

COMPUTER AWARENESS

Computer is an electronic device. Computer is a data processing tool. It takes Data and commands as input. Computer processes the data according to the commands and provides the resulting information as an output. A computer is a machine, which calculates and solves problems at very fast speed and has memory to store instructions and information's. Computer can also calculate the figures. It has the storage place called memory to store the information's. This memory is in the form of small boxes called chips.

Basically any computer is supposed to carry out four functions viz., accepting the data as input, storing the data and instructions in its memory and recalling the same as and when required (Retrieving), processing the data as per instructions to convert it into useful information and communicating the information as output.

Computers can be used for many other interesting works like drawing different shapes/pictures, listen music, play games, quiz, puzzles, preparation of greeting cards etc. Computers are used in Education, Hospitals, Business, Science and Engineering, Entertainment, Communication and Telecommunication, Desk Top Publishing, Libraries, Railways, Airports, Offices, Defence, Private and public sectors etc. The other thing which computer can do is to control functioning of very complicated intelligent machines like robots satellites etc.

Evolution of Computers

The first calculating device developed and used for calculations is known to be the Abacus. An abacus made calculations using beads and rods. Moving beads up and down does addition and subtraction of numbers. The Abacus is a simple and an effective manual calculating device.

Blaise Pascal, a young Frenchman, invented an Adding Machine in 1642. This was a mechanical calculating device made from gears, wheels and dials. It was used for adding numbers quickly. Adding machine based on this principle is still in use.

Joseph Jacquard, a French weaver, invented an Automated Loom in 1804. This Loom used punch cards to produce patterns and designs on cloth. The weaving action of this machine depended on the absence or presence of holes in the card.

Charles Babbage, an English man born in 1833, is known as the father of computers. He designed and built a machine called "Difference Engine". This machine could take in the information and sort it out in the form of tables. Difference Engine was used to calculate the logarithm tables accurately. Lady Ada Lovelace, an associate of Charles Babbage, developed procedures for solving problems on the Difference Engine. She is known to be the first lady programmer of the world. Charles Babbage also gave the complete design of a more advanced calculating machine called the "Analytical Engine". Computers have mainly four categories viz., Digital, Analog, Hybrid and Optical.

I. Digital Computers operate by numerical counting (adding) of discrete data, using the method of controlled arithmetic operations. Digital computer represents the data into digits and then all operations are done on these digits at extremely fast rates. Digital computer basically knows how to count the digits. Digital computers employ many interchangeable arithmetic devices in usually sequential operation. Hence, cost is

relatively high and programming is complex. Digital computers have been grouped into four viz., Micro Computers, Mini Computers, Mainframe Computers, Super Computers

(a) Micro computers: A microcomputer is a computer whose CPU is a microprocessor. A microprocessor is a processor all of whose components are on a single integrated-circuit chip. Home computers, personal office computers are examples of microcomputers, which have proliferated, bringing computing power and literacy to more and more people. In terms of number of units, microcomputers are those of all other types of computers combined. Microcomputers can be sub-divided into two types:

(i) Home Computer: Home computers are meant for hobbyists rather than professionals. These consist of a keyboard integrated with CPU in one box type thing and interfaced with ordinary television and audiocassettes. They are meant for entertainment, and training. Vendors supply cassette tapes containing programs for computer games and for entertainment.

(ii) Personal Computers: Personal computers are called so because they are designed for personal use of individual or individual small business. They are meant for professionals, small business units and office automation systems. PC can be used for a variety of applications like: Computer literacy, BASIC Programming, Fun and Games, Home and School applications, Business and Professional applications, Electronic spread sheets, Telecommunications, Data Base Management, Accounting, **Word Processing.**

(b) Minicomputers: By early 1960, economic and technical factors combined to make small, inexpensive computers attractive for many applications. Many computing tasks could be accomplished with less power than was then available on the contemporary mainframe computers. Speed of execution, memory size, and other characteristics of minicomputers increased with advances in technology. The availability of low cost memory allowed a dramatic increase on the size of main memory attached to the minicomputers.

(c) Main Frame Computers: Although there has been some blurring of the boundaries between minicomputers and mainframe computers, the mainframe remains a distinct class of computers. There are some key differences between the mainframe class computers and the mini class computers. One of the most dramatic differences is in the speed of the two classes. Another dramatic difference is in price. The primary function of mainframes today is to support large databases. Large business and government organizations need a central repository of data that can be managed and controlled centrally. Only the mainframe has the processing power to handle large database systems. Moreover mainframes have more that kept up with other classes of computer in terms of price and performance.

(d) Supercomputers: There is a need for computers to solve multi various mathematical problems of real physical processes, such as problems that occur in aerodynamics, seismology, metrology, and atomic, nuclear and plasma physics. The Super computer has limited use because of its price tag, a limited market. Only these machines are used, mostly at research centers and some government agencies with scientific or engineering functions. As with other areas of computer technology, there is a content demand to increase the performance of the supercomputer. In some current applications in aero dynamics and nuclear physics, as many as arithmetic operations, requiring more than two days of computing time on a contemporary supercomputer, are needed for a single problem.

II. Analogue Computer - Mostly used in engineering and scientific calculations. Analogue computers employ relatively few distinct, single-purpose devices in parallel-channel operation. Hence, cost is relatively low and programming is easy. The accuracy of

analogue computers is limited as compared to the accuracy of digital computers, which is essentially unlimited. Analogue computers are best suited for simulating the response of physical systems, while digital computers are best suited for handling numerical problems, statistical data, and discrete random process. Digital computers can be set up, however, to serve as mathematical models of physical systems.

III. Hybrid Computers: There is another category of computers, which should be mentioned in passing. These are the hybrid computers, which make use of both analogue and digital components and techniques. They employ analogue-to-digital and digital-to-analogue converters for transforming the data into suitable form for either type of computation.

IV. Optical computer: Optical computers will be super high speed computer yet to be developed which shall work on quadra system logic.

Components of computer

Input devices, Output devices, processing unit [CPU], Memory. A device whose purpose is to allow the user to provide input or information to a computer system is called an Input device. Input devices are those devices that we use to send information into the computer. Input devices are - Keyboard, Mouse, Scanner, Joy stick, Bar Code Reader, Micro phone, Digital camera. Output devices are those devices that a computer uses to give information to us. The device used to get information from the computer. Output devices are Monitor [Visual Display unit], Speaker, Printer, Plotter etc.

CPU is responsible for receiving the instructions, processing them and supplying the results to the output units. Central Processing Unit (CPU) of a computer resides in the system box. Physically, there are processor chips, which are plugged on a circuit board called the motherboard. The most important processor chip is the microprocessor chip. Processing includes mathematical operations like addition, subtraction, multiplication and division. Processing also include logical functions like comparison and sorting. The components of CPU are:

i) Arithmetic and Logic Unit [ALU] consists of high-speed memory locations directly built into the CPU. It is responsible for the arithmetic [$+$, $-$, $*$, $/$] and logical operators [$<$, $>$, $<=$, $>=$, $<>$] on the data entered.

ii) Control Unit [CU] does not process or store data but maintains the flow of data between the ALU, Memory and the Input/Output devices. Sometimes, it just transfers the data from the memory to the output devices or to the storage devices. But if it finds the instructions for the arithmetic or logical operations, it transfers them to ALU for further processing.

iii) Memory Unit or the primary storage stores the data before processing, and the final results obtained after processing, in different storage sections. The programs or instructions given to the processor are also stored here.

The functions of CPU are - (a) To access and store relevant data and instructions during processing (b) To control the sequence of operations (c) To give commands to, and coordinate the actions of all parts of the computer system (d) To carry out-processing.

How is the data input classified?

The data input may be in form of - (a) Numerical with different symbols (b) Alphabetic. (c) Alphanumeric (Combination with letters, numbers and symbols) Examples: a1, b2, d/, 1* etc. Then this is coded into data acceptable to computer in its language. It may be audible, visual or audiovisual analogic data. In this case, an inter-facing device is required to convert it into signals, which are acceptable to computers.

