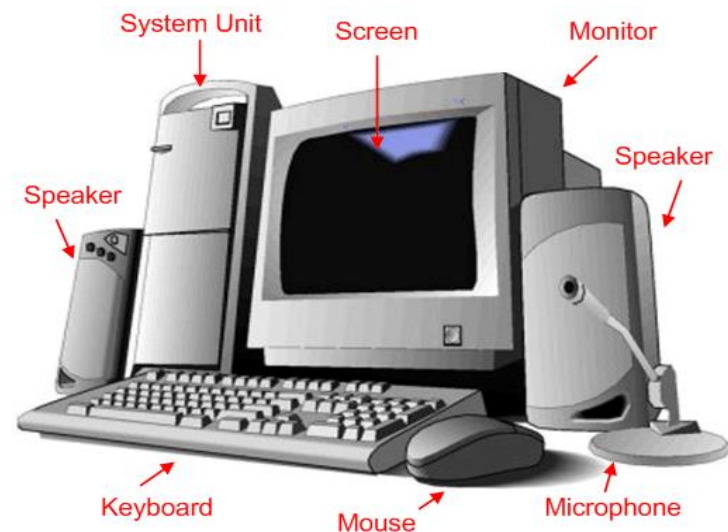# Meeting 6

Hardware

Hardware

Hardware is physical equipment of computer system. Hardware can be divided into two categories:

Input Device and **Output Device**.

Input Device

INPUT DEVICE

Input device is computer device that is used to input data into computer system.

Input device can be divided into some categories:

1. Text input devices

Such as **keyboard,** a device to input text and characters by depressing buttons (referred to as keys), similar to a typewriter. The most common English-language key layout is the QWERTY layout. Below is a picture of a keyboard using QWERTY layout.

2. Pointing devices

The most common pointing device is **mouse.** In computing, a mouse (plural mice or mouse devices) is a pointing device that functions by detecting two-dimensional motion relative to its supporting surface. Physically, a mouse consists of an object held under one of the user's hands, with one or more buttons, other elements, such as "wheels", or extra buttons.

Other alternative of pointing device is **trackball,** a pointing device consisting of an exposed protruding ball housed in a socket that detects rotation about two axes. The trackball was invented by Tom Cranston and Fred Longstaff as part of the Royal Canadian Navy's DATAR system in 1952[1], eleven years before the mouse was invented. Below is a picture of a trackball.

3. Gaming devices

One example of gaming device is a **joystick.** A joystick is a general control device that consists of a handheld stick that pivots around one end, to detect angles in two or three dimensions.

4. Image, Video input devices

There are two common input devices in this type. First is **Image scanner, a** device that provides input by analyzing images, printed text, handwriting, or an object. Below is a picture of image scanner.

Webcam

Second type is a **webcam. Webcams** are video capturing devices connected to computers or computer networks, often using USB or, if they connect to networks, ethernet or Wi-Fi. They are well-known for their low manufacturing costs and flexible applications. Below is a picture of a webcam.

Audio Input Device

5. Audio input devices

One example of audio input device is a **microphone.** Microphone sometimes referred to as a mic or mike, is an acoustic-to-electric transducer or sensor that converts sound into an electrical signal. Microphones are used in many applications such as telephones, tape recorders, hearing aids, motion picture production, live and recorded audio engineering, in radio and television broadcasting and in computers for recording voice, VoIP, and for non-acoustic purposes such as ultrasonic checking.

Output

1. Image, Video Output Devices

First example is a **printer.** In computing, a printer is a peripheral which produces a hard copy (permanent human readable text and/or graphics) of documents stored in electronic form, usually on physical print media such as paper or transparencies. Many printers are primarily used as local peripherals, and are attached by a printer cable or, in most newer printers, a USB cable to a computer which serves as a document source.

Output Device

2. Audio Output Devices

Speakers. Computer speakers, or multimedia speakers, are external speakers,
commonly equipped with a low-power internal amplifier.

Headsets. Headphones are a pair of small loudspeakers, or less commonly a single speaker, with a way of holding them close to a user's ears and a means of connecting them to a signal source such as an audio amplifier, radio or CD player.

Exercises Meeting-6

1. Hardware can be divided into two categories, mentioned that …
   - a. Inside/Outside device
   - b. Front/Outside device
   - c. Input/Output device
   - d. Software/Freeware
   - e. Shareware/Open Source

2. A set of computer consists of metal, plastic, and other physical devices which is called …
   - a. Software
   - b. Hardware
   - c. Program
   - d. Process
   - e. Instruction

3. There are input device, except :
   - a. Mouse
   - b. Keyboard
   - c. Microphone
   - d. HardDrive
   - e. Scanner

4. Video capturing devices connected to computers or computer networks, often using USB
   - a. Website
   - b. Webcam
   - c. Webnet
   - d. WebVideo
   - e. Video Conference

5. A device that provides input by analyzing images, printed text, handwriting, or an object is :
   - a. Printer
   - b. Webcam
   - c. Plotter
   - d. Hard Drive
   - e. Scanner

Exercises Meeting-6

1. The hardware is ….

2. Hardware can be divided into two categories, mentioned that and explain ….

3. Give the examples of Input Devices and Output Devices ….

4. The function for video capturing devices connected to computers or computer networks is ….

5. **A** device that provides input by analyzing images, printed text, handwriting, or an object is …..