

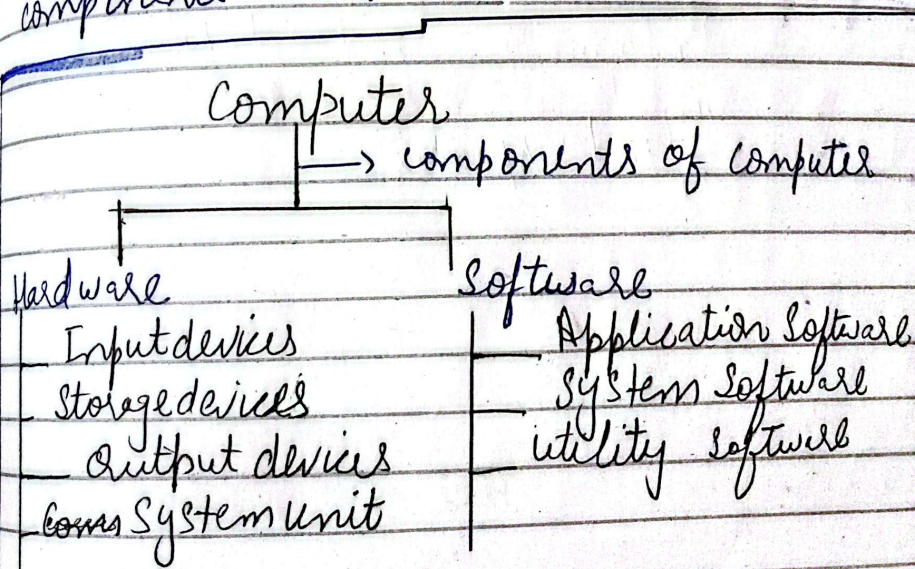
IMPORTANCE OF INFORMATION TECHNOLOGY.

Information technology send and receive information from one place to another.

It help to connect information from one communicating device to another.

Q) Draw a basic computer block diagram and Briefly explain the function of each part?

Computer mainly consist of two components



Hardware Components Function

Input device: It is mainly use to input data in computer software for further processing.

Input devices include: Keyboard, Mouse, joystick, Scanner, Camera.

System Unit

It is used to execute instructions given by computer input devices. It process data and also storage occurs in this unit.

System unit consist: processor, CPU, Mother board, RAM, ROM.

Output devices:

It is use to display information and data. Output devices: Monitor, Printer and Speaker.

Software Components Function

System Software

It is main software it is used for system configuration. It provide platform to application software.

Example Android software,
MAC Software

Application Software: it is used to perform user tasks. It includes communication software like WhatsApp, IMO, Viber.

Graphic Software: Photoshop, Adobe Illustrator

Utility Software: It is an extension and sub-systems software. It is used to maintain system software by combating virus in system.

Example: Antivirus software etc.

~~Soft~~ Storage Devices

Primary Memory and Storage

RAM: it is volatile memory known as **RANDOM ACCESS MEMORY**.

ROM: It is non-volatile memory and known as **READ ONLY MEMORY**. It is permanent memory.

SSD card: It is non-volatile

HD: Hard disk storage device

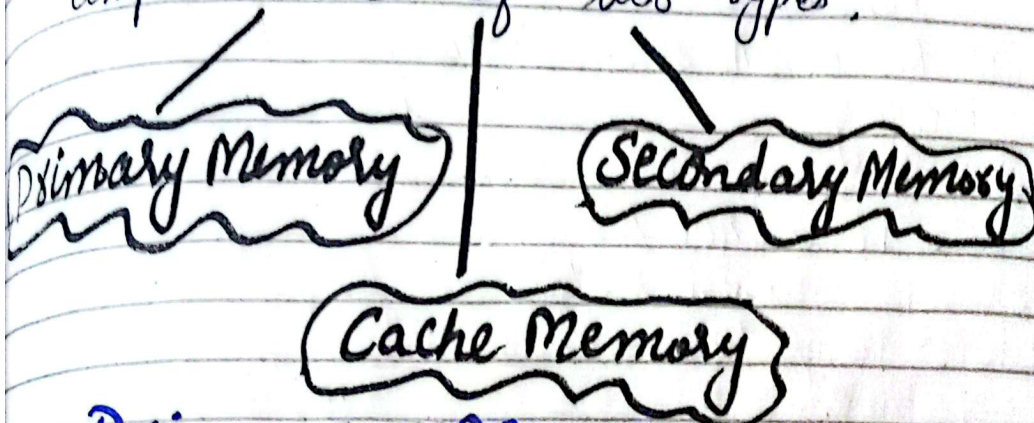
Q1 What is a computer Memory?
Describe its units and discuss
various types of memories?

Computer Memory:

Computer Memory is a mechanism which is use to store computer data, instruction

Input and output instructions are also stored in computer memory

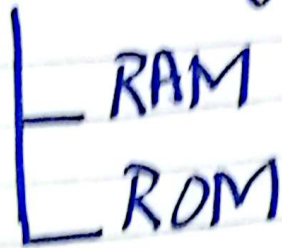
Computer memory are of two types.



