# CHAPTER -1
# BASIC COMPUTER OPERTION

***COMPUTER :*** The computer word comes from the Greek word `compute'. It is an electronics device which converts raw data into meaningful information with the help of stored instruction.

In other terms it can be called as a device which takes input and gives us output under the control of set of instruction called a program.

## *IDENTIFICATION OF DIFFERENT COMPONENTES OF COMPUTER*

**KEYBOARD** : It is an input device. The keyboard allows the user to interact with the computer directly. Keyboard reassembled an electronic type writer. Keyboard has some special function keys(F1,F2……F12) Escape key (ESC) , Caps lock keys, Tab keys, Shift keys, Control keys , Alt keys and Enter keys etc.

**MOUSE** : It is an input device which used to point and select on the VDU/Monitor. A mouse may have 1, 2, 3 buttons. The function of each button is determined by the programme that uses the mouse. A mouse can be classified as optical or mechanical mouse depends upon the basic technology.

**MONITOR**: The most commonly used output devices is VDU (video display unit). It is used to display information on the screen. The information modes are text mode or graphical mode.

**CPU**: (CENTRAL PROCEESING UNIT): It is the brain of computer where all data's should manipulate with specified instruction then it display output. It also controls the input, output and storage devices. The CPU is divided into 3 basic parts.

a) Memory Unit
b) Control Unit
c) ALU(Arithmetic and logic unit)

a) Memory unit : It is called the main storage unit where we can store the data temporarily or permanently.
b) Control unit: - It is the central nervous system of computer, which control, maintain order or direct the operation of the entire system. It also control the input output(I/0) devices
c) ALU : It performs the arithmetical calculation and logical decision. It also manipulated the data like addition, multiplication, subtraction and division.

**STEP TO SWITCH ON THE COMPUTER**

1. Switch on the power switch from the switch board.
2. Switch on UPS.
3. Switch on the CPU.
4. Switch on the monitor.

**BOOTING PROCESS**

The process to activate the machine from dead stage to active stage called booting.

**STEPS FOR BOOTING**

1. The power switch for the computer should be ON.
2. The BIOS (basic input output system) program present in the ROM gets active.
3. The BIOS program checks for the available memory and all attached peripheral devices like CD,TAPE, etc. This process is termed as POST (power on self test). In case of any fault in them it is pointed out by either a sequences of beep on error message on the screen. The BIOP is read into RAM during system initialization.

4. The BIOS looks for presence of small program on 1st sector (sector 0) of 1st track (track 0) on the floppy disk (drive A) on the hard disk (drive c) loads it into memory. This program is called the boot program or boot strap loader. If the boot program is not found the floppy disk or hard disk is not recognize for use under MS DOS an error message is display accordingly.
5. This program searches for the operating system and copy them into the memory. In DOS, operating system, 1st it load msdos.sys and io.sys into the memory and then the command.com. In case this program are not found in bootable disk an error message is display. It indicate that the disk was a non system disk and requesting for inserting new disk with operating system.
    a) Cold boot
    b) Worm boot (ctrl + del + alt)

## STEP TO SHUT DOWN THE COMPUTER

1. Press alt+f4 key simultaneously, select shut down option and click on ok.

Or

Press the windows key from the keyboard or move the mouse pointer to the extreme right corner of the screen i.e. just above the taskbar, click on setting, click on power, click on shut down.

## STEP TO RESTART THE COMPUTER

Press the Reset button to restart the computer , or press CTRL + ALT + DEL or click on start button , then click on restart option to restart the computer.

### LAYOUT OF FRONT PANEL & BACK PANEL OF COMPUTER



# Chapter -2

# PERSONAL COMPUTER SYSTEM

## Mother Board

A Computer Motherboard is commonly known as Main board or MB or System board or logic board is designed on PCB (Printed Circuit Board).It holds or connects all components and parts together on a single sheet. It allocates power and allows communication between the CPU, RAM, and all other computer hardware components. It holds many important components such as Computer memory slots, CPU, SATA IDE slots, expansions slots(PCI,AGP etc),capacitor's, resistor's ,BIOS chip etc. Each type of motherboard is designed to work with specific types of processors and memory, so they don't work with every processor and every type of memory.

The motherboard may be characterized by the

1. Form factor
2. Chipset
3. Processor socket

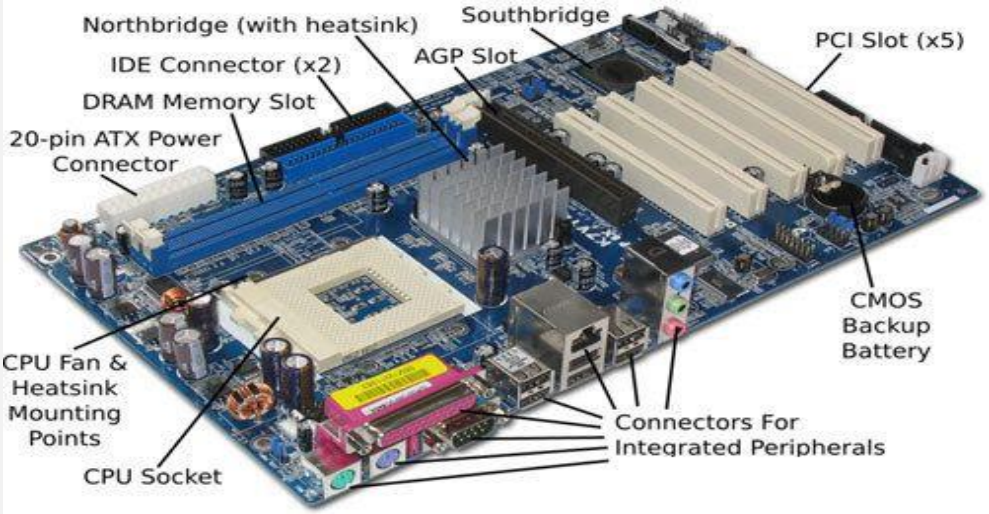
Form factor : It refers to the motherboard's geometry, dimensions, arrangement and electrical requirements. Advanced Technology Extended (ATX) is the most common design of motherboard for desktop computers.

Chipset : It is a circuit, which is used to controls the of resources such as the bus interface with the processor, cache memory and RAM, expansion cards, etc. It

used to coordinate data transfers between the various components of the computer.

The processor socket : It is a connector into which the processor is mounted. The Basic Input Output System (BIOS) and Complementary Metal – Oxide semiconductor (CMOS) are present on the motherboard.

Components of Motherboard




1. PCI Slot – This board has 2 PCI slots. These can be used for components such as Ethernet cards, sound cards, graphics card and modems.
2. Northbridge – It allows communication between the CPU and the system memory and PCI-E slots.
3. ATX power connection – This is one of the connections that supply power to the motherboard. This connection will come from your Power Supply.
4. CPU – Fan Connection – This is where your CPU fan will connect. Using this connection over one from your power supply will allow the motherboard to control the speed of your fan, based on the CPU temperature.
5. Socket – This is where your CPU will plug in. The bracket that is surrounding it is used for high end heat sinks. It helps to support the weight of the heat sink.
6. Memory slots – These are the slots for your RAM. Most boards will have 4 slots, but some will only have 2.
7. IDE connection – The IDE(Integrated Drive Electronics) is the connection for your hard drive or CD / DVD drive. Most drives today come with SATA connections, so we may not use this.

8. Southbridge – This is the controller for components such as the PCI slots, onboard audio, and USB connection.
9. SATA connections – These will be used for hard drives, and CD / DVD drives.
10. Front Panel connections – This is where you will hook in the connections from your case. These are mostly the different lights on your case, such as power on , hard drive activity etc.
11. FDD connection – The FDD is the floppy Disk controller. If you have a floppy disk drive in your computer, this is where you will hook it up.
12. External USB connections – This is where you will plug in external USB connections for your case or USB bracket.
13. CMOS battery – This is the motherboard's battery. This is used to allow the CMOS to keep it settings.

Types of ports and connectors

**Keyboard & Mouse :** This Port is used to connect keyboard and mouse , now a day we use USB connector for keyboard and mouse

**Serial or COM :** It used to connect some types of modem, scanner, or digital camera

**Parallel or Printer** : You plug your printer into the parallel, or printer, port. But now printers may use a USB port

**USB :** Designed to replace older Serial and Parallel ports, the USB (Universal Serial Bus) can connect computers with a number of devices, such as printers, keyboards, mice, scanners, digital cameras, PDAs, and more

**Video or Monitor** : It used to connect your monitor into the video port

**Line Out** : It used to connect speakers or headphone into the Line Out jack

**Line In** : The Line In jack allows you to listen to your computer using a stereo system

| | |
|---|---|
|  | **Microphone** : It used to connect a microphone into this jack to record sounds on your computer |
|  | **Joystick or Game** : If you have a joystick, musical (MIDI) keyboard, or other gaming device, this is where you plug it in |
|  | **Phone or Modem** : The phone or modem jack is where you plug your computer into a phone line |
|  | **Network or Ethernet** : You can connect your computer to a network by plugging in an Ethernet cable in this port |
|  | **SCSI** : It used to connect a hard drive, CD-ROM drive, or other device to a computer |

## Chapter - 3

## COMPUTER LAB SAFETY AND STUDY OF LAB TOOLS

### Lab Safety Measures

Safety guidelines help protect individuals from accidents and injury. They also help to protect equipment from damage. Some of these guidelines are designed to protect the environment.

