

MERIT COMPUTER SKILL DEVELOPMENT

INSTITUTE , Siwan-841241

Microsoft Excel

Date: 17-12-2022

《Excel Basics:-》

Before Working With Ms-Excel it Must be Started and different parts of the Screen Must be Identified.

《To Execute Ms-Excel:-》

Process:-

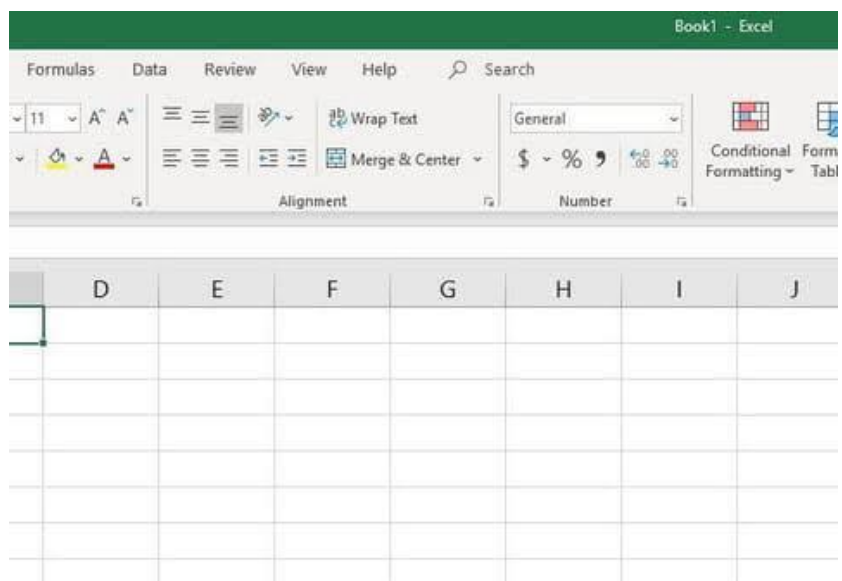
1. Click on Start Button.
2. Click on All apps .
3. Click on Microsoft Excel.

OR,

1. Press **Start+R**
2. Type **Excel**
3. Click on Ok/Enter

《Parts of Ms-Excel Spreadsheet:-》

- Title Bar
- Quick Access Toolbar
- Tab List
- File Tab
- Ribbon
- Name box
- Formula Bar
- Active Cell
- Column Headers
- Row Headers
- Sheet Tab
- Insert Worksheet
- Sheet Scroll Button
- Status Bar
- View Button



- Page layout View
 - Page break View
 - Normal View
-
- Zoom Control

《Worksheet Within Workbook:-》

Ms-Excel documents (files) are known as Workbook. Each workbook contains **1 sheet by default in Ms-Excel 2016.**

Microsoft Excel

Each sheet is named uniquely like sheet 1, sheet 2 which are displayed in the sheet tab.

A workbook can also contain sheets, which are named as chart 1, chart 2, etc. By default.

When Ms-Excel is loaded, it automatically opens a new workbook, as **book 1 .xlsx**.

This name is displayed on the title bar.

The main part of the Ms-Excel Screen is the worksheet area - a grid of row and column.

《The Worksheet Contains:-》

Row — 10,48,576

Column ---- 16,384

Microsoft Excel

Date: 19-12-2022

《Cell:-》

The combination of a column and row is called Cell.

Each cell has a name or Cell address.

The Cell address consists of the column letter and a row number. The first cell address is A1 and the first cell is also known as **Name cell**.

Similarly, the last cell address is **XFD1048576**.

The total cells in a worksheet are **16,384*10,48,576**.

At one time one cell can be Active and the address of the Active cell will be displayed in the Name box.

《Navigate Worksheet:-》

To move to any cell of any worksheet of an open Workbook, the mouse can be used.

- To scroll through different parts of workbook, drag the box Scroll.
- To go to different sheets in the workbook, click the desired sheet name.
- To go to desired cell, click inside the cell or click on Find and Select, then Go To, Type the Cell address.
- Click the Name box, type cell address and press Enter.

《To move one cell to another using keyboard:-》

Shortcut Key	Action
Tab or	Right one cell

Microsoft Excel

Shift + Tab or	Left one cell
Shift + Enter or	Up one cell
Enter or	Down one cell
	Last cell in the row
	First cell in the row
	First Cell in the column
	Last cell in the column
PgDn	Down one screen
PgUp	Up one screen
Alt+PgDn	Right one screen
Alt+PgUp	Left one Screen
Ctrl+PgDn	Next sheet
Ctrl+PgUp	Precious Sheet

Microsoft Excel

Date : 20-12-2022

《Enter and Edit Data:-》

Any entry can be made in the Active cell.

《Entries are 4 different Types :》

- Text
- Numbers
- Logical Values
- Formulas

《Text :- 》

Text in a cell can include any combination of letters, numbers, keyboard symbols. A cell can contain **32,767 character**.

To share number as text use apostrophe (') before number.

《Numbers:-》

Numbers include digits 0 to 9 and some special Characters like \$ % + - / e.t.c.

Date and time are also stored as numbers. If 12-20 is entered it will display 20 December.

Microsoft Excel

Note:- When a number does not fit in a cell it will display #####.

《Logical Value :-》

Logical Values like TRUE and FALSE can be entered in a cell.

《Formulas:-》

Formulas are entered into cell to performs calculation. A formula begins with an equal (=) sign.

After Completing formula entry the result will be displayed in the cell and formula will be displayed in the formula bar.

Note :- Built-in Function which are stored to performs calculation are also called or treated as formula entry.

《To Make Entry in the Cell :-》

1. Select the cell.
2. Type the Content.
3. Press Enter.

《To Edit the cell Content :-》

- **Press F2 function Key** or double Click the cell,make correction and Enter.
- Select the cell, Go to formula bar , make Correction and Enter.
- To delete , Select the cell and Press Delete key .

Microsoft Excel

Date : 22-12-2022

《Range of cells:-》

Range is a group of cells (also called as a block) selected generally to make the cell formatting.

To Specify the range of cells using the click and drag from the middle of cell.

