



Unit	Syllabus
Unit - 1	Computer Fundamentals Definition Generation & Basic Components of Computer , Input / Output Device , Memory & Other Peripherals , Introduction to Operating System (Windows 98 / X) , Function & feature of Operating System (Accessories , Control Panel , Desktop , understanding file and folder properties)
Unit -2	Office Automation Tools : MS Word- Introduction to MS Office Suit , Introduction to Word Processing . Tool and Menu Document editing , working with tables , images and word art (creating flow chart) , header footer , inserting page number date and time . Working with image in word. Creating research and scientific documents - references , table of contents , insert index , table of figures , cross references , bibliography , mail merge
Unit -3	Office Automation Tools : MS Excel & MS Power Point MS Excel Interface , Tools & Menus , Creating Spreadsheet , Use of Function Charts & Graphs , data Analysis tools (T - test- F - test , Anova Test) . MS Power Point Interface, Tools and Menus Creating Slides , Inserting Multimedia Objects , Transitions and Custom Animation , Delivering Presentations introduction to Google docs , Google drive , Google forms . Google scholar , Google power
Unit -4	Internet Technologies and research tools Introduction to various social media platforms face book twitter , LinkedIn , blogs , Instagram , YouTube etc. Social media research tools - twitter Face book analytic Instagram business tools , YouTube analytics . Search Engine Optimization (SEO) , Social Media Optimization (SMO) and Search Engine Marketing (SEM) : Concept , Difference and Functioning Web scraping . Search Engines Concept . Types , Crawler based and Human power directories , Different search engines available . Search Engine as a Tool of research .
Unit -5	Info graphics- Introduction to info graphics , Visual Elements of Info graphic - Info graphic Colors , Info graphic Fonts , Info graphic Icons , Info graphic Images . Types of info graphics - Informational Info graphic , Timeline Info graphic , Charis Info graphic , Comparison Info graphic , Number Info graphic , Resume Info graphic . Process of creating info graphics , Info graphic -Tools - open - source and - free online tools to create info graphics .



UNIT -1

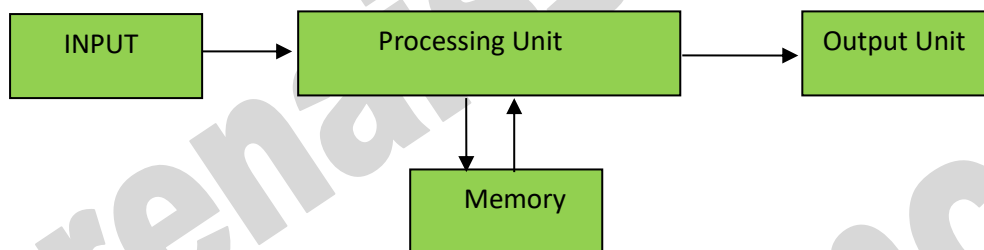
Introduction

A computer is a general purpose device that can be programmed to carry out a set of arithmetic or logical operations automatically.

A **computer** is an electronic device that manipulates information, or data. It has the ability to **store**, **retrieve**, and **process** data. You can use a computer to type documents, send email, and browse the Web. You can also use it to handle spreadsheets, accounting, database management, presentations, games, and more.

In World War II, mechanical analog computers were used for specialized military applications.

During this time the first electronic digital computers were developed. Computer was developed by **CHARLES BABBAGE**. He is also known as Father of computers.



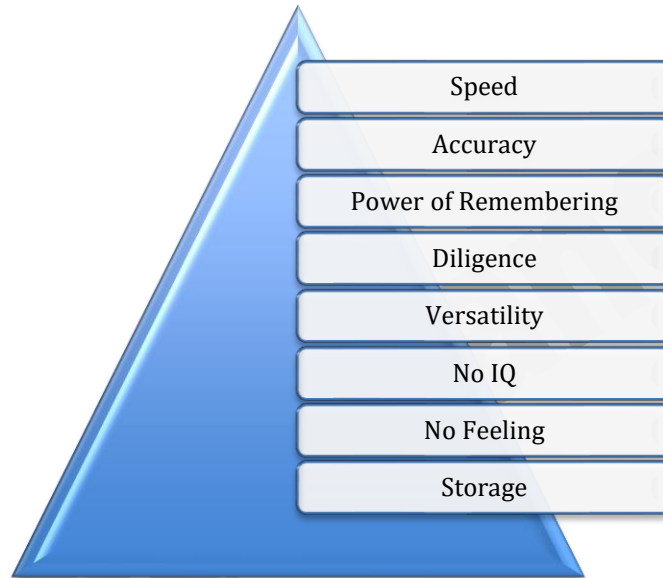
Organization of a Computer

Computer can also be defined in terms of functions it can perform. A computer can

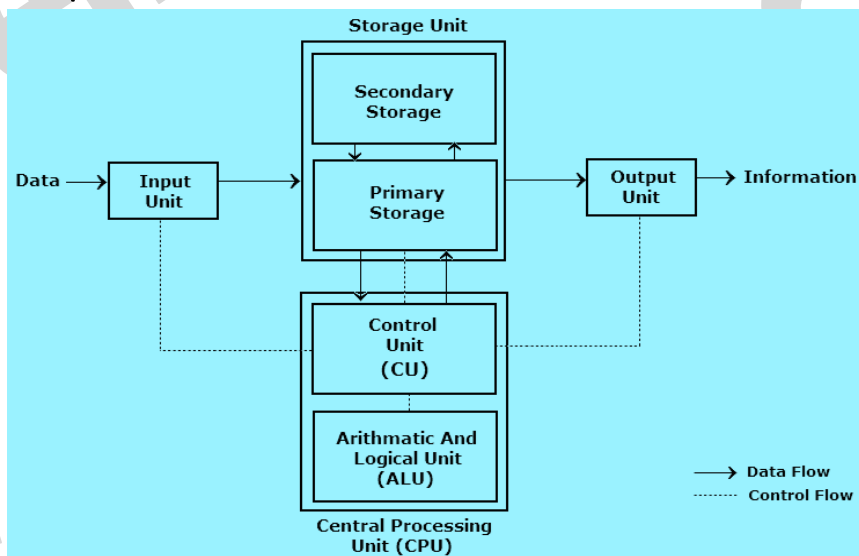
- Accept data,
- Store data,
- Process data as desired,
- Retrieve the stored data as and when required and
- Print the result in desired format.



Characteristics of computer:-



Block diagram of Computer:-



1. **Input:** this is the process of entering data and programs into the computer system.
2. **Control Unit (CU):** The process of input, output, processing and storage is performed under the supervision of a unit called 'Control Unit'. It decides when to start receiving data, when to stop it, where to store data, etc. It takes care of step -by-step processing of all operations inside the computer.
3. **Memory Unit:** Computer is used to store data and instructions.
4. **Arithmetic Logic Unit (ALU):** The major operations performed by the ALU are addition, subtraction, multiplication, division, logic and comparison.
5. **Output:** This is the process of producing results from the data for getting useful information. The ALU and the CU of a computer system are jointly known as the central processing unit (CPU). You may call CPU as the brain of any computer system.



