Advance Excel Assignment 2

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

Ans : The dollar sign ($) in Excel has two main uses:

   i)   It is used when formatting cells as currency. Ex : $100

   ii)   It is used as an **absolute reference** symbol in cell references within formulas. Its role to fix either the row or the column or both in a cell reference, preventing them from changing when you copy the formula to another cell.

   Dollar ($) sign is helpful when you want certain parts of a formula to always refer to the same cell or range in your calculations.

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

Ans : Inorder to change the reference from Relative to Absolute we should place a dollar sign ($) before the row number, column letter, or both depending on whether you want to make it absolute (fixed) or mixed (fixed one part).

A1   ->   It is a Relative reference
$A1 or A$1   ->   One of either the column or the row is absolute.
A1   ->   Both the column (A) and the row (1) are absolute. When you
                                    copy the formula to another cell, both the column and the row will
                                    remain fixed.
Key Shortcut :   Select the cell with the reference you want to change. Press the **F4** key
                     repeatedly. This will cycle through the different reference
                     types: relative, absolute, mixed row, and mixed column.

3. Explain the order of operations in excel?

Ans : In excel order of operations often referred to as BODMAS.

1. **Parentheses/Brackets:** Operations within parentheses or brackets are performed first.
2. **Exponents/Orders:** Exponential (power) calculations are performed next.
3. **Multiplication and Division:** After parentheses and exponents, multiplication (*) and division (/) operations are performed from left to right.
4. **Addition and Subtraction:** Finally, addition (+) and subtraction (-) operations are carried out from left to right.

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

Ans : Most commonly used functions in excel are :
   a) **SUM**   -> **=SUM(number1, [number2], ...)**
   b) **Average**   -> **=AVERAGE(number1, [number2], ...)**
   c) **VLOOKUP**   -> **=VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])**
   d) **IF**   -> **=IF(logical_test, [value_if_true], [value_if_false])**
   e) **CONCATENATE**   -> **=CONCATENATE(text1, [text2], ...)**

5. When would you use the subtotal function?

Ans : The **SUBTOTAL** function is typically used when you want to calculate intermediate totals within a list of data **grouped by categories**.

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

Ans : **VLOOKUP -> =VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])**

1. Lookup_value: This is the value you want to find in the first column of the table_array. It can be a text string, a number, or a cell reference.

2. Table_array: This is the range of cells containing the data you want to search through.

3. Col_index_num: This is the number of the column in the table_array that contains the value you want to return.

4. **[Range_lookup]:** This specifies how VLOOKUP should handle approximate matches. There are two options:
   '0'   ->   This allows an exact match.
   '1'   ->   This allows for approximate match.