

Question: What are the function of a computer ? Briefly explain.

Answer: The main and also basic function of a computer is to run programs. The programs they run can help to improve humans' everyday lives. But, there are four basic functions of a computer system which are given below:

1. Input: We input data i.e. we provide data; set of instructions . We input data through input devices which are keyboard, mouse, scanner etc .

2. Processing: The computer processes it i.e. it manipulates the data which is done by the C.P.U

3. Output: After processing the data the computer displays the result, it gives an output. Output devices are the monitor, in the case of visual output, speakers, in the case of audio output, printers, etc

4. Storage: We can save your data for future use in the CPU itself which is stored in the computer's ROM. There are several other storage devices also like removable disks, CDs, etc.

The function of a computer is to make every day life easier for the average person. So in a way the function of the computer is to make life easier.

Question: What are the characteristics of a Computer ? Briefly explain.

Answer: There are some characteristics of a computer which are given below:

1. **Speed:** A computer is very fast device. It takes only few seconds for calculations that human being take hours to complete.
2. **Automatic:** A machine is said to be automatic if it works by itself without human intervention.
3. **Accuracy:** The degree of accuracy of computer is very high and every calculation is performed with the same accuracy.
4. **Diligence:** A computer is free from tiredness, lack of concentration, fatigue, etc. It can work for hours without creating any error.
5. **Versatility:** It means the capacity to perform completely different type of work. You may use your computer to prepare payroll slips.
6. **No I.Q:** Computer is a dumb machine and it cannot do any work without instruction from the user. It performs the instructions at tremendous speed and with accuracy.
7. **No Feeling:** It does not have feelings or emotion, taste, knowledge and experience. Thus it does not get tired even after long hours of work. It does not distinguish between users.
8. **Storage:** The Computer has an in-built memory where it can store a large amount of data.
9. **Power of remembering:** As a human being acquires new knowledge, the brain subconsciously selects.

Question: Write the definition of following terms:

1.Data: Data is the raw material used as input to data processing.

2.Information: Information is the processed data obtained the output of data processing.

3.Data Processing: The activity of processing data using a computer is called data processing. Data processing consists of three sub activities: capturing the input data, manipulating the data, and managing the output results.

Question: Write the basic operations of a Computer.

Answer: There are five basic operations of a computer which are given below:

1.Inputting: The process of entering data and instructions into the computer system.

2.Storing: Saving data and instructions to make them readily available for initial or additional processing as and when required.

3.Processing: Performing arithmetic operations or logical operations on data to convert them into useful information.

4.Outputting: The process of producing useful information or results for the user such as a printed report or visual display.

5.Controlling: Directing the manner and sequence in which all of the above operations are performed.

Question: Draw the block diagram of a computer. Briefly explain.

Or. Discuss the basic (main) components of a computer systems.

Or. Briefly discuss the basic organization of a computer systems.

Answer: The block diagram of a computer system which are given below:

