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Q1 In your opinion what are three importance characteristic of computers,

Explain each characteristic?

* Q2 write key characteristics of fourth generation of computers?

Ans: Basic characteristic ::

① Speed ::

As you know computer can

(2)
very fast. it takes only few second for calculations that take hours to complete.

Therefore, we determine the speed of computer in term of microsecond (10^{-6} part of second) (10 to the 9 part of second). from this you can imagine how fast your computer perform work.

* Accuracy %

The degree of accuracy of computer is very high and every calculation is performed with the same accuracy. the accuracy level is 7.

determined on the basis of design of computer.

(3) Diligence %

A computer is free from tiredness, lack of

(3) concentration. fatigue.
it can work for hours
without creating any error.

(4) versatility: it means the
capacity to perform different
type of work you may
use your computer to
prepare payroll slips. next
moment you may use it
for inventory management
or to prepare electric
bills.

(5) No IQ: it does not have
feeling or emotion, taste,
knowledge and experience.
Thus it does not get tired
even after long hours of
work.

(6) Storage: The computer has
an built memory where it
can store a large amount
of data. you can also

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store data in secondary storage devices such as floppies which can be kept outside your computer and carried to other computers.

* ⑤ characteristic of Fourth generation computer:-

- ① The fourth generation computers have microprocessor-based systems. It uses VLSI (Very large scale integrated) circuits.
- ② They are all cheapest among all the computer generation.
- ③ The speed, accuracy and reliability of the computer were improved in fourth generation computers.
- ④ Many high-level language were developed in the fourth generation such as COBOL, FORTRAN, BASIC, PASCAL and C language.

Q2(a) Discuss the importance of Arithmetic logic unit and control unit of computer systems.

(b) Write detail note on importance of Ram (Random access memory)?

Ans(a) An Arithmetic logic unit is combinational digital electronic circuit that performs arithmetic and bitwise operators on integer binary numbers. [1] [2] [3] [4] This is in floating point numbers. An ALU is fundamental building block of many types of computing circuits including the central processing unit of computers graphics processing units. may contain multiple ALUs. The input to an ALU are the data to be operated called operands and a code indicating the operator to

(6)
performed. An ALU also has status inputs or outputs or both which convey information about previous operation between the ALU and external status registers.

* control unit :-

It is very important to have control unit in a computer system without a control unit its like a body with out

Brain. Control unit of a computer is a CPU. Some latest CPU in market are intel i5, i7 etc.

(b) Ram :-

① volatile in nature

② in case of power interruption all the data in RAM is lost.

③ RAM only store data as long as computer is on.

* Types.

two types.

(a) static

(b) dynamic

(7)

* Static RAM:

(1) uses an external circuitry to periodically generated or refresh storage data to retain the store data.

(2) Dynamic RAM:

Does not need any special regenerator circuit to retain the stored data.

Faster, costlier and consumes more power.