**1) General Safety**

Safe working conditions help prevent injury to people and damage to computer equipment. A safe workspace is clean, organized, and properly lighted. Everyone must understand and follow safety procedures.

**CAUTION**

This is a partial list of basic safety precautions to use when working on a computer:

- Remove your watch and jewelry and secure loose clothing.
- Turn off the power and unplug equipment before performing service.
- Cover sharp edges inside the computer case with tape.
- Never open a power supply or a CRT monitor.
- Do not touch areas in printers that are hot or that use high voltage.
- Know where the fire extinguisher is located and how to use it.
- Keep food and drinks out of your workspace.
- Keep your workspace clean and free of clutter.
- Bend your knees when lifting heavy objects to avoid injuring your back.

**2) Electrical Safety**

Follow electrical safety guidelines to prevent electrical fires, injuries, and fatalities in the home and the workplace.

**CAUTION**

- Do not wear the antistatic wrist strap when repairing power supplies or CRT monitors. Only experienced technicians should attempt to repair power supplies and CRT monitors.
- Some printer parts become hot during use, and other parts might contain high voltage. Check the printer manual for the location of high-voltage components. Some components retain a high voltage even after the printer is turned off. Make sure that the printer has had time to cool before making the repair.
- Electrical devices have certain power requirements. For example, AC adapters are manufactured for specific laptops. Exchanging power cords with a different type of laptop or device may cause damage to both the AC adapter and the laptop.

**3) Fire Safety**

Fire can spread rapidly and be very costly. Proper use of a fire extinguisher can prevent a small fire from getting out of control.

**CAUTION**

follow these safety procedures:

- Never fight a fire that is out of control or not contained.
- Always have a planned fire escape route before beginning any work.
- Get out of the building quickly.
- Contact emergency services for help.
- Locate and read the instructions on the fire extinguishers in your workplace before you have to use them.

**Analysis of various Power Fluctuation Types(Blackout, Brownout, Noise, Spike)**

The following types of AC power fluctuations can cause data loss or hardware failure:

- **Blackout** - Complete loss of AC power. A blown fuse, damaged transformer, or downed power line can cause a blackout.
- **Brownout** - Reduced voltage level of AC power that lasts for a period of time. Brownouts occur when the power line voltage drops below 80 percent of the normal voltage level. Overloading electrical circuits can cause a brownout.

- **Noise** - Interference from generators and lightning. Noise results in poor quality power, which can cause errors in a computer system.
- **Spike** - Sudden increase in voltage that lasts for a short period and exceeds 100 percent of the normal voltage on a line. Spikes can be caused by lightning strikes, but can also occur when the electrical system comes back on after a blackout.
- **Power surge** - Dramatic increase in voltage above the normal flow of electrical current. A power surge lasts for a few nanoseconds, or one-billionth of a second.

**Power Protection Devices**

To help shield against power fluctuation problems, use devices to protect the data and computer equipment:

- **Surge suppressor** - Helps protect against damage from surges and spikes. A surge suppressor diverts extra electrical voltage that is on the line to the ground.
- **Uninterruptible power supply (UPS)** - Helps protect against potential electrical power problems by supplying a consistent level of electrical power to a computer or other device.
- **Standby power supply (SPS)** - Helps protect against potential electrical power problems by providing a backup battery to supply power when the incoming voltage drops below the normal level. The battery is on standby during normal operation. When the voltage decreases, the battery provides DC power to a power inverter, which converts it to AC power for the computer. This device is not as reliable as a UPS because of the time it takes to switch over to the battery. If the switching device fails, the battery cannot supply power to the computer.

**Procedures for proper Disposal or recycling of computer components**

**Equipment Disposal**

Batteries

Monitors

Toner Kits & Cartridges

Chemical Solvents and Aerosol Cans

**Study of General Lab Tools**

- **Hardware Tools**

A toolkit should contain all the tools necessary to complete hardware repairs. Hardware tools are grouped into four categories:

**1) ESD tools :** There are two ESD tools : The antistatic wrist strap and the *antistatic mat*. The antistatic wrist strap protects computer equipment when grounded to a computer chassis. The antistatic mat protects computer equipment by preventing static electricity from accumulating on the hardware or on the technician.

**2) Hand tools**

screwdriver , Wire cutters , Tweezers , Part retriever , Flashlight , Wire stripper , Crimper , Punch-down tool

**3) Cleaning tools :** Having the appropriate *cleaning tools* is essential when maintaining and repairing computers. Using the appropriate cleaning tools helps ensure that computer components are not damaged during cleaning. Cleaning tools include the following : Soft cloth , Compressed air , Cable ties , Parts organizer

**4) Diagnostic tools :** *Diagnostic tools* are used to test and diagnose equipment. Diagnostic tools include the following:

Digital Multimeter , Loopback adapter , Toner probe

- **Software Tools**

Like hardware tools, there are a variety of software tools that can be used to help technicians pinpoint and troubleshoot problems. Many of these tools are free and several come with the Windows operating system.

**Disk Management Tools**

Disk management is used to manage the drives installed in a computer like hard drives (internal and external) , optical disk drives and flash drives. It can be used to partition drives , format drives, assign drive letters and much more.

The following are some disk management tools:

- **FDISK:** A command-line tool that creates and deletes partitions on a hard drive. The FDISK tool is not available in Windows XP, Vista, or 7. It has been replaced with the Disk Management tool.
- **Disk Management Tool:** Initializes disks, creates partitions, and formats partitions.
- **Format:** Prepares a hard drive to store information.
- **ScanDisk or CHKDSK:** Checks the integrity of files and folders on a hard drive by scanning the file system. These tools might also check the disk surface for physical errors.

- **Defrag:** Optimizes space on a hard drive to allow faster access to programs and data.
- **Disk Cleanup:** Clears space on a hard drive by searching for files that can be safely deleted.
- **System File Checker (SFC):** A command-line tool that scans the operating system critical files and replaces files that are corrupted.

# Chapter – 4
# OPERATING SYSTEM
## MS DOS (Microsoft disk operating system)

It is a non-graphical command line operating system which was introduce by Microsoft in August 1981. It is the first widely install in personal computer in the 1980s.

- It is character user interface software (CUI).
- It is a single user single task is operating system.
- It is less powerful or a slow operating system.
- All commands have to be typed at the DOS prompt by using keyboard only.
- It does not support graphics.
- It is not having the plug and play facility to assign a new device.
- The DOS is having 3 system file that is IO.SYS, MSDOS.SYS, COMMAND.COM.
- IO.SYS and MSDOS.SYS are hidden file where as COMMAND.COM is unhidden file.

**DOS** is having mainly two types of command. That is Internal and External Command.

**Internal command:** All internal command are stored in one file called command.com and it is automatically loaded into RAM or memory when the machine is switch on. This is called RAM resident command which is resides in computer memory till the machine is switch on. Some internal commands are DATE, TIME, CLS, VER, VOL, EXIT, COPY CON <FILE NAME>, DIR, COPY, REN, TYPE, DEL, MD, CD, RD, WILD CARDS etc.

**External command:**

1. These commands are present in independent files in the external file storage disk.
2. These are called disk resident commands.

3. When an external command is called MSDOS locates this command on disk loads in its memory then it gets executed.
4. If a command is split wrongly or if an external command files is missing DOS will display an error message. Some of the external command are TREE, FORMAT, MOVE, EDIT,etc.

**File:** File is collection of data information.
**Directory:** Directory is a collection of several types of files.

**Rules of file name**

- In DOS the file name is divided into two sections that is primary name and extension name.
- The Primary name and extension name is divided by a DOT symbol (.).
- The maximum length of primary name is eight characters and the extension name is three characters.
- No space, no punctuation marks are allowed in between file name.
- The first letter must be an alphabet and rest of the name is numeric.
- The primary name is compulsory whereas the secondary name is optional.

**HOW TO START DOS FROM WINDOWS OS.**

- Click in search option -> type cmd or command ↵

## COMMANDS

**Internal commands**

**1. DATE: -** It is used to display the current system date and also to enter the new date.

Syntax- DATE

**Example- C :\> DATE** ↵

**Output-** The current date is: 26-12-20
Enter the new date: (DD-MM-YY)

**2. TIME: - It** is used to display the current system time and also to enter the new time.

Syntax- TIME

**Example- C :\> TIME** ↵

**Output-** The current time is: 22:01:25.82
Enter the new time:

**3. CLS: -** It is used to clear the data.

Syntax- CLS

**Example- C :\> CLS** ↵

**4. VER: -** It is used to display the version number of OS.

Syntax- VER

**Example- C :\> VER** ↵

**Output-** Microsoft windows [Version 10.0.16299.309]

**5. VOL: -** It is used to display the external volume label name of the disk.

Syntax- VOL

**Example- C :\> VOL** ↵

**Output-** Volume in drive C is WINDOW
Volume Serial Number is 7E45-2035

**6. COPY CON: -** It is used to create a file.

Syntax- COPY CON <File name>

Data's for saving the file **Ctrl+z or** F6**.**

**Example- C :\> COPY CON Document**

Notes of a skdav. ^z ↵

**7. DIR: -** It is used to display the directory listing of a specified drive.

Syntax- DIR

**Example- C :\> DIR** ↵

Volume is drive C is WINDOWS
Volume serial number is 7E45-2035
Directory of C:\

| | | | |
|---|---|---|---|
| 16-12-2020 | 00:29 | <DIR> | 3D Objects |
| 20-12-2020 | 10:45 | 401 | skdav |

2 File(s) 802 BYTES
15 DIR(s) 956,100,653,056 Bytes Free.

**8.** To change the drive.

Syntax- <Drive name>:

**Example- C :\> D:** ↵

**D :\> DIR** ↵

D :\> C: ↵

C :\>

**9. DIR/P: -** It is used to display the directory listing in page wise manner.

Syntax- DIR/P

**Example- C :\> DIR/P** ↵

**10. DIR/W: -** It is used to display the directory listing in wider and columnar manner.

Syntax- DIR/W

**Example- C :\> DIR/W ↵**

**11. DIR <file name>:-** It is used to display a specified file.

Syntax- DIR <file name>

**Example- C:\> DIR skdav ↵**

Volume in drive C is windows
Volume serial number is 7E45-2035
Directory of c:\
20-12-2018 22.45 401 skdav
1 file(s) 401 bytes
0 dir(s) 955,587,928,064 bytes free.

