MS Office Excel 2007

A Book For Expert In Excel

EXCEL MASTER

HaCkEr InDiA {HI}

Microsoft Office Excel 2007

- MS Office Excel file extension = .xlsx

<i> What is MS Excel ?

=>> MS Excel is a spreadsheet application developed by Microsoft for Microsoft windows. It includes all features of spreadsheet package like recalculation graphs fiction and also provides many types of functions.

- Different Parts Of MS Excel:-

(a) Worksheet:- Worksheet is a collection of cells, where you can keep and manipulate the data. By default, each Excel worksheet contains 3 worksheets.

(b) Spreadsheet:- A spreadsheet is a sheet of paper that shows accounting of other data in rows and columns. A spreadsheet is generally designed to hold numerical data and short text strings. Spreadsheets usually provide to portray data relationships graphically. Example:- MS Excel, Visicale Lotus 1-2-3

(c) Workbook:- Excel files are called work books, whenever you start a new project in excel you will need to create a new work book.

- How to open MS Excel 2007 ?

=>> Start Menu→All Programs→MS Office→MS Office Excel→Enter Or,

Start→Run→Type(Excel)→Enter

	A	B	C	D	E	F	G	H	I	J	K
1	Name	English	Bengali	Math	Geography	Biology	Total	Average	Division	Rank	Grade
2	NM1	55	62	85	60	50					
3	NM2	65	74	84	84	60					
4	NM3	54	54	56	56	57					
5	NM5	75	62	57	63	52					

(A) Functions:-

a. **Total:-** =SUM(B2:F2)

b. **Average:-** =AVERAGE(B2:F2)

c. **Division:-** =IF(H2>=70,"1st Division",IF(H2>=60,"2nd Division",IF(H2>=50,"3rd Division","Fail")))

d. **Rank:-** =RANK(G2,$G$2:$G$5)

e. **Grade:-**
=IF(B2>=80,"A+",IF(B2>=70,"A",IF(B2>=60,"B+",IF(B2>=50,"B",IF(B2>=45,"C", "D")))))

(B) Mathematical Functions:-

1. **Sum Function:-** This function adds all the numbers in a range of cells. Example- =SUM(B2:F2)

2. **Max Function:-** This function returns the largest value in range of cells. Example- =MAX(B2:F2)

3. **Min Function:-** This function returns the small value in range of cells. Example- =MIN(B2:F2)

4. **SQRT Function:-** This function returns the positive square root of any positive number. Example- =SQRT(25)

5. **Round Function:-** This function used to round of a number. Example- =ROUND(12.123456,2)

6. **Fact Function:-** This function is used to find out the factorial value of a number. Example- =FACT(5)

7. **Mod Function:-** This function is used to find out returns the reminder after a number is devided by a divisor. Example- =MOD(26,5)

8. **Power Function:-** This function calculates a given number raised to a supplied power. Example- =POWER(8,3)

9. **Product Function:-** This function is used to find out the multiply value from a list of numbers. Example- =PRODUCT(7,3)

10. **Sumif Function:-** This function can be used to add the cells specified by given condition criteria. Example- =SUMIF(A1:B1,">100")

11. **LCM Function:-** This function is used to return the List Command Multiple. Example- =LCM (A1:B1)

12. **GCD Function:-** It is used to return the Greatest Command Divisor. Example- =GCD(A1:B1)

13. **Int Function:-** This function is used to find out the nearest integer value of a list of numbers. Example- =INT(-5.25)

14. **Now Function:-** This returns the current system date & time format. Example- =NOW ()

15. **Today Function:-** This function returns the current date formatted as a date. Example- =TODAY()

16. **Datedif Function:-** This function used to calculate the current age. Example- =DATEDIF(A1,B1,"Y")&"Years"& DATEDIF(A1,B1,"YM")&"Months"& DATEDIF(A1,B1,"MD")&"Days"

17. **Concatenate Function:-** Joins two or more text into one text string. Example- =CONCATENATE (A1:B1)

18. **Code Function:-** It returns a numerical code for the first character in a text trired. Example- =CODE(A1)

19. **Left Function:-** It returns the specified numbers of characters from the start of a text strings. Example- =LEFT(A1,4)

20. **Right Function:-** It returns the specified numbers of characters from the end of a text strings. Example- =RIGHT (A1,2)

21. **Len Function:-** It returns the numbers of characters in a text string. Example- =LEN(COMPUTER), =LEN(A1)

- Total Number Of Columns — XFD [Ctrl+→]

Rows — 1048576[Ctrl+↓]

Employee Table

	A	B	C	D	E	F	G	H	I
1	Department	Basic	Dareness Allowance	House Rent Allowance	Traveling Allowance	Mediclaim	Provident Fund	Gross	Net
2	Accountant	12000							
3	Clerk	5250							
4	Office	15500							
5	Accountant	17000							
6	Peon	8000							
7	Clerk	7000							
8	Admin	21000							

- Formulas:-

1. Dareness Allowance:-
=IF(B2>=15000,B2*12.5%,IF(B2>=10000,B2*9.5%,B2*7%))

2. House Rent Allowance:-
=IF(A2="Accountant",B2*5.5%,IF(A2="Clerk",B2*5%,0%))

3. Traveling Allowance:- =B2*10%

4. Mediclaim:- =B2*5%

5. Provident Fund:-
=IF(B2>=15000,B2*10%+500,IF(B2>=10000,B2*10%+200,B2*5%+200))

6. Gross:- =SUM(B2:G2)

7. Net:- =(H2-G2)

- Filter:- There are two types of filter.