Types of memories

i) Primary memory devices are in the form of a computer chip and they are plugged on the motherboard. In a PC, there are four types of primary memory chips viz., Random Access Memory (RAM) b) Read Only Memory (ROM), Cache Memory [store or to reserve] and Registers. The Hard Disk is basically a mass storage device, which is used for storing data permanently in the computer. Its storage capacity is many times more than that of a floppy and pen drive.

ii) Secondary memory consists of different storage devices in which you can store the work done on the computer. The popular storage devices are floppy disks, Pen drives, external hard disks and CD ROMs. Although all of these are storage devices, they differ from each other in many ways. Data can be written on floppy disk. Its capacity is however less but it has the advantage of being portable. It is very easy to write and rewrite data on the hard disks and floppy disks.

CD-ROM stands for Compact Disk Read Only Memory. It is an input device that has been exclusively designed to perform read operations. It reads data with the help of laser beam, which is directed with the help of lenses, prism and mirrors.

CD-RW: In a CD-RW, it is possible to write many times on the disk, overwriting the previously recorded data.

DVD: A DVD or Digital Versatile/video Disc is a high-density medium, capable of storing a full-length movie on a single disc.

RAM & ROM

RAM is the main memory of the computer. This is the working memory. Any program or data first gets transferred to this memory and then only user can use it. Anything that is typed on the keyboard goes on to the RAM. Similarly, the output displayed on the screen comes from the RAM. It is called volatile memory (temporary). RAM becomes blank as and when the system is switched-off.

The ROM is built into the system box. It contains the basic instructions to start the computer and display the system configuration. We can read from this chip and cannot write or change anything on it. The name of this memory suggests that you can only read from this chip and cannot write or change anything on it. It is similar to a printed book that you buy from the market. You only read from the book and do not write anything on it yourself. This chip contains important information and instruction to enable a computer to startup and identify various components within the computer. ROM is non-volatile memory (permanent). That is, even in the absence of electricity, content of this memory is not lost.

Cache is a component that transparently stores data so that future requests for that data can be served faster. The data that is stored within a cache might be values that have been computed earlier or duplicates of original values that are stored elsewhere. If

requested data is contained in the cache, this request can be served by simply reading the cache, which is comparatively faster. Otherwise, the data has to be recomputed or fetched from its original storage location, which is comparatively slower. Hardware implements cache as a [block](#) of memory for temporary storage of data likely to be used again. [CPUs](#) and [hard drives](#) frequently use a cache, as do web browsers and web servers.

Units of Memory

This is a system consisting of two digits. The computer converts all the information including numbers and letters into binary system. In the electronic chip the transmission of electricity represents the digit 1 and no transmission of electricity represents the digit 0. 1 or 0 is known as a binary digit or bit. **Bit** is a binary digit. In computer all the characters including letters, punctuation marks, numbers and special characters are stored in bytes. One byte consists of 8 bits and stores one character. 4 Bits are called Nibble. The units of memory are as under:

8 Bits	1 Byte
1024 Bytes	1 Kilobyte [KB]
1024 Kilobytes	1 Megabyte [MB] (One Million)
1024 Megabytes	1 Gigabyte [GB] (One Billion)
1024 Gigabytes	1 Terabyte [TB] (One Trillion)

Computer languages

1. Machine Language: Machine language is considered to be the first generation language. All instructions/data that are fed to the computer are converted into a sequence of bits [0 and 1] as a computer understands only the binary numbers, which consists of only 2 digits [0 and 1]. As clear from the name, machine language is directly accepted and executed by the computer. Note: Machine language is the elementary language of a computer, which consists of binary digits [0 and 1] only. It is directly executable by the computer and no further translation is required and the execution of the program is very fast. However, portability is an issue as the internal designs of computers are different which warrants conversion of program. You need to rewrite the program.

2. Assembly Language: In assembly language, binary operation codes were replaced by the Mnemonics i.e. like two or three letter abbreviations. For example, in machine language, if the operation code for "add," is "0010"; its equivalent in assembly language is 'ADD'. An assembler is used to further translate it into the machine code so that it can be executed by the computer. Since mnemonics are abbreviations or symbols, they need to be translated into machine language to get executed. Assembly language is considered to be second-generation language. Machine and assembly languages are also called low level language as they are linked with the hardware. Since assembly language differs from the machine language in the way of mnemonics mainly, most of the shortcomings of machine language like machine dependence, difficulty in writing and debugging the programs etc., are applicable to the assembly language.

3. High Level Languages: Machine language and assembly language were used because initially computers came with very small memory and limited resources. Thus program efficiency could be achieved only by using hardware-oriented languages. As speed, power and capacity of computer increased, a need was felt to develop the programs which can make use of this wonderful machine in many other fields and can be developed by people who are not experts in computer architecture and hardware. So high level languages

came into existence. High-level languages (HLL) are the languages with simple English like syntax, which is easy to understand. Basic, Fortran, Pascal, Cobol, C, and C++ are a few such languages. We need compilers or interpreters to change the HLL code to machine code so that it could be understood and executed by the computer. High-level languages are considered to be third generation languages.

(1) BASIC stands for Beginner's All-purpose Symbolic Instruction Code. It is a comparatively easy language for beginners in the sense that it uses phraseology similar to conventional ENGLISH. BASIC is the most commonly used language on microcomputers. It was designed by two American professors JG Kemeny and Thomas Curtz of Dartmouth College USA in 1964. Most microcomputers use a BASIC devised by a company called Microsoft. Because of its simplicity, BASIC was used in the first PC to gain commercial success.

(2) FORTRAN stands for FORMULA TRANSLATION. It was the first computer language developed by IBM in 1957. It has been modified since then many times and these versions were given the names like FORTRAN II. FORTRAN-IV is the most popular version, which was developed in 1966. Latest addition to this is FORTRAN 77, on which even file handling and word processing is possible. FORTRAN'S syntax is very rigid. It is used in engineering and scientific applications.

(3) PASCAL is sometimes used on small computers and is better structured than BASIC. PASCAL was designed and developed by Nicolaus Work for teaching computer science.

(4) COBOL: It stands for Common Business Oriented Language and is the most popular business language today for data processing. It was designed around 1959-60 with a purpose to provide a common language for business applications.

(5) C: Its mid level general-purpose language more versatile than BASIC or FORTRAN. It is used both with Unix and DOS operating systems. The C language was developed at Bell Laboratories in the early 1970s. It was subsequently used to write the UNIX operating system. AT&T (Bell Labs' parent) markets a C compiler and UNIX operating system tools as a single software package. There are many other versions of C that run on pc's and larger machines.

(6) LOGO: It allows even children to program a microcomputer quickly for drawing pictures etc.

(7) Fourth Generation Languages: These languages are under stage of development. Efforts are being made to see that no elaborate programming is required and languages become user friendly. One such language SQL was developed by IBM around 1976. SQL is an acronym for "Structured query language". Commercial relational DBMS packages such as Oracle 7, Ingress 6.4, and Sybase use SQL. Remember when the input program (called as Source Code) is processed by a language translator, output is the machine language program called as Object program. High-level languages have lots of advantages over Machine language and Assembly language. These programs developed on one type of computer can run or get executed on other type of computer with no change or little change. Hence lot of effort was saved. It is really easy to write a program in a high level language. The programmer is more concerned about logic and program development without worrying about the hardware aspect.

Computer language is a medium to communicate with each other. Similarly a computer language, which is needed to interact with computer, has its own set up rules and syntaxes. While making programs it is essential to follow these syntax, otherwise

computer will not be able to understand anything. Computer languages can be classified into three categories based on complexity of the language viz., Machine Language Assembly Language / High Level Language. Software means a set of instructions/programs given to the computer system, which enables the hardware to function. Computer software is the intelligence of the computer and can be broadly classified into:

i) System software: A software program coordinates the operations of the various hardware components of the computer. The system software or operating system program helps the user to actually operate the computer system. Without the operating system, we cannot use the applications software. The operating system controls computer system resources and coordinates the flow of data to and from the microprocessor and to and from input devices and output devices such as the keyboard and the monitor. It helps the computer to supervise and manage its resources. The most popular operating systems are DOS, UNIX, LINUX, Windows 98, Windows 2000, Windows XP and the Windows 8.

ii) Application software makes the computer useful for the people and can be used for different purposes. These help the user to work more efficiently, faster and more productively. There are general purpose application software's such as Word processing software, Spread sheets, Database management software, Desk Top Publishing software etc. Software developed to suit the specific requests of the customers is called Customized software. Example - Accounting, Library management, Fees collection, Hotel management etc.