**12. DIR/p/w: -** Display the list of file in page wise and wider manner.

**Example- C :\> DIR/p/w ↵**

**13. REN -** It is used to rename a file.

Syntax- REN <old file name> <new file name>

**Example- C :\> REN Document skdav ↵**

**14. COPY -** It is used to make a duplicate copy of the source file. The target file name must be a new file name.

Syntax- Copy <source File name> <Target file name>

**Example- C :\> Copy document Bio ↵**

**15. TYPE -** It is used to display the contains of a file. That is only in readable mode.

Syntax- Type <file name>

**Example- C :\> Type skdav ↵**

**16. DEL -** It is used to remove a file from disk.

Syntax- DEL <file name>

**Example- C :\> DEL Bio ↵**

**17. MD (Making directory) :-** It is used to create a new directory.

Syntax- MD <directory name>

**Example- C :\> MD software ↵**

**18. CD (Change directory):-** It is used to change the directory name.

Syntax- CD <Directory name>

**Example- C :\> CD Software ↵**

**19. RD (Remove directory):-** It is used to remove the directory.

**Rules of RD command:**

I. While removing the directory always parent directory should be activated than we should remove the child directory.

II. Before deleting the directory it must be empty.

III. The directory name or file name are not same.

Syntax- RD <Directory name>

**Example- C :\> RD Software ↵**

**20. CD..** It back for 1 step.

Syntax **- cd ..**

**Example- C:\users\user> CD.. ↵**

**21. CD.. \..** **-** It back for 2 steps.

Syntax **– cd..\..**

**Example- C:\users\user> CD..\.. ↵**

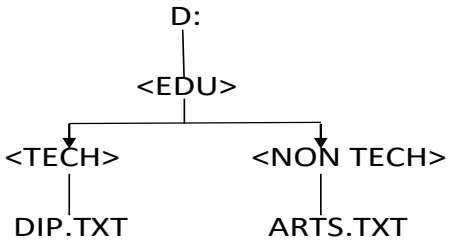
**22. CD\ -** It activates the root directory.

Syntax **– cd**

**Example- C:\users\user> CD\ ↵**

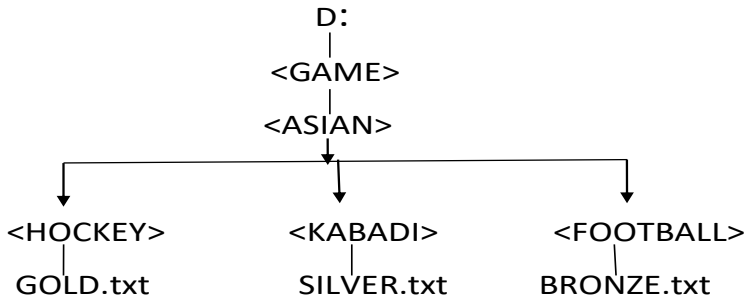
**Lab work-1**

- Create the below structure in MS DOS.




**Lab Work- 2**

- Create the below structure in MS DOS.




## Labwork – 1

D:\> MD EDU

D:\> CD EDU

D:\EDU> MD TECH

D:\EDU> MD NONTECH

D:\EDU> CD TECH

D:\EDU\TECH> COPY CON DIP.TXT

I'm the diploma student of SKDAV clg.

^z

D:\EDU\TECH> CD..

D:\EDU> CD NONTECH

D:\EDU\NONTECH> COPY CON ARTS.TXT
I'm the arts students of SKDAV clg.
^z
D:\EDU\NONTECH> CD ..

D:\EDU> CD\

D:\>

**Labwork – 2**

D:\>MD GAME

D:\>CD GAME

D:\GAME>MD ASIAN

D:\GAME>CD ASIAN

D:\GAME\ASIAN>MD HOCKEY

D:\GAME\ASIAN>MD KABADI

D:\GAME\ASIAN>MD FOOTBALL

D:\GAME\ASIAN>CD HOCKEY

D:\GAME\ASIAN\HOCKEY> COPY CON GOLD.TXT

DHYAN CHAND

^z

D:\GAME\ASIAN\HOCKEY>CD..

D:\GAME\ASIAN>CD KABADI

D:\GAME\ASIAN\KABADI> COPY CON SILVER.TXT

PRADEEP NARWAL

^z

D:\GAME\ASIAN\KABADI>CD..

D:\GAME\ASIAN>CD FOOTBALL

D:\GAME\ASIAN\FOOTBALL> COPY CON BRONZE.TXT

BAICHUNG BHUTIA

^z

D:\GAME\ASIAN\FOOTBALL> CD\

D:\>

**Labwork – 3**

Remove the EDU directory from D: drive. (i.e. Labwork-1)

D:\> CD\EDU\TECH

D:\EDU\TECH> DEL DIP.TXT

D:\EDU\TECH> CD..

D:\EDU> RD TECH

D:\EDU> CD NONTECH

D:\EDU\NONTECH> DEL ARTS.TXT

D:\EDU\NONTECH> CD..

D:\EDU> RD NONTECH

D:\EDU> CD\

D:\> RD EDU

**Wild card**

Wild Card: - It is used for substituting one character or set of characters.
1. *(Astrick) - It is used to substituting one or more than one character at a time.
2. ? (Question Mark) - It is used to substitute one character at a time.

| Wild card | What is represents | EXAMPLE |
|---|---|---|
| * . txt | All files with extension name as "txt". | Letter.txt<br>Abhi.txt |
| Report .* | All files with primary name as "report" and any extension name. | Report.txt<br>Report.doc |
| M*. * | All files starting with letter "M" and any extension name. | Memo.txt<br>Manual.doc |
| ???.* | All files fall in between 3 letter and any extension name | Win.txt<br>Rom.doc<br>DJ.bak |

**External Command**

1. Format: - This command is used for to create new tracks and sector into the external disk that means it prepare a new disk by creating new track and sector.

Syntax : format <drive name > : ↵
Example : format e: ↵

2. Move: - It is used for moving all the files from one directory to another directory.

Syntax- MOVE <Source path and file name> <Target path>
Example- C:\>Move C:\Newcollege\ITI\ETC*.* C:\Newcollege\ugie\Chem ↵

3. Tree: - It is used to view the list of directory and subdirectory present and the disk on graphical from.

Syntax- Tree

Example- C :\> Tree ↵

Tree/f: - It is used for display any specific subdirectory contains by showing the file name also.

Syntax- Tree/f

Example- C :\> Tree/f ↵

Example- C :\> Tree/f C:\newclg ↵

4. Edit: - This command is used to modify or change the data of a file. That means it is the alternate commands of "copy con" command. The demerit of "copy con" command is the merit of edit command.

Syntax- Edit

Example- C :\> EDIT ↵

## Lab Work- 4

1. Change the directory to **HOCKEY**
Copy **GOLD.txt** files from <HOCKEY> to <KABADI>by using path concept.

**D:\> CD\GAME\ASIAN\HOCKEY**
**D:\GAME\ASIAN\HOCKEY> COPY GOLD.TXT D:\GAME\ASIAN\KABADI**

2. Back to the root directory
Move SILVER.txt from <KABADI> to <FOOTBALL> by using path concept.

**D:\GAME\ASIAN\HOCKEY> CD**
**D:\>MOVE D:\GAME\ASIAN\KABADI\SILVER.TXT D:\GAME\ASIAN\FOOTBALL**

3. Create a file on the name of SAMPLE.DOC by edit command inside <KABADI> directory.

**D:\>CD\GAME\ASIAN\KABADI**
**D:\GAME\ASIAN\KABADI> EDIT SAMPLE.DOC**

4. Display the total structure of <GAME> directory by using tree/f command.

**D:\GAME\ASIAN\KABADI> CD**
**D:\> TREE/F D:\GAME**

5. Copy all the files from <KABADI> directory and place it inside <ASIAN> directory by using path concept.

**D:\> COPY D:\GAME\ASIAN\KABADI*.* D:\GAME\ASIAN**

6. Display the directory of <FOOTBALL> by using path concept.

**D:\> DIR D:\GAME\ASIAN\FOOTBALL**

7. Create a new file on the name of A1.txt inside <ASIAN> by edit command path concept.

**D:\> EDIT D:\GAME\ASIAN\A1.TXT**

8. Rename all the .txt to .Bak of <ASIAN> directory.

**D:\> REN D:\GAME\ASIAN*.TXT *.BAK**

9. Remaining in <HOCKEY> move the files from <ASIAN> directory to <FOOTBALL> directory, those files first letter is A and 2nd letter don`t know and its extension may be anything.

