Electronic Document Preparation and Management for CSEC®

2nd Edition

Ann Margaret Jacob • Agatha Augustine

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Acknowledgements

Dedication

This book is dedicated to Lil and all my students who
convinced me that I should write it, C. Bose Chattergoon and
Keith Khan who opened the way so that I could produce it,
and Okello Haynes who did all he could to make sure that I
would finish it.

Hermie Margaret, this one is for you.

Adupe Olodumare

Contents

Keyboard Layout

Illustrations and exercises in this book relate to the American keyboard layout. This places the @ on the 2 key and the " on the ' key. Teachers are advised to check the layout of the keyboards to be used by their students.

Electronic Document Preparation and Management for CSEC: additional exercises

This book is accompanied by a CD containing additional keyboarding and typewriting practice. Exercises are in three sections, each relating to the three *Keyboard mastery* sections.

1 *The computer*

By the end of this unit you should be able to:
- Define the computer
- Identify types of computers
- Discuss the advantages and disadvantages of computer usage

Unit at a glance

- A **computer** is defined as an electronic machine or device that accepts and processes data to produce information.

- A **computer system** consists of hardware, software, procedures, data and people.

- Computers are classified according to size and the number of users they can support. Classes of computers include:

  - Mainframes.
  - Minicomputers.
  - Microcomputers, including laptops, desktops, palmtops and other devices.

- Advantages of computer usage include speed, accuracy, storage and reliability.

Can you imagine a world without computers? Many persons now consider them an essential part of their lives. Computers have transformed the way businesses operate and they are used, for example, in document preparation and data storage as well as in the preparation of business plans, financial calculations and communications among employees. Computers are in many homes and several household devices, e.g. microwave ovens, DVD players and washing machines, are now computer controlled.

The main reasons for the ever wider use of computers are their speed, accuracy, reliability and versatility. A computer can carry out calculations in a fraction of the time it takes the average person; it never gets tired or bored and can be programmed to perform a wide variety of tasks. A computer is accurate. It will do exactly the task it was instructed to do as many times as it was instructed. However, the use of computers has created new challenges: some persons may lose their jobs or need to learn new skills when computers are introduced in the workplace. Some businesses cannot operate if the computer system breaks down or there is a power outage.

Definition of the computer

A computer may be defined as an electronic device that accepts data as input, processes the data into information, stores and allows the retrieval of the processed data, and outputs those results in a form that is usable by humans or other computers.

The computer performs four basic operations:

- It accepts data (input).
- It manipulates the data (processing).
- It produces information or results (output).
- It stores the data and results (storage).

These operations are executed under the direction of stored programs. A program is a sequential set of instructions that enable the computer to perform a specific task.

A typical computer

The names and purposes of the devices that make up a typical computer are as follows.

The computer case

The **computer case** is also called the **systems unit**. It contains the most important part of the system, the **central processing unit** (also called the CPU) or 'brain' of the computer. You cannot see the CPU unless you open the systems unit. The systems unit also contains other parts, many of which can be seen only when the case is opened. The floppy disk drive and compact disk (CD) drive may be seen from the outside. Some cases lie flat on the desk, usually under the monitor. Others, called tower cases, stand upright, either on the desk or on the floor.

The monitor

The **monitor** is a device that displays text and images generated by the computer. It is sometimes called a visual display unit or VDU. The screen is the display area of the monitor. At the front of the monitor, below the screen, you will most likely find buttons to control the size, brightness and contrast of the on-screen display.

The keyboard

You use the **keyboard** to enter information and instructions into a computer by pressing various labelled keys. Most keyboards have 101 keys. **Multimedia** keyboards have additional keys that control sound, visual display, Internet connections, and so on. Keyboards were designed to be similar to typewriters and have a similar layout.

The mouse

The **mouse** is a handheld device that allows you to make selections and move items on the computer's screen by clicking on different parts. You will probably guess that it got its name because it resembles that small animal.
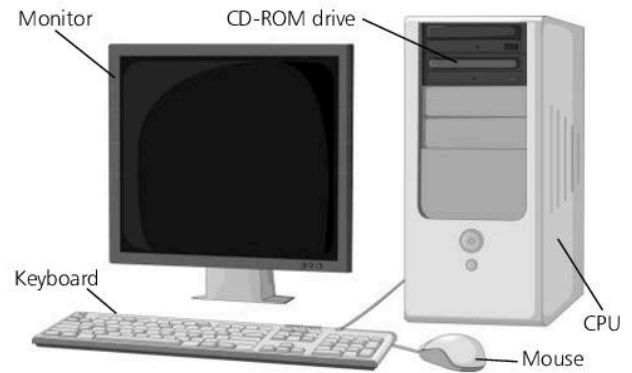
Figure 1.1 *Parts of a typical microcomputer*

DID YOU KNOW?

The first computers invented did not have any mouse, monitor or keyboard. Input and output were done using cards with holes punched in them.

My glossary

From here on you will be required to create a glossary of the terms used in the textbook. Copy the terms and write definitions for each in your notebook.

Central processing unit	Multimedia keyboard
Computer	Program
Keyboard	Screen
Monitor	Systems unit
Mouse	Visual display unit

To do

Discuss three benefits and three challenges with using computers in business situations.

Types of computers

Computer systems may be classified according to size. The four basic classes are microcomputers, minicomputers, mainframe computers and supercomputers.

As workstations increase in capacity and mainframes decrease in size, the differences between the classes of computers have become less significant.

Microcomputers

Microcomputers, also called **personal computers (PCs)** are designed to be used by one person. There are many different sizes of personal computers. New smaller units are often more powerful than larger ones.
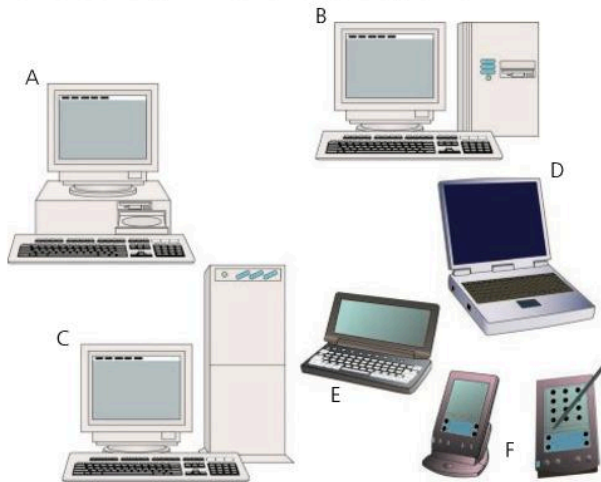
Figure 1.2 *Microcomputers: A desktop, B mini-tower, C tower, D laptop/notebook, E palmtop and F personal digital assistants (PDAs)*

- A **palmtop** was an early hand-sized computer. They have mostly been superseded by tablet computers, which are more powerful and offer many more features.
- A **personal digital assistant (PDA)** is a small handheld device about the size of a pocket calculator. A PDA is used for managing schedules and storing contact information. Mobile smartphones now offer the features of a PDA plus many more, including email, Internet, audio recording, photographs and video.
- A **laptop** or **notebook** combines the screen, keyboard, pointing device, processor, memory and hard drive in a lightweight battery-powered case often no larger than an average textbook. Persons who need to take work home, or who travel in their work or have limited workspace often choose to use laptops.
- A **desktop** is a personal computer (PC) that is designed to be set up in a permanent location. This type of computer is most commonly found in homes, schools and offices.

- A **workstation** is a desktop computer, but with a more powerful processor, extra memory and greater capabilities. Workstations are used by millions of office workers all over the world. They are used for software development and engineering design, and are popular with users such as scientists, engineers and movie animators, who require most of the features of a PC but need the power of a larger computer.
- A PC may also be used as a **server**. A server is a computer that is designed to control a computer network. They are therefore constructed with powerful processors, extensive memory and large storage capacity.

Minicomputers

Minicomputers, sometimes called **mid-range computers**, are more powerful than microcomputers and can support a number of users performing different tasks. They were originally developed to perform specific tasks such as engineering calculations.

Figure 1.3 *Minicomputer*

Mainframe computers

Mainframe computers are large systems that can handle numerous users, store large amounts of data and process transactions at a very high rate. They are used in large organisations where many people must access the same data, often simultaneously. Each user accesses the mainframe through a **terminal** that consists of a monitor and at least one input device. Mainframes usually

Figure 1.4 *Mainframe computer*

require a specialised environment including separate air conditioning and electrical power.

Supercomputers

Supercomputers are the largest, most powerful category of computers and consequently the most expensive. These systems are able to process hundreds of millions of instructions per second. They are used for jobs requiring long, complex calculations, for example navigation satellites, weather forecasting and genetic engineering.

Figure 1.5 *Supercomputer*

To do

1 Identify the main properties of each class of computer.
2 State at least one situation in which each type of personal computer is used.

My glossary

Write definitions of the following terms.

Mainframe	Personal digital assistant
Microcomputer	Server
Mid-range computer	Terminal
Personal computer	Workstation

Figure 1.6 *Components of a computer system*

Components of a computer system

A computer system is a combination of hardware, software, procedures, data and people that create a functional unit (Figure 1.6).

Hardware

The term **hardware** refers to all the tangible parts of the computer, that is, all the parts that you can see or touch. These include the computer case, monitor, mouse, keyboard and disk drives.

Software

The computer must have organised sets of instructions or **programs** to make it work. Programs are also called **software**. You cannot see or touch software. You can only see and touch the packaging in which it comes.

People

People are the users of the computer. Although some computers operate without a human manipulating them, people are still the users of the output of the computer. Additionally, it is people who design, build, program and maintain the computer system.

Data

Data consists of raw facts such as numbers, letters, special characters or symbols. These convey little meaning individually. However,

when they are combined and processed they appear in context and convey meaning to people.

Data is organised into **files** within the computer. Each file is a set of data that has been given a name. This course is designed to teach you how to create **documents**. A document file is created, modified and used by people. A document usually contains **text** or words and figures, but may also include graphs, pictures, sounds or video.

Computers manipulate and store data in the form of coded electrical impulses called **bits**. A bit is an on or off signal which passes through the computer's circuitry, with the number 1 representing on and the number 0 representing off. Every piece of software or data can be broken down into a series of on or off signals (also called its binary code).

A **byte** is the group of zeros and ones that represent one **character** such as a letter, number or symbol. A byte is made up of 8 **bits**.

- Approximately a thousand bytes is a kilobyte (KB).
- Approximately a million bytes is a megabyte (MB).
- Approximately a billion bytes is a gigabyte (GB).

Procedures

Procedures are the instructions that tell a user how to operate and use the information system.

When you bring together hardware, software, data, procedures and users, you get a complete computer system.

To do

1 Write down a definition of a computer.
2 Identify the five components of a computer system.
3 Differentiate between hardware and software.

My glossary

Write definitions of the following terms.

Bit	File
Byte	Hardware
Character	Software
Data	Text
Document	

Classifying devices

Hardware devices may be classified as being input, output, processing or storage. A few devices can perform more than one function.

Input devices

Some of the devices allow you to send messages into the computer system. These are called input devices. Input devices include the keyboard and the mouse.

Output devices

Some devices allow messages to be sent out of the system, either directly to the user or to another computer. These are the **output devices**. Output devices include the monitor, printer and speakers.

Storage devices

Some devices are used to store information even after the computer is turned off. These **storage devices** include a hard-disk drive (also called hard drive), floppy-disk drive and recordable CD drive. The storage devices are usually located within the systems unit or computer case. However, some storage devices may be located outside the systems unit.

Processing devices

The 'brain' of the computer is called the **central processing unit** or processor or CPU. It processes or works on the information in the computer. The CPU consists of three interrelated parts:

- The **arithmetic logic unit** that performs all of the calculations necessary for the computer to operate.
- The **control unit** which directs the flow of data through the CPU and to and from the other devices.
- The **memory unit** that holds all of the data and instructions that the computer uses to operate.

The memory unit consists of two types of memory:

- **Read-only memory (ROM)** that is permanent and is not normally changed by the user.
- **Random access memory (RAM)** that can be changed instantly. RAM is erased whenever the computer is switched off.

Peripheral devices

Input, output and storage devices are also called **peripheral devices**. Peripheral devices are all connected to the computer's central processing unit.

To do

1 Explain the term 'peripheral devices'.
2 Explain the way in which data is represented in the computer.

My glossary

Write definitions of the following terms.

Input	Storage
Output	RAM
Peripheral device	ROM
Processing	

Examination-type questions

1 a Define a computer. (1 mark)
  b State the five components of a computer system. (5 marks)
  c List four advantages of using a computer. (4 marks)
  d Define each of the following:
    (i) Microcomputer (2 marks)
    (ii) Minicomputer (2 marks)
    (iii) Mainframe (2 marks)
  e Explain the difference between input and output. (2 marks)
  f Explain how data is represented in the computer. (2 marks)

2 Khelly is starting up a hairdressing salon and wants to invest in the best possible computer for her business. She is not sure what she should buy, so she has come to you for help. She shows you the picture shown in Figure 1.7.
  a (i) Name the parts of the computer labelled A to D in Figure 1.7. (4 marks)

Figure 1.7

    (ii) What are three devices that are contained within the systems unit? (3 marks)
  b (i) What do the letters CPU mean? (1 mark)
    (ii) What are the components of the CPU? (3 marks)
    (iii) What is the role of the CPU? (3 marks)
  c Khelly does not know about the different types of personal computers she can purchase. Describe three PCs she can obtain instead of a desktop. (6 marks)

2 Input devices

By the end of this unit you should be able to:
- Explain the use of the various input devices

Unit at a glance

- Input devices are used to enter information such as letters, numbers, sounds or pictures into a computer. There are many input devices, including:

  - Keyboard.
  - Mouse.
  - Light pen.
  - Microphone.
  - Document scanner.
  - Character reader.
  - Bar-code reader.

Figure 2.1 *Pointing devices: A joystick; B trackerball; C trackpoint; D touchpad; E mouse*

In Unit 1 you were introduced to some input devices, including the keyboard and the mouse. Do you remember the definition of an input device? What are some of the input devices about which you have learned? In addition to the input devices we have already discussed, several devices have been developed to make input easier, faster and more accurate, particularly in the business environment. We will now examine a few of these.

Pointing devices

As you learned in Unit 1, the mouse is a handheld device that is used to select items on the computer screen. There are several variations to the mouse, including the trackpoint, touchpad, trackerball and joystick. These are collectively referred to as *pointing devices* (Figure 2.1).

A **trackpoint** is more commonly found on a portable computer. It is a device about the size of a pencil eraser that is fixed between the keys on the keyboard. The cursor is controlled by moving the trackpoint with a fingertip. The buttons are found adjacent to the keyboard, close to the trackpoint.

The **touchpad** is a flat device that can sense where on its surface it is touched. You control the screen pointer by gliding your fingers along the surface of the touchpad.

The **trackerball** or **trackball** is an inverted mouse, with the ball facing upwards. The ball is rotated by the fingers or palm of the hand to control the movement of the screen pointer.

The **joystick** is a device that allows the user to control the screen pointer by manipulating an upright rod. The joystick is used to control video games. It is also used in simulation systems, such as flight training programs that create a virtual aircraft on the computer.

Keyboards

You read about the keyboard in Unit 1. There are many different variations of the keyboard. **Multimedia** keyboards have additional keys that control sound, visual display, Internet connections, and so on. **Internet** keyboards have special keys that open and use features of the browser program used to access the Internet.

You may have noticed a flat screen on the cash register in fast-food outlets. This is a **Concept keyboard** (Figure 2.2). It consists of a grid of buttons that have been programmed with a set of instructions and is then covered with an overlay sheet. The concept overlays in fast-food outlets carry a picture or description of the available meals and make ordering easier and quicker. This sort of keyboard is also used for small children, or for persons who may have physical difficulty using a conventional keyboard.
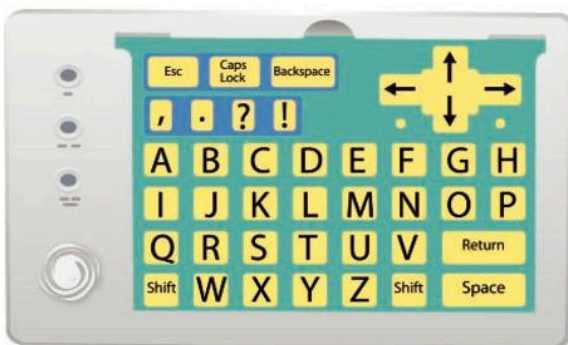
Figure 2.2   A concept keyboard

Light pen

A **light pen** is an input device that is used to select objects on a display screen (Figure 2.3).

The user points it at the screen to move the pointer and choose objects. A light-sensitive device detects the pixel or picture element on the screen at which the pen is pointing. The user is then able to select the object in a similar way to using a mouse. Some video games use a 'gun' that is really a simple light pen that is capable of operating from a greater distance.

Figure 2.3   Light pen

The light pen is very useful for designers and artists because they can create freehand drawings directly on the monitor screen.

Digital cameras

Figure 2.4   Digital camera

Digital cameras have mostly replaced cameras that use film (Figure 2.4). A **digital camera** operates independently of the computer. It allows you to take pictures and to store digital photographic images. Some digital cameras can also capture

sound and video. The images and sounds are stored on a memory chip or disk that can be transferred to your computer. Digital cameras are often used when producing advertising and sales material. Digital cameras are used extensively in the production of websites for e-commerce (the use of the Internet to conduct business).

Figure 2.5 *PC camera, or webcam*

A PC camera or webcam is a digital camera connected to the computer (Figure 2.5). The computer is its power source. Video, with sounds and still images captured by a PC camera, are sent directly to the computer where they can be edited and stored. Webcams are used to see and speak with persons via the Internet. Some business people use PC cameras for videoconferencing, conducting meetings with persons who are a long way away.

Graphics tablet

A **graphics tablet** or **digitising pad** allows the user to draw on a flat pad (also called the tablet) using a **stylus** or special pen (Figure 2.6). Some models display the drawings on the tablet itself while others send the drawings to the computer screen. This device is popular with artists, architects and designers.

Figure 2.6 *Graphics tablet*

Scanner

A **scanner** is a device that converts existing images or documents to a digital image on the computer. A scanner bounces a beam of light off the document and records the reflected light as a series of binary digits or a bitmap. You can then take that image and use it in a paint program, send it out as a fax or print it. With optical character

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DID YOU KNOW?

How a digital camera works

A digital camera uses no film. Instead it uses a sensor that converts light into electrical charges. The image sensor is a silicon chip with a grid containing hundreds of thousands or millions of photosensitive diodes called **photosites**. Each photosite captures a single picture element or pixel of the image.

When you press the shutter release button of a digital camera, the shutter opens briefly. Each pixel on the image sensor records the brightness of the light that falls on it by accumulating an electrical charge. The more light that hits a pixel, the higher the charge it records. When the shutter closes to end the exposure, the charge from each pixel is measured and converted into a digital number that is stored on a memory card or a disk. The series of numbers can then be used to reconstruct the image by setting the colour and brightness of matching pixels on the screen or printed page.

recognition (OCR) software you can convert printed documents such as letters or newspaper articles to text that can be used in your word processor.

Figure 2.7 *Scanner*

Optical mark reader
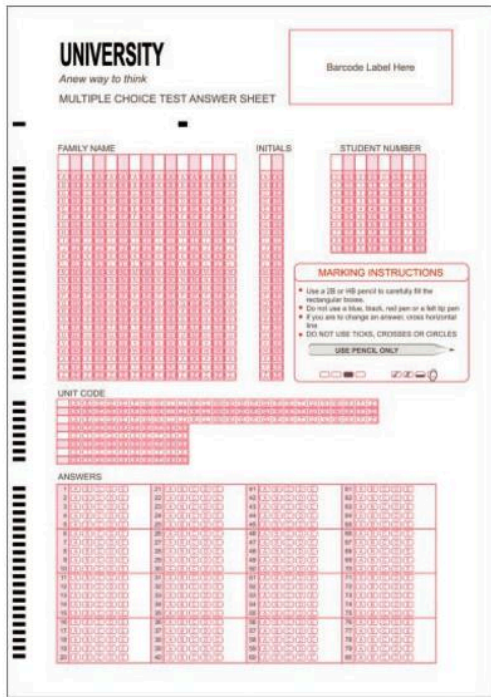
Figure 2.8 *An OMR form*

An **optical mark reader (OMR)** reads into the computer marks made by pencil on a printed form. OMR systems read pre-printed forms such as applications, questionnaires and multiple-choice examination papers (Figure 2.8). Data can be input quickly and easily without the need for manual typing,

but marks must be placed precisely where indicated and must be dark enough to be read by the scanner.

Bar-code reader

A **bar-code** is a series of printed vertical lines of differing widths that represent numbers. The bars are read by an optical scanner and software is used to identify the product for sales pricing and controlling stock (Figure 2.9). These codes are printed on nearly every package that is sold. Shops use bar-codes because they are cheap to produce, very durable and make it easier to know when to order stock. They make the payment process faster and reduce the risk of errors, so customer satisfaction is increased. Bar-codes are used to identify books in some libraries that have an electronic lending system.

First the bars must be linked to the data you want to capture

The bar-code can then be printed out, using either an inkjet printer (as here) or using a laser printer
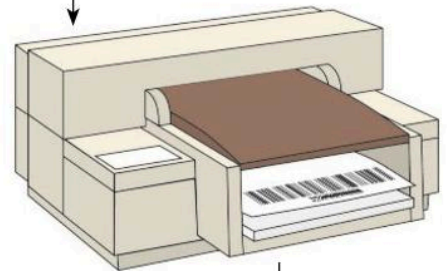
The bar-code may then be read with a scanner

Figure 2.9 *How bar-codes work*

Magnetic ink character reader

Magnetic ink character recognition (MICR) is the reading of characters that are printed with magnetic ink (Figure 2.10). The device for recognising the characters is called a magnetic ink reader. This system is used for numbering cheques and identifying the account on which the cheque will be drawn. MICR is used because the characters are very difficult to forge or damage. Also, the data can be read electronically, making input faster and more accurate.
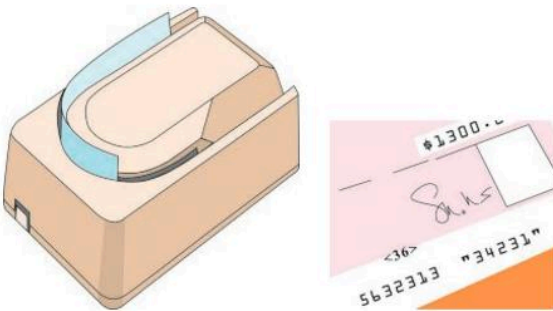
Figure 2.10 *Magnetic ink character reader and cheque*

Magnetic strip

A **magnetic strip** is a short piece of magnetic tape that is attached to a plastic card, such as a credit card (Figure 2.11). Other cards that use this technology are debit or cash-point cards, telephone calling cards, club membership cards and personal identity cards. The strip contains the personal details of the card owner as well as account information. The card is read when it is inserted or swiped in a special reader. Magnetic strips are convenient and easy to use. However, the data can be lost or corrupted if the cards are bent or exposed to magnetic fields.

Figure 2.11 *Magnetic strip*

Touch screen

A **touch screen** or **active picture technology** uses a special type of visual display unit that has a grid of light beams or fine wires across the screen on which options are displayed. The computer senses where the screen is touched, recognising which words or icons have been selected. Touch-screen displays are generally utilised on computers that the public use, e.g. on automated banking machines and check-in machines in airports (Figure 2.12).

Figure 2.12 *Touch-screen check in*

Direct voice input

Direct voice input or **voice recognition** is the control of a computer by voice. The speaker uses a microphone and related software that converts sound waves to a digital code. There

is a wide variation in human speech patterns so direct voice input is usually confined to a limited number of commands. However, the technology is constantly being improved, so that newer systems are more versatile. Uses include security systems, for example to control entry to a building, and in mobile phones. Voice recognition means that the user can make calls while driving (although safety organisations still advise against this). Voice recognition can also be used with a word-processing program to enter text.

To do

Identify the use and benefits of each input device.

My glossary

Write definitions of the following terms.

Active picture technology
Bar-code
Concept keyboard
Digital camera
Digitising pad
Direct voice input
E-commerce
Graphics tablet
Joystick
Keyboard
Magnetic ink character recognition

Magnetic strip
Multimedia keyboard
Optical character recognition
Optical mark reader
PC camera
Scanner
Stylus
Touch screen
Touchpad
Trackball
Trackpoint
Voice recognition

Figure 2.13 *Voice recognition*

Examination-type questions

1 a Define the term 'input'. *(1 mark)*
b Name the most suitable input device to be used in each of the following situations:
  (i) For sending a copy of an existing photograph via the Internet to a friend living abroad.
  (ii) When correcting a multiple-choice examination answer sheet.
  (iii) When conducting a meeting via the Internet.
  (iv) To speed up the bill preparation process at a grocery store. *(8 marks)*

c Explain the difference between optical character recognition and magnetic ink character recognition. *(2 marks)*
d Describe three pointing devices other than the mouse. *(3 marks)*
e (i) What is active picture technology? *(2 marks)*
  (ii) Describe two situations in which this technology is used. *(4 marks)*

3. Output devices

By the end of this unit you should be able to:
- Explain the use of the various output devices

Unit at a glance

- Output devices are the parts that allow you to obtain information from the computer in the form of text, images or sounds. Output devices include:

  - Monitors.
  - Printers.
  - Speakers.
  - Multimedia projectors.

In Unit 1 you learned that the monitor is an output device. Output devices are instruments that produce data from the computer in a form that can be used by a human or another computer.

After the monitor, the **printer** is the most commonly used output device. The printer is a device that takes the information on your screen and transfers it to paper or a **hard copy**. There are two basic classes of printer – impact and non-impact.

Impact printers

Impact printers use a printhead containing a number of metal pins which strike an inked ribbon placed between the printhead and the paper.

The general features of impact printers are:
- They create the characters by striking the paper.
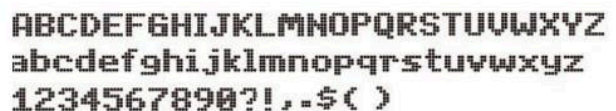
- They print on most types of paper.
- Multiple (carbon) copies may be printed at once.

The disadvantages of impact printers are:
- Some users find them noisy.
- Their speed is relatively slow.
- They do not print **transparencies** (documents printed on clear plastic film).

There are several types of impact printers including daisy-wheel and line printers. However, most of these are no longer used. **Dot-matrix printers** are impact printers that 'draw' a character from a series of dots. They are cheap and durable, but very noisy. Print speed, at 30–550 characters per second, is very fast, but the quality is low compared to other types of printer (Figure 3.1).

```
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890?!,.$( )
```

Figure 3.1 *A dot matrix printout*

Dot-matrix printers are suitable when the quality of the finished document is not very important. They are still used for the preparation of bills and invoices in places such as hospitals and stores where carbon copies are needed. Some years ago these printers were the most popular, but people now choose laser and inkjet printers, which are capable of higher printing speeds, superior quality and good colour at affordable prices.

Non-impact printers

Non-impact printers are much quieter than impact printers as their printing heads do not strike the paper. The general features of non-impact printers are:

- Higher character-per-second print speed.
- As the name suggests, no contact between the print head and the paper.
- Can print transparencies.
- Can print on most types of paper in black-and-white and colour.

The main types of non-impact printer are laser printers, inkjet printers and thermal printers (Figure 3.2).

Figure 3.2   *A laser, B inkjet and C thermal printers*

- **Laser printers** are relatively expensive, but the price of them is coming down. These printers use a laser beam and dry powdered ink to produce the print on the paper. A laser printer can produce about 400 pages of letter-sized paper per minute with high print quality, including full-colour photo-quality prints.

- **Inkjet printers** are cheaper than laser printers, but they are slower and produce lower-quality prints. Inkjet printers are actually a non-impact variation of dot-matrix printers. A matrix of fine jets is used to squirt ink at the paper. Inkjet printers operate quietly at fairly high speeds, and the print is of an appropriate quality for most home and business purposes.

- **Thermal printers** use special heat-sensitive paper. Characters are formed by heated needles being placed in contact with the thermal paper, forming darkened dots. A thermal printer is quiet and relatively fast. However, there are several disadvantages including the high cost of paper, no choice of print colours and low durability of the prints. Some calculators that print on rolls of paper and some cash registers use thermal printing. Thermal printers are also used in automated teller machines, credit-card machines and prepaid phone card dispensers.

  Another form of thermal printing is **dye sublimation**. These printers use heat to transfer the ink from coloured ribbons into a gas that cools into a glass-like substance on the paper. Dye sublimation printers produce the highest-quality graphics, with bright images of photographic standard. These are among the most expensive printers on the market and are used by businesses such as advertising agencies and photo studios.

- **Plotters** are used to produce high-quality, accurate, large-sized drawings. They are normally used for computer-aided design (CAD) and computer-aided manufacture (CAM) applications such as printing plans for houses or automobile designs.

Multimedia projector

A **multimedia projector** takes the image from a computer screen and projects it onto a larger screen or wall so that it can be seen by a large audience. Multimedia projectors are

usually equipped with a remote-controller device that gives the computer instructions, such as moving from one display page to another.
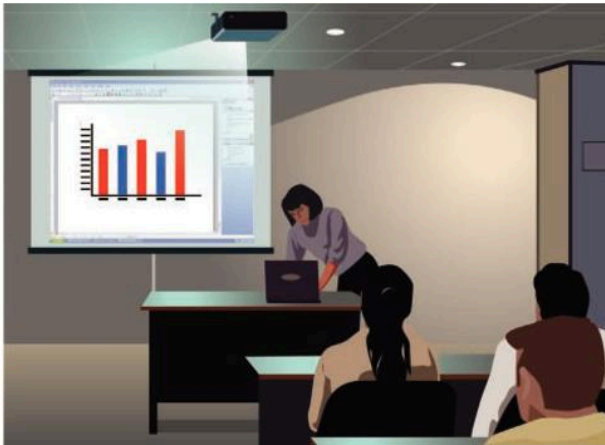
Figure 3.3 *Multimedia projector*

Modem

A **modem** (a contraction of the words 'modulator-demodulator') is a device used to allow computers to communicate with each other using telephone lines. Some modems are installed in the system unit. Other modems are external devices. The modem changes a signal from the digital format which computers use, to an analogue format that can be transmitted along the telephone line. The modem on the receiving computer converts the analogue signal back to digital form. Therefore, a modem serves a combination of input and output functions.