BAMC II year

Subject: Information Commination Technology

Motherboard

A **motherboard** is the main printed circuit board (PCB) found in general purpose microcomputers and other expandable systems. It holds and allows communication between many of the crucial electronic components of a system, such as the central processing unit (CPU) and memory, and provides connectors for other peripherals. A motherboard usually contains significant sub-systems such as the central processor, the chipset's input/output and memory controllers, interface connectors, and other components integrated for general purpose use.

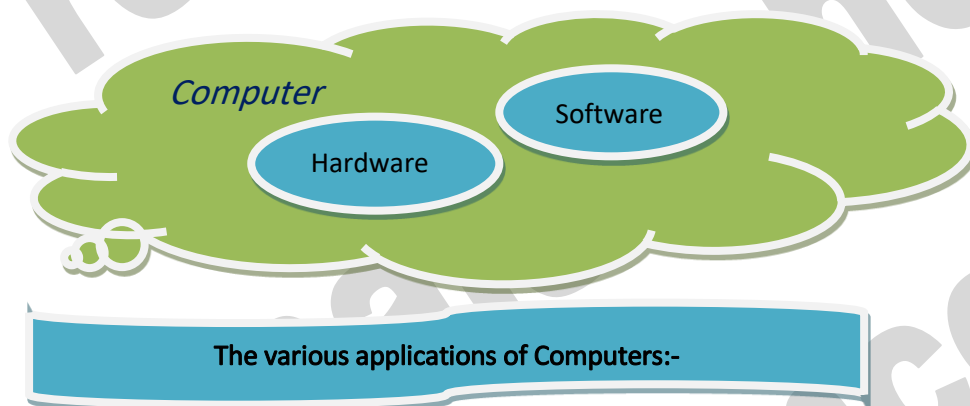
Motherboard specifically refers to a PCB with expansion capability and as the name suggests, this board is often referred to as the "mother" of all components attached to it, which often include peripherals, interface cards, and sound cards, video cards, network cards, hard drives, or other custom components.

Computer Hardware:

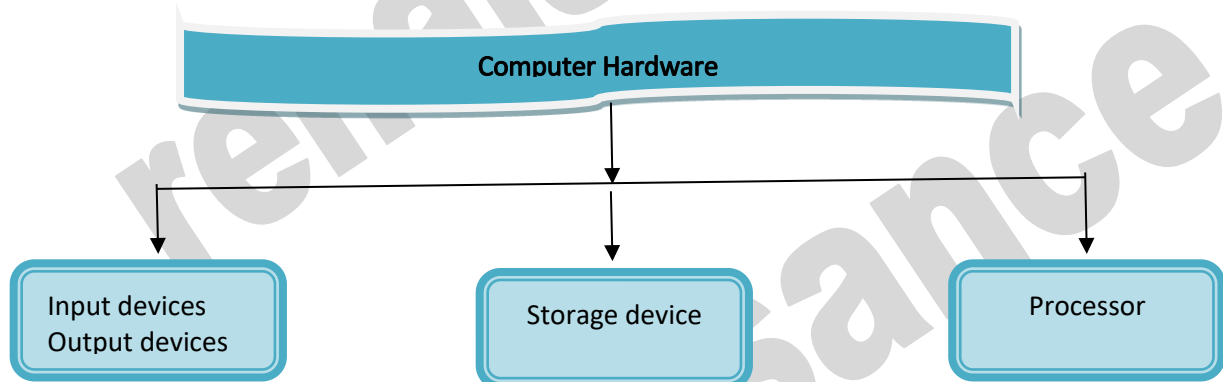
In simple terms we can say, computer parts that have tangible property are comes under computer hardware categories. Computer hardware is the physical parts or components of a computer. This is also sometime called the machinery or the equipment of the computer.

Computer Software:

Computer software is instructions that can be stored and run by hardware. Software is any set of machine-readable instructions that directs a computer's processor to perform specific operations.



- Insurance
- Banking
- Business
- Education
- Marketing
- Health Care
- Engineering Design
- Military
- Communication
- Government Applications



Input devices

An input device is an **electromechanical device** as it utilizes both electronic and mechanical power. It aims in receiving data from external world. The input devices are responsible for converting data into a form that is understood by the computer. An input device is a peripheral device that converts symbols that people understand into bits that computers can process

Basic working of input devices:-

- Accept the data.
- Convert it into the machine understandable form.

Different Types of input devices:-

- Keyboard
- Mouse
- Joystick
- Light pen
- Track Ball
- Scanner
- Microphone



- Digitizing Table
- Magnetic Ink Character Reader (MICR)
- Optical Character Reader (OCR)
- Bar Code Reader
- Optical Mark Reader

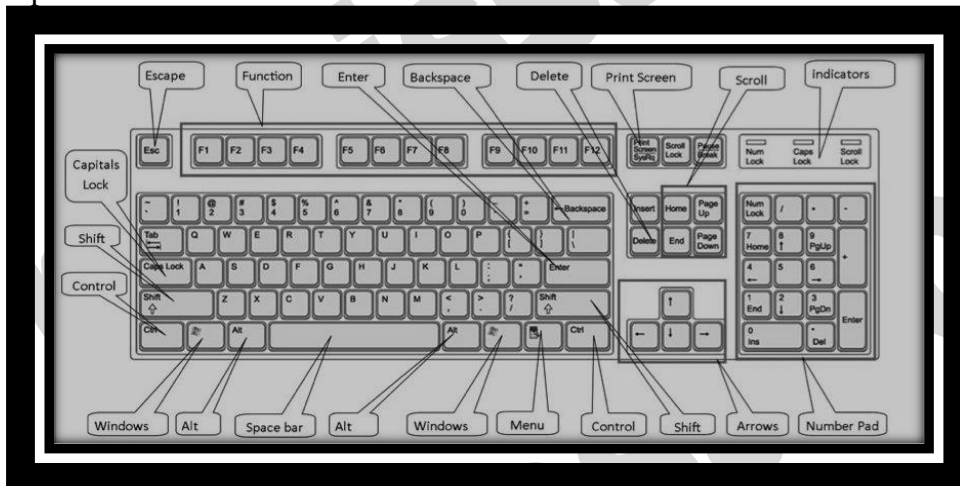




Keyboard

Keyboard is one of the most commonly used input devices to input the data into the computer. It is like the traditional typewriter, although there are some additional keys provided for performing some additional functions. Keyboards are of two sizes 84 keys or 101/102 keys, but now 104 keys or 108 keys.

- Keyboard is an input device used to enter data in to computer by pressing one key at one time.
- It has its own processor and circuitry that carries information to the processor.
- When you press a key, it presses a switch, completing the circuit and allowing a tiny amount of current to flow through.
- It tells the processor the position of each key what each keystroke or combination of keystrokes represents.



- Despite the development of alternative input devices, such as mouse, touch screen, light pen, the keyboard remains the most commonly used and most versatile device used for direct (human) input into computers.
- One factor determining the size of a keyboard is the presence of duplicate keys, such as a separate numeric keyboard, for convenience.
- Another factor determining the size of a keyboard is the size and spacing of the keys.

