Ms. EXCEL

INTRODUCTION:-Ms. excel stand on Microsoft excel. It is the most important part of M.S. office group.

M.S. excel is a popular spreadsheet program. Where you design work sheet using this software package.

A work sheet also called the spreadsheet is an electronic sheet made up of row and columns. It is mainly used for planning a project or checking the financial position of an organization.

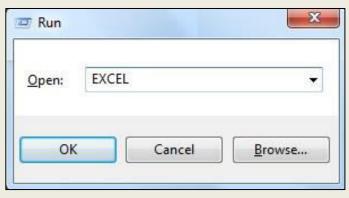
The extension code of M.S Excel is .XLSX and executive code is excel.exe

- **Excel provided the following additional feature:-**
- (1) Excel has a grid of columns and rows in which you can enter numeral, text etc. Each box in the grid (the inter section of row and columns) is called a cell. The cell is where you enter data.
- (2) Excel can perform mathematical or logical calculations and show the result.
- (3) You can easily change the contents of cell.
- (4) You can plot a wide variety of graphs.

To start M.S Excel do the following process

- (1)Start > Program > Microsoft office 2007 > Microsoft Excel 2007 ←
- (2)Start > Run (Windows key + R) ←

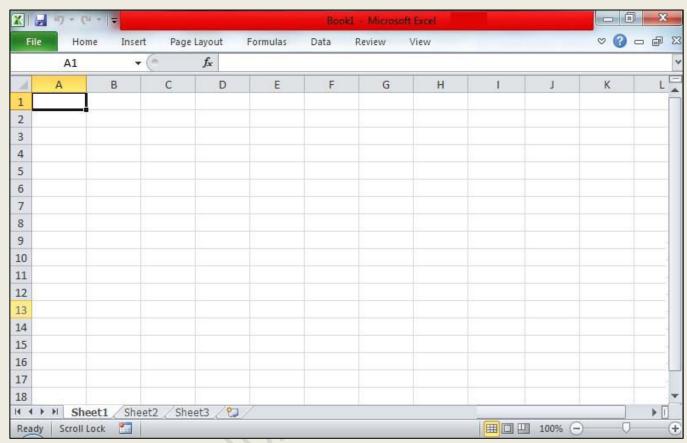
Highlight the Run box. In this box type "Excel" than click on ok button.



(3) Start through M.S Dos

Open M.S Dos and type

C:\>Start<space> Excel.exe ←



Application of spread sheet:-

Spreads are mainly used to solve complex calculation easily. They can also be used for graphical representation of large volume of data with the help of graphs.

So, spread sheet are used in the following application:-

- (1) Financial accounting
- (2) Annual report
- (3) Budgeting and fore costing
- (4) Income tax and sale tax application
- (5) Job estimation and cast seeds scientific research
- (6) Bill receivable and payable

Spread sheet terminology

When you are working with a spread sheet package you have to know some spread sheet terminology.

<u>Work book</u>:-A work book is a collection of many worksheets. In a single workbook you can store information in an organized manner by default, workbook opens with three worksheets and it can contain a maximum of sheets.

<u>Worksheet</u>:-A worksheet is a sheet made up of rows and columns. It is used for planning a project or financial document of an organization worksheet refers to the actual document you create by using the spread sheet program.

<u>Cells</u>:-A cells is the intersection of a row and a column for example the uppermost cell is A1(column A, Row 1).

<u>Formula</u>:-It is an order values, cell reference, function and operators in a cell that together give a new value. A formula always begins with "=" sign.

<u>Document window</u>:-The window is Excel work book is displayed.

<u>Work book window</u>:-The window within the excel application window in which a worksheet chart is show.

<u>Active worksheet</u>- An active worksheet is the worksheet that is currently open.

<u>Formula bar</u>:-The formula bar is below the tab bar. The area of the screen where you the enter number or formula.

Sheet tab:-Tab which allow you to go to a spread sheet in a workbook.

M.S EXCEL – 2007

First column – A

Last column - XFD (16384)

First row – 1

Last row - 1048576

First cell – A1

Function

Functions are predefined formula that performs complex calculation by using a specific value in a particular order to give a result.

- (1) Arithmetical functions
- (2) Mathematical functions
- (3) Logical functions
- (4) Statical functions
- (5) Text functions
- (6) Date and time functions
- (7) Financial functions
- (8) Database functions
- (9) Sumif and countif functions
- (10) Trigo function
- (11) Hlookup & vlookup

Arithmetical Function

Sum ()

-This function return the summation value of given number.

