

DISH NET INFOTECH

COMPUTER FUNDAMENTAL

Q. Father of Computer?

Ans. CHARLES BABBAGES.

Q. What is Computer?

Ans. Computer word comes from the Latin word compute which means calculation. Computer is an Electronic data processing machine used for the wide range of activities.

Q. Full form of Computer?

Ans.	C	:	Common
	O	:	Operating
	M	:	Machine
	P	:	Particular
	U	:	Used for
	T	:	Technical
	E	:	Education
	R	:	Research

Q. Advantage of computer?

Ans. (a). The ability to perform calculation at fast speed and store that information for future retried or use.

(b). They ability to make logical rules for their internal or external control.

(c). The ability to communicate with other computer system. Computer is an electronic machine which can perform a lot of action according to the instruction but it requires data for processing and after this process it provides you information about the data.

Q. Representation of Information:-

Ans. Information is manipulation and Suminarization of data. Technically, data are raw facts and figures that are processed into information Such as summaries and total . These types you can repret a information.

(a). Textual.

(b). Numerical.

(c). Pictorial Audio Visual

In the following forms (unit) you are able to represent Information.

(1). Bit

(2). Byte.

(3).Kilo Byte (KB).

(4). Mega Byte (MB)

(5). Giga Byte(GB)

Note:- The smallest of measurement in computer is 'Nibble' but today is not being used . So the smallest Unit is Bit.

Q. INPUT DEVICES:-

Ans. Data and Instructions are entered into a computer through input devices. An Input device converts input data and instruction into a suitable binary form which can be accepted by the computer.

DISH NET INFOTECH

(a). keyboard:- Programs and data are entered into a computer through a keyboard which is attached to a micro computer or the terminal of a PC or a mini or large computer.

(b).Mouse:- The mouse is used to draw sketches diagrams etc on the screen. It is also moved on the graphic table for drawing work.

Q. Output devices?

Ans. The result which are seen by user is called output.

(a). Printers:- Printers are the most popular output device they provide information in a permanganate. Readable form they produce printed outputs of results, programmers and data.

(b). Monitor:- Monitor is very Similar to a television and its size is measured in diagonal length of the screen. Monitors are available in different types.

(1). Monochrome Display Adaptor(MDA).

(2). Video Graphics Array (VGA).

Q. Describe the characteristics of Computer?

Ans. **(1) Speed:** - Computer is a fast device it can perform million of calculation in a fragment of second.

(2) Accuracy: - In a computer the accuracy of calculation is very high. It can depict large fractional Values very accurately of calculation are very high it can depict.

(3) Storage: - Like human brain computer has its own memory which can written very large amount Of data until we desire to loose it.

(4) Diligence: - Computer unlike human beings is free from erchaustion or lock of connection.

(5) Versatility: - The computer is very much flexible in performing the job provided to it. It can do Different kind of jobs provided to it in a logical sequence.

Q. Generation of Computer?

Ans. **(1). First Generation (1946 to 1954):-**The digital electronic values (Vacuum tubes) and Assembly Language for programming.

Examples / Instances :- IBM-700 , IBM-701, IBM-704 , and UNTVAC.

(2). Second Generation (1955 to 1964) :- The second Generation Computer used transistors for CPU components ferrite cores for main memory magnetic disks for secondary memory and High –Level language (FORTRAN,COBAL, ALGOL) for programming .

Example/ Instances :- IBM-1620 , IBM-7090, PDP-(Programmed Data Processor).

(3). Third Generation (1965 to 1974) :- The Third Generation computer used ICs (Integrated Circuits) for CPU

Components . In the beginning third generation Computers used magnetic core memory but semiconductor memories (RAMs and ROMs) were used .

Example/Instances:- IBM-370, CDC-7600 (Control Data Corporation) and star-100.

(4). Fourth Generation:- (1975 up till now):- The Fourth Generation computers use VLSIC (Very Large Scale Integration Chip) for both CPU and memory . A CPU consists of one or more microprocessors.

DISH NET INFOTECH

Example/Instances:-CRAY-MPC, VAX -8842, WIPRO LAND-MARK-860 etc.

(5). Fifth Generation :-The Fifth Generation Computer are still under development stage Japan and USA have under taken projects to design and develop such computer . These computer will use USLI(Ultra Large Scale Integration) and user will not have the burden of programming .

Q. Generation of Languages?

Ans. The term Generation of computer language is used to convey the generic enhancements in the various computer languages.

Q. The Generation of Computer languages is given below?

Ans. **(1). First Generation:** - Machine code Language.

(2). Second Generation: - Assembly Language.

(3). Third Generation: - High Level Language.

(4). Forth Generation: - Including a Whole range of structured query language and tools.

(5). Fifth Generation: - Translators Compiles.

(6). Sixth Generation: - Interprets.

(7). Seventh Generation: - Assembly Language.