Example of cell range is **A1.A5 or A1:A5**

《Exercise:-》

A	B	C	D	E	F	G
Item	Price	Week 1	Week 2	Week 3	Week 4	Subtotal

Microsoft Excel

Tea	10	500	450	399	499	=
Cold coffee	50	650	409	590	650	
Hot coffee	90	550	309	600	700	
Choco coffe	110	400	309	500	505	
Milkshake	50	250	387	400	400	
Total						

《Different methods of Selection :-》

- Click the cell , hold primary button drag to the required cell and release.
- Click the first cell , hold shift button click the last cell.
- To block non-continuous celk, hold ctrl button and click each cell.
- To block entire row , click Row Border.
- To block entire column, click Column Border.
- To block entire sheet or formatted range press **Ctrl + A**.

《Entering and Copying Formula.》

- Click the cell and tyoe formula with equal Sign and Press Enter.
- To copy Formula, select the cell , Press **Ctrl + C**.
- To paste the Formula , Go to Required Cell Press Enter.

Note :- =SUM functions used to add the given range.

Microsoft Excel

Date : 23-12-2022

《Cell Reference:-》

A Formula Represents Certain Cell Relationship Which Generates a Result .
When typing the Cell Address in the Formula. three types of cell refrence can be Used.

A cell Reference specifies when the Formula Is Copied to other cells,its column or row Number is to Change or Not.

《Types of Cell Reference:-》

- Relative Cell Reference
- Absolute Cell Reference
- Mixed Cell Reference

《Relative Cell Reference:-》

If a Formula With relative refrence is copied , references used in the formula Will automatically change in the copied cell.

Microsoft Excel

Example:- **=B3*C3**

《Absolute Cell Reference:-》

If the Formula with absolute reference is copied , references used in the formula remain unchanged.

Example:- **=\$B\$3*\$C\$3**

《Mixed Cell Reference:-》

If a Formula with mixed reference is copied , the References used in the formula with change either the column wise or row wise.

Example:- **=C3*\$E\$1**

Microsoft Excel

Date : 24-12-2022

《Setting the Column Width:-》

If the Cell is not displayed in full,in any Cell,Width of the Column must be increased , similarly,Column width Can be Reduced.

《To Increase the column Width:-》

1. Drag the Column Header Right Border
OR,
2. Go to home tab » Click Format » Column Width in Cells Group.
OR,
3. Double Click the Column Header Right border.

(Default Width is 8.43)

《Commands on the Format Menu:-》

- Column Width
- Autofit Column Width
- Hide Columns
- Unhide Columns
- Default Width

《Setting the Row Height:-》

Microsoft Excel

☐ Drag the Row Header Below Or Above.

OR,

☐ Go to Home Tab » Click Format » Row Height in cells Group.

OR,

Double Click the Row Header (**Default Row Height is 15**).

《Cell Formatting:-》

Cell Formatting Includes setting the font Type, Font Size , Bold , italic alignment, Cell Color, Decimals e.t.c.

NOTE:- 6 Alignment is Ms-Excel.

Microsoft Excel

Date : 26-12-2022

《Save the Workbook:-》

Process:-

1. Go to File Menu
2. Click on Save
3. Type the File name
4. Choose File Format
5. Select Location
6. Click on Save button.

NOTE:- The Extension name of Ms-Excel file is ".xlsx."

《Close the Workbook:-》

Process:-

1. Go to File Menu
2. Click on "Close"

《Create a new Workbook:-》

Process:-

1. Go to file menu
2. Click on New
3. Select Blank Workbook

《Open a Workbook:-》

Process:-

1. Go to file menu
2. Click on Open
3. Go to the Location
4. Choose your file
5. Click on Open

Microsoft Excel

《Exit the App:-》

Process:-

1. Go to file Menu
2. Click on Exit
 - Save / Don't Save / Cancel
3. Choose what necessary.

Date : 26-12-2022

《Copying the Cell Content:-》

Process:-

1. Select the Cell / Cells.
2. Go to Home tab
3. Click on Copy in Clipboard group
4. Active Any other Cell
5. Go to Home tab
6. Click on Paste in Clipboard Group.

《Moving the Cell Content:-》

Process:-

1. Select the Cell / Cells
2. Go to Home tab
3. Click on Cut in Clipboard
4. Active any Other cell
5. Go to Home Tab
6. Click on Paste in Clipboard Group

Microsoft Excel

Date: 27-12-2022

《Importance of Function:-》

Function Shortens a Formula,
For Example, to add the Values in the Cells C1 to C5 .
The Formula is = C1+C2+C3+C4+C5.

If the is Used , we need to Type Only =SUM(C1:C5)

Complex Formulas Can be Created Using Functions and Some Tasks Can be Accomplished Only by Using the Functions.

For Example to display the Current date And Time use Today () and Now ().

《Mathematical and Statical Functions:-》

=> SUM ()

Microsoft Excel

if is a Mathematical Function Used to Add the Numeric Value in a Range of Cells. **A Macimum of 255 Arguments can be Given.**

SYNTEX:-

=SUM (number1,[number2],...)

《AVERAGE:- 》

Calculates and Return the Average (Arithmetic mean) of the Numeric Value of range of Cells. It is a Statistical Function. **A Maximum of 255 Arguments can be Given.**

SYNTEX:-

=AVERAGE (number1, [number2],)

Microsoft Excel

Date: 31-12-2022

《Text Function :-》

=> Left ()

Returns the Specified number of Characters from the left sides of a Text string the Number is not specified , it returns the First Character.

SYNTEX:-

=LEFT (text, [num_char])

=> RIGHT ()

Returns the Specified number of characters from the RightSide of a text string.if the Number is not Specified, it returns the last character.

SYNTEX:-

=RIGHT (text , [num_chars])

=> MID ()

Returns the Specified number of Characters from the middle of a text string , given a starting position and Length.

SYNTEX:-

=MID (text, start_num, num-chars)

=> LEN ()

Returns the length of a string , spaces are counted such as Character.

Microsoft Excel

SYNTAX:-

=LEN (text)

=> PROPER ()

Converts the first letter of each word in a text string to upper Case and Remaining letters to lower Case.

SYNTAX:-

=PROPER (text)

=> UPPER ()

Converts all lower Case letters in a text string to Upper Case.

SYNTAX:-

=UPPER (text)

=> LOWER ()

Converts all Capital Letters in a text String to Lower Case.

SYNTAX:-

=LOWER (text)

=> REPT ()

Repeat the Given text a Specified number of times.

SYNTAX:-

=REPT (text , number_times)

Microsoft Excel

Date:02-01-2023

《OPERATOR :-》

Operator is a symbol, used to specify the type of calculation that us to be performed on the elements of a Formula.