	Α	В	С
1	10	60	110
2	20	70	120
3	30	80	130
4	40	90	140

Subtraction

-This operator return the subtract value of given number.

	Α	В	=70-40
1	80	90	=100-40-20
2	50	40	=A1-B1 =A2-B2
3	60	10	=A3-B3

Product ()

-This function return the product value of given number.

	Α	В	=product (A1, B1)
1	8	9	=Product (A1:A3)
2	5	4	=Product (A1:B3)
3	6	1	=Product (A1:A3)*20 =Product (10,20,5)

=5*4

DIVISION

-This operator return the divided value of given two number.

	Α	В	
1	80	5	
2	50	10	
3	60	16	

Fact ()

-This function return the factorial value of given number.

```
=Fact (3) eg. =3*2*1
=Fact (5)
```

Power ()

-This function return the power value of given number.

```
=power (5,2)
=power (10,4)
```

Sqrt ()

-This function return the Square Root value of given number.

```
=sqrt (25)
=sqrt (16)
```

Log()

-This function return the Logarithm value of given number.

```
=log (100)
=log (10000)
```

Int ()

-This function return the Integral value of given number.

```
=int (14.14)
=int (1.732)
```

Average ()

-This function return the Average value of given number.

```
=Average (1,2,3,4,5)
         =Average (2,4,5,6,10)
ABS ()
    -This function return the Absolute value of given number.
         =ABS(-10)
         =ABS(-50)
Ceiling ( )
    -This function returns the upper most nearest value of given
number.
         =ceiling (14,3)
         =ceiling (19,4)
Floor ( )
    -This function return the lower most nearest value of given
number.
         =floor (14,3)
         =floor (37,19)
Odd ()
    -This function returns the upper closest odd number.
         = Odd (42)
         =Odd (10)
Even ( )
    -This function returns the upper closest even number.
         =Even (13)
         =Even (100)
Round ( )
    -This function returns a number rounded to a specified number of digit.
         =Round (239.2314,2)
         =Round (12.21432,0)
Roundup ( )
```

```
-This function returns a no roundup the given decimal value
upward next to the higher digit.
          =Roundup (16.59876,1)
          =Roundup (65.98675,0)
Rounddown ( )
    -This function returns round down the given decimal value.
          =Round down (16.4763,2)
          =Round down (16.4763,0)
                           Text Function
Upper ( )
    -This function converts all the given text in upper case.
Ex:- =Upper("suraj")
    =Upper("Puja")
    =Upper("rishav")
Lower()
    -This function converts all the given text in lower case
Ex:- =lower("SURAJ")
    =lower("PUJA")
    =lower("RISHAV")
REPT()
    -This function repeats the given text up to given number of time
Ex:- =rept("ram",4)
    =rept("suraj ",25)
Exact()
    -This function compare two text string and returns true if their exactly the
same otherwise it returns false.
                 B
        Α
```

1	SURAJ	Suraj
2	Suraj	Suraj
3	suraj	SURAJ

=Exact(A1,B1)

=Exact(A2,B2)

=Exact(A3,B3)

Proper()- This function converts any given text into capitalization each word.

=Proper ("I am an indian") — I Am An Indian.

Len()- This function returns the length of the given text. It also counts the blank space.

=Len ("Future")

=Len ("HORIZON COMPUTER")

Left()- This function returns the character from the specified text from the starting.

=Left ("Ramesh",3)

Right()- This function returns the specified character from the specified text from the end.

=Right ("Ramesh", 4)

Mid() - This function gives the number of character from the specified position from the given string.

=Mid ("Future", 3, 3)

Replace() - This function replace the old text specified by the new text.

=Replace ("Hiit",1,1,"Z")

Substitute()— This function substitute the old text specified by the next text. =substitute ("future study centre","study","computer")

Char()- This function returns the characters specified by the given code number from the character set for your computer.

=Char (65)

=Char (97)

Code() – This function returns the numeric code for the first character in a text string.

=Code ("A")

=Code ("a")

Dollar()- This function converts a number to a text using currency format. =Dollar (5, 2)

Concatenate() - This function joins the several text by given string.