**D:\>CD\GAME\ASIAN\HOCKEY**
**D:\GAME\ASIAN\HOCKEY>MOVE D:\GAME\ASIAN\A?*.* D:\GAME\ASIAN\FOOTBALL**

10. Open SAMPLE.DOC file which is placed inside <KABADI> directory.

**D:\GAME\ASIAN\HOCKEY> TYPE D:\GAME\ASIAN\KABADI\SAMPLE.DOC**

# Chapter – 5

## BASIC WINDOWS OPERATING SYSTEM OPERATIONS

**Operating System:** It is a type of system software that acts as an interface between the users of a computer and the computer hardware. It acts as the resource manager that use the computer resources like CPU, memory, files and I/O devices in an efficient manner. Example: MS DOS, MS Windows, Unix etc. There are various versions of MS Windows available like Windows XP, Vista, 7,8 or 10.

### What is a window?

A window is an area on the desktop with in which all window based programs run. Each application opened will appear in its own window, or its own little section of the screen. Windows can be moved and resized so that we can operate many different applications at the same time.

**Basic components of windows**

Window : A window is an area of desktop within which all widows based program run.

Desktop : Desktop refers to main background area. We can customize desktop in various ways such as editing background pictures, changing background color and changing the icons on the desktop. There are small pictures which appear on the left side of the desktop called icon. We choose are of the icon by double clicking on it.

Taskbar : The taskbar is a simple row at the very bottom of the screen where all currently opened files or applications are listed. It helps you select what you want to keep opened and what you want to close.

Start Menu: By clicking the start menu, in the bottom left corner of the screen, a vertical window consisting of the recently opened applications and saved locations will pop-up.

Clock : It displays the current time. It appears on the right side of the taskbar.

My computer: It provides a quick access to our computer disk device. Control panel and internal devices.

My document : It provides a complete space to store our document.

Recycle bin : It stores all the information of all the deleted files and folder. It also allows us to recover them.

Network place: It allows us to view or display various network available and files and folders on our network.

Maximize/Minimize/Close Buttons:

These buttons are located at the top right corner of our opened documents, and the area used to close, minimize or maximize the document window. They help us jump from one task to another fast and let us decide either we want to close an application or resize it’s area on the screen or just hide it for a few moments

WINDOWS UTILITIES & ACCESSORIES

In Windows 10 we still have well-known Windows Accessories folder. It is available in
Start Menu > All Apps > Windows Accessories.

1. Note pad : It is a simple text editor for Microsoft windows. It is a common text only editor which have no format tags or styles. The extension name is .TXT .
2.Word pad : It is a basic word processor. It is more advanced then note pad but less efficient then Microsoft word. The extension name is .DOC.
3. Paint : It is a drawing tool. The extension name is .BMP
4. Calculator : It is commonly used icon calculating tools in window OS.
5. Character Map : It is the built-in utility for helping us insert all possible text symbols or special characters into our document.
6. Sound recorder : It record sound and save it in the computer

MOUSE OPERATIONS

A computer mouse is a hand-held pointing device that detects two dimensional motion relative to a surface. This motion is typically translated into the motion of a pointer on a display, which allows a smooth control of the Graphical User Interface of a computer. On a standard mouse, there are three controls: Left button, Right button and the wheel in between.

Operations:

A mouse typically controls the motion of a pointer in two dimensions in a graphical user interface (GUI).

Different ways of operating the mouse cause specific operations to be performed in the GUI:

- Click : pressing and releasing a button.
- (left) Single-click : Clicking the left mouse button once.
- (left) Double-click : Clicking the left button two times in quick succession. Point to the icon to open (My Computer) on the desktop and then double-click by quickly pressing and releasing the left mouse button twice without moving the mouse.
- Right-click : Clicking the Right button. Point to any icon on the desktop or in a window or a selected character, word or paragraph and then click the right mouse button. This brings a shortcut menu with different options depending on the software. Some of the options are enabled(black colour) and some disabled(gray colour). The disabled options become enabled(black) only if the object is selected.

DRAG AND DROP : In computer graphical user interface drag and drop is the action of clicking on an object and dragging it to a different location as required.

The basic sequence involved in drag and drop is :

- Press and hold down, the button on the mouse or the other pointing device to “grab” the object.
- “Drag” the object/ cursor/ pointing device to the desired location.

“Drop” the object by releasing the button

FIND FILES AND FOLDERS :

Click on start button. The start menu will appear.

Highlight search.

Click files or folders. The search results dialog box will open.

Choose on option.

Enter your search criteria. Use the table that follows to help you.

Click search. The results of your search will appear in the right pan.

CHANGE WINDOW TASKBAR PROPERTIES :

Right-click a blank area of the taskbar.

From the menu, select properties.

In the taskbar and start menu properties dialog.

Check group similar taskbar buttons.

Click ok.

CREATE A SHORTCUT TO AN ITEM ON THE DESKTOP

Click start. The start menu will appear.

Locate the item which you want to create a shortcut. If the item is located on a submenu, go to the submenu.

Click and drag the item on your desktop.

KEYBOARD OPERATIONS :

This table lists the commonly used shortcut keys:

| TO | PRESS |
|---|---|
| Activate Help | F1 |
| Activate context- sensitive Help | Shift –F1 |
| Zoom in (limit 1600%) | PgUP |
| Zoom out (limit 25%) | PgDN |
| Switch windows forward | F6 |
| Switch window backward | Shift-F6 |
| Undo an operation | CTRL-Z |
| Redo an operation | CTRL-Y |
| Close Maxlm DL | ALT-F4 |
| Open a file | CTRL-N |
| Save a file | CTRL-S |
| Create a new file | CTRL-N |
| Open camera control window | CTRL-W |
| Open Observatory control window | CTRL-T |

FILE EXPLORER / WINDOWS EXPLORER AND UTILITIES

File / Windows Explorer : It is a place we can view the drives on your computer and manipulate the folders and files using windows explorer. We can cut, copy, Paste, Rename and delete folders and files.

To Open Windows Explorer :

I. Click the start button, located in the lower left corner on our screen.
II. Go to the programs.
III. Go to Accessories.
IV. Click windows explorer.

**To create file/folders :** Open windows explorer -> Right click in right side =? New -> File/Folder

**To cut/copy/paste/delete**- File/Folder

CUT :

- Select what you want to cut.
- Click Edit, which is located on the menu bar. A drop-down menu will appear.
- Click Cut.

PASTE :

- Place the cursor at the point where you want to place the information that is currently on the Clipboard.
- Click Edit. A drop-down menu will appear.
- Click Paste.

COPY :

- Select what you want to copy.
- Click Edit, which is located on the menu bar. A drop-down menu will appear.
- Click copy.

Using keyboard shortcuts :

Cut :

- Select what you want to cut.
- Press Ctrl + X.

Paste :

- Place the cursor at the point where you want to place the information that is currently on the Clipboard.
- Press Ctrl + V.

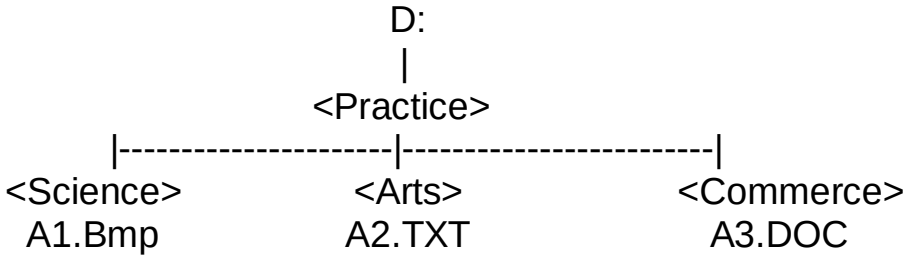
Copy :

- Select what you want to copy.
- Press Ctrl + C.

Expanding and collapsing explorer folders : We will find a (+) and (-) sign on the left side of the list of folders.

By clicking on “+” sign we expanding the folder or click on “-“ sign we collapse the folders.

Lab Work- 5




1. Design the structure in windows explorer.
   Right click on the start button -> select windows explorer / file explorer -> select D: drive -> at the right side of the screen press right mouse button (RMB) -> new -> folder -> name as practice . Like such a manner create all the folders as science, arts and commerce.

   To create any file inside the above folder -> double click that folder -> press RMB of the right side of the screen -> select new -> select any file type-> create a file.
   For ex : paint, notepad, wordpad etc.

2. Copy A1.Bmp file from <Science> to <Arts>.
   Select A1.bmp file -> right click -> copy -> open the arts folder -> right click -> paste

3. Rename A3.DOC file  AA3Doc file.
   Select A3.doc -> right click -> rename -> write the new name as AA3.doc

4. Move A2.Txt file from <Arts> to <Practice>.
   Select A2.txt -> right click -> cut -> select the practice folder -> right click -> paste.

5. Delete A1.Bmp file from <Arts>.
   Select A1.bmp file -> right click -> delete -> Yes (send the file to recycle bin)

6. Create a shortcut of AA3.Doc file in desktop.
   Press RMB in desktop -> new shortcut -> browse -> to select the file A3.doc -> click in next -> write the shortcut name -> finish.

7. Change the icon symbol of AA3.Doc file.
   Select the A3.doc file which is available in desktop as shortcut -> right click -> properties -> change icon -> select any picture -> ok -> ok.

