



Figure 1.5 Dot matrix printers are impact printers – these are used to produce output on pre-printed forms, which may be single sheets or continuous forms



Figure 1.8 Laser printers are ideally suited for printing legal and technical documents



Figure 1.9 Inkjet printers are suitable for printing newsletters and presentations on transparencies

IT06

Which type of printer is best suited for printing EACH of the following:

- (a) legal documents;
- (b) cards and invitations;
- (c) multi-part forms?

Justify your response.

Most computer systems are equipped with a monitor, printer and a pair of speakers.

Impact printers (line or dot matrix) are somewhat noisy as they use a hammer to strike an inked ribbon on the output media (usually paper) to produce the output. Non-impact printers (laser or inkjet) are quieter and generally faster. These types of printers are necessary when producing documents such as invoices and accounting reports on multi-part forms.

Like printers, a range of monitors is available. Users may select a particular type or size based on the tasks to be carried out, the amount of space available on a desk or even based on office decor. Flat panel monitors are now very popular and these have widely replaced CRT monitors that were once commonplace in most businesses. Whilst sizes range from 14 inches to 30 inches, 17–19 inch monitors are popular in Caribbean offices.

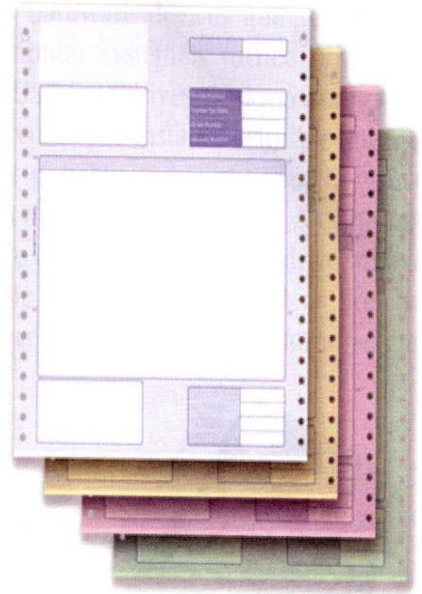


Figure 1.6 Pre-printed continuous forms are used for tasks such as printing invoices



Figure 1.7 Cut-sheet paper is used in all types of printer

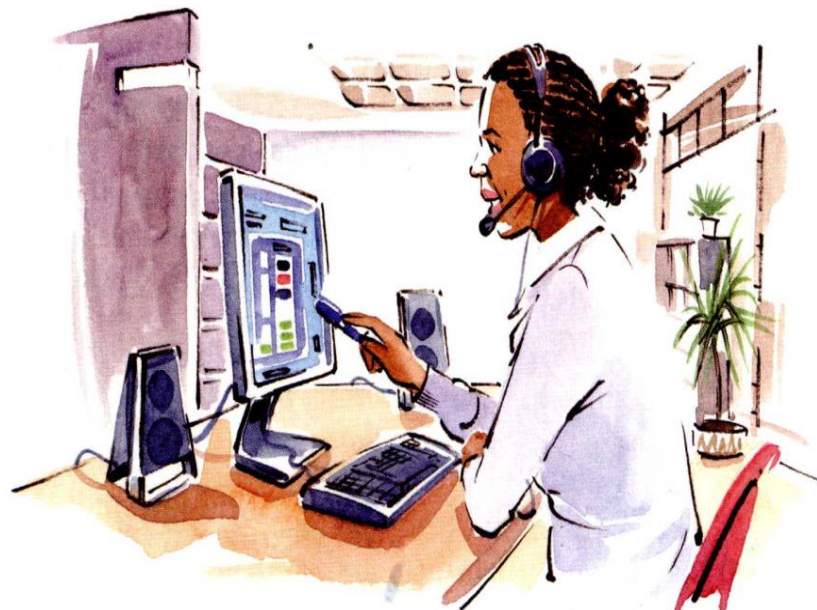


Figure 1.10 Speakers are available in a wide range of styles. They allow office personnel to use the text-to-speech features now provided by many application programs and operating systems. These output devices also allow sight-impaired personnel to operate computer systems.

Device	Function
Printer	To produce printed copies of documents on a range of stationery.
Monitor	To display the operating system's desktop, the work area of application programs and the document being processed by the user.
Multimedia projector	To display an enlarged image produced by a computer system – this is useful for presentations involving multiple participants, especially in a large room.
Speakers	To allow playback of audio from applications and to provide audible alerts produced by the operating system and application software, which gives useful feedback to users.
Touchscreen	To allow input and output direct from the screen.