=concatenate ("ram", "sita")

Logical function

And () -This function return "true" if all the given condition satisfy, otherwise it return "false".

```
=And (30>23, 10<14)
=And (8<10, 8>9)
```

OR() -Returns TRUE if any argument is TRUE returns FALSE if all arguments are FALSE.

```
=OR (5>3, 7<15, 6>2)
```

=OR (4<5, 9>10, 40<100)

IF () – This function return the "true" specified statement. If the condition is true otherwise, it returns the "false" specified statement.

- =IF (A1>10,"Larger","Smaller")
- =IF (A1<50,"fail","pass")
- =IF (A1=20,"equal","Not equal")

Project 1- Election commission

1	Α	В	С	D				
1	Indian election commission							
2								
3	Name Age		Nationality	Eligible(yes/no)				
4	Ram	am 20 indian		=IF(AND(B4>=18,C4="indian"),"yes","no")				
5	Sohan 15 pakistani		pakistani	no				
6	Mohan 30 indian		indian	yes				
7	Ramesh 14 america		american	no				
8	Ranjan	60	indian	yes				

Project 2- Calculate the marks sheet.

	А	В	С	D	E	
1	D.A.V. PUBLIC SCHOOL, GAYA					
2		<u>D.A.V.</u>	T ODLIC SCITE	OL, GATA		
3	S_NAME		CLASS		ROLL NO	
4						
5	S. No.	SUBJECT	F.M	P.M	O.M	
6	1	HINDI	100	30	81	
7	2	MATH	100	30	92	
8	3	SCIENCE	100	30	78	
9	4	ENGLISH	100	30	69	
10	5	S.S.T.	100	30	89	
11	TOTAL		=SUM(C6:C10)	=SUM(D6:D10)	=SUM(E6:E10)	
12						
13			PERCENTAGE	=E11/5		
14			DIVISION			

	Α
1	Value
2	10.5
3	8
4	12

DIV

```
=IF (D13>=60,"1st Div", IF (D13>=45,"2nd Div", IF (D13>=30,"3rd","Fail"))

Remarks:- Below 60 = "C"

Between 60 to 75 = "B"

Between 75 to 85 = "A"

Above 85 = "A+"

=IF (D13<60,"C", IF (D13<=75,"B", IF (D13<=85,"A","A+")))
```

Statistical Function

Min()- This function returns the lowest value among the given number.

	Α
1	Value
2	10.5
3	8
4	12

Max()- This function returns the greater value among the given number.

B

Count()- This function counts

1	10	
2		5

the number of given value.

=Count (A1:A6)

=Count (10, 50, 45, 03, 12)

	Α
1	Value
2	32
3	
4	12ab
5	89
6	-12

Countblank()- This function counts the blank of cell.

=Countblank (A1:B4)

Counta():-This function counts the number of cell that are not empty.

=Counta (A1:A6)

Sumsq()given

		Α
,	1	Value
	2	32
	3	
	4	12ab
	5	89
	6	-12

This function returns the sum square root value of number.

=Sumsq (4, 3)

Convert():- This function will convert a number from one measurement unit to another measurement unit.

	Α	=convert (A1,"in","ft")
1	24	=convert (A3,"mn","sec")
2	5	=convert (1,"mn","sec")
3	2	, , , , ,

Convert between time:-

	Α	=convert (A2,"day","hr")
1	Data	=convert (A2,"hr","mn")
2	6	=convert (A2,"yr","day")

Convert between measurement:-

		=convert (A2,"cm","Ft")
1	Data	=convert (A2,"mm","km")
2	6	

Convert a binary to decimal:- To do this function use BIN2DEC

- =Bin2Dec(1111111)
- =Bin2Dec(1100100)

Convert a binary to hexa decimal in this function BIN2HEX.

- =Bin2Hex(111101)
- =Bin2Hex(1110)

Convert binary to octal use BIN2OCT =Bin2Oct(1100100)

=Dec2Bin(98)

Convert decimal to hex a decimal use =Dec2Hex(100)

Convert decimal to octal use DEC2OCT =Dec2Oct(58)

Lookup & Reference function

Lookup() - This function looks a value either from a one row or one column.