8. Restore A1.Bmp file from recycle bin.
   Open the recycle bin -> select A1.bmp file -> right click -> restore.

9. Change the Screen Saver to 3D txt.
   Right click on desktop -> personalized -> screen saver -> select screen as 3D text -> click in setting -> write your name inside custom text -> ok -> ok

10. Change the date and time.
    Goto the notification area -> click in date & time -> select change date & time -> set the correct date -> ok -> ok

# Chapter – 6

## WORD PROCESSING(MS-word)

The application programmed that enables the processing of word is called word processing. A word processing is a software package, that helps us to create edit to save to print document.
Popular word processing software are :

- Word star
- Word Perfect
- Microsoft word

Microsoft word :It is a word processing software. MS Word is a software that allows to type, design different style of letter, grammatical & spelling error checking, creating mail merge etc.
Starting MS Word :

→Click on start button.
→ Click on all programme
→ Click on ms office
→ Click on ms word.

Identifying Components of the Word Screen

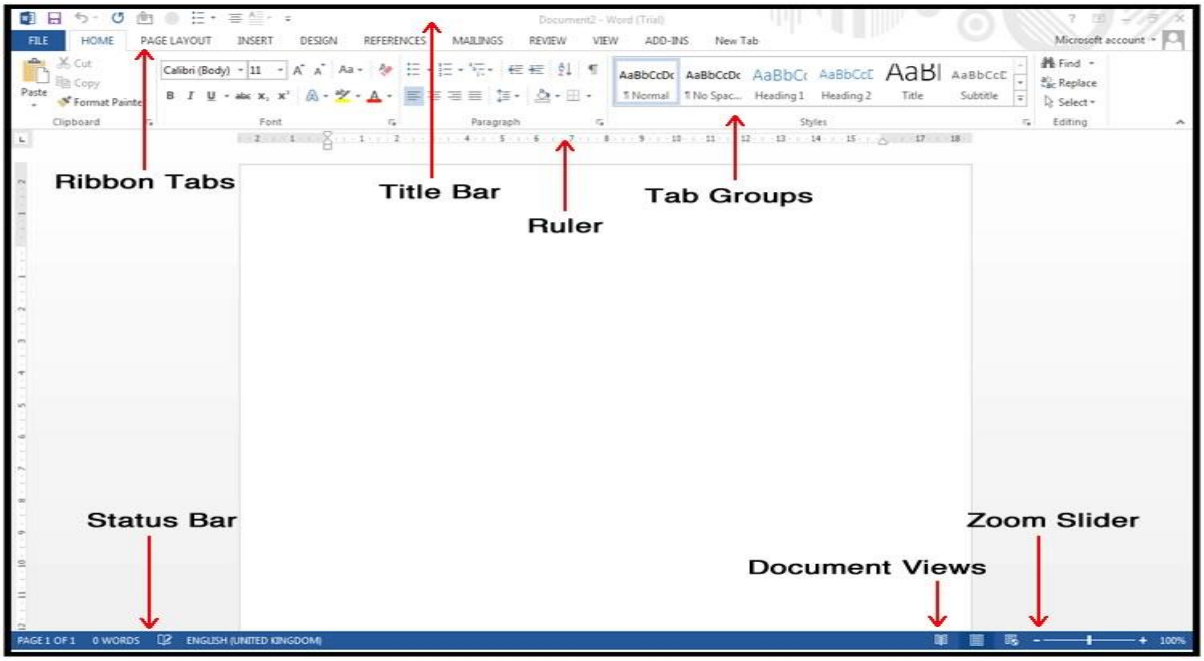



Figure 1-1: The Document Window

**Create a new document :**
Click on file → Click on new → Click on new document.
**Opening a new document :**
Click on file → Click on open → Select the file you want to open → Select on Open.
**Close a document :**
Click on file → Click on close
**Saving a document :**
Click on file. → Click on save → Click on save as → Click on enter name the file name → Click on save.

**Move, copy, and delete text :**

- To cut text to the Clipboard:

Select the text → On the Home tab, in the Clipboard group, click the Cut button.
Or,
Right-click the selection → click Cut. Or Press Ctrl+X.

- To copy text to the Clipboard:

Select the text → On the Home tab, in the Clipboard group, click the Copy button.
Or,
Right-click the selection → click Copy. Or Press Ctrl+C.

**To paste the most recent item from the Clipboard :**

Position the cursor where we want to insert the text → On the Home tab, in the Clipboard group, click the Paste button.
Or,
Press Ctrl+V Or Right-click where we want to insert the text, and then in the Paste Options section of the menu, click a paste option

**To undo our last editing action :**

Do either of the following:
On the Quick Access Toolbar, click the Undo button.
Or,PressCtrl+Z.

**Spelling and grammar :**

- To check a word that was red underlined as misspelled right click on the word.
- To replace the word with one of the choice the original work.
- Any possible correct spelling will be listed.
- The word underlined because it is not in the dictionary right clicks on the word and the result will added for the menu.
- It is a word phase is underlined with green there is a grammatical error.
- Right click on the line and select the appropriate suggestion.

**Apply paragraph formatting :**

Select the paragraph you want to apply the paragraph formatting -> right click -> select paragraph -> select Indent & spacing -> set alignment(left /right/center/justify) , set indentation (left/right margin) , set line spacing etc.

**Insert clipart :**

To click on insert -> Click on clipart icon -> Search the required clipart -> Click on the drop down option at the right of the picture and select insert.

**Insert Picture :**

To click on insert-> Click on picture -> click in stock image(win 10) -> select ant picture -> click in insert.

**To insert Equation &symbol :**

To click on insert -> click in equation-> select any format for equation -> type the equation

**Header & Footer :**

Headers and Footers allow us to add information (e.g. name, title of document, etc.) within the top or bottom margins of our document, and will repeat on every page for our document.

Step

To click on insert -> click in Header or footer -> select the format -> type the message for header & footer -> click in close header & footer

**Tables**

Tables are useful for presenting text information and numerical data in a neat and orderly fashion. A Table consists of rows and columns that intersect to form boxes called cells, which we can then fill with text, numbers, or graphics. We can also format our table for added effect (e.g. make the lines within the table visible or invisible).

Step

Click the Insert tab -> Click the Table icon -> In the Insert Table drop-down menu, move our mouse pointer over the boxes until we have the number of rows and columns that we want in the table.

The Live Preview feature will show what the table will look like in the document -> Click to confirm the table.

**Inserting Page Numbers**

Word provides a simple tool for adding page numbers to our document. The insert page number tool also provides a selection of simple, and colourful options for our page numbers.

Step

Click the Insert tab -> click Page Number -> In the Page Number drop-down menu, click Bottom of Page ->

In the Bottom of Page drop-down menu, select a Page Number from the list .

**Mail Merge**

Mail Merge is a useful tool that allows us to create multiple letters, labels, envelopes, name tags, emails, and more. By using information stored in a list, database, or spreadsheet, we can create personalized documents by merging the information with a form letter, mailing labels, or envelopes. We can perform a mail merge by using the Mail Merge Wizard, or by using the commands on the Mailings tab.

**Step**

Create a data file (new file) -> create a table (specify the rows & cols) -> store the datas -> save the file -> close it

Create a form letter file (new file) to design the letter format -> Type the letter -> add the data file into this form letter file -> click in mailing -> start mail merge -> letters -> click in select recipients -> use an existing list -> select the data file -> click in open -> click in insert merge field -> select the fields one by one ( place the field in the proper place) -> click in finish & merge -> edit individuals document / print document.

LAB WORK -6

1. Type the given below data as per given format ?

[Operating System]

Different OS name :

- Dos
- Windows
- Unix
- Linux

Disk operating system : The operating system is used for operating files on a computer. It is set of computer programme and also known as DOS are to change list file is allow cut system resources, according to the requirement DOS provides pictures, assential to control hardware devices such as keyboard.

Ans – click in start -> Type Word 2016 in search tab -> press enter ->

Type the above data by using proper alignment, formatting & check spelling , rectify it.

2. Add the line spacing 2.5 for the above paragraph ?

Ans – Select the paragraph -> click in home tab -> click on line spacing -> select 2.5

3. Type the header message as “operating system” and footer as page no. ?

Ans –

HEADER - Go to insert -> Header -> choose the format -> type the message given as “OPERTING SYSTEM”

FOOTER – Go to insert -> footer -> choose the format -> type the message as “Page no”, then click in insert page no.

4. Type different application software name in numbering format ?

Ans – Select numbering format under HOME tab Paragraph ground -> type the data one by one by pressing enter key.

5. Design the eqn $Z = \frac{x^2+y^2}{\sqrt{x^3+y^3}}$ $\boldsymbol{A} \cap \boldsymbol{B} \neq \boldsymbol{A} \cup \boldsymbol{B}$.

Ans – Goto insert -> equation -> choose the style -> type the equations.

6. Change the format of the paragraph as :

FONT NAME - Arial

FONT SIZE - 10

Alignment – Justify

BORDER AS OUT SIDE

Ans – Select the paragraph -> click in home -> change font name, size, alignment and border.

7. Send your birthday invitation message to your 5 friends.

Ans – Create a data file (new file) -> create a table (specify the rows & cols) -> store the datas -> save the file -> close it

| Name | Add | Pincode |
|---|---|---|
| Ajay | Bbsr | 769012 |
| Rohit | Ctc | 752345 |
| Mohit | Rkl | 782345 |

Create a form letter file (new file) to design the letter format -> Type the letter -> add the data file into this form letter file -> click in mailing -> start mail merge -> letters -> click in select recipients -> use an existing list -> select the data file -> click in open -> click in insert merge field -> select the fields one by one ( place the field in the proper place) -> click in finish & merge -> edit individuals document / print document.