Figure 3.4 *Internal and external modems*

Speakers

A speaker produces output in the form of sound. Some computers have built-in speakers. However, external speakers such as the ones shown in Figure 3.5 are also commonly used.

Figure 3.5 *Computer speakers*

A **speech synthesiser** is a device that takes data from a computer and outputs it as spoken words, often by combining a series of **phonemes** or short sound elements. The speech synthesiser 'reads', or sounds out, any text that is displayed on the screen. This feature is useful for the visually impaired and for persons learning a new language. Speech synthesisers can be in the form of a card that is inserted into the computer, a box that is attached by cables, or a program that uses the computer's in-built sound card (Figure 3.6).

Figure 3.6 *A speech synthesiser*

To do

Identify the use and benefits of each output device.

My glossary

Write definitions of the following terms.

Dot-matrix printer
Dye sublimation
    colour printer
Impact printer
Inkjet printer
Laser printer
Modem

Multimedia projector
Non-impact printer
Plotter
Printer
Speech synthesiser
Thermal printer

Examination-type questions

1 The manager of Cheapo Enterprises is investing in output devices for his business. He is getting several dot-matrix printers at a bargain price. The three workers in his small office are strongly opposed to this purchase.

a List three output devices other than printers. (3 marks)

b State the use of each of the devices you have listed in **a**. (3 marks)

c Other than the price, what are two reasons why the manager would choose a dot-matrix printer? (2 marks)

d What are three reasons why the office workers would object to this purchase? (3 marks)

e (i) Suggest three types of printer that the manager could purchase instead of dot-matrix printers.
(3 marks)

(ii) State two advantages of each of the printers you have suggested.
(6 marks)

2 a Arrange the following types of printers in order from cheapest to most expensive:
    Laser
    Dye sublimation
    Dot matrix
    Inkjet (4 marks)

b Explain the difference between impact and non-impact printers. (2 marks)

c Clearly explain the purpose for which each of the following devices is used:
(i) Speaker
(ii) Speech synthesiser
(iii) Multimedia projector
(iv) Modem (8 marks)

d Describe the business uses of each of the following devices:
(i) Thermal printer
(ii) Plotter (6 marks)

4 Storage devices

By the end of this unit you should be able to:
- List various types of storage media and their practical applications

Unit at a glance

- Storage devices are used to preserve files in a form that can be read by the computer. Some storage devices are:

  - Compact disk (CD-ROM and CD-RW).
  - Digital video disk (DVD).
  - Floppy disk.
  - Hard disk.
  - Flash drives.
  - Memory cards.

Storage devices

When a computer is switched off, the data that is in the main memory of the central processing unit is erased. Secondary **storage** devices are used to retain data and programs until they are needed again. These devices are also called **auxiliary storage** or **backing store**. Storage devices include floppy disks, hard disks, optical disks, flash drives and memory cards.

Disks are used to store information. As has already been explained, data in a computer is represented as a series of coded electrical impulses called bits. A group of bits called a byte is used to represent each character. All information on computers is stored in **files**. The size of a file is measured in bytes.

All disks need a drive from which they get information (this is also called 'reading'),

and they put information onto the disk (also called 'writing'). Each drive is designed for a specific type of disk whether it is a CD, DVD, hard disk or floppy disk. The disk is the **storage medium** which contains computer files such as data or programs. The disk drive is the **storage device** that runs the disk, or reads from and writes to the disk.

Disks are either magnetic or optical (Figure 4.1). A **magnetic disk** stores data by magnetising microscopic particles of iron oxide. These particles are then oriented in either a positive (north) or negative (south) direction to represent the on-off pattern of the bits. Magnetic disks include floppy disks and hard disks. An **optical disk** stores data as microscopic light-and-dark spots on the disk surface. The dark spots are called **pits** while the lighter non-pitted areas are called **lands**. The pattern of pits and lands represent binary-coded data. The optical disk drive uses a laser light to read this data. Optical disks include compact disks (CDs) and digital video disks (DVDs).
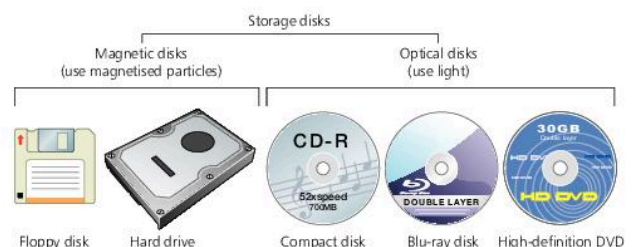
Figure 4.1 *Magnetic and optical disks*

Hard-disk drive

The **hard-disk drive** consists of one or more flat, rigid platters about 3.5 inches in diameter, mounted on a spindle inside a sealed case. The disks are made of aluminium or glass and are coated with magnetic iron oxide particles. The disks spin rapidly, making thousands of rotations per minute. Each disk has at least one read/write head which moves in and out from the centre of the disk to locate data. This enables data to be accessed quickly and directly. Hard disks are the most commonly used storage media. This is because:

- They have large storage capacity.
- They are fast and relatively cheap.
- The information on a hard disk can be stored and deleted as necessary.

Figure 4.2   *A hard disk*

Hard disks are usually found inside the computer, but there are also external hard drives, available as a separate component. These are useful for adding capacity to a computer. Newer computers have hard drives of more than 200 GB.

DID YOU KNOW?
The hard disk makes over 7,000 revolutions each minute. That is fast! It means that the computer can access data very quickly from this device.

To do

Find out how many bytes make up the following units:
- A kilobyte.
- A megabyte.
- A gigabyte.
- A terabyte.

Floppy disk

A **floppy disk** or **diskette** is a thin, flexible magnetic disk enclosed in a rigid plastic body. Diskettes are still a popular means of transporting information, although they are rapidly being replaced by higher capacity alternatives. They are still used by some persons because they are extremely cheap, small and relatively durable.

Figure 4.3   *A diskette and disk drive*

Magnetic tape

Magnetic tape used for computer storage resembles audio cassette tape. It is used mainly as a backup storage medium. It takes a relatively long time to retrieve data from magnetic tape. With the development of faster, low-cost storage devices, magnetic tape is not used as frequently.

Figure 4.4 *Magnetic tape*

Compact disk

Compact disks or CDs can store large amounts of information. One CD can store 650 MB of data or about 70–80 minutes of music. A compact disk may be CD-ROM, CD-R or CD-RW. CD-ROM stands for **compact disk read-only memory**. Your computer can only read the data on a CD-ROM. You cannot write any additional data to it. Likewise, a CD-ROM drive is designed to read the disk; you cannot 'burn' a CD with a CD-ROM drive. CD-RW stands for **compact disk – read/write**. CD-RW drives can copy information or burn information onto a blank CD. **Read-only CD** blanks (CD-R) can only be written to once. The more expensive **Read/Write CDs** (CD-RW) allow you to erase and write over existing data several times.

DVD disk

DVD disks can store over 4 GB. **DVD-R** drives allow you to record large files, such as movies, on a single disk. A DVD-R drive can also read and write compact disks. DVD-RW disks may be reused several times.

Blu-ray is a newer version DVD that uses a blue laser instead of the traditional red laser. Blue light has a shorter wavelength, enabling far more data to be stored on the same-size disk. A Blu-ray DVD can store up to 50 GB of data, over 12 times more than a standard DVD.

Flash drives

Figure 4.5 *Flash drives*

The **flash drive** is a small, relatively inexpensive, portable storage device that connects to the computer via a USB port (Figure 4.5). It is known by a variety of names, including memory stick, thumb drive, USB drive, key drive, finger stick, pen drive, jump drive, disk-on-key and memory key. Some flash drives offer as much as 128 GB of storage, and the capacity continues to increase.

Memory cards

A **memory card** is a small plastic-coated rectangle that can be used to store data, including photographs, videos and text files. It is also called a storage card or flash memory card. This versatile storage medium is used in different types of device including digital cameras, music players, cell phones, laptops and game consoles. Memory cards are popular because they are small, lightweight, durable and can be swapped among many different devices.

Figure 4.6 *Memory card reader*

Changing technology

Computer devices are constantly being developed and improved. The aim is usually to offer faster, smaller and higher-capacity alternatives. You can keep abreast of the latest developments in computer technology by browsing the Internet or reading trade magazines.

DID YOU KNOW?

Information that we save is placed on a storage medium such as a floppy disk or compact disk. When the computer reads the data, input is taking place. When the computer writes the information on the disk, output occurs. Therefore, the storage devices really perform a combination of input, output and storage.

To do

Identify the use and benefits of each storage device.

My glossary

Write definitions of the following terms.

Auxiliary storage	Magnetic disk
Backing store	Magnetic tape
Files	Memory card
Flash drive	Optical disk
Floppy disk	Storage devices
Hard-disk drive	Storage medium

Examination-type questions

1 a Define the terms:
   (i) Auxiliary store
   (ii) Bit
   (iii) File   *(6 marks)*
b Arrange the following in order of capacity, from largest to smallest:
Hard disk   Memory card   CD   Diskette
      (4 marks)

c Differentiate between:
   (i) Magnetic disks and optical disks
   (ii) Hard disks and diskettes
   (ii) Storage device and storage medium
   (iv) CD/R and CD/RW   *(8 marks)*
d Magnetic tapes were once commonly used. Why are they no longer very popular?
      (2 marks)

5 *Software*

By the end of this unit you should be able to:
- Distinguish between operating software and application software
- Identify various types of application software

Unit at a glance

- **Operating system software** (OS) are programs that coordinate all the activities among computer devices. The OS contains instructions that allow the user to run application software.

- Examples of common operating systems include Windows, Mac OS, OS/2, Warp, UNIX, Linux and Apple.

- **Application software** are programs that perform specific tasks for users, such as games, Internet browsers and antivirus software.

- Examples of common application software include word-processing software, spreadsheet software, database software, presentations software and graphics software.

Figure 5.1 *As a programmable machine, a computer needs software before it can do any useful work*

The software that a computer needs falls into two categories: an operating system and application software.

Operating systems software

Operating systems (also called systems software) are programs that control various parts of the machine and allow them to communicate with each other and work in unison. DOS (Disk Operating System) was the most popular and widely used operating system. Microsoft programs such as Windows XP, Windows Vista and Windows 7 are now most commonly used. UNIX is a multi-user operating system developed to run on almost any computer, from PCs to mainframes. The Macintosh Operating System (Mac OS) is designed to run on Apple computers. Other examples of operating systems include OS/2, Warp and Linux.

As you have already learnt, a computer is able to perform tasks automatically, under the direction of a program. A program is a set of instructions, written in a logical sequence. All computer programs are known as software. The term hardware is used to refer to all of the physical parts of the computer system. Every tangible part of the computer (including the disks) is hardware. The programs that are stored on the disks are called software. Because a computer is a programmable machine, it needs software before it can do any useful work.

An operating system runs the whole time that a computer is switched on. It manages all of the operations of the computer system. For example, it controls the transferring of data between the main memory of the computer and the peripheral devices. The operating system allocates memory to programs and schedules the running of programs on the central processing unit. The OS converts the various hardware parts into a single functioning unit that is able to perform the tasks required by the user. The operating system tells the computer how to:

- Transfer files from main memory to the disks and vice versa.
- Execute an application program.
- Keep a record of all the files that are stored on the hard disk.
- Keep a record of all the used and available space on the hard disk.
- Copy programs and data to and from the computer.
- Find out what is stored on a disk.
- Organise the contents of disks into folders or directories.
- Delete unwanted files from the hard disk.
- Manage the input and output devices that make up the hardware components of a computer.
- Recognise keystrokes and mouse clicks that the user makes and display them on the screen as output.
- Send screen contents to the printer when a user gives a command.

The hardware of a computer may be compared to an automobile. Without a driver the automobile is useless. The operating system may be called the 'driver' of the computer system. The system becomes functional when the OS is loaded onto the computer. An operating system works in the background to make operating the computer hardware a straightforward task.

The OS loads when the computer is booted or started. This means that at start-up the OS must be taken from storage and placed in the computer's main memory. This process is called **booting**.

Windows is one type of systems software that works with DOS to make the computer more user friendly. Before Windows was developed, the PC user had to memorise and type in all commands. Windows is a **graphical user interface** (GUI). A GUI is a program that uses graphical display (icons and menus) as a means of interaction between the user and the computer. Windows issues the DOS commands to the computer when the user performs actions such as clicking on the icon or menu item with the mouse.

DID YOU KNOW?

A window is a section of the screen that is used to display an open program, file or folder. You can open several windows at the same time. For example, you can open your email in one window, type a letter using a word processor in another, and use an encyclopedia CD in another window. The name of each window is displayed on the **taskbar** at the bottom of the screen. You can switch from one window to another by clicking on its name in the taskbar.

To do

1 Explain the purpose of operating system software.
2 Differentiate between a disk operating system and a graphical user interface.

Applications software

Applications software is the software that is used to actually perform specific tasks on the computer. This means that you use applications software to perform a variety of tasks such as drawing a picture, playing a game or recording music. These tasks would have to be carried out even if computers did not exist.

Applications software is created by an individual or a corporation and sold or given away as **freeware**. A **licence agreement** between you and the creator of that software generally allows you to use the software, but prohibits you from making copies of it to sell. The copying of software is called **piracy**. It is illegal and punishable by law.

You will be using application programs such as word processing, spreadsheet, database management and presentation software. These are discussed in detail in Section II, Units 8 to 11. Some other commonly used applications are discussed below.

Accounting programs

Accounting programs are designed to keep and organise financial information. This information includes employee payrolls, sales and purchases ledgers, bank transaction records and records of suppliers. It is easy to print the information as financial reports.

Stock control

Stock control software allows businesses to keep organised records of the quantities of items they have in stock. Most stores and supermarkets now use electronic scanners at their checkouts. The data is input directly into their stock control system so that they are notified when it is time to order new supplies. Some stock control systems automatically place orders with suppliers when stocks fall below a predetermined level.

Desktop publishing

Desktop publishing (DP) programs are used for the design, layout and printing of publications such as documents, books, magazines, flyers and newsletters. These programs combine word processing, graphics, design and printing into a single program. They allow you to define the size and shape of a page, to position text and pictures, and manipulate the appearance of the text. Desktop publishing allows you to display information in a wide variety of formats similar to those used by professional typesetters and designers.

Graphics software

Graphics programs enable artists to create pictures, and engineers and architects to create designs. Some graphics programs contain pre-stored drawings (clipart), photographs and background designs. Many word-processing and spreadsheet programs now include graphic elements in them.
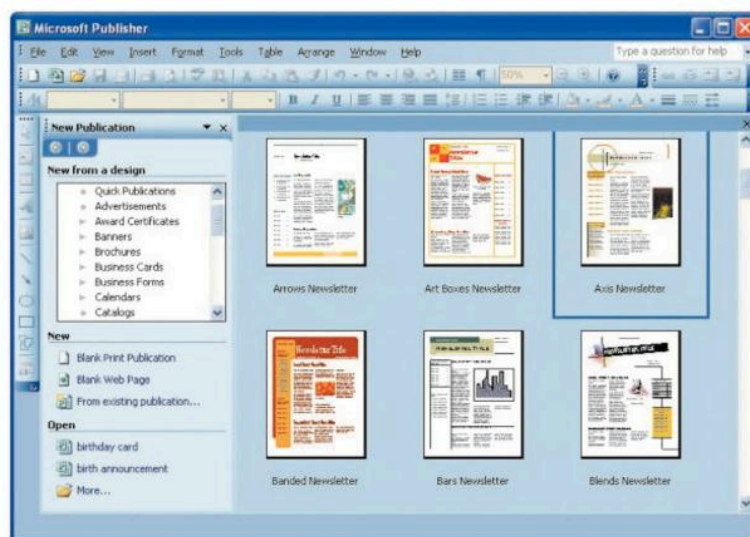

Figure 5.2 *Microsoft Publisher: a DP program*

Computer-aided design (CAD) allows you to produce two- and three-dimensional designs on a computer screen. These designs can then be easily altered when necessary. CAD is now used in clothing design, interior decorating and manufacturing, to name a few examples.

Communications programs

Communications programs allow computers to 'talk' to each other. Browsers are programs that allow you to access and search through the Internet. Other communication programs are used to send and receive electronic mail (email) and to chat with other computer users in different locations.

My glossary

Write definitions of the following terms.

Accounting program
Applications software
Communication program
Computer-aided design
Desktop publishing program
Graphical user interface
Graphics program
Operating system
Stock control program

Figure 5.3 *Windows Messenger: a communication program*

Examination-type questions

1 Define the term 'software'. *(2 marks)*

2 Explain each of the following terms:
   a Freeware
   b Software piracy
   c Graphical user interface *(6 marks)*

3 Clearly explain the difference between operating systems software and applications software. *(3 marks)*

4 Name three examples of operating system software. *(3 marks)*

5 Identify three types of applications software, clearly stating the purpose of each. *(6 marks)*

6 Working with Windows

By the end of this unit you should be able to:
- Use the Windows operating system

Unit at a glance

- Icons on the **Windows desktop** include My Computer, My Documents, Recycle Bin, date and time, Internet Explorer and Microsoft Outlook.

In this unit you will learn how to work with the Windows operating system. There are several versions of Windows, including 2000, XP, Vista and 7. The appearance of these versions might vary, but they function quite similarly. You should read through this unit before you begin working on the computer.

The first step you need to take is to turn on the computer.

You need to switch on the monitor and the systems unit separately. There is a power button at the front of each. The switch may look different depending on the kind of computer, but they are usually identified by this symbol:

The computer takes some time to check itself when you switch it on. This is called the **power-on self test** or POST. (Computer people just love acronyms!) During this time it may display a **wait icon** that usually looks like an hourglass.

This icon tells you that the processor is busy and is not available for instructions at that time. Do not begin any activities until the wait icon disappears.

After your computer starts up it will most likely display the Windows desktop (Figure 6.1). A **desktop** is an on-screen work area. Look at your desktop carefully. You will see some small pictures called **icons**. An icon is a graphic image that represents a program, a document or some other computer file.

Figure 6.1 *Windows desktop*

The icon labelled **My Documents** represents the area where the computer stores or **saves** most of the files that you create.

The **Internet Explorer** icon activates the browser software that enables you to use the Internet.

The **Microsoft Outlook** icon provides access to email facilities.

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The **Recycle Bin** represents the storage location where deleted documents are placed. If a document is in the Recycle Bin it can be retrieved. However, if the Recycle Bin is emptied the document cannot be recovered unless a special retrieval program is used.

The **taskbar** is usually located at the bottom of the screen. The taskbar displays the names of any programs that are open.

The **computer clock** is located at the right of the taskbar. When you place the mouse pointer over the clock the date is displayed. You can change the date and time and access a calendar by double-clicking on the clock. Double-clicking will be explained to you later in this unit.
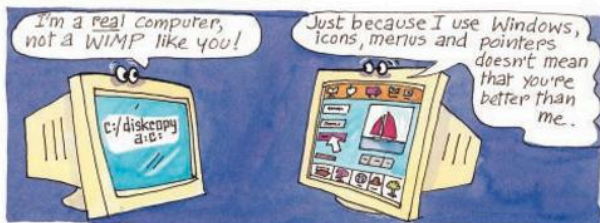

Figure 6.2

At the left-hand end of the taskbar there is a special icon called the **Start icon**. The start icon contains the main menu. A **menu** shows the options that are available to the user. The main menu allows you to see and open the programs that are on your computer system. The main menu will vary slightly according to the version of Windows that you are using. Before you can use the start icon, you need to learn how to use the mouse.

How to use the mouse

Place your hand on the mouse so that the palm of your hand fits over it. If you are using your right hand, put your thumb on the left side of the mouse and your ring finger and little finger on the right. Lightly rest your index finger on the left mouse button and your middle finger on the right mouse button (Figure 6.3).

Figure 6.3   *Using the mouse*

Mouse actions

1   Click: Place your mouse pointer on an item. Press and release the left mouse button. This action selects the item.
2   Double-click: Point to the item and quickly press and release the left mouse button twice. This action is used to open a document or start a program.
3   Drag and drop: This action is used to move an item on the screen. Point at the item and press and hold down the left mouse button. While holding the button, move the pointer to where you want to place the item. Release the mouse button.
4   Right-click: This action causes a list of commands to be displayed on the screen. You can then left-click on the action you want the computer to perform. To right-click, press and release the right mouse button.

5 Scroll button: There may be a third centre button or wheel on your mouse. This allows you to **scroll** to see text in a long document, web page or spreadsheet that is not presently visible on the screen.

   Some scroll buttons are designed to be rolled with the finger. Others offer automatic scrolling. To activate this feature, click the scroll button and an arrow will appear on the screen. Move the mouse in the direction of the hidden text. The further away you move the arrow from its original point, the faster the display will scroll. Click the left mouse button to stop the automatic scrolling.

Using the Windows start menu

1 2000 and XP

Move the mouse pointer until it rests on the start icon at the bottom left corner of the screen, and click it with the left mouse button. The start menu will open up. There are small arrows next to several items in the main menu. These arrows indicate that a **sub-menu** exists. Place your pointer on **Programs** to open up the Programs sub-menu (Figure 6.4). The double arrow at the bottom of the programs sub-menu indicates that some programs in the menu are not presently displayed on the screen. Click on the double arrow so that all of the programs are shown. Some items in the programs menu, such as Accessories, have sub-menus of their own. You can choose an item in the menu by single-clicking on it.

2 Windows 7 and Vista Start Menu

Windows Vista and Windows 7 are quite similar to each other in appearance. Move the mouse pointer until it rests on the Start icon at the bottom left corner of the screen and click with the left mouse button (Figure 6.5).
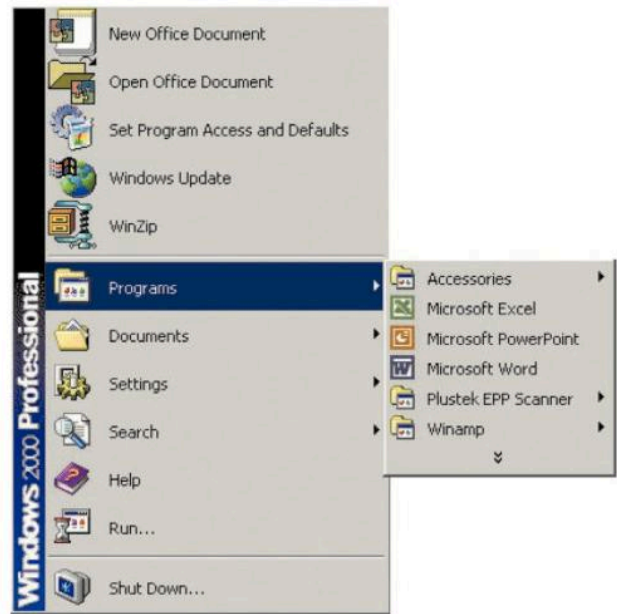

Figure 6.4   *The Windows 2000 Professional start menu*

Figure 6.5   *The Windows 7 and Vista start menu*

The start menu will open up. Click on **All Programs** to see the list of programs that are available on your computer.

You may notice that some of the programs, for example Microsoft Office, are contained in folders (Figure 6.6).
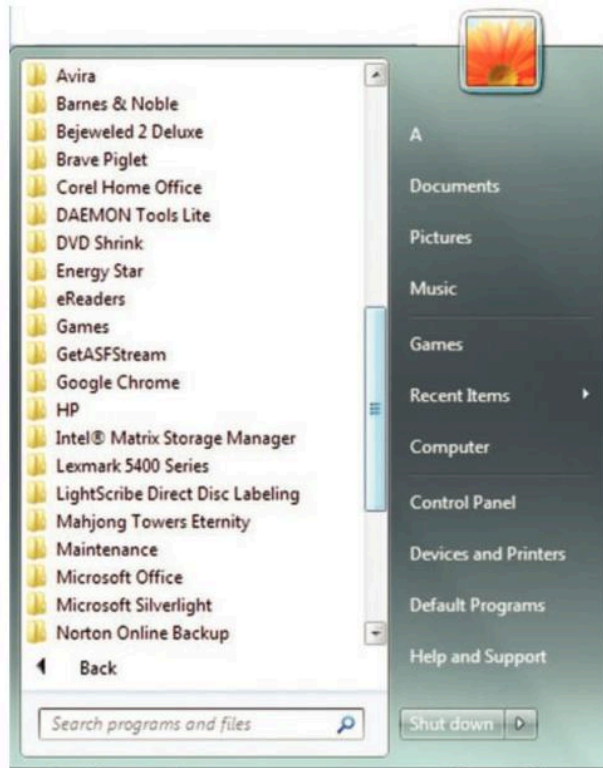

Figure 6.6   *The Programs menu*

Figure 6.7   *The Windows XP start menu*

Opening a program

1 Windows 2000 and XP

To start a program click **start**, and then click the name of the program you want to open. The section of the start menu that you will see displays the icons and names of the most recently and most frequently used programs. To open a program that you do not see on the **start** menu, point to **Programs**, and then navigate through the menus to the program you want and click it. When you open the program, Windows automatically displays it on the **start** menu (Figure 6.7).

2 Windows 7 and Vista

To start a program click the **Start** icon, and then click the name of the program you want to open.

The first section of the **Start** menu that you will see displays the icons and names of the most recently and most frequently used programs.

To open a program that you do not see on the **Start** menu, click on **All Programs**, and then search through the folders to find the program you want and click it. For example, to open Microsoft Word, click on the Microsoft Office folder. Then click on Microsoft Word and that program will open.

The structure of a window

The rectangular display area that appears when you open a program or file is called a **window**. A window is a portion of the screen where programs and processes can be run. Windows can be closed, resized, moved, minimised to a button on the taskbar, or maximised to take up the whole screen. A window consists of the following parts.

The **title bar** displays the name of the program or file you have opened. It is found at the top border of your window.

Figure 6.8a *The title bar*

The **menu bar** displays a list of available options. This is usually found just under the title bar.
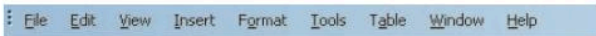

Figure 6.8b *The menu bar*

The **scroll bars** allow you to see portions of the document that are presently hidden from view if the entire document cannot be displayed on the screen. There are two scroll bars, the **vertical** at the right and the **horizontal** at the bottom of the window.

Toolbars display shortcuts to commands. You can give the computer a command by clicking on a toolbar button. For example, the button to give a **print** command may look like this:

Figure 6.9 *A Microsoft Word toolbar*

The **status bar** is usually found at the bottom of the window. In a word-processing window the status bar may display information such as the page and line number on which you are presently typing.

Figure 6.10 *A Microsoft Word status bar*

Maximising, minimising and restoring windows

To minimise or maximise a window or restore it to its previous size click the appropriate button in the upper-right corner of the window:

- Click ▢ to minimise the window to a taskbar button. The window will disappear from the screen, but it will still be available in the taskbar. To restore the minimised window to its previous size, click its taskbar button.

- Click ▢ to adjust the size of the window.

- Click ▢ to restore the window to its previous size.

You can also double-click the window's title bar to maximise it or restore it to its previous size.

Resizing windows

The following points describe how to resize an open window. (Note: You cannot resize a window when it is displayed in a full screen (maximised).)

- To change the width, point to the left or right window border. When the pointer changes into a horizontal double-headed arrow ▢ drag the border to the right or left.

- To change the height, point to the top or bottom window border. When the pointer changes into a vertical double-headed arrow ▢ drag the border up or down.

- To change the height and width at the same time, point to any window corner. When the pointer changes into a diagonal double-headed arrow ▢ drag the border in any direction.

Moving windows

To move a window, place your mouse pointer in the title bar. Click and drag the window to the desired position. You cannot move a window when it is displayed in a full screen (maximised).

Working with more than one window

To arrange all open windows:

1 Right-click an empty area on the taskbar.
2 Click **Cascade Windows**, **Tile Windows Horizontally**, or **Tile Windows Vertically**.

(See Figures 6.11 and 6.12.) Windows that are reduced to taskbar buttons will not

be displayed when you tile or cascade. To restore your windows to their previous state, right-click an empty area on the taskbar and then click **Undo Cascade** or **Undo Tile**.

Quitting a program

To quit a program click ❌ on the title bar.

You can also click **Exit** in the **File** menu of the program you are using.

Shutting down safely

1 2000 and XP

Click on the words **Shut down** at the bottom of the start menu. Depending on the version of Windows you are using, a shut down window may appear like the one shown on this page. Click **OK**. The systems unit on most modern computers turns off automatically, so you will only need to turn off your monitor.

Figure 6.11 *Tiled windows*

Figure 6.13 *The shut down window*

2 Windows 7 and Vista

In Windows Vista, click on the **Start** menu, then click on ▶. A list of options will appear. Click on **Shut Down**. In Windows 7, click on the **Start menu**, then click the Shut down button.
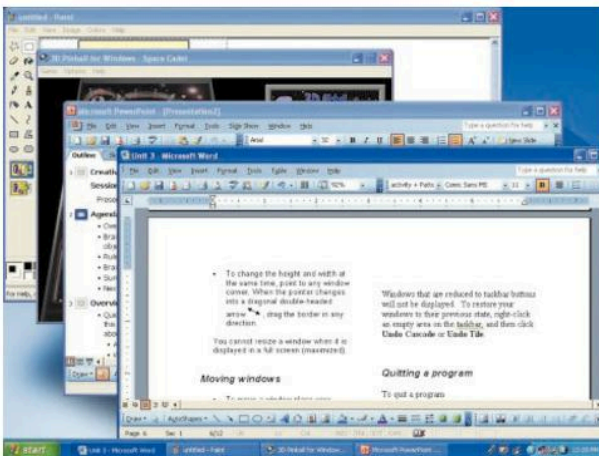
Figure 6.12 *Cascaded windows*

My glossary

Write definitions of the following terms.

