**Excel**

**Excel Formulas**

**SUM - SUM(CELL RANGE|A1:A10)**

**AutoSum function under formulatab. Or Alt +. This will select automatically the range.**

**Use Ctrl + Enter to retain the same cell context. If you just usw enter after the formula the cursur move to next cell. And you can use thin “+” symbol to copy formula for all the cell below by double clicking it.**

**Operators**

**Operators preference - PIDMAS**

**Parenthesis, Indices(Square Root), Division, Multiplication, Addition, Subtraction.**

**Count**

**COUNT - Only count numeric numbers.**

**COUNTA - Counts everything including strings.**

**Relative Reference(Default)**

**When you have formula reference to particular cell and when you copy the same formula for below downside cells also. By default the formula keep on mating the cells according with relative reference. When you want to multiply salary with bonus percentage which is in other cell. You have to make sure to keep it as absolute(Not changing the bonus cell).**

**Absolute Reference(Lock/Fix the reference-$-symbol)**

**When you want to reference only one particular cell. You have use fun + f4 which give $ symbol for absolute reference.**

**Named Ranges**

**You can name any colume as xyz and use this range name somewhere else for fast work.**

**Functions**

**TRIM - This function helps to trim the white spaces of any cells.**

**Text Functions**

**LEN(text)**

**LEFT(text,num)**

**RIGHT(text, num)**

**MID(text, start, last)**

**FIND(char,text) - Find the index of @ symbol in email. Then use LEFT to extract.**

**UNIQUE(Range of Cell) - Find the unique strings.**

**TODAY() - Dynamically changes.**

**Vlookup Function**

**Vlookup work fron left to right not right to left. Lookup value should be on the left and the things you want to return should be on right.**

**Vlookup is static reference any change made to columns, add, delete it will show error.**

**Lookup\_value is like an ID for which you want to return matching data.**

**VLOOOUP(lookup\_value, table\_array,column\_index, [range\_lookup])**

**It is like matching ID/lookup value from an table with particular column and getting the data.**

**Index Match Function**

**Vlookup basically return the value of the cell.**

**Match basically return colum/row number of that cell.**

**MATCH(lookup\_value, lookup\_range[one complete colum/row], match\_type)**

**INDEX(array, row\_num, column\_num)**

**INDEX(Return\_range, MATCH(loopup\_value, lookup\_range, match\_type))**

**Index match overcome the problem with deletion of column like in vlookup.**

**DATA CLEANING**

**Widen Columns - Select all columns and double click the double headed arrow.**

**Delete Blank Rows - Select the table->Home->Find and select ->Go to Special - > Blank. It select all the blank space. Then, Home -> Delete - > Delect Rows.**

**Ctrl + H - Find and replace.**

**Ctrl + T - Create table.**

**Alt + H - Home.**

**Ctrl + page down/up - Shift between the sheets.**

**Ctrl + K - Creates a copy of excel worksheet.**

**Power Query - Home ->Data ->New query.**

**Power query simplifies the process of importing data from different source files and sorting them into an excel sheet.**

**The best part of the power query is still the excel is connect to original data source.**

**PIVOTE TABLES**

**Before you create a pivote table the data should be clean.**

**Home - > Insert ->Pivote table. In pivote table, In the field settings you can see all the attributes. Then you have four drag fields[Filter, Columns, Rows, Values] area where you can drag field and see the results depending upon your analysis. Depending on your requirement you drag the fields and analyse the data.**

**SLICERS - Fancy filter for excel dashboards.**

**Dynamic Array Functions**

**Array function help with multiple calculation in one go.**

**FILTER - Filter function help to filter data of the table based on conditions specified.**

**RANDARRAY - Generate random data set easly.**

**SEQUENCE - Generate sequence of numbers with step difference between them.**

**SORT - Sort the column in the table.**

**UNIQUE - To clear the data with unique record from the table of data.**

**XLOOKUP - Replacement for index match.**

**Xlookup(lookup\_value, lookup\_array, return\_array)**

**XMATCH - Help to find position when there are duplicate in the data column. This just a upgrade version of MATCH.**

**Advance Formulae**

**IF - IF(logical\_test, value\_if\_true, value\_if\_false)**

**IFS - Nested IF. IFS(LT1, v1, v2, LT2, v1, LT3, v1)**

**SUMIF - SUMIF(Range, criteria, [sum\_range])**

**SUMIFS - Nested SUM. SUMIFS(range, criteria1, criteria2, criteria3)**

**MACROS and VBA**

**A macro is function which helps to run routine steps that you can run using single button.**

**A program you run to do automation tasks.**

**Have To Build an Dashboad in excel**