22.07.2023

ASSIGNMENT - V

# INTERNAL COMPUTER HARDWARE

Internal computer hardware is the physical part of a computer as distinguished from software that executes or runs from hardware. The hardware of a computer is infrequently changed while software are modified frequently.

## INTERNAL COMPONENTS -

### 1. MOTHERBOARD

The motherboard is the body or mainframe of computer, through which all other components interface.

* Central circuit board making up complex electronic system. Motherboard provides electrical connections by which other components of system communicate.
* It includes many components such as: CPU, RAM, firmware, internal & external ports.

CPU :- CPU is a machine that can execute computer programs. It is sometimes referred to as brain of computer.

### 2. RANDOM ACCESS MEMORY

→ RAM is a fast access memory that is cleared when computer is power-down. RAM attaches directly to motherboard, and is used to store programs that are currently running. RAM

* RAM is a set of ICs that allows stored data to be accessed.

Types :-

1. Static RAM
2. Dynamic RAM
3. Writable RAM

### 3. FIRMWARE

* Loaded from ROM run from the Basic Input-Output System (BIOS).
* Computer program that is embedded in hardware device. Eg: Microcontroller.
* It is computer program which is executed by micro processor or controller.
* It is also tightly linked to piece of hardware.

HARSHANA.B
192211067

## 3. GRAPHICS CARD

Graphics card is a computer expansion card that generates feed of graphics output to a display device such as monitor.

* Comes in form of printed circuit board which are to be inserted into expansion slot.
* Often preferred over integrated graphics for increased performance.

## 4. COMPUTER PORTS

* serves as interface between computer & other computers or peripheral devices.
* Refers to part of computing device available for connection to peripherals such as input & output devices.

Eg: PS/2, Firewire, D sub, Telephone plug.

## 6. NETWORK INTERFACE CARD

* Used to connect different networking devices.
* Functional such as support for I/O interrupts, Direct Memory Access, partitioning & data transmission.

Functions:

* Convert data into digital signal.
* Offers both wired & wireless data communication techniques.
* Middleware between a computer / server and a data network
* Operates on both physical as well as data link layer of OSI model.

## 7. SOUND CARD

* Internal expression card that provides input & output of audio signals to & from computer under control of computer programs.