Cascade	POST	Taskbar
Desktop	Recycle bin	Tile
Icon	Scroll	Title bar
Maximise	Scroll bar	Toolbar
Minimise	Status bar	WIMP
Menu bar	Sub-menu	Window
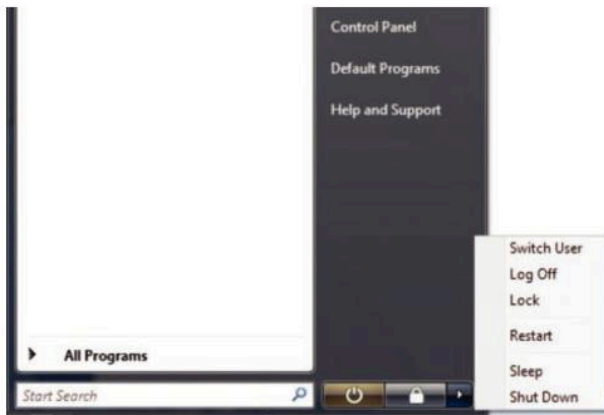
Figure 6.14 *The Vista shut down menu*

Developing work skills

Prepare a table summarising each skill introduced in this unit and at least one way of performing it. Two have been filled in the table below.

Task	Method
Opening a program	Use the left mouse button to click **start**. When the menu opens, point to **All Programs** and then click the name of the program you want to open.
Moving a window	Ensure that the window is not maximised, then click on its title bar and drag it to the desired position.

Examination-type questions

1 Define the following terms as they relate to computers:
   a Desktop
   b Icon
   c Menu
   d Folder   *(4 marks)*

2 State the purpose of the following items in the Windows operating system:
   a Recycle bin
   b Taskbar
   c Scroll bar
   d Wait icon   *(8 marks)*

3 List the steps you must follow to do each of the following:
   a Start up the operating system   *(2 marks)*
   b Open a program   *(3 marks)*
   c Shut down the computer safely   *(3 marks)*
                                    (Total 8 marks)

7 Computer care and ergonomics

By the end of this unit you should be able to:
- Describe ways of caring for computer peripherals and the working environment
- Identify health factors associated with computer use

Unit at a glance

- General care of the computer includes:
  - Following all manufacturer's instructions.
  - Keeping the computer, peripherals and work area dust free.
  - Protecting the computer from moisture and extended exposure to direct sunlight.
  - Using a surge protector.
  - Covering the computer when not in use.
  - Installing and using antivirus software.

- Ergonomics is the science of designing equipment and work processes to suit the worker in order to reduce the risk of strain and injury. Ergonomics seeks to minimise risk of injury from:
  - Repetition.
  - Awkward postures.
  - Static forces.

- You should know the harm caused by:
  - Extended use.
  - Inadequate lighting.
  - Inappropriate furniture.
  - Bad posture.

General care of the computer

The computer and associated devices are designed to be durable, so they are not usually damaged through normal use. However, they are made of electronic components that must be safeguarded from dust and moisture. Following these guidelines will help ensure that you get the best from your computer system.

Figure 7.1 *Read your instruction manual when setting up*

Setting up your system

- Read your instruction manuals **carefully** before setting up your computer or its peripherals (Figure 7.1).
- Obey all warnings on the equipment. Hazards are often indicated by ⚠ or some other symbol.

- Place your equipment on a sturdy, level desk. Ensure that your desk is four to six inches from the walls. This allows for proper circulation of air and leaves space for all cables to be safely routed.
- Do not expose your computer equipment to direct sunlight, external heat or moisture.
- Use a surge protector and uninterrupted power supply (UPS) unit to plug in your computer and telephone cable. This safeguards your equipment from harmful fluctuations in the power supply.
- Never overload electrical outlets.
- Position the monitor so that there is no reflection on the screen. If reflections are unavoidable, use an anti-glare screen.
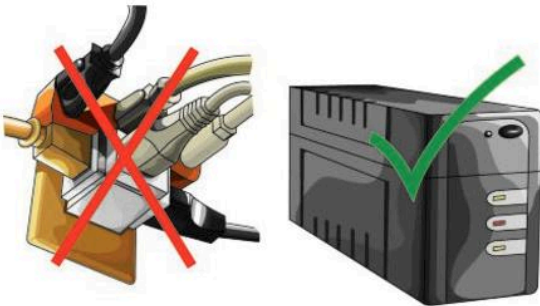
Figure 7.2 *Safeguard your power supply*

Maintaining your work environment

- Never eat or drink near the computer.
- Keep your work area free from clutter and dust.
- Use a soft brush or feather duster to dust the monitor, keyboard, systems unit and other devices.
- Wipe the monitor screen and scanner glass with a soft lint-free cloth that is moistened (slightly damp, not soaked!) with a screen-cleaning liquid. Screen-cleaning liquids may be purchased at a computer supplies store.
- Cover the computer and its peripherals with dust covers when the equipment will not be used for a long period.
- Ensure that no dust, moisture, fingerprints or scratches get onto the

play surface of your disks and diskettes. Optical disks (CDs and DVDs) should always be held by their edges. Keep all disks in their protective cases.

Figure 7.3 *Don't put food or drink near computers*

- Keep the documents that you create on your computer well organised. In Unit 6 you will learn how to create folders and subfolders for organising your work.
- Your computer does not have unlimited storage space. You can free space on your hard drive by deleting all unwanted documents. Do not keep documents that you do not need.
- Your computer comes with several maintenance programs including **disk backup**, **error checking** and **disk defragmenter**. You will learn how to use these utilities in Unit 27.
- Protect your computer from harmful intrusions such as **viruses**.
- Ensure that all cables and extension cords are secured where they cannot be tripped over or trodden on, nor snagged by chair legs or rollers.

Utilities

Utilities are programs that are intended to recover data and manipulate disk files. For example, **antivirus** programs are designed to search for and remove a virus program (see Figure 7.4). A virus is a program that is designed to destroy files or corrupt a hard drive. There are three ways of acquiring a computer virus:

- It can come attached to an email.
- It can come on a floppy disk that was used on an infected computer.
- It can come to your computer when you download files from a website that does not have strict antivirus regulations.

Some antivirus programs check programs while they are being installed and warn of potentially harmful actions. Antivirus programs are a useful safeguard. However, new viruses are constantly being created so you should follow these guidelines:

- If you receive an email from someone you do not know and it has an attachment, **do not open it**. Delete it from your system.
- Avoid interchanging storage media between computers. For example, do not use a flash drive or diskette at the public library and then use it on your home or school computer.

- Do not insert flash drives and diskettes from unreliable sources.
- Use antivirus software to scan all media before copying or opening files from them or starting your computer from them.
- Do not visit unsecured websites.
- Learn how to recognise the common signs of viruses. These include unusual messages that appear on your screen, decreased system performance, missing data, and inability to access your hard drive. If you notice any of these problems on your computer, run your virus-detection software immediately to minimise the chance of losing data.
- Always get the latest version of antivirus programs. Many of the antivirus software manufacturers allow licensed users to download the latest updates from their websites.
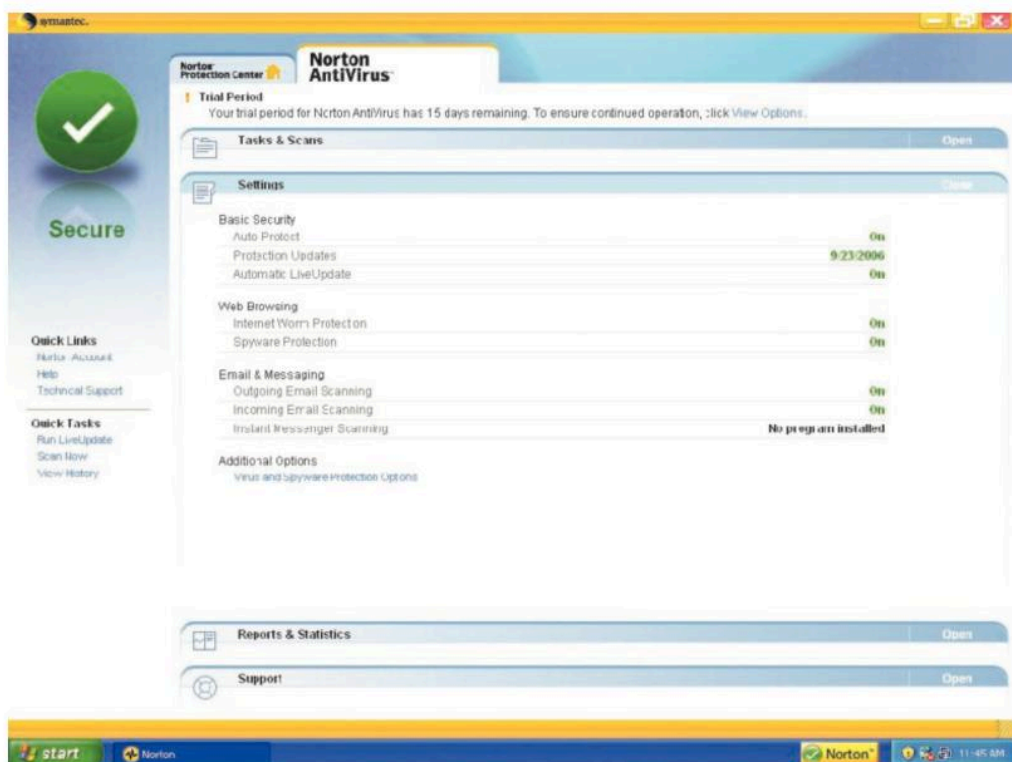

Figure 7.4 *Norton Antivirus screen*

Ensuring personal health and safety

Ergonomics is the science of designing the job, equipment and workplace to fit the worker, reducing fatigue, discomfort and injury. It includes:

- Workspace design such as office layout and size, seating, lighting and ventilation.
- Furniture and equipment.
- Work habits.

Ergonomics seeks to minimise risk of injury from:

- **Repetition** or body movements carried out over and over again.
- **Awkward postures** or body positions such as excessive twisting or stretching.
- **Static forces** caused by maintaining the same position for a prolonged period of time.

Repetitive strain injuries occur when the muscles, tendons, nerves or other tissue experience stress or strain because a task is performed repeatedly. For example, the painful condition called **carpal tunnel syndrome** develops in the wrists of persons who often type on computer keyboards for long periods of time. Repetitive strain injuries are also known by other names, including:

- Occupational overuse syndrome.
- Repetitive stress injuries.
- Cumulative trauma disorders.
- Repetitive motion disorders.

Workspace design

The office should be designed to promote worker health, safety, comfort and efficiency. Offices should never be overcrowded. Rooms should be well ventilated, but desks should not be placed directly below or in front of air-conditioning vents. Offices should be well lit, but glare should be minimised in order to prevent headaches and eye strain.

Furniture and equipment

Ergonomically designed office furniture helps to promote efficiency and health. Furniture should be adjustable to cater for the needs of different workers. Chairs should be comfortable with adjustable height, lower-back support and adjustable armrests. The height of the desk should be appropriate for the worker and the task to be done. The height should allow the worker's shoulders to be relaxed and to hang naturally. A lower desk or a keyboard tray is necessary for typing.

Posture

Sit with your back erect and your shoulders down and back. Do not be stiff or tense; relax, but do not slump. Adjust the chair height so that your knees bend at a 90° angle. Your thighs should be horizontal and your feet should rest firmly on the floor.

Figure 7.5 *Have a well-organised work area*

Forearms horizontal

Seat back adjustability

Space in front of keyboard to support hands during pauses in keying

Good lumbar support

Seat height adjustability

No excess pressure on underside of thighs and backs of knees

Space for postural change – no obstacles under desk
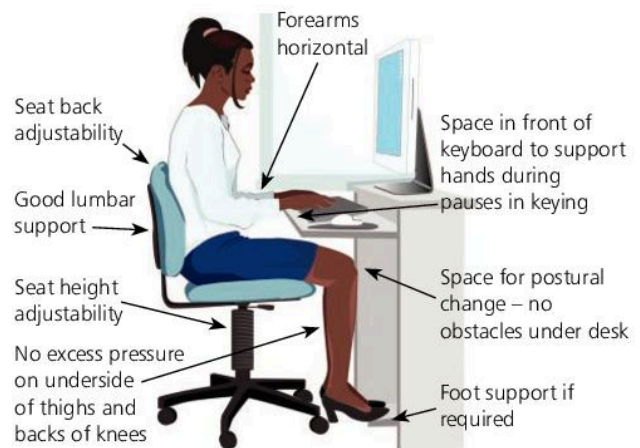
Foot support if required

Figure 7.6 *Correct posture helps to promote both efficiency and good health*

Your keyboard should be positioned so that your upper arms will hang naturally at your sides. Your forearms should be parallel with the keyboard. Your wrists should be straight.

Work habits

Position your work so that you can be comfortable while doing it. Avoid postures that require extended stretching, twisting or unnatural curvature of the spine. Take short breaks (10 to 60 seconds) throughout the work day. During these breaks look away from your work, blink several times and flex and stretch your muscles. Get out of your chair every 20 to 40 minutes. Try to alternate tasks so that you avoid having overly long periods of the same activity. For example, a period of typing may be followed by some filing in order to change position and stretch the muscles.

Important reminders

To ensure personal health and safety, follow these guidelines:

- Use a properly designed computer desk with a built-in tray to hold the keyboard and mouse.

- Select a comfortable chair with adjustable height, lower-back support and adjustable armrests.
- Position your monitor 24–30 inches (60–75 cm) away from your eyes or approximately an arm's length away from your body.
- Look away from the screen and blink your eyes every few minutes to reduce the risk of eyestrain.
- Take frequent breaks away from the computer.
- Report safety hazards to your teacher or the first available teacher.
- Report accidents in the computer lab as soon as possible.
- Cooperate to provide instructive charts for the computer lab.

My glossary

Write definitions of the following terms.

Antivirus	Surge protector
Ergonomics	Utilities
Repetitive strain injuries	Virus

Examination-type questions

At the end of a long EDPM session, Mai Ling complains of blurred vision, pain in the wrists, aching lower back and numb fingers. Her doctor advises her to learn about ergonomics.

1 What is ergonomics? *(2 marks)*

2 Explain three causes of repetitive stress injuries. *(6 marks)*

3 Prepare a list of guidelines under the following headings that can help Mai Ling to prevent or reduce her symptoms:
   a Selection of furniture
   b Workplace design
   c Work habits
   d Posture *(8 marks)*

4 State four ways of caring for computer equipment. *(4 marks)*

Keyboard mastery I

Suggestions for teachers and students:
- Disable the auto correct option in the word-processing software.
- The exercises in this section are intended for classroom supervision. Ensure that the correct posture and fingering techniques are used. Students should also practise independently.
- You may use techniques such as clapping, tapping your feet or a metronome to develop rhythm.
- Use available typewriting software to help your students to become efficient.

- It is essential that you practise consistently until you can type at a speed of 35 words per minute or faster.
- Note that the keyboard layout assumed for these exercises is the US layout. Your keyboard may differ in the positions of some keys such as the double quote and @ symbol.
- Note that additional practice exercises can be found on the accompanying CD.

NOTEBOOK 1: TOUCH TYPING

Typing without looking on the keyboard is called '**touch typing**'. To be an efficient typist you must be skilled in keyboard mastery. This means you should be capable of typing accurately at high speeds. **The key to your success lies in constant practice with a good dictionary and thesaurus as your desk companions.** Practise each new reach repeatedly both in the introductory exercise and in connected matter.

The home keys, guide keys and guide fingers

Keep the fingers of your left hand on **asdf** and the fingers of your right hand on **;lkj**. These are the **home keys.** The **A key** on the left and **semicolon key (;)** on the right are called the **guide keys**. Hence the **little fingers** which are assigned to these keys are called the **guide fingers.** When the little fingers are over the guide keys, it is easy for the other fingers to find their respective home keys naturally. Each finger must be used only for the keys assigned to it. Use all of your fingers when typing. **Strike the space bar once with the right thumb to create a space** after you have typed a group of letters or a word. Aim to type accurately without looking on the keyboard. **Keep your eyes on the 'copy', that is, the text from which you are typing.**

Look at the diagram above carefully and locate the home keys. Now look at the computer keyboard. Locate the home keys and position the fingers of each hand over the key to which they are assigned. The fingers should not touch the home keys, but **hover** slightly above them. It is from this position that all other keys are reached in 'touch typing.' When all of your fingers have been correctly positioned, the **G** and **H** keys should be free in the middle.

The computer keys are very sensitive. Touch them lightly to avoid unnecessary repeating of letters you have already typed.

Exercise 1: Getting to know the home keys

1 Type the following: **aaaassssddddffff;;;;llllkkkkjjjj** (tap the enter key once)
;;;;llllkkkkjjjjffffddddssssaaaa (tap the enter key twice)

2 Type the following but this time tap the space bar once to create a space after each letter: **a s d f ; l k j a s d f ; l k j a s d f ; l k j a s d f ; l k j**
; l k j a s d f ; l k j a s d f ; l k j a s d f ; l k j a s d f
Look at the two assignments you have done. Discuss the difference.

3 Type the following exactly as it is three times:
aaaa ssss dddd ffff;;; llll kkkk jjjj aaaa a ass dd ff ;; ll kk jj

NOTEBOOK 2: GETTING READY TO TYPE

As you type a character key (new key or new reach), keep the other fingers curved, hovering over the home keys.

Space between words/groups of letters

The space between words or groups of letters is called a character space. Tap the space bar once with your right thumb to create a character space between each group of letters or words.

Say each letter to yourself as you type. Speak softy. Do not disturb the person next to you.

Margins

The unused space that surrounds the text on a page is called the margin. There are four margins: top, bottom, left and right. These margins have been pre-set on the computer. However, you may change the width of each margin as necessary.

Set the margins

Click **File** then **Page Setup ...** on the menu bar. Click the ⬆ or ⬇ until the margin size changes to the width you want to use. Click **OK**.

Before you begin typing, always set the left margin on 5 cm (2 inches) for all fingering exercises until your teacher instructs you to do otherwise.

After you have completed each exercise, check to see how accurately you have typed. Do not attempt to correct errors. Your teacher will tell you when to do so. When instructed, save the document you have created.

Exercise 2: The home keys

Type each line three times, then leave a clear line by pressing the **Enter** key twice before starting the next line of the activity.


```
asdf ;lkj asdf ;lkj asdf ;lkj asdf ;lkj asdf ;lkj asdf ;lkj
aaa ass add aff a;; all akk ajj ;;; ;ll ;kk ;jj ;ff ;dd ;ss;
saa sss sdd sff s;; sll skk sjj l;; lll lkk ljj ddd daa dss
dff d;; dll dkk djj k;; kll kkk kjj kaa kss kdd kff kak;

all ass add ask sal sad saf lad las laf lal lak laj la;
asdf ;lkj asdf ;lkj jkk fdd kll dss a;; lsd jfs asdf ;lkj;
faa fss fdd fff f;; fll fkk fjj j;; jll jkk jjj faa fss fdd jff
dad das daf dal dak daj jad jal jaf jak jas jaj jada;

salsa sass asks lala fada falk laka jada lass sall daff fall
asdf ;lkj asdf ;lkj asdf ;lkj asdf ;lkj asdf ;lkj asdf ;lkj asd
```

MEMORY BOX

- Strike the keys with a light touch
- Say each letter as you type
- Ignore errors
- Set the left margin at 5 cm (2 inches)

NOTEBOOK 3: TYPING A NEW REACH

New reach: In this and subsequent exercises, the line in which two boxes appear, one on the left and the other on the right with three letters in each, represents a new reach that is being introduced.

Reach is the name given to the new character key you will type. The letter in the middle of the box is the new reach. **The first letter is the guide key.** It tells you which finger to use to type the new reach (new character key) after which you must return the finger to the guide key. Type with a rhythm and sing the letters softly to yourself while you type, but do not disturb the person sitting next to you.

Before you begin to type a new reach, first locate it on the keyboard and practise typing it without actually depressing the key. Start by typing each line three times, then tap the enter key twice to leave an extra line space before going on to type the next line.

Exercise 3: New reaches: g   h

Set the left margin at **5 cm (2 inches)**.
Remember to type each line three times, then leave a clear line by pressing the **Enter** key twice before starting the next line of the activity.

fgf

jhj

1   fggf dfgf jhhj fgf jhj hhj ggf fggf jhhj
    fgf jhj gfg hjh gfg hjh;fgf jhj fgf jhj fgf
    fgg gfg jhh hjh gs; gl; ga; gk; gd; gj; gd;
    ag ;h sg lh dg kh fg jh jg fh gh lg sh; hg
    ash gag hag flag sash hash shal dahl; has
    galas fagsa ;hfg; shaga glass flash as; sal

2   a lass lash a glass flask; dad had half a flag;
    gag a dash hag as hall lags; dad had a salad;
    a glad salad falls as dad gags a glass flask hag;
    dad shall flag a gas shag as jala dash lass lafs;
    saghs shall fall as half glass dash glad kada;

Exercise 4: New reaches: e   i   c   ,

Remember to type each line three times, then leave a clear line space
before starting the next line of the activity.

ded

kik

1   ded kik ded kik ded kik ded kik ded kik
    dee ede kii iki led sik dig jig hig geh fell;
    lall laid jiffa dhal keda skill fell deaf jelli
    ella dellia sailed fellas jagged silk dished
    sell dahlias sail seas feel leaf kill ease

2   all sails fall as ash gases dashed ale kegs;
    lasses sell ladies jig slides as lads sell dads figs;
    filled kegs half fields as jell fishes failed;
    saki slides as she half eased jailed lads dial;
    lassie seeks lass leaf as hall fills all dales

dcd		k,k

3   dcd k,k dcd k,k dcc k,k dcd k,k dcd k,k;
     cck,, dcded k,kik dcded k,kik dcdedc k,kik,;
     flick, deck, licks, jacks, lacks, dicks, kicks,
     click sick cellis hicks lacks lick jicks cakes;

4   cefs lacks calls, all cefs kick hacks deck;
     call fellas, call gals acasa aces, chads chess;
     caddies facial lacks chief dice, classic access
     slack slicks, flack his dashed lace head flies

5   diced lice, hacked sack, filed cases, glacial chaos,
     cased icicles sacks acacia, fickle calas, decked hat,
     ask alice if cassie sick lasses ache hailed delcie;
     caseck kajeck has sickle cell, she called her classes

MEMORY BOX

- Keep your feet flat on the floor, one slightly in front of the other
- Sing the new reaches softly to yourself as you type with rhythm
- Tap the space bar once to leave a space between words and groups of letters
- Type each line three times
- Save the document on a storage device

NOTEBOOK 4: USE THE CORRECT FINGER

Modifier keys: Caps Lock and Shift key

The Modifier (shift) keys: *In the following exercises you will learn how to use the shift keys to type upper-case characters (CAPITAL LETTERS). You will find a shift key on each side of the keyboard. To type an upper-case character, depress the shift key with the little finger of one hand while you type the letter with the designated finger of the other hand. Example, to type A,* **depress** *the right shift key, then type A. Release both keys immediately. Repeat this action using the left shift key to type O. An easy way to remember what to do is to memorise the steps:* **depress** *the shift key,* **type** *the character then* **release** *both keys immediately.*

Use the **Caps Lock** *to type blocks of text such as a main heading or sub-heading.*

Exercise 5: New reaches: Left Shift Key   Right Shift Key   x . z " " ' ' ,

Set the left margin at 5 cm (2 inches).

Type each line three times.

This exercise introduces the double quotation mark. This is **not** the same as two single quotation marks. The double quote is obtained by holding the **Shift** key and striking the single quote.

For left capital use right shift

For right capital use left shift

1   aAa sSs dDd fFf ;:; lLl kKk jJj A:S Ldf:
    Al Ll Id Fu Je Dk Si Kg :s Gh Jd Eh Ig:
    Alice: Chaka: Eddie: Delcie: Faces: Sack:
    Lecia: Gesha: Icicle: Kassie: Hilda: Jada:
    "Shales held all cheese cakes" said Jessica Kadlec

sxs

l.l

2   sxs l.l sxs l.l sxs l.l sxs l.l sxs l.l sxs l.l
    sxs l.l axa sxs l.l dxd fxf lxl kxk gxg hxh ;x;
    sxs l.l cxc ,x, lix x.x Axis exe lxi fax sex sx.l
    flex. Slax. Lex. Sax. Lex. Fix. Hex. Exhale.

3   sxx l. sxs l.l sxsx l.l. xsx .l. xas .lk sax l;
    ax ;. Sx l. dx k. fx j. gx h. sax lxs. Dex ki.
    ax ;. Sx l. dx k. fx j. gx h. sax lxs. Dex ki.
    .Sax ... Hex. Sxl. Sxa. Sxi. Sxk. Sxf.
    Dixi Alex faxed Lex six. Jex fixed all dex hexed axis.

4   exhale exhaled fixes exiles Axiel Sixfam's hoax.
Lix sixs lax. Saxi exed fixed jix. Essex's dix.
Jex fixed six faxed axe sxl. Sxc Cxc dsxd l.lsxs
Sax faxer dex xef xik xaj affix sexes excess l.lxs

| aza | 5   aza ;"; aza ;"; aza ;"; aza ;"; aza ;";aza ;"; aza ;"; | ;"; |

zed zsz zaz zil ezk Liz   rez zil zek zew liz zul eiz
"Lessie is selfish," said Clessie. "She is a laze."
"Jessie laughs. Cecelia's gazelle laughs less."
"Lazag," Called Jake. "I said I did see gas leaks;"

You have now learnt enough keys to type some new words at a faster speed.
With regular practice you will soon master the keyboard.

6   "Aziz Hazez" Zekiz, Zisca "Jeliz,"Zid,Jigz,
Iza Laza, Zilca "Zaceiz" Zelda "Dazel" z
Aza Jeze legz Cadiz, "Jizac Zekz" Gez Zilig
Dida Zaed, Kizi Gaza, Hazak Lazad,Fiz;
Zikki Zed dazed Eliza Zee, " Dezi Zagz" Zez

| aza | 7   ;'; aza ;'; aza ;'; aza ;'; aza ;'; aza ;'; aza ;'; | ;'; |

a' s' d'f' ;', l'k'j' g'h'a's'd'f';l'k'j' g'h ;';
giz's diz's zez's fil's calz's fed's ak's zezl's
'Zac' 'Laz' "zef" zif Faz,"Liz" zed zig zag;'
Jaze's laze Cadz Zel's Ada's Feliz ziz's zag'

8   Kadz's ice fields glazed Zalli jaze's ziz's
Zada's jazzed glasses fell. Gizelle sizzles
Alizia,Liz's Zida's jazell's iced zig Zefa's
Kaza fielz Zack jiz's, Chez's Fizkle's Azi

MEMORY BOX

- The double quotation mark is not the same as **two** single quotation marks
- The double quotation mark (double quote) is obtained by holding the shift key and striking the "/" key

- The first letter in each box indicates that a new reach is to be typed, and which finger to type the new reach with
- Keep your eyes on the copy. Do not attempt to correct mistakes
- Set the left margin at 2 inches (5 cm)

NOTEBOOK 5: CORRECTION OF ERRORS

Proofreading means checking your work when you have finished typing to be sure you typed exactly what you shoud. Whether you make mistakes regularly or not it is your responsibility to proofread. Ask someone to read the original while you follow on the screen or vice versa.

Accuracy will improve steadily if you keep your eyes on the text while at the same time maintaining good typing rhythm. The exercises you will type from here on are designed to improve speed and accuracy.

Correction of errors
Typing students, especially those preparing for examination should know the penalty for each type of error. Errors include the inclusion, and/or omission of a word, block of text etc. in the wrong place, and failure to apply the rules and principles of grammar and typewriting. After typing, check the soft copy against the original and correct all errors. To avoid repeating errors adjust faulty typing techniques and correct errors as soon as you discover them.

Methods of correction
Delete: To delete one character, word(s), or a block of text:

i   Select the text to be deleted by positioning the cursor before the first letter in the word, click the left mouse button and drag it accross to the last letter.
ii   Press the delete key once and the selected text will disappear.
iii Continue typing.

(Also see Unit 12)

Exercise 6: New reaches: r   u   t   y   /
Set the left margin at 5 cm (2 inches).
Type each line three times.

frf   **juj**

1   frf juj frf juj frf juj frf juj frf juj frf juj frf juj frf juj;
Frr juu rfrf ujuj ruf ruj jur juur frru hyuj suez usher
free Juju Luces's full. Julia's shuffles are ruffled.
Ucla sells juices, iced. Rufus culls fish heads.

2   "Ucilda Ridge guards such fishes:" Alice laughed.
"Surely." Said father, "All Hazel's cards are here, Gilda."
Africa, Israel, Russia and Fuji had the usual guides
Jursca Guzreff shall like Druell Fazeed

3   Russel guessed Ursula was sure Rakha Rahael sailed aside
As Shurla hurled a rude guruh's crushed head, Urcil giggled;
Keisha Kurla shall judge curled hair jiggles
Julia Jodi cried as her crude ruler sailed

ftf   **jyj**

4   ftf jyj ftf jyj ftf jyj ftf jyj ftf jyj ftf jyj;
ftf jyj ftt jyy fyt jty stjy jyst try yut yet:
fat yet set jet urt tru atu uit tui lau hau.
hurt Kurt suit Tuit tuil crui druf surf lur

5   Lydia Guy says the Gulf States fuel is really ready.
Jessie's faith lasted all his little lusty life:
"July's Saturdays are great." I like Fridays.
August's Thursdays are crude. Tuesdays are the best.
Saturday, Tuesday, Thursday, Friday. All days.

aza   **;/;/**

6   a ;/; aza ;/; aza ;/; aza ;/; aza ;/; aza ;/;
July/August Thursday/Friday cruise/sail
Light/Dark see/hear/taste fair/ugly
Zaire's Rasta/Dreads failed last cricket test.

MEMORY BOX

- First letter in each box indicates which finger you should use to type a new reach
- Type each line three times
- Keep your eyes on the copy
- Adopt correct sitting posture
- Use the correct guide finger for each new reach

Exercise 7: New reaches: w   o   ?