To

«Name»

«Add»

«Pincode»

Sub : bday invitation card

Dear «Name»

I will be celebrating my b'day party to be held on 3rd Jan 2021 so u r invited to join my b'day party.

From

RAM...

# Chapter – 7

## SPREAD SHEET SOFTWARE (MS- EXCEL)

The Microsoft Excel is a spreadsheet package included in the Microsoft Office.

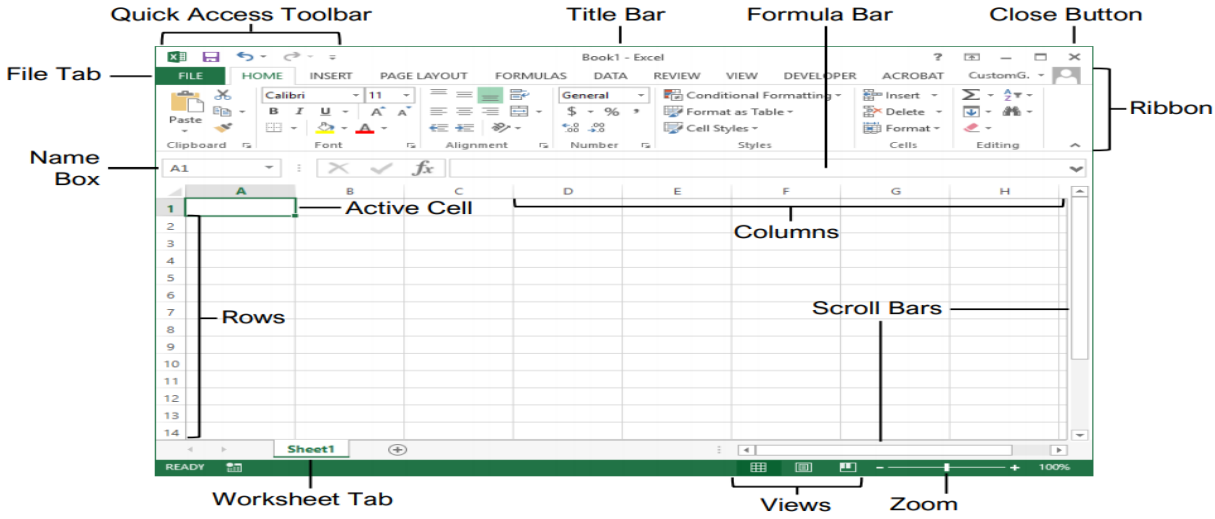
**Spreadsheet :** A spreadsheet is defined as the large sheet containing a mixture of rows and column. It provides facility to organize the data in rows and columns. This spreadsheet is also called as electronic spreadsheet software.

**Popular spreadsheet software are :**

Supercalc
Lotus 123
Ms-Excel

**Start To Excel:**

→Click on start button.
→ Click on all programme
→ Click on Ms office
→ Click on Ms Excel.




In Microsoft Excel the data we enter, whether it consists of numbers, text, or formulas, is stored in a file known as a ***workbook***. Workbooks are just like huge electronic books with pages (or *sheets*) that have been organised into columns and rows. The collection of worksheet is called work book. The workbook file extension name is .XLS.

**Worksheet:** It is the collection of rows and column where row and column are intersect each other then the cell is prepared.

The column name starts with A, B,C …….. XFD
The row no start from 1, 2, 3 . . . . , 1048576
The home cell address is A1
The end cell address is XFD 1048576.
The maximum column is 16384.
The maximum sheet can be inserted 255.

**Different data type in Excel**

- Text
- Number
- Date
- Time
- Formula

**1.Functions Overview**

Functions are simply preprogrammed formulas already provided in Excel which can perform calculations covering a wide range of categories including statistics, date and time arithmetic, financial calculations, lists, engineering, and more.

**Mathematical function**

***1) Sum ()*** - Adds all the numbers in a range of cells.

Syntax: sum (number1, number2 . . .)

Ex: = SUM (10, 5, 30) output- 45

2) ***Max ()*** - Returns the largest value in a set of values, ignores logical values and text.

Syntax: max (number1, number2 . . . . . .)

Ex: =MAX (10, 20) output-20.

***3) Min ()*** - Returns the smallest number in a set of values, ignores logical values and text.

Syntax: MIN (number1, number2 . . . . . .)

Ex: =min (40, 50) output-40.

4) ***Average () -*** Returns the average (arithmetic mean) of its arguments, which can be numbers or names, arrays, or references that contain numbers.

Syntax: AVERAGE (number1, number 2 . . . . .)

Ex: = average (20, 40) output 30.

5) ***Fact ()*** - Returns the factorial of a number, equal to 1*2*3*...* number.

Syntax: FACT (number)

Ex: =fact (5) output -120.

6) ***Round ()*** - Rounds a number to a specified number of digits.

Syntax: ROUND (number, num, digits)

Ex: =Round (123.34, 2) output-123.34.

7) ***Sign ()*** - Returns the sign of a number: 1 if the numbers is positive, zero if the number is zero, or -1 if the number is negative.

Syntax: SIGN (number)

Ex: =sign (3) output-1

8) ***Mod ()*** - Returns the remainder after a number is divided by a divisor.

Syntax: MOD (number-1, divisor)

Ex: =mod (10, 5) output-0.

9) ***Power ()*** - Returns the result of a number raised to a power.

Syntax: POWER (number, power)

Ex: = power (2, 3) output-8

**Text functions**

***1) Char*** () - Returns the character specified by the code number from character set for your computer.

Syntax: CHAR (number)

Ex : =char (“66”) output-B

***2) Code*** ()-returns a numeric code for the first character in a text string, in the character set used by your computer.

Syntax: CODE (text)

Ex : =code (“a”)  output - 97

***3) Concatenate*** () - Joins several text strings into one text string

Syntax: CONCATENATE (text-1, text-2- - - - -)

Ex: = concatenate (Abhishek, dev, abhijeet)

***4) Left ( ) -*** Returns the specified number of characters from the start of a text string.

Syntax: LEFT (text [num- chars])

Ex: = left (‘’Rourkela”, 3)  output-Rou.

***5) Right ( )*** - Returns the specified number of character from the end of a text string.

Syntax: RIGHT (text [num- chars])

Ex: = Right (“Rourkela”5)  output-rkela

6) ***Mid ( )*** – Returns the characters from the middle of a text string, given a starting position and length.

Syntax: MID (text, start- num, num- chars)

Ex: = mid (“Rourkela”,2, 4)  output-ourk.

***7) Len ( )*** – Returns the number of character in a text string.

Syntax: LEN (text)

Ex: = Len (“Rourkela”)  output-8.

8) ***Lower ( )*** - converts all letters in a text string to lowercase.

Syntax: LOWER (text)

Ex: = lower (“RKL”)  output-rkl.

9) ***Upper ( )*** - converts a text string to all uppercase letter.

Syntax: UPPER (text)

Ex: = upper (“rkl”)  output-RKL

10) ***Replace ( )*** - Replaces part of a text string with a different text string.

Syntax: REPLACES (old-txt, start-num, num-chars, new-text)

Ex: = Replace (“Rourkela”,1,3,“p”)  output-Prkela.

11) ***Proper ( )*** - converts a text string to proper case; the first letter in each word in uppercase, and all other letter to lowercase.

Syntax: PROPER (text)

Ex: =proper (“rkl is a city”)  output- Rkl Is A City

**DATE AND TIME**

***1) Today ( )*** - Returns the current date formatted as a date.

Syntax: (today ()).

Ex: = (today ())  output- 3/10/2018.

***2) Now ( )*** - Returns the current date and time formatted as a date and time.

Syntax: (now ()).

Ex: = (now ())  output -3/10/2018  02:15.

***3) Year ()*** - Returns the year of a date, an integer in the range 1900-9999.
Syntax: YEAR (serial- number)
Ex: = year (today ()) output-2018.
4) ***Month ()*** - Returns the month, a number from 1(January) to 12 (December).
Syntax: MONTH (serial- number)
Ex: =month (today ()) output -3.
5) ***Day ()*** - Returns the day of the month, a number from 1 to 31.
Syntax: DAY (serial-number)
Ex: = day (today ()) output-2
6) ***Time ()*** - converts hours , minutes, and seconds given as numbers to an Excel serial number, formatted with a time format.
Syntax: TIME (hour, minute, second)
Ex: = time (30, 15, 00) output-3.30 pm.
***7) Hour ()*** - Returns the hour as a number from 0 (12:00A.M) to 23(11:00P.M).
Syntax: HOUR (serial-number)
Ex: = hour (now ()) output-11
8) ***Minute ()*** - Returns the minute, a number from 0 to 59.
Syntax: MINUTE (serial-number)
Ex: = minute (now ()) output-3
9) ***Second ()*** - Returns the second, a number from 0 to 59.
Syntax: SECOND (serial-number)
Ex: =second (now ()) output-35

**LOGICAL**

1) ***AND ()*** - checks whether all arguments are TRUE, and returns TRUE if all arguments are TRUE.
Syntax: AND (logical-1, logical-2…….)
Ex: = and (a> 5, b. 40) output- false
2) ***OR ()*** - checks whether any of the arguments are TRUE, and returns TRUE or FALSE. Returns FALSE only if all arguments are FALSE.
Syntax: OR (logical-1, logical-2……)
Ex: = or (a, =15, b, =20) output- true
3) NOT () - changes FALSE to TRUE, or TRUE to FALSE.
Syntax: NOT (logical)
Ex: not (a, =70) output-true
4) ***If ()*** – checks whether a conditions is met, and returns one value if TRUE, and other value if FALSE.
Syntax: IF (logical - test, [value-if- true], [value -if - false])

Ex: = if (b2> 50, "pass", "fail").