Generally the keyboards contain the following keys, they are:-

- Alphabets
- Arithmetic operators such as +, -, *, /
- Numeric digits 0–9
- Cursor arrow keys
- Navigation keys such as Home, End, PgUp, PgDown, etc.
- Num Lock button, used to enable or disable the numeric pad
- Enter key

Mouse:

The mouse is used to point to a particular place on the screen and select to perform one or more action. The pointing device may point to the menu, commands, size windows, starts programs etc. The most conventional kind of mouse has two buttons on top: the left one being used most frequently then right



BAMC II year

Subject: Information Commination Technology

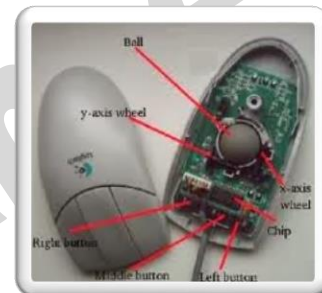
one. A mouse is a pointing device that functions by detecting 2D motion relative to its supporting surface. The mouse's motion typically translates into the motion of a pointer on a display, which allows for fine control of a graphical user interface

Mouse Actions

- Left Click
- Double Click
- Right Click
- Drag and Drop

Types of mouse:-

- Mechanical mouse:
- Optical mouse:
- Cordless 3-D mouse:
- Wireless Mouse:
 - RF Transmitter:
 - RF Receiver:



Track ball:

This is also a pointing device. Track ball is an input device that is used with a computer, instead of a mouse. This is a ball, which is half inserted into a device. By moving fingers on ball, pointer can be moved. Since the whole device is not moved, a track ball requires less space than a mouse. A track ball comes in various shapes like a ball, a button and a square.

Compared with a mouse, a trackball has no limits on effective travel; at times, a mouse can reach an edge of its working area while the operator still wishes to move the screen pointer farther. With a trackball, the operator just continues rolling, whereas a mouse would have to be lifted and re-positioned.

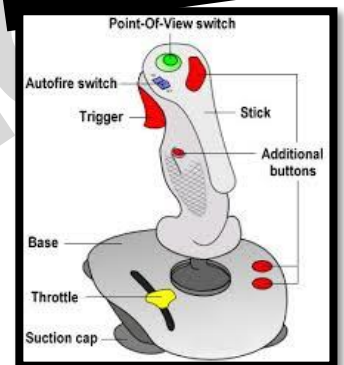
Joystick:-

The joystick is handheld stick. This stick can rotate about one end transmitting its angle to the computer in two or three dimensions. It typically has a button on top that is used to select the option pointed by the cursor. Joysticks are often used to control video games, and usually have one or more push-buttons whose state can also be read by the computer.

Digitizing Tablet:

An input device that permits drawing of images and graphics is called a digitizing tablet. They give feeling of drawing images with pencil and paper. The graphics tablet has two major parts that are:-

- A flat surface on which the image is drawn.
- Stylus that helps in drawing.





BAMC II year

Subject: Information Commination Technology

Scanners

An input device capable to read text or illustrations printed on a paper and interpret it in a form that can be used by a computer is known as a scanner. It converts the document image into digital form so that it can be fed into the computer. Capturing information like this reduces the possibility of errors typically experienced during large data entry.



Digital Camera

A digital camera can store many more pictures than an ordinary camera. Pictures taken using a digital camera are stored inside its memory and can be transferred to a computer by connecting the camera to it. A digital camera takes pictures by converting the light passing through the lens at the front into a digital image.

There are several categories in which the cameras can be classified:-

- **Video camera**
 - Professional video cameras
 - Camcorders used by amateurs.
 - webcams
- **Digital camera**
 - Live-preview digital cameras
 - Compact digital cameras
 - Bridge cameras



Magnetic Ink Character Recognition:



MICR is also an input device is commonly used in banks because of a large number of cheques to be processed. The bank's code number and cheque number are printed on the cheques with a special type of ink that contains particles of magnetic material that are machine readable. This reading process is called Magnetic Ink Character Recognition (MICR).

Magnetic Ink Character Recognition is a character recognition system that uses special ink and characters. When a document that contains this ink needs to be read, it passes through a machine, which magnetizes the ink and then translates the magnetic information into characters.

MICR technology is used by banks. Numbers and characters found on the bottom of checks (usually containing the check number, sort number, and account number) are printed using Magnetic Ink. To print Magnetic Ink need, you need a laser printer that accepts MICR toner.



BAMC II year

Subject: Information Commination Technology

MICR provides a secure, high-speed method of scanning and processing information.

Optical character Reader:-

Optical character Reader is an input device that is use to read a printed text. The OCR scans text optically character by character, converts them into a computer readable code and stores the text on the system memory.



Optical Mark Reader:-

Optical mark reader is also known as optical mark recognition that is same as the scanner which reads on specific areas of the page. Thus OMR can be defined as the process of scanning paper-based documents and identify data or marks in a location defined previously.

It is specially used for checking the answer sheets of examinations having multiple choice questions.

Bar Code Reader:-



An electronic device used to read barcodes printed on various surfaces is called barcode reader. It is also known as barcode scanner. Bar Code Reader scans a bar code image, converts it into an alphanumeric value, which is then fed to the computer to which bar code reader is connected.

Bar coded data is generally used in labeling goods, numbering the books, etc. It may be a hand-held scanner or may be embedded in a stationary scanner.

Voice Recognition System:-

Voice recognition systems are alternatively known as voice data entry or audio data entry terminals. This method of input enables a programmer to instruct the computer with spoken words instead of a written program

Light Pen:-

Light pen is also an input device used as pointing device, which is similar to a pen. It is used to select a displayed menu item or draw pictures on the monitor screen. It consists of a photocell and an optical system placed in a small tube.



- ✚ A light pen is a computer input device used in conjunction with a computer's CRT display.
- ✚ It allows the user to point to displayed objects or draw on the screen in a similar way to a touch screen but with greater positional accuracy.
- ✚ A light pen detects a change of brightness of nearby screen pixels when scanned by cathode ray tube electron beam and communicates the timing of this event to the computer.
- ✚ Because the user is required to hold his arm in front of the screen for long period of time, the light pen fell out of use as a general purpose input device.

Touch screen:-

An input device that permits users to operate a PC by simply touching the display screen is called a touch screen. The touch screen is as easy to use as trackballs or touchpad's.

Three major components form a basic touch screen they are as follows:-

- Touch sensor
- Controller
- Software driver

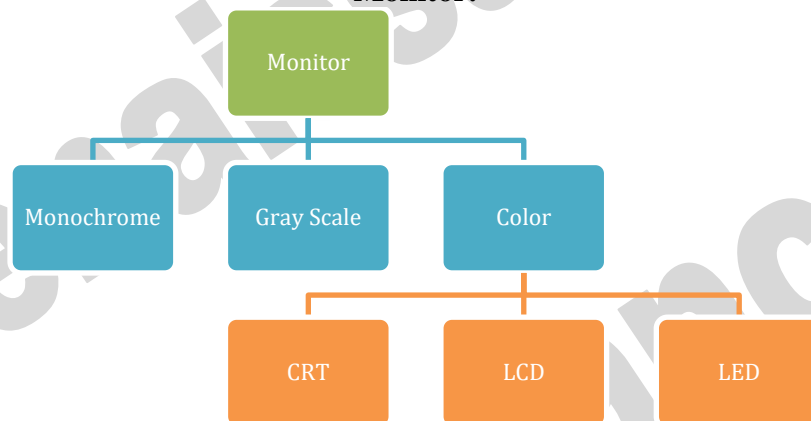


Output Devices

An output is an electromechanical device that receives output from a computer in binary coded form and converts it into human understandable form and transmits to the user. An **output device** is any peripheral that receives data from a computer, usually for display, projection, or physical reproduction.

