

# UNIT - 1

## INTRODUCTION TO COMPUTER SYSTEMS

Dr. Saurabh Pal

Associate Professor & Head

Department of Computer Applications

Veer Bahadur Singh Purvanchal University, Jaunpur

# OBJECTIVES

---

- ✘ Definition of Computer system
- ✘ Block diagram of Computer system
- ✘ Identify the various parts of a computer system
- ✘ Functions of each part

# DEFINITION OF A COMPUTER

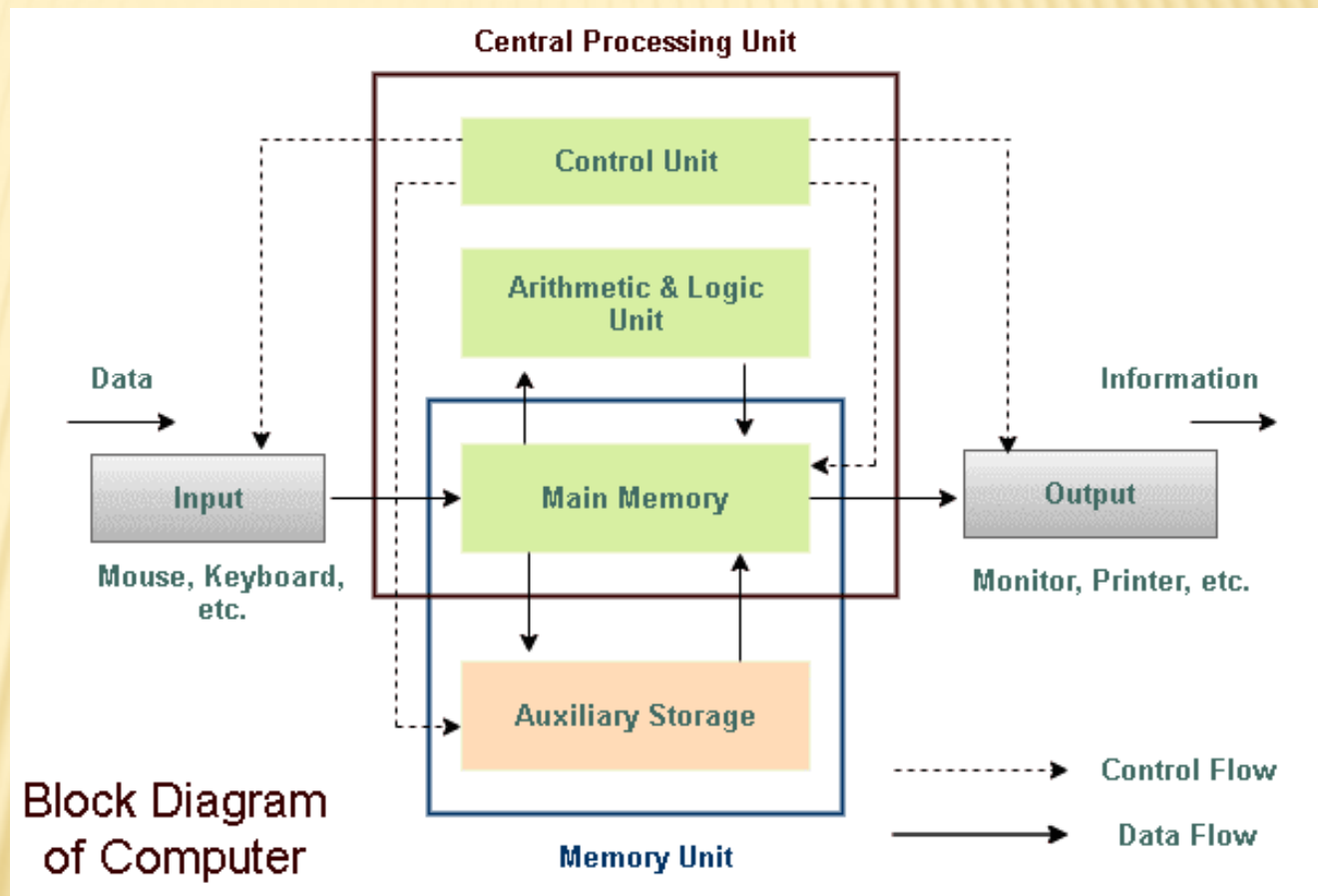
---

- ✘ By definition, a computer is an electronic device that inputs data, processes data (converting it into information that is useful to people) outputs and stores information.
- ✘ Computers are controlled by programmed instructions that transform the data into meaningful information.
- ✘ Generally a Computer is a device that accepts input, processes it, stores data, and produces output.

# BLOCK DIAGRAM OF COMPUTER SYSTEM

## ✘ Steps followed to process data

- + Input
- + Processing
- + Output
- + Storage





# INPUT

---

- ✘ Input: Information provided to the computer by a person, the environment, or another computer.

## Examples of Input

- + words and symbols
- + numbers
- + pictures
- + audio signals from a microphone
- + signals from another computer
- + temperature, speed, pressures, etc. from sensors

# PROCESSING

---

- Processing - manipulation of data.
  - Data are symbols that represent raw facts, objects, and ideas about people, places, events, and things that are of importance in an organization.
  - A computer program or software is a series of instructions that tell a computer how to carry out a processing task.
- Examples of Processing
  - Arithmetic calculations
  - Sorting a list
  - Modifying pictures
  - Drawing graphs

# OUTPUT

---

- ✘ Output - the result produced by a computer after processing the data.
- ✘ Output device – displays, prints, or transmits the results after processing.
- ✘ Examples of Output
  - + images on a monitor
  - + printed documents
  - + sounds
  - + signals to device controllers

# MEMORY AND STORAGE

---

- ✘ Memory - the area of a computer that temporarily holds data that is being processed or waiting to be processed, stored, or output.
- ✘ Storage - The area where data can be left on a permanent basis while it is not needed for processing.
- ✘ Examples of Storage
  - + magnetic disks
  - + CD-ROM (Compact Disk Read-Only Memory)
  - + magnetic tapes
  - + Flash disk
  - + Memory card
  - + Floppy disk