=> Microsoft Excel includes different Types of Calculations Operator :-

- Arithmetic Operator
- Comparison Operator
- Text Operator
- Reference Operator

《Arithmetic Operator:-》

Microsoft Excel

Arithmetic Operator performs basic Mathematical Operations such as Addition, Subtraction Or Multiplication e.t.c.

OPERATOR	MEANING	EXAMPLE
+	Addition	=3+7
-	Subtraction	=8-4
*	Multiplication	=4*2
/	Division	=7/3
%	Percent	=20%*80

《 Text Operator:-》

The Text Operator "&" Combine one Or More text Value to Produce a Single piece of text. & (Ampersand) Connects two Value to Produce One Continuous Text.

Example :-

= "Shamma" & "Naaz"	= ShammaNaaz
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《Reference Operator:-》

Reference Operator Combine a Range of Cells for calculation.

OPERATOR	MEANING	EXAMPLE
: (Colon)	Range Operator which Produce One Reference to all the Cells between two References.	=SUM (A1:C5)
, (Comma)	Union Operator, Which Combine Multiple Reference into one Reference.	=SUM (A1:A5 , B1:B5)
_ (Single Space)	Intersection Operator Which produces a Cell Common to two References.	=(BB1:B5_A1:D7) Here , Cell B7 is Common to Both Range.

Microsoft Excel

Date: 03-01-2023

《Logical Function:-》

Microsoft Excel

Logical Functions are used to determine whether a Condition is True Or False Or Check for multiple Conditions.

《IF :-》

The IF Function is Used to determine whether a Condition is True Or False. One Value is returned if the Condition is True ,and different Value is returned if the condition is False.

SYNTAX:-

<code>=IF(logical_test,[value-if-true], [value-if-false])</code>

A	B	C	D	E	F
Emp-id	Name	Post	Salary	HRA	Net Salary
101	Faizan				
102	Shamma				
103	Saleha				
104	Ashfaque				

=> CRITERIA 1

Salary	HRA
< 10,000	30%
>= 10,000	40%

=> CRITERIA 2

Salary	HRA
10,000 to 20,000	20%
21,000 to 40,000	40%
41,000 to 60,000	50%

=> CRITERIA 3

Salary	HRA
50,000 to 1,00,000	40%
1,01,000 to 1,50,000	55%

Microsoft Excel

1,51,000 to 2,00,000	63%
2,01,000 to 2,50,000	70%

Date: 06-01-2023

《SUMIF:-》

SUMIF is used to total a range of numeric cells based on a condition.

SYNTAX:-

=SUMIF (range, Criteria, [Sum-range])

- Range is the range of cells Where the Criteria is to be searched.
- Criteria are in the form of number Expression or text that defines the cells to be added.
- For Example, Criteria can be Expressed as 30, "30" , ">30", "Apples".
- Sum Range is a range of Cells the number of which to be Added.

《COUNTIF:-》

This Function Gives the Count of the Number of Cells Which satisfies the Criteria.

SYNTAX:-

=COUNTIF (range, Criteria)

Exercise :-

A	B	C
Branch	Month	Sales
Pachrukhi	January	5000
Patna	March	3500
UP	February	4000
Hathaura	March	2500
Pachrukhi	January	3500