- Monitor / Visual Display Unit
- Printer
- Plotter
- Speaker

Monitor:



Monitor is the most common and the most popular output device. It forms images from tiny dots, called pixels that are arranged in a rectangular form. The sharpness of the image depends upon the number of the pixels.

There are two types of viewing screen used for monitors:

Cathode-Ray Tube (CRT):

The CRT display is made up of small picture elements called pixels. The smaller the pixels, the better the image clarity, or resolution. It takes more than one illuminated pixel to form whole character, such as the letter 'e' in the word help.

- There are some disadvantages of CRT:
- Large in Size
- High power consumption

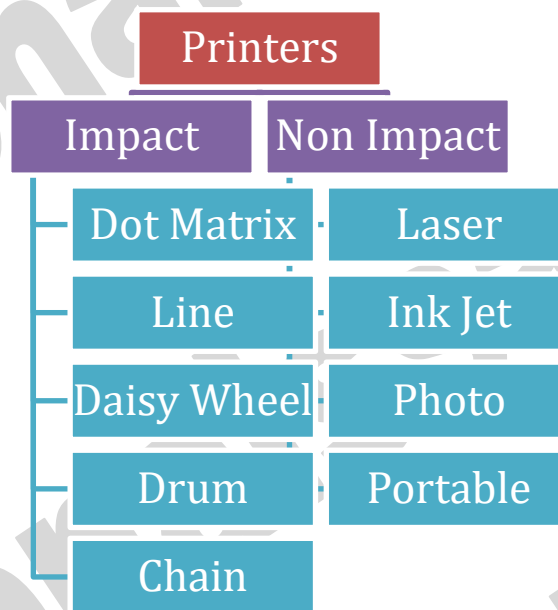


LCD(Liquid Crystal Display)



Printer:-

A printer is an output device that is used in a computer to print alphanumeric characters on papers. It converts the electronic signals from the computer into human readable form or hardcopy to produce a print out of the result of data processed in the computers.



Plotter:-

A plotter is a vector graphics printing device that connects to a computer. It draws pictures on paper based on commands from computer. A plotter is a very versatile tool.

Types of plotters:-

- Drum plotter
- Flat-Bed plotter

Sound Cards:-

Sound cards are a important part of computer, without sound cards you will have no music, no effects and no voices. Sound card is also referred as a **sound board** or an **audio card**, a **sound card** is an expansion card or integrated circuit that provides a computer with the ability to produce sounds that can be heard by the user either over speakers or headphones.



BAMC II year

Subject: Information Commination Technology

Sound card connections are as follows:-

- Digital out
- Sound in or line in
- Microphone or Mic
- Sound out or line out
- Fire wire
- MIDI or Joystick

Speakers:-

A hardware device that is connected to a computer's sound card that outputs sounds generated by the computer is referred as speaker. Speakers are rated in Frequency response, Total Harmonic Distortion, and Watts.

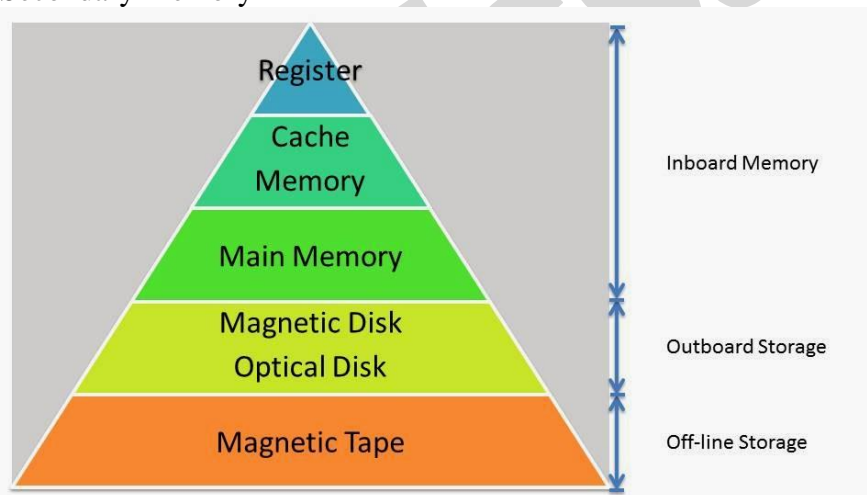


Storage:-

Computer data storage is often known as storage or memory refers to computer components and recording media that retain digital data used for computing for some interval of time. A memory is just like a human brain. It is used to store data and instructions. Computer memory is the storage space in computer where data is to be processed and instructions required for processing are stored.

Memory is primarily of two types:

- Primary Memory/Main Memory
- Secondary Memory



Primary memory:-

Primary memory holds only those data and instructions on which computer is currently working. It has limited capacity and data gets lost when power is switched off. It is generally made up of semiconductor device. These memories are not as fast as registers. The data and instructions required to be processed earlier reside in main memory. Primary memory is divided into two categories they are as follows:-

- RAM



BAMC II year

Subject: Information Commination Technology

- ROM.

RAM:-

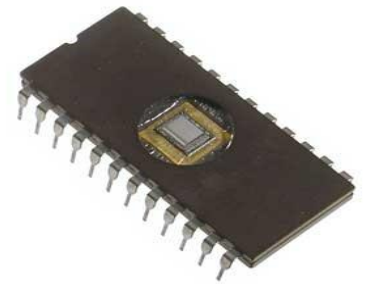
Full form of RAM random access memory (RAM). A RAM constitutes the internal memory of the CPU for storing data, program and program result. It is read/write memory. Since access time in RAM is independent of the address to the word that is, each storage location inside the memory is as easy to reach as other location & takes the same amount of time. RAM is volatile, i.e., data stored in it is lost when there is a power failure. Hence, a backup uninterruptible power system (UPS) is often used with computers. RAM is small, both in terms of its physical size and in the amount of data it can hold. There are two types of RAM they are as follows:-



- Static RAM (SRAM)
- Dynamic RAM (DRAM)

ROM:-

ROM is Read Only Memory. ROM are the memories on which it is not possible to write the data when they are online to the computer. They can only be read. It is a permanent in built in the computer at the time of its production. It is also known as firmware. It stores the set of instructions permanently which instructs the computer how to work. The ROM can be used in storing micro programs, system programs, subroutines.



Types of ROM are as follows:-

- PROM
- EPROM
- EEPROM

Secondary memory:-

Secondary memory is also known as external memory or non-volatile. It is slower than primary memory. These are used for storing Data/Information permanently the data one stored will not be erased as the power is switched off. CPU directly does not access these memories, instead they are accessed via input-output routines. Contents of secondary memories are first transferred to main memory and then CPU can access it.

Types of secondary memory are as follows:-

- Magnetic tapes
- Magnetic disk

Magnetic tapes:-

Magnetic tape is the most commonly used device for storing large data. It is sequential access device. Magnetic tape is a strip or ribbon of plastic which is coated with Ferro magnetic oxides. It is generally 80-2400 feet long and 1/2 inch wide, in size.

