# The Central Processing Unit

# Read and learn new words by heart

Precisely – точно
Manufacturer – изготовитель
Particular – личный
Determine – определять
Retrieve – восстанавливать
Reference – находить по ссылки
State – положение
Portion – часть
Sequence – последовательность
Select – выбирать
Interpret – объяснять, толковать
Subtraction – вычитание
Multiplication – умножение
Division – деление
Exponentiation – показания

# Read and translate the text

It is common practice in computer science for the words "computer" and "processor" to be used interchangeably. More precisely, "computer" refers to the central processing unit (CPU) together with an internal memory. The internal memory, control and processing components make up the hearth of the computer system. Manufactures design the CPU to control and carry out basic instructions for their practical computer.

The CPU coordinates all activities of the various components of the computer. It determines which operations should be carried out and in what order. The CPU can also retrieve information from memory and can store the results of manipulations back into the memory unit for later reference.

In digital computers the CPU can be divided into two functional units called the control unit (CU) and the arithmetic-logical unit (ALU). These two units are made up of electronic circuits with millions of switches that can be in one of two states, either on or off. The function of the control unit within the central processor is to transmit coordinating control signals and commands

The control unit is that portion of the computer that directs the sequence or step-by-step operations of the system, select instructions and data from memory, interprets the program instructions, and controls the flow between main storage and the arithmetic-logical unit. The arithmetic-logical unit, on the other hand, is that portion of the computer in which the actual arithmetic operations, namely, addition, subtraction, multiplication, division and exponentiation, called for in the instructions are performed. Programs and the data on which the control unit and the ALU operate, must be in internal memory in order to be processed. Thus, if located on secondary memory devices such a disk or tapes, programs and data are first loaded into internal memory.

# Answer the questions:

1.What is the heart of the computer system?

2.What do manufacturers design the CPU for?

3.What does the CPU coordinate?

4.How can the CPU in digital computers be divided?

5.What are the functions of the control unit?

6.What can you tell about the arithmetic- logical unit?

# What is the main idea of the text?

1) The CPU coordinates all the activities of the various components of the computer.
2) The CPU is composed of the control unit and the arithmetic-logical unit only.
3) The CPU is made up of the control unit, the arithmetic-logical unit and internal memory.
4) The words "computer" and "processor" are interchangeable.

# Fill in the words

1) "Computer" refers … the central processing unit together with an … memory.
2) CPU determines which operations should be carried … and … what order.
3) The control unit is that portion of the computer that … the sequence operations of the system, select … and data … memory and controls the flow … main storage and the arithmetic-logical unit.

Thank you for your attention.