QUESTIONS

Total Sales in Pachrukhi	
Total Sales in March	
Total Sales Above 3000	

Microsoft Excel

Total Sales till 4000	
Count Siwan	
Count Sales Above 2000	

Date: 07-01-2023

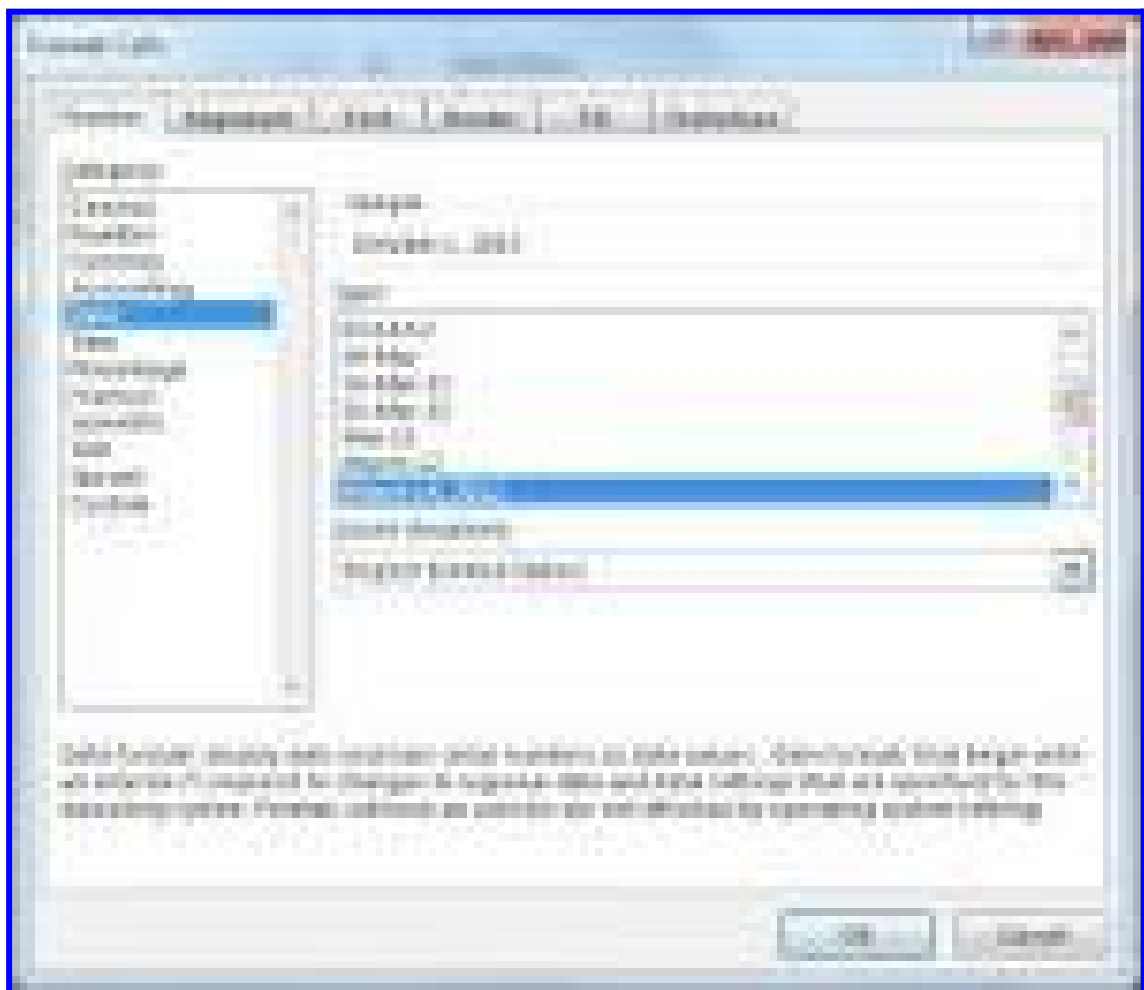
《Cell Format Categories:-》

- The format of a Cell Contrats how the cell looks and also defines how the information (Data) stored inside it will be treated and Displayed.
- There are numerous format options for changing the look of the Cell,including borders and background Colors.

《To Select a Format:》

Process:-

1. Right Click the cell or Range of cells.
2. Click on format cells
3. A dialog box will appear



Microsoft Excel

|| General ||

It is the default format, Excel will make no changes to the format of numbers.

|| Number ||

This format is used to specify number of decimals and thousand separate.

|| Currency ||

This format is used to specify number of decimals and currency symbol.

|| Accounting ||

This Category is same as the currency , except it will align the currency symbol.

|| Date ||

This format is used to specify, now the date must be displayed.

|| Time ||

This Format is used to specify 24 hours or 12 hours format , displayed seconds or not.

|| Percentage ||

This format multiply the cell value by 100 and display the result with a percent %.

|| Fraction ||

This Category will display the content of a cell as a fraction.

|| Scientific ||

The Scientific Category will display the contents of a cell in Scientific notation.

|| Text ||

This Format Category can be used to represent a number entered in a cell as text entry.

|| Special ||

This Category has options to enter ZIP CODE or Phone Number .

|| Custom ||

This format category is used to create our Own Format.

ID	Salesman	Salary	Rating	P.N.	Aadhar no.
----	----------	--------	--------	------	------------

Microsoft Excel

M01	Faizan Ali	10,000			
M02	Shamma Naz	15,000			
M03	Abu Hussain	9,000			

QUESTIONS
Change ID as Text
Change the Rating as Fraction
Change Phone no. As Special
Change Address as Custom
Change Sales as Scientific

Date: 09-01-2023

《Apply Background to Worksheet:-》

To make the Worksheet attractive, background picture can be inserted.

Process:-

1. Select the worksheet
2. Go to Page Layout Tab
3. Click on Background in page Setup Group
4. Select the Picture
5. Click on insert

《Conditional Formatting:-》

- Conditional Formatting lets you change the appearance of a cell based on value or Another cells Value.
- You Specify Certain Conditional and when those conditons are met , Excel applies the formatting that you choose.
- A Conditional format changes the apoearence of a cell range based on a conditional if the conditon is true, the cell range is formatted , it condition is true , the cell range is not formatted.

《To Apply Conditional Formatting:-》

Process:-

1. Select the cells
2. Go to Home Tab
3. Click on Conditional Formatting in styles group

Highlight Cells Rules :

Microsoft Excel

- Greater than
- Less than
- Between High and low Value
- Equal to
- Contains a value
- Date tha occurs

Exercise 1

A	B	C	D	E		F
ID	Name	Course	Add	Total Fee	Paid	Dues
M01	Shamma	ADCA	Shahtakiya	12,000		
M02	Faizan	ADFA	Shahtakiya	12,000		
M03	Saleha	BCA	Siwan	20,000		
M04	Ashfaque	ADCA	Islamiya Nagar	6,000		

QUESTIONS
Highlight cell value of islamia Nagar with Yellow
Highlight Entire row of ID M04 with green
Highlight Entire Column of Dues with Red

Date: 12-01-2023

《Custom List:-》

A Custom List is a Collection of Some Commonly Used Words, Which Can be reproduced by dragging the fill handle.

《Defining Custom List:-》

Process:-

1. Enter list in a range of Cells.
2. Select the range
3. Go to File tab
4. Select Options
5. Select Advanced
6. Go to General Section
7. Click on Edit Custom List
8. Click Import button

Microsoft Excel

9. Click on OK.

OR

Process:-

1. Go to File tab
2. Click on Options
3. Select Advanced
4. Go to General Section
5. Click on Edit Custom List
6. Click on New List Option
7. Type the list
8. Click on OK.

NOTE:- Custom Lists are not stored for Specific Workbook. It is Available for use in all Workbook.

《Range:-》

A Collection of Cells is Called Range i.e. A1:C10

《Range Name:-》

A Range Name Can be given to a range instead of using the cell Reference to use the range.

《Creating a Range name:-》

Process:-

1. Select the range
2. Go to Name box
3. Type the name

OR,

Process:-

1. Select the range
2. Go to Formula tab
3. Click Define name in Defined name Group
4. Type the name

《Using a range Name:-》

A	B	C	D
Product	Price	Quantity	Total
Jeans	600	4	2400
T-shirt	150	2	300
Shirt	300	4	1200
Lungi	300	3	900

Microsoft Excel

Kurta	500	3	1500
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Date: 15-01-2023

《Reffering to other sheet of the same Workbook:-》

The Workbook name is followed by the exclamation mark. If the worksheet contains spaces, the name must be enclosed within quotes.

Example:-

=SUM (Sheet1!A1:A5,Sheet2!A1:A5,Sheet3!A1:A5)

《Reffering to the Worksheet in other Workbook:-》

The Data Present in one Workbook Can be Used for calculation In Another Workbook.

Example:-

=SUM ([Book1.xlsx] sheet1! \$A\$2:\$A\$5)

Date: 24-01-2023

《Charts:-》

Charts are Graphical Representation of numeric data a Set of numeric data, Which is actually plotted, is called data series. Each value in the data series is a data point. Data Series Can be in Row or Column.

Charts are display to series of numeric data in a graphical format to make it easier to understand large quantities of data.

《Types of Charts:-》

Depending on the Appearance of chart, chart Can be and Embedded Chart and chart Sheet.