Primary Memory:

- It is also called as a main memory of computer
- It is directly accessible from C.P.U
- It is further divided into two main memories

Primary Memory



RAM: Its full form is "RANDOM Access Memory". It is non-volatile memory.

It is divided into two types

SRAM

Static Random Access Memory

It cannot be change remains static while computer remains turn on

DRAM

Dynamic Random Access Memory.

It changes frequently while computer remains switch on.

ROM: Its full form is "Read only Memory". It is not editable. It is non-volatile memory.

ROM is divided into three main sub-types

EROM

Erasable Read only Memory

PROM

Programmable Read only Memory

EEPROM

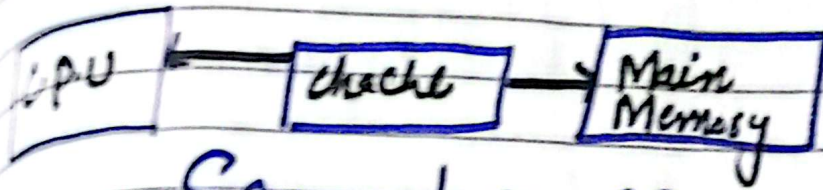
Electrically Erasable Read only Memory

Cache Memory:

It is also a type of memory.

It acts as a buffer zone between C.P.U and Main Memory. It is highly synchronized memory.

It temporarily have the ~~top~~ repeated data.



Secondary Memory:

It is volatile memory. also called as computer storage.

All documents, videos, images stored in secondary memory.

It cannot access directly into C.P.U. first it brought up into the main memory.

Example : hard disk, Magnetic disk, SD card, Floppy disk.

Units of Computer Memory:

Computer memory is always in the form of binary number 1 and 0.

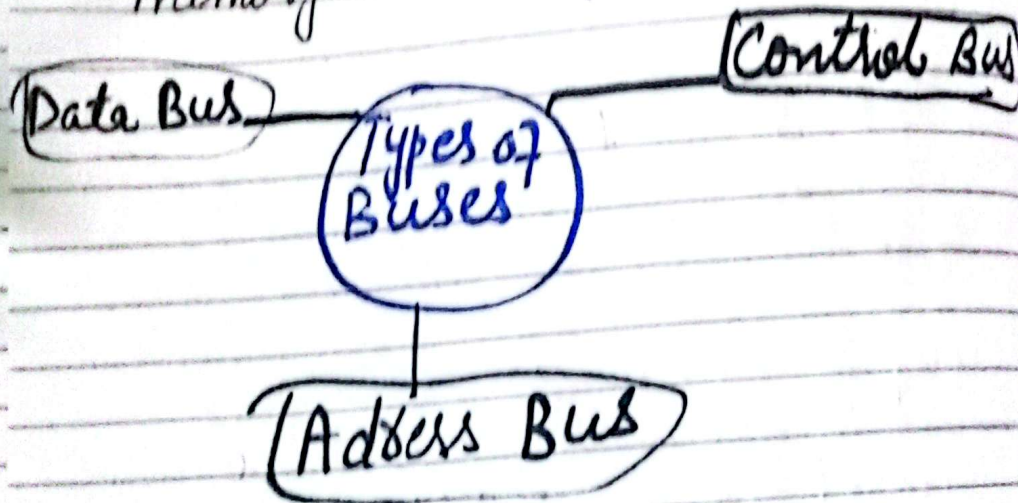
units of computer Memory

1 Bit
1 Nibble
1 Byte
1 Kilo byte
1 Mega Byte
1 Giga Byte
1 Tera byte
1 Peta byte
1 Exa byte
1 Zetta byte

1 Bit
2 Bits
1024 Bytes
1024 KB
1024 MB
1024 GB
1024 TB
1024 PB
1024 EB

Q) How data transfer from memory to C.P.U

The transfer of data between memory and C.P.U through computer buses. It is the physical wires network which connect C.P.U memory and input/output devices.



Data Bus:

It is two pathway bus
It transfer data from
Memory to C.P.U and
C.P.U to Memory-

Address Bus:

It is one pathway only
use to find where is
data stored and fetch from
computer.

Control Bus:

It is use to control computer
function, signals and interpretation

System Unit:

It is the most important system
present in computer. It is also
called as Computer tower and
chassis

System unit is made of
major and minor parts.

- Mother board
- CPU
- RAM, ROM
- Hard disk, SSD

Motherboard: It is also called as a system board. It contains chip like semiconductor called as Integrated circuit. Each IC contains pathway for electronic flow.

- All other components system unit present in system board.

CPU

- Central processing unit.
- It is called as the Brain of the computer.
- It is divided into two main parts

Arithmetic & Logic unit

Control unit.

1- Arithmetic unit: It is the

part of CPU. It is generally use to perform mathematical operation like Addition, Subtraction, Multiplication, Division

2- Logical unit: It is used to perform logical operation like which one is greater than other

3- Control unit: It is use to control computer instruction, help to send information to refered part of computer.

INFORMATION TECHNOLOGY

Information technology is consist of interpreting data and processing data

Data: Data is unman and unprocessed material given to the computer for processing

Components for information Technology

Computer is the major source required to process information

① First data is inserted by input devices

② Then data processed by using system unit.

③ Then Output devices extract data.

④ Further more, storage devices store data for further processes.

