ALMA

COMPUTER BASIC

I. Fill in the blanks:

- 1. The history of computers dates back to 5000 BC, when the Chinese invented a calculating machines Called **Abacus**.
- 2. In 1620, William Oughtred developed the Slide Rule based on the concept of Logarithms.
- 3. Computers works upon data under the control of a set of instructions called **Program.**
- 4. 1642 the first mechanical calculator, called Pasculine was developed by **Blaise Pascal**.
- 5. ENIAC stands for Electronic Numerator Integrator And Calculator.
- 6. In 1808, a French Weaver named <u>Joseph Jacquard</u> invented a stiff card with a series of holes punched on it.
- 7. In 1694, Gottfried Wilhelm Von-Leibnitz developed the second mechanical machine known as **Reckoning Machine** or Leibnitz Wheel.
- 8. Charles Babbage, an English Proffesor from Cambridge University developed a machine in 1822 called **Difference Engine.**
- 9. If Charles Babbage was honoured as the Father of Computer; Lady Lovelace was the first **Programmer** in the World.
- 10. In 1890, Herman Hollerith developed a **Tabulating** machine

II. In the following Ouestion (1-10) choose the correct answer:

- 1. Speed of a Computer is ascertained as MIPS; i.e.
 - a. Megabytes of instruction per second
 - b. Millions of instruction per second
 - c. Millions of input per second
 - d. None of the above
- 2. A limitation of computer is;
 - a. Lack of Self conscience
 - b. Accept of instructions
 - c. Versatile
 - d. Capable of storing data
- 3. In the fifth of computers the integrated circuits used is;
 - a. IC
 - b. LSIC
 - c. ULSIC
 - d. VLSIC
- 4. The set of wires, connecting the microprocessor and the memory, through which the data flows is Called:
 - a. A data Bus✓
 - b. A Data Wire
 - c. Virtual Memory
 - d. A Data Base
- 5. Mouse was devised by Douglas Engel Bart of Stanford Research Centre in
 - a. 1940
 - b. 1953
 - c. 1963 **/**
 - d. 1970
- 6. Random Access Memory (RAM) is;
 - a. Secondary memory
 - b. Primary Memory and Main Memory ✓
 - c. Not a Main Memory
 - d. Non Volatile
- 7. Refresh Rate of Screen is measured in;

- a. Hertz (Hz) 🗸
- b. Pixel
- c. Byte
- d. MIPS
- 8. The Technique used to display graphical output is called;
 - a. Bit Mapping
 - b. Graphic Display
 - c. Visual Mapping
 - d. Digital Output
- 9. Peripherals are:
 - a. A part of the CPU
 - b. Output device alone
 - c. Input device alone
 - d. Input, Output and Secondary Storage device.
- 10. The three part of a CPU are:
 - a. ALU, Control, Memory 🗸
 - b. ALU, Memory, Chip
 - c. Chip, Disk Drive, Peripherals
 - d. Control, Disk Drive, Peripherals

III. In the following Questions (1-10). Tick the wrong one out:

- 1. Special purpose computers are mainly used in
 - a. Space exploration
 - b. Agriculture
 - c. Satellite operations
 - d. Schools
- 2. Input devices are:
 - a. Joystick
 - b. Light Pen
 - c. Monitor \checkmark
 - d. Scanner
- 3. Monitor is
 - a. An input device
 - b. An output device
 - c. Only for displaying
- 4. The video standard or display modes are
 - a. Color Graphic Adapter(CGA)
 - b. Standard Graphic Array(SGA)
 - c. Video Graphic Array(VGA)
- 5. types of printers are;
 - a. Inkjet printer
 - b. Laser printer
 - c. Daisy printer
 - d. Mono printer
- 6. Computer hardware can be mainly divided as
 - a. Input Unit
 - b. Central Processing Unit
 - c. Output Unit
 - d. Operating System 🗸
- 7. Several types of RAM are
 - a. Dynamic RAM
 - b. Programmable RAM(PRAM)✓
 - c. Synchronous RAM(SRAM)
 - d. Static RAM(SRAM)
- 8. Hard disk is
 - a. A Hardware component of a computer