Embedded Chart is Drawn on the worksheet where the data exists. Chart sheet is a separate Sheet containing Only the chart in it.

《To Create A Chart:-》

Process:-

1. Type the data

A	B	C	D
Product	January	February	March
Laptop			
Keyboard			

Microsoft Excel

Monitor			
CPU			
Mouse			

2. Select data range
3. Go to Insert Tab
4. Click on Column Chart in charts Group

Exercise 1

A	B	C	D
Item Name	Quantity	Price	Sales
Mouse	10	150	
Keyboard	50	180	
Mouse	30	150	
Lapy	40	35000	
Keyboard	60	180	
Pen Drive	5	200	
Pen Drive	4	200	
Lapy	8	810	

Questions
Total Sale of Mouse
Total Quantity of Keyboard
Count of Lapy

Date: 01-02-2023

《Advanced Filter:-》

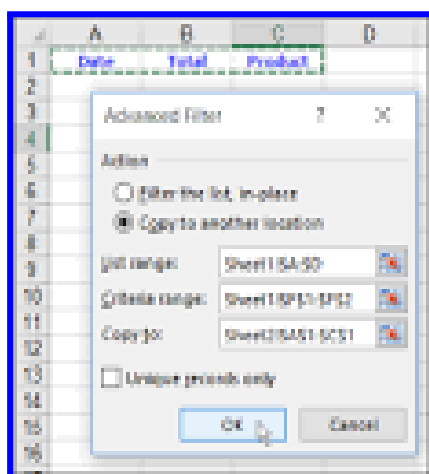
With Advanced Filtering methods You can Specify Complex Filtering Criteria. The condition is written in any Part of the worksheet. There are Five Methods of Advanced Filter.

Microsoft Excel

A	B	C	D	E	F
Item	Category	Customer	Quantity	Rate	Sales

Process:-

1. Go to "Data tab"
2. Click on "Advanced filter" in "sort and filter"



3. Click on OK.

Date: 05-02-2023

《Unique Record Only:-》

In the Example Given below the filter displays item, Customer and sales Where Sales Greater Than 5000.

A	B	C
Sales		
>5000		
Item	Customer	Sales

Microsoft Excel

《Multiple Criteria in multiple Columns Where all Criteria Must be true:-》

This is the Condition to filter the records with city as Siwan and sales greater than 5000.

QUESTION 1	
A	B
City	Sales
Siwan	>5000

《Multiple Criteria in Single Columns Where any criteria can be True:-》

This is the Condition to filter the records having the Criteria as Baked food as dry fruits.

QUESTION 2
A
Category
Baked Food
Dry Fruits

《Multiple Criteria in multiple Columns Where any Criteria Can be true:-》

This is the Condition to filter the records having the category as beverage or Sales greater than 3000.

QUESTION 3	
A	B
Category	Sales
Beverage	
	>3000

Date: 10-02-2023

《SORT:-》

Sorting is arranging the record in a database, based on one or more fields (Column). Sort brings the related records together so that records in the database are easily accessible.

Microsoft Excel

Record can be arranged in the ascending Order or Descending Order. You can sort data by text (A to Z or Z to A) . Number (smallest to Largest OR Largest to smallest).

Process:-

A	B	C
NAME	ROLL	ADDRESS
Sham	1	Siwan
Wasim	2	Patna
Danish	3	Siwan
Mahboob	4	Punjab
Faizan	5	Patna

1. Click " Inside Data "
2. Go to "Home Tab "
3. Click on " Sort & Filter " in editing Group.
4. Click on => A to Z — Smallest to Largest
=> Z to A — Largest to Smallest

Process:-

1. Click Inside Data
2. Go to " Data tab "
3. Click " Sort " in "Sort & Filter Group"
(A window / Box will be Appear)
4. Select Any type of Sorting Style.
5. Click on OK

Date: 11-01-2023

《Database Function (D-Function):-》

To perform Calculation like Total , Sum, Count e.t.c. is a Databased on a Condition Use Database.The D-Function Requires a database with fields name and Condition.

SYNTAX:-

=DFunction (Database,Field, Criteria)
--

A	B	C	D	E	F
Name	Sub	Marks		Name	Marks
Sham	Word	72		Sham	96

Microsoft Excel

Faizan	Excel	64			
Shamma	Excel	75			
Saleha	Windows	55			
Ashfaq	Word	45			
Sham	Tally	49			
Abu hussain	Word	50			

QUESTIONS	
Total Marks of shaheen ?	96
Number of Students appeared for word exam?	3
Average Marks of students in windows?	
Lowest Marks in Word?	45

Function	Answer
F2 = DSUM (A1:C8,"MARKS",E1:E2)	96
F2 = DCOUNTA (A1:C8,"NAME",E1:E2)	2
F2 = DAVERAGE (A1:C8,"MARKS",E1:E2)	
F2 = DMIN (A1:C8,"MARKS",E1:E2)	35

Date: 13-01-2023

《Subtotal:-》

- You Can Automatically Calculate Subtotal and grand Total in a List for a Column by using Subtotal Command.
- To Generate Subtotal of numeric field based on a controlling
- The database must have been sorted on ascending or descending order of the Controlling field.

Process:-

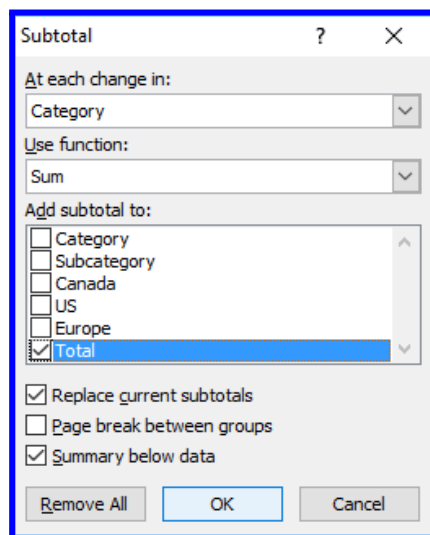
A	B	C
---	---	---

Microsoft Excel

Name	Region	Sales
Akbar	East	70
Danish	East	72
Sham	East	75
Akbar	West	80
Sham	West	83
Danish	West	96

=> Sort the data in Ascending or Descending Order.