In computer networking, *topology* refers to the layout of connected devices. Broadly they are categorized as under:

Bus Topology: Bus networks use a common backbone to connect all devices i.e. Single cable. A device wanting to communicate with another device on the network sends a broadcast message onto the wire that all other devices see, but only the intended recipient actually accepts and processes the message. Bus networks work best with a limited number of devices. In case where the number of computers are more, performance problems will likely result. If the backbone cable fails, the entire network effectively becomes unusable.

Ring Topology: In a ring network, every device has exactly two neighbors for communication purposes. All messages travel through a ring in the same direction (either "clockwise" or "counterclockwise"). A failure in any cable or device breaks the loop and can take down the entire network. To implement a ring network, one typically uses FDDI, SONET, or Token Ring technology.

Star Topology: A star network features a central connection point called a "hub node" that may be a network hub, switch or router. Devices typically connect to the hub with Unshielded Twisted Pair (UTP) Ethernet. Compared to the bus topology, a star network generally requires more cable, but a failure in any star network cable will only take down one computer's network access and not the entire LAN.

Tree Topology: Tree topologies integrate multiple star topologies together onto a bus. In its simplest form, only hub devices connect directly to the tree bus, and each hub functions as the root of a tree of devices. This bus/star hybrid approach supports future expandability of the network much better than a bus (limited in the number of devices due to the broadcast traffic it generates) or a star (limited by the number of hub connection points) alone.

Mesh Topology: Mesh topologies involve the concept of routes. Unlike each of the previous topologies, messages sent on a mesh network can take any of several possible paths from source to destination. (Recall that even in a ring, although two cable paths exist, messages can only travel in one direction.) Some WANs, most notably the Internet, employ mesh routing. A mesh network in which every device connects to every other is called a full mesh. Partial mesh networks also exist in which some devices connect only indirectly to others.

Topologies remain an important part of network design theory. You can probably build a home or small business computer network without understanding the difference between a bus design and a star design, but becoming familiar with the standard topologies gives you a better understanding of important networking concepts like hubs, broadcasts, and routes.

Computer Networks

A computer network is a group of computers that are connected to each other for the purpose of communication. Networks may be classified according to a wide variety of characteristics. A computer network allows computers to communicate with many other computers and to share resources and information. The Advanced Research Projects Agency (ARPA) 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.

LAN stands for local area network and WAN stands for wide area network. There are obvious differences between the two network types. LANs are smaller networks, usually within an office base. Connections between the workstations are physical, with cables, and all the office resources are shared and distributed between the network workstations. The most common type of LAN is that of Ethernet. This is a family of frame-based computer networking technologies for LANs.

WANs are broader geographic networks, like one city to another. They are more of a collection of interconnected LAN networks. Other WANs, provided by service providers, connect local networks to the Internet. In actual fact the Internet is more a specific Internetwork, not a straight WAN. While LANs are smaller, collectively they can be linked to create the WAN. This really is done using a series of routers, and bridges, which are basically network hardware devices which enable interconnectivity between separate LANs with the option of expanding into small-scale WANs.

LANs are faster with 10 GB data transfer rates encompass a smaller geographical area. WANs also rely on common carriers, while LANs do not. Aside from these differences users of a LAN will more likely need password validation as it will have specific user rights. While smaller WANs might also have this, it is less likely. LAN networks will generally be more private than WAN networks, and will have some sort of networking software and probably a network administrator. Hardware resources are shared on a LAN, while with a WAN the focus is more on communications.

The network topology of LANs is often peer-to-peer. That is to say, each client shares its resources with other workstations in the network. WAN networks will operate on a more client-to-server basis with interconnected LANs. Really, all this means is that the resources are requested from a central server.

A single LAN network will be cheaper to set up than that of a larger WAN, with more workstations and more hardware connection requirements with the need for a leased line. So, the differences between Lan's and Wan's are indeed greater than just that of size. There are differences in network topology, hardware requirements, software requirements as well as technical specifications and cost.

Windows & Desktop

Windows is a commercial, multi user, multi tasking operating system with a graphical user interface (GUI). It presents the information to the user in rectangular boxes called windows. In windows every user can have personal settings and a user can open any number of applications depending upon the system resources.

Windows will get started when you switch on the CPU. After loading Windows the first screen that appears is called Desktop. All the further activities that you start in Windows would then start from the Desktop. It is comprised of many components like Icons, Start menu and Task bar.

Icons: Several small pictures along with their name remain present on the desktop. These pictures are called icons. Icons are basically, small graphical symbols, which represent a program. Each icon represents a different program and its name is written below the icon. Example - My computer, Recycle Bin, My Documents etc. When you double click on any icon the program will be opened. It is a multi user and multi tasking operating system and user friendly. However, it requires more memory. There are three types of icons viz., Program icons, Shortcut icons and Tool bar icons. Example - My Documents, My Computer and Recycle bin.

To shut down the windows, Click on START, in the menu that appears click on Shutdown / Turn Off Computer, then in the dialogue box that appears with options like STANDBY / SHUTDOWN / RESTART etc.

There are three main reasons for working in the Windows environment viz., to reduce memory load and make working easier, to run multiple applications at the same time, and share information between them and to use standardized applications.

i) Program Window: A computer program is a set of instructions that perform a specific task, such as word processing or data management. Each time you open a program, Window opens a program through which we can enter commands for the program. The more programs you start, the more windows you open. As a result, you may have several program windows open on your Desktop at the same time. A program window might contain several document windows.

ii) Document Window: A document is any information you create with a program, such as a letter, spreadsheet, or database file. When you open or create a document in a program, you open a document window. Each document window contains a single document and always appears in the program window's work area. This type of window is sometimes referred to as a child window.

The elements of window are - Title bar, Left side of the title bar there is control menu bar, Below the title bar there is menu bar, Scroll bar, Edit field and Status bar.

A dialog box is a window that appears temporarily on the top of your application window, which would require information from you to complete the task. It usually contain an option called "OK"/"Apply"/"Cancel". OK executes the task, Apply provides an opportunity to make changes before closing and Cancel closes the dialog box ignoring all the changes you may have made.

A message box is a simple box that displays a message or a warning to you. Generally they require you to acknowledge the window and click on OK to continue working. In the case of dialog boxes and Message boxes, you cannot continue working until you have closed this box.

A list box contains a list of options. Usually, you can only select one option in a list box. It contains a V at the right corner of the field and when you click on the V, various selectable options are displayed. Then click on an appropriate option and select it. The list box closes now.

Combo boxes are a combination of an edit box and a list box. A combo box is a rectangular box with one option along with a downward facing arrow next to the rectangular box. However, when you press the Down Arrow key a list of additional options descends from the box. You can only select one option from the list. Once you come to the entry of your choice, press the tab key to move to the next field. Since it is a combo box one can also type directly into it and use it like edit field.

Menu: Menu means containing list of different options. Each option itself will have special feature, which is used for the purpose of the document.

a. Windows Menu: By clicking on the START button, we can activate windows menu. Using the mouse, we can select different Windows Menu options and activate them. Alternately we can press the Windows Key to Activate the Windows Menu and use up or down arrow keys to select a particular menu.

b. Other application menus: The application Menu options are available below the title bar of the window. (File, Edit, View, Insert, Format, Tools...etc). By clicking on the required menu option, the sub menu options available under the selected menu option are displayed. By clicking on the appropriate sub menu option, the desired operation can be performed.

Menu's are very important, because without menus we can not complete the task for any application window. By using menus only we can complete the task with the help of dialogue box. So the menu options are very useful for making the work easy.

Key Board

Escape key - It means to remove any type of dialogue boxes and message boxes from desk top or from any application windows etc. It also cancels the menu from different application windows.

