■ Week 1: Basic Computer Concepts

■ Introduction to Computer and its parts

A computer is an electronic device that manipulates information or data. It has the ability to store, retrieve, and process data. Basic parts of a computer include:

- **Monitor**: Displays the output from the computer.
- **CPU (Central Processing Unit)**: Brain of the computer, processes instructions.
- **Keyboard**: Input device used to type data into the computer.
- **Mouse**: Pointing device used to interact with the screen.
- **Storage Devices**: Hard drives, SSDs store data permanently.
- **Motherboard**: Main circuit board that connects all components.
- **Power Supply Unit**: Provides power to the system.

■ Multimedia Tools – Input & Output Devices

Multimedia tools allow interaction with text, audio, images, animation, video, and more.

- **Input Devices**: Devices used to input data into a computer.
- Keyboard, Mouse, Scanner, Microphone, Webcam, Joystick.
- **Output Devices**: Devices that receive data from a computer.
- Monitor, Printer, Speakers, Projector.
- These tools help users communicate with computers in interactive and creative ways.

■ Accessories: Paint, Notepad, WordPad, Calculator, etc.

Windows Accessories are small programs or applications provided by the Windows OS for basic computing tasks.

- **Paint**: Simple graphics editor to draw and color images.
- **Notepad**: Basic text editor for writing plain text.
- **WordPad**: A richer text editor that allows formatting and inserting images.
- **Calculator**: Performs basic and scientific mathematical calculations.
- **Snipping Tool/Sketch**: Captures screenshots.

■ Operating System

An Operating System (OS) is system software that manages computer hardware, software resources, and provides services for computer programs.

Functions of an OS include:

- Process Management
- Memory Management
- File System Management
- Device Management
- User Interface (GUI or CLI)

Examples: Windows, macOS, Linux, Android.

■ Computer Precautions

Basic precautions help in the safe and effective use of computers:

- Avoid food and drinks near computers to prevent damage.
- Keep computer dust-free and well-ventilated.
- Regularly update antivirus software.
- Do not touch internal parts without proper knowledge.
- Shut down properly to avoid system corruption.
- Take breaks to prevent eye strain and fatigue.