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

The main purpose of using a dollar sign is to freeze or lock the cell references. There are two types of reference the absolute and relative references.

Once the cells are locked they cannot be copied, the value remains constant. Although they can change only when you add or remove rows and columns in the worksheet. Thus they form an absolute reference. When a cell is not locked it can result in different values and can be copied anywhere to get the result. This is known as a relative reference.

Use the F4 function key to lock the cell reference instantly.

Here are some examples that will give you a better understanding:

1. $B5 - When the dollar sign is placed at the beginning of a cell reference, it is considered to be relative for row and absolute for columns.

2. B$5 - When the dollar sign is placed in the middle of the reference, it shows that it is relative to the column and absolute for rows.

3. $B$5 - Placing the sign in between the reference indicates that when you paste the value anywhere on the sheet it will automatically indicate the cell B5.

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

To change the reference from relative to absolute, you need to add the dollar sign before the column notation and the row number.

For example, A1 is a relative cell reference, and it would become absolute when you make it $A$1.

If you only have a couple of references to change, you may find it easy to change these references manually. So you can go to the formula bar and edit the formula

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.

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

To help you get started, here are 5 important Excel functions you should learn today.

The SUM Function : his function works to sum a group of numbers in a specific set of cells.

The TEXT Function: *Text* function is a useful tool that helps convert a date (or number) into a text string in a particular format.

The VLOOKUP Function: *VLookup* is powerful Excel function that is often overlooked. Users will find it useful when they need to find specific data on a large table.

The AVERAGE Function : The *average* function is an extremely useful tool for getting the average value in a range of cells.

The CONCATENATE Function: This function is a good time saver when you need to combine data from 2 or more cells. Unlike the merge tool which physically merges two or more cells into a single cell, the *concatenate* function only combines the contents of the combined cells

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

The SUBTOTAL Function in Excel allows users to create groups and then perform various other Excel functions such as SUM, COUNT, AVERAGE, PRODUCT, MAX, etc.

The SUBTOTAL function works by calculating the total value of a cell range, based on another mathematical function. SUBTOTAL uses up to **11** different mathematical functions (from **AVERAGE** to **VAR.P**) to find the right total value while working within the parameters of the function (ignoring other SUBTOTAL formulas, for instance).

A SUBTOTAL formula is easily created using the following structure:

=SUBTOTAL(function\_num, ref1, ref2,…)

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

The VLOOKUP function is a premade function in Excel, which allows searches across columns. It is typed =VLOOKUP and has the following parts: =VLOOKUP (lookup\_value, table\_array, col\_index\_num, [range\_lookup])

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

In its simplest form, the VLOOKUP function says:

=VLOOKUP(What you want to look up, where you want to look for it, the column number in the range containing the value to return, return an Approximate or Exact match – indicated as 1/TRUE, or 0/FALSE).