PUNJAB POLICE • PSSSB • PUNJAB PCS • GOVERNMENT EXAMS

HOUSE OF ASPIRANTS

COMPUTER

CHAPTER 4

Input Devices

Prepared by someone who has already achieved what you are preparing for.

WEBSITE houseofaspirants.in

EDITION October 2026

LANGUAGE Punjabi & English

House of Aspirants

Punjab's bilingual exam-preparation platform

houseofaspirants.in

Welcome, Aspirant

Thank you for choosing **House of Aspirants**. These notes are written for every serious government-exam aspirant: **exam-oriented, easy to understand and free**.

> *"Prepared by someone who has already achieved what you are preparing for."*

HOW TO GET THE MOST FROM THESE NOTES

1 Read
Go through the chapter once and mark the points that are new to you.

2 Practise
Attempt this chapter's MCQ quiz on houseofaspirants.in.

3 Revise
Check previous year questions on the topic and revise your marked points.

Visit Our Website

- Bilingual notes: Punjabi & English
- Daily quiz & chapter-wise MCQs
- Monthly current affairs
- 10+ years of previous year papers
- Progress tracking

Scan to visit

www.houseofaspirants.in

Join Our Telegram Channel

- Latest notes, first
- Daily updates
- Exam notifications
- Weekly PDFs
- Live guidance sessions

Scan to join

t.me/HouseOfAspirant

Keep Learning. Keep Growing. Keep Achieving.

Team House of Aspirants

© 2026 House of Aspirants. These notes are for educational purposes only. Reproduction, redistribution or commercial use without permission is prohibited.

COMPUTER · CHAPTER 4

Input Devices

ਇੰਪੁੱਟ ਡਿਵਾਈਸਾਂ

IN THIS CHAPTER

- Basic Working
- Examples Of Input Devices
- Keyboard
- Mouse
- Scanner
- Joystick

An **Input Device** is a hardware device that allows a user to enter data, instructions, or control signals into a computer.

The computer receives the input through input devices, processes it using the **CPU (Central Processing Unit)**, and produces the desired output.

BASIC WORKING

User

↓

Input Device

↓

CPU (Processing)

↓

Output Device

EXAMPLES OF INPUT DEVICES

- Keyboard
- Mouse
- Scanner
- Joystick
- Light Pen
- Digitizer
- Microphone
- MICR
- OCR
- Touch Screen
- Webcam
- Biometric Devices

1. KEYBOARD

A **Keyboard** is the most commonly used input device used to enter text, numbers, symbols, and commands into a computer.

Connectivity

- USB Keyboard (Wired)
- Bluetooth Keyboard (Wireless)



Types of Keyboards

A. QWERTY Keyboard

The most commonly used keyboard layout in the world.

The first six letters of the top row are:Q W E R T Y

Features

- Standard keyboard layout
- Usually contains 104 keys
- Widely used in India

Important Keys

Toggle Keys:Used to switch a function ON or OFF.

Examples:

- Caps Lock
- Num Lock
- Scroll Lock

Modifier (Combination) Keys:Used along with another key.

Examples:

- Shift
- Ctrl
- Alt

Exam Point

Most commonly used keyboard = QWERTY

B. AZERTY Keyboard

Used mainly in:

- France
- Belgium
- Some European countries

The first six letters are:A Z E R T Y

Exam Point

AZERTY = French Keyboard

C. DVORAK Keyboard

Developed to improve typing speed.

Exam Point

DVORAK = Fast Typing Keyboard

2. MOUSE

A **Mouse** is a hand-held pointing device used to control the cursor on the screen.

Inventor

Douglas C. Engelbart in 1963

Main Parts

- Left Button
- Right Button
- Scroll Wheel



Touchpad

A laptop uses a **Touchpad** instead of a traditional mouse.

The cursor moves when a finger is moved across the touchpad.

Types of Mouse

A. Trackball Mouse

Contains a ball fixed inside the device.The user rotates the ball using fingers.



B. Mechanical Mouse

Uses:

- Ball
- Rollers



Drawback

Collects dust and requires regular cleaning.

C. Optical Mouse

Uses:

- LED
- Optical Sensor
- Digital Signal Processing



Features

- No ball mechanism
- More accurate
- Faster

Important Fact

Microsoft introduced optical mouse technology commercially in 1999.

D. Wireless Mouse

Uses:

- Bluetooth
- Wi-Fi
- Infrared (IR)

Advantage

No cable required.

Important Term

Hovering

Moving the mouse pointer over an object without clicking it.

3. SCANNER

A **Scanner** converts printed documents, photographs, or images into digital form.

Uses

- Document scanning
- Image scanning
- Digital archiving

Types of Scanners

A. Flatbed Scanner

Most commonly used scanner.

Features

- Document placed on glass surface
- Scanning head moves

Uses

- Books
- Documents
- Photos



B. Handheld Scanner

Held in hand and moved over the document.



Example

Barcode Scanner

C. Sheetfed Scanner

Features

- Paper moves through scanner
- Scanner remains stationary



Best For

Single-page documents

D. Drum Scanner

Uses:PMT (Photomultiplier Tube)

Features

- Extremely high resolution
- Professional image scanning



E. Photo Scanner

Specially designed for photographs.

Features

- High color depth
- High resolution



4. JOYSTICK

A **Joystick** is a pointing device consisting of a stick mounted on a movable base.

Inventor:C. B. Mirick

Uses

- Video games
- Flight simulators
- Military applications



Difference from Mouse

Mouse	Joystick
Cursor moves only when mouse moves	Cursor keeps moving in stick direction
Used for general work	Used mainly for games

5. LIGHT PEN

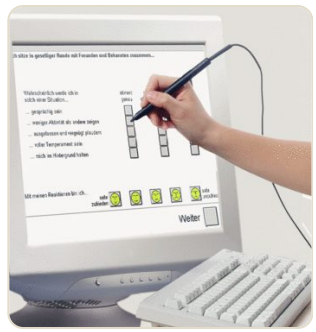
A **Light Pen** is a pen-shaped pointing device.