TAB Key - Pressing Tab one time, gives 5 spaces. Press TAB to go to next option in a dialogue box. TAB combines with SHIFT key. Then press SHIFT and TAB to go to previous option. TAB combines with INSERT key. Then press INSERT and TAB to read same option repeatedly in any dialogue box. TAB combines with CONTROL key. Then press Control and Tab to move between the pages in some dialogue boxes. TAB combines with ALT key. Then press Alt and TAB to move between opened application windows. At the time of

working in columns and rows, press TAB one time to go to next cell and press Shift Tab to go to previous cell.

Shift Key - Shift is used to change the small letters into the capital letters. Pressing the shift key we can edit different symbols placed on number keys and other symbol keys. Shift is used for selecting the text with arrow keys. Shift also combines with Control key, Home key, End key, Page up key and Page down key for selecting the text.

Control Key: Control key is used to combine with other keys as commands while working with different applications. Examples: Control A, Control Z etc.

ALT Key - Alt is used to activate or to deactivate the menu bar. Alt is used to combine with other keys as commands. ALT combines with TAB key, to move between opened application windows.

Application Key: When we activate application button, some menu options will take place.

Insert Key: Insert is one of the combination key.

Enter Key - Activates the menu which allows change the line, open the files/folders and give extra space between the lines.

Arrow Keys: To go to previous character, press left arrow. To go to next character, press right arrow. To go to previous line, press up arrow. To go to next line, press down arrow.

Delete Key: It is used delete the text in a document. It is used to delete blank lines. It is used to delete forward characters. Delete key combines with some keys, as keyboard commands. Examples: Control and delete, Alt and delete, Insert and delete.

Home Key: It brings the cursor to the starting of the same line. Home key combines with other keys as keyboard commands. Examples: Control and Home, Shift and Home etc.

End Key: It takes the cursor to the last character of the same line. End key combines with some keys, as keyboard commands. Examples: Control and End, Shift and End etc.

Page Up Key: It scrolls the screen towards upward direction. It combines with Control key, to go to previous page.

Page Down Key: It scrolls the screen towards downward direction. It combines with Control key, to go to next page.

Spacebar Key: Spacebar is used to give spaces between the words. Press Spacebar one time selects the list views where files are placed in folders and different drives in my computer. Spacebar is the combination to some keys, as keyboard commands. Examples: Alt Spacebar and X, Alt Spacebar and R, Alt Spacebar and N, Alt Spacebar and C, Control Spacebar etc.

Back Space: Back Space is used to delete the characters backward direction. Back Space is also used to move between the drives and to my documents. To come out from the folders or from sub folders we use back space key.

Character User Interface	Graphical User Interface
The commands are typed in a series of characters	The commands are given by clicking icons
Does not support pictures	Supports pictures
Mostly single user operating systems	Multi user operating systems
Does not support multi tasking	Supports multi tasking
User must learn all commands in order to use a Character User Interface	People with no/little computer knowledge can operate
Requires less memory	Requires more memory
Popular during the beginning days of computers	Popular with the evolution of the computer technology
Character User Interface's are useful for giving complex commands	Not useful for giving complex commands. It contain command shell for giving complex commands

Microsoft Word

MS Word is a word processing programme involves the information of written text into a form that gives it a formatted systematic looks that facilities easy reading. It allows add/change fonts, characters, Headers and Footers. It also generates personalized letters through Mail Merge, allow you to share resource available to all office programme, such as clipart, drawing tools etc. This module can be used to create and maintain documents, like letters, reports, circulars etc. The documents are stored in .doc or docx format. MS Word is a word processor through which we can format our text in the required format. The Word has nine menus viz., File, Edit, View, Insert, Format, Table, Tools, Windows and Help.

FILE MENU – (Keyboard shortcut: ALT + F)

- 1. New:** This is used to create a new document. The shortcut key is Ctrl N. If already there is a open document 1, then document 2 is created. If document 2 is also already open, then document 3 is created.
- 2. Open:** This is used to open an existing document. The shortcut key is Ctrl O. This will ask for file name. Type the file name and press enter.
- 3. Close:** This is used to close the current document. The shortcut key is Ctrl W. This will not close the word.
- 4. Save:** This is used to make the changes permanent. The shortcut key is Ctrl S. This will ask for file name for the first time. After that it will make the changes permanent.
- 5. Save as:** This is used to make a copy of that file. The shortcut key is F12. This will ask for file every time.
- 6. Page setup:** This is used to set the paper properties such as margins, size etc.
- 7. Print:** This is used to print the current document. The shortcut key is Ctrl P. This will ask for printer name, number of pages, number of copies.
- 8. Send to:** This is used to save the file in floppy or to send the file to E-mail.

9. Exit: This is used to quit the Ms word. Shortcut key is **Alt F4**.

EDIT MENU - ALT E

Edit menu has the following commands:

1. Undo: This is used to cancel the last operation performed, like delete or typing etc. the shortcut key is **Ctrl Z**.

2. Redo: This is used to perform the cancelled operation by undo. The shortcut key is **Ctrl Y**.

3. Cut: this is used to remove the selected text from the document, a copy is placed in the clipboard. The shortcut key is **Ctrl X**.

4. Copy: this is used to copy the selected text in the clipboard. The shortcut key is **Ctrl C**.

5. Paste: This is used to place the text from clipboard to the cursor position. The shortcut key is **ctrl V**.

6. Clear: This is used to remove selected text from the document. Shortcut key is **delete key**.

7. Select all: This is used to select the whole document. Shortcut key is **Ctrl A**.

8. Line up: This is used to move the cursor to previous line. The shortcut key is up arrow.

9. Find: This is used to find the required text. The shortcut key is **Ctrl F**. It will ask for find what: type the required text and press enter. Use arrow keys to read the text.

10. Find and Replace: This is used to replace the required text. The shortcut key **Ctrl H**. It will ask for find what, type the required text to be found. Then press tab. It will ask for replace with: type the word to be replaced. Click on Replace to replace the text at the current occurrence, Click on Replace All to replace the text at all the occurrences. A dialogue will say about the total no of replacements. Press escape and use arrow keys to read the text.

11. GO TO: This is used to move the cursor to required position. Shortcut key is **Ctrl G**.

INSERT MENU - ALT I

Insert menu has the following commands:

1. Break: this is used to create section, page breaks. The shortcut key for page break is **Ctrl enter**. The shortcut key for Column break is **Ctrl Shift enter**.

2. Page Number: Page number dialogue will appear The position for page number should be selected by using up/down arrows. Use tabs and select the alignment using arrow keys then press enter page numbers will automatically displayed.

3. Date and Time: This is used to insert the current date or time. The dialogue will ask for the required format, use arrow keys to select the appropriate format and press enter.

4. Auto Text: the auto text can be used to insert the frequently occurring text. Type the required text. Select the typed text. Use alt F3 to open the auto text dialogue. It will ask for auto text name. Type the name and press enter. To insert auto text: Select the required position to insert the auto text. Select auto text from insert menu. Type the auto text name and press enter.

5. Symbol: The keyboard does not have special symbols like alpha beta etc. In order to type these symbols, symbol command can be used.

6. Picture: This is a submenu which consists of the following: Clipart: Clipart is the preloaded picture which can be used by inserting in the document. FromFile: This is used to insert required picture file. Auto Shapes: This is used to insert shapes like oval, rectangle etc.

7. File: This command can be used to insert another file into the current document. This will ask for file name, type the file name and press enter.

8. Bookmark: To insert bookmark, first select the required word by using the Ctrl and arrow keys. Then select the command, it will ask for bookmark name, type a name without special characters. Press enter, the bookmark will be created.

FORMAT MENU - ALT O

1. Font: Shortcut key for dialogue is **Ctrl D**. the font dialogue consists of the following: Font name: this is used to give different styles for text. Attributes: This is used to give the attributes like bold, italics, regular. Size: This is used to increase or decrease font size. Colour: This is used to change font colour. There are some other attributes like strike out, superscript, subscript, shadow, outline etc.