1. Go to "Home Tab"
2. Click on "Subtotal" in Outline Group.



3. Click on OK.

NOTE:- Auto Filter => Ctrl+shift+L

Date: 14-01-2023

《Pivot Table:-》

A Pivot table is used to Summarize, Analyze, Explore and Present your data. A Pivot table is a way to extract data from a long list of information and present it in a more meaningful and user-friendly understandable format.

Process:-

A	B	C	D	E	F
Item	Branch	Salesman	Quantity	Price	Sales

Microsoft Excel

Rexona	Chhapra	Wasim	20		
Lifebouy	Chhapra	Wasim	10		
Dove	Patna	Sham	15		
Santoor	Katihar	Afzal	25		
Nirma	Chhapra	Afzal	39		
Rexona	Patna	Wasim	35		
Lifebouy	Katihar	Afzal	29		
Dove	Katihar	Akbar	25		
Santoor	Patna	Akbar	10		

1. Click inside data
2. Go to "Insert tab"
3. Clcik on "Pivot Table" in Tables Group.

4. Click on OK.

Period	Q1		
Row Labels	Sum of Viewers	% of Viewers	
North	362	22.07%	
Bat Man	91	5.55%	
Ben Ten	133	8.11%	
Spider Man	138	8.41%	
South	384	23.41%	
Bat Man	87	5.30%	
Ben Ten	125	7.62%	
Spider Man	172	10.49%	
East	415	25.30%	
Bat Man	102	6.22%	
Ben Ten	107	6.52%	
Spider Man	206	12.56%	
West	479	29.21%	
Bat Man	99	6.04%	
Ben Ten	140	8.54%	
Spider Man	240	14.63%	
Grand Total	1,640	100.00%	

Microsoft Excel

Date: 15-01-2023

《Data Validation:-》

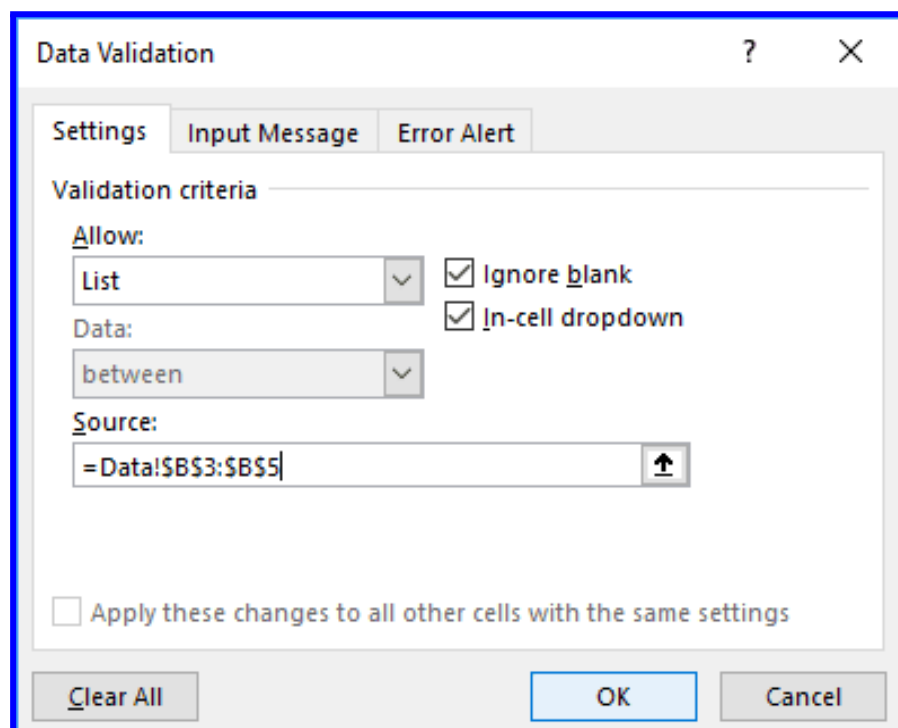
Data Validation is an Excel feature that you Can use to define restrictions on what data can or should be entered in a cell. You can configure data validation to oresent user form entering data is not valid.

=> How to Create List Validation:-

A	B	C	D	E
Name				
Sajid				
Wasim				
Ahsan				
Faisal				

Process:-

1. Select Cell or range B1 to B5 (B1:B5)
2. Go to "data tab"
3. Click on "data Validation" in tools group
4. Select List form "Allow dropdown list"



Microsoft Excel

Date: 16-02-2023

《Custom Validation:-》

Custom Validation Can be done using a Formula. The Content of a Cell is validated Based in the content of any cell.

Process:-

A	B
Price	Discount Price
200	
300	
50	
400	
50	
500	

1. Select Cells B2:B7
2. Go to "data tab"
3. Click on "data Validation" in data tools group
4. Select Custom Validation from Allow dropdown list

《Input Message tab:-》

=> Title :-

Type on Optional title for input message to be displayed when a user select the restricted cell. The title will appear in Bold Text.

=> Input Message:-

Type the text of the Message to be displayed. The message can be upto 255 character.

《Error Alert Tab:-》

=> Title:-

Type on Optional Message for error message.

Microsoft Excel

=> Error Message:-

Type the error message that should appear when an incorrect Entry has been

Date: 17-02-2023

《VLOOKUP:-》

- VLOOKUP Stands for "Vertical Lookup"
- Looks for a value in the leftmost Column of a table and then returns a value in the same row from a column you specify.
- By default the table must be sorted in a ascending order.
- VLOOKUP is used to show "Vertical Lookup" from a data (table). Use can see Particular record by the help of Vlookup.

