

Lesson 1: Development of Computers

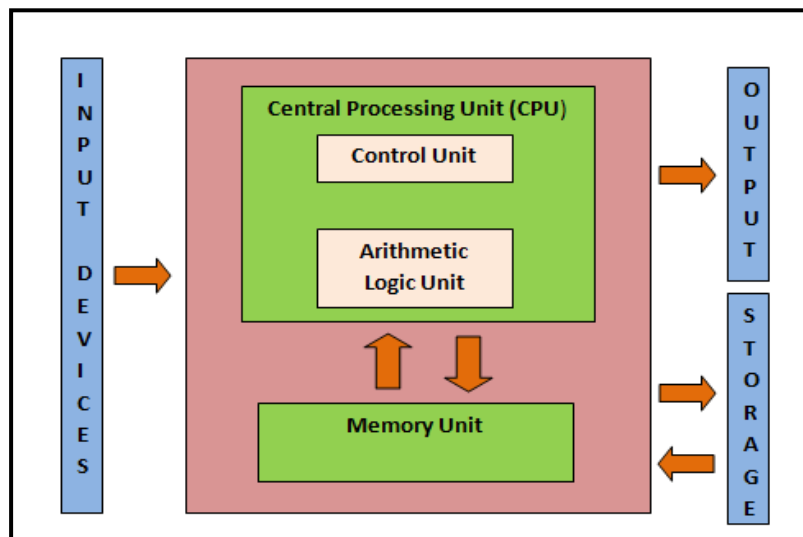
Inside the System Unit

As we all know that a computer unit is made up of an input unit, a processing unit (also called system unit) and an output unit. The processing unit is responsible for all the work done by the computer. The diagram of a system unit is given below:

Central Processing Unit (CPU)

The CPU is a chip inside the system unit. It works for all computations inside a computer. Whenever you press a key, click the mouse, or start an application, you are sending instructions to the CPU. It further consists of 2 components:

1. Control Unit (CU): It directs all the operations. It controls the actions of the other components, so that instructions are executed in the correct sequence.
2. Arithmetic Logic Unit (ALU): The major operations performed by the ALU are addition, subtraction, multiplication, division, logic (True/False) and comparison.



The Motherboard

The motherboard is the main circuit board in a computer. It houses a variety of microchips, sockets and electronic components. It plays an integral part in connecting all parts of a computer.



Memory

The main memory of a computer is in the form of chips which are fixed on the motherboard. The computer memory is of two types:

1. Primary Memory: It is made of microchips. It is of the following types:

- a. **Random Access Memory (RAM):** It holds the data, programs and store results temporarily while you are working on the computer. The contents of the RAM get erased when the computer is switched off.
- b. **Read Only Memory (ROM):** Every computer comes with a ROM which helps the computer to know what to do when it boots up, like checking the hardware attached and loading the operating system in the memory.
2. **Secondary Memory:** It consists of the storage devices which are used to store the work done on the computer. These storage devices are the hard disk, compact disk (CD), digital versatile disk (DVD) and the pen drives. There are 2 types of CDs available:
 - a. **CD-Recordable (CD-R):** You cannot delete the recorded data.
 - b. **CD-ReWritable (CD-RW):** Data can be erased and rewritten.



Now, answer the following questions:

Q.1. Write the full forms for the following:

CPU	
CU	
ALU	
RAM	
ROM	
CD-R	
CD-RW	
DVD	

Q.2. Write (T) for True and (F) for False against the statements.

1. Laptop can fit in your pocket. ☐
2. CPU chip is fitted on the motherboard. ☐
3. A CU in a CPU does all the calculations and comparisons. ☐
4. RAM is a permanent memory. ☐

Q.3. Fill in the blanks:

1. _____ is the temporary memory.
2. _____ and _____ are components of CPU.
3. _____ memory consists of storage devices.
4. Memory of a computer can be divided into _____ memory and _____ memory.

Q.4. Answer in one word/sentence.

1. What does ALU do?
2. What is the main circuit board in a computer system called?
3. Name some storage devices.
4. How can Primary memory be classified?
5. Why is RAM called temporary memory?

Homework

Draw the system unit in your sheets and learn all the abbreviations.

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Answers

Q.1. Write the full forms for the following:

CPU	Central Processing Unit
CU	Control Unit
ALU	Arithmetic Logic Unit
RAM	Random Access Memory
ROM	Read Only Memory
CD-R	CD-Recordable
CD-RW	CD-ReWritable
DVD	Digital Versatile Disk

Q.2. Write (T) for True and (F) for False against the statements.

1. F
2. T
3. F
4. F

Q.3. Fill in the blanks:

1. RAM
2. CU and ALU
3. Secondary Memory
4. Primary Memory and Secondary Memory

Q.4. Answer in one word/sentence.

1. The major operations performed by the ALU are addition, subtraction, multiplication, division, logic (True/False) and comparison.
2. The motherboard is the main circuit board in a computer.
3. The storage devices are the hard disk, compact disk (CD), digital versatile disk (DVD) and the pen drives etc.
4. Primary memory can be classified as:
 - i) RAM: Random access memory
 - ii) ROM: Read only memory
5. The content of RAM get erased when computer is switched off, that is why it is called temporary memory.