4	А	В
1	Frequency	Color
2	4.14	red
3	4.19	orange
4	5.17	yellow
5	5.77	green
6	6.39	blue

=Lookup(5.99,A2:A6,B2:B6) =Lookup(5.31,A2:A6,B2:B6)

=Lookup(4.19,A2:A6,B2:B6)

1	Α	В	С	D	Е
1		CTUDE	NT DETA	II C	
2		STUDEI	<u>NT DETA</u>	IIL3	
3	Roll no	S_Name	F_Name	Address	Course
4	#001	Suraj	Ram	Gaya	A.D.C.A.
5	#002	Mohan	Krishna	Patna	D.C.A
6	#003	Ram	Ramakant	Manpur	TALLY
7	#004	Rishav	Prakash	Ranchi	D.T.P
8	#005	Ayushi	Vikash	Gaya	D.C.A
9	#006	Puja	Mohan	Bokaro	A.D.C.A.
10					
11	Roll no				

<u>HLookup(</u>): -This function looks for a value in the top row of a table and returns the value in the same column from a row you specified.

4	А	В	С	D	E	F	G
1	Roll No.	1001	1002	1003	1004	1005	1006
2	Std. Name	Sanju	Suman	Ranjan	Rakesh	Amit	Sumit
3	Sub (Hons)	Math	Eng	Phy	Eng	Math	Che
4	Class	B.sc	M.sc	B.sc	B.sc	1.sc	M.sc
5							
6	Roll No.	1001					
7	Std. Name	=HLOOKUP(B6,B1:G4,2)					
8	Sub(hons)	=HLOOKUP(B6,B1:G4,3)					
9	Class	=HLOOKUP(B6,B1:G4,4)					

<u>VLookup()</u>: - This function looks for a value in the last most column of a table and returns the row from a column you specified.

4	Α	В	С	D
1	Roll No.	Std. Name	Sub (Hons)	Class
2	1001	Sanju	Math	B.sc
3	1002	Suman	Eng	M.sc
4	1003	Ranjan	Phy	B.sc
5	1004	Rakesh	Eng	B.sc
6	1005	Amit	Math	I.sc
7	1006	Sumit	Che	M.sc
8				
9	Roll No.	1001		
10	Std. Name	=VLOOKUP(B9,A2:D7,2)		

Date & Time Function

<u>Today()</u>:- This function returns the current system date.

=Today()

Now():- This function returns the current system date as well as time.

=Now ()

<u>Date()</u>:- This function returns the number in date format.

=Date (2016, 5, 15)

<u>Datevalue(</u>):- This function returns the number of days between the specified date and the current date.

=Datevalue ("1-1-1901")

Day():- This function returns the days from the specified date expression.

=Day ("02-09-2016")

Month():- This function returns the month from the specified date expression.

=Month ("03-06-2016")

Year():- This function returns the year from the specified date expression.

=Year ("03-04-2016")

Hour():- This function returns the hour from the specified time expression.

=Hour ("5:10:30")

<u>Minute()</u>:- This function returns the minute from the specified time expression.

=Minute ("5:10:30")

<u>Second()</u>:- This function returns the second from the specified time expression.

=Second ("5:10:30")

<u>Days360()</u>:- This function returns the days between the given two date based on 360 per year.

	Α	В
1	1/1/2016	10/31/2016

- =Days360 (A1,B1)
- =Days360 ("02-05-1995","05-08-2016")

Sum if and Count if Function

<u>Sumif()</u>:- This function adds the number of cells specified by the given condition.

	Α	В
1	Property value	Commission
2	100000	7000
3	225000	25000
4	190000	20000
5	150000	15000

- =SUMIF(A2:A5,">160000",B2:B5)
- =SUMIF(A2:A5,"<160000",B2:B5)

4	Α	В
1	Name	Salary
2	Ram	5000
3	Ramesh	6500
4	Mohan	7000
5	Sonu	6500
6	Ranjan	7800

- =Sumif(B2:B6,">6500")
- =Sumif(B2:B6,">=6500")
- =Sumif(B2:B6,"<6500")
- =Sumif(B2:B6,"<=6500")

2	A	В
1	Goods name	sales
2	CPU	8000
3	KEY	350
4	MOUSE	250
5	UPS	1600
6	MONITOR	5000

<u>Countif()</u>:- This function counts the number of cells within a range that meet the given condition.

	А	В
1	Fruit	Data
2	Apples	32
3	Oranges	54
4	Peaches	75
5	Apples	86
6	Mango	80

=Countif(A2:A6,"Apples")

=Countif(B2:B6,">55")

1	А	В	С	
1	Branch	Executive	Sales	
2	Banglore	Word	1200	
3	Punji	Excel	1300	
4	Goa	Windows	1500	
5	Punji	Excel	2500	
6	Gaya	Excel	3000	
7	Patna	Notepad	2000	
8	Punji	Excel	1600	

Math & Trigo function

<u>Degrees()</u>:- This function converts number radians to degrees.