Set the left margin at 5 cm (2 inches).
Remember to type each line three times, with a clear line space between each group.
Leave 2 character spaces after the question mark.

sws

lol

1   sws lol sws lol sws lol sws lol sws lol sws lol;
    sww loo owl wol wof ows low wo; ow; sows stow.
    Oslo orgy grow swor word fowl wolf slows wow
    Screw arrow worms world lower slows cows rows.
    Chewer dower rower fewer wards weirdo hewer sew.

2   Jade saw the waters swell as Wallace looked ahead of Hewitt.
    The close shallow water did not curb their swooning today.
    Orwell was always ready while Sheila waited for the wise girl
    All laws were waded through at the court of justice halls today.
    Wilkie walked where wild flowers will grow while water flows.

aza

;?;

3   azA ;?; aza ;?; aza ;?; aza ;?; aza ;?; aza ;?;
    A?a ;?; s?s l?l d?d k?k f?f j?j h?h g?g a?a
    ?w s? o?o u?u y?y t?t r?r e?e w?w d?a
    a?a ;?; s?s l?l d?d k?k f?f j?j g?g h?h ;?;
    Sad? Why? How? Gone? Dead? When?

4   Will Azaria tell Zelda's side of the tale?
    Did you guess the correct order of the words?
    "Earth works?" Did you ask for the hat also?
    Really? Truly? Who is this beauty? Isn't she cute?

5   Will Hazel Keseke raise the price of sweaters after Will's prices fall?
    While he walked away, Walter Woods saw the owl with the bowl:
    High Courts let all foolish laws fall as to wit they lowered the case.
    Willis Oldfews saw the willows he hewed at Crow Prowler's yard.
    After Drew's, Lady Fowler, the dowager looked blown away.

MEMORY BOX

- Adopt the correct posture and keep your eyes on the copy
- Type each line three times
- Leave one space after colon, semicolon and comma
- Leave two spaces after a full stop, question mark and exclamation
- Position the book at a slope to the side of the keyboard where it does not affect use of the mouse

Exercise 8: New reaches: v b m n

Set the left margin at 5 cm (2 inches).

fvf   **jmj**

1   fvf jmj fvf jmj fvf jmj fvf jmj fvf jmj fvf jmj
fvv jmm vfv mjm vm; msl lim ved vak maj
jam kim lov cav vau vol mod ami ave umv vag
vote, jams moss love some viva most germ dove.
James gave Velma's velvet kurma to Mavis Cave.
Dreamers Mountains may see climbers from many miles away.

2   Verda closed the vault door very carefully today.
Roma and Edith were room mates at school.
Most times Samuel mixes dove drinks with Smalta
Verol, Dove, Mala and Mervyn versified seven poems on the
vessel today.
Curves come smaller. Most are much wider these days.

fbf   **jnj**

3   fbf jnj fbf jnj fbf jnj fbf jnj fbf jnj fbf jnj fbf jnj
fbb jnn fbf jnj fbb jnn Jan nag gin kin won Ron
cub rob tub dub run rub cob eon one Don fun fob;
Narace sobs and runs a yarn, then turns to burn the urns.

4   Fine bones and brand new snow brings Tone running.
Easter brings buns, eggs and funny bunnies bundled as one.
'Golden Nuggets' is playing tonight in the cinema on Bush Road.
The newest cricket ball in the market is called 'The Kangaroo'.

5   Velvet brings Nell Brown ten new green ribbons annually
Granny Luces became a world famous runner after many years.
The Bank of Trinidad has engineered an enhanced savings plan.
Do you remember how Milo's secret made Marlon smile?

6   On Sunday at noon, Senna, Jane and Norris had seen Evadne
On Valentine's Day Margaret married the Merchant of Valencia.
Vernon, will not leave before asking the question that bothers him.
Dixie designs equally beautiful garments for ladies and men.

7   Yvonne met Mura Blackburn where Blanche sent Velma.
From Fedon in Grenada they were sent to Trinidad Pitch Lake
Cousins Bernelle Du Bois and Burnelle Nyack are firm friends.
Marjorie Lynnette, Ann Margaret, and Gabriel Wendell are
Hermie and Wilson's children.

Exercise 9: New reaches: q   p

Set the left margin at 5 cm (2 inches).

aqa

;p;

1   aqa ;p; aqa ;p; aqa ;p; aqa ;p; aqa ;p; aqa ;p; aqa ;p;
aq ;p aqq ;pp qa p; qaq p;p qwd po qsk pli qse aq;p
pol; qera ;pl aqs pki qde kip deq req iop qat p;y jip feq
tap poq sup pit urp laq sweep piss posse ques piro enq bp
qaq sop sp; ;lq qif peq que bop rap dip qua pop lap

2   Pommeracs, pomcytheres, pineapples and squash are favourites.
Pirogues are quite safe in South Quay, Port of Spain.
Parkites Sports Club is quick to quibble, "We play in Queens Park."
Quick witted Quincy quickly ran and left the Paraquettes quaking.

3   Police and Prisoners squall about spies in the squalid quarters.
Proud squires quelled quarrels and proffered punch to quench all.
Parrots, quails, and monkeys chased the quenks at play.
Squealing sqaws squabbled as pushing squatters played squares.

NOTEBOOK 6: CORRECTION OF ERRORS, CONSOLIDATION EXERCISES

Correction of errors

Insertion or omission of a letter or letters, word/s, paragraph/s or even a whole section of a document are some common mistakes which typists make from time to time. Therefore, proofread your typescript and correct errors.

Consolidation exercises

The following exercises are intended to help you build self-confidence and strengthen the weaker fingers. Copy each line three times then leave an extra line before going on to type a new line. At the end of each exercise **proofread** *and correct errors.*

Exercise 10: Consolidation

Let us use all of the reaches that we have learnt so far.
By now you should be able to strike the keys automatically without looking at the keyboard.
Set the left margin at 3.75 cm (1.5 inches) and type each line three times.

1   asdf ;lkj asdf ;lkj asdf ;lkj asdf ;lkj asd'lkjf
    ded kik ded kik ded kik ded kik ded kik ded
    dcd k,k dcd k,k dcd k,k dcd k,k dcd k,k dcd
    frf juj frf juj frf juj frf juj frf juj frf juj

2   ftf jyj ftf jyj ftf jyj ftf jyj ftf jyj ftf jyj;
    sws lol sws lol sws lol sws lol sws lol sws lol
    l.l sxs l.l sxs l.l sxs l.l sxs l.l sxs l.l sws;
    fbf mj fbf jmj fbf jmj fbf jmj fbf jmj;
    fvf jnj fvf jnj fvf jnj fvf jnj fvf jnj fvf jnj

| aqa |

3   aqa ;p; aqa ;p; aqa ;p; aqa ;p; aqa ;p; aqa ;p;
    aza ;/; aza ;/; aza ;/; aza ;/; aza ;/; aza ;/; aza
    ;'; aqa ';' sws ;'; aza ;'; sxs ;'; sxs ;'; sws ;';
    ;"; ded ;"; frf ;"; ttf ;"; fgf ;"; fvf ;"; jnj;
    ;:; Ded ;:; fRf ;:; Sws ;:; ttf ;:; Red ;:; Grs :;
    fgf jhj fgf jhj fgf jhj fgfjhj fgf jhj gfg jhj fgf;

| ;p; |

4   Mahla's dad had cracked half of all Razack's cakes.
    Elsa sold Eddie's checkered easles at Ella's weekly sales.
    Ilya will hold all the tickets for the cricket wicket keepers' fans.
    Delcie knows Elsa Williams is Lilh DuBois's teacher not Jeanette's

5   The stylish hat she wore that day is grandma's best head piece.
    Venus Martian and Pices Jupiter will merge all their businesses.
    Sixty tornadoes swept through five states in America on Wednesday.
    News of the great disaster flashed on every television set today.

Exercise 11: Speed and accuracy

Calculating typing speed

This activity is designed to help you work out how quickly you are typing. Typing speed is calculated by dividing the word count by the time you took to type the passage. Note that the word count is calculated by dividing the number of characters in a passage including spaces by five.

```
Example:
Assume that you typed a passage in 10 minutes
The character count = 820
The word count = 820/5 = 164
Then your typing speed = 164/10 = 16.4 words per minute.
```

Set the left and right margins at 2.5 cm (1 inch) from the left and right edges.
Type each passage in double line spacing, then calculate your speed.

Passage 1   Cricket World Cup safety rules have brought changes that some folks are unhappy about. Fans expected zeal and vigour on the field as well as quick running between the wickets – not apologies for failure to perform well. We realise that the outstanding teams are better prepared than the poor performers who appeared to be unprepared and out of their depth. Two well-known personalities of the sport have died in the same country. Joy, excitement and anxiety are three of the reasons that have been suggested for the abysmal performance of the team. It has been rumoured that some countries of the east have already decided they will no longer employ foreign coaches: but the West Indies Cricket Board of Control has taken no such decision.

Character count: 735
Word count: 147

Passage 2   As a sports fan travelling to the West Indies for the Cricket World Cup Tournament, be sure to include sun tan lotion, a pair of dark shades or two, hats with a brim, a strong umbrella, some sleeveless jerseys, and shorts of varying lengths. To avoid dehydration on hot days, do drink lots of wholesome liquids. Important! Include a rain coat in your luggage because cricket and rain always follow each other. Always have some means of identification with you as you move around. When you shop for clothing you should make wise choices. Some fabrics wear well on hot days. Cotton and linen keep the wearer cool. "Some people feel dizzy in the summer so avoid over exposure on hot days." quoted Joyce Buxom.

Character count: 706
Word count: 141.2

Passage 3   All Caribbean community countries celebrate common feast days and festivals. Christmas is an example of a common feast day. Easter is another. Almost every country of the community is independent. Reflecting on independence often leads to reflections on the abolition of the slave trade by the British. For me the parallel is that abolition of

the slave trade and independence are two similar situations. With the abolition of slavery, the slaves found themselves responsible for their survival for the first time since their brutal uprooting from Africa – the 'mother land.' 'Massa day done.' This was the joyful cry. However, in some ways the period immediately following their freedom was in itself even worse than slavery.

Character count: 611
Word count: 122.2

Passage 4   The post-independence era saw the fledgling independent Caribbean states struggling to do what the freed former slaves once had to do – be responsible for themselves. For most it was not easy. For those with some resources to rely on, it was less difficult. Even before the era of independence there was the ill-fated attempt at federating the West Indies. The failure of the federation is well documented and immortalised in 'Federation', a calypso sung by the world renowned calypsonian Fransisco Slinger – 'The Mighty Sparrow'. He sang this calypso in the Independence Calypso King Competition which was held as part of the celebrations when Trinidad and Tobago attained independence from Great Britain forty-five years ago. Kade Simon – Lord Brynner won that competition.

Character count: 752
Word count: 150.4

Exercise 12: Consolidation

Set the left margin at 3.75 cm (1.5 inches).
This exercise will help you to become more skilful on the keyboard. Try to type a little faster every time you repeat a line.

Justice Junior judged the jiggles as the jugglers jested with Julien.
Jabbering is another way of speaking quickly and unclearly.
The holly holders held the harvest holiday feasts at Halfway Hall.
Truly, Fifty Fridays ago Faith failed to follow the road to Fuller's Falls.
Soldiers strolled softly as several smokers sallied forth in soiled socks.
Lester left Lall's lazy dolls to thrill the strollers at Lasell's Cartel.
Dexter exacted taxes to fix the exits in Rex's six large pixi taxis.
Wendell wed Wattie Welch's daughter at Wilford on a wet Wednesday.
The lovely Eve veiled herself at Valley View Cove where Yvette waited.
The youths yodeled and ate jelly, yelling lustily yet, at Yellow Yolk Trace.
At South Quay, the request to search the aqueduct all day was his quest
although the acquired quack queries quoted qualms about the quotient.
Zaza Zander zig zagged the lines on the azure blazer, but
she stitched on two dozen zazzy zips so well there were zero errors.

NOTEBOOK 7: ACCURACY/SPEED CHECK: CONSOLIDATION EXERCISES – SPEED BUILDING

Now that you can '**touch type**' connected matter with reasonable speed and accuracy, the following longer sentences provide drill (**workout**) for each letter of the alphabet. **Type each sentence twice**, proofread and correct errors.

Check the dictionary for correct spelling, pronunciation and meaning if you find some words sound silly, wacky or zany. You might be amazed to discover that they actually exist!

The warm-up drills help you to type each letter of the alphabet with reasonable speed and accuracy. Type each warm-up drill twice before you begin the activity.

Exercise 13: Consolidation

The following exercises will help to improve both speed and accuracy as you try to overcome your weak reaches. The first red letter in each line is the letter being drilled.
Set the left margin at 3.75 cm (1.5 inches) and the right at 2.5 cm (1 inch) from the edge.

Activity 1
Warm-up drill:
The quick brown goats jumped over the lazy fox in the valley.

asdf ;lkj as all sad add. At Allison and Alma's Auto place, waiting customers who use the foot spa do abate feet trauma because as Andy repairs the cars, Asha massages their feet.
Fbf jnj bailey bridges obliterate gaps between Bushland and Brothers Estate from where Abel, Bertha and Brian Lara will bring back the bats and balls which the blizzard blew away.
dcd k,k ca co cu ci ce curling, churling chips and cubed cucumbers with chopped cranberry.
sauce cooked in a saucepan combines well with conch appetisers and ice cream desserts.
ddd da de di du do donkeys downed dry reeds and pods on the hard road after dinner in a dull, mouldy yard near Woodstock with the deafening grinding sounds heard on the drills.
Ded ea e; es el ed ef el ek je eh eg The estatic, excited lasses Edith, Edna and Mae excelled in their exams and were recently endowed when they ended all their speeches at Grey Hall.
fff fa fo fe fi fa fu feed the fellows well as food is free. Focus first on full finishers finding the fall felts from Africa. France and Frankfurt had fully followed Frank's fishy tales.

Activity 2

Warm-up drill:

Tomazine Kitchener lives at the entrance to Uriah Butler Avenue, in Fyzabad. He works at Jumbo Hardware on Kowlessar Branch Road in Cedros near the green exit sign at Zeno's Quick Shoppe.

fgf ga ge gi gu go the grown girls gave grey gloves and a great bag of green grapes to grannies, at Great Goose Groceries in Green Gables close to 'The Golden Girls' Gateway

jhj ha he hi ho hu Hilda held the heavy hose while hanging on to the hoopla game as Holly brush cut the bushes while Hope was hurrying the harried horses home towards the halfway house.

Kik ia ie ii iu io is id if ig I; il ik ij ih ig Iris ignored the high ideals Ivan the idealist brought with him, but the idiot still idles with the identical twins in Arima when the traffic is heavy.

jjj Jmj fvf ja je ji ju jo Judas of Jerusalem jested with just Jesus's life and failed to inject concern for His abject but unjustly decreed jostling jarred jaunty journey to Calvary.

kkk ka ke ki ku ko Kinda kept keys, kegs and kernels in a kiln and kidded with the kids from the kingdom who wore kilts, knowing their kindred was King Kingsley who knighted Sir Kenny.

lll la le li lu lo Lynn Lobin laughed as Liz's slow milling class walked close to the soiled billboard with loose hand bills falling all over the floor Zelda had recently cleaned.

Activity 3

Warm-up drill:

Eva and Greta Gay will guard Leo as Zila keeps Judge Felix in Mulchan Lane with Zeb Chan the quick axe thrower.

jmj ma me mi mu mo On most Mondays major majestic mountains are mentioned whilst we are moving from river to river following meandering streams during summer time.

jnj na ne ni nu no The rash left by stinging nettles sank into the skin of newborn infants at the time of the new moon. No one had seen the green screen which is used to cover the cribs, hidden in the corner.

lol oa oe io ou oo unknown to Tom Lothad the oats and oak with the stolen corn thrown overboard because they had found no sound ground over the snowed-in woods surrounding Oakley's Corner Store.

;p; pa pe pi pu po Oprah had put Paul's cup on the cupboard to pend while Pele stooped to punch Phil. Peter pushed his soup to Joseph while pulling pens upwards upon a looping pole.

aqa qa eq qi oq qu Quick, the quiet quart querried the quaffing Quaker's qualifications as a father to quadruplets after quadrupeds dancing a quadrille made him quail at South Quay.

Activity 4

Warm-up drill:

Fans saw James' prize at Zeus Hall as Gill's excited brows quickly fell on Mr Pope's vanity zip.

Fr**f** fa fe fi fu fo Fred Fidget fought for half of the fief of Fidel Fiddle, his father, but it is just a half frozen field on the farm marked off for farming by the funny fence near Fodders oilfield.

Sss sa se sis u so Susheila's sou sou is such a surprise that simply saying some joined was sufficient for Yasmin's curious siblings to shin down the post shindying and shallying all the way.

f**t**f Trendies Stores tend to sell tents for a tenth their true value although the tepee types are costly but his tenant's old tricks tend to have him tense as his tenure won't last till the time he tenders his note.

j**u**j eu ua ou ui ua uu undue hurry will cause dumb action by uneasy rulers who entrusted themselves with the unusual pursuit of lusting after the fountain of youth, thus causing the quango rulers to feud.

f**v**f va ve vi vu vo virtuous virgins live in Virginia above Vernetta Verdant's cove though they strove to move from Vegan Town, they found Venice had voted for no vegetarians.

Vernon verified the verdict with Claudette before leaving Vancouva

Activity 5

Warm-up drill:

Obviously the vivacious brunette observed the teacher had strayed from the objectives of the lesson, hence she waved the hand with the bronze coin on the obverse side, out of his view.

S**w**s wa we ei wu wo Walter Weisa is wacky to wade into the water with a wad, waving at the waiter while the wading bird wedged the wafer in the wadi, waking the wagon driver.

s**x**s ax ix ex ox xu "the x-rayed xylem is the exception we expect for Xmas," said Mr X who explained the exact make up of the X chromosome not extinct in but part of all men.

j**y**j.ay ye yi oy yu Yvonne's yellow yearbook yielded a yarn of years gone bye and spoke of the strong yen of the yeomanry and the yelp of the yes-men among whom was a yobo.

S**z**s za ze iz uz oz Two zonked, zoned zebras Zanzibar and Zen, live in a Zulu ziggurat where Zenith played the zither while lazing as the zephyr wafts leeward from the lake.

You are well on your way to becoming an expert typist. Let us now try to master the figures and symbols on the upper reach of the keyboard.

NOTEBOOK 8: FIGURES AND SYMBOLS

The following exercises introduce figures and symbols. The figure/symbol keys are located on the fifth row of the keyboard. You can see clearly that each key in this row carries two distinct characters.

Figures are typed in the lower case and symbols are typed in the upper case. Each figure/symbol is assigned to a guide key/finger.

Extreme accuracy in typing figures is important. Therefore use correct fingering for typing figures. **Proofread and make corrections regularly.**

Exercise 14: New reaches: 3   8   4   7

Set the left margin at 3.75 cm (1.5 inches).
Warm-up drill:
Fires blazed across vented rooms as King Jex's quick, quaint, grey water pumps left the mount zone.

de3ed

ki8ik

1   e3d i8k e3d i8k e3d i8k e3d i8k e3d i8k e3d i8k
    e3ed i8ik de3ed ki8ik e3ed i8ik de3ed ki8ik e3ed i8ik
    de3ed ki8ik
    e3d i8k e33ed i88ki 38 years, 83 days, all 3 days we
    worked 8 hours.
    For 8 years, 8 months, 8 hours, 8 minutes, we were paid
    3 times in 3 years.
    383 bounty hunters trekked through Africa for 8 years,
    3 months, and 3 weeks.
    Columbus saw 3 mountain peaks, thanked God and said:
    "Voila Trinidad."
    Whether it was 3 years or 8, we do know that Robinson
    Crusoe lived in Tobago.
    The storm arrived at 8 o'clock and lasted 8 hours. Some
    38 persons died, 3 drowned.
    Next 3 and 8 months we shall be 38 years old on day 3 of
    month 8 this year.

Fr4rf

ju7uj

2   r 4f u7j r4f u7j r4f u7j r4f u7j r4f u7j r4f u7j r4f u7j
    r4f u7j
    fr4rf ju7uj fr4rf ju7uj fr4r ju7uj fr4rf ju7uj fr4rf ju7uj
    fr4rf ju7uj

3   Bo stayed on the 7th floor for 4 hours from 7 o'clock and
    returned to 74th Street.
    Harry is 4 years old, dad 47, mother, 44. They have 7 children,
    Jane has 4.
    7 bunches of bananas each had 7 hands. 4 hands had 4 fingers.
    The rest had 7.
    The 74 year-old pilot of the 44-year-old 747 engine retired
    after 47 years service.
    The result is Pakistan 47 runs, India 74, West Indies 38, Zimbabwe 87.
    The crate had 84 plums, 33 guavas, 78 cherries, 47 toulums, and 34
    coconuts.
    Laura left 48 minutes ago for 3748 77th Street, thence to 784 73rd
    Avenue.

Exercise 15: New reaches: 1   0   2   9

Set the left margin at 3.75 cm (1.5 inches).
Warm-up drill:
The rich men will buy six zebra pews as a surprise gift for Jackford Haysthorpe of Earthquake Avenue.

aq1qa

;p0p;

1   q1a p0; q1a p0; q1a p0; q1a p0; q1a p0; q1a p0; q1a p0;
aq1qa ;p0p; aq1qa ;p0p; aq1qa ;p0p; aq1qa ;p0p; aq1qa
;p0p
count 0 hens 1 semp, 10 pikoplats, 100 parrots, 1 pup,
10 goats and leave.
10 burst mains, 100 lengths copper, 01 street lights and 101 telephones.
10 add 01 is correct but 100 plus 10 multiply by 10 is the same thing.
Antiguan Police sent 1 reporter and 0 fans home from the world cup game.
In 3 infant classes the ages ranged between 4 and 8 years
with 10 aged 7.
Candidates A, B and C polled 180 votes each but D top scored with 249.

sw2ws

lo9ol

2   w2s o9l w2s o9l w2s o9l w2s o9l w2s o9l w2s o9l
sw2ws lo9ol sw2ws lo9ol sw2ws lo9ol sw2ws lo9ol
sw2ws lo9ol
Jane owes 2 cents, John 9 dollars to their teacher Germaine of Maran.
Buy 29 lilies, 9 roses, and 2 lady slippers, from Miss Florie the florist.
Pedro Cupido Davis is 97 years old and wants to be 100 on 31 January.
12 owls hoot hoot 7 times. 38 toucans flew 98 miles in 40 hours.
At the zoo we saw 9 snakes, 3 tigers, 4 lions, 2 camels,
8 turkeys, 23 ducks.
The last count yielded 300 heads, 60 desks, 297 chairs,
and 7 chalkboards.

Exercise 16: New reaches: 5   6

Set the left margin at 3.75 cm (1.5 inches).
Warm-up drill:
Kim cheered excitedly when his father Garvin brazenly drove his new Lexus jauntily down
Parquet Avenue.

ft5tf	jy6yj

t5tf y6j t5f y6j t5f y6j t5f u6j t5f y6j t5f y6j t5f y6j
Ft5tf jy6yj ft6t jy6yj ft5tf jy6yj ft5tf jy6yj ft5tf jy6yj
Today Shivon sold 5 hats, 6 ties, 56 were on the
Tobago tour.
Store 163 crates on 60 trucks with 85 boxes, 97 cans, in 42 trunks.
Give 203 pens, 75 pencils, 100 note books, 68 rulers, to 10 charities.
You may travel on flight 047, E35, C983, LV61 departing at 0800 hours.
Bus No 06 goes to Penal, 95 Morvant, 48 Fyzabad, 14 Debe,
72 Balandra, 1 Couva.
Call the Sales Department at 765-8934, or leave a message on 321-7654
Repeat figures when taking a message: 6 could sound as fix sometimes.
Do not mix ate with 8, nor 7 with 70 or eleven but saying 27 instead of
7 is bad.
We had 3 trees, 5 knives, 9 twines, 8 gates, 7 leavens, 11 dozens
and 10 hens.
7 ravens ate 9 lines 8 limes, exit 4 doors and 2 more, climbed 3 trees,
baked 1 cake.
12 twits twirled 20 times late as 10 friends ate 8 cakes, but 11 twins
swam 12 miles.
37 hats fell on Nell as she quickly sold 56 zinnia bells to 90 buyers in
Top Store 24.

NOTEBOOK 9: THE NUMERIC KEYPAD

The numeric keypad is located on the right of the alphabetic keyboard. It is made up of four columns of keys. A finger of the right hand is assigned to each column. The thumb is assigned to
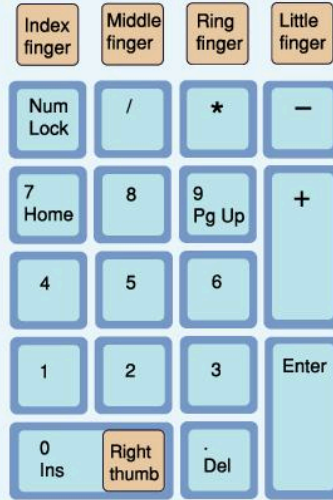
Numeric keypad

0/Ins. (See the diagram above.) The main function of the numeric keypad is for figure work. Some examples are:

- preparing financial documents, for example estimates, invoices and accounts

- calculating timesheets and payrolls

- converting quantities, for example currencies, imperial units to metric and vice versa

- performing other mathematical tasks.

The figure keys on the top row of the alphabetic keyboard may be used when you are typing a document that includes numbers. The keys on the numeric keyboard are placed close to each other, similar to those on a calculator. This is more convenient to use when typing numbers only. To activate the numeric keypad, press the Num Lock key.

Congratulations, you did it! You have completed the keyboarding course. Now let us move on to a few professional typewriting techniques.

NOTEBOOK 10: TYPEWRITING TECHNIQUE I

Date, time, numbers, punctuation marks, symbols, expressing money within text

Type your name and the date on the top left corner of each assignment you do. This will help you to file printed work in chronological order (that is, by date).

Date: The date can be typed in more than one way. However, the recommended order is: day, month and year. Type the month in words to avoid confusion, for example: **05 December 2012.**

Time can be expressed using either the 12-hour clock or the 24-hour clock. When using the 12-hour clock, separate the hour from the minutes with a full stop followed by a.m. or p.m., for example 12.15 a.m. and 3.45 p.m. Four unspaced digits are also used to tell the time with the 24-hour clock. The digits are not separated. The first two represent the hour and the last two represent the minutes. Type the digits first, then type 'hours' or its abbreviated form 'hr' with or without a following stop depending on the system used for typing abbreviations. For example, 0100 hours (one o'clock in the morning) and 16.45 hrs (quarter to five in the afternoon).

Numbers as figures or words: Type all numbers as numerals, e.g. in statistical tables, reports, house numbers, postcodes, insurance policies, certificates, etc. For the references in documents, if numbers are required they may be used alone or combined with letters. Use numerals when the abbreviation for number (no.) is used, for example No. 10 Downing Street. When the numeral one (1) stands alone or when a number begins a sentence, use words.

Numbers with symbols: Use figures with the following:

- With percentage and with the currency symbol, for example $4.00 is 25% of $16.00.

- To express measurement and quantity, for example 10 kg, 15 reams of A4 paper, 100 m, 32°C.

- To express time using both the 12- and 24-hour clock method, for example: 2.00 p.m., 14.00.

Spacing after punctuation marks: Leave one character space after comma, colon and semicolon. Leave two character spaces after the full stop, question mark, and exclamation mark when it is at the end of a sentence.

Symbols: The symbols over the numbers in the fourth row are all upper-case characters. Hold Shift and press the number key to type the required symbol.

A hyphen has no space before or after it. It is used as follows:

- In combined words, e.g. third-class, mother-in-law, right-hand.

- To join parts of a word, e.g. extra-marital.

- When a word breaks at the end of one line and continues on the next.

- In compound adjectives, such as blue-eyed baby, full-time job.

Dash: The symbol for the dash is the hyphen with one space before and after it. When you type a space and one or two hyphens between text, Microsoft Word automatically inserts an en dash (–). If you type two hyphens and do not include a space before the hyphens, then the longer em dash (—) is created. You may also create the dash when you hold the CTRL key and press the minus on the numeric keypad. For example: 'His view – and it has not changed' OR 'His view––and it has not changed'. When a dash begins a line it should be typed against the left margin followed by one space.

Money expressed within text: Type money symbols first. The figures in dollars and cents as well as pounds and pence are separated by the decimal point. Two figures must follow the decimal point, for example $12.01, or $25.89 and £78.43 or £83.02.

To get symbols such as £, ¢, or € poisiton the cursor at the point where the symbol is to be inserted, click **Insert** then **Symbol...** on the menu bar. Select (**normal text**). Scroll through until you see the symbol you want. Click on the symbol and click the **Insert** button. Close the **Symbol** dialogue box.

Note that the symbols for dollars and cents, as well as pounds and pence are never used together or included in the same amounts.

Exercise 17

Set the left margin at 3.75 cm (1.5 inches).
Warm-up drill:
The ladies could not believe that razors used for shaving require analysis by experts whose knowledge make us aware that quality plays a major role in the price of goods.

Instruction for technique drills

Excluding the bold words on the left-hand side which indicate the character or symbol to be drilled, type the following exercises three times.