Magnetic Disk:-

A magnetic disk is a circular plate constructed of metal or plastic coated with magnetized material. Both sides of the disk are used and several disks may be stacked on one spindle with read/write heads



BAMC II year

Subject: Information Commination Technology

available on each surface. Bits are stored in magnetized surface in spots along concentric circles called tracks. Tracks are commonly divided into sections called sectors. Disk that are permanently attached and cannot removed by occasional user are called hard disks. A disk drive with removable disks is called a floppy disk drive.

Types of magnetic disk:-

- Hard disk
- Floppy disk
- Compact disk
- Video CD
- DVD

Floppy Disk



The floppy disk gets its name from the fact that it is made out of a flexible plastic material. The plastic base is coated with an iron-oxide recording substance that's similar to the material applied to the plastic ribbon of a magnetic tape. Data are recorded as tiny invisible magnetic spots on this coating



CD-ROM

The CD-ROM (Compact Disk Read Only Memory) is a direct extension of audio CD. CD-ROM players are more rugged and have error correction facility. This ensures proper data transfer from CD-ROM to the RAM of the computer. CD-ROM is written using a CD writer. Information is retrieved from a CD-ROM using a low power laser, which ingenerate in an on optical disk drive unit.

Hard Disk

The disk described so far is the type of disks which can be removed from the disk drive and carried from place to place. Some disks however, are built into the computer or a special disk drive.. Hard disks can store anywhere from 20 MB to more than 40GB. Hard disks are also from 10 to 100 times faster than floppy disk.

USB drive (1) An external hard disk drive or optical disc drive that plugs into the USB port. portable hard drive. (2) A solid state storage module that plugs into the computer's USB port. Using flash memory chips that hold up to one terabyte of data, the solid state USB drive emulates a hard disk.

A USB flash drive -- also known as a USB stick, USB thumb drive or pen drive -- is a plug-and-play portable storage device that uses flash memory and is lightweight enough to attach to a keychain. A USB flash drive can be used in place of a compact disc.

Cache Memory

Cache memory is faster than the main memory. The cache memories although are fast yet are very expensive memories and are used in only small size. Thus, small cache memories are intended to provide fast speed of memory retrieval without sacrificing the size of memory. Cache memory stores a copy of the instructions and data to be immediately used of main memory. The memory reads or writes operation is first checked with cache memory and if the desired location data is available in cache memory then used by the CPU directly.

Other Memories:-

- Flash memory
- Virtual memory
- Cache Memory

Software

Software is a set of program which performs desired task. Software runs on hardware. Software is a sequence of instructions written to solve a particular problem.

There are two types of software's:

- System Software
- Application Software

System Software:-

System Software performs the basic functions necessary to start and operate a computer. It refers to all programs that make computer work. It controls and monitors the various resources



BAMC II year

Subject: Information Communication Technology

of a computer such as processor, input-output devices and communication links. Example : -
Operating System and Compiler

System software is divided into three categories:-

- System management software
- System support software
- System development software

Application Software:-

Application software refers to the programs which help the computer to work effectively for specific applications. Example Ms- Office , Tally , Adobe etc.

Application software is of two types:-

- General purpose program
- Application specific program

Other software's are as follows:-

Utility software

utility software are those software that is used for system utilization .
like antivirus , window media player etc.

Virus :-

A computer virus is a program or piece of code that is loaded onto your computer without you knowledge and runs against your wishes. All computer virus are man made.

A few prominent virus are Michelangelo, dishwasher, C-brain , macmag , nenusalem , columbus etc.

Antivirus : - a utility software that searches a hard disk for viruses and removes any that are found. Most antivirus programs include an auto update feature that enables the program to download profiles of new virus so that it can check for the new viruses as soon as they are discovered.

Some popular antivirus are NPAV, Quick heal ,Avast and Mac fee etc.

Data compression is encoding of information using fewer bits than the original representation. The process of reducing the size of a data file is referred to as data compression

- Lossy
- Lossless

Compression is useful because it reduces resources required to store and transmit data. Data compression is subject to a space–time complexity trade-off. For instance, a compression scheme for video may require expensive hardware for the video to be decompressed fast enough to be viewed as it is being decompressed, and the option to decompress the video in full before watching it may be inconvenient or require additional storage

Disk Defragmenter is a utility in Microsoft Windows designed to increase access speed by rearranging files stored on a disk to occupy contiguous storage locations, a technique called defragmentation.



BAMC II year

Subject: Information Commination Technology

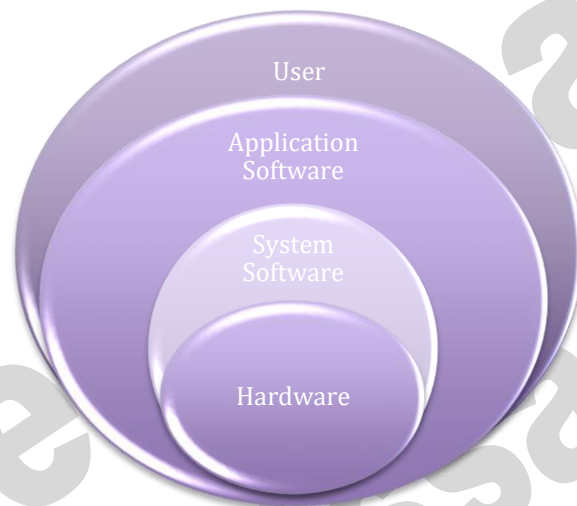
Disk Cleaning is a computer maintenance utility included in Microsoft Windows designed to free up disk space on a computer's hard drive. The utility first searches and analyzes the hard drive for files that are no longer of any use, and then removes the unnecessary files. There are a number of different file categories that Disk Cleanup targets when performing the initial disk analysis:

- Compression of old files
- Temporary Internet files
- Temporary Windows files
- Downloaded program files
- Recycle Bin
- Removal of unused applications or optional Windows components
- Offline web pages (cached)

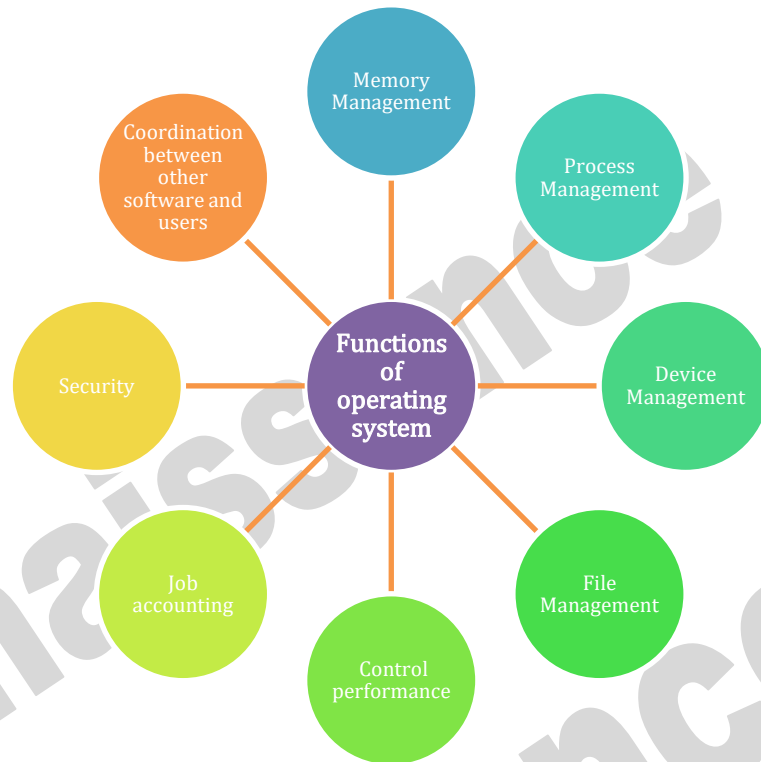
Operating System

An operating system is a program that acts as an interface between the user and the computer hardware and controls the execution of all kinds of programs.