=Degrees (3.14)

Radians(): This function converts number degrees to radians.

=Radians (180)

<u>Sin()</u>:- This function returns the sine value of given number.

=Sin(Radians (90))

<u>Cos()</u>:- This function returns the cosine value of given number.

=Cos(Radians(90))

<u>Tan()</u>:- This function returns the Tangent value of given number.

=Tan(Radians (45))

Roman():- This function converts a number into alpha numeric roman.

=Roman (5)

Financial Function

Rate()- Returns the interest rate per period of an annuity

PMT()- Calculates the monthly payment for a loan based on constant payments and a constant interest rate.

<u>NPER()</u>-Returns the number of periods for an investment based on periodic, constant payments and a constant interest rate.

<u>PV()</u>:- Returns the present value of an investment. The present value is the total amount that a series of future payments is worth now. For example, when you borrow money, the loan amount is the present value to the lender.

FV():- Returns the future value of an investment based on periodic, constant payments and a constant interest rate.

Syntax:-

```
=Rate (NPER, PMT, PV, [FV], [TYPE])
=Rate (48,-3000, 100000)

Syntax:-
=FV (Rate, NPER, PMT, [PV], [TYPE])
=FV (1%,48,-3000)
=FV (12%/12,48,-3000)

Syntax:-
=NPER (Rate, PMT, PV, [FV], [TYPE])
=NPER (12%/12,-3000,100000)

Syntax:-
=PMT (Rate, NPER, PV, [FV], [TYPE])
=PMT (14%/12, 48, 100000)
```

		А	В
-	1	MORTGAGE L	OAN ANALYSIS
	2	Intrest rate (Year)	15%
	3	Terms(month)	30
	4	Laon amount	75000
	5		
	6	Monthly Payment	=PMT(B2/12,B3,-B4)

Database Function

<u>Dsum()</u>:- Adds the numbers in the field of records in the database that match the condition you specified.

<u>Dproduct()</u>:- multiples the value in the field of records in the database that match the condition you specified.

<u>Dmax()</u>:- Return the largest number in the field of records in the database that match the condition you specified.

<u>Dmin()</u>:- Return the smallest number in the field of records in the database that match condition you specified.

<u>Dcount()</u>:- counts the cells of containing number in the field of records in the database that match the condition you specified.

	Α	В	С
1	Name	salary	salary
2	Ram	5000	>6000
3	Sohan	6000	
4	Mohan	4000	
5	Aman	8000	
6	Ravi	7000	
7	Raju	6000	
8			
9	DSUM	=DSUM(A1:B7,"salary",C1:C2)	
10	DPRODUCT	=DPRODUCT(A1:B7,"SALARY",C1:C2)	
11	DMAX	=DMAX(A1:B7,"SALARY",C1:C2)	
12	DMIN	=DMIN(A1:B7,"SALARY",C1:C2)	
13	DCOUNT	=DCOUNT(A1:B7,"SALARY",C1:C2)	

(iii) Then after click on sheet 2, Again enter the data

A		В	С	D
1 TA 5%		DA 6%	HRA 7%	TOTAL
2				

For TA 5%, In cell A2 type

=Sheet1! B2*5%

For DA6%, In cell B2 type

=Sheet1! B2*6%

For HA 7%, In cell C2 type

=Sheet1! B2*7%

For total, In cell D2 type

=Sheet1! B2+A2+B2+C2

File to file:-To make a relation between one file to another file.

Use:-

- (i) Open a new work book
- (ii) Then after enter the data in the work sheet

	Α	В	
1	NAME	SALARY	
2	SURAJ	50000	
3	PRAKASH	60000	
4	RAM	70000	
5	PUJA	80000	
6	AYUSHI	90000	

- (iii) Then after the data save the workbook (Press Ctrl+S)
 Ex:-Ram (File name)
- (iv) Again open a new workbook put the data in the work sheet

	Α	В	С	D	
1	TA 5%	DA 6%	HRA 7%	TOTAL	
2					

For TA 5%, In cell A2 type

=[Ram.XLSX]Sheet1! B2*5%

For DA 6%, In cell B2 type

=[Ram.XLSX]Sheet1! B2*6%

For HRA 7%, In cell C2 type

=[Ram.XLSX]Sheet1! B2*7%

For Total, In cell D2 type

=[Ram.XLSX]Sheet1! B2+A2+B2+C2

HOME TAB (ALT + H)

Clipboard

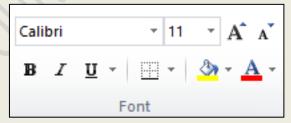


Cut (ctrl + x):-To cut the selected data from the document and put it on the Clipboard.