# Lab work- 7

1. Create a bar chart for the following party?

| | BJP | CONGRESS | AAP |
|---|---|---|---|
| Delhi | 92 | 48 | 20 |
| U.P | 85 | 69 | 66 |
| Bihar | 69 | 98 | 97 |

Select the data from (A1 : C4) -> click in Insert -> select the chart style from chart group -> like column chart -> now it display the chart.

2. Display the current date?
   = today()
   output - 17/03/2021
3. Add the no. like 25,5,10.
   = sum(25,5,10)
   Output – 40
4. Find the factorial of 4?
   = fact(4)
   Output 24
5. Find the power (8, 2) ?
   =power(8,2)
   Output - 64
6. Convert a text string to upper case i.e. "skdav".
   =upper("skdav")
   Output - SKDAV
7. Convert a text string to proper case 'RKL is a smart city '.
   =proper("rkl is a smart city")
   Output – Rkl Is A Smart City
8. Find the remainder of 2 nos i.e. (15, 7).
   = mod(15,7)
   Output - 1
9. Find the round up place of 136.957 up to 2nd place of decimal places?

= round (136.957,2)
Output – 136.96

10. Concatenate 3 city make like Punjab, Mumbai, Delhi.
= concatenate("Punjab", "Mumbai", "Delhi")
Output - PunjabMumbaiDelhi
11. Design a data base to store 3 students name their 1st internal mark & 2nd internal mark. Find total mark & remark?
If %mark is > = 60 then "pass" otherwise "fail"?

| RNO | NAME | 1st Internal | 2ND Internal | TOTAL | % mk | REMARKS |
|---|---|---|---|---|---|---|
| 1 | Abhishek | 70 | 80 | ? | ? | ? |
| 2 | Santos | 65 | 60 | ? | ? | ? |
| 3 | Dwiti | 60 | 65 | ? | ? | ? |

Total = sum(c2:d2)
%mk = average(c2:d2)
Remark = if(f2>60 , "pass", "fail")

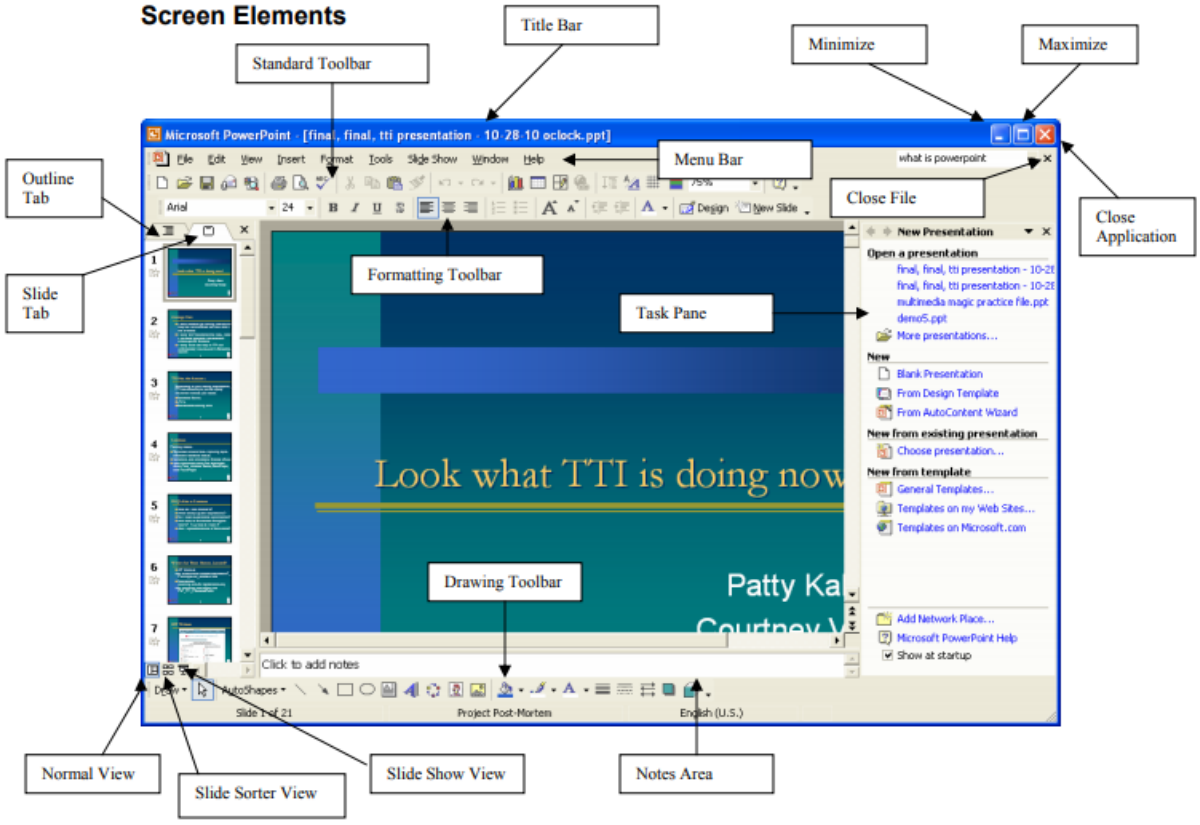
## Chapter – 8
## MS POWER POINT

POWER POINT :- Power point is a slide show presentation program that's part of the Microsoft office suite of tools. Power point makes it easy to create,collaborate and present your ideas in dynamic, visually, compelling ways.

Power point is a complete presentation graphic package. It gives everything that we need to produce a professional looking presentation. Drawing, graphing and presentation management tools all designed to be easy to use and team.

STARTING POWER POINT :-

Start ⟶ All program me⟶ Ms Office⟶ Ms power point.




CREATING A PRESENTATION:-

When we start power point we can work on it is many different ways such as:-

a. AUTO CONTENT WIZARD: - If you want power point to help you with the content of each slides of your task.
b. PICK A LOOK WIZARD: - If you know what you want to say on each slide but want help with the look of individuals slide.
c. TEMPLETE: - If you want to make a slide look like a template.

Blank presentation – If you want to start with a blank slide.

Open an existing presentation – If you want modify an existing presentation or use it is a template for a new presentation.

Create a new slide

- Click on new
- Choose blank presentation on the task panel
- Here it display two panels for title and sub-title

Insert a new slide

- Click in home panel
- Click in new slide
- It display different type office theme
- Select anyone

Apply a design Templates

- Click to design panel
- Select different design of pre-defined templates
- Select any one for applying into the slide

Applying animation to objects

- Click on animation tab
- It display different styles of slide transition
- Select anyone for applying into the slide

Applying custom Animation to the object.

- Click in Animation
- Click in custom Animation
- Click in add effects
- Select any types of option like Entrance, Emphasis, Exit motion paths.

Run the slide show

- Press F5 to run the slide show
  Or
- Click in view
- Click in slide show

Saving, opening and closing presentation

Saving

- Click in the file name
- Click in save
- Write the presentation file name
- Click in save

Opening

- Click in file
- Click in open
- Select the presentation file

- Click in open

Closing / Exiting

- Click in file
- Click in close

## Chapter – 9
## INTERNET

COMPUTER NETWORK :

A computer network is a group of computers, that are connected to each other for the purpose of communication. A computer network allows computer to communicate with many other computers and to share resources and information. The Advanced Research Projects Agency (ARPL) funded the design of the "Advanced Research Projects Agency Network" (ARPANET) for the United States Department of Defense It was the first operational computer network in the world. Development of the network began in 1969, based on designs developed during the 1960s.

INTERNET :

The Internet is a global system of interconnected computer networks that use the standard Internet Protocol Suit (TCP/IP) to serve billions of users Worldwide. It is a network of networks that consists of millions of private and public, academic, business, and government network of local to global scope that are linked by a broad array of electronic and optical networking technologies.

APPLICATION OF INTERNET :

- Communication with other computer around the world.
- Banking
- Investment
- Shop for good and service
- Download and listen the music
- Watch movies
- Take a course

- Access education materials
- Accessories of entertainment and leisure like as online games, magazines and vacations planning guides, share and edit documents with other in real time provide into graphic auto clips and video clips.

ADVANTAGES OF INTERNET :

- E-Mail (Electronic Mail)
- Information
- Entertainment
- Programmes
- Discussion groups
- Online chat.

INTERNET SERVER :

A server is any combination of hardware or software designed to provide services to clients. When used alone, the term typically refers to a computer which may be running a server operating system, but is commonly used to refer to any software or dedicated hardware capable of providing services.

WEB BROWSER :

A web browser is a software application for retrieving. Presenting, and traversing information resources on the world wide page. An Information resources is identified by a uniform resources identifier(URI) and may be a web page, image, video or other piece of content. The major web browser are internet explorer, Mozilla Firefox, Apple safari, Google chrome, Netscape navigator 9, and opera for window and Apple safari, Mozilla Firefox, Netscape's navigator 9, opera for Macintosh.