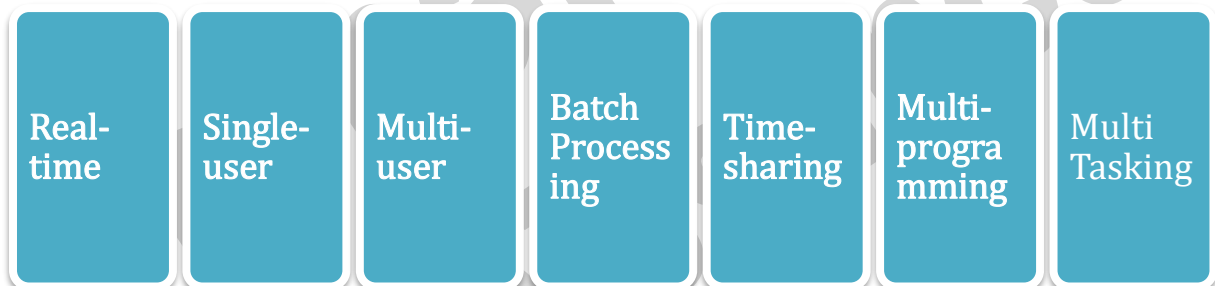
In technical terms, it is software which manages hardware. An operating System controls the allocation of resources and services such as memory, processors, devices and information.



Following are some of important functions of an operating System.



TYPES OF OPERATING SYSTEM



MS Windows

Windows XP is a personal computer operating system produced by Microsoft as part of the Windows NT family of operating systems. The operating system was released to manufacturing on August 24, 2001, and generally released for retail sale on October 25, 2001.



BAMC II year

Subject: Information Commination Technology

Windows XP is a graphical user interface (GUI). It has pictures (graphical) that you use (user) to communicate (interface) with the computer. This type of system is popular because it's logical, fun, and easy to use.

This operating system has multi-tasking capabilities, meaning it can run several applications at the same time. Multi-tasking allows you to view this lesson on the Internet at the same time you practice using other applications with Windows XP.

History of Windows:

Versions	Year
Windows	10 Nov.1983
Windows 1.0	Nov.1985
Windows 2.0	09 Dec.1987
Windows 3.0	22 May.1990
Windows 95	August 1995
Windows 98	June 1998
Windows 2000	Feb.2000
Windows XP	25 Oct. 2001
Windows Vista	2007
Windows 7	22 July 2009
Windows 8	26 Oct. 2012
Windows 10	2015

The New and updated features in the new program are:

- Windows XP is faster, smarter, safer
- Windows XP is easier to learn and use
- Windows XP offers better help for every task
- Playing music, video and CDs
- Offers wizard
- User interface
- Infrastructure
- Networking and internet functionality

Windows XP editions

- Home and Professional
- Starter Edition
- Media Center Edition
- Tablet PC Edition
- Subscription and pre-paid editions
- 64-bit editions



BAMC II year

Subject: Information Commination Technology

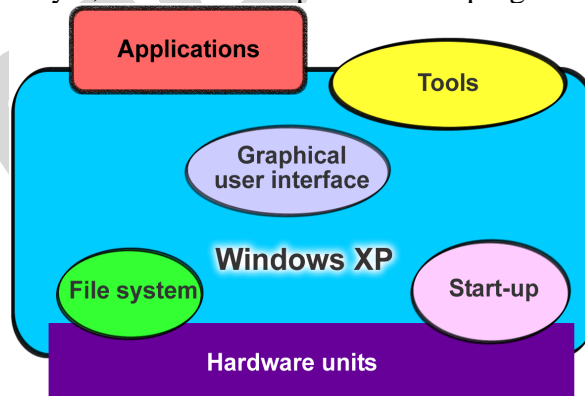
- Editions for embedded systems

Windows XP is an operating system

Windows XP is a collection of programs, which enables the entire pc to work. Among Windows' most important tasks are:

- Assist in starting the pc.
- Control and handling of all hardware, including RAM, I/O, cards and controllers.
- Read-in of a graphics user interface with windows, menu bars etc.
- Forms a platform for the user programs (*applications*) like Word, Internet Explorer, and Photoshop etc.
- Handling of user data in *files*.

Beyond the pure operating system tasks Windows XP includes a large collection of smaller and larger tools. Among others Windows XP comes with Internet Explorer and the multimedia player Windows Media Player, which are independent user programs.



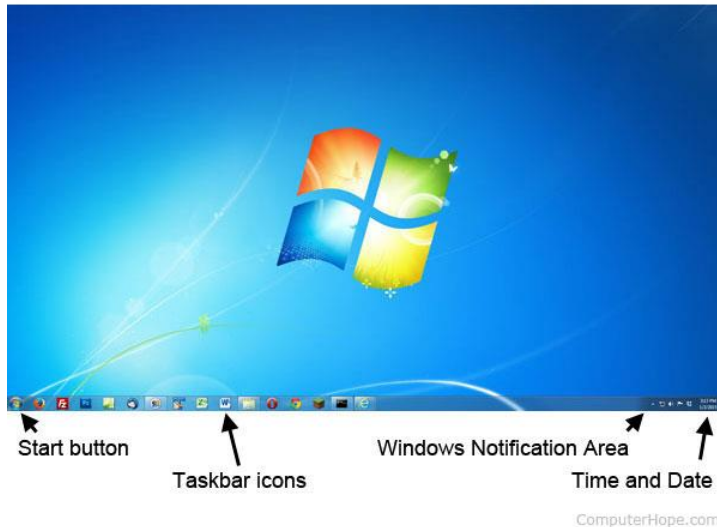
Windows XP is both an operating system and a program package.

Desktop

Desktops in a WINDOWS is utility that allows users to manage applications on up to four virtual desktops, all accessible using the tray icon interface. 4. When referring to an operating system or GUI, the Desktop is a system of organization of icons on a screen. The Microsoft Windows Desktop was first introduced with Microsoft Windows 95 and has been included with every version of Windows since then.



Windows 7 Desktop



The desktop contains:

- **Start button:** This is one of the most important tools you will use while working with Windows XP. The Start button allows you to open menus and start applications.
- **Taskbar:** This is primarily used to switch between open windows and applications. Learn more about using the taskbar in a later lesson.
- **Icons (or graphical pictures):** This represents applications, files, and other parts of the operating system. By default, Windows XP provides you with one desktop icon, the Recycle Bin.
- **Windows Notification Area**
- **Time and Date:** The date and time is also shown on the Desktop, in the notification area on the taskbar. If the date and time is incorrect, you can change the date and time right from the Desktop.

Exploring Windows Explorer

Windows Explorer is a file management tool that lets you create, rename, and delete folders. It also allows you to copy, print, move, delete, rename, and manage files.

To open Windows Explorer:

1. Open **My Documents**.
2. Click the **Folders** button on the **Navigation** toolbar.
3. A **list of folders** opens in the **left pane**.