2. Paragraphs: The paragraph dialogue have the following: Indentation: This is used for setting the paragraph indentation. Spacing: the spacing is used for specifying the line spacing. There are single, double, 1.5, multiple line spacings. The shortcut key for single line spacing is Ctrl 1, the shortcut key for double line spacing is Ctrl 2, the shortcut key for 1.5 line spacing is Ctrl 5. Bullets and Numberings: this is used for generating automatic numbers, bullets. The dialogue has separates tabs for bullets and numberings. Using arrow keys the required formats can be created. Alt B is used to select the bullets tab. Alt N is used to select the numbers tab.

3. Borders and Shadings: The borders and shadings have the paragraph borders, page borders and shading tabs. The shortcut key for page border is alt P. the shortcut key for paragraph border is alt B. The shortcut key for shadings is alt S. Using tab key appropriate format can be selected.

4. Columns: the column is the format which is used for preparing news format. The column dialogue have 2,3,4,left, right check boxes. These boxes can be selected for required number of columns. There is one more check box for a separator line . there are options for specifying the columns width.

5. Tabs: The tabs can be used to create statements, invoices etc. The tab dialogue will ask for tab stop positions. Type the required tab position, use alt S to set the tab. The tab stops can be divided among the 6 inches. This tab stops can be cleared by using alt A. Before setting the tab, select the required position by using Shift and arrow keys.

6. Drop cap: Normally the newspapers have paragraph starting with a big capital letters. To use such kind of characters in the document we can use this. There are two options: in margin and dropped.

7. Text Direction: The text in the document is normally from left to right. This direction can be changed to top to bottom by using this command.

8. Change Case: The letters typed in lower case can be changed to upper case or vice versa. For this typed text should be selected, Shift F3 can be used to change the case. The available options are lower, upper, sentence case.

TABLES - ALT A

1. Insert: Insert have the following submenus: **Table:** This will ask for number of rows and columns. Select auto contents check box and press enter to create a table. **Columns:** this command can be used to insert columns in the table. The available options are columns to right and columns to left. **Rows:** This command is used to insert rows in the table. Available options are rows above and rows below. **Cells:** This command is used to insert cells in the table. The available options are left, right, above, below.

2. Delete: the delete can be used to remove the cells from the table. This have the following options: **Table:** This is used to delete the current table. **Columns:** this is used to delete the current column. **Rows:** This is used to delete the current row. **Cells:** This is used to delete the selected cells.

3. Select: This command can be used to select the rows, columns, cells in the table.

4. Merge Cells: This command is used to merge more than one cells. This is done by selecting the required cells by using shift and arrow keys.

5. Split Cells: this command is used to split the cells. This dialogue will ask for number of columns and rows. By giving required number of columns and rows, the cells can be splitted.

6. Split Table: This is used to divide the table. Before using this command, select the table.

7. Table auto format: This command is used to format the table in the available format. This is done by selecting the table and giving appropriate format.

8. Auto Fit: the table should be auto fit to contents. In other case the alignment would be improper. To set the auto fit to contents table can be selected and this command can be applied.

9. Heading Row Repeat: tables can be sometimes big so that it cannot be fit into single page. In that case in order to repeat heading of the table this command can be used.

10. Sort: This is used to arrange the tables in ascending/descending order. For this, first select the required column and apply this command.

11. Formula: This command can be used to apply formula in the table. This formula can be used to sum the columns above or sum the rows towards left.

12. Show Grid Lines: This is used to show the lines between the cells.

TOOLS MENU - ALT T

1. Spelling and Grammar: Shortcut key is F7. Move the cursor to start of the document. Press F7 to open the spelling and grammar dialogue. If we feel that the word is wrong, we can use alt C to change the word. In other cases alt I can be used to ignore the choice. Alt G can be used to ignore all such spelled words.

2. Language: Set language: this is used to change the language from USA to British format etc. **Thesaurus:** This is used to find an appropriate synonym for a selected word. To find thesaurus, first select the required word and use shift F7. the thesaurus dialogue will be opened. Use tab and arrow keys to select the appropriate synonym. Use alt R to replace the word with the synonym.

3. Word Count: This is used to find out the following in the current document. Pages, words, characters (without space) characters (with space), paragraphs, lines.

4. Auto Summarise: This command can be used to give the summary about current document.

5. Auto Correct: Typing errors can be corrected by using the auto correct. This dialogue will ask for replace with colon edit. Type the abbreviation or the required word, use tab key it will ask for with colon edit. Type the words to be replaced. Press enter to add this to dictionary. In case of removing already existing word, type the word and press alt D. It ask for confirmation of deleting press enter.

6. Protect Document: This is used to protect the document from accidental use of the document. This is done by giving password. The protect document dialogue will ask for password. Type the password and press enter, it will ask for confirmation, repeat the password and press enter. Unprotect document: the protected document cannot be modified. In order to modify, unprotect the document. This is done by selecting the unprotect document from Tools Menu. It will ask for the password - type it and enter.

The **table of contents** is a very useful feature of MS-Word. This not only provides an overview of the contents of the full documents but also allows jumping to the section indicated by an entry in the table of contents. Before creating table of contents in the document, we should put heading styles for main headings, side headings and sub-headings.

Format List Box: There are several formats of displaying Table of Contents entries "From Template" option is almost similar to what we see in the books. Select the desired format from this list. Show page numbers and right align page numbers: Both of these are check boxes. Show Levels: It is an edit spin box. Specify the number of levels, which you wish to include in the Table of Contents.

Tab Leader: It is a combo box. Select the character, which would fill up the blank space in the line between the heading and page number of the Table of Contents entry. Press enter on the OK button. This would create the Table of Contents at the location of the insertion pointer. If the Table of Contents needed to be created at the beginning of the document make sure to go to the beginning of the document before activating the Index and Table command.

Mail merge: In case of sending a same letter to more than person the mail merge can be used. It requires three files to be created. 1. To hold the format of the letter. 2. To hold the address of receivers. 3. A document where the merged letter is saved.

Microsoft Excel

Excel is a spreadsheet program, and is used present financial data such as budget or sales report. Excel allows to enter and Edit data in a Worksheet. To use Functions and Formulas to calculate and analyze data. To create colorful Charts and Grafics. To save time by combining a series of commands into a single command by using MACROS. To change and analyze a large amount of data in to a list.

Adding, subtraction, multiplication, division, square root, average, future value (fv), EMI (pmt), current date and time (now), maximum (max), minimum (min), insert date (control & semi colon), insert time (control shift semi colon), text length (len)

Wizard - Highlight the cell where you want your new formula to appear. Start the Function Wizard. Follow the Function Wizard through its two dialog boxes.

Pivot table creates an interactive summary from many records. For example, you may have hundreds of invoice entries in a list on your worksheet. A pivot table can total the invoices by customer, product or date. You create the pivot table by using a wizard. You can quickly rearrange the information in the pivot table by dragging the buttons to a new position. Organize data in a table that Excel can understand. The first row must have headings. Use a different heading for each column. Keep all the data together -- don't include any blank rows or columns in the table. Leave at least one blank row and one blank column between the data table and any other information on the worksheet.

PowerPoint

Power Point is a program that helps you to plan, organize and design professional presentations. The computer screen can be used for 35mm slides or overhead projectors to deliver a presentation. Power Point allows you to edit and organize text in a Presentation. To add objects to the slides in a presentation (Shapes, Pictures, Clip Arts and Charts. To change the color schemes in presentation.*To Animate the presentation.To add slide Transition.

Presentation Graphics are application software available to design charts. The package allows the user to, Design charts, Arrange the matter in a readable format, Add pictures in the chart to make them more meaningful and attractive, Change the appearance of the alphabets on the charts and Print these charts. Another way of doing presentation is, the computer can be attached to a device called a LCD(Liquid crystal display). This device is attached in place of monitor. Instead of displaying the contents on the monitor, using LCD you can display directly on the screen to a large group of audience without printing them, straight from the computer.

Presentation Graphics add an interesting aspect to your thoughts and ideas. They make your ideas look nice on the transparencies. The combination of your voice and the visual appeal created via the graphics, help in capturing and sustaining the audience's attention.

