## **SYSTEM UNIT**

The concepts discussed here are applicable to a Personal Computer (PC) or a Laptop. However, some are also applicable to other types of computers.

The computer is visible to the eye as a box (or as a flat thin object if the computer is a laptop). From outside, various external parts are attached to the box. The box is termed as the System Unit. If the computer is a Laptop, some of the outside parts are directly embedded within the body of the thin flat laptop. Examples of external parts are keyboard, mouse, monitor, printer, network plug etc. However, the following description is about the INTERNAL PARTS of the System Unit or thin Laptop. The internal parts are described below:

#### **Motherboard**

It is the main board which is responsible for connecting different parts of a computer.

# MAJOR PARTS POSITIONED ON THE MOTHERBOARD are described below:

1. Microprocessor (CPU):

**Components of CPU** 

**Arithmetic Logic Unit (ALU)** 

**Control Unit** 

**Registers** 

Cache

Clock

#### 2. Buses

(buses are mainly designed for transferring commands and data across components of motherboard)

**Control Bus (for carrying commands)** 

**Data Bus (for carrying data)** 

Address Bus (for carrying memory addresses)

## Other types of buses (for other connection operations)

## 3. Controllers / Cards

(controllers are pieces of hardware designed for many different purposes)

Input device controllers
Output device controllers
Storage device controllers
Graphics controllers / cards
Other types of controllers

#### 4. Memory

Random Access Memory (RAM) Read Only Memory (ROM)

#### 5. System clock

(for synchronizing the connectivity and operations between different components on the motherboard)