**Advance Excel Assignment 2**

**Q1.** What does the dollar($) sign do?

**Ans:** In short, the dollar sign ($) in Excel makes cell references absolute:

* `$A$1`: Both column and row are fixed.
* `$A1`: Column is fixed, row changes.
* `A$1`: Row is fixed, column changes.

This ensures the reference stays constant when you copy or move the formula.

**Q2.** How to Change the Reference from Relative to Absolute (or Mixed)?

**Ans:** To change a cell reference from relative to absolute (or mixed):

* Select the cell with the formula.
* Click on the cell reference in the formula bar.
* Press `F4` to toggle through the reference types (relative, absolute, mixed).

**Q3.** Explain the order of operations in excel?

**Ans:** In Excel, the order of operations is:

* Parentheses: Calculations inside parentheses first.
* Exponents: Powers and roots next.
* Multiplication and Division: From left to right.
* Addition and Subtraction: From left to right.

This order ensures accurate calculations in formulas.

**Q4.** What, according to you, are the top 5 functions in excel and write a basic syntax for any of two?

**Ans:** Top 5 Excel functions:

* VLOOKUP: Searches for a value in the first column and returns a value in the same row from another column.
* SUM: Adds numbers.
* IF: Returns one value if a condition is true and another value if false.
* INDEX: Returns the value of a cell in a specified row and column.
* MATCH: Searches for a value in a range and returns its position.

**Basic Syntax for Two Functions:**

* VLOOKUP: `=VLOOKUP(lookup\_value, table\_array, col\_index\_num, [range\_lookup])`
* SUM: `=SUM(number1, [number2], ...)`

**Q5.** When would you use the subtotal function?

**Ans:** We can use the `SUBTOTAL` function when you need to perform calculations on a filtered list or a range of data while excluding hidden rows. It’s useful for summarizing data in a dynamic way, especially when you apply filters to your dataset. `SUBTOTAL` can perform various operations like SUM, AVERAGE, COUNT, and more, depending on the function number you specify.

**Q6.** What is the syntax of the vlookup function? Explain the terms in it

**Ans:** The syntax of the `VLOOKUP` function is: =VLOOKUP(lookup\_value, table\_array, col\_index\_num, [range\_lookup])`

**Terms Explained:**

1. `lookup\_value`: The value you want to search for in the first column of the table\_array.
2. `table\_array`: The range of cells that contains the data. The first column should include the `lookup\_value`.
3. `col\_index\_num`: The column number in the table\_array from which to retrieve the value. The first column is 1, the second is 2, and so on.
4. `[range\_lookup]`: Optional. TRUE (or omitted) for an approximate match, FALSE for an exact match.