Q. The Operating System?

Ans. An Operating system is a master control programs that runs the computer and acts as a scheduler. It controls the flow of various parts of the computer.

Q. Types of Operating System?

Ans. **(1). CUI:** - (Command Line or Character User Interface).

(2). GUI: - (Graphical User Interface).

Q. Advantage of Computer?

Ans. **(a).** The Ability to perform calculations at fast speed and store that information for future retrieval or use.

(b). The Ability to make logical rules for their internal or external control.

(c). The Ability to communicate with other computer system.

Computer is an electronic machine which can perform a lot of action according to the instruction. But it the requires data processing and after the process it provide you information the about the data.

Q. Types of Computer?

Ans. There are two basic types of Computer

(a). Analog Computer.

(b). Digital Computer.

(c). Hyper Computer.

(a). Analog Computer:- Analog Computer Handles or process information about a physical nature such as Temperature pressure etc.

DISH NET INFOTECH

(b). Digital Computer: - Digital Computer data process on binary digit (Zero or One)

(C).Hyper Computer :- Computer can also do some parts of employing digital computation and some parts based on analogue principles such computer are called Hyper Computer .

Q. Categories of Digital Computer?

Ans. **Categories of Digital Computer:** - (a). Micro Computer -----Very Large.

(b). Mini Computer -----Large.

(c). Main Computer -----Medium

(d). Super Computer -----Small.

Q. Data Processing Concept?

Ans. The main purpose of D. T. P. to do complex work speedily and accurately different data processing cycle given below.

(1). **Input**

(2). **Processing**

(3). **Output**

Input -----Processing-----Output.

Q. Representation of Information?

Ans. Information is manipulation and some summarization of data technically data are raw facts in figures that are purposed into information such as summaries and total.

These types you can represent information.

(a). Textual.

(b). Numerical

(c). Pictorial or audiovisual

In the following form (unit) you are able to represents information.

(1). Bit

(2). Byte

(3). Kilobyte (K.B.)

(4). Megabyte (M.B.)

(5). Gigabyte (G.B.)

Q. **Hardware?**

Ans. The physical component of a computer is called hardware.

Example:- Hard Disks , floppy disks keyboard , Printers etc.

Q. **Software?**

Ans. A sequence of Instruction given to a computer perform a particular task is called a soft ware or a programmed the software required to execute user programmed is none as system software the term soft ware include both system software include both system software and users programmed.

Example: - Operating systems, Assembler Computer compiler , enterpreter, text editors etc.

Q. Types of software ?

Ans. a. operating system.

b. Application software.

System software is basically designed to control the operation of a computet system.

system software supports

DISH NET INFOTECH

1. Running of other software.
2. Communication with peripheral devices (printer , card disk etc.)

Application software is basically designed to carry out operations for a specified application . Application software such as payroll or inventory package of an organization.

The operating system

An operating system is a master control program that runs the computer and acts as a scheduler. It controls the flow of signal from c.p.u. to various parts of the computer.

Types of operating system .

1. CUI (Command line or character user interface)
2. GUI (Graphical user interface.)

Memory managements are two types.

1. virtual storage
2. dynamic linking

The operating system performs the following functions.

a. Job Management

The operating system responds to commands from the user and loads the desired application program into the memory for execution .

b. Data Management

The application program does not know where the data is actually stored or how to get it. that knowledge is contained in the operating system access method or device driver routines.

c. Security Multi user operating system maintains a list of authorized users and provides passwords who may try to gain access to the computer system.

Boot strap program

Boot means start on make the computer system ready so that it can take our instructions. The word boot comes from boot strap helps you to get your boots on like wise booting the computer helps it to get its read only memory (ROM)

Instructions get loaded in its main memory. You can boot your computer system in two ways .

(a). Cold booting .

(b). Warm Booting.

When the computer is first switched on it is called cold booting. When the computer is ready is struck up due to some reasons then it is called warm booting.

Booting Sequence:-

Booting up is a term that simply means starting your system. You can also boot the system from the beginning It is called the cold boot.

Another way of booting the computer is when the system was already on but. It hangs up. this method is called. Warm boot. You press the Cont+Alt+Del key combination to start a warm boot.

Networking:-

Networking is a form of computer communications generally used for the transfer of data and information.

Need and advantages of Network :-

DISH NET INFOTECH

Network is required for:-

- (a). To share computer files .
- (b). To share computer equipment.
- (c). Low cost of transfer of data.

Types of Network:-

(a) LAN (Local Area Network)

Local area networking is a form of computer communications generally used for internal transfer of data and information within an organization.

(b). WAN (Wide Area Network.)

Wide area networking is a form of communications generally used when you are transferring data and information across a country.

(c). MAN (Metropolitan Area Networking).

Metropolitan area networking is a form of computer communications generally used for transferring data and information within a city.

Network Topologies:-

Topology determines the way that how can we physically connect our computers (Two or more computers) on the network different ways are given below.