To explore Windows Explorer:

1. With **Windows Explorer open**, scroll until you see the **Control Panel icon** in the left pane.
2. Click the **Control Panel icon**. The contents (of the Control Panel folder) display in the **right pane**.
3. Practice viewing other folders in the list.
4. To **close Windows Explorer**, click the **small black X** in the upper right of the list OR click the **Folder** button.



The Taskbar

The **taskbar** is the small blue bar you see at the bottom of your desktop. It contains the **Start menu** and the **Quick Launch bar**, which contains **icons** for Internet Explorer, Windows Media Player, and Show Desktop. Click an icon to open a program. Click Show Desktop to quickly view your desktop without closing any programs or windows.



The box on the right is called the **Notification Area**. Microsoft also uses the Notification Area to remind you when **software updates** are available for download.



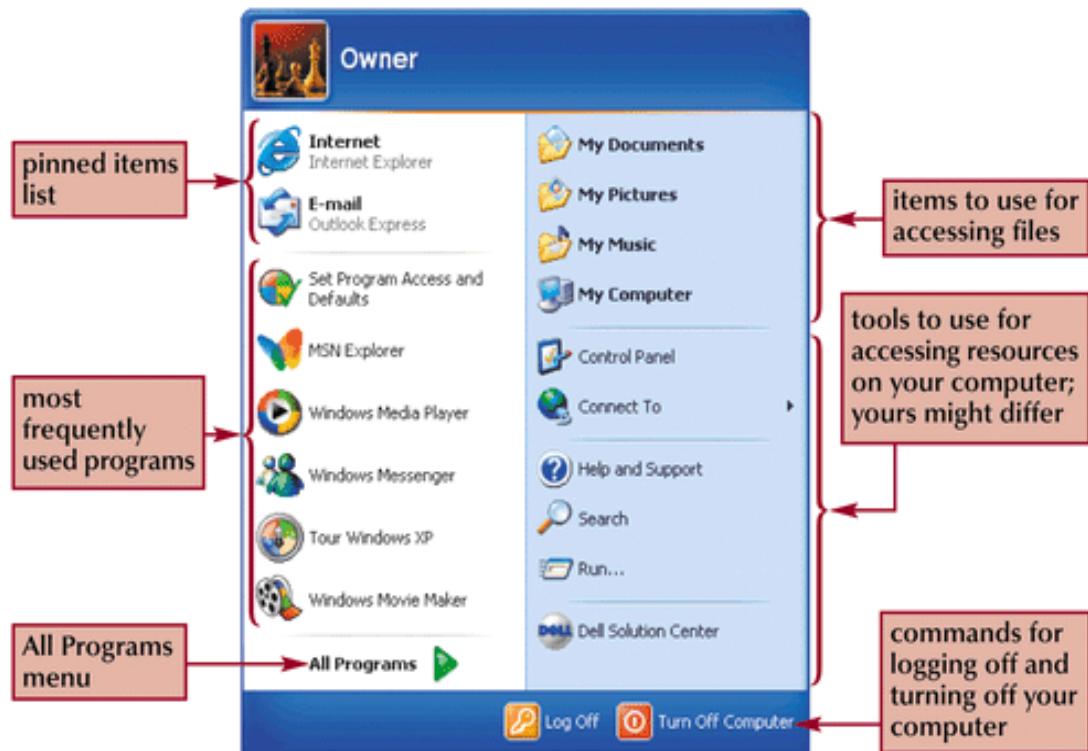
When you open or minimize a window or program, a **rectangular button** appears on the taskbar that shows the name of the application.

The Start menu

When you click the **Start** button, the **Start menu** appears. The **Start menu** is your path to the applications on your computer. It contains two columns. The left side of the **Start menu** lists programs, while the right side allows access to common Windows folders (My Documents, for example). It also provides access to **Help and Support**, **Search**, and **Run**. If you select **All Programs**, a pop-up menu appears. Pop-up menus like this are called **cascading menus**. If a cascading menu is available, a **small black triangle** appears next to the name of the application or function.

To explore the Start menu:

1. Click the **Start** button.
2. Move the mouse pointer to each option, and view the various cascading menus.
3. Click (or roll your mouse pointer over) **All Programs**.
4. Move the mouse pointer to the right, and view other **cascading menus**.
5. To exit the menus, click outside the menu area or press **Esc** on your keyboard.




The Recycle Bin

The Recycle Bin is nothing more than a space on the hard disk reserved to store information that is deleted so that in the event of deleting a file or folder by mistake it is possible to retrieve it. By default the Recycle Bin restores files or folders to the place from where they were deleted. If, for example, a file is deleted from **D:\my documents**, when it is restored it will go to that folder.

The Recycle Bin will maintain the deleted documents until it is emptied.

To open the Recycle Bin place the cursor on *Desktop* and double-click on the **Recycle**

Bin icon. 

Restoring Files or Folders

To restore all of the elements from the Recycle Bin click on the green arrow on the left side that says restore all items.

If we only want to restore some of the elements:

- 1) Select the elements to be restored by clicking on them. If the elements are not in subsequent order, use the Ctrl key to select them or the Shift key if they are one below the other.
- 2) Once selected, a dialog box will appear on the green arrow on the left that will say Restore this item or Restore the selected items.

The selected files will return to where they were located before deletion.

Deleting Files or Folders from the Recycle Bin




BAMC II year

Subject: Information Commination Technology

Before deleting any element from the Recycle Bin you need to realize that once it is deleted it cannot be retrieved or restored.

● If you want to delete any file or folder from the Recycle Bin follow these steps:

1) Select the Elements to be deleted.

2) Click on ; this will delete the selected elements. You can also do this by pressing the Delete button.

The selected files will disappear and cannot be restored.

My Computer

It is another tool you can use to manage files and folders. With this tool, you can **create, rename**

and move folders and copy, print, move, delete and rename files. It also allows you to gain **access** to other system tools.

To open My Computer:

1. Double-click the **My Computer icon** on the desktop.
2. **My Computer** opens.

My Network Places overview

My Network Places displays shortcuts to shared computers, printers, and other resources on the network. The shortcuts are created automatically in My Network Places whenever you open a shared network resource, such as a printer or shared folder.

Open My Network Places

- To open My Network Places, click Start, and then click My Computer. Under Other Places, click My Network Places.
- The View workgroup computers task is displayed in My Network Places when your computer is in a workgroup and not in a domain. Double-click this icon to narrow your search to only those computers, printers, and resources that share a workgroup with your computer.
- If your computer is connected to a workgroup that has less than 32 computers, Windows will automatically create shortcuts in My Network Places to the shared resources in your workgroup.
- To add a shortcut in My Network Places to a folder on a Web server, the Web server must support network places..

My Documents

The My Documents folder is your own personal folder in which you can store your documents, graphics, and other personal files. You can change the target if you want My Documents to point to a different folder location.

- Change the Default Location of the My Documents Folder
- To change the default location of the My Documents folder, follow these steps:
- Click Start, and then point to My Documents.
- Right-click My Documents and then click Properties. Click the Target tab.



User Accounts

To get at the settings for the User Accounts, click Start and then Control Panel. From the Control Panel, double click User Accounts.