Copy (ctrl + c) :- To copy the selected data from the document and put it on the clipboard.

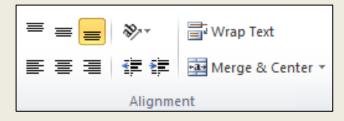
Paste (ctrl + v)- To paste the cut or copied data from the clipboard. It's also allows to paste the value, formula, transpose etc.

Font



It's allow to change the format of selected range such as font family, font size, color, bold, italic etc.

Alignment



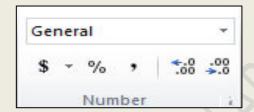
-Using this option to change the alignment of text or number such as left, right, center etc.

Wrap text- it's allowed to make a visible content within a cell.

-You can enter a manual line break by using short key-"Alt + Enter".

Merge cell or split- It's allowed to merge the multiple rows or columns within a cell.

Number Format



-By choosing different number format, you can change the appearance of numbers format without changing the number such as number currency, accounting, date, time etc.

Scientific- This format displays a number in exponential notation replacing part of the number with "E+n".

Where E (exponential) multiples the number by 10 to the nth power.

\$ Accounting Number format- Choose the currency format for selected cell. You can also change the currency format instead of dollar such as Euro, Chinese, and French etc.

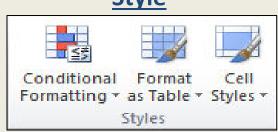
Percent style (ctrl + shift + %) – To set the percent style of selected cell.

(,) comma style:- To set the separate thousands comma for value.

Increase Decimal- Increase the more decimal place of precise value.

Decrease Decimal- Decrease the fewer decimal place of precise value.

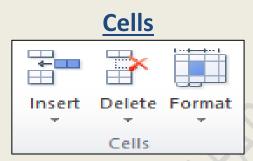




Conditional formatting- Highlights interesting cell, emphasize value and visualize data using data bar, color, scales, and icon sets.

Format as Table- Apply quickly format of selected cell range and convert it to a table by choosing a pre-defined table style.

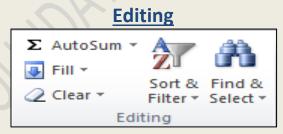
Cell style:-Change the cell style.



Insert – it allows inserting cells, rows and columns into the sheet or table.

Delete- It allows deleting the cells, rows, columns from the sheet or table.

Format –To change the row height column width, organize sheets, protect sheets and hide the cells.



(Σ) sum (alt + =) – it allows to calculate some functions such as sum, average, max, min etc.

Fill – It allows filling the same condition that you applied such as left, right, up, down, series etc.

Clear:-Delete everything from the cell.

Sort- It allows arranging the data in ascending or descending order.

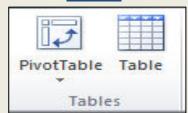
You can also filter out the data of specific value.

Find & select- By using this option find and select the specific text, formatting, or type of information within the workbook.

You can also replace the information with new text or formatting.

INSERT TAB (ALT + N)

Table



Pivot table- By using this option to arrange and summarize the data.

Pivot chart-To Insert the pivot chart in another sheet.

Table- it allows to make the data to sort, filter, and format data within a sheet.

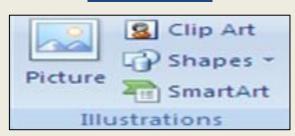
To create pivot table & chart

- 1. At first create a new workbook.
- 2. Write the some data as-

	Α	В	С	D	Е	F	G	Н
1	Name	Roll	Class	Math	Eng	Hindi	Science	S.sc
2	Aryan	101	X	85	75	75	75	75
3	Rahul	102	xi	65	85	65	85	85
4	suman	103	X	85	65	95	65	65

- **3. Select** the data and go to table and select pivot table.
- **4. Then** a pivot table field list will appear on right edge of workbook. Here pick the Name, roll and drag into Row label field. "Class" drags into Report filter and tick out of all sub check box.
- 5. After that select the pivot chart from the option tab.