Procedure to create power point presentation: Ctrl+N will also help to open a new presentation. A blank slide is opened automatically with the name as presentation1. Now you can enter the data in the slide. Types of slide layouts -

Title Slide: It contains two parts, one for title and one for subtitle. You can only enter the title and sub titles in this slide.

Title only: In this type of slide you have only one section for adding titles ie you can add only title to this slide.

Title and text: In this slide you can enter both title and text ie you can type a heading and describe about that topic in detail.

Title and 2-column text: In this slide you can give both title and text but its layout is little different from the earlier one. Text can be typed in column format. But it will provide you only 2 columns.

Title, text and clipart: This slide allows you to enter title, text and also allow you to insert picture from clipart. Clipart is a tool which contains varieties of pictures arranged in different categories. You must have used clipart in ms-word also, it functions same way in PowerPoint. In this slide you will have title at the top, text at the left side and clipart at the right side.

Title, clipart and text: This functions same way as the previous slide the only difference is that the text will be at the right side and clipart will be at the left side.

Title, text and chart: This slide contains title part, text part and chart also. Chart is the graph which you can insert in your slide. It is the graphical representation of data. Here text is placed at the left side and chart at the right side.

Title, chart and text: This chart functions same as the previous one, the only difference is that text will be placed at right side and chart at the left side.

Title and Table: This slide provides two options one for title and another for table. You can enter data in the form of table. You can also specify the no of rows and columns. For more details refer to session 18.

Title and chart: It provides two options one for giving title and another for inserting chart. You can't enter text in this slide.

Title and Organization chart: It has two objects one for giving titles and other for inserting organization chart. Organization chart is used to represent hierarchical relationships.

Layout of PowerPoint is divided into different sections. These include:

1. Task panes: - Task panes are the window within an office application that provides commonly used commands. Task panes are located on the right hand side of the screen. To access it you have to press F6 from the keyboard.

2. Slide: The slide which you have inserted from the blank presentation option will be placed at the centre of the screen. Layout of the slide: The screen of the slide is divided into different placeholders. The placeholders can contain text, title, picture, or a chart. Placeholders are nothing but the different objects like title, clipart, chart etc inside the screen.

3. Thumbnails: Thumbnails are located at the left side of the screen. It contains two tabs, outline and slide. Slide tab displays the full view of the slide. From here you can change the slide design, layout, insert new slide, delete a slide, change the slide transition, you can cut, copy & paste the slides and you can hide any slide. Outline tab displays the contents (text) of the slide. From here you can format the text, insert hyperlink, cut copy & paste the text.

4. Speaker notes: It is located at the bottom of your slide. The person making the presentation may have made notes while developing the presentation to make sure that the points are not forgotten or missed. PowerPoint provides a space called notes page at the bottom of your slide to type such notes. It can be viewed while running your presentation. Pressing the function key F6 moves us between each of these sections.

In Microsoft PowerPoint, a **hyperlink** is a connection from a slide to another slide, a custom show, a Web page, or a file. The hyperlink itself can be text or an object such as a picture, graph, shape, or WordArt. An action button is a ready-made button that you can insert into your presentation and define hyperlinks for. If the link is to another slide, the destination slide is displayed in the PowerPoint presentation. If the link is to a Web page, network location, or different type of file, the destination page or file is displayed in the appropriate application or in a Web browser. In PowerPoint, hyperlinks become active when you run your presentation, not when you are creating it. Use action buttons when you want to include buttons with commonly understood symbols for going to the next, previous, first, and last slides. PowerPoint also has action buttons for playing movies or sounds.

INTERNET & E-MAIL

WORLD WIDE WEB (WWW): An Internet client-server hypertext distributed information retrieval system." The Web is not a network. The Web is not the Internet itself. The Web is not a proprietary system like AOL. Instead the Web is a system of clients (Web browsers) and servers that uses the Internet for its data exchange. The Web allows rich and diverse communication by enabling you to access and interact with text, graphics, animation, photos, audio and video. Web browser is the software program you use to access the World Wide Web, the graphical portion of the Internet. The first browser, called NCSA Mosaic, was developed at the National Center for Supercomputing Applications in the early 1990s. The easy-to-use point-and-click interface helped popularize the Web, although few could then imagine the explosive growth that would soon occur.

Email is now an essential communication tools in business. It is also excellent for keeping in touch with family and friends. The advantages to email are that it is free (no charge per use) when compared to telephone, fax and postal services.

Information: There is a huge amount of information available on the internet for just about every subject known to man, ranging from government law and services, trade fairs and conferences, market information, new ideas and technical support.

Services: Many services are now provided on the Internet such as online banking, job seeking and applications, and hotel reservations. Often these services are not available off-line or cost more.

Buy or sell products: The Internet is a very effective way to buy and sell products all over the world.

Communities - Communities of all types have sprung up on the Internet. It's a great way to meet up. With people of similar interest and discuss common issues.

The Toolbar - The row of buttons at the top of your browser, known as the toolbar, helps you travel through the web of possibilities, keeping track of where you've been. Since the toolbars for Navigator and Internet Explorer differ slightly. Bookmarks or Favorites lets you can record the addresses of websites you want to revisit. Once you add a URL to your list, you can return to that web page simply by clicking on the link in your list, instead of retyping the entire address.

The Address Bar - Just under the toolbar, you will see a box labeled "Location," "Go To," or "Address." This is where you type the address or URL of a website you want to visit. After you enter it, press the Return or Enter key to access the site or click on the "Go" button to the right of the address box. By clicking the small triangle to the right of the Location box, you will get a drop-down list of the most recent websites you've visited. To revisit a site, just click on the address.

The Menu Bar - Located along the top of the browser window, the menu bar offers a selection of things you can do with a web page, such as saving it to your hard drive or increasing the size of the text on a page. Many of the choices are the same, as the buttons on the toolbar below, so don't try to learn everything now. Click once on a word to access the drop-down menu, and then click on the selection you want to make.

Electronic mail or e-mail, allows computer users locally and worldwide to exchange messages. Each user of e-mail has a mailbox address to which messages are sent. Messages sent through e-mail can arrive within a matter of seconds. A powerful aspect of e-mail is the option to send electronic files to a person's e-mail address. Non-ASCII files, known as binary files, may be attached to e-mail messages. These files are referred to as MIME attachments. MIME stands for Multimedia. Internet Mail Extension, and was developed to help e-mail software handle a variety of file types. For example, a document created in Microsoft Word can be attached to an e-mail message and retrieved by the recipient with the appropriate e-mail program. Many e-mail programs, including Eudora, Netscape Messenger, and Microsoft Outlook, offer the ability to read files written in HTML, which is a MIME type.

There are Web servers, FTP servers, telnet servers and e-mail servers running on millions of machines on the Internet right now. These applications run all the time on the server machine and they listen to specific ports, waiting for people or programs to attach to the port.

FTP stands for File Transfer Protocol, and is a way of copying files between networked computers. . Anonymous FTP is an option that allows users to transfer files from thousands of host computers on the Internet to their personal computer account. FTP sites contain books, articles, software, games, images, sounds, multimedia, course work, data sets, and more. FTP transfers can be performed on the World Wide Web without the need for special software. In this case, the Web browser will suffice.

Telnet is a program that allows you to log into computers on the Internet and use online databases, library catalogs, chat services, and more. There are no graphics in Telnet sessions, just text. To Telnet to a computer, you must know its address. This can consist of words (locis.loc.gov) or numbers (140.147.254.3). Some services require you to connect to a specific port on the remote computer. In this case, type the port number after the Internet address. Example: telnet nri.reston.va.us 185.

Telnet is available on the World Wide Web. A link to a Telnet resource may look like any other link, but it will launch a Telnet session to make the connection. A Telnet program must be installed on your local computer and configured to your Web browser in order to work. With the increasing popularity of the Web, Telnet has become less frequently used as a means of access to information on the Internet.

NETFIND is an Internet user directory tool. It provides a simple Internet white pages directory facility. Given the name of a person on the Internet and a rough description of where the person works, Netfind attempts to locate telephone / electronic mailbox information about the person. It does so using a seed database of domains and hosts in the network. Netfind finds information about people through the Internet protocols

IRC (Internet Relay Chat) is a multi-user, multi-channel chatting system. Imagine sitting in front of your computer and "talking" through typed messages with either one person or many other people from all over the Internet, all in real time!