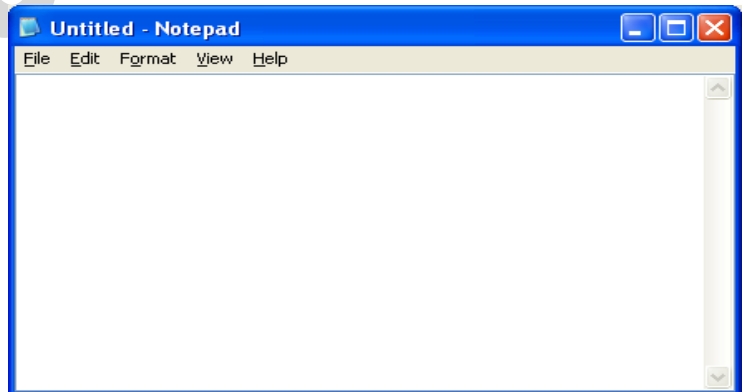
- We can create a new user account.
- We can make the account as password protected.
- Through admin we can even change the password.

Windows XP Accessories Applications:

- Calculator,
- Notepad,
- WordPad,
- Paint

Using Windows XP Notepad

Notepad is a miniature text after the calculations are performed. To enter numbers from the editor. Just as you use a notepad on your desk, you can use Notepad to take notes onscreen while working in other Windows applications.



Because Notepad stores files in text format, almost all word processing applications can retrieve Notepad's files.

However, if you want the capability of formatting your documents, you'll need a true word processor.

Starting Notepad

To start Notepad, open the Start menu and choose Programs, Accessories, Notepad. Notepad starts up and displays a blank document in the Notepad window .

Working with Documents in Notepad

You can move the insertion point by using either the mouse or the keyboard. You select and edit text in Notepad the same way you select and edit text in WordPad.

Limited formatting is available from the File, Page Setup command. You can change margins and add a header or footer, but you cannot format characters or paragraphs in any way. You also can use the Tab, Spacebar, and Backspace keys to align text. Tab stops are preset at every eight characters.

With the commands on Notepad's Edit menu, you can cut, copy, and move text from one place in a file to another. Text that you cut or copy is stored in the Clipboard. When you paste text, the contents of the Clipboard are copied from the Clipboard to the document at the location of the insertion point.

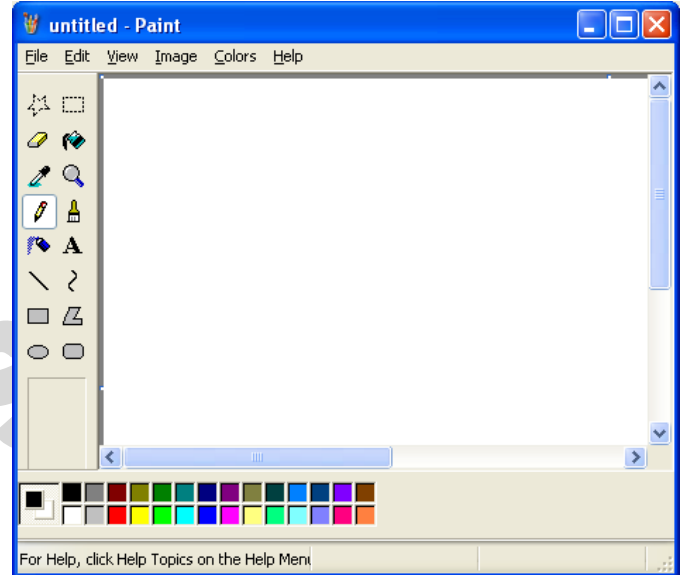


4.Using Windows XP Paint

Paint is n easy-to-learn graphics application that you can use to create and modify graphics images.

Steps for starting Windows Paint

To start Paint, click Start, Programs, Accessories, Paint. Paint starts up and opens a new, empty Paint file



5.Using Windows XP Entertainment

Windows XP includes entertainment programs for playing CDs, viewing multimedia files, and recording and playing back sounds.

It is capable of performing many tasks like:

1. Playing Games
2. Changing the Volume
3. Playing a Sound with Sound Recorder
4. Playing an Audio CD
5. Working with Media Player Controls
6. Changing the Visualizations
7. Copying CD Tracks
8. Using the Media Library
9. Creating a Playlist
10. Tuning into the Radio
11. Changing the Skin for Windows Media Player
12. Playing a Video Clip
13. Importing a Movie with Windows Movie Maker

Changing Mouse Pointer

1. Open Mouse Properties by clicking the Start button The Start button, and then clicking Control Panel. In the search box, type mouse, and then click Mouse.
2. Click the Pointers tab, and then do one of the following:
 - To give all of your pointers a new look, click the Scheme drop-down list, and then click a new mouse pointer scheme.
 - To change an individual pointer, under Customize, click the pointer you want to change in the list, click Browse, click the pointer you want to use, and then click Open.
3. Click OK.

To change your desktop background

1. Open Display in Control Panel.
To open Display, click **Start**, click **Control Panel**, click **Appearance and Themes**, and then click **Display**.
2. On the **Desktop** tab, do one or more of the following:



BAMC II year

Subject: Information Commination Technology

- Click a picture in the **Background** list. In **Position**, click **Center**, **Tile**, or **Stretch**.
- Click **Browse** to search for a background picture in other folders or on other drives. You can use files with the following extensions: .bmp, .gif, .jpg, .dib, .png, .htm. In **Position**, click **Center**, **Tile**, or **Stretch**.
- Select a color from **Desktop color**. The color fills the space not used by a picture.

Note

- To open Display, click **Start**, click **Control Panel**, click **Appearance and Themes**, and then click **Display**.
- You can use a personal picture as a background. All of your personal pictures located in **My Pictures** are listed by name in the **Background** list.
- You can save a picture from a Web site as a background. Right-click the picture and then click **Set as Background**. The picture is listed in the **Background** box as Internet Explorer Background.
- If you choose an .htm document as your background picture, the **Position** options are unavailable. The .htm document is automatically stretched to fill your background.

Copying and Moving Files and Folders

Sometimes you will need to move a file from one folder to another, or copy a file from one folder to another, leaving the file in the first location and placing a copy of it in the second. You can move or copy a file or folder using a variety of methods. If the file or folder and the location where you want to move it are visible in a window or on the desktop, you can simply drag the item from one location to the other. Moving a file or folder on the same disk relocates it whereas dragging it from one disk to another copies it so that it appears in both locations. When the destination folder or drive is not visible, you can use the Cut (to move), Copy, and Paste commands on the Edit menu to move or copy the items.

Copy a File or Folder

1. Open the drive or folder containing the file or folder you want to copy.
2. Select the files or folders you want to copy.

Move a File or Folder

1. Open the drive or folder containing the file or folder you want to move.
2. Select the files or folders you want to move.
3. Click the **Organize** button on the toolbar, and then click **Cut**.
4. Display the destination folder where you want to move the files or folder.
5. Click the **Organize** button on the toolbar, and then click **Paste**.

Copy or Move a File or Folder Using Drag and Drop

1. Open the drive or folder containing the file or folder you want to copy or move.
2. Select the files or folders you want to copy or move.
3. In the Navigation pane, point to a folder list to display the expand and collapse arrows.
4. Click the arrows to display the destination folder, and then click the destination folder.
5. Right-click the selected files or folders, drag to the destination folder, and then click **Copy Here** or **Move Here**.