WEB PAGE :

A webpage or web page is a document or resource of information that is suitable for the World Wide Web and can be accessed through a web browser and displayed on a computer screen. This information is usually in HTML or XHTML format and may provided navigation to other WebPages via hypertext links.

WEBSITE :

A website (also spelled web site) is a collection of related web pages, images, videos or other digital assets that are addressed with a common domain name or IP address in an Protocol-based network. A web site s hosted on at least on web server, accessible via a network such as the Internet or private local area network.

UNIFORM RESOURCE LOCATOR (URL) :

A uniform resource locator (URL) is a subset of the uniform resource identifier (URI) that specifies where an identified resource is available and the mechanism for retrieved it.

WEB SEARCH ENGINE :

A web search engine is a tool designed to search for information on the World Wide Web. The search result is usually presented in a list of results and is commonly called hits. The information may be consisting of web page, image, information, and other types of files.

HYPERTEXT TRANSFER PROTOCOLO (HTTP) :

Hypertext Transfer Protocol (HTTP) is an application-level protocol for distributed, collaborative, hypermedia information systems. Its use for retrieving inter-linked resources, called hypertext documents.

WORLD WIDE WEB (WWW) :

The World Wide Web, abbreviated as WWW and W3 and commonly known as The Web, is a system of interlinked hypertext document contained on the Internet. With a web browser, one can view web pages that may contain text, images, video, and other multimedia and navigate between them using hyperlinks.

E-MAIL :

Electronic mail is a method of exchanging message between people using electronic devices. E-mail appropriate across computer network, which today is primarily in the internet.

ADVANTAGES OF E-MAIL :

- Speed
- Cost
- Conveniences

CREATE AN E-MAIL ACCOUNT :

- Double click on internet explorer.
- Write www.yahoo.com or gmail.com or rediffmail.com in the address box then press enter.
- Click on create account .
- Then it will display a create account form.
- Filling the given form.
- Click on a agree all form and condition.
- Your account will be created.

SENDING E-MAIL :

- Open the email website for. Ex. www.rediffmail.com or www.gmail.com
- Click in sign in , type user name and password.
- Click in write/compose option to write the mail
- Fill the information of TO, SUBJECT & type the message in the message box. For ex.
  To : bubu@gmail.com
  Sub : appointment letter
  Attach : appointment.doc
- Then click in send button.

RECEIVING E-MAIL :

- Open the email website for. Ex.www.rediffmail.com or www.gmail.com
- Click in sign in , type user name and password.
- Click in inbox option to receive the mails
- Click on any message to open it.

CHATTING :

Chat may refer find of communication over the internet that efforts a real time transmission of text message from enter to receiver.

## Chapter – 10
## "C" Programming

**Q1. W.A.P to print the message as "WELCOME TO SKDAV".**

```
#include<stdio.h>
#include<conio.h>
void main()
{
Clrscr();
printf ("WELCOME TO SKDAV");
getch();
}
```

**Output =**

WELCOME TO SKDAV

**Q2. W.A.P to accept sum of 2 numbers.**

```
# include<stdio.h>
# include<conio.h>
void main()
{
        int a,b,sum;
        clrscr();
        printf("enter two nos");
        scanf("%d%d",&a,&b);
        sum=a+b;
        printf("The sum of the two number is %d",sum);
        getch();
}
```

**Output =**

Enter two numbers 23 24
Sum of numbers is 47

**Q3. W.A.P in C to find the greatest number among three numbers**

```
#include<stdio.h>
#include<conio.h>
void main()
{
        int a,b,c;
        clrscr();
```

```
        printf("enter 3 nos");
        scanf("%d%d%d",&a,&b,&c);
        if(a>=b&&a>=c)
        {
                printf("largestis%d",a);
        }
        else
        if(b>=a && b>=c)
        {
                printf("largest is %d",b);
        }
        else
        if(c>=a && c>=b)
        {
                printf("largest is %d",c);
        }
    getch();
}
```

**Output =**

Enter 3 nos 34 90 70

Largest is 90

Q4. W.A.P in C to find the average of n numbers by using for loop.

```
#include<stdio.h>
#include<conio.h>
void main()
{
 int i,n,num;
 float sum,avg;
 clrscr();
        printf("enter the nth value : ");
 scanf ("%d", &n);
 for (i=1; i<=n; i++)
 {
        printf("enter a number : ");
        scanf("%d", &num);
        sum = sum + num;
 }
 avg = sum/n;
 printf("average of %d different number is %f  : ", n, avg);
 getch();
}
```

Output =

enter the nth value : 3
enter a number : 25  36  78
average of 3 different number is 46.33

Q5. W.A.P in C to determine whether a number is prime or not ?

```
#include <stdio.h>
void main()
{
        int n, i, flag = 0;
        clrscr();
        printf("Enter a positive integer: ");
        scanf("%d", &n);
        for (i = 2; i < n / 2; ++i)
        {
            if (n % i == 0)
             {
                flag = 1;
                break;
              }
        }
   if (n == 1)
  {
      printf("1 is neither prime nor composite.");
   }
   if (flag == 0)
  {
        printf("%d is a prime number.", n);
  }
    else
 {
      printf("%d is not a prime number.", n);
}
}
```

Output=
Enter a positive integer: 7
7 is a prime number.

Q6. W.A.P in C to check whether a given number is palindrome or not ?

```
#include <stdio.h>
void  main()
{
  int n, rev = 0, rem,temp;
```

```
  clrscr();
  printf("Enter a number“);
  scanf("%d", &n);
  temp = n;
  while (temp != 0)
  {
 rem = temp % 10;
 rev = rev   * 10 + rem;
 temp = temp/10;
  }
  if (rev == n)
     printf("%d is a palindrome number.\n", n);
  else
    printf("%d isn't a palindrome number.\n", n);
  getch();
}
```

Output =

Enter a number 131

131 is a palindrome

Q7. W.A.P in C to accept row wise and column wise element in a two dimensional array and print them.

```
#include<stdio.h>
#include<conio.h>
void main()
{
 int i,j,mark[3][3];
 clrscr();
 printf("enter 9 elements ");
 for(i=0;i<3;i++)
 {
          for (j=0; j<3; j++)
          {
            scanf("%d",&mark[i][j]);
          }
 }
 printf("\n the matrix elements are \n");
 for(i=0;i<3;i++)
 {
         for (j=0; j<3; j++)
         {
             printf("%d \t",mark[i][j]);
```

```
        }
        printf("\n");
 }
  getch();
}
```

OUTPUT =

```
Enter  9  elements
11      22     33
44      55     66
77      88     99

 the matrix elements are
11      22      33
44      55      66
77      88      99
```

Q8. W.A.P in C to find the vowels in a given string.

```
#include <stdio.h>
void  main()
{
  int i, count = 0;
  char s[50];
  clrscr();
  printf("Input a string\n");
  gets(s);
for (i=0; s[i]!=`\0’; i++)
 {
    if (s[i] == 'a' || s[i] == 'A' || s[i] == 'e' || s[i] == 'E' || s[i] == 'i' || s[i] == 'I' || s
[i] =='o' || s[i]=='O' || s[i] == 'u' || s[i] == 'U')
{
   count++;
 } }
  printf("Number of vowels in the string: %d", count);
  getch();
}
```

OUTPUT =

```
Input a string   Rourkela
Number of vowels in the string : 4
```

Q9. W.A.P in C to find the factorial of a number by using recursion.

```
int fact(int n);
#include<stdio.h>
```

```
#include<conio.h>

void main()
{
    int num,f;
    clrscr();

    printf("\n  Enter the number: ");
    scanf("%d",&num);

    f=fact(num);
    printf("\n  The factorial of the number %d is %d",num,f);
    getch();
}

int fact(int n)
{
    if(n==0 || n==1)
        return 1;
    else
        return(n * fact(n-1));
}
```

OUTPUT =

Enter a number 3

The factorial of the number 3 is 6

Q10. W.A.P in C to find the sum of Fibonacci series, by using function.

```
#include <stdio.h>
void fibo(int r);
void main()
{
   int range;
   clrscr();
   printf(“ enter the range of Fibonacci series :”);
   scanf(“%d”, &range);
  fibo(range);
}

void fibo(int r)
{
  Int a=0, b=1, c, sum=0;
while( a <= r)
{
```

```
  sum +=a;
  c = a+b;
  a = b;
  b = c;
}
  printf(“sum of fibo series is %d”,sum);
  getch();
}
```

OUTPUT =

Q 11. W.A.P in C to accept a number from keyboard and print it in reverse order of entry, by using function.

```
#include <stdio.h>
void reverse(int no);
void  main()
{
  int n ;
  clrscr();
  printf("Enter a number“);
  scanf("%d", &n);
  reverse (n);
  getch();
}
void reverse(int no)
{
   int  rev = 0, rem,temp;
  temp = no;
  while (temp != 0)
  {
     rem = temp % 10;
     rev = rev   * 10 + rem;
     temp = temp/10;
  }
  printf("reverse of the no is %d \n", rev);
}
```

Output =
Enter a number 131
Reverse of the no is 131

Q12. W.A.P in C to compute the sine series.

```
// WAP to find the sine series
#include<stdio.h>
#include<math.h>  //sine and M_PI is defined in math.h
void main()
{
 float angle,value;
 clrscr();
 printf("Enter an angle:");
 scanf("%f",&angle);
 value=sin(angle*M_PI/180);  //M_PI is a constant used to represent pi
 printf("sin(%.0f)=%.4f",angle,value);
 getch();
}
```

Output: Enter an angle: 30
sin(30)=0.5