MUD (Multiple User Dimension, Multiple User Dungeon, or Multiple User Dialogue) is a computer program which users can log into and explore. Each user takes control of a computerized persona/avatar/incarnation/character. You can walk around, chat with other characters, explore dangerous monster-infested areas, solve puzzles, and even create your very own rooms, descriptions and items.

Net lag - The Internet (the network which connects your computer to mine) is made up of thousands of interconnected networks. Between your computer and the computer which houses the MUD, there may be up to 30 gateways and links connecting them over serial lines, high-speed modems, leased lines, satellite uplinks, etc. If one of these gateways or lines crashes, is suddenly overloaded, or gets routing confused, you may notice a long time of lag time between your input and the MUD's reception of that input. Computers which are nearer to the computer running the MUD are less susceptible to netlag. Another source of lag is if the computer which hosts the MUD is overloaded. When netlag happens, it is best to just patiently wait for it to pass.

Spamming, derived from a famous Monty Python sketch, is the flooding of appropriate media with information (such as repeated very long say commands). Unintentional spamming, such as what happens when you walk away from your computer screen for a few minutes, then return to find several screenfuls of text waiting to scroll by, is just a source of irritation. Intentional spamming, such as when you repeat very long say commands many times, or quote /usr/dict/words at someone, is usually frowned on, and can get you in trouble with the MUD administration.

Client program - A client program is simply another program you use instead of telnet to connect to a mud. Clients also provide useful things such as macros and the ability to gag or highlight certain mud output. Clients are available for anonymous ftp from several sites.

Internet	Intranet
The Internet is available to the public (everyone).	Intranet is a private network only available to select users. E.g. a school may use an intranet so that its pupils can work from home.
It has slow access speeds	It has higher access speeds when compare to Internet.
The information in internet is less secured when compared with that of Intranet	In Intranet the information is more secured with that of Internet.

Different types of web browsers are used to view the website in Internet. e.g. Netscape, IE, Opera	Standardized type of browser is used to view the website in Intranet.
Different types of operating systems are used to view the website (e.g. Windows, Mac)	Standardized type of operating systems are used to view the website in intranet.
It accessible to Global audience (e.g. multilingual, different cultures)	It is Primarily accessible to local audience.

Phishing is an e-mail fraud method in which the perpetrator sends out legitimate-looking email in an attempt to gather personal and financial information from recipients. Typically, the messages appear to come from well known and trustworthy Web sites. A phishing expedition, like the fishing expedition it's named for, is a speculative venture – the phisher puts the lure hoping to fool at least a few of the prey that encounter the bait. Phisher use a number of different [social engineering](#) and e-mail spoofing ploys to try to trick their victims. The perpetrator's e-mail used AOL logos and contained legitimate links. If recipients clicked on the link, they were taken to a spoofed Web page that asks for personal information, including credit card numbers, personal identification numbers ([PINs](#)), social security numbers, banking numbers, and passwords. This information was used for [identity theft](#).

Vishing is an activity where fraudsters trick unsuspecting customers into providing their personal and financial details over the phone. Usually fraudsters pose as representatives of large companies, banks or public authorities like Reserve Bank of India. The details are used to carry out fraudulent transactions in the customer's account.

Objective Questions

- Window is a _____ user interface.
a) Character **b) Graphical** c) Both a and b d) None
- Expand DOS
a) Disk Operating System b) Disk Open System c) Dynamic Operating System
d) None
- Directory can be deleted by using _____ DOS command.
a) CD b) MD c) RMDIR **d) Del**
- Which of the following is the DOS external command?
a) Format b) CLS c) SYS d) DISKCOPY **d) a & b**
- Operating system is a type of software _____.
a) Application software **b) System software** c) Both a and b d) None
- LAN stands for _____.
a) Local Area Network b) Local and Network c) None
- New Directory is created by using _____DOS command.
a) MKDIR b) MD **c) Both a and b** d) None
- Which of the following is not an operating system?
a) DOS b) UNIX c) LINUX d) Windows **e) None**

9. Which of the following is an input device?
a) MS- DOS b) CPU c) Input data **d) Keyboard**
10. The _____ shortcut key is redo the last undone action.
a) Ctrl and Y b) Ctrl and Z c) Ctrl and U d) Ctrl and V
11. The _____ shortcut key is cut the selected text or word.
a) Alt and E, T **b) Ctrl and X** c) Both a and b d) None
12. The _____ shortcut key does the central alignment.
a) Ctrl and L b) Ctrl and R **c) Ctrl and E** d) Ctrl and J
13. To open a document, which of the following commands are True?
a) Ctrl and O **b) Select file on menu bar and open** c) Alt and O d) Alt and F
14. The Repeat on Edit menu repeats which of the following actions?
a) The last action b) The second last action c) All previous change d) None
15. What is the keyboard shortcut to display the symbol dialogue box?
a) Alt + I + S b) Alt + S + I c) Ctrl + I + S d) Ctrl + S + I
16. The _____ shortcut key is zooming a page.
a) Alt + F + V **b) Alt + V + Z** c) Alt + F4 d) Alt + F + C
17. The _____ shortcut key is to select the entire document.
a) Ctrl + Z b) Ctrl + C c) Ctrl + V **d) Ctrl + A**
18. Excel is a _____ program.
a) Spread sheet b) Application c) Software d) Hardware
19. Which of the following is an Excel Component?
a) Title bar b) Caption button c) Menu bar **d) All of the above**
20. A ___ is an electronic ledger having a set of cells arranged in rows and columns.
a) Workbook b) Cell **c) Worksheet** d) All of the above
21. The worksheet option is available on the _____ menu.
a) Insert b) Format c) View d) Edit
22. Which one is an Excel function name?
a) MAX b) MIN c) SUM **d) All of the above**
23. The _____ Excel function returns a positive square root of a number.
a) PRODUCT b) FACT c) MOD **d) SQRT**
24. The _____ Chart component represents a data series.
a) Legends **b) Axes** c) Category d) Labels
25. The Picture option is available on the _____ Menu.
a) Insert b) Edit **c) Format** d) Data
26. Keyboard shortcut for opening the format cells dialog box.

a) Ctrl + I b) Alt + 1 **c) Ctrl + 1** d) Shift + 1

27. Excel chart is used _____.

a) Analyze values **b) Analyze numerical value** c) Both a and b d) None

28. What is the valid font size in power point?

a) 10 b) 12 c) 14 d) 8

29. If the ruler is hidden choose the ruler from the _____ menu.

a) File b) Edit **c) View** d) Tools

30. I/O in respect of computers stands for

a) Intake/ Output b) Import/ non-import **c) Input/Output** d) All.

31. A peripheral device

a) May be used for input b) May be used for output c) May be used for storage
d) All.

32. UNIX is a

a) Multi-user operating system b) Single user operating system
c) Language d) None.

33. A new directory is created using the command:

a) CHDIR b) RMDIR **c) MKDIR** d) MAKE

34. Use the _____ command to change the name of a file:

a) REN b) COPY c) RENUM d) None.

