Volume-I

11th Standard - Chapter : Introduction to Computers

BOOK BACK QUESTIONS

I Choose the correct answer:

1. First generation computers used
(a) Vacuum tubes (b) Transistors (c) Integrated circuits (d) Microprocessors
2. Name the volatile memory
(a) ROM (b) PROM **(c) RAM** (d) EPROM
3. Identify the output device
(a) Keyboard (b) Memory **(c) Monitor** (d) Mouse
4. Identify the input device
(a) Printer **(b) Mouse** (c) Plotter (d) Projector
5. …… Output device is used for printing building plan, flex board, etc.
(a) Thermal printer (b) Plotter (c) Dot matrix (d) inkjet printer
6. In ATM machines, which one of the following is used to
(a) Touch Screen (b) speaker (c) Monitor (d) Printer
7. When a system restarts …….. which type of booting is used.
(a) Warm booting (b) Cold booting (c) Touch boot (d) Real boot.
8. Expand POST
(a) Post on self Test (b) Power on Software Test
c) Power on Self Test (d) Power on Self Text
9. Which one of the following is the main memory?
(a) ROM **(b) RAM** (c) Flash drive (d) Hard disk
10. Which generation of computer used IC's?
(a) First (b) Second **(c) Third** (d) Fourth

TWO MARKS

II ANSWER THE FOLLLOWING

1. What is a computer?

ANS: A Computer is an electronic device that takes raw data (unprocessed) as an input from the user and processes it under the control of a set of instructions (called program), produces a result (output), and saves it for future use.

2. Distinguish between data and information.

ANS: DATA:

Data is defined as an unprocessed collection of raw facts, suitable for communication, interpretation or processing.

For example, 134, 16 'Kavitha', 'C' are data. This will not give any meaningful message.

INFORMATION:

Information is a collection of facts from which conclusions may be drawn. In simple words we can say that data is the raw facts that is processed to give meaningful, ordered or structured information.

For example Kavitha is 16 years old. This information is about Kavitha and conveys some meaning. This conversion of data into information is called data processing.

3. What are the components of a CPU?

ANS:The three components of CPU are 1)control unit 2)arithmetic logic unit 3)memory unit.

4. What is the function of an ALU?

Ans: The ALU is a part of the CPU where various computing functions are performed on data. The ALU performs arithmetic operations such as addition, subtraction, multiplication, division and logical operations. The result of an operation is stored in internal memory of CPU. The logical operations of ALU promote the decision-making ability of a computer.

5. Write the functions of control unit.

Ans: The control unit controls the flow of data between the CPU, memory and I/O devices. It also controls the entire operation of a computer.

6. What is the function of memory?

Ans: The Memory Unit is of two types which are primary memory and secondary memory. The primary memory is used to temporarily store the programs and data when the instructions are ready to execute. The secondary memory is used to store the data permanently.

The Primary Memory is volatile, that is, the content is lost when the power supply is switched off. The Random Access Memory (RAM) is an example of a main memory. The Secondary memory is non-volatile, that is, the content is available even after the power supply is switched off. Hard disk, CD-ROM and DVD ROM are examples of secondary memory.

7. Differentiate Input and output unit.

Ans: **Input Unit**

Input unit is used to feed any form of data to the computer, which can be stored in the memory unit for further processing.

Example: Keyboard, mouse,etc.

Output Unit

An Output Unit is any hardware component that conveys information to users in an understandable form.

Example: Monitor, Printer etc

8. Distinguish Primary and Secondary memory.

Ans: The primary memory is used to temporarily store the programs and data when the instructions are ready to execute.

It is volatile memory that is the content is lost when the power supply is switched off.

Example: RAM: Random Access Memory

The secondary memory is used to store the data permanently

It is non-volatile memory that is the content is available even after the power supply is switched off.

Hard Disk,CD-ROM And DVD ROM.

Three marks

Explain in Brief

1. What are the characteristics of a computer?

Ans: the general characteristics of and informatuter are speed,memory capacity,accuracy,diligence,representatives,reliability,endurance and versatility.

2. Write the applications of computer.

Ans: the applications of computers are business,education,marketing,banking,insurance,communication,health care,military,engineering design.

3. What is an input device? Give two examples.

Ans: the input device is the component through which data and instructions are provided to computer ex:keyboard and mouse.

4. Name any three output devices.

Ans: the output device is the component which delivers the data and information proceeds by the CPU.

EX:Monitor,plotter,printers.

5. Differentiate optical and Laser mouse

Ans: optical mouse:

It uses red,blue or green LED

It has three buttons

It is less sensitive and sensitive towards surface.

Laser mouse:

It uses only infrared led.

It has many as 12 buttons and can be programmed by user.

It is highly sensitive and able to work on any hard surface.

6. Write short note on impact printer

Ans: These printers print with striking of hammers or pins on ribbon. These printers can print on multi-part (using carbon papers) by using mechanical pressure. For example, Dot Matrix printers and Line matrix printers are impact printers.

A Dot matrix printer that prints using a fixed number of pins or wires. Each dot is produced by a tiny metal rod, also called a "wire" or "pin", which works by the power of a tiny electromagnet or solenoid, either directly or through a set of small levers. It generally prints one line of text at a time. The printing speed of these printers varies from 30 to 1550 CPS (Character Per Second).

Impact Printer

Line matrix printers use a fixed print head for printing. Basically, it prints a page-wide line of dots. But it builds up a line of text by printing lines of dots. Line printers are capable of printing much more than 1000 Lines Per Minute, resulting in thousands of pages per hour. These printers also uses mechanical pressure to print on multi-part (using carbon papers).

7. Write the characteristics of sixth generation.

Ans: Parallel and Distributed computing

- Computers have become smarter, faster and smaller
- Development of robotics
- Natural Language Processing
- Development of Voice Recognition Software

8.Write the significant features of monitor.

Ans: Monitor is the most commonly used output device to display the information. It looks like a TV. Pictures on a monitor are formed with picture elements called PIXELS.

Monitors may either be Monochrome which display text or images in Black and White or can be color, which display results in multiple colors. There are many types of monitors available such as CRT (Cathode Ray Tube), LCD (Liquid Crystal Display) and LED (Light Emitting Diodes). The monitor works with the VGA (Video Graphics Array) card. The video graphics card helps the keyboard to communicate with the screen. It acts as an interface between the computer and display monitor. Usually the recent motherboards incorporate built-in video card.

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