National Institute of Open Schooling  
Senior Secondary Course : Computer Science  
Lesson 1 : Computer Fundamentals  
Worksheet - 1

1. Vigyan scanned his assignment and stored it in his folder for future reference. Then he typed answers of his assignment in a word processor and took a printout to submit it to his teacher. Rewrite the above statement by classifying into input and output along with adding the name of devices he used to:
   a) Scan his assignment
   b) Type his document
   c) Display his document
   d) Print his document

2. If CPU is known as the brain of the computer then which device is known as the heart of the computer. Justify.

3. Can we say that the smartphones of today function like a voice recognition system. Justify your answer.

4. Carefully observe the following block diagram of a computer and answer the questions that follow:

![Block diagram of a computer](image)

- Fig. 1.1: Block diagram of a computer

   a) What will happen if the memory unit is removed from the CPU?
Lesson 1: Computer Fundamentals
Worksheet - 1

b) Why is there one direction arrow from Input Unit to CPU and CPU to Output Unit?

5. Complete the cross word with respect to hints given below:
   1 down (It is just like a television screen and it is used to display data and information)
   2 down (is an input device that utilizes a light-sensitive detector to select objects on a display screen.)
   3 down (is a device that is used to draw charts, graphs, maps etc., with two or more automated pens.)
   4 across (It manages the instructions given to the computer.)

6. With respect to the usage classify the types of computers required by the following organization:
   a) In a study centre
   b) An international call center
   c) Space Research Organisation
   d) A small company with an employee strength of 50 -70 employees

7. What unit of memory will you associate with the following:
   a) A 1 page text file with only text and no images
   b) A 3 minute video
   c) A 3 hour documentary
8. Look around and identify any two devices that use:
   a) Infrared port
   b) USB port

9. Computers find application in nearly every field that we can think of. The following diagram shows its implementation in the process of performing ultrasound.

Identify any two other real life applications that uses computer and amazes you. Pictorially represent using a flowchart the working of the chosen systems.
10. Why was binary number system preferred and not the decimal number system for digital computers?