Computer

Chapter: 1. The Computer System.

Introduction : A computer is a machine. It works on electricity or batteries. It different from other machines. It does not have a fixed function. It can perform several functions.

Types of Computer: Computers are available in different shapes and sizes, for example desktop computer, laptop computer, tablet computer, etc.

Many machines today have computers built into them, for example **smart phones.**

What can a computer do?

- It can help you in writing an essay.
- It can check spelling of works.
- It can be used to play games.
- It can be used to draw pictures.
- It can be used to read books.
- It can help to book flight and railway tickets.

Thus, a computer is much more than a ordinary machine. It can perform several functions.

How does a Computer work ?

Computer perform their functions in three steps. Suppose you want the computer to add two numbers, 3 and 6. The three steps are as follows,

Step 1 Input : Give the computer the required information, that is the numbers 3 and 6 to be added. This information is called **data.**

Next give the computer **instructions** to add. Your instructions tell the computer what to do with the numbers. Any instruction that you give to the computer is called a **command.**

The information and instructions together is the **input** to the computer.

Step 2 process: The computer works on the data according to your instructions. This is called **processing** the data. The processing is carried out in the **central processing unit.** So the actual process of addition is done in the CPU.

Step 3 output: Computer gives the result as 9. This result is the **output.** It gets displayed on the **monitor.**

A computer can store data and instructions

A computer **stores** data and your instructions. You can use the stored data and instructions whenever you want. The input that you give to a computer is stored in it. The output is also stored. The data and instructions in the computer can be stored in different kinds of devices, such as hard disk, flash drive, CD-ROM and DVD- ROM. These devices are called **storage devices.**

Computer program: A computer is special in many ways. It is very fast and can do work in seconds. A computer does not get tired. It is a very accurate machine. A computer can only do what it is instructed to do.

The step - by- step instructions given to a computer to make it do some work is called a **computer program.**

Characteristics of a Computer

Speed: A computer can perform all activities very fast, that is it can process the data in second. It can perform very large number of calculations without getting tired.

Storage: A computer can store large amounts of data and instructions.

Accuracy: Computer do not make mistakes. If data and instructions given to the computer is correct, it will give you correct result.

Many uses: Computers can perform many different types of jobs efficiently.

Starting and shutting down a computer

To start a computer, follow these steps.

Step 1: If the electricity switch is off , put it on.

Step 2: Switch on the UPS.

Step 3: Switch on the CPU.

Step 4: Switch on the Monitor.

On switching ON the computer, a screen called the **desktop** appears. It has small pictures called **icon** on it.

To shut down a computer, follow the steps.

Stap 1: Click on the start button.

Step 2: On the list that appears, click **Shut Down.** A message saying 'Shutting down...' will appear.

The monitor will turn blank after a few seconds.

Step 3: Switch OFF the monitor.

Step4: Switch OFF the UPS.

Step 5: Switch OFF the electricity Switch.

Exercises

1. Choose the correct answer.

i. Which of these machines can perform many functions ?

a. Car   b. Grinder   c. Computer   d. All of these

ii. Which of these can be used to give input to the computer ?

a. CPU   b. Keyboard   c. Monitor   d. Printer

iii. If you have to calculate 7- 6 using a computer, which of these which will be the input?

a. 7   b. 6   c. Subtract   d. a, b and c

iv. If take the output of a computer on a paper using a printer, the output is known as:

a. Hard copy   b. Soft copy   c. Paper copy   d. Print copy

v. Which of these stored in the computer?

a. Input data   b. Processing instructions   c. Output   d. All of these

2. Rearrange the jumbled words.

i. ICAMENH -   MACHINE

ii. POCSGRIESN -   PROCESSING

iii. TRUCINSSNOIT -   INSTRUCTIONS

iv. PMPTOLA -   PALMTOP

v. NIORFTONAIM-   INFORMATION

vi. GROMPRA   -   PROGRAM

3. Fill in the blanks.

i. A computer performs its function in three steps--- input , process and output.

ii. The information given to a computer is called data.

iii. The input is given to a computer by an input device.

iv. The processing device of a computer is called <u>Central</u> <u>Processing</u> Unit .

v. The monitor of a computer is called an <u>output</u> device.

4. Answer the following questions.

i. List five ways in which computers are useful to us.

Ans. a) It can help you in writing an essay.

b) It can check spelling of words.

c) It can be used to play games.

d) It can be used to draw pictures.

e) It can play music and videos.

2. State four characteristics of a computer.

Ans. The four characteristics of a computer are speed, storage, accuracy and ability to perform several functions.

3. What is a computer program?

Ans. The step- by- step instructions given to a computer to make it do some work is called a computer program.

Activities

1. Draw a computer and label its parts.

Do yourself

1. Circle the correct answer.

I am a computer.

a)   I can think on my own.   True/ False
b)   I do not make calculation mistakes.   True/ False
c)   I can only do what I am instructed to do.   True/ False
d)   I get bored and feel tired if I am instructed to do the

same job over and over again.   True/ False

e)   I can perform all jobs very fast.   True/ False

f)   I can store information.   True/ False

g) I cannot work unless you program me.   True/ False

h) I need step- by- step instructions to work.   True/ False