- b. Software ✓
- c. Stored Data
- d. Measured in GB.
- 9. Mouse is of two types:
 - a. Optical Mouse
 - b. Laser Jet Mouse
 - c. Mechanical Mouse
- 10. We can classify the keys of Keyboard in three types as:
 - a. The Alphanumeric keys
 - b. QWERTY keys 🗸
 - c. The Numeric keypad
 - d. The Functions keys

IV. State the following as true or false

- 1. Computer can think and feel like human being. F
- 2. Computer has limited memory. T
- 3. Internet is a Network of Networks. T
- 4. Alt + F4 key is to close an application in windows. T
- 5. Printer is an output device. T
- 6. Mouse and keyboard are output. F
- 7. Computer can perform millions of instructions in a second. T
- 8. CPU stands for Central Processing Unit. T
- 9. Programming Languages contains series of commands. T
- 10. Bytes are units of measurement used in storing data. T

QV.1. What is a computer?

Computer is a device that can help solve problems by accepting the data, performing certain operations whether logical or arithmetic and then presenting the result of those operations to generate relevant information. Computers work upon data under the controls of a set of instruction called Program.

A Computer is capable of accepting data from the user and performing arithmetic and logical operations over the data, under the control of program. A computer accepts the data through input device and generates results of the processing through output devices. All the logical Arithmetic operations over the data, in a computer, take place at CPU (Central Processing Unit) which is called the brain of the Computer.

QV.4. INTERNET

Internet can be actually defined as a network of networks. But it can be described as different point of views as follows:-

From a social point of view:- The internet is a device through which millions of people are communicating and sharing their idea and information. They communicate electronically on a one-to-one basis or a groups.

From a technical point of view:- the Internet is a network of thousands of computer networks. Together, the networks making up the Internet consist of over million computer systems. These computer and networks communicate by exchanging data according to the same rules, even though the networks and computer systems individually use different technologies.

The proper definition of Internet is: "The Internet is a network of networks that connects people and computers worldwide".

E-MAILS:

E-mail, shortened form of **Electronic Mail**, is the most used feature on the Internet. Almost all websites give their users, email account in order to sign in. Email has become very popular because unlike in regular mail, there is no delay. Postage is also not required. Printing e-mail addresses on business cards has become a fashion as common as printing the telephone numbers today. Email is a system that allows a person or a group to electronically communicate with others through network.

QV.5. How do CRT Monitors works?

CRT (Cathode Ray Tube) monitors consist of a vacuum tube with an electron gun. In a monochrome monitor, a very thin electron beam is shot towards the plane surface. The internal face of the plane surface has a phosphorus coating on it, which on firing with electron beam emits lights which result in the formation of single pixel. It may be possible, a continuous firing of electron beam on a single point may bum phosphorus at that point. To overcome this problem, the electron beam is shot in such a manner that it travels in 'Z' path and activates the pixels on the screen to present a visual output. The Z-type of electron beam is called "Raster".

The second side of picture tube which is called neck directs the path of electron beam by regulating it through magnetic field.

When a pixel flashes for a while and extinguishes then a pixel is said to be refreshed. And the rate at which refreshment of a pixel takes place is called Refresh rate which is generally 30 times per second. In case the refresh rate is low, then screen will flicker, it is because phosphorus loses it glow quickly.

The luminescence of pixel depends upon the intensity of electron beam which further depends upon voltage of electric current. Voltage can easily be regulated. In a digital monitor, presence and absence of voltage can put on and off the pixel respectively. In highly advanced analog brightness of each pixel is controlled by a continuous electron beam. In monochrome monitor, this technology result in gray scale effect; whereas in colored monitor **CRT** technology gives more variety of colors than digital monitor.