...)’.

**IF FUNCTION** :

The IF Function in Excel is a fundamental tool for performing logical

operations that are used to perform comparisons or tests that result in a TRUE

or FALSE outcome.

It creates conditional statements based on logical tests, allowing you to make

decisions based on specified conditions, and thereby enabling you to create

dynamic and flexible spreadsheets. The IF function can handle both text and numeric results. It provides a versatile way to control the flow of calculations and data

* Syntax: =IF(logical\_test, value\_if\_true, value\_if\_false

**SUMIF, COUNTIF, AVERAGEIF Functions**

★ The SUMIF, AVERAGEIF, and COUNTIF functions in Excel are useful for

performing logical operations while summarizing and analyzing data.

★ SUMIF allows you to sum values based on a specified condition.

★ AVERAGEIF calculates the average of values that meet a specific

condition.

★ COUNTIF counts the number of occurrences that satisfy a given condition

* Syntax ‘=SUMIF(range, criteria, [sum\_range]’
* Syntax ‘ =AVERAGEIF(range, criteria, [average\_range])’
* Syntax ‘=COUNTIF(range, criteria)’

**LEFT Function**

★ The LEFT function can be used to truncate or limit the number of characters displayed from the left side of a text string.

★ Syntax: =LEFT(text, [num\_chars]

**RIGHT Function**

★ The RIGHT function can be used to truncate or limit the number of characters displayed from the right side of a text string

★ Syntax: =RIGHT(text, [num\_chars])

**MID Function**

★ The MID function can be used to extract a substring from the middle of a

text string. This is particularly useful when you want to exclude a specific

portion of text.

★ Syntax: =MID(text,start\_num,num\_chars)

**UPPER Function**

★ The UPPER function converts all letters in a text string to uppercase

★ Syntax: =UPPER(text)

**LOWER Function**

★ The LOWER function converts all letters in a text string to lowercase

★ Syntax: =LOWER(text

**PROPER Function**

★ The PROPER function capitalizes the first letter of each word in a text string

★ Syntax: =PROPER(text)

THANKYOU