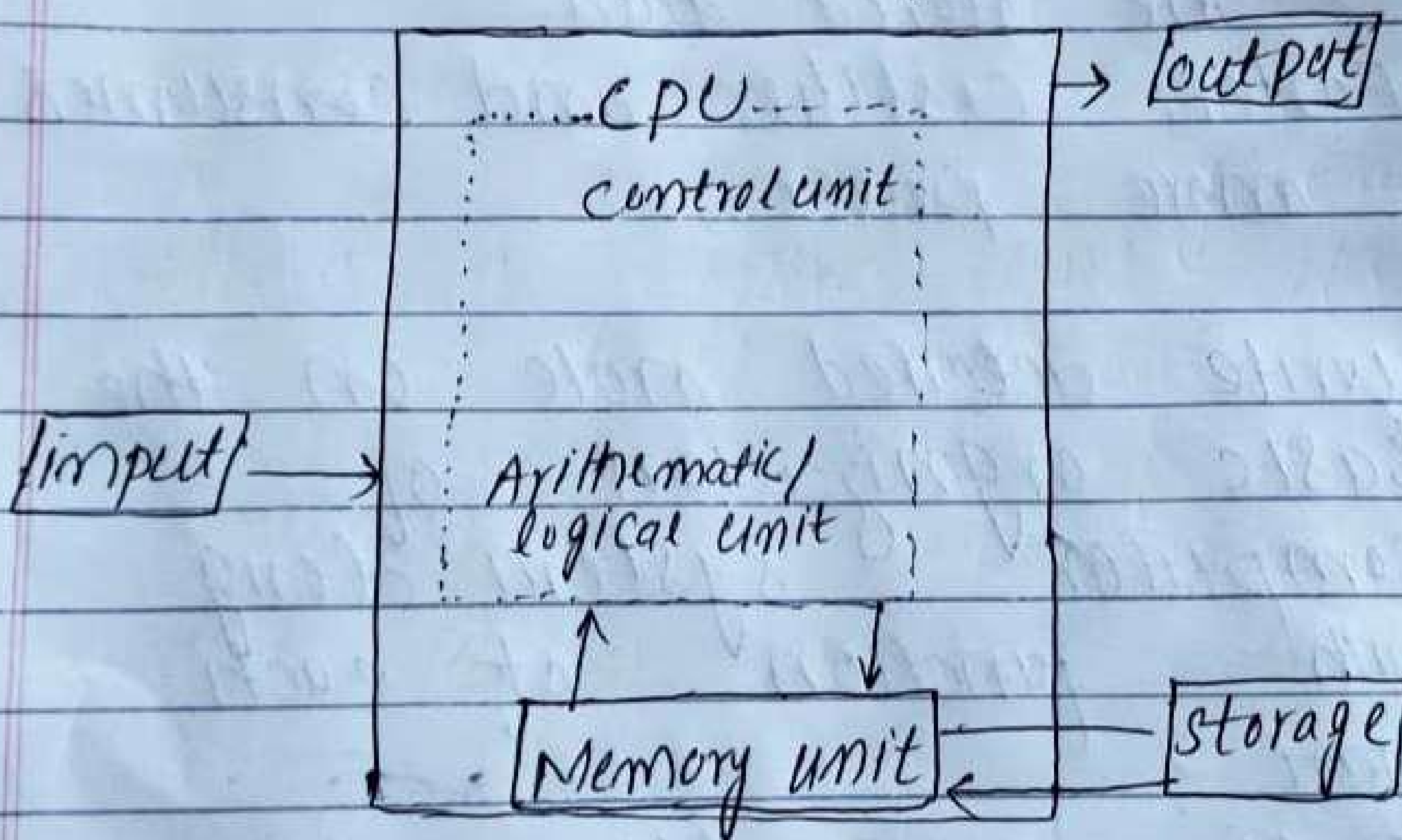
Q3: write detailed note on the Basic organization of Computer system along with function of each part?

Ans: Basic organization of Computer:

Any computer can perform the four basic operations of input, processing, output and storage. These operation constitute the IPO cycle. The internal design

(8)

or structure of computer may differ from one system to another through the basic operations remain the same figure. logical unit together direct the flow of control in the central processing unit.



* input unit :-

Data and instructions are entered into the computer through the input unit to get processed into information. Input devices like the key board

9

can be used to input characters, numbers and certain symbols a mouse is a device that has an on screen pointer that enables the user to select items and choose options. a microphone can be used if the user wishes to enter instruction by making a voice entry.

CPU:

The actual processing of the data is carried out by CPU which is the brain of computer. The CPU store data and instructions in the primary memory of the computer called RAM.

Arithmetic Logic Unit:

The CU obtains the program instructions stored in the primary memory in RAM to ALU for processing

9 10

The ALU performs the logic and the Arithmetic operation on the data and results are temporarily stored in the RAM. After the processing the final results are stored in secondary memory.

Control Unit:

The CU obtains the program instructions stored in primary memory of the computer, interprets them, and issues signals that result in their execution.

processors:

Some computers use more than one processing in order to reduce the load on single processor.

Output:

The output passes on final results of computation to users through the out

put devices like the Minter printer. The output interfaces convert the binary code produce by computer into the human readable form.

Storage Unit :-

Before the actual processing take place, the data and instructions the enter the computer system have to be stored internally. Also the final results generated by the computer after being sent to the out put unit. The storage unit of computer system is designed to store the data generated at various stages of processing. The hard disk drive or hard disk drive.

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