

ISC COACHING CENTRE



**EXPERT TUITION FROM
EXPERIENCED TEACHERS**

Class IV-X *English, Maths,
Science & Social Science*
Class XI-XII

**English, Maths, Accountancy, Economics,
I.p, C.S, Business Studies, History,
Pol. Science, History, Geography**

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|-----------------------|-------------------|-----------------|
| - Class Notes | - Pre-Board Paper | - Board Papers |
| - Important Questions | - Assignmenta | - Mcq Questions |
| - Test papers | - Sample papers | - Short Notes |

**Branch 1:-
C-20, Bunglow Road,
Adarsh Nagar**

**Branch 2:-
ISC, Near Labour
Chowk, Adarsh Nagar**

987005 80592

Ch-1 Computer System

Introduction: A computer is an electronic device, under the control of instruction stored in its memory that can accept data, process the data according to specified rules (Program) on processor & produces information (output), & store the information for future use.

A computer system comprises of five components:

Input Unit → A device through which data & programme from the outside world enter the computer system.

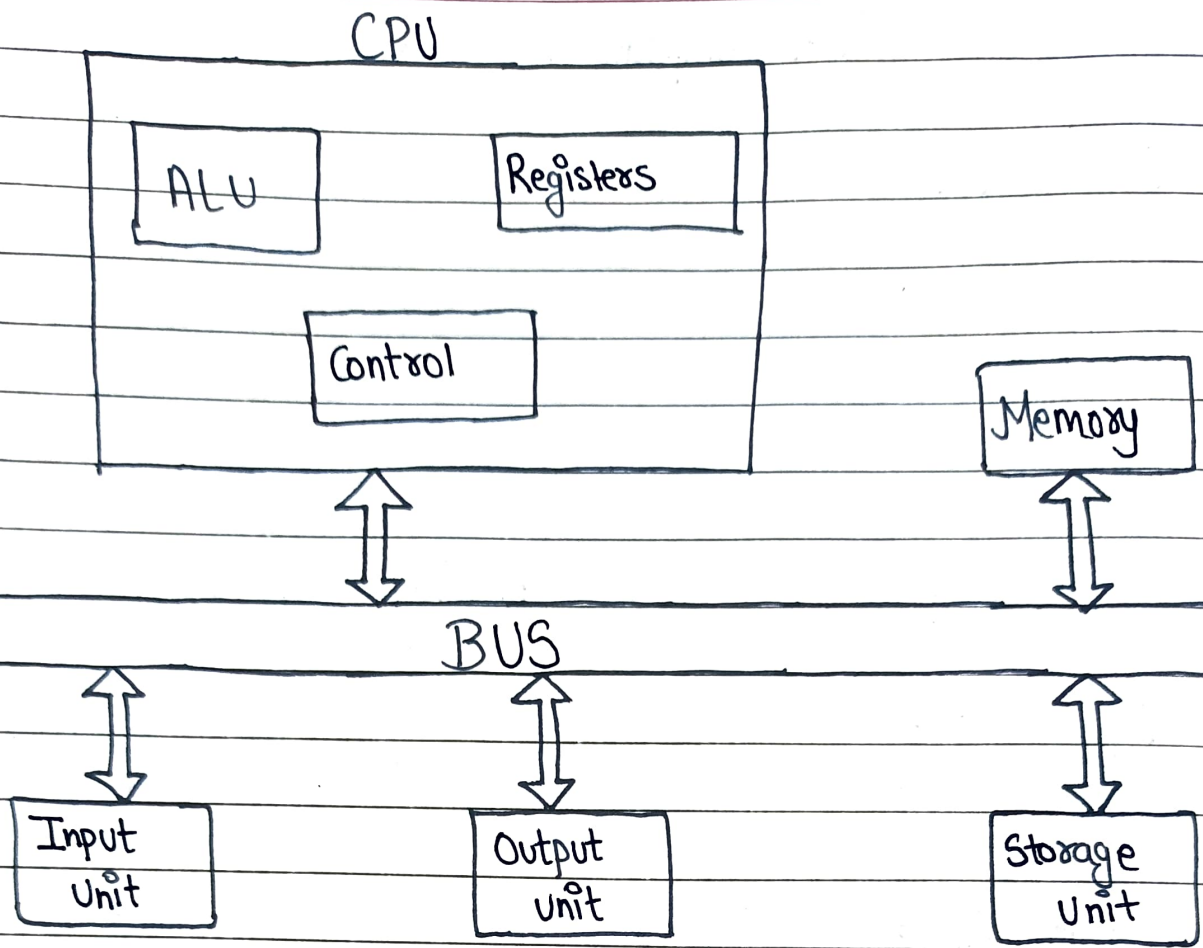
Output Unit → A device through result stored in the computer memory are made available outside the computer system, in readable form.