Character/symbol	Typing exercise
Date	Her letter of 29 March 2007 states that Good Friday will fall on 07/04/07. However, the examination will take place on 15/10/2007.
Time	The interview appointment is for 11.15 today but she must leave home at 9.00 a.m. to arrive on time. The ferry arrived at 05.56 on Sunday 06/06/06.
Numbers with figures and words	The school population is 1675–1850 pupils, 100 teachers and 75 auxiliary staff including clerical, secretarial and maintenance personnel. Twenty absentees on the teaching staff is ridiculous.
Numbers with symbols	Pay $13.86 for 2 bags of oranges. The goods from England arrived today. They cost $100.56. She said 35% of 200 was not enough. She sent this formula: = (b3*c3 + d3)

Asterisk*	The asterisk* (sometimes called the star) is typed after the last letter in a word to indicate that an explanation will be given at the bottom or foot of the page.
Full stop, question mark, exclamation mark	Do leave two spaces after a full stop. "Should I leave two spaces after a question mark?" asked Mavis. "Leave two spaces after the exclamation mark!" shouted Sheila. Buyers beware! Every trade has its own tricks. Purchase only those items you need and can afford.
Colon, semicolon, comma	Spaces: Leave one space after the colon, semicolon and comma; there are no exceptions to this rule.
Numbers as figures	Counting from 6 is easy; but only stop after you have counted to 100. Stop when you count to 70; say 80, 90, shout 100! Then run away.
Symbols	Take this list to Shop #3 where Edith sells fur coats @ $150.00 each although she said profits were just about 20%. Davis' Half & Half Store, tagged bargains as 5% + 30% – 10% = (Save the best for last).* 'Happy Shopping!'
Dash	Calypso – an ancient West African tradition of praising or condemning the actions of others depending on where our loyalties lie – is a popular pastime in the Caribbean. The Prime Minister's Best Village Trophy Competition – a highly acclaimed festival – ends with the La Rein Reivé Show. Awaking late every morning – though heedless of time, helped for a while. Efficiency – especially in high-profile officials – is a very admirable quality.
Hyphen	She enjoyed very amicable relations with her sisters-in-law and mother-in-law. They loved shopping for mass-produced goods. The X-ray did not reveal the exact location of the fracture. The young intern had a very matter-of-fact approach. *Volte-face* is a French expression that means a change to a completely opposite opinion. But V-neck is a noun which means the neck opening of a dress, shirt, jersey, etc., with the front cut in the shape of a V.
Money	The price per pound of fish in the market today was: Carite $20.00, bonito $12.00, herrings (fry-me-dry) 3 lbs @ $10.00, red fish $15.00, big jacks sold at $7.00 per pound, and titiri $8.00 per calabash. Chris said shopping was so good today that the major currency notes were accepted everywhere. Joseph bought 4 navy blue blazers @ £250.99 each, 2 brown gabardine suits @ US$500.08 each and 12 pairs of assorted-colour socks @ £3.09 per pair, 4 ties at $15.07 each, 1 dozen shirts – assorted brands, colours and styles – @ $EC30.66 each, 6 Marino vests @ $EC09.07 each and 1 tie pin with a diamond stud @ $600.

NOTEBOOK 11: TYPEWRITING TECHNIQUE II

Additional characters

Apostrophe: This is used as follows:

- To indicate the omission of a letter, e.g. that's.

- To denote possession as in: Nathan is Rudder's nephew.

- To enclose a simple quotation within a sentence.

- As a single quotation mark used instead of a double quotation mark to indicate speech.

Note that either double or single quotation marks can be used, but the style used within a document should be consistent. For example: He meant 'The Trinity Cross' or; "He meant the Trinity Cross".

Double quotation marks: Used to indicate direct speech, these can be used instead of single quotation marks if that is the preferred style. Sometimes both the single and double quotation marks are necessary, for example when a quotation is within a quotation, as shown below:

"As the great Bob Marley said 'One love, one heart' should unite us all!" urged Ada as she concluded her rousing speech.

Exclamation mark: Must be followed by two spaces and it has the same effect as the full stop.

Brackets: Another name for brackets is parentheses. They are used as a brace to enclose an explanation or to partition part of a sentence to make it more meaningful, for example (for her absence).

Oblique/solidus: Used instead of 'or' and 'and'.

Ampersand (&): This is the abbreviation for 'and'. It is used in names and abbreviations, for example, Modest & Frederick Ltd; Mr & Mrs Malcolm Smith.

Abbreviations for measurements: The plural forms of abbreviated metric units of measure have no 's', for example: 10 kg, 5 mm, 2.5 cm, etc. The single quotation mark is used for feet, and the double for inches, for example: 1 ', 10 ". Also yd is used for yard, ft for foot or feet, and in(s) for inch(es). Leave a space between the figures and the abbreviations, for example: 3 yds 6 ft 3 ins.

Celsius is the metric measurement for temperature. The abbreviation for Celsius is C. Leave a space between the figure and the degree symbol, for example 6 °C.

Fractions: Microsoft Word automatically displays the following fractions in the format shown: ½ ¼ ¾ . The other fractions are usually shown as typed, for example: 1/3 4/5 7/8.

Type the numerator followed by the solidus (oblique) and the denominator then strike the space bar and the desired fraction will appear in the document. Leave no space between the parts of the fraction. If you are typing a number that consists of a whole number followed by a fraction, leave a space before starting the fraction, e.g. 3 ½ or 78 5/8.

Ellipsis: This is a set of three spaced full stops used within a document to show that words have been omitted – especially in literary work and quotations. The omission may occur anywhere in the passage. Unless it is required for sense, the ellipsis is not inserted if the omission is at the beginning or end of the quote, as it will be clear that the text is only an extract. If the omission is at the end of a sentence, a fourth spaced full stop is added. The fourth full stop indicates the end of the sentence.

Exercise 18

Type the following drills. They are designed to help you master the spacing used with punctuation marks. Excluding the bold words on the left which indicate the character or symbol to be drilled, type the following exercises three times.

Character/symbol	Typing exercise
Apostrophe	Miss Slater laughed when Mr. Maundy's jade bag fell on top of Mrs. Brown's red felt hat as Oscar's ball rolled down the aisle. Gema's stomach was always at odds with her appetisers – especially cake.
Single quotation	The class was reading Randolph's report, 'An Unknown Quantity' outside when the sleeping boy's scream was heard in the distance. By popular demand Jeanette Du Bois sang 'Dodo Petite Popo' to her grateful audience who later asked her to sing 'Misty'.
Double quotation	Edith shouted to Joseph, "Come along." "No. I must leave now," he replied, and ran away. "The double quotation mark is used 'interchangeably' with the single quotation mark to show where words written or spoken by someone are being quoted," Laura said to Stan.
Exclamation	"Stand at attention! Stand at ease! Left! Right! Left!" The commander seemed to be barking at his men as they sweated in the heat. "Not peach!" the butler exclaimed. "Today's guests love chocolate! Oh mama mia mama mia!" he shouted.
Brackets	His mother's call was unheeded as the (bibulous) lad headed for the soda fountain. A fable is a short story (in which animals or objects speak) that teaches a moral or truth.
Oblique/solidus	Oblique means a sideways direction. In typewriting, however, the oblique/solidus symbol is used instead of 'or', or instead of 'and or'. Youths/adults can purchase from the dime stores across the country.
Caps Lock	Depress the CAPS LOCK when you have to type a word, heading or line in upper case. You will find the CAPS LOCK key on the left of the keyboard just above the SHIFT key.
Underline	The underline icon follows the italics icon on the menu bar. It is used to rule a line under a word, sentence or heading, mainly to draw attention to the importance of the underlined text.

Character/symbol	Typing exercise
Ampersand	Instead of 'and' the ampersand is used in the names of firms and other organisations. Brendon Xcho got a letter from Mourdes & Storbech Accounting Ltd on Monday. Stephens, Todd & Foggarty Ltd as well as Woolworth Ltd, Nagib Elias & Sons Ltd, Aboutique and Gabriel's Frabric Store Ltd, once had branches on High Street in San Fernando.
Measurements	Buy 2 kg whole wheat flour, 1 packet of 5 cm plasters, 2 m of brown cotton at $4.00 per metre, 4' 9" skipping rope and change a $10.00 note at the bank before you come home.
Ellipsis	Careful use of the computer includes dusting the systems unit and the peripherals, … work environment clean and clutter free. "a new record for this type of crime. Anxiety on the campus after the mass murders was overwhelming. It all happened so very quickly. … surpassed human understanding I shall surely tell you how it happened."

Exercise 19: Alphabetic drills

The following alphabetic drills are designed to sharpen your typing skills.
Set the left margin at 3.75 cm (1.5 inches).

A asdf ;lkj as all sad add. Atiba, Aaron and Anderson achieved averages above all players in the All-Stars basketball game at Arima.

B Fbf jnj Brazilian Brandon Bridges brought batters from the best clubs to the baseball finals in Bolivia, where a bevy of beautiful bees buzzed at the brim of a barrel.

C dcd k,k ca co cu ci ce Candy and cake are delicious accompaniments to the cheese puffs, carrot sticks and crunchy cucumbers that Cheyenne carried to a picnic.

D ddd da de di du do 'Driving while drunk is definitely doltish and dangerous you doddering dimwit!' shouted Devon as Wendell tried to dodge the Datsun driven by Don the drunkard.

E Ded ea e; es el ed ef el ek je eh eg Even as Earl and Ernestine emerged from the emerald waters chased by eels the egrets on the banks of the river were engaged in pecking insects and eggs.

F fff fa fo fe fi fa fu feed Following furiously after the fleeing foal, five frantic fellows fell over the cliff and into the foamy sea where they floated safely.

G fgf ga ge gi gu go Gloria, Gretchen and Greta giggled gloriously at the gibbering gibbon as he glared and glowered menacingly in the glass cage at the Glasgow Zoo.

H jhj ha he hi ho hu Hold all heavy hammers by their handles but heave the lightest hoses to Henry who has hastened to hoist them over the house.

I kik ia ie ii iu io is id if ig I; il ik ij ih ig Insulting Ivanah is so incredibly impolite; it is impractical to insist that she includes ice cream with the icing ingredients in the imperial cake.

J jjj Jmj fvf ja je ji ju jo Jumping jackrabbits and juvenile jackals jostled as Jerome and Joshua joked joyfully while Jaden and Justin jeered at their jerking and jabbering.

| K |

kkk ka ke ki ku ko Keep the kitchen sparkling Kigel: fill the cracks, stick all tacks, block those holes, tack the sack, seek out leaks, unblock the sink and stack the crockery.

| L |

lll la le li lu lo Let us leave Lulu in Laventille where Llewellyn will use the shovel to level the soil and Larry will lift the loads of gravel while Lynette looks at the lovely landscape.

| M |

jmj ma me mi mu mo Major musicians make majestic symphonies that move some men to immortalise their magnificence and many to attempt to emulate them.

| N |

jnj na ne ni nu no Neila, newspapers notify the nation about noteworthy notions, new opinions and numerous options on any given day in the month.

| O |

Lol oa oe io ou oo Only original clothes are obtained at Oniko's Boutique on Orange Boulevard in the oldest part of Oregon where Ontario's fashionable folk often come to shop.

| P |

;p; pa pe pi pu po Place a portion of purple prune pulp into the grape puree and pour a cupful onto the pieces of peach, pineapple and papaya to make a potent punch and a filling for the pie.

| Q |

aqa qa eq qi oq qu Quincy quickly quitted quaffing the Quaker oats as Quentin quietly questioned the quality of the quart of milk he squirted into the quagmire.

| R |

Frf fa fe fi fu fo Rachael ran the required race and then rested and relaxed while cheering for Rubin as she participated in the rooster's relay.

| S |

Sss sa se sis u so Sheba, Sheema and Sherwin shopped for sneakers and shoes to match the shirts, shorts and dresses they purchased at discount prices at the summer sale in Sydney.

| T |

ftf Tricia tossed the tennis ball to Tina who told the ten teenagers that the test of their determination to triumph will not only be at the start of the tournament but right through.

| U |

juj eu ua ou ui ua uu until Understand that being unique undeniably gives opportunity to surpass the mundane and become outstanding, unusual and superb.

| V |

fvf va ve vi vu vo Dava visited Vail, Venice and Virginia on his voyage to discover the vast diversity of venues that are available for vacations.

| W |

sws we wow aw wa wi Watch with me as we view the wonderful wastrels wriggle and waggle their walking sticks as they wander from Wisconsin to Winnipeg where we sew waistcoats.

| X |

sxs ax xe xi xo xu ox foxes oxygen oxen and foxes in boxes exist with xylem to extend their existence as they eat flax in Luxembourg, fixing taxes and playing saxophones.

| Y |

jyj yea yip yow yoyo you yah Yesterday Yvonne and Yvette said yes as Brandy yodelled to his yak yet Joy journeyed beyond Mount Yonder to meet Yoland at Yellowstone Creek.

| Z |

aza zig zag zygote Zion zoned zebras while the zephyr wafted over lake Zulu keeping dozens of dazed gazelles at bay until a zesty breeze caused dozens of wasps to buzz crazily.

Remember: additional exercises can be found on the CD that accompanies this book.

Introduction to word processing

By the end of this unit you should be able to:
- Explain the purpose of a word processor
- Use a word processor to enter text
- Save, retrieve and print documents

Unit at a glance

- Word-processing software enables you to use your computer as a typewriter.

- Word processing offers many advantages over conventional typewriting.

- The keyboard contains alphabetic and numeric keys, special keys and a numeric keypad. Some keys help you to navigate or get around in a document. These keys include the Home key, End key, PgUp and PgDn keys.

- The cursor is the dark vertical bar that indicates where typed text will appear.

- Typed documents may be saved on a secondary storage device.

Word processing

Before computers were introduced, documents were prepared using typewriters. Typists had to be extremely careful because a single error could ruin a document. **Word processing** programs enable you to create, edit, format and print documents such as letters, papers and reports. Word processing is superior to typewriting because it allows you to change what is written without having to retype the entire document or use correction fluid. You can insert new characters and delete existing ones, and move blocks of text from one part of a document to another.

Word-processing programs offer a variety of fonts (text styles), colours and effects. Most also offer tools such as spelling and grammar checkers and a thesaurus. After ensuring that the document is perfect, you can print as many copies as you want. The most popular word-processing program is Microsoft Word.

> ### DID YOU KNOW?
> If a document is very long, it can only be displayed one section at a time. The rest of the document is 'scrolled away' or hidden from view. If you want to see hidden sections of your document, you can click on the scroll buttons found on the left (▲ ▼) and at the bottom (◄ ►) of the window. These buttons move the document in small jumps, usually one line at a time. If you wish to make larger movements, click and drag the scroll bar that is located between the scroll buttons.

There are several advantages of using a word processor instead of a conventional typewriter. Some of these include:

- Word processing increases your efficiency because you do not have to retype the entire document when errors are made. After getting the corrected draft you can make amendments to the original document easily.
- Word processing allows you to see your work on the screen, read it and correct it before it is printed.
- You can add, delete or rearrange your words.
- If you need to address the same letter to many recipients, word processing enables you to do so in a fraction of the time it would take using a typewriter.
- Work typed can be saved and reused as needed. Repetitive work such as legal documents can be typed once, saved and modified as needed.
- Word processing offers a far wider variety of text styles and colours than typewriting.
- Many word-processing programs contain templates that make producing documents easier. A template determines the basic structure for a document and contains document settings such as AutoText entries, fonts, page layout, special formatting and styles.
- Word processing increases productivity and significantly reduces the number of typists employed by large firms.

The cursor

When you open your word-processing program, you will see a small dark vertical bar (|) blinking on the screen. This is your cursor. The cursor indicates where the text you type will appear.

Your cursor moves across the screen as you type. After you have started typing, you can use the mouse to place the cursor anywhere within your text. Simply move the mouse pointer (it will look like I) to the place that you want the cursor to go, and click the left mouse button.

Before you begin to type your document you need to learn some facts about your keyboard.
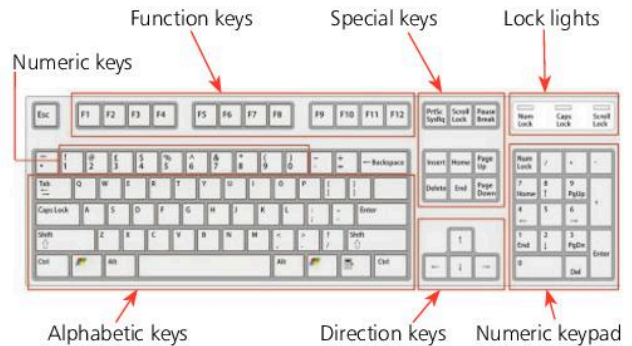
Figure 8.1 *The keyboard*

The keyboard

The keyboard is the input device that resembles a typewriter. When you press a key a coded message is sent to the CPU. The CPU sends a signal to the monitor to display the **character** that you have typed.

The Escape key

At the top left corner of the keyboard, you will see a key labelled **Esc**. This key is sometimes called the panic button. It allows you to quit some of the tasks you are doing. For example, if you open a menu but do not want to make a selection from it, press the Esc key.

Character keys

A character is a letter, number, punctuation mark or other symbol. The character keys are displayed in the larger, left portion of the keyboard in the row below the **Function keys** that are labelled F1 to F12.

The **space bar** is the longest key on the keyboard. Press the space bar to insert a blank space after each word. Remember to put the space *after* your exclamation marks, commas and full stops, not before.

Modifier keys

The **Caps Lock** and **Shift** keys are called **modifier** keys because they modify or change the function of the character keys. They let you enter text in upper-case or capital letters (ABC) and lower-case letters (abc).

If you want a single capital letter, hold Shift and press the letter key, then release both keys. Look at the key with the number 4 on it. You will notice that there is also a $ on the same key. To get the $, hold Shift and press the 4 key.

Press Caps Lock only if you want to type a large block of text in capital letters. When you have finished typing the block of text, press Caps Lock again to return to lower case. A light at the top right side of the keyboard indicates when Caps Lock is on.

Command keys (system keys)

The **Ctrl** and **Alt** keys are special command keys that are used in combination with other keys to perform specific tasks. For example, you can open the Start menu by holding the Ctrl key and pressing the Esc key. Or you can quickly close a program by holding the Alt key and pressing the F4 key.

Other important keys

The **Enter** key is used to move to a new line. If you are typing, when you reach the end of the line, the text will automatically **wrap** to the next line. This word-wrap feature means that **you only need to press Enter to start a new paragraph**.

The **backspace** key is sometimes labelled with a left-pointing arrow ⬅. You can press backspace to remove the character to the left of the cursor.

The **Delete** key also erases characters. Use the Delete key to erase a character that is to the right of the cursor.

There are four arrow keys together in a group (⬅ ⬆ ⬇ ➡). These **arrow** keys control the cursor. Instead of clicking with the mouse, you can use these keys to move the cursor around the screen.

The **Home** key takes the cursor to the beginning of the line. If you hold the **Ctrl** key and press **Home**, the cursor returns to the beginning of the document. The **End** key takes the cursor to the end of the line. Can you predict what will happen if you hold **Ctrl** and press **End**? Try it!

Sometimes a document is so large that only part of it can be displayed on the screen at a time. The **PgDn** key is used to bring the lower part of the document into view. Striking the **PgUp** key makes the upper part of the document visible once more. Now that you know these keys, let us use them to do a typing activity.

To do

Open Microsoft Word or another word-processing program and type the story below. Remember to let the computer automatically go to the next line. Your lines may be longer or shorter depending on the size of the letters. Press Enter twice before you start a new paragraph.

Jason and Keith are fifteen-year-old twins who live on the island of Trinidad in the Caribbean. Jason's goal is to become a computer programmer, while Keith is interested in becoming a graphic artist.

The twins spend most of their free time using the computer that their uncle bought for them last Christmas. They use it to search for information, type projects and play games. They even use it to chat with friends from abroad.

Their parents do not know much about computers, although their mother sometimes uses it to play the game called Solitaire. The twins recently showed their father how to create his own music CDs on the computer.

Do not close your word-processing program before you complete the next section.

Saving a document

When you are creating a document, the computer holds it in primary or main memory. This is the working memory of the CPU. The computer cannot keep items permanently in the main memory because this area is wiped clean every time the computer is switched off.

Figure 8.2 *Main memory is not permanent*

You will probably want to keep a permanent copy of your document within the computer system. The document must be **saved** or placed in secondary memory, that is, on a storage device. Each item that you save on your computer is called a **file**. Files are usually organised into **folders**. A folder is a subdivision of the computer's storage. A folder can contain many files.

DID YOU KNOW?

- **Your hard disk, which is usually called Drive C, can store billions of bits of information. If a computer has additional hard drives they are usually called drives D, E, F, and so on.**
- **A dialogue box is a window displayed on the screen from which commands or other information can be set or selected.**

The folder called **My Documents** is generally used to store the documents created on your personal computer. My Documents is located on your computer's hard disk.

How to save to the Documents folder

Click on **File** in your menu bar and then click **Save**. The following **Save Window** or **dialogue box** will appear. Note that if you

are using a newer version of Microsoft Word you might have to click on an icon like this to find the Save option.
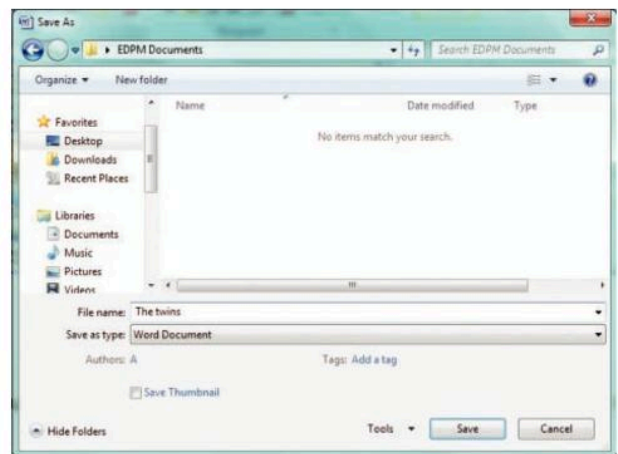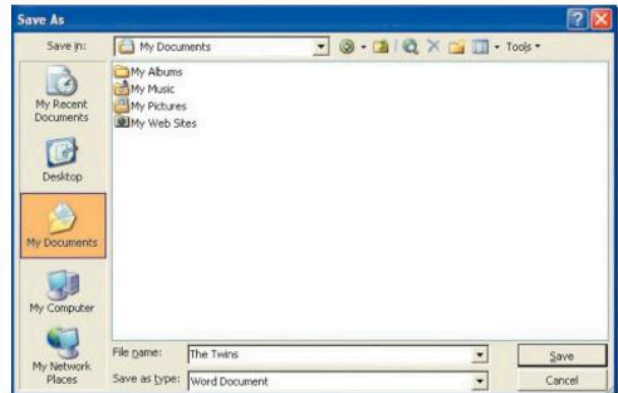
Figures 8.3a and 8.3b *The Save dialogue box*

Use your keyboard to type **The Twins**. This name will appear in the box labelled **File name**.

Now look at the top of the dialogue box. You will see the words **Save in** followed by a folder icon and the name of a folder.
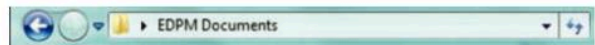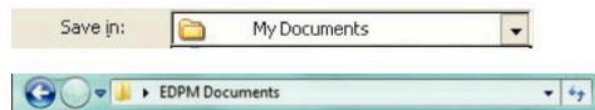
Figures 8.4a and 8.4b *Folder locations*

Documents will usually appear in this location by **default**. The term 'default' means that it is automatically displayed without the user making a choice. If another folder

is listed in this space, click on **Documents** from the list of icons to the left of your dialogue box.
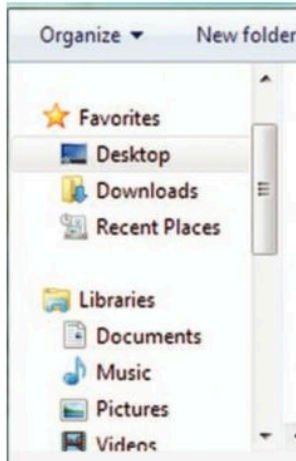
Figure 8.5 *Icons of locations in which documents are saved*

Your screen will now look like Figure 8.6.

Click on the folder named **My Documents**. Now click the **Save** button located at the bottom right of the Save window. Your document is now stored in the **My Documents** folder on your computer's hard drive.

Look at the blue bar at the top of your screen. You should now see the words 'The Twins'. This indicates that your document

has been saved. Close the program by clicking on the ☒ at the top right-hand corner of your window.

To do

Open your word-processing program and type the following paragraph. Save it in My Documents as **Computer history**.

Do you know that the first computers were people? In fact the word 'computer' was a job title just as lawyer, doctor and engineer are job titles. The computer's job was to perform complex calculations as quickly and accurately as possible. This continues to be one of the main tasks performed by electronic computers.

Do not close your document.

Saving on an external medium

You may prefer to save your document to a removable medium such as a diskette or flash drive. These storage media have far smaller capacities than a hard drive. The computer can access files faster from the
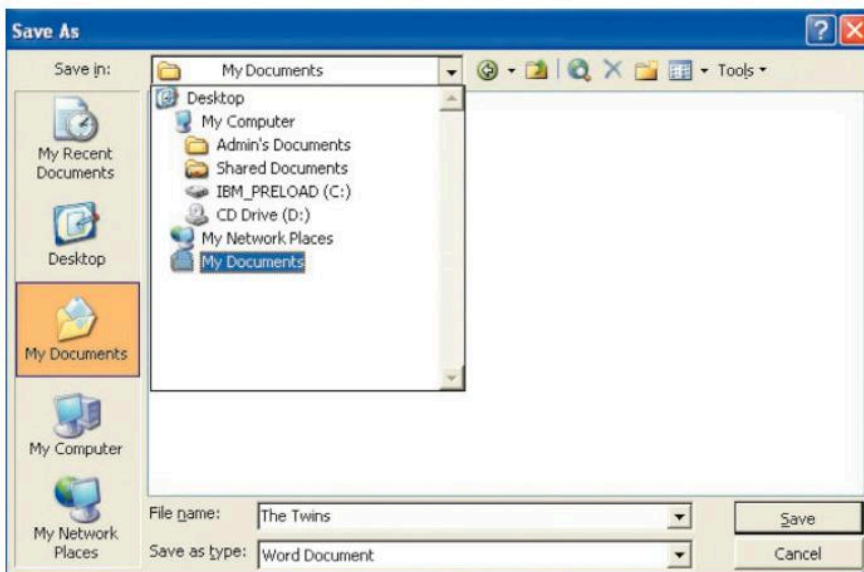
Figure 8.6 *The Save As box*

hard drive than from a removable storage medium. However, diskettes, memory cards and flash drives are portable, that is, they are easily moved from one place to another. This is an advantage if the computer you are working on is not your own. On the other hand, viruses are often transmitted from one computer to another via removable media. You must always ensure that your removable medium is scanned for viruses using an up-to-date antivirus program.

If you are using a diskette insert it in the floppy disk drive. Flash drives are placed in a USB port as is shown in Figure 8.7 and memory cards are placed in a memory card reader as is shown in Figure 8.8.

Figure 8.7   *Inserting a flash drive*

Figure 8.8   *Inserting a memory card*

How to save to the removable medium

Saving to a removable medium is quite similar to saving to My Documents. Follow the steps in the following list.

1 Insert the removable medium.
2 In your document window, click **File** then click **Save As**.
3 Click on the medium name from the list of locations on the left. You might have to double-click on the computer icon to find your medium.
4 Click in the section labelled **File name** and type in the name you want to use.
5 Click **Save**.

To do

Insert a floppy disk, flash drive or memory card. Save the document **Computer history** onto your removable medium.
Close your document.

How to retrieve a document

1 In your Microsoft Office program, click **File** in the menu bar or the Office icon, and then click **Open** (Figure 8.9).
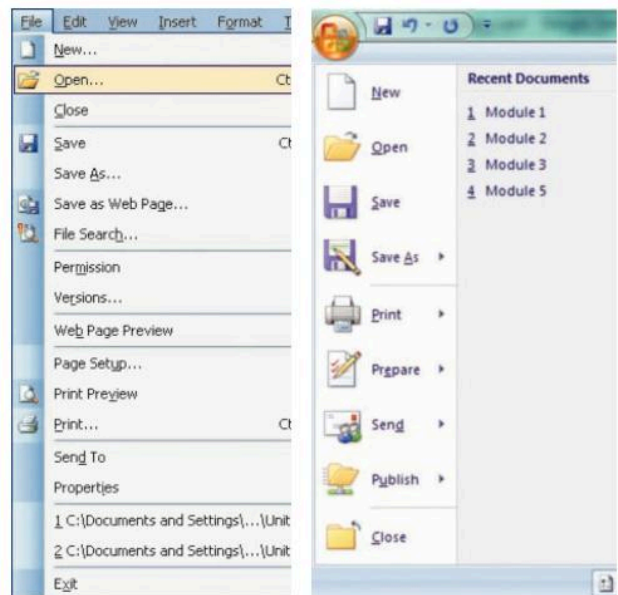
Figures 8.9a and 8.9b   *File menus*

2 In the **Open** dialogue box, click the drive, folder, or Internet location that contains the file you want to open (Figure 8.10).

3   In the folder list, locate and open the folder that contains the file.
4   Click the file, and then click **Open**.

To do

Open the document called **Computer history**. Is your work all there?
Close the document without making any changes.

How to print a document

Click **File** in your menu bar and then click **Print....** (Remember that if you do not see the option you want, click on the double arrow at the bottom of the menu.) You can select options such as the number of copies you want to make (Figure 8.11).
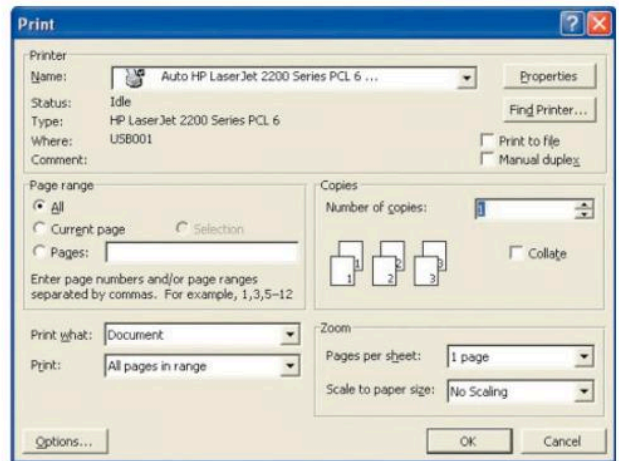
Figure 8.11   *The **Print** dialogue box*

If you want to print the entire document, click **All** in the **Page Range** selector section. If you want to print just the page on which you are presently working (in which the cursor is located), click **Current Page**. If you want to print a specific number of pages from your document click **Pages** and type in the page numbers separated by commas or a page range (e.g. 1, 5, 6, 8 or 3-7).

Click **Properties** to choose the quality of printing and size of stationery you want to use. Draft-quality printing saves on the amount of ink that is used. It is appropriate for the first printing of a document to which corrections may be made. The final print of the document may be made at a higher-quality setting.

