

# Introduction to Computer & its Application, Hardware & Peripherals

**Objectives:** At the end of this lesson you shall be able to

- describe the various components of a computer
- describe hardware, software and peripherals
- describe applications of computer
- explain how to connect accessories to computer
- switch on and shutdown a computer.

## Introduction

A computer is an electronic, digital device used to process data, converting the data into information that is useful to People/users. A computer system consists of hardware and software components.

Hardware is the physical equipment such as the case, storage drives, keyboards, monitors, cables, speakers, and printers.

Software is the operating system and programs.

The operating system instructs the computer how to operate.

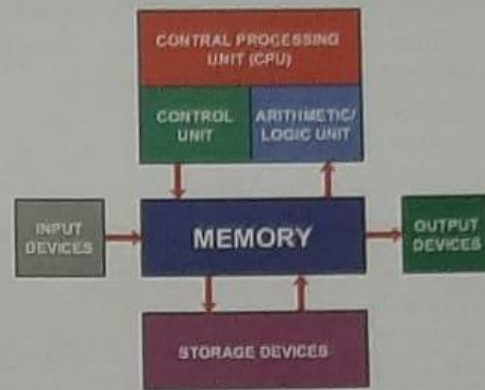
Programs or applications perform different functions.

## Information Processing Cycle (Fig 1)

It is a sequence of events in processing information which includes input, processing, storage and output. These processes work together & repeat over & over

- Input - Entering data into the computer.
- Processing - Performing the operation on the data.

Fig 1



- Output - Presenting the result
- Storage - Saving data program or output for future use

## Components of Computer

### Input Devices (Fig 2)

Input devices used to enter data or instructions into a computer

Fig 2



- Keyboard
- Mouse
- Digital camera
- Scanner
- Mic
- Bar code reader
- Joystick

**Keyboard Standard Layout (Fig 3)**

A standard computer keyboard has about 100 keys. Most keyboards use the QWERTY layout, named for the first six keys in the top row of letters.

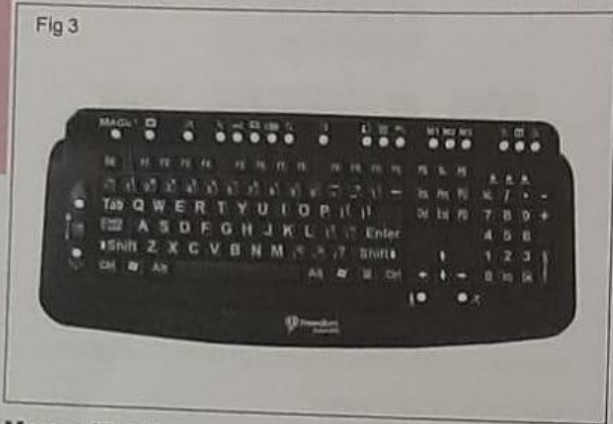


Fig 3

**Mouse (Fig 4)**

The mouse is a pointing device. You use it to move a graphical pointer on the screen.

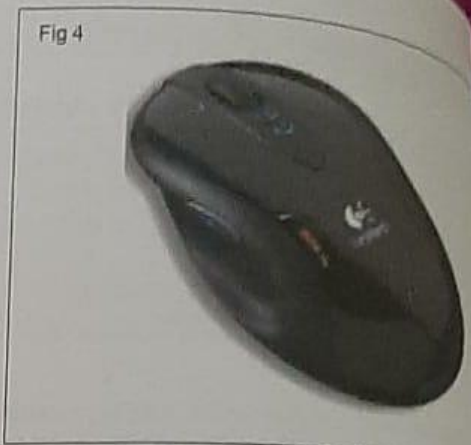


Fig 4

The mouse can be used to issue commands, or perform other types of input tasks.

**Using the mouse involves five techniques:**

- Pointing - Move the mouse to move the graphical pointer.
- Clicking - Press and release the left mouse button.
- Double-clicking - Press and release the left mouse button twice.
- Dragging - Hold down the left mouse button and move the pointer.
- Right-clicking - Press and release the right mouse button.

**Output Devices (Fig 5)**

- Printers, Scanners, and Fax Machines - Printers are output devices that create hard copies of computer files. Other all-in-one type printers are designed to provide multiple services such as printing, fax, and copy functions.

Fig 5



MONITOR

PROJECTOR

SPEAKER

PLOTTER

PRINTER

- Speakers and headphones are output devices for audio signals.

Most computers have audio support either integrated into the motherboard or on an adapter card. Audio support includes ports that allow input and output of audio signals.

- Visual display unit (Monitor, Screen etc.)
- Printer/Plotter
- Multimedia projector
- Speaker