Central processing unit (CPU) → It is the brain of computer.

Primary Memory → It is the internal memory, volatile in nature. It is a collection of cells each with a unique physical address most computer are byte addressable cell at 11111110 basic computer Organization.

Secondary Memory → It is external memory, non-volatile & permanent in nature.

Computer Organisation: It refers to the logical structure of a computer describing how the component are connected to each other.



Input Unit (Input Device):

Input device takes the input & send data or information to the computer or another device.

Keyboard → It is an output device which sends data in to the computer. The data send depends on the key pressed by the user.

Mouse → A mouse is a small handheld input device which controls a cursor in a graphical user interface.

Microphone → it receives audio generated by input source & sends the same to a computer.

Scanner → Scanner optically reads a document, file or image & then change it into digital signal & sends to the computer.

OMR → Optical mark recognition reader is used to read marks on a document & send them to computer.

OCR → OCR stands for optical character recognition in an output which reads printed text & send to the computer.

Webcam → It sends the captured image to a computer.

Graphics Tablet → This input device is used to draw using hand.

Trackballs → an upside down mouse, encased within a socket. Is a cursor control device.

Gamepad → Also known as joy pad is the input controller for video games.

Joystick → these input device are used to video games.

Output Unit

A device that can receive data from computer or another device & create output with that data is called output device.

a) **Monitor** - A monitor is an output device that is responsible for receiving data from a computer & displaying that information or text or images for users to see.

b) **Printer** - It is used to print hard copy of input for documentation.

c) **Speaker** - Receives sound signal from a computer & then plays that sound signal & thus we hear song or music or any other audio.

d) **Projector** - Gets data from a computer & displays or projects the same information onto a screen or a wall.

3) Central Processing Unit

CPU is the main control centre of the computer that guide, directs, control & operate the computer.

a) **ALU (Arithmetic Logic Unit)**: It perform arithmetic (+, -, *, /) & logic operations.

b) **CU (Control Unit)**: It controls & guides flow & manipulation of all data. It acts as supervisor.

c) **Registers** - It holds data temporarily in small units during the processing time.

The Memory:

The Memory of a computer is a predefined working place where the data is stored temporarily, to facilitate its performance the memory of computer is also known as Primary or Main memory.

Memory units tells us how much memory is required for a file/data/program etc. and it is measured by memory units - bit (elementary units) or byte (smallest unit).

UNIT	STORAGE	ABBREVIATION
Bit	Binary Digit, Single 1 or 0	B
Nibble	4 byte bits	-
Byte / Octet	8 bits	B
Kilobyte	1024 bytes	KB
Megabyte	1024 KB	MB
Gigabyte	1024 MB	GB
Terabyte	1024 GB	TB
Petabyte	1024 TB	PB
Exabyte	1024 PB	EB
Zettabyte	1024 EB	ZB
Yottabyte	1024 ZB	YB

Main Memory is of two type :

Main Memory : means the internal or primary memory of the computer system is of two types :

RAM : [Random Access Memory] Memory in which each location can be accessed and changed.

- i) Dynamic RAM (DRAM)
- ii) Static RAM (SRAM)

b) Read only Memory (ROM) Memory in which each location can be accessed but not changed. ROM is a non-volatile memory & data is permanently stored within the unit.

- i) PROM - Programmable ROM
- ii) EPROM - Erasable Programmable ROM
- iii) EEPROM - Electrically Erasable Programmable ROM
- iv) Flash EEPROM
- v) Mask ROM