Two commonly used computer printout paper options are letter sized and legal sized. Letter-sized paper measures 8½ × 11 inches and may be used for printing letters and school projects such as essays and research papers. The longer legal-sized (8½ × 14 inches) is used for typing documents such as leases and hire-purchase agreements. Many of the documents in this course must be printed on A4 paper, which is slightly longer than the letter-sized sheets. You will learn more about stationery types and sizes in Unit 19.
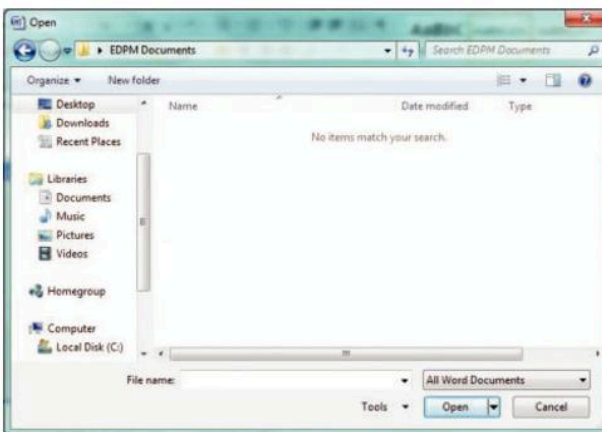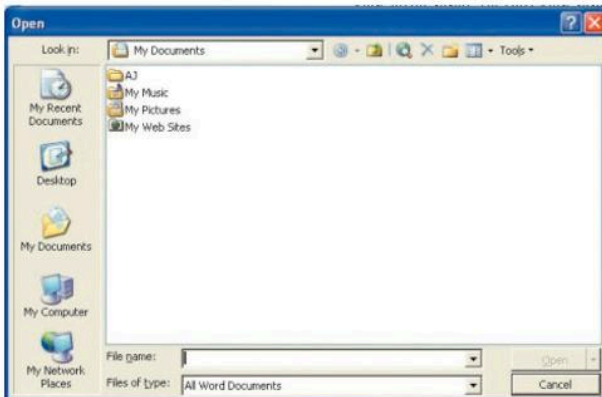
Figures 8.10a and 8.10b   *File **Open** dialogue boxes*

To do

Open **The Twins** and print two copies in draft quality.

Keyboarding techniques

You probably had to search for the keys when you were doing the previous typing activity. It is best to learn the proper techniques for typing when you first learn to use the computer. That way, you will not develop habits that you will have to 'unlearn' later on. Some programs teach typing, e.g. the popular **Mavis Beacon** series.

The **keyboarding and typewriting units** in this book contain a number of activities to help you to learn to type properly. You will need to repeat each exercise several times. Remember to start slowly, be accurate and patient, and practise frequently. As you work consistently with these activities, your typing speed and accuracy will increase. This is important because you will probably use the keyboard for the rest of your life.

Keyboard shortcuts

There are several key combinations that you can use to give commands to your computer. Try to learn and practise as many of them as you can. You will find that they help to improve your speed and efficiency when preparing documents. The plus (+) sign between the keys listed indicates that you should press the keys simultaneously.

Table 8.1 *Keyboard shortcuts*

Key combination	Command
CTRL + B	Make letters bold
CTRL + I	Make letters italic
CTRL + U	Underline letters
CTRL + SHIFT + <	Decrease font size
CTRL + SHIFT + >	Increase font size
CTRL + SPACE BAR	Remove paragraph or character formatting from selected text
CTRL + C	Copy the selected text or object
CTRL + X	Cut the selected text or object
CTRL + V	Paste text or an object
CTRL + Z	Undo the last action
CTRL + Y	Redo the last action
CTRL + O	Open a document
CTRL + N	Create a new document
CTRL + P	Print a document
CTRL + S	Save a document
CTRL + 1	Single-space lines
CTRL + 2	Double-space lines
CTRL + 5	Set 1.5-line spacing
CTRL + 0 (zero on the alpha part of the keyboard)	Add or remove one line space preceding a paragraph
ALT + F4	Close the program window

Table 8.2 on the next page shows some of the toolbar buttons and their related commands. If you do not see a button that you want to use click at the end of the toolbar, point to **Add or Remove Buttons** and point to the name of the toolbar. Click on the button you want to add from the drop-down menu that appears.

Table 8.2 *Toolbar buttons and commands*

Button	Command	Button	Command
	Create a new blank document		Open a saved document
	Save the document		Print this document
	Show a print preview of the document		Activate the Spelling and Grammar check
	Open the research task pane to use the thesaurus and translator		Cut (used to remove selected text and graphics from their location and place them on the clipboard)
	Copy the selected text and graphics onto the clipboard		Paste the contents of the clipboard
B	Make text **bold**	*I*	Put text in *italics*
U	Underline text		Activate the **Microsoft Office Help** feature

To do

Using Microsoft Office Help
Open Microsoft Word. Place your mouse pointer over each button on the toolbar. A small box called a **screen tip** will appear to indicate the function of each button.

Open Microsoft Office Help by clicking on . A task pane will appear to the right of your screen. Under **Search for:** type the question 'How to save a document'. Click . Click **Save a document**. Read the information in the Help window that will appear. Close the Help window. Close the task pane. Close Microsoft Word.

My glossary

Write definitions of the following terms.

Command key	Insert
Cursor	Modifier key
Default	Retrieve
Delete	Scroll
Edit	Template
File	Thesaurus
Folder	Word processing

Examination-type questions

1 There are several advantages to using a word-processing program instead of a conventional typewriter. List three of these advantages.
(3 marks)

2 State which key you will use to perform each of the following actions:
   a Move the cursor to the beginning of a line
   b Erase characters to the right of the cursor
   c Move out of a menu without making a selection
   d Bring the upper part of a document into view on the screen *(4 marks)*

3 Explain the purpose of each of the following keys when typing a document on the computer:
   a Caps lock
   b Ctrl
   c Shift
   d Backspace *(4 marks)*

4 List the steps involved in:
   a Printing a document
   b Saving a document to a floppy disk or flash drive
   c Retrieving a document from an external storage medium *(9 marks)*

9 Introduction to spreadsheets

By the end of this unit you should be able to:
- Explain the purpose of a spreadsheet
- Use the basic features of a spreadsheet program

Unit at a glance

- A spreadsheet is used for the manipulation of numeric data.

- Conditions under which spreadsheets should be used include:

  - Working with data for which calculations must be done, including totals, percentages and averages.

  - Creating charts or graphs such as pie charts, histograms and line graphs.

  - Producing documents consisting of data in table form such as invoices and accounts.

- Each worksheet is a grid of **columns** (designated by letters) and **rows** (designated by numbers).
- The letters and numbers of the columns and rows are called **labels**.
- The block that is created by intersection of a column and a row is called a **cell**.
- Each cell on the worksheet has a unique **cell address**.
- The cell address consists of the column letter followed by the row number. For example the first cell is **A1**.
- Cells can contain text or numbers or mathematical formulae.
- You would not be able to perform mathematical calculations with a cell if it contained a combination of text and numbers. The only exception is if the cell contains a **formula** as will be explained in this unit.

Spreadsheet programs allow you to add, subtract and perform other calculations on rows and columns of numbers. You can use formulae so figures are automatically recalculated when an entry is changed. Numbers can be converted into charts and graphs. Spreadsheets can be used by anyone who must manipulate and keep track of numbers. You can use spreadsheets to produce invoices (bills), income statements (trading and profit and loss accounts) and balance sheets. In this unit you will be introduced to Microsoft Excel.

An Excel file is a workbook that contains many worksheets. You must become familiar with the following facts about an Excel worksheet.

Using the Excel toolbars

The Standard and Formatting toolbars in Excel are quite similar to those in Word. They allow you to quickly access basic Excel commands. Table 9.1 identifies the functions of some of the toolbar buttons.

Manipulating worksheets

A new Excel workbook consists of three worksheets, identified as Sheet 1, Sheet 2 and Sheet 3.

- To add a sheet, click **Insert** then **Worksheet** on the menu bar.

- To access a worksheet click on its tab just above the status bar.
- To rename the worksheet tab, right-click on the name tab and select Rename from the shortcut menu. Type the new name and press the **Enter** key.

Table 9.1 *Excel toolbar buttons*

Button	Name	Function
Σ	AutoSum	Adds the contents of a group of adjacent cells
A Z ↓	Sort Ascending	Sorts text data in ascending order from A to Z and numerical data from the smallest to the largest
Z A ↓	Sort Descending	Sorts text data in descending order from Z to A and numerical data from the largest to the smallest
	Chart Wizard	Activates the Chart Wizard to insert a chart using selected data
$	Currency Style	Applies currency format to the number in a cell
%	Per cent Style	Applies per cent format to the number in a cell
,	Comma Style	Adds commas to the number in a cell e.g. 1,275,399
.0 .00	Increase Decimal	Increases the number of digits after the decimal point
.00 .0	Decrease Decimal	Decreases the number of digits after the decimal point
	Decrease Indent	Decreases the distance from the cell border at which text starts
	Increase Indent	Increases the distance from the cell border at which text starts
	Drawing	Activates or deactivates the drawing toolbar
100% ▾	Zoom	Changes the size at which the worksheet is displayed on the screen

Entering data

You must select a cell before you can begin typing data. Click on a cell to select it. A dark border will appear around the selected cell. You may move from one cell to another by clicking with the mouse. It is usually more convenient to use the keyboard to select cells (Table 9.2). If a particular cell is not visible on the screen you may find it easier to use the **Go To...** command in the **Edit** menu.

To **change the contents of a cell** in which you have already entered data double-click on the cell or click once and press **F2**. To **cut cell contents** that will be moved to another cell select **Edit** then **Cut** from the menu bar or click the **Cut** button on the standard toolbar.

To **copy the cell contents**, select **Edit** then **Copy** from the menu bar or click the **Copy** button on the standard toolbar.

To **paste cut or copied cells**, select the cell into which you want to paste and select **Edit** then **Paste** from the menu bar or click the **Paste** button on the standard toolbar. To **merge cells**:

- Select adjacent cells by clicking and dragging.
- Select **Format**, then **Cells**.
- Click on the **Alignment** tab on the **Format Cells** dialogue box that appears (Figure 9.1).
- Click **Merge cells**. Click **OK**.

Table 9.2 *Navigation keystrokes*

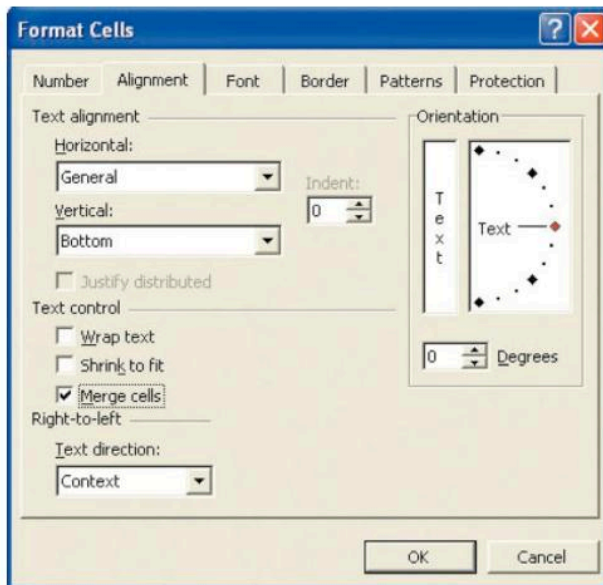| Movement	Key stroke
One cell up	Up arrow key
One cell down	Down arrow key or Enter
One cell left	Left arrow key
One cell right	Right arrow key or Tab
Top of the worksheet (cell A1)	CTRL+Home
Last cell containing data	CTRL+End
End of the row	CTRL+right arrow key
End of the column	CTRL+down arrow key

Figure 9.1 *The Format Cells dialogue box*

DID YOU KNOW?

You can merge cells to create a heading that spans several columns. This is called a **multiple columnar heading**.

Working with rows and columns

To **add a row**, select **Insert** then **Rows** from the menu bar, or right-click on the row label with the mouse, and choose Insert.

To **add a column**, select **Insert** then **Columns** from the menu bar, or right-click on the column label with the mouse, and choose Insert.

To **resize rows and columns**, drag the line that separates the row or column label. You may also click the row or column label and select **Format**, point to **Row** and select **Height...** or **Format** point to **Column** and select **Width...** from the menu bar. Enter a numerical value for the height of the row or the width of the column.

To **select an entire row or column**, click in its label.

Using formulae

Formulae are used to instruct Excel to perform calculations. Begin the formula with an equals sign: =. Type the addresses of the cells whose values will be manipulated with appropriate **operands** placed in between. The operands are:

+ add
- subtract
* multiply
/ divide

After the formula is typed into the cell press the **Enter** key.

To format data for currency or percentage:

- Select the cell(s) to be formatted.
- Click on the appropriate button on the toolbar (see Table 9.1).

My glossary

Write definitions of the following terms.

Cell	Formula	Spreadsheet
Cell address	Label	Workbook
Column	Row	Worksheet

To do

Let us use what you have learnt so far to create a simple invoice (bill of sale).

1 Merge cells A1 to F1.
2 Type **Richard's Books & Stationery Supplies**.
3 Format the font to Monotype Corsiva, size 18, maroon, bold, centred.
4 Merge cells B3 to E3.
5 Type **INVOICE**.
6 Format the font to Times New Roman, size 14, centred, blue.
7 Increase the width of column C to 35.00
8 Apply a currency format to columns D and E.
9 Type the following in bold in cells A5 to E5, respectively:
Quantity   Unit   Item   Price   Cost

10 Type the following data. Remember that words and numbers must be placed in separate cells.

1	ream	A4 paper	60	=A6*D6
10	boxes	pencils	9	=A7*D7
3	notebooks		4.95	=A8*D8
Total				=E6+E7+E8

11 Change the quantity of reams of paper to 5.
12 Change the price of a box of pencils to 7.25.

Can you suggest why the costs and total changed when you changed the quantities and prices? Discuss your observations with your teacher.

Examination-type questions

1 Define each of the following terms as they relate to spreadsheets:
   a Row
   b Cell
   c Address
   d Label   (4 marks)

2 Which key or combination of keys on the keyboard can you use to make each of the following movements?
   a One cell up
   b One cell right
   c To the last cell with data   (3 marks)

3 The following table represents entries that Kayla made in a spreadsheet file.

Table 9.3 *Kayla's spreadsheet file*

	A	B	C	D
1	Quantity	Item	Price	Cost
2	4 boxes	paperclips	$5.00	A2*C2
3				
4				

   a State two errors that Kayla made.   (2 marks)
   b Draw the table with the correct entries.   (2 marks)
   c Enter the following item in row 3: 12 pens at $3.50 each.   (2 marks)
   d Enter the formula that will calculate the cost of the pens.   (2 marks)
   e Enter the formula that will calculate the total cost of all items in cell D4. (2 marks)
   f State the steps involved in merging cells AC4.   (3 marks)

10 Introduction to database management

By the end of this unit you should be able to:
- Explain the purpose of a database management system
- Describe the main features of a database management system

Unit at a glance

- A **database** is an organised collection of related data items.

- A **Database Management System** is a program that facilitates the storage and retrieval of structured information on a computer's hard drive.

- Each data item is called a **field**. A group of related fields is called a **record**. A group of records is arranged in a file called a **table**. A table is a collection of data about a specific topic, such as employees, products or suppliers.

- Where two or more tables contain related information you can create a relationship between the tables.

Working with a database

A database is an organised collection of related data items. For example, a firm may keep a database that consists of the name, address, phone number and account status of each customer. This database would then be used throughout the day. It would be accessed to view customer information. Customer records would be viewed when handling enquiries or transactions. Records would be added whenever a new customer comes to the firm. Inactive records may be deleted or exported to another location.

A database is stored on a computer's hard drive. Microsoft Access is a database management system (Figure 10.1). A database management system is a program that facilitates the storage and retrieval of

Database management programs allow you to store, organise, manipulate, retrieve, display and print large collections of data and information. Using database software enables you to enter, retrieve and update data in an organised and efficient manner. Databases are used to manage mailing lists, catalogues, inventories and personnel files. They also enable you to generate statistics, print reports and produce mailing labels. These programs also allow you to extract portions of the data based on some given criteria, generating lists or reports.
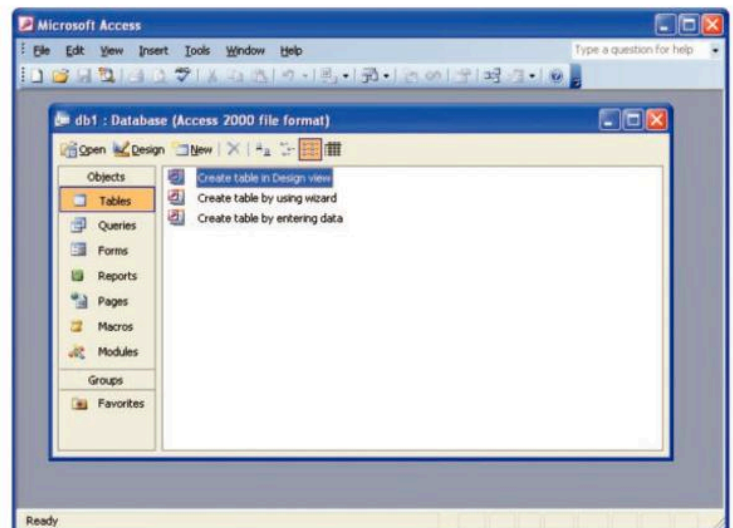
Figure 10.1 *Microsoft Access – a database program*

structured information on a computer's hard drive.

A database is arranged into files, records and fields. A field is the smallest unit of data in a database. A record is a collection of fields and a file is a collection of records.

Fields

Each data item is called a **field**. Some examples of field types are shown in Table 10.1.

Table 10.1 *Fields and what they are used for*

Field type	Used for
Text	Words or a combination of words and numbers such as names, addresses and vehicle numbers Numbers that do not require calculation, such as telephone numbers, postal codes or the serial numbers on devices
Currency	Amounts of money
Number	Numerical data to be used in mathematical calculations
AutoNumber	Allowing the computer to automatically number the records when they are inserted
Date/Time	Dates and time
Picture or OLE object	Items that were created in other programs such as pictures, sounds, Word documents or spreadsheets
Yes/No	Data for which there are only two options, such as Yes/No, True/False, On/Off, Male/Female
Memo	Long text such as descriptions or notes
Hyperlink	Words or graphics that can be clicked to go to another location such as a page on the Internet
Look-up wizard	Creating a list of values that can be selected. For example, a list of subjects offered in your school

To do

You want to create a database to store contact information for all your friends. The list below shows the data that you want to gather. Remember that each data heading is called a field. Complete the list by identifying each field type. The first one is done for you.

Field	Field type
First name	Text
Surname	
Address	
Date of birth	
Email address	
Facebook ID	
Telephone	
Age	

Records

A group of related fields is called a **record**. All of the information about one of your friends makes up that person's record. It is easier for the computer to manage the records if they are identified by a number. Each record should have a unique identification number that is called the **primary key field**.

Files

A group of records is arranged in a file called a **table**. A table is arranged in a grid consisting of columns (vertical sections) and rows (horizontal sections). Each column represents a field. Each row represents a record. A cell is created where the rows and columns intersect. Each cell can contain only one unit of data.

A table is a collection of data about a specific topic, such as employees, products or suppliers. It is best to use a separate table for each topic. You can then link the tables so that you can view related information. This results in a more efficient database because each data item is stored only once.

To do

Brindee has created the following database table to record the books in her personal library.

Book ID	Author	Title	Type	Bought new	When purchased
107	Elizabeth Jane Howard	*Families*	Drama	☐	12/02/2011
234	Johnny Donn	*Martian Moon*	Science fiction	☑	23/11/2005
129	Chinde Adika	*Deep Night*	Horror	☑	$34.75
234	Ruth Lovelace	*Chiller*	Mystery	☐	09/09/2010

1 Identify two errors that she made when entering the data.
2 Brindee wants to enter additional data. State what field type she should use for each of the following:
   a The year of publication
   b A summary of the book
   c The author's website

Database

A database consists of a collection of tables. After storing data in Microsoft Access, the data can be manipulated and used in a variety of ways. Some ways of working with Microsoft Access are:

1 To sort data into order, such as alphabetically or chronologically (by date).
2 To search for and retrieve specific information.
3 To prepare reports.

Creating a database

When you open Microsoft Access, the **Getting Started** task pane will open. It can look like one shown in Figures 10.2a and 10.2b, depending on the version of Access that you are using.

1 Select the option labelled **Blank Database** or **Blank Access Database**.
2 You will be prompted to save the database. Save the database with an appropriate name. The database window will then open, looking like the ones shown in Figures 10.3a and 10.3b.
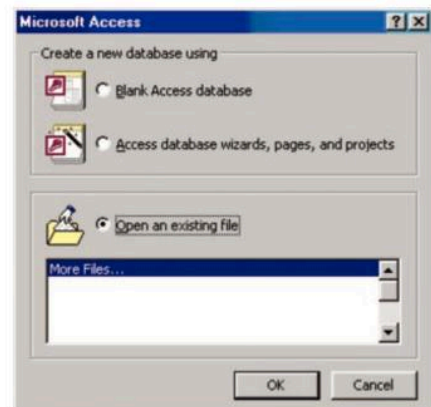
Figures 10.2a and 10.2b *Getting started in Microsoft Office Access*
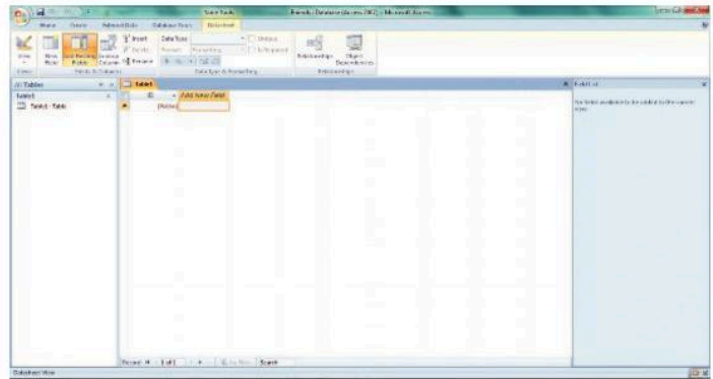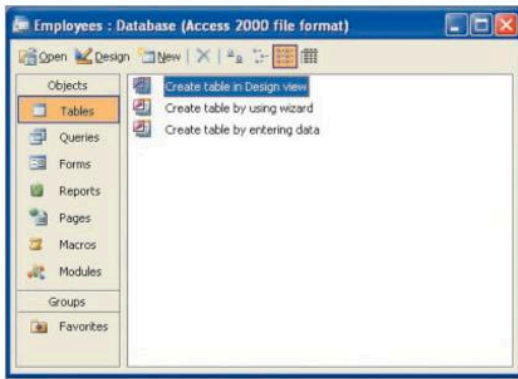
Figures 10.3a and 10.3b *The Database window*

Working with a table

You may find it easiest to create a table by using the preset headings that are contained in the Access **Templates** or the **Table Wizard**.

To use the templates (Access 2007 or later)

A template is a table that is already set up. Some of the templates in Access 2007 are shown in Figure 10.4. To see the templates in

Access 2007 or later versions, you must click on the tab labelled **Create** on the Menu bar (Figure 10.5).

1 Select the type of table you want to prepare, for example use **Contacts** for storing names, addresses, and so on. The selected template will be displayed on the screen (Figure 10.6).
2 Delete the field that you do not want to use. Right-click on the column name and select **Delete** from the menu that appears.
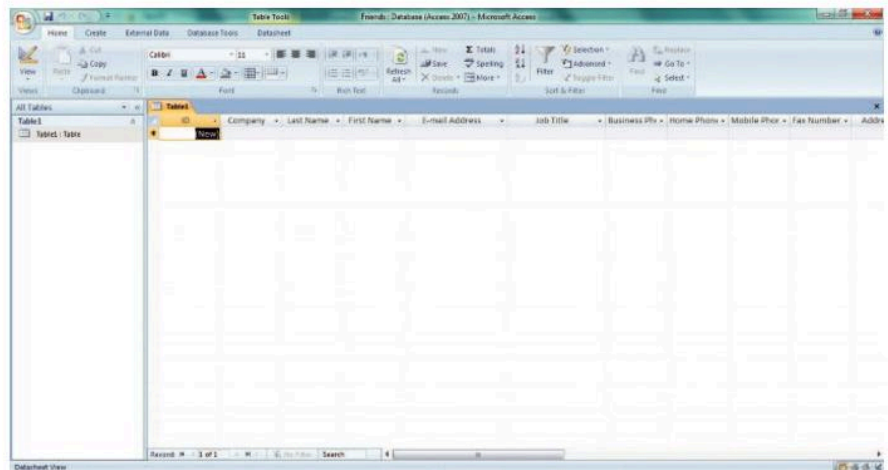
Figure 10.4 *Table templates*

Figure 10.6 *The Contacts template in Access 2007*
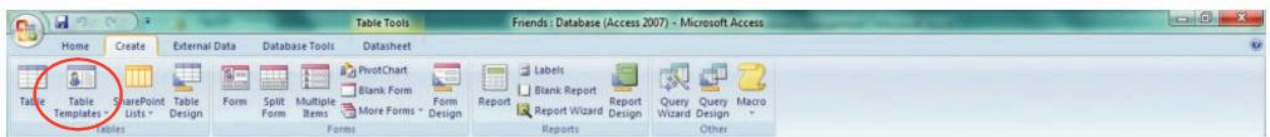
Figure 10.5 *The Create ribbon in Access 2007*

To use the Wizard (Access 2003 or earlier)

A **wizard** is a feature that makes a program easier to use by providing a set of dialogue boxes that lead the user through a series of clearly defined steps. The Table Wizard allows you to choose which headings you want to use in the database table and automatically selects the appropriate field type.

1 Click **Create table by using wizard** (Figure 10.7).
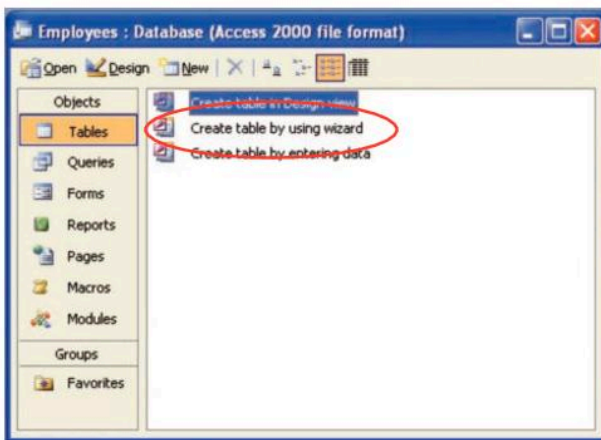
Figure 10.7 *Selecting the Table Wizard*

2 Select the type of table you want to create by clicking either **Business** or **Personal** (Figure 10.8).
3 Click on the sample table that you want to use.
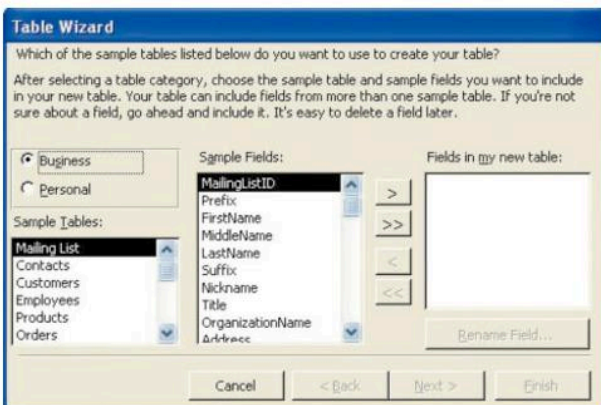
Figure 10.8 *The Table Wizard*

4 Click on the sample field you want to include and click **>** to add it to your table. If you want to remove a field, click on its name in the **Fields in my new table:** section and click **<**. To add all of the fields click **>>**. To remove all of the fields click **<<**. Click **Next >**.
5 Allow the computer to set the primary key field for you. Click **Next >**.
6 You will be asked how you want to use the table. Select **Enter data directly into the table**. Click **Finish**.

To do

Use the Contacts template or the Table Wizard to create an address book with at least eight records.

Running a query

A **query** instructs Microsoft Access to display specific data from a database. Queries can be used to:

1 Retrieve data from a table.
2 Perform mathematical calculations.
3 Add, change or delete data.

For example you might want to display only the names and companies of the persons listed in your **Contacts** database table. Instead of personally searching for that data you can do the following:

4 Open the **Contacts** table, click on the **Create** tab, then click **Other**.
5 Select **Simple Query Wizard** from the **New Query** dialog box that opens.
6 Select **Tables/Queries** and choose the **Contacts** table.
7 Use the **>** button to add the "first name", "last name" and "company" fields, then click **Next**.
8 Type an appropriate name (e.g. Company list) and click **Finish**.
9 The field you selected will be displayed as a table.

My glossary

Write definitions of the following terms.

Database	File
Database management system	Record
Field	Table

Examination-type questions

1 Arrange the following data items in order from the largest to the smallest:

   File   Record   Database   Field   *(2 marks)*

2 State two advantages of using a database to store information.   *(2 marks)*

3 State the use of each of the following field types:
   a Currency
   b Hyperlink
   c Memo.   *(3 marks)*

4 Use the outline below to plan a database table to show the workers in an organisation.

Field	Field type
EmployeeID	
Name	
MainContactNumber	
DateEmployed	
IDPhoto	

(5 marks)

5 Explain the purpose of the primary key in a database table.   *(2 marks)*

6 Explain the difference between a wizard and a template as it relates to creating a database.   *(2 marks)*

7 Outline the steps that you will follow to create a database table by using *either* a template *or* a wizard.   *(4 marks)*

Introduction to presentations

By the end of this unit you should be able to:
- Explain the uses of presentation software
- Illustrate the features of a presentation document

Unit at a glance

- A presentation is a form of oral communication in which the speaker shows and explains the content of a topic to an audience.