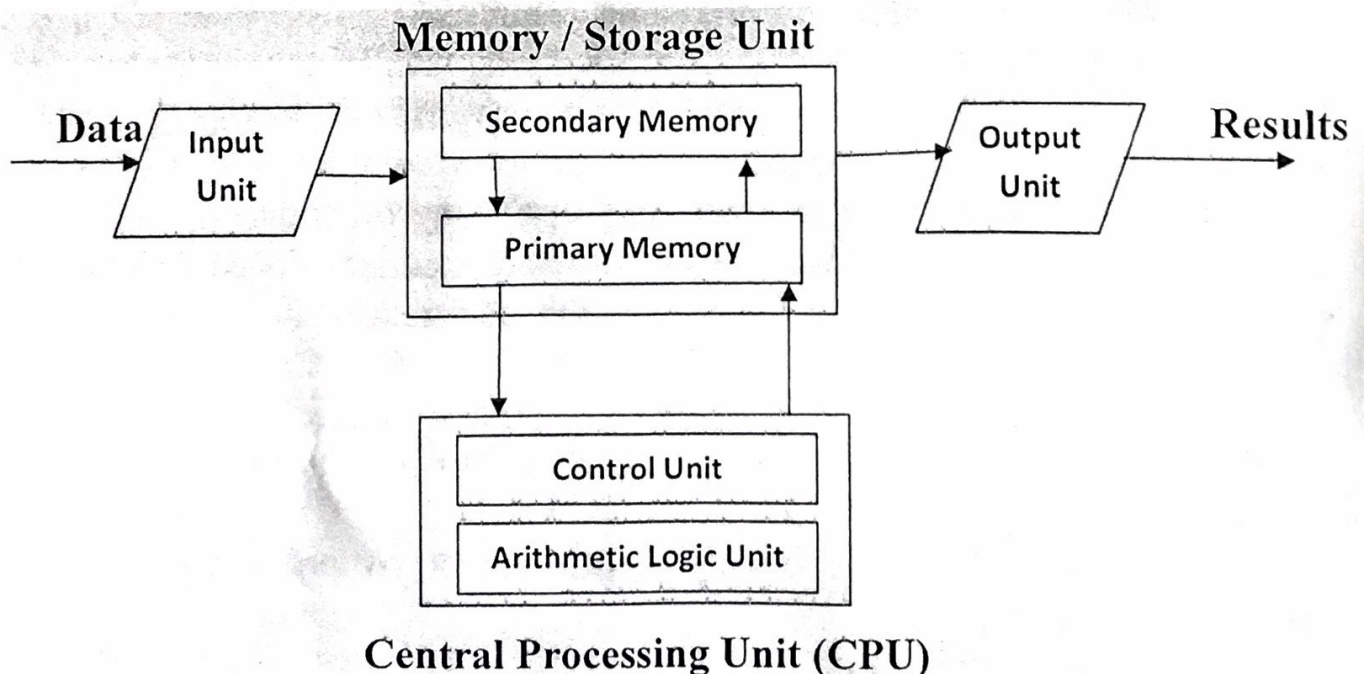


Figure: Block diagram of a computer systems.

1.Input Unit: The input unit allows data and instruction to be fed to the computer system from the outside world, in computer acceptable form.

2.Output Unit: The output unit allows the computer system to supply the information or results, obtained from data processing, to the outside world, in human acceptable form.

3.Memory Unit: The memory unit of a computer system holds the data and instructions to be processed and the intermediate and final results of processing. There are two types of memory device which are given bellow:

- I. **Primary Memory:** It is also known as main memory which is used to hold pieces of program instructions and data, intermediate results of processing. It is used for temporarily. It has limited storage capacity, because it is very expensive. Example: RAM (Random Access Memory).
- II. **Secondary Memory:** It is also known as auxiliary memory which is used to take care of the limitations of the primary memory. It is used for permanently. It has the large storage capacity & it is very cheaper in cost. Example: ROM (Read Only Memory).

4.Arithmetic Logic Unit: During data processing, the actual execution of the instructions takes place in the arithmetic logic unit of a computer system. Where the arithmetic operations means: add, subtract, multiply, division and the logical operations means: less than, equal to and greater than.

5.Control Unit: The control unit of a computer system manages and co-ordinate the operations of all the other components of the computer system.

6.Central Processing Unit: The control unit and the arithmetic logic unit of a computer systems are jointly known as Central Processing Unit. It serves as the brain of the computer system and is responsible for controlling the operations of all other units of the system.

Question: What are the difference between Volatile & Non-Volatile memory ?

Answer: There are some difference between volatile and non-volatile memory which are given below:

Volatile Memory:

- I. When the power supply of a computer system is turn off or reset, then the data or information is losses.
- II. It is used for temporarily.

- III. It has the limited storage capacity.
- IV. It is very expensive in cost.
- V. Example: RAM (Random Access Memory).

Non-Volatile Memory:

- I. When the power supply of a computer system is turn off or reset, then the data or information does not loss.
- II. It is used for permanently.
- III. It has the large storage capacity.
- IV. It is very cheaper in cost.
- V. Example: ROM (Read Only Memory).

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