Process:-

A	B	C	D	E	F
Name	Post	Salary		Name	Salary
Sandeep	MD	1000			
Faisal	QC	2000			
Kamar	PM	3000			
Hesham	Trainer	4000			

1. Click on E1 cell
2. Go to "data tab"
3. Click on "data Validation" in data tools group
4. Select "lists" from Allow drop down list.
5. Click on ok
6. Click on F1 cell
7. Go to Formula tab
8. Click on "lookup references" in function liabarary group
9. Click on OK

Date: 18-02-2023

《Basic of Vlookup Or Introduction Vlookup:-》

=> Range Lookup

Microsoft Excel

A	B	C	D	E
ID	Name	Product	Zone	Sales
101	Masoom	Lux	South	80
102	Amjad	Dove	North	41
103	Faisal	Santoor	West	71
104	Kamar	Lifebouy	South	76

=> Solve the question 1

G	H	I	J	K
ID	Name	Product	Zone	Sales
102				

=> Solve the question 2

M	N
ID	102
Name	
Product	
Zone	
Sales	

Date: 19-02-2023

《Iferror Vlookup:-》

=> SYNTAX:-

=Iferror (value,value-if-error)

=> Nested Vlookup:-

A	B	C	D	E	F	G	H
SM-ID	PR-ID		PR-ID	SALESMAN	PR	ZONE	SALES
1001	PR-1001		PR-1001	Masoom	Lux	South	71

Microsoft Excel

1002	PR-1002		PR-1002	Amjad	Dettol	North	61
1003	PR-1003		PR-1003	Faisal	Santoor	West	51
1004	PR-1004		PR-1004	Kamar	Lifebouy	East	41

QUESTION 1		
J	K	L
SM-ID	PR-ID	SALESMAN
1002		

QUESTION 2	
N	O
SM-ID	SALESMAN

Date: 21-02-2023

《Multi table Vlookup:-》

=> Sheet 1

A	B	C
Bill - no.	Product	Quantity
101	Keyboard	25
102	Mouse	45
103	LCD	21
104	Pendrive	41
105	HDD	20

Microsoft Excel

=> Sheet 2

A	B	C
Bill - no.	Product	Quantity
106	Keyboard	25
107	Mouse	45
108	LCD	21
109	Pendrive	41
110	HDD	20

=> Sheet 3

A	B	C
Bill - no.	Product	Quantity
111	Keyboard	25
112	Mouse	45
113	LCD	21
114	Pendrive	41
115	HDD	20

QUESTION 1	
A	B
Bill - no.	101
Product	
Quantity	

E	F	G
Bill - no.	Product	Quantity
111		

Microsoft Excel

Date: 22-02-2023

«"And" and "OR" Function:-»

These both functions are used to check multiple cell reference (compare Between Multiple Cells.)

A	B	C	D
40	20	30	
50	40	56	
54	28	36	
30	65	75	
87	38	56	

Example :-

D1 = AND (A1>40,B1>40, C1>40)

A	B	C	D	E	F	G
Marksheet of Board Exam (Science)						
Name	Physics	Chemistry	Biology	Maths	Total	Remarks
Ashfaque	50	70	90	30		
Saleha	70	28	50	54		
Mashroor	60	60	30	40		
Danish	95	89	28	43		

Example:-

G3 =If (And (B3>=30,C3>=30, D3>=30), "PASS" , "FAIL")

Date: 23-02-2023

«Filter using Vlookup:-»

A	B	C	D
---	---	---	---

Microsoft Excel

Unique Product	Product	Zone	Sales
	Lux	South	150
	Santoor	North	200
	Lux	North	300
	Rexona	East	350
	Dove	South	200
	Santoor	East	100
	Dove	West	180

Example:-

A2 =B2 & Countif (\$B\$2:B2 , B2)

F	G	H
Product		
Lux		
Product	Zone	Sales

SYNTAX	
COUNTIF	(Range, Criteria)
IFERROR	(value , Value-if-error)
VLOOKUP	(Lookup_value, table_array, Col_index_num, [range-lookup])

Date: 24-02-2023

《HLOOKUP:-》

HLOOKUP stands for "Horizontal Lookup". It is used to see Particular field and record in horizontal mode from data.

Process:-

Microsoft Excel

A	B	C	D	E	F
Name	Sandeep	Faisal	Qamar	Sham	Sajid
Roll	1	2	3	4	5
Add	Chhapra	Gopalganj	Siwan	Patna	Siwan

1. Click on cell A5
2. Go to "data tab"
3. Click on "data Validation"
4. Select List from Allow dropdown list
5. Click on OK
6. Click on B5
7. Go to Formula tab
8. Click on "Lookup & Reference"
9. Click on "HLOOKUP"
10. Click on OK

=> SYNTAX:-

= HLOOKUP (Lookup_value, Table-Array, Row_index_num, [range_lookup])

QUESTION 1		
A	B	C
Name	Roll	Add

QUESTION 2	
A	B
Name	
Roll	
Add	

Date: 27-02-2023

Microsoft Excel

《OFFSET:-》

OFFSET Function is used to refer to a cell or a range of cells from a given cell.

A	B	C
5	5	8
7	2	1
3	3	9

=> SYNTAX:-

=OFFSET (reference , rows , column , [height], [width])	
Function	Answers
=Offset (A1,2,2)	9
=Offset (B2, 1 , 1)	9
=Offset (A2 , 2 , 1)	9

Date: 28-02-2023

《Index:-》

=> SYNTAX:-

=INDEX (array , row_number , [Col_num])
=Match (lookup_value, lookup_array , [Match-Type])

《Sheet 1:-》

=> Data 1

A	B	C
Item Name	Product ID	Rate
Keyboard	P001	200
CPU	P002	150
Mouse	P003	230
Pen drive	P004	100

Microsoft Excel

Hard disk	P005	200
UPS	P006	500

QUESTION 1	
E	F
Product ID	P003
Item Name/ Rate	Rate
Rate is =	

Date: 01-03-2023

《Data Consolidation:-》

Consolidation is Process Where information or Data from different sources are merzed or consolidate.

Process:-

1. Create Data in more than one sheets. (In 3 sheets)
2. Go to sheet 4
3. Click on "Data Tab"
4. Click on consolidation in data tools Group
5. Click on OK

《Splitting window panes:-》

Windows can be split into panes , resulting in either too or four seperate scrollable regions on the window.

Process:-

1. Go to View Tab
2. Click on Split in Window group

《To Remove the Split:-》

Process:-

Microsoft Excel

1. Go to view Tab
2. Choose Split button

Date: 02-03-2023

《Goal Seek:-》

Goal Seek Solves Formula backwards. Here the result needed as well as the single input to be changed is known. To determine the value of the input to get the desired result, Goal Seek is Used.

A	B
SUBJECT	MARKS
Physics	60
Chemistry	70
Biology	80
Maths	
Hindi	67
Total Marks	
Average Marks	

Process:-

1. Select Cell B8
2. Go to Data Tab
3. Click on What if Analysis in data tools group
4. Click on Goal Seek
5. Click on OK

Date: 03-03-2023

《XLOOKUP:-》

Searches a range or an array for a match and return the corresponding item from second range or By Default, an extract match is used.