- There are different types of presentations including lectures, speeches and the giving of reports.

- A presentation document provides an outline of the main ideas to be discussed.

Have you ever listened to a speech, lecture or debate? How interesting was it? Did the speaker read the entire presentation or just refer to notes at intervals? If you are called upon to make a presentation, will you write out and then read the entire speech or will you use an outline of the main points? Does the method you use make a difference?

A presentation is a form of oral communication in which the speaker shows and explains the content of a topic to an audience. A presentation is used to explain, educate, train, convince or convey information. There are different types of presentations including lectures, speeches and giving of reports. Whether the audience consists of one person or hundreds, there are some basic guidelines that must be followed to create and deliver an effective presentation.

Know your purpose

A presentation is delivered to achieve a particular goal. You must be clear about what you want the audience to do when the presentation is over. Presentations can be designed to:

- Entertain.
- Provide information.
- Attract attention.
- Convince or persuade.
- Inspire or motivate.

Know your subject

List the main ideas and points that you want to communicate, and then note the supporting details that you will use. Research your topic thoroughly to ensure that you are accurate at all times. Never try to fake, bluff or pretend to know more than you do. Your audience will detect your insincerity or dishonesty and will not value your message.

Know your audience

You must know who will be listening to your presentation and where it will be presented. A presentation for eight-year-old primary school students will be quite different from one for members of the Parent–Teacher Association. One that will be delivered at your graduation ceremony will be

significantly different from one presented at a youth rally. Similarly, there is a difference between a presentation prepared for your integrated science class and one prepared for your school assembly. Your audience will influence your choice of elements such as the subject matter, language, vocabulary and graphics (e.g. pictures, diagrams, charts).

Know yourself

What are your abilities and your limitations? Do you have a powerful voice or do you speak extremely softly? Are you able to use a little humour effectively or do your jokes fall flat? Are you an expert on your selected topic or is your knowledge limited? An honest appraisal of your strengths and weaknesses will help you to determine what strategies you should use. For example, you might need to use a microphone to ensure that you are heard comfortably by all.

Practise

Practise your presentation until you are comfortable with your material. Rehearse several times in front of friends or relatives or the mirror. Get feedback about your presentation. Make changes that will improve your delivery.

Plan well in advance

A **storyboard** is a planning tool used for multimedia such as television, film and advertising presentations. It is a sketch of how to organise a presentation and a list of its contents. A storyboard consists of a series of panels or boxes, each of which includes:

- A representation of the elements that will be used such as graphics and sound effects.
- The text of any points that will be shown to the audience.
- Notes of the details that will be spoken about but not shown.
- How much time each section should take.

To do

Let us prepare a storyboard entitled *Dr Eric Williams – A Caribbean Hero*

1 Write out the key ideas related to the presentation (Figure 11.1).

Early life → Higher Education → Scholarly career → National political involvement → Caribbean issues → Significant contributions

Figure 11.1 *Key ideas*

2 Write out supporting topics for each key idea. For example, some supporting topics for Early life are shown in Figure 11.2.

Early life → Higher Education → Scholarly career → National political involvement → Caribbean issues → Significant contributions

Discuss:
Where and when born
Family
Primary and secondary schools attended
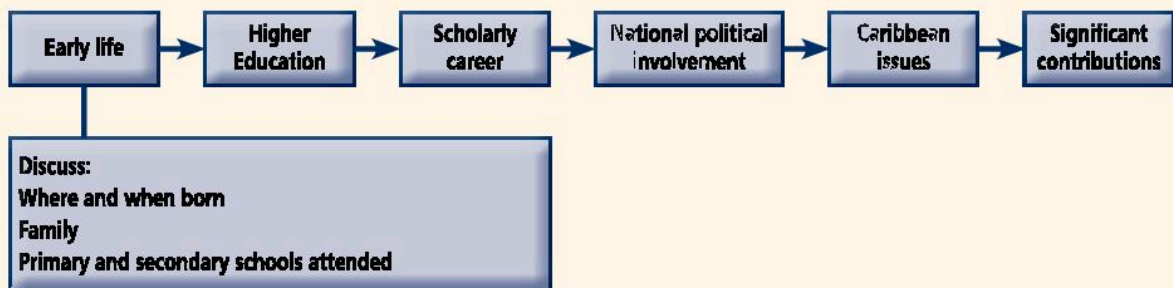
Figure 11.2 *Supporting topics*

3 Plan the elements that will be used for each topic and sub-topic as illustrated in Figure 11.3.

| Early life | → | Higher Education | → | Scholarly career | → | National political involvement | → | Caribbean issues | → | Significant contributions |

Discuss:
Where and when born
Family
Primary and secondary schools attended

Use family photo
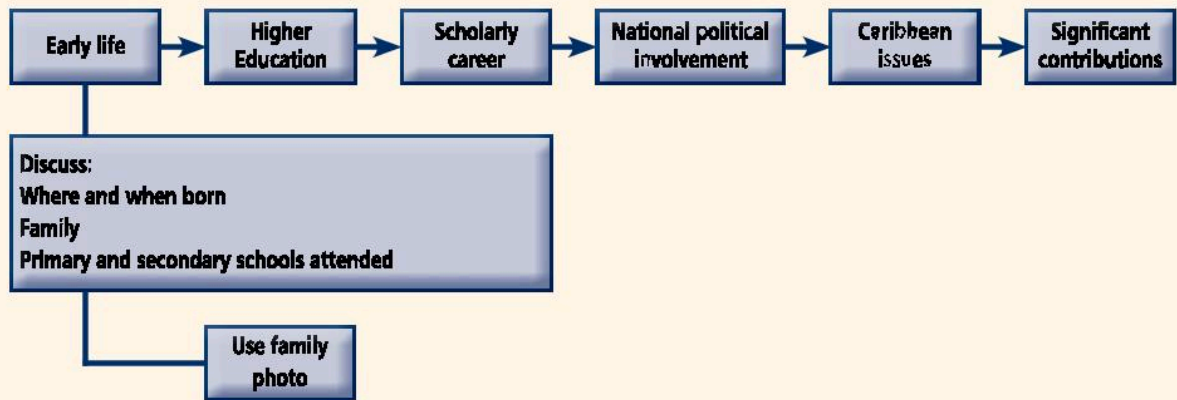
Figure 11.3 *Planning graphic elements that will be used*

4 Jot down the detail that you will present for each topic.
5 Plan how much time will be spent on each topic. For example, you might plan to talk about his early life for two minutes, but about his contributions for 10 minutes.

A storyboard helps you to:

- Define the limits of the presentation within available resources and time.
- Organise and focus the presentation.
- Decide what medium and method to use for each part of the presentation.

A completed storyboard represents the printed version of a presentation. Storyboards are also used extensively by film directors and advertising agencies because they give a good idea of the product before filming begins. This means that changes can be made before production costs are incurred.

1

Kyle, a student, enters computer lab with drink in hand.

2

"Remember, Kyle! You are not allowed to eat or drink in the computer lab"

Class prefect approaches student.

3

As Kyle turns away he comes into contact with another student entering the lab. The drink spills onto Kyle's shirt and the floor.

4

"What if this had happened near to a computer?!"

A shocked Kyle.

Figure 11.4 *A simple storyboard*

Developing work skills

You work with an advertising agency. You have been asked to plan a television commercial for a new brand of sneakers. Write out a plan for an advertisement that will attract teenagers. Draw the storyboard for the advertisement (you may use stick figures).

Presentation software

Presentation software allows you to create presentation documents called slides (Figure 11.5). Each slide can contain any combination of elements such as text, pictures, sound, animations and movie clips. A multimedia projector can be connected to the computer to project the slides onto a screen or wall. The slides can also be printed and used as handouts. Examples of presentation software include Microsoft PowerPoint, Lotus Presentation and OpenOffice Impress. You will learn more about using presentation software in Unit 18.
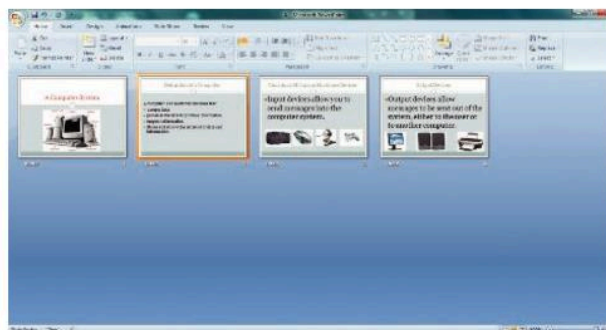
Figure 11.5 *Slides in a PowerPoint presentation*

My glossary

Write definitions of the following terms.

Graphics	Slide
Presentation	Storyboard
Presentation software	

Examination-type questions

1 Explain what the following are:
   a A presentation
   b Presentation software *(2 marks)*

2 Name two examples of presentation software. *(2 marks)*

3 State three purposes of a presentation. *(3 marks)*

4 Discuss three factors that should be considered when planning a presentation. *(6 marks)*

5 Define the following terms as they relate to presentations:
   a Slide
   b Graphic *(2 marks)*

6 You have been asked to deliver a presentation on computer safety to a group of first-form students at your school. Prepare an outline or storyboard using at least three main ideas. *(5 marks)*

12 Formatting and layout

By the end of this unit you should be able to:
- Outline and apply the guidelines for formatting documents
- Use appropriate justification formats for various documents
- Judge placement of text in terms of line spacing and margins
- Print typescript using appropriate stationery

Unit at a glance

- **Font** is the design or shape of a set of characters. You can select from a variety of font types, styles, sizes, colours and effects.

- The sizes of **line spacing** most commonly used in document preparation are: single, 1.5 and double.

- Paragraph **alignment** may be: left, centre, right or fully justified.

- Your word-processing software includes a number of features that may be used to modify the way your document looks. These include: bullets, numbering, symbols, borders and shading.

- You can change the on-screen **background** colour of your typed document. To create a printable background you must apply a **watermark**.

- The page **margins** are the blank spaces around the edges of the page. The **printable area** is the area inside the margins in which you insert text and graphics.

- The **horizontal margins** are located at the top and bottom of the page. The **vertical margins** are located at the left and right of the page.

- **Print preview** provides a view of the document as it will appear when you print it.

Word processors allow you to change the appearance of or format the words you type. You usually make these changes after you have typed the document. Making changes to a typed document is called editing. Before you begin editing you should become familiar with two very useful buttons found on the standard toolbar:

The **Undo** button allows you to reverse the last action you performed.

The **Redo** button allows you to reverse the Undo.

The arrow ▼ next to each button displays a list of the most recent actions. Scroll through the list and click to simultaneously undo or redo several actions.

Selecting text

You must first select the typed text before it can be formatted. **Selecting** is the process of identifying to the computer the text you wish to change. The selected text looks like this. There are several methods of selecting text. Here are a few.

Method 1

Use the mouse to click at the beginning of the text. Hold down the left mouse button and drag to the right. Release the button when you reach the end of the text you want to select.

Method 2

Click at the beginning of the words with your mouse. Hold down the Shift key and click at the end of the words. Release the shift key.

Method 3

Use the arrow keys on the keyboard to position the cursor at the beginning of the text to be selected. Hold Shift and use the right and down arrow keys to move along the text. You will see the text being highlighted one letter at a time.

Method 4

If you wish to select all of the text in the document, click **Edit** then **Select All** on the menu bar. Or if you prefer, you can hold the **Ctrl** key and press the **A** key.

Method 5

Press the F8 key. Move your cursor to the area you want to select. Use your arrow keys to select the text. Press **ESC** to stop selecting.
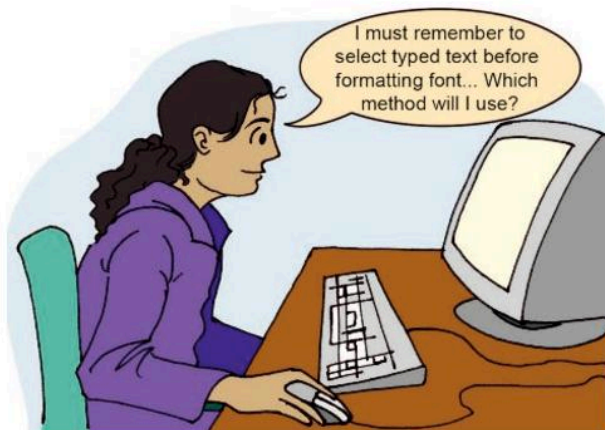
Figure 12.1

Practise using the various methods until you become familiar with them.

Guidelines and methods of font formatting

The word **font** refers to the shape and size of the characters. Font may be plain or very decorative. The type of font is selected according to the nature of the document being prepared. For most business letters the font type used is either **Times New Roman** or **Arial**. Some font types are shown in Figure 12.2.

Arial

ALGERIAN

Bible Script

Comic Sans MS

Gothic

Lucida Handwriting

Monotype Corsiva

Times New Roman

Figure 12.2 *Font types*

To do

1 Look at the fonts in Figure 12.2 above.
2 Identify the fonts that are more appropriate for business documents.
3 Can you suggest situations in which the other fonts may be used?

How to change the font

To change a font follow these steps:

1 Select the text.
2 Click **Format** then **Font** in the menu bar. The **Font** dialogue box will appear. Note: If you do not see the Font option, expand the menu by clicking on the double arrow at the bottom of the drop-down menu.

   In the section of the dialogue box labelled **Font**, you will see the names of the various kinds of print that are available on the computer. In the **Font** dialogue box in Figure 12.3, you can see the font names Times New Roman, Transportation, Trebuchet MS, Tunga and Tw Cent MT.
3 Click on one of the font names. The text in the preview section of the window should change. Now click **OK**. The Font box will close and you will see the changes made to the highlighted text. Click anywhere on your on-screen page to deselect the text.
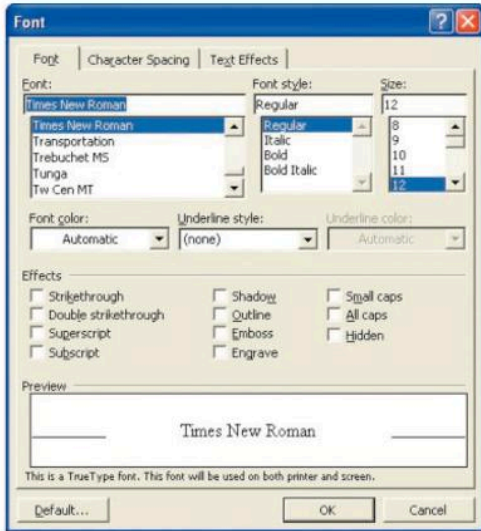
Figure 12.3 *Font dialogue box*
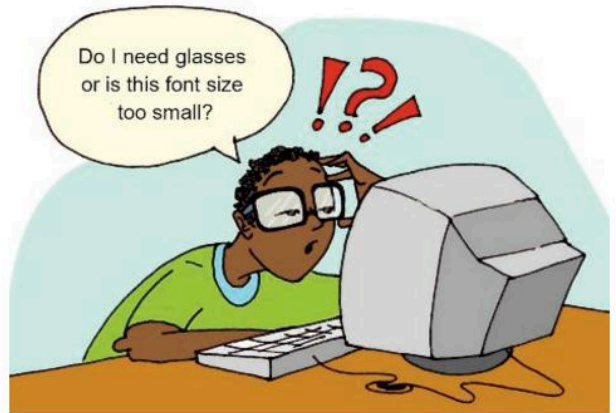
Figure 12.4

To do

Open Microsoft Word and type the following sentences. Remember to place your fingers on the home keys and use the typing techniques you have learnt.

1 Rita's dance troupe wore ruffled dresses.
2 She dries her feet at the fire.
3 Guy has had a great yield at his estate this year.
4 Hailey regularly files letters at her desk.
5 I asked her to get the red leather shirt.
6 Harry raced after Jade; she fled at the gate.
7 Tuesdays and Saturdays are their days here.
8 He said that Jess has a legal lease.

Select each sentence in turn and change the font.
Use different fonts.
Save your document using Fonts as the file name.
Print the document on A5 paper.
Close Microsoft Word.

Figure 12.5 *Font sizes*

How to change font size

Your computer can format font in various sizes, from very small to extremely large. Font size is measured in **points**. Usually, the list of font sizes range from size 8 to size 72.

To change font size:
1 Select the text to be formatted and click **Format** and **Font** on the menu bar.
2 In the font window that appears, select the size from the list shown (Figure 12.6) and then click **OK**.
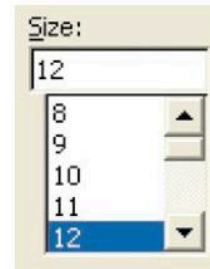
Figure 12.6 *Selecting font size*

Note: Use the arrows ▲ and ▼ to scroll through the list. If you want a size that is not shown, type the figure in the box above the list.

<div style="border:1px solid;">

To do

1 Open the document you saved as Fonts. Experiment with changing sentences to different font sizes.
2 Print the document on A4 paper.
3 Close the document without saving the changes.

</div>

How to change font style

Font styles include regular, **bold**, *italic* and <u>underline</u>. **Bold**, *italic* and <u>underline</u> are used to highlight words that you want to stand out in your text.

To get these font styles:
1 Select the text and use the **Format** and **Font** menu commands.
2 Click on the style you wish to use and then click **OK**.

How to change font effects

Special effects may be added to fonts. Some of these effects are shown in Figure 12.7.

To get these effects:
1 Select the text and activate the **Font** dialogue box by clicking **Format** then **Font**.

Figure 12.7   *Different font effects*

2 Click on the effect you desire so that a check appears in the box ☑ (Figure 12.8).
3 Click **OK**.
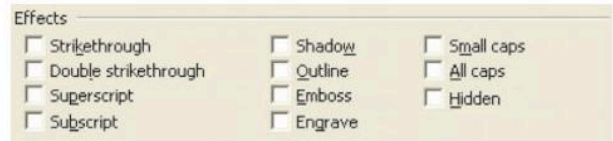
Figure 12.8   *Choices of font effects*

How to change font colour

Font may be printed in any colour that your printer can produce. Your choice of colour is influenced by the kind of document you are typing. Most business documents are printed using black ink. You may use colour when doing design work such as letterheads, menus, invitations and programmes.

The **Font color:** option of the **Font** dialogue box contains a palette of 40 colours. To activate this palette, click on the ▼ next to the font colour selector, as is shown in Figure 12.9.

If the colour you wish to use is not shown in this palette, Microsoft Word offers you the opportunity to choose from over one hundred standard colours or an infinite
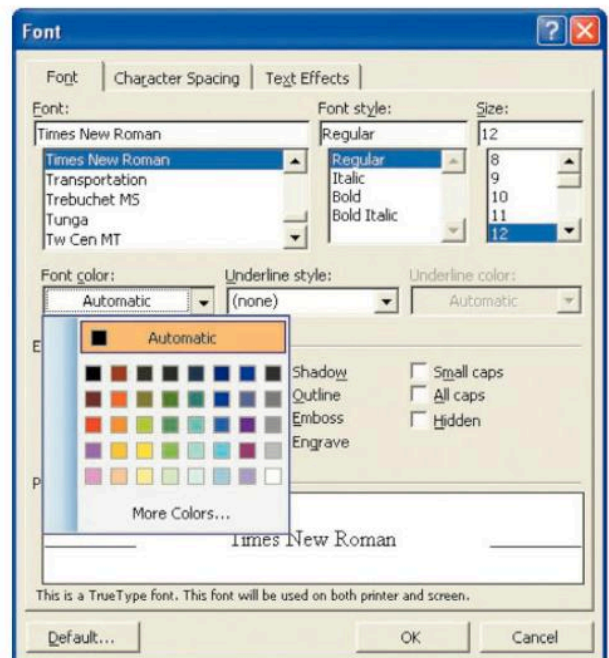
Figure 12.9   *Font colours*

number of custom colours. To activate these options, click on the button labelled **More Colors...** under the colour palette.

Click on the tab labelled **Standard** and then select the colour you want (Figure 12.10). The new colour will be displayed at the bottom right of the box. Click **OK** to close the Colors box, and then click **OK** to exit the Font window.

Click on the tab labelled **Custom** to see even more colour options (Figure 12.11). Click the colour spectrum on the colour you want. Then click on the shade you wish to use from the selector to the right of the spectrum.
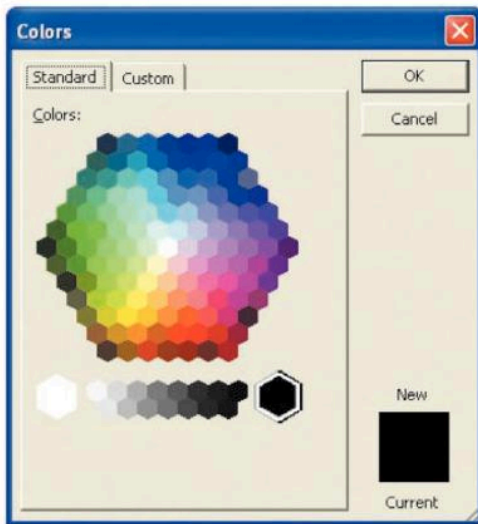
Figure 12.10   *The **Standard** colour selector*
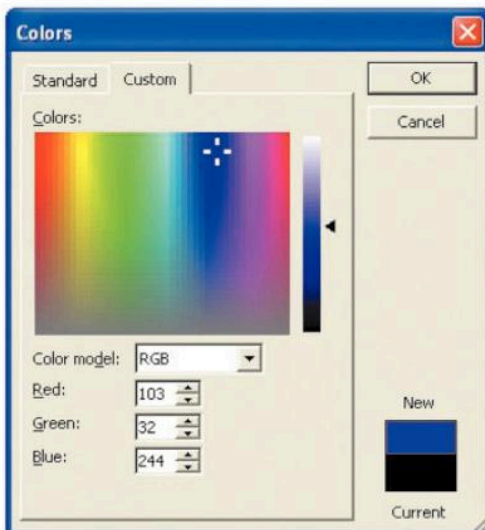
Figure 12.11   *The **Custom** colour selector*
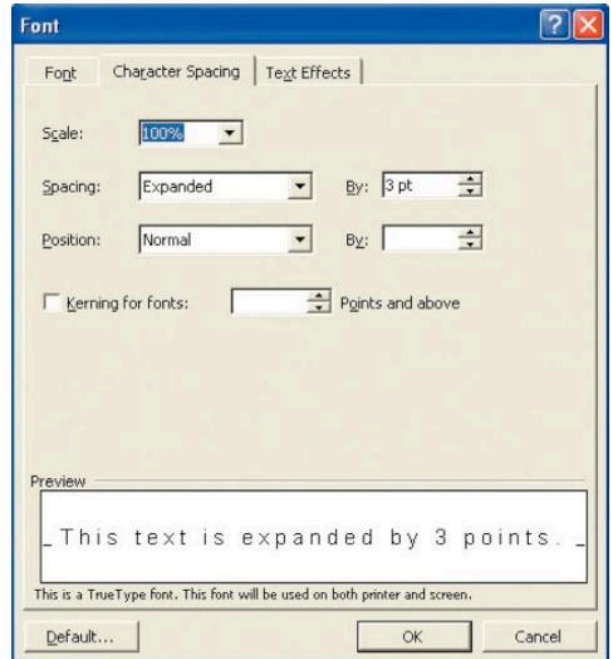
Figure 12.12   *Character spacing*

This text is expanded by 3 points.

This text is condensed by 1.2 points

Figure 12.13

Character spacing

The **Font** dialogue box enables you to alter the spacing between characters. Characters may be **expanded** to increase the spacing or **condensed** to decrease the spacing. Figure 12.12 shows the settings used to expand text by three points.

To adjust character spacing:

1   Select the text you want to format.
2   Click **Format** then **Font** in the menu bar.
3   Click on the **Character Spacing** tab.
4   Select the spacing you wish to use then enter the number of points by which you want the text expanded or condensed.
5   Click **OK**.

To do

1 Open the Fonts document and try changing font colours, styles and spacing.
2 Print your document on letter-sized paper.
3 Save the changes as a new document called Modified fonts.

DID YOU KNOW?

You will find it exciting to use a variety of fonts, styles and colours. However, your work will look chaotic if there are too many different fonts, colours and sizes on one page. Decorative fonts and bright colours are best suited to creative work such as flyers, advertisements and newsletters. For business documents you must use plain font.

Paragraph formatting

There are several ways of formatting your paragraph to modify the way it looks. Some examples of paragraph formatting include:

- Line spacing.
- Alignment.
- Tabs.
- Indents.
- Bullets.
- Numbering.
- Symbols.
- Borders and shading.

Adjust line spacing

Line spacing is the amount of space from the bottom of one line of text to the bottom of the next line. Microsoft Word adjusts the line spacing to accommodate the largest font or the tallest graphic in that line. You can change the spacing between the lines or the spacing before or after each paragraph.

Letters are usually typed using single line spacing with an extra line space between paragraphs. Manuscripts are generally typed with double line spacing unless you are otherwise instructed.

To change line spacing:

1 Select the paragraphs you want to change.
2 Click **Format** then **Paragraph...** on the menu bar.
3 Click the **Indents and Spacing** tab on the dialogue box that appears.
4 Click the ▼ on the line spacing selector.
5 You will see several options such as single, double, 1.5 and Exactly. Click on the spacing you want to use.
6 Click **OK**.
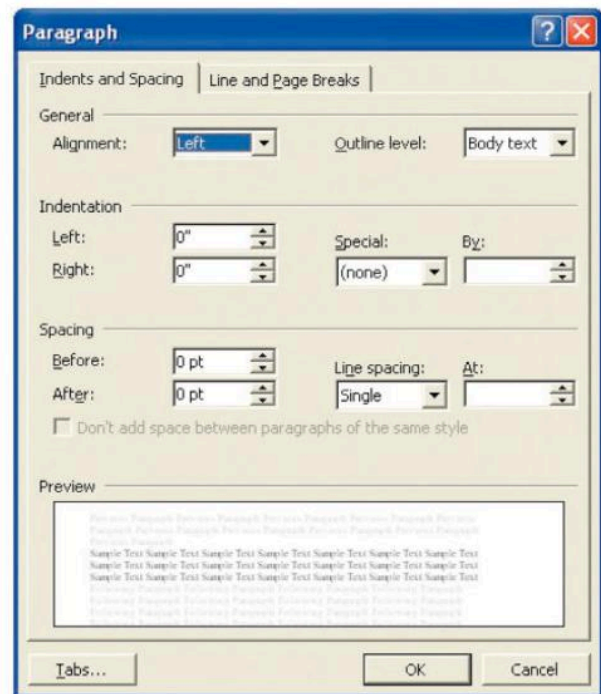
Figure 12.14 *The **Format Paragraph** dialogue box*

If you select **Exactly**, **At least** or **Multiple** for line spacing, you must enter the amount of space you want in the **At:** box.

Adjust paragraph spacing

Paragraph spacing controls the distance of one paragraph from the next. You may adjust the spacing before and/or after the paragraph.

Left alignment causes the first letter of each line in a paragraph to be in line with the left margin. This paragraph is left-aligned.

Right alignment causes the last letter of each line to be in line with the right margin. This paragraph is right-aligned.

Centre causes each line of text to be evenly spaced between both the left and right margins. This paragraph is centred.

Justify causes the text to be evenly distributed between both margins so that the first and last letters of each line are in line with the respective margins. Because the last line of text in a paragraph is often shorter than the other lines, it may not appear to be justified. This paragraph is justified.

To change paragraph spacing:

1 Select the paragraphs you want to change.
2 Click **Format** then **Paragraph...** on the menu bar.
3 Click the **Indents and Spacing** tab in the box that appears.
4 Under **Spacing**, enter the spacing you want in the Before: or After: box.
5 Click **OK**.

Adjust paragraph alignment

There are four options for paragraph alignment: left, right, centre and justified.

To change the paragraph alignment:

1 Select the paragraphs you want to change.
2 Click **Format** then **Paragraph...** on the menu bar.

3 Click the **Indents and Spacing** tab in the box that appears.
4 In the **Alignment** selector click ▼, and click on the option you want to use.
5 Click **OK**.

Alternatively, you can use the **Formatting** toolbar to alter paragraph alignment.

Table 12.1

Task	Button
Align left	
Centre	
Align right	
Justify	

DID YOU KNOW?

- If the **Formatting** toolbar is not visible, click **View**, and point to **Toolbars** on the menu bar. Click **Formatting** so that a tick ✓ appears.
- If you still do not see the buttons that you want to use, click the **Toolbar Options** button at the end of the Formatting toolbar. Click on the button you want to use. The button will be added to the toolbar. Click on any blank area of the screen to exit the menu.

My glossary

Write definitions of the following terms.

Centre-align	Left-align
Character spacing	Line spacing
Condensed	Paragraph spacing
Expanded	Points
Font	Right-align
Justify	Selecting

Working with indents

Indent refers to the distance of text from the left and right margins of your page. Indents may be set by dragging the appropriate marker on the horizontal ruler. Look at the left of the horizontal ruler and you should see a marker that looks like this:

This marker is actually composed of three sections. Dragging each section produces a different type of indent.

There are several types of indent including the following:

- First-line indent ▽.
- Left indent ▢.
- Hanging indent △.
- Right indent △ (found at the right margin).

A **first-line indent** starts the first line of the paragraph at a specified distance from the margin. All other lines start at the margin. The paragraph in Figure 12.15 shows a half inch first-line indent. Look at the horizontal ruler in the figure. You will see a downward-pointing triangle at the half inch position.