(1). Linear Bus Topology:-

Linear bus topology has the advantage of not requiring that every computer be up and running in order for the network to function. But because a single cable is dedicated to all the information traffic performance can be slow at times.

(2). Circular or Ring Topology:-

This layout is similar to the linear bus except that nodes are connected in a circle using cable segments. In this layout each node is physically connected to only two others.

(3).Star Topology:-

Each node is connected to a single centrally located file server using its own dedicated segment of cable this topology has the advantage of minimum data traffic along the cables.

(4). Tree Topology:-

This network topology containing zero or more nodes that are linked to gather in a hierarchical fashion the top most node is called the root the root may have zero or more child nodes Each child node can in turn have zero or more children of its own.

Navigation:-

DISH NET INFOTECH

You can navigate around your computer in several ways. Some of the navigation tools are given below.

- (a). Start button
- (b). My computer
- (c). Windows Explorer
- (d). Network Neighborhood

FAT (File Allocation Table):-

This contains the actual sector location for the file.

Start Button:-

Taskbar and start button are used to Navigate through windows by using start button you can start programs open documents, customize your system etc.

How can you use start menu?

- (a). Click on the start menu.
- (b). Click on the item which you want to open.

My Computer:-

My computer is used to view the contents of a single folder or drive. Double click my computer on your desk top to display the drives available on your computer when you double click on the drive icon, a window display the files or folders available on that drive. Double click on a folder to see the files within the folders. Changing Drives and folders in my computer.

- (a). Double click on the appropriate disk icon a; or c; d; etc.
- (b). A new window opens which are showing the contents of the selected drive.
- (c). Double click the name of folder to see the contents.
- (d). To open a particular file double click the name of file.
- (e). Click on the close button to close files or folders screens.

Window Explorer:-

Window Explorer displays you files in a hierarchical structure the left side of the window explorer window displays the list of drives and folder the right side displays the contents of a selected folder.

Applications Window:-

Window containing the program which is to be run such as M.S word , M.S excel . So on are called Application window most of the work that you do win be in such windows and these are also called parent condos.

Document Window:-

Some of the programs designed for windows applications will be let you on more than one document at a time.

Example:- Word, Excel allows you to open multiple documents at a time they are also called child windows.

The title bar:-

DISH NET INFOTECH

The top band of every window is known as the title bar where the window name and icon are displayed. You can move the window around your desk top in case it is not maximized the title bar is highlighted, When the window is active.

Menu bar:-

A menu usually contains a list of commands or actions that can be carried out on the respective window.

Scroll bar:-

This option helps you to move document when it does not fit within the window.

- (a). Scroll up the document.
- (b). Scroll down the document.
- (c). Scroll to the right of the document.
- (d). Scroll to the left of the document.

-:PAINT SCREEN:-

Title bar:-The top hand of every window knows as the title bar where the window name and icon are display.

Menu bar:- A menu usually contains a list of commands or action that can be carried out on the respective window.

Scroll bar:- The option help you to move document when it does not feet within the window.

Desk Top:- The desk top is your work while working window it is called the desk top .

-: FILE:-

A file can contain any kind of information such as a programmed application and a document.

-: FOLDER:-

A folder is a special key and contains which store other type of files.

-:INTRODUCTION OF MS PAIT:-

Paint is a color bar and capable application where you can create original art work and move it in to many other window application. You can use paint to resize and edit art copied from other documents and screen.

The Extant ion of MS PAINT:- **.BMP**.

The Run command of MS PAIT:- **MSPAINT**.

HOW CAN YOU START MS PAINT

Click on the start button and on click the all programmed and accessories and ms paint .

Click the Run command on the start button in window option and write the mspaint.

-: TOOL BOX:-

- (1). **Free from selection tool:-** Free from the selection of the picture part.
- (2). **Selection tool:-** This tool use for the select any picture art etc.
- (3). **Eraser tool :-** This tool use for erase of the any picture or art etc.
- (4). **Fill color tool :-** This tool use for fill the color in any shape.
- (5). **Pick color tool :-** This tool use for the pick up the color with any shape in pick the any Shape.
- (6). **Magnifier tool :-** Change the magnification any picture shape etc.
- (7). **Pencil tool :-** This tool use for draw a free from fine one pixel wide.
- (8). **Brush :-** Draw using an brush with the selected shape and size.
- (9). **Air brush :-** Draw using an air brush of the selected size.
- (10). **Text tool :-** This tool use for insert text into the picture .
- (11). **Lines tool :-** Draw a straight line with the selected line width .
- (12). **Curve tool :-** Draw a curve line with the selected line width.
- (13). **Rectangle tool :-** Draw a rectangle line with the selected fill style.
- (14). **Ellipse tool :-** Draw a ellipse line with the selected fill style.
- (15). **Polygon tool :-** Draw a polygon line with selected fill style.
- (16). **Rounded rectangle tool :-** Draw a rounded rectangle line with the selected fill style.