=> SYNTAX:-

- In Excel :-

=XLOOKUP (lookup_value, lookup_array, [if-not-found], [Match_Type], [Search_Type])

- In Google Sheet:-

Microsoft Excel

=XLOOKUP (Search_key, lookup_range, result_range, [missing-value], [match_type], [Search_Mode])

A	B	C	D
Item ID	Name	Date	Sales
101	Mouse	27-02-023	25
102	Keyboard	28-02-023	36
103	Hard disk	01-03-023	21
104	Scanner	02-03-023	35
105	Printer	03-03-023	41

QUESTION 1

E	F	G	H	I	J	K
Name	Sales		Item ID	Name	Date	Sales
Mouse			102			
Item ID	Sales					
102						

Note :- Match Mode

- Exact Match => 0
- Exact Match or Next Smaller => -1
- Exact Match or Next Greater => 1

Search Mode

- Top to Bottom => 1
- Bottom to Top => 2

Date: 10-03-2023

《Scenario Manager:-》

Scenario Manager lets you Create and save different sets of input Values, with their results, as scenarios. A Scenario is a group of input values saved with a name.

Process:-

Microsoft Excel

A	B	C	D
Ashfaq Plastic Pvt. Ltd.			
Plastics	10000		
Labour	1000		
Power	500		
Total			

1. Click on Cell B5
2. Go to Data Tab
3. Click on what if analysis
4. Click on Scenario Manager
5. Click on Add

《Protection in Excel:-》

There are Several levels of protection that can be applied to a workbook. The top most level of protection is protecting the Workbook. There are four level of security. They are file Protection, Workbook Protection, worksheet protection, Cell Protection.

《How to Create File Protection:-》

Process:-

1. Create a Workbook
2. Press - F12 to "Save as "
3. Click on "Tools Dropdown list"
4. Click on General Options
5. Enter Password (123)
6. Re-Enter Password (123)
7. Click on OK

《Worksheet Protection:-》

From Worksheet Protection you can Have a total control of spreadsheet or database by protecting each element Your worksheet encompass.

Process:-

1. Go to Review Tab
2. Click on Protect worksheet in Changes group
3. Enter Password (123) => Click on OK
4. Re-enter Password (123) => Click on OK

《Workbook Protection:-》

By using workbook protection level you can only lock-down the structure and worksheet window (screen)

Microsoft Excel

Process:-

1. Go to Review Tab
2. Click on Protect Workbook
3. Enter Password (123) => Click on OK
4. Re-enter Password (123) => Click on OK

《Cell Protection:-》

When you protect a sheet, cells are locked by default, which means that they can't be edited. To enable cells to be edited while leaving only cells locked, you can unlock all the cells and then lock only specific cells or ranges before you protect the sheet.

Process:-

A	B	C
1	32	15
10	20	21
34	21	32

1. Press - CTRL+A (To Select whole sheet)
2. Go to Home Tab
3. Click on Font, Number , Alignment dialog box Launcher
OR,
4. CTRL + 1 to Format Cells
5. Go to Protection Tab of dialog box
6. Click locked to Uncheck
7. Click on Ok
8. Select cells or range A1 to C3 (A1:C3)
9. Press-CTRL+1 to Format Cells
10. Go to Protection Tab of dialog box
11. Click locked to Check
12. Go to Review tab
13. Click on "Protect worksheet " in Changes group
14. Enter Password (123) => Click on OK
15. Re-enter Password (123) => Click on OK

Date: 10-03-2023

《Auditing:-》

Auditing examines the relation between cells and Formulas on the sheet and identifies errors. Auditing place arrows that point to the cell that provides data to formulas that refer to the cell.

A	B	C	D
---	---	---	---

Microsoft Excel

Product	Quantity	Rate	Amount
Mouse	10	159	
Keyboard	5	200	
USB	29	100	
Pendrive	30	259	

1. Select Cell D2
2. Go to "Formula tab"
3. Click on "Trace precedent" in Formula Auditing group

《Freeze:-》

It is used to freeze panes, first row and first column.

A	B	C
Name	Roll	Add
Kamar	1	Siwan
Faisal	2	Patna
Hesham	3	Punjab

《To freeze first row :-》

Process:-

1. Click inside data
2. Go to view tab
3. Click on freeze panes dropdown list
4. Click on any option
 - Freeze panes
 - Freeze top row
 - Freeze first column

Date: 11-03-2023

《Creating and using a list box or Combo box:-》

List boxes are used to display a set of options as a list and allow you to select an item from it, it returns the number of the item selected from the list. By storing the number returned by it in a Cell (**Called cell link**) a Condition can be given and this Condition can be used with D-Function to generate the desired result from controls (**List box or Combo box**) are available in Developer tab but Developer tab is not displayed by default . So we have to enable it.

Microsoft Excel

《How to enable Developer Tab:-》

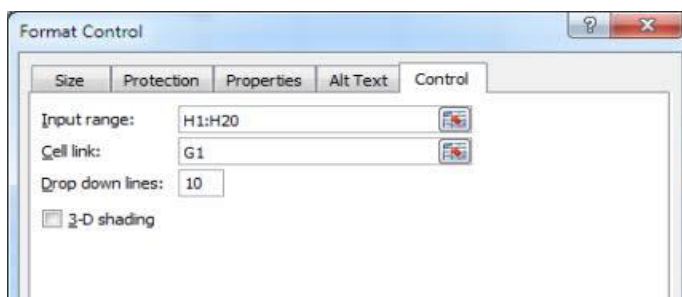
Process:-

1. Go to file tab
2. Click on Options
3. Click on Customise Ribbon
4. Check developer in Second panel in window
5. Click on OK

A	B	C	D	E	F
Branch	Income	Expense			
Siwan	600	200		Siwan	Branch
Patna	500	300		Patna	Siwan
Chhapra	350	500		Chhapra	
Siwan	1000	800			
Patna	800	500			
Chhapra	600	300			
Siwan	500	700			
Patna	450	200			
Chhapra	650	649			
Income	=DSUM (A1:C10 , "INCOME", F2:F3)				
Expense	=DSUM (A1:C10, "EXPENSE", F2:F3)				
P / L	= B12 - B13				

Process:-

1. Go to developer tab
2. Click on "Insert" in Controls group
3. Select "List or Combo box"
4. Left click hold and Drag at worksheet
5. Right Click on list box or Combo box
6. Click on Format Control



Microsoft Excel