Illustration



Picture:- To insert a picture from a file.

Clip Art- To insert clips Art into the workbook.

Shapes - To insert already made shapes into the workbook such as rectangle, triangle, star etc.

Smart Art- to insert a smart Art graphic to communicate information.



Chart- It allows to user to create different types of chart such as column, line, pie, bar, area etc.



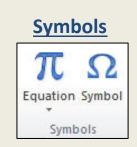
Text Box- To insert a text box into the workbook.

Header & Footer- To insert the header text at the top of page and footer text below the page.

Word Art- Insert the decorative text in your document.

Signature line:-To insert a digital signature in your document.

Object— To insert an embedded object in your document.



Symbol:- To insert characters that are not on your keyboard such as copyrights, trademark, paragraph symbol etc.

Page Layout (Alt + P)

Theme

Themes:- Using theme change the overall design of the entire document including color, font, effects.

Page Setup

Margins:- To change the margin sizes for the entire document or the current section.

Orientation:- To change the page layout orientation from portrait to landscape.

Size:- To apply the page size of the current document such as A3, A4, B5, letter etc.

Print Area-

<u>Set print area-</u> To set the print area for print by select cells.

<u>Clear print area-</u> To remove the set print area from the document.

Breaks:-To break the pages into several parts for prints.

Background:- To set the background image of the sheet.

Print titles:- it allows to set the specify rows and columns to repeat on each printed page.

Scale to fit

Width:-To shrink the width of print output to fit a maximum number of pages.

Heights:-To shrink the height of print output to fit a maximum number of pages.

Scale:- To shrink the print output by percentage of its pages.

Sheet option

Gridlines

<u>View</u>:-Show or hide the gridlines between rows and columns of current document.

<u>Print</u>:-To apply the print gridlines for printing.

Headings

<u>View</u>:- show or hide the rows and columns heading.

<u>Print</u>:- Active the print heading for printing.

Arrange

Send backward- To send the selected object backward of all objects.

Bring forward- To bring the selected object forward one step or to the front of all objects. , , ,,,,,,,,,,

Selection pane- To show the selection objects individually.

Align- To change the alignment of multiple objects.

Group- Using this option to group the object together so that they can be treated like single object.

Rotate- To rotate or flip the selected object.

Formulas Tab (Alt + M)

Function Library

Insert function:- Insert the function in the selected cell

Function library:-Show the list of all functions

Defined Names

Name manager- it is used to create, edit, delete, and find the all names used in the workbook.

Define name- it is used for define the cell range such as A10 to A20.

Use in formula- To use the define cell name in the current formula.

Create from selection- it generates the automatically data range from the cell.

Formula Auditing

Trace precedents- it shows the all arrows and refers to the cell that is affected by formulas.

Trace dependents- It's indicated the all cells by arrows that are affected by formulas.

Remove Arrows- Its remove the all arrows drawn by trace precedents and trace dependents.

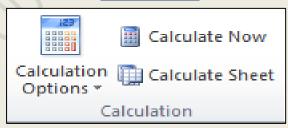
Show formula:- Show or hide the formula in each cell instead of resulting value.

Error Checking:- To checks the common error that occur in formulas.

Evaluate formula:- It launch an Evaluate formula dialog box and debug formula each parts of the using cell.

Watch window:- it displays the values in a separate window.

Calculation



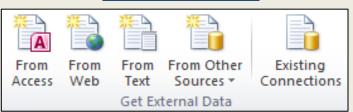
Calculation Option:- To set the calculation type automatically and manually.

Calculate Now:-Calculate the entire workbook Now.

Calculate Sheet:-Calculate the entire worksheet Now.

DATA TAB (ALT + A)

Get External Data



From Access:-To import data from a Microsoft access database.

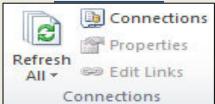
From Web:-To import data from a web page.

From text:- To import data from a text file.

From other sources:-To import data from other data sources.

Existing connections:-To import an external data sources by selecting from a list of used sources.

Connections



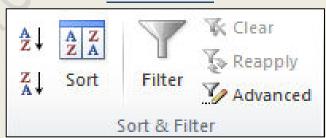
Refresh All:- To update the all information in the workbook that is coming from a workbook.

Connection:- It displays all data connections for the workbook.

Properties- It shows connected data sources.