(i) Auto Filter:-

Condition 1= Select the data range from A2:I1→Data Menu→Sort and Filter Tab→Filter

Condition 2= Click on Basic→Select All(Number filter)→ Number Filters→Greater Than→Type The Basic Range(Like 1000)→Ok

(ii) Advance Filter:- At first type in the cells

	A	B
1	Department	→ Criteria
2	Clerk	

Select All The Dataset→Specify The Criteria Range→Data Menu→Advance Filter→Select Copy to Another Location→Fill Up The Form(List Range:- Refer The Dataset, Criteria Range:- Type Specified Criteria Range, Copy to:- Specify the location where you want to see the result)→Copy Unique Records Only—Check This Option→Ok

- V-LOOK-UP (Vertical Look Up):- It looks for a value in the left most column of a table and then returns a value in the same row from a column that you specify.

Syntax:- =VLOOKUP(lookup_value,table_array,col_index_num,range_lookup)

=VLOOKUP(D1,A1:C6,3,0)

	A	B	C
	Item	Quantity	Price
1			
2	CPU	4	3200
3	M.Board	5	4500
4	Mouse	2	300
5	Pendrive	10	120
6	DVD	5	1000

- **H-LOOK-UP(Horizontal Look Up):-** It looks for a value in the top row of a table or array of values and returns the value in the same column from a row that you specify.

Syntax:- =HLOOKUP(lookup_value,table_array,row_index_num,range_lookup)

=HLOOKUP(E1,A1:D4,4,0)

	A	B	C	D
1	Products	Mobile	Head Phone	Memory Card
2	Serial No	1234	1465	123
3	Quantity	10	15	10
4	Price	18000	15000	5000

- **SUMIF:-** Adds the cells specified by a given condition or criteria.

Syntax:- =SUMIF(range,criteria,sum_range)

=SUMIF(A2:A6,D1,C2:C6)

	A	B	C
1	Category	Item	Price
2	Fruits	Mango	20
3	Mobile	MI	15000
4	Books	English	250
5	Fruits	Orange	20
6	Books	Math	170

- **SUMIFS:-** Adds the cells specified by a given set of condition or criteria.

Syntax:- =SUMIFS(sum_range,criteria_range_1,criteria_1,criteria_2.....)
=SUMIFS(C2:C5,A2:A5,"Apple",B2:B5,"Ram")

	A	B	C
1	Fruits	Supplier	Quantity
2	Apple	Ram	10
3	Mango	Shyam	25
4	Orange	Jadu	5
5	Apple	Ram	7

Simple Interest:- Simple interest means that interest payments are not compounded – the interest is applied to the principal only.

	A	B
1	Loan Amount	15000
2	Interest Rate	6.02
3	Terms In Month	2
4	Total Interest	1806
5	Amount+Interes	16806

Goal Seek

	A	B	C	D	E	F
1	Name	Roll	Bengali	English	Mathematics	Total
2	Arun	A001	85	20	36	141
3	Barun	A002	56	42	45	143
4	Tarun	A003	30	25	59	114
5	Kiran	A004	80	75	90	245
6	Mala	A005	70	65	40	175

(1) What Goal Seek Work ?
=> It Used to update a table data.

Step:- Select Any Total Number→Data Menu→Data Tools Command Group→Whatif Analysis Option→Goal Seek
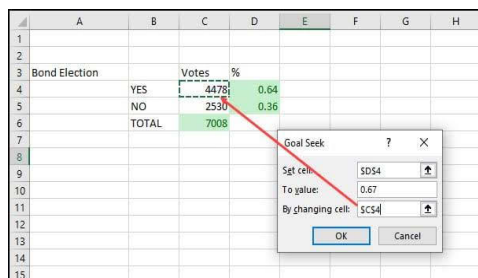
→Ok→Ok

Conditional Formatting

- It is used to highlight the specific data.

Step:- At first select the student table→Style Command Group→Conditional Formatting→Highlights Cells Rules→Choose Greater Than, Less Than, Between→Enter The Number On The Cell And Select Any Color→Ok

1. How to insert a column/row ?

=> Select Any Column→Home→Cells Command Group→Insert Button→Select Insert Sheet Column Option/Row

2. How to insert a worksheet ?

=> Right Click On The Sheet Name Insert Choose Worksheet→Ok

3. How to rename a worksheet ?

=> Right Click On Any Sheet Name→Rename→Type The New Name→Click On The Page→Ok

4. How to delete cells ?

=> Right Click On Any Cell→Delete

5. How to add tab colour ?

=> Right Click On Any Sheet→Tab Color→Select Any Colour

6. How to change row hight value ?

=> Select Any Row→Home→Cell Command Group→Format Button→Row Hight Option→Change The Value→Ok

,By default row hight value 15 inch.

7. How to change column width value ?

=> Select any column→Home→Cells command group→Format Button→Coloumn width option→Change The Width Value→Ok

,By default columns width value 8.43 inch

8. How to protect your sheet ?

=> Home Menu→Cells Command Group→Format Button→Protect Sheet Your Password→Ok→Re-Enter Your Password→Ok

9. How to Unprotect Your Sheet ?

=> Home Ribbon→Cells Command Group→Format Button→Unprotect Sheet→Type Your Previous Password→Ok

10. How to protect your excel file with a password ?

Step:- Office Button→Prepare→Encrypt Document→Type Your Password→Ok

~:End:~

Last Updated:~ 01/01/2021

Special Credit:- WEBEL Gotan

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