35. The symbol that shows you where the mouse is on the screen is:

a) icon b) mouse pointer c) arrow d) director **e) Cursor**

36. The FIND option in the start menu in Windows is for:

a) search files only b) search folders only **c) both a and b** d) none

37. Selection of text can be of:

a) single word b) single line c) paragraph **d) all**

38. Which of the following menus has the spelling and grammar tool?

a) Insert menu b) Format menu **c) Tools menu** d) Edit menu

39. Address of the first cell in the worksheet.

a) 1 b) A **c) A1** d) 1A

40. Which of the following is an Internet Service Provider.

a) VSNL b) Satyam Online **c) Both a and b** d) None

41. Which one is the presentation software?

a) MS Word **b) MS Power point** c) MS Excel d) MS Access

42. Advantage of Email is

a) Low speed b) High cost **c) High speed** d) None

43. Which one of the following is used to convert digital signals to analog signals and vice-versa?

a) **Modem** b) Phone c) Printer d) none

44. What is the intersection of a column and a row on a worksheet called?

a) Column b) Value **c) Cell** d) Address

45. Which of the following is a peripheral device?

a) Dot matrix printer b) MS- DOS c) Control unit of CPU d) Input data

46. Which of the following is the DOS external command?

a) Format b) SYS c) DISKCOPY d) All

47. An operating system is which type of software?

a) Application software **b) System software** c) Both a and b d) None

48. 'Save as' on file menu is used for which of the following?

a) Save changes b) Save to file first time **c) Copies the file into another** d) None

49. A table is a grid of rows and columns containing boxes of:

a) Text or graphics b) Only text c) Only graphics d) None

50. What is the default width of the cell in the worksheet?

a) 8.45 **b) 8.43** c) 8.4 d) 8.44

51. How many default worksheets are available in a work book?

a) 4 b) 5 c) 2 **d) 3**

52. Default order in excel when you select the sort option from the menu?

a) Descending **b) Ascending** c) both a and b d) None

53. What is the name of the last column in the worksheet?

a) V b) VI c) IV d) VII **e) Depends on system resource**

54. What is the valid font size in power point?

a) X b) 12 c) IX d) XI

55. Symbol option is available in which menu in word?

a) View b) Edit **c) Insert** d) Tools

56. View slide option is available in which menu?

a) Edit b) Format c) Tools **d) Slide show**

57. How many steps are available in auto content wizard?

a) 3 b) 5 c) 4 d) 2

58. What is the default font in word?

a) Arial **b) Times New Roman** c) Verdana d) None

59. What is the default representation (transfer type) for FTP?

a) Binary b) ASCII c) Both a and b d) None

60. Which chart component is to represent a data series? Answer: **labels.**

61. What is the key board short cut for opening format cells dialogue box?
Answer: Control and 1
62. Excel chart is used for **Analyses values and numerical values.**
63. To plot profit and loss over a seven years period which chart is best suited? **Line**
64. If the ruler is hidden, chooses the ruler combined from the **view** menu.
65. The shortcut key to redo the last undone action is **Control + Y**
66. =sum(a2:a10) is an example of a
a) Function **b) Formula** c) Cell address d) Value
67. All the following terms are associated with spreadsheet software except
a) Worksheet b) Cell c) Formula **d) Virus detection**
68. Name which is not a removable media
a) ROM b) Diskette c) DVD d) Pen Drive e) None of the above
69. when a file contains instructions that can be carried out by the computer, it is often called
- a) Data b) Information c) Application **d) Executable** e) Assembly
70. Which is not a computer programming language?
a) C++ b) Java c) Visual Basic **d) Machine language** e) None
71. The fastest computer is called **Super Computer**
72. Scanner is an **Input** device.
73. Magnetic tape is an example of **Secondary** memory.
74. A memory which cannot be altered is called **ROM**
75. All mathematical, logical operations are done by **ALU**
76. Which is not a feature of UNIX **GUI**
77. The commands readily available on disk are **Bootstrap**
78. The page in windows that comes after full loading is **Desk top**
79. The bottom portion of desktop on active window shown is called **Taskbar**
80. To close an existing window the shortcut key is **Alt F4**
81. Ctrl+ Alt+ Del results in **restart**
82. Spell check is present in **Tools**
83. A ready-made example is called **Wizard**

84. The default saving folder in word is **My documents**
85. Ctrl + C is a short cut for **Copy**
86. To select all the short cut is **Control + A**
87. To switch between open windows we can use **Alt + Tab**
88. The feature with big size first letter is called **Drop cap**
99. To send a document of the same content, to different we can use **mail merge**
100. A group of commands to act as a single command is **Macro**
101. The files with .dot extension are called **Template**
102. Excel files have default extension of **XLS**
103. To find sum of values from b4 to b10 the symbol is **colon**
104. Formulas in excel begin with which symbol **Equals (=)**
105. Function to obtain the absolute value of a numeric is **ABS**
106. To select desired data we can use **Filter**
107. The extension of power point file is **PPT**
108. The shortcut to insert a new slide is **Control + M**
109. Order and timing of parts of a slide can be done in **Preview**
110. The protocol to operate the internet is **FTP**
111. Internet explorer is an example of **Browser**
112. Google is an example of **Search engine**
113. The incoming mails are stored in **Inbox**
114. Password is always appearing as **Special characters**
115. Yahoo is an example of **Client server**
116. To connect a computer telephone line we need **Modem**
117. The global monitoring body for internet is **WWW**
118. Every system on the net is identified with unique **IP address**
119. The message part of an E-mail is called **Compose**

120. _____ computer is the fastest computer. **Super**
121. Windows NT is an _____ **Operating system**
122. To delete all files in a directory the _____ command can be used. **Del**
123. GUI **Graphical User Interface**
124. Mail merge involves merging of the _____ with a data source. **Document**
125. The worksheets contain _____ columns. **256**
126. Give one slide layout name that you know in power point ____ **Table**
127. Name one web browser software. **Internet Explorer**
128. WAN stands for _____ **Wide Area Network**
129. -----is used to login remote computer. **Internet explorer**
130. The Web is a series of interconnected documents stored on a computer somewhere called a _____. **Server**
131. MUD stands for _____. **Multi User Domain**
132. To quit MS-Word click on the file menu and then click on the exit option. **True**
133. Scrolling means moving the text view. **True**
134. The ruler can be used to set indents, tabs, column widths and margins. **True**
135. BACKSPACE to insert a character to the left of the insertion point. **False**
136. Format-> row-> hide is selected to hide the selected row. **True**
137. Protocol is a set of rules and procedures that enables computers to communicate over a network. **True**
138. URL stands for Uniform Resource Language. **False**
139. A mailbox is a location on an email server where incoming messages are stored for a user. **True**
140. Network is a collection of networks. **True**
141. Hard Disk is a storage device. **True**
142. MS- DOS is a GUI operating system. **False**
143. FORMAT is a Dos Internal command. **False**
144. Double click mouse on a word in MS word, it selects that word. **True**
145. To display the current time, the TIME function can be used in MS- Excel. **True**
146. .Com is the extension of the power point file. Answer: **False**
147. The internet and www are two names for the same thing. **False**
148. The talk program allows you to connect your computer to someone else's computer and the type a message back and forth. **True**
149. USENET is a large collection of discussion groups. **True**
150. IRC stands for Internet Relay Communication. **True**
151. MS- DOS is a multi user operating system. **True**
152. Directory can be deleted by using _____ dos command. **RD <name>**
153. Name any two dos internal commands. **Copy, Ren, Type and Cls**
154. What does MS DOS stand for? **Micro Soft Disk Operating System**
155. Shortcut key to close an application in windows _____ **Alt F4**
156. LAN stands for__ **Local Area Network**

157. Short cut key to copy files or data __ **Control + C**
 158. How to find the address of the cell __ **Insert + C**
 159. How to find the maximum value of numbers entered from c20 to c50____
=max (c20:c50) and press enter
 160. _____ is a collection of computers or computer like devices that can communicate across a common transmission media. **Internet**
 161. Expand HTTP_____ **Hyper Text Transfer Protocol**
 162. **Modem** is used to convert digital signals into analog signals and vice versa.
 163. Power point is a ___programme **Presentation**
 164. Main purpose of slide sorter view is ___ **To view all slides at one time**
 165. Headers and footers are edited in _____ view **Print preview**
 166. Expand ROM__ **Read only memory**

Question	Answer
CLS	DOS command
Windows 98	Multi task operating system
ppt	Extension of power point file
Mail merge	Send same letter to different addresses
Primary key	Record can be identified uniquely
Email	Sending and receiving electronic composed letters
Internet	Network of networks
Keyboard	Input device
Floppy	Storage device
Internet Explorer	Web browser
FTP	Protocol
Cell	Basic unit on the worksheet.
Hard disk	Storage device
Windows 95	Operating system.
Net scape navigator	Web browser
Plotter	Output device
Computer network	Collection of computers
TREE	Directory structure
Windows help	F1 Key
Compiler	System software
Header	Displayed in top margin
Auto filter	Creates a series
Slide	Each individual page in presentation
URL	Uniform Resource Locator