Table 1.2 Functions of various output devices

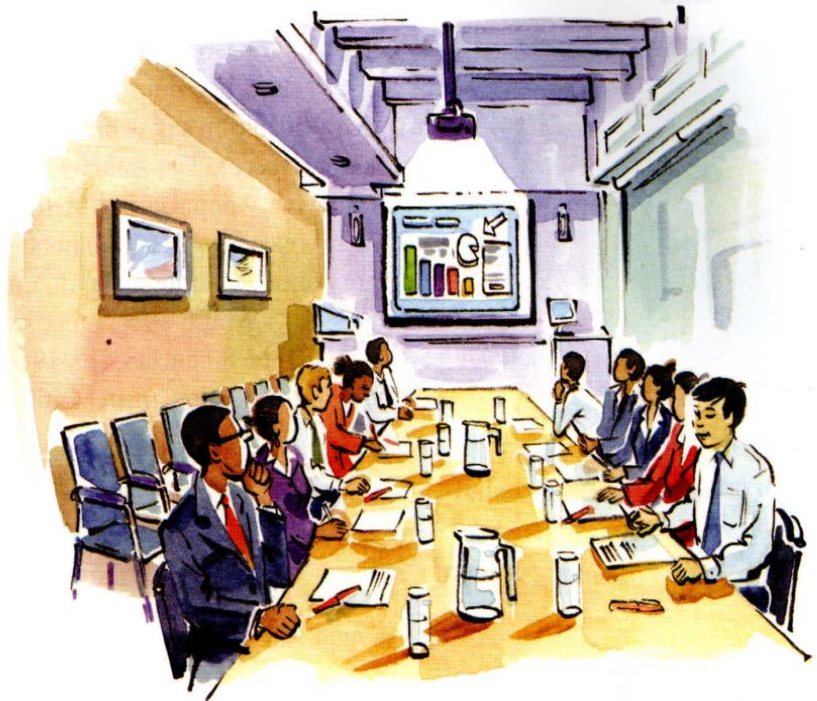


Figure 1.11 A multimedia projection system in use

Storage devices

storage device ▶

A storage device is a hardware component that keeps data, information and program instructions permanently. There are many types of storage devices and they are available in a range of capacities. Some storage devices are portable while others are not.

ITQ7

Suggest TWO reasons why floppy disks and diskettes are not popular nowadays.

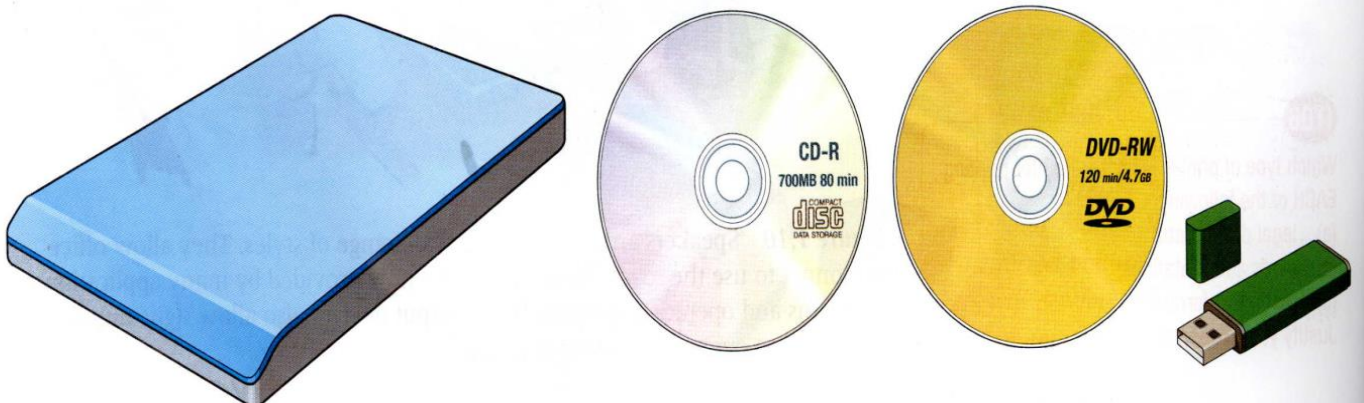


Figure 1.12 The external hard drive, CD-ROM, DVD and flash drive are four of the most common storage units in use today. USB flash drives have replaced floppy disks as the medium of choice for transferring files.

secondary storage ▶

internal hard drive ▶

external hard drive ▶

USB and firewire ports ▶

Secondary storage consists of all the hardware devices and media that keep data and information when a computer system is turned off. These include hard drives, CD-ROMs, DVDs and USB flash drives. Desktop computers, servers and notebook computers usually come pre-installed with an internal hard drive. An internal hard drive is not portable and is not usually visible unless the system unit is open (see section on System unit below). A computer system may have more than one hard drive installed. If additional drive storage is needed, an external hard drive may be connected via a USB or firewire port. The USB and firewire ports provide connection technology for attaching peripheral devices to a computer, providing fast data exchange. Many businesses make a backup copy of their data to an external hard drive. This drive is then disconnected and stored in a fireproof location for safekeeping. Computer systems are also equipped for optical storage.

Optical storage technology uses laser beams to read and write data. Compact discs (CD) and digital video discs (DVD) are two common types of optical media. Many of the computer systems being manufactured today are equipped with a DVD multi-recorder. These hardware devices allow a wide range of optical media to be used for storage.



Figure 1.13 Miniaturisation is evident in memory card creation; over time, the physical card sizes have become smaller

ITQ8

Explain why writing data on a recordable CD is sometimes referred to as 'burning a CD'.



Figure 1.14 USB flash drives have largely replaced diskettes as the storage media of choice for portable file storage; these thumb-sized devices have the capacity to store much more than a DVD and are stylish and portable

Storage device	Description and function
CD-ROM	Compact Disk Read-Only Memory stores data that can be read by a computer. It is not writable and is used to distribute computer software.
CD-R	Compact Disk Recordable is a variation of the CD-ROM that can be written to (once) using a CD writer (also called a 'burner').
CD-RW	A variant of the CD-R that allows data to be rewritten.
DVD	Similar dimensions to a compact disc (CD) but stores more than six times as much data. Its main uses are for video and data storage. Because of their large capacity, DVDs are also used to back up data stored on hard drives.
Flash drive	A 'thumb-sized' device with a USB connector. Popular sizes used by students and office workers include 4GB, 8GB and 16GB.
Memory card	Used in devices such as cameras and smartphones. They are available in a wide range of types (CompactFlash, SD, MicroSD, etc.), sizes and capacities.

Table 1.3 Functions of various storage devices