Edit links- it allows to update or remove the links.

Sort & Filter



Sort:- It arrange the data lowest to highest and highest to lowest value.

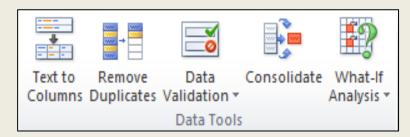
Filter- Using auto filter to filter data in a quick and easy way find.

Clear- it's cleared the filter and sort state for the current range of data.

Reapply:- To reapply the filter and sort data in the current page.

Advance filter- to filter the data using criteria range.

Data Tools



Text to columns:- To separate the contents of one cell into separate rows from a sheet.

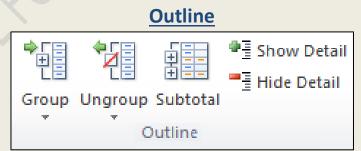
Remove duplicates- to delete the duplicate rows from a sheet.

Data validation:- This option prevents the invalid data to enter into the cell according to given criteria.

Consolidate- its combine the multiple values range into one new range.

What-if analysis-Scenario manager
-Goal seek
-Data table

Scenario Manager- it's allows you to create and save different group of value and compare between them.



Group:- This option use to tie a range cells together so that they can be collapsed or expended.

<u>Ungroup</u>:- This option use to ungroup a range of cell that were previously grouped.

<u>Subtotal</u>:- Total several rows of related data together by automatically inserting subtotal and total for the selected cell.

Show detail:- This option use to expand a collapsed group of cells.

Hide details:- This option use to collapsed a group of cells.

Review Tab (Alt + R)

ABC Spelling Research Thesaurus

Proofing

Spelling (F7):- This option checks the spelling of entered text.

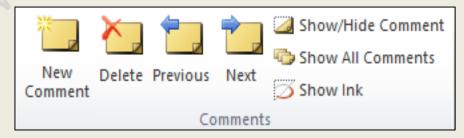
Research (Alt + Click):- It search material in your work sheet such as dictionary.

<u>Thesaurus</u>:- It suggests other words with a similar meaning to the word you have selected.



Translate:-Translate the selected text in to a different language.

Comments



New comment:-Add the comment about the section.

Delete:-Delete the selected comment.

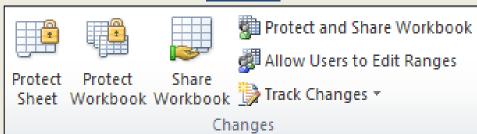
Previous:-Find to the previous comment in the document.

Next:-Find next to the comment in the document.

Show/hide comment: - Show or hide the comment attached to the selected cells

Show all comment:- Display all comment in the sheet

Changes



Protect sheet:-Protect the sheet by given password

Protect workbook:- Protect the workbook by given password

<u>Share workbook</u>:-It allows multiple people to work in a workbook at the same time.

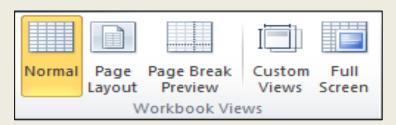
<u>Protect and share workbook</u>:-It share the workbook and protect with a password

<u>Allow user to edit ranges</u>:-It allows specific people to edit ranges of cells in a protected workbook or worksheet.

<u>Track changes</u>:-Track all changes made to the document including, inserting, deleting and formatting changes.

VIEW TAB (Alt +W)

Workbook Views



Normal:- views the document in Normal view.

Page Layout:- Views the document as printed page.

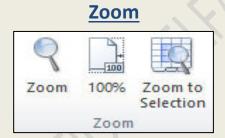
Page break preview- its shows the break pages area.

Custom views:- This option create the different view of the workbook. A custom view provides an easy way to see the different data.

Full screen:- View the document in full screen mode.



Show / Hide:- Show or hide the gridlines, formula bar and heading line.





<u>Window</u>



New window- opens a new window with current document.

Arrange all- to arrange the all open program window.

Freeze Pane- keeps the position of sheet cell range in rest mode.

Split window- To split the window into multiple resizable pane.

Hide window- to hide the current active window.

Unhide window- To unhide the current hidden window.

View side by side- to open the saved workbook in side by side and compare containing data.

Synchronous scrolling- Enable this option works the scroll in both open workbook.

Macros

Reset position- Reset the window position of the document.

Save workspace- This option used workspace and you can restore at a

the all open saved document in a