Lesson – 4

Table Formatting with Formulas

Microsoft Office Excel 2010 has more rows and columns than ever before with the following new limits:

For MS Excel 2010, Row numbers ranges from 1 to **1048576**; in total **1048576 rows**, and Columns ranges from A to XFD; in total **16384 columns**.

Logical Function

Function	Description
AND	Returns **TRUE** if all of its arguments are **TRUE**
FALSE	Returns the logical value **FALSE** if all of its arguments are **not TRUE**
IF	Specifies a logical test to perform
IFERROR	Returns a value you specify **if a formula evaluates to an error;** otherwise, returns the result of the formula
COUNT	The **COUNT** function counts the numeric values in the selected cells
COUNTIF	The **COUNTIF** function counts the alphabetic values in the cells within a range that meet a single criterion that you specify
LOOKUP	The **LOOKUP** function returns a value either from one-row or one-column range or from an array.
SUM	The SUM function gives you the addition or total sum of the selected numeric criteria

- **Note:** **Formula always begins with equal (=) sign.**

AND

Returns TRUE if all its arguments are TRUE; returns FALSE if one or more argument is FALSE.

Syntax

AND(**logical1**,logical2, ...)

Logical1, logical2, ... are 1 to 255 conditions you want to test that can be either TRUE or FALSE.

SUM

Select a cell next to the numbers you want to sum, click AutoSum on the Home tab, press Enter, and you're done. When you click AutoSum, Excel automatically enters a formula (that uses the SUM function) to sum the numbers.

Syntax: **SUM**( )

FALSE

Returns the logical value FALSE.

Syntax*:* **FALSE**( )

Remark

You can also type the word FALSE directly onto the worksheet or into the formula, and Microsoft Excel interprets it as the logical value FALSE.

✍ *Use all the options with* ***Practical Assignment No. - 1 & 2***

IF

This article describes the formula syntax and usage of the **IF** function in Microsoft Excel.

The **IF** function returns one value if a condition you specify evaluates to TRUE, and another value if that condition evaluates to FALSE. For example, the formula **=IF(A1>10,"Over 10","10 or less")** returns "Over 10" if A1 is greater than 10, and "10 or less" if A1 is less than or equal to 10.

Syntax

```
IF(logical_test, [value_if_true], [value_if_false])
```

IFERROR

This article describes the formula syntax and usage of the **IFERROR** function in Microsoft Excel.

Description

Returns a value you specify if a formula evaluates to an error; otherwise, returns the result of the formula. Use the **IFERROR** function to trap and handle errors in a formula.

Syntax

```
IFERROR(value, value_if_error)
```

COUNT

This article describes the formula syntax and usage of the **COUNT** function in Microsoft Excel.

Description

The **COUNT** function counts the number of cells that contain numbers, and counts numbers within the list of arguments. Use the **COUNT** function to get the number of entries in a number field that is in a range or array of numbers. For example, you can enter the following formula to count the numbers in the range A1:A20:

=COUNT(A1:A20)

In this example, if five of the cells in the range contain numbers, the result is **5**.

Syntax **:** **COUNT(value1, [value2], ...)**

COUNTIF

This article describes the formula syntax and usage of the **COUNTIF** function in Microsoft Excel.

Description

The **COUNTIF** function counts the number of cells with alphabetic values within a range that meet a single criterion that you specify. For example, you can count all the cells that start with a certain letter, or you can count all the cells that contain a number that is larger or smaller than a number you specify. For example, suppose you have a worksheet that contains a list of tasks in column A, and the first name of the person assigned to each task in column B. You can use the **COUNTIF** function to count how many times a person's name appears in column B and, in that way, determine how many tasks are assigned to that person. For example:

=COUNTIF(B2:B25,"Nancy")

Note **:** To count cells based on multiple criteria, see COUNTIFS function.

Syntax **:** **COUNTIF(range, criteria)**

✍ *Use all the options with* ***Practical Assignment No. - 3***