It contains a light-sensitive sensor that detects objects on the screen.

Invented:Around 1955 Developed Under Whirlwind Project (MIT)

Uses

- Drawing
- Selecting object



6. DIGITIZER (GRAPHICS TABLET)

A **Digitizer** is a flat input device used with a stylus.It converts hand-drawn images into digital form.

Uses

- Digital drawing
- Graphic design
- CAD (Computer Aided Design)
- AutoCAD
- Signature capture



7. MICROPHONE

A **Microphone** is an input device used to enter sound into a computer.

Functions

- Records voice
- Voice calls
- Video conferencing
- Online meetings

Examples

- Zoom Meetings
- Google Meet
- Online Classes



8. MICR(MAGNETIC INK CHARACTER RECOGNITION)

MICR reads characters printed with magnetic ink.

Mainly used in:

- Banks
- Cheque Processing

Exam Point

MICR is used on bank cheques.



9. OCR(OPTICAL CHARACTER RECOGNITION)

OCR converts printed or handwritten text into editable digital text.

Uses

- Digitizing books
- PDF conversion
- Document scanning



Example

Scanning a printed page and converting it into editable Word text.

OCR vs MICR

Feature	OCR	MICR
Full Form	Optical Character Recognition	Magnetic Ink Character Recognition
Technology	Optical	Magnetic
Used For	Documents	Cheques
Accuracy	High	Very High

10. TOUCH SCREEN

A Touch Screen acts as both:

- Input Device
- Output Device

Users interact by touching the display directly.



Uses

- Smartphones
- Tablets
- ATM Machines
- Kiosks

Inventors: Frank Beck and Bent Stumpe and Developed in Early 1970s

11. VIRTUAL REALITY (VR)

Virtual Reality (VR) creates a computer-generated environment that appears real to the user.

Devices Used

- VR Headset
- Gloves
- Headphones





Applications

- Gaming
- Training
- Medical Simulation
- Education

12. WEBCAM

Definition

A Webcam is a camera connected to a computer.

Uses

- Video calls
- Online classes
- Recording videos
- Capturing images



Examples

- Laptop Camera
- USB Webcam

13. BIOMETRIC DEVICES

Biometric Devices identify a person using unique biological characteristics.

Examples

- Fingerprints
- Face
- Retina
- Iris
- Voice
- Palm Veins

Types of Biometric Devices

A. Face Scanner

Identifies a person using facial measurements.

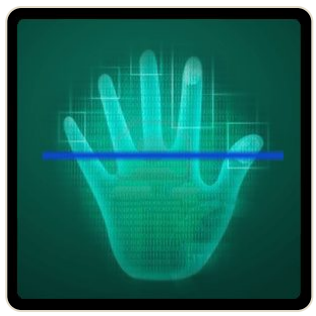
Examples:

- Face Unlock in Smartphones



B. Hand Scanner

Uses palm vein patterns.



Feature

Palm veins are even more unique than fingerprints.

C. Fingerprint Scanner

Most commonly used biometric device.

Uses

- Attendance Systems
- Mobile Phone Unlocking
- Security Systems



Exam Point

No two persons have identical fingerprints.

D. Retina/Iris Scanner

Uses the eye for identification.

E. Voice Scanner

Uses voice characteristics for identification.

COMPARISON TABLE OF IMPORTANT INPUT DEVICES

Device	Input Type
Keyboard	Text
Mouse	Pointing
Scanner	Image
Microphone	Sound
Webcam	Video
MICR	Magnetic Characters
OCR	Printed Text
Touch Screen	Touch
Fingerprint Scanner	Biometric

MEMORY TRICKS

Keyboard Types:

QAD

Q → QWERTY

A → AZERTY

D → DVORAK

Scanner Types

FHSDP

F → Flatbed

H → Handheld

S → Sheetfed

D → Drum

P → Photo

MOST IMPORTANT FACTS FOR EXAMS

- ✔ Douglas Engelbart invented the Mouse.
- ✔ QWERTY is the most common keyboard.
- ✔ AZERTY is the French keyboard.
- ✔ DVORAK improves typing speed.
- ✔ Barcode Scanner is a handheld scanner.
- ✔ MICR is used in banks.
- ✔ OCR converts printed text into editable text.
- ✔ Touch Screen is both input and output device.
- ✔ Light Pen is not used with LCD screens.
- ✔ Digitizer is used in CAD and AutoCAD.
- ✔ Retina Scanner provides high security.
- ✔ Fingerprint Scanner is the most common biometric device.

ONE-LINE REVISION POINTS

- Keyboard enters text.
- Mouse controls cursor.
- Scanner digitizes documents.
- Joystick is used in gaming.
- Light Pen is pen-shaped input device.
- Digitizer converts drawings into digital form.
- Microphone inputs sound.
- MICR reads magnetic ink.
- OCR converts images into text.
- Touch Screen is both input and output device.
- Webcam captures images and video.
- Biometrics identify individuals using body features.

QUICK REVISION

Keyboard → Text Input

Mouse → Pointing Device ,Inventor: Douglas Engelbart

Scanner → Image Input

Joystick → Gaming

Light Pen → Screen Selection

Digitizer → Graphics & CAD

Microphone → Sound Input

MICR → Bank Cheques

OCR → Text Recognition

Touch Screen → Input + Output

Webcam → Video Input

Biometrics →

Face

Fingerprint

Palm

Retina

Iris

Voice