**Assignment-2**

1. **What does the dollar($) sign do?**

Ans- In the excel there are two type of reference is used one is absolute and another one relative, when we use dollar sign before any cell in the excel it is called absolute reference. The dollar sign fixes the reference to given cell so that it remains unchanged when we drag the formula from one cell to another cell.

We use f4 key on the keyboard to use dollar sign($) in the excel , by default when we use any formula or refer any cell like this A4,it is called relative ,it automatically changes when we move from one cell to another.

We press number of times f4 key in order to make the absolute cell-

=$B$3- Entire range of cell is absolute|| ONE PRESS.

=$B3-only b column id absolute || TWO TIMES PRESS.

=B$3-only row “3”is absolute || THREE TIMES PRESS.

=B3= relative cell|| FOUTH TIMES PRESS.

**2-How to Change the Reference from Relative to Absolute (or Mixed)?**

Ans- \* First select the cell that contain the formula.

\*In the formula bar, select the reference that you want to change

\*Press F4 key on multiple times then we switch from absolute to relative. The example given below-

We press number of times f4 key in order to make the absolute cell-

=$B$3- Entire range of cell is absolute|| ONE PRESS.

=$B3-only b column id absolute || TWO TIMES PRESS.

=B$3-only row “3”is absolute || THREE TIMES PRESS.

=B3= relative cell|| FOUTH TIMES PRESS.

**3-Explain the order of operations in excel?**

Ans- Understanding the order of operations is crucial for creating accurate and reliable spreadsheets. Excel follows the following order of operations:

In general, Excel's order of operation follows the acronym PEMDAS (Parentheses, Exponents, Multiplication, Division, Addition, Subtraction)

Parentheses: Excel first evaluates expressions enclosed in parentheses. If there are nested parentheses, it starts with the innermost and works outward.

Exponents: Excel calculates any exponentiation (raising a number to a power) next. You can use the caret (^) operator or the POWER function for this purpose.

Multiplication and Division: Excel performs multiplication and division operations from left to right. These operators have equal precedence, so they are evaluated in the order they appear in the formula.

Addition and Subtraction: Similar to multiplication and division, addition and subtraction operators are evaluated from left to right. They also have equal precedence.

Concatenation: When you use the ampersand (&) operator or CONCATENATE function to join text values, Excel evaluates this operation after mathematical calculations.

Comparison Operators: Excel evaluates comparison operators like =, <>, <, >, <=, and >=. These operators are used for comparisons in logical tests.

Logical Operators: Logical operators like AND, OR, and NOT are evaluated next. They are often used in conjunction with comparison operators to create complex logical expressions.

References to Cells and Ranges: Finally, Excel evaluates references to cells and ranges, which may contain the results of previous calculations or data to be used in formulas.

Here's an example to illustrate the order of operations:

=A1 + B1 \* (C1 - D1^2) / 2

In this formula, Excel would:

Calculate D1^2 (exponentiation).

Calculate (C1 - D1^2) (subtraction and exponentiation).

Calculate B1 \* (C1 - D1^2) (multiplication).

Calculate (B1 \* (C1 - D1^2)) / 2 (division).

Finally, add A1 to the result.

By following this order of operations, Excel ensures that formulas are evaluated correctly and consistently.

**4-What, according to you, are the top 5 functions in excel and write a basic syntax for any of two?**

Ans-According to me the top five function in the excel are – VLOOKUP, I/F, CONCANTENATE, S UBTOTAL, COUNTA.

The syntax of VLOOKUP and COUNTA Is mentioned below-

The syntax of VLOOKUP (lookup value, range containing the lookup value, column number in the range containing the return value, Approximate match (true)or exact match(false)).

The syntax of I/F- if (condition) instruction; It will give the true or false depends on situation, True is always a **non-zero value**, and false is a value that contains zero.

The syntax of CONCANTENATE- Concatenate (B1, “ ”, B2);

It is used to join the two strings to end to end. We take space between the join of the two strings because it will give proper name, like Aniket Yadav otherwise it will aniketyadav(not looks proper).

The syntax of subtotal- SUBTOTAL (function Num, ref1,[ref2]…) , the big bracket argument is optional,

It contain the 11 formula of sum by just simple click we can apply any formula in of the formula. It exclude the filter also when calculate the value , this is most important feature of this formula

The syntax of COUNTA- Counta (value1,[value2, value….]

It is used to count value containing the value i.e., cells that contain the non-empty cells .It is very important because it will count the either the number or any string value present in the cell . it is quite more use full then COUNT function.

**4-When would you use the subtotal function?**

Ans-The subtotal function contains the 11 formulae of the sum, it is use where have to exclude the filtered or hidden rows when we calculating a total on the worksheet. It is available in all the excel except EXCEL 2007.

its syntax is – SUBTOTAL (function Num, ref1,[ref2]…) , the big bracket argument is optional.

**6. What is the syntax of the VLOOKUP function? Explain the terms in it?**

Ans- The syntax of VLOOKUP (lookup value, range containing the lookup value, column number in the range containing the return value, Approximate match (true)or exact match(false)).

Note-: The column which holds the data used to lookup must always to be left.