**Advance Excel Assignment 2**

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

One of the things that make Excel such a powerful tool is the ability to refer to cells/ranges and use these in formulas. And when you copy these formulas, these cell references can adjust automatically. This is called relative reference where the references adjust based on the cell in which it has been applied.

1. How to Change the Reference from Relative to Absolute (or Mixed)?

We can press F4 to toggle the relative address to absolute address or manually add the dollar sign ($) before the row and the column to change relative to absolute in Excel.

1. Explain the order of operations in excel?

When evaluating a formula, Excel follows a standard math protocol called "order of operations". In general, Excel's order of operation follows the acronym PEMDAS (Parentheses, Exponents, Multiplication, Division, Addition, Subtraction) but with some customization to handle the formula syntax in a spreadsheet.

First, any expressions in parentheses are evaluated. Parentheses essentially override the normal order of operations to ensure certain operations are performed first.

Next, Excel will resolve references. This involves replacing cell references like A1 with the value from the cell, as well as evaluating range references like A1:A5, which become arrays of values. Other range operations like union (comma) and intersection (space) also happen at this time.

Next, Excel will perform exponentiation, negation, and percent conversions (in that order), followed by multiplication and division, addition and subtraction, and concatenation. Finally, Excel will evaluate logical operators, if present.In summary, Excel solves formulas in the following order:

* Parentheses
* Reference operators
* Exponents
* Negation
* Percent
* Multiplication and Division
* Addition and Subtraction
* Concatenation
* Logical operators

4. What, according to you, are the top 5 functions in excel and write a basic syntax

for any of two?

The sum function, Text function, Vlookup function, Average function, Concantenate Function

5.When would you use the subtotal function?

Sometimes, we need data based on different categories. SUBTOTALS help us to get the totals of several columns of data broken down into various categories. For example, let’s consider garment products of different sizes manufactured. The SUBTOTAL function will help you to get a count of different sizes in your warehouse.

1. What is the syntax of the vlookup function? Explain the terms in it?

VLOOKUP( lookup\_value, table\_array, col\_index\_num, [range\_lookup] )

lookup\_value - The value that you want to search for.

table\_array - The array of data that is to be searched for the lookup\_value.

col\_index\_num - An integer, specifying the column number of the supplied table\_array, that you want to return a value from.

range\_lookup] -

An optional logical argument that describes what the function should return in the event that it does not find an exact match to the lookup\_value.

The [range\_lookup] can be set to TRUE or FALSE, meaning:

TRUE - If an exact match is not found, use the closest match below the lookup\_value.

FALSE - If an exact match to the lookup\_value is not found, return an error.

If the [range\_lookup] value is omitted, it uses the default value of TRUE.