To create a first-line indent:

1 Select the paragraph you want to indent.
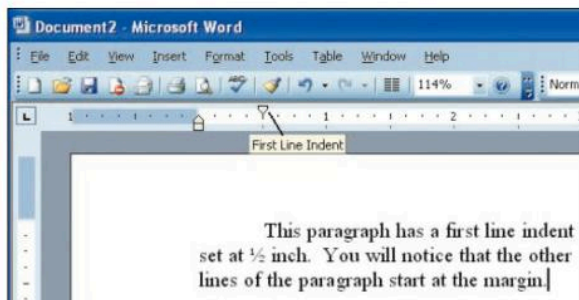
Figure 12.15 *First-line indent*
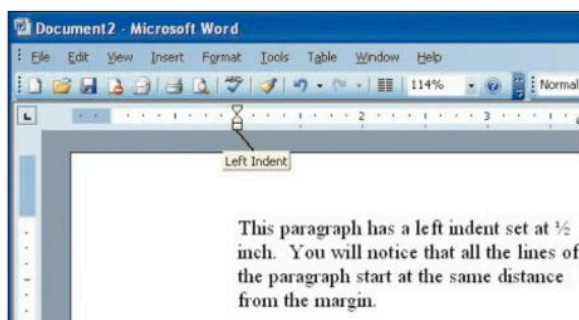
Figure 12.16 *Left indent*

2 On the horizontal ruler, drag the **First Line Indent** marker to the position where you want the text to start.

A **left indent** moves the entire paragraph at a distance from the left margin. The default left indent position is zero. The paragraph in Figure 12.16 shows a left indent set at half an inch.

To create a left indent:

1 Select the paragraph you want to indent.
2 On the horizontal ruler drag the **Left Indent** marker to the desired position.

With a **hanging indent** the second and subsequent lines of a paragraph are set at a greater distance from the margin than the first line. Hanging indents are often used with numbered or bulleted lists. The paragraph in the following figure has a hanging indent set at half an inch.
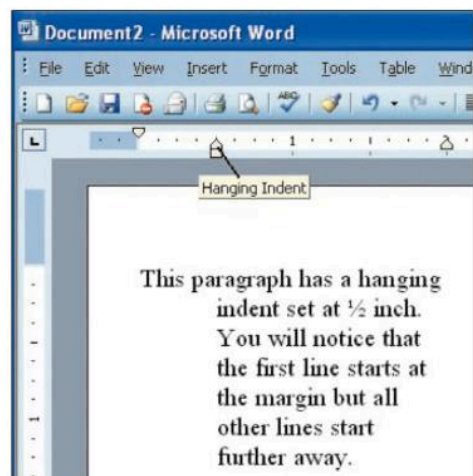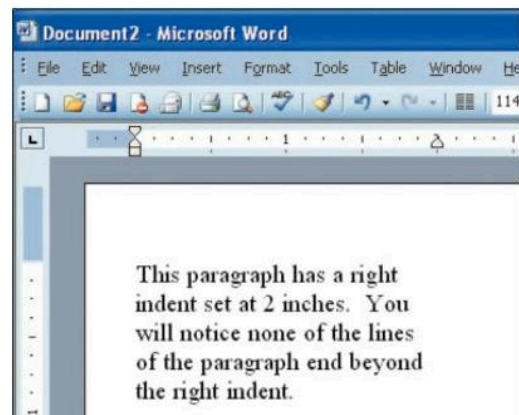

Figure 12.17 *Hanging indent*

Figure 12.18 *Right indent*

99

To create a hanging indent:

1 Select the paragraph in which you want to create a hanging indent.
2 On the horizontal ruler, drag the **Hanging Indent** marker to the position at which you want the indent to start.

A **right indent** sets the distance of the text from the right margin. The paragraph in Figure 12.18 shows a right indent set at two inches.

To change the right indent:

1 Select the paragraph you want to change.
2 On the horizontal ruler, drag the **Right Indent** marker to the position where you want the text to end.

You can also set indents by clicking **Format** then **Paragraph...** on the menu bar. Click on the **Indents and Spacing** tab in the dialogue box that appears.

To change the left or right indent, either type in the desired position or select it by holding ▲ or ▼ until the required number appears.

To create a first-line or hanging indent select from the **Special** selector then enter the desired position in the **By:** box. Click **OK**.

You can also create a negative indent (also called an **outdent**) that causes text to extend into the left margin. To do this:

1 Select the paragraph you want to extend into the left margin.
2 On the horizontal ruler, drag the **Left Indent** marker to the position where you want the paragraph to start.

To do

Type the following paragraph with a first-line indent of 2.5 cm (1 inch):

> Communication is the process by which a signal is transmitted from a sender to a receiver and is understood as it was intended. Effective communication is essential to efficiency in the workplace. Communication is effective if the message is received without any distortion or misinterpretation.

Type the following paragraph with a left indent of 5 cm (2 inches):

> The telephone is one of the most frequently used communication media in the business world. Often the telephone is the first means of contact between the organisation and its customers. The techniques used and etiquette shown by office personnel create a lasting impression on callers. It is therefore important to know how to make and receive telephone calls with professionalism, enthusiasm, courtesy and respect.

Set a right indent at 11.4 cm (4½ inches) and type the following paragraph:

> It is now common for businesses to have dealings with organisations around the globe. A company in the Caribbean may buy from and sell to markets in Europe, Asia and the Americas. A large number of multinational corporations have operations in this region. Consequently it is necessary to have an understanding of time zones in regions around the world.

Use a 2.5 cm (1 inch) hanging indent when typing the following paragraph:

> Credit cards and debit cards are pieces of plastic with a magnetic strip that holds coded information such as the cardholder's name and the card number. Debit cards allow the user electronic access to the funds that are in their account. Credit cards allow the user to borrow up to a predetermined amount to pay for transactions.

My glossary

Write definitions of the following terms.

First-line indent   Left indent
Hanging indent   Outdent
Indent   Right indent

Bullets and numbering

A **bullet** is a symbol that is placed before text to indicate a list of items. Alternatively a list may be numbered. Microsoft Word offers several different numbering styles.

To create a numbered list:

1 Select the text to which you want to add numbers.
2 Click **Format** then **Bullets and Numbering...** on the menu bar.
3 Click on the **Numbered** tab.
4 Click on the numbering style you want to use.
5 Click **OK**.

To create a bulleted list:

1 Select the text to which you want to add bullets.
2 Click **Format** then **Bullets and Numbering...** on the menu bar.
3 Click on the **Bulleted** tab.
4 Click on the bulleting style you want to use.
5 Click **OK**.

You can customise the bulleted list by using a picture or other symbol. To do this:

1 Select the list that you want to customise.
2 On the **Format** menu, click **Bullets and Numbering...**, and then click the **Bulleted** tab.
3 Click the list format you want to alter.
4 Click **Customize....**
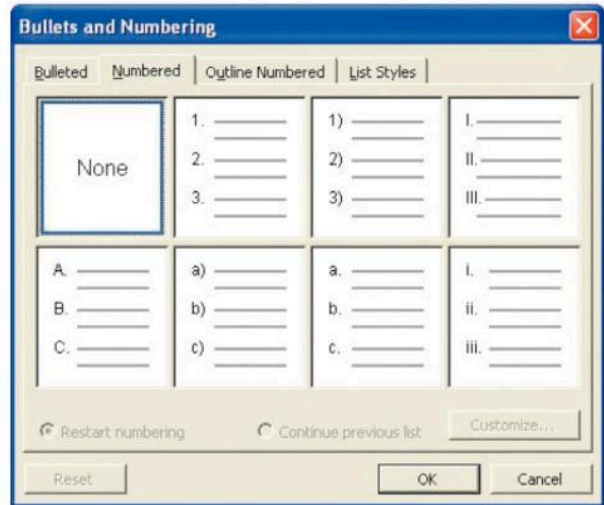
Figure 12.19 *The **Bullets and Numbering** dialogue box*

5 Either click **Character...** if you want to use a different symbol or click **Picture...** to select a picture.
6 Select the symbol or picture you want.
7 Make any other modifications you desire. For example, you can alter the size, colour, style and effects of symbols by clicking on the **Font...** option.
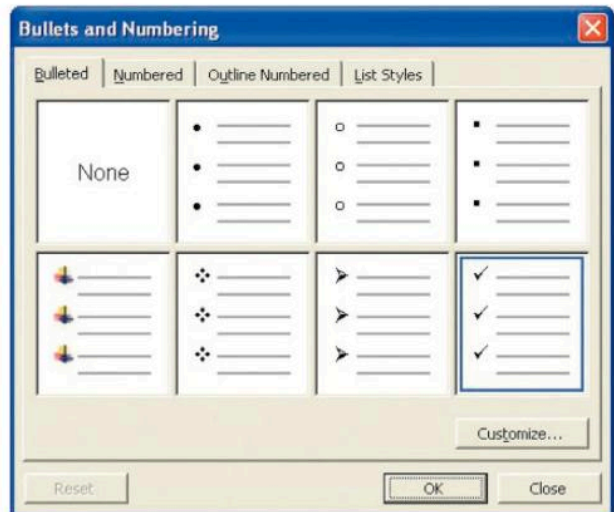
Figure 12.20 *The **Bullets and Numbering** dialogue box*
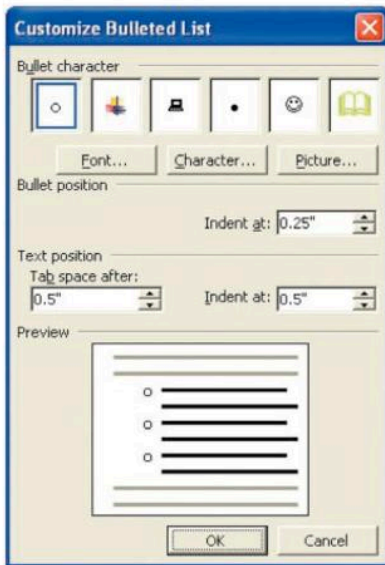
Figure 12.21 *The **Customize** dialogue box*

DID YOU KNOW?

Some fonts consist entirely of symbols that can be used when creating bulleted lists. Webdings and Wing-dings are two examples. Figure 12.22 shows some symbols available in Wingdings.
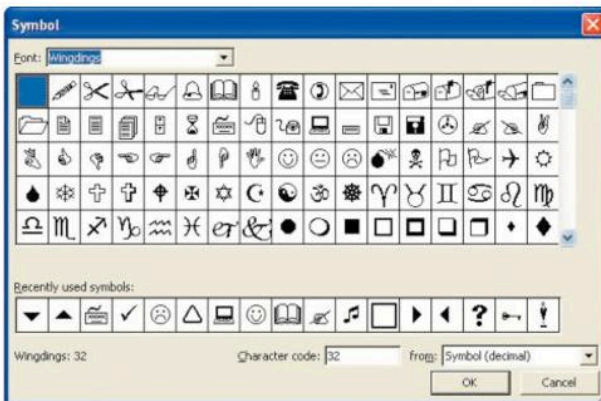

Figure 12.22 *The **Symbol** option*

To do

1 Type the following lists and apply an appropriate bullet to each list.

2 Customise your bullets.

3 Choose an appropriately sized paper to print your document.

```
Examples of input devices:
    Keyboard
    Mouse
    Scanner
    Microphone
    Bar-code reader
Font formatting options:
    Size
    Colour
    Style
    Effects
    Character spacing
The three punctuation styles used
in business documents are:
    Open punctuation
    Full punctuation
    Mixed punctuation
```

4 Retype the lists and apply a different numbering style to each.

DID YOU KNOW?

Try adjusting the indentation of your bulleted and numbered lists by applying the techniques you have already learnt.
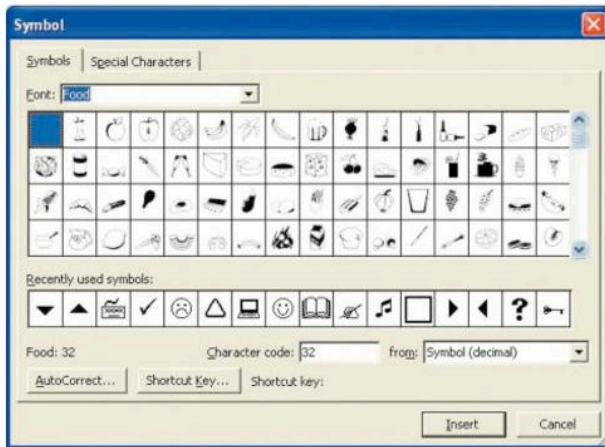
Figure 12.23 The **Symbol** dialogue box
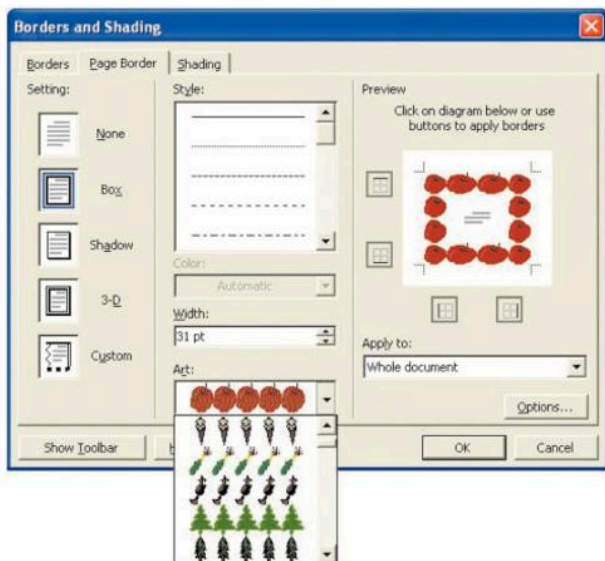
Figure 12.24 The **Page Border** tab

Inserting a symbol

You have already learnt to type symbols such as the asterisk and ampersand. However there are many other symbols that are not on your keyboard. You can use the **Symbol** dialogue box to enter these symbols anywhere in your document.

You should have already discovered the fonts that contain symbols when you were working with bullets. These include **Wingdings** and **Webdings**.

To insert a symbol:

1 Click where you want to insert the symbol.
2 On the **Insert** menu, click **Symbol**..., and then click the **Symbols** tab.
3 In the **Font:** box, click the font that you want.
4 Click on the symbol you want to use and then click the **Insert** button.
5 Click **Close**.

DID YOU KNOW?
Microsoft Word saves the symbols you have used most recently. You can insert any of these quickly by double-clicking **Recently used symbols:** in the **Symbols** dialogue box and then clicking **Close**.

Borders and shading

Borders are used to outline words, paragraphs, entire pages or cells in a table. Borders may be simple lines or decorative frames. Page borders may be applied to one or more sides of the document. Figure 12.24 shows a few of the artistic page borders that are available in Microsoft Word. These artistic borders are not available for outlining words or paragraphs.

Shading changes the background colour of the text. There are several shading patterns to choose from with an almost infinite range of colours.

This text is shaded light yellow with a dark blue trellis pattern.

Figure 12.25 shows the **Shading** tab of the **Borders and Shading** dialogue box.

You can use borders and shading to:

● Improve the appearance of your document.
● Draw attention to specific text in your document.
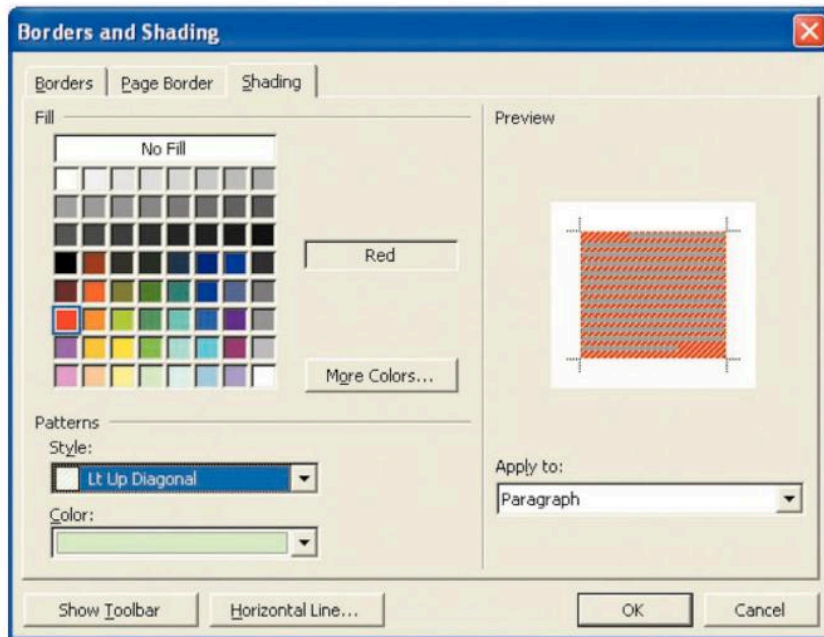● Format cells in a table.

Borders and Shading

Borders | Page Border | Shading

Fill

No Fill

Red

More Colors...

Patterns

Style:

Lt Up Diagonal

Color:

Preview

Apply to:

Paragraph

Show Toolbar | Horizontal Line... | OK | Cancel

Figure 12.25 *The **Shading** tab*

To apply borders and shading:

1 Select the text or picture you want to apply a border to.
2 Click **Format**, then **Borders and Shading...** .
   (a) Click the **Borders** tab to apply text borders.
   (b) Click the **Page Border** tab to apply borders to one or more sides of the page.
   (c) Click the **Shading** tab to apply shading to text.
3 Select the colours and styles you want.
4 Click **OK**.

DID YOU KNOW?

Click the **Options...** button to specify the distance of the border from the text. You may also specify whether a page border is applied to the entire document, a specific section, the first page only or all of the pages except the first page. Use **Print Preview** to ensure that your entire border will be printed.

Background

In Microsoft Word, **Background** is used for web pages, online documents or email messages.
   To change the background:

1 On the **Format** menu, point to **Background**.
2 Do one of the following:
   (a) Click the colour you want.
   (b) Click **More Colors...** to see additional colour choices.
   (c) Click **Fill Effects...** to change or add special effects, such as **gradients**, patterns or textures.
3 Click **OK**.

   To remove a background:

1 On the **Format** menu, point to **Background**.
2 Click **No Fill**.

A **gradient** is a gradual progression of colours and shades. As is shown in Figure 12.26, there are several preset gradients from which you can choose. You may also select from a number of shading styles such as **From corner** or **Diagonal up**.
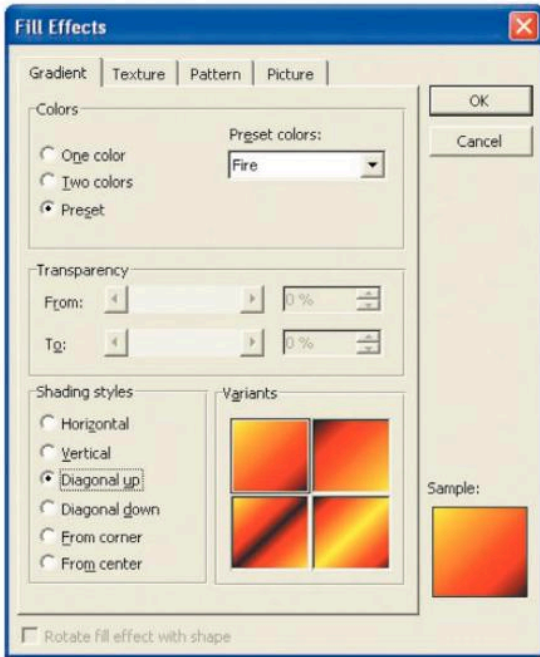
Figure 12.26   *The **Fill Effects** dialogue box*

Backgrounds create a pleasing appearance to displays on the screen. However, Microsoft Word does not support the printing of background colour. To create a printable background you must apply a **watermark**. Watermarks are text or pictures that appear behind document text. They are used to:

- Add interest.
- Identify the status of the document, such as 'Draft', 'Confidential' or 'Urgent'.
- Show the producers of the document such as a company's name.

To add a watermark:

1. Click **Format**, point to **Background**, and then click **Printed Watermark...** .
2. Do one of the following:
   (a) To insert a picture as a watermark, click **Picture watermark**, and then click **Select Picture...** . Select the picture you want, and then click **Insert**.
   (b) To insert a text watermark, click **Text watermark**, and then select or enter the text that you want.
3. Select any additional options that you want, and then click **Apply**.

To remove a watermark:

1. On the **Format** menu, point to **Background**, and then click **Printed Watermark...** .
2. Click **No watermark**.

Print Preview allows you to see the document as it will look when it is printed. To do this click **File** then **Print Preview**. Click on the **Close** button on the taskbar under the menu bar to close the print preview and return to the document.

The toolbars or ribbons contain many shortcut buttons that enable you to quickly apply paragraph formatting as is illustrated in Table 12.2. You should practise using these buttons until you become familiar with them.

Table 12.2   *Shortcut buttons*

Button	Function
x_1	Convert text to a subscript, such as the 2 in H_2O
x^1	Convert text to superscript, such as the 2 in $4^2 = 16$
Aa▾	Change the case of the selected text, e.g. to upper case, lower case or initial capitals. Click ▪ to select different case options
≔▾	Create a bulleted list. Click ▪ to select different bullet styles
≔▾	Create a numbered list. Click ▪ to select different styles of numbering such as roman numerals
〓	Decrease the indent level of the paragraph
〓	Increase the indent level of the paragraph
‡≡▾	Change the line spacing
⬇	Put the selected text in alphabetic or numerical order
⊞▾	Apply borders to the selected text. Click ▪ to select different borders
🖌▾	Apply shading, that is, colour the background behind selected text. Click ▪ to select different colours

Headers and footers

A document page actually consists of several parts. The margins are the blank spaces that surround the printable area of the page. Headers and footers are areas in the top and bottom margins of the page into which you can insert text or graphics.

Some items that are usually inserted into the headers and footers are:

- the document's title
- the chapter or section number
- the author's name
- page numbers
- the date
- a company logo.

The header area may be used to create **letterheads**. A letterhead is a paper with an organisation's name, address, logo, telephone number and other information printed at the top. It is usually a distinctive design that uses colour and a visually pleasing layout. The letterhead area is usually between 1½ to 2 inches high and is centred at the top of the page.

To work in the header and footer areas:

1 Click **View** in the menu bar.
2 Click **Header and Footer**. (A special Header and Footer toolbar will appear.)
3 Type the information you want.
4 Click **Close** on the **Header and Footer** toolbar.

As you point to each item on the **Header and Footer** toolbar a **ScreenTip** will appear. A screen tip is a small box that indicates the function of each button in a toolbar.

Formatting margins

A **margin** is the blank space outside the printing area on a page. Margins determine the distance between all text and the edge of the page. They therefore control the width of the text area of your page. The **horizontal margins** are found at the top and bottom of the page. The **vertical margins** are found to the left and right of the page.

Your printer settings control the minimum size to which you can set your margins. If your margins are set smaller than the allowable limits, you will see a warning (Figure 12.28).

Developing work skills

You work with an employment agency called The Skills Bank Employment Services Limited. You are asked to design a letterhead for the company using appropriate font, font size, colour and layout.

1 Design the letterhead in the header of a document.
2 Save it as a read-only document called Skills Bank Letterhead.

Superior Automotive Supplies

22 Adventure Road, SEATOWN
Phone 555 1234-8 Fax 555 6672 email Superior@carworldint.com

Figure 12.27 *A sample letterhead*

Figure 12.28 *Warning*

To change page margins:

1 Click **File** then **Page Setup...** in the menu bar (Figure 12.29).
2 Click the **Margins** tab.
3 Use ▲ to increase or ▼ to decrease the margin, or type in the measurement you want.
4 Click **OK**.

If you want to change the margins for a part of the document only, select the text and then set the margins you want. In the **Apply to:** box, click **Selected text**. Microsoft Word automatically breaks the document into **sections**.
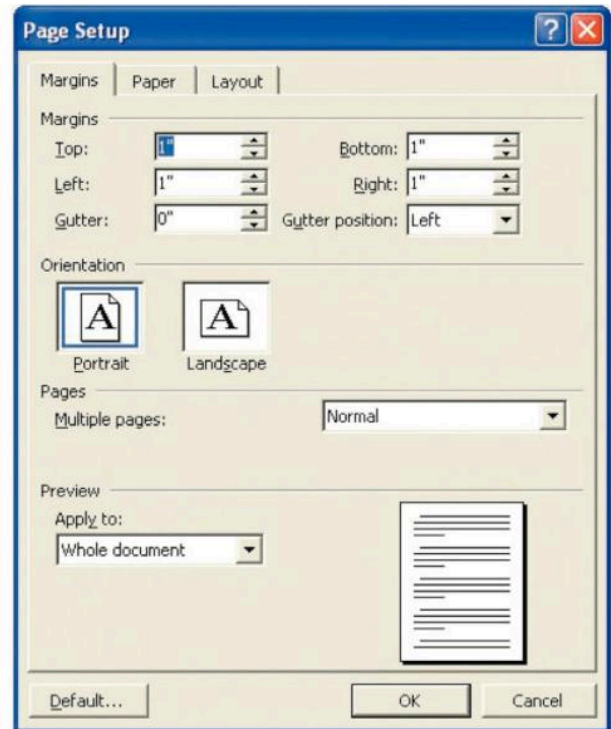
Figure 12.29 *The **Page Setup** dialogue box*

To do

Open Microsoft Word and type the following document.

> It takes practice to develop speed and accuracy when typing, as well as to become familiar with all the features of the applications software that are used in this course. The use of headers and footers is one of the skills that you should master.
>
> A new user of word-processing software might not realise that the document page contains two hidden areas: the header and the footer. The text entered in these sections is usually displayed on each page. However, there is a button that enables you to have a different first page, or to have different header and footer text on odd and even numbered pages. With time and patience you will be able to discover many other features of the header and footer sections of your document page.

a Insert the title **Headers and Footers** as a bold, centre-aligned, size 28, blue header.
b Put in a page number in the footer by using the appropriate option in the **Insert** menu.
c Save the document as Headers and Footers.
d Change the background of the document to the preset gradient called Daybreak.
e Preview your document and discuss your observations with your teacher.
f Remove the background.
g Insert the following words as a watermark: EDPM Activity.
h Preview your document and discuss your observations with your teacher.
i Apply an art page border that is 20 points from the text.
j Save the changes you have made.
k Print your document on appropriately sized stationery.

DID YOU KNOW?
- A **section** is a portion of a document in which page formatting options are set that are different from the rest of the document.
- A **section break** is a mark that is inserted to show the end of a section. It stores all of the formatting information that is relevant to that section, such as margins, headers and footers.
- To create a section break in a document click **Insert** then **Break...** on the menu bar. Select the type of break you want to create and click **OK**.

Example

A document 4.5 inches long is typed on letter-sized paper in portrait orientation. Calculate the size of the margins that will vertically centre the document.

Method:
(Step 1) $11 - 4.5 = 6.5$
(Step 2) $6.5/2 = 3.25$

Answer:
To centre the text vertically the top and bottom margins must each be set at 3.5 inches.

If you plan to bind a document use a **gutter margin** to add extra space to the side or top margin. The gutter margin makes sure that text is not hidden by the binding.

To **horizontally centre** a document you use equal left and right margins. To do this:

1. Type the longest line of the document.
2. Look at the horizontal margin to determine the length of this line.
3. Subtract this figure from the width of your paper to determine the total size of the left and right margins.
4. Divide the answer by two to calculate the size of each margin.

To **vertically centre** a document you use equal top and bottom margins. To do this:

1. Type the document using the default margins.
2. Look at the vertical ruler at the left of the document window to calculate how much space is occupied by the typed text.
3. Subtract this figure from the length of your paper to determine the total size of the top and bottom margins.
4. Divide the answer by two to calculate the size of each margin.

DID YOU KNOW?

The computer can vertically centre the document automatically. Click on the **Layout** tab of the **Page Setup** dialogue box. Select **Center** from the options for **Vertical Alignment**.

Example

The longest line of a document is 5 inches long. The document is typed on letter-sized paper in portrait orientation. Calculate the size of the margins that will horizontally centre the document.

Method:
(Step 1) $8.5 - 5 = 3.5$
(Step 2) $3.5/2 = 1.75$

Answer:
To centre the text horizontally the left and right margins must each be set at 1.75 inches.

My glossary

Write definitions of the following terms.

Block (text)
Border
Bullet
Centre horizontally
Centre vertically
Flagged
Footer
Gradient
Grammar checker
Header
Horizontal margin

Insert mode
Letterhead
Margin
Overwrite mode
Proofreading
Section
Section break
Spelling checker
Vertical margin
Watermark

Developing work skills

Prepare a table summarising each skill introduced in this unit and at least one way of performing it.

Examination-type questions

1 State the purpose of the following buttons:
   a Aa▾
   b ↕≡▾
   c x¹   *(3 marks)*

2 Define the following terms as they relate to word processing:
   a Bullet
   b Justify   *(4 marks)*

3 a Explain the difference between indents and margins.   *(3 marks)*
   b What is meant by vertical centring of text?   *(2 marks)*
   c Produce the following notice so that it is centred horizontally and vertically on your page.   *(8 marks)*

NOTICE

CLOSURE OF COMPUTER LAB

The computer lab will be closed on 9–12 November. This is necessary to facilitate repairs and upgrading of equipment. We apologise for any inconvenience caused.

13 Editing tools

By the end of this unit you should be able to:
- Edit documents using a variety of techniques

Unit at a glance

- Editing involves making changes to a typed document.

- Your word processor offers several editing features including:

  - Cut: to remove selected text and place it in a memory location called the **Clipboard**.

  - Copy: to make a copy of selected text and place it on the clipboard.

  - Paste: to insert cut or copied text from the clipboard into the document.

  - Move: to change the location of typed text by using cut-and-paste or drag-and-drop techniques.

  - Find: to search for every occurrence of a specific word or phrase.

- Find and replace: to search for every occurrence of a specific word or phrase and replace it with a given word or phrase.

- Type over mode: a setting in which existing text can be typed over and thus replaced.

- Insert mode: new text is entered beside existing text as you type.

- The Spelling and Grammar Checker: a feature that identifies possible errors in a document. Grammatical errors are flagged with a green wavy underline whereas spelling errors are identified with red.

- The Thesaurus: a tool that enables you to look up synonyms while you work and insert them into your document.

The process of reading through a document to identify and correct errors or rearrange text is called **proofreading**. This is a vital aspect of electronic document preparation and management. When proofreading you should:

- Read the document and check it against the original, word for word.
- Never skim through when proofreading because you may think you see text that is not actually there.
- Look for omissions, insertions and transpositions.

- Ensure the accuracy of dates, figures, proper nouns and addresses.
- Make sure that the document is free from spelling and grammatical errors.
- Make certain that the punctuation is appropriate.
- Ensure that your word usage is correct.

Your word-processing software contains several features that enable you to **edit** or make changes to typed text. You can select a **block** of text then copy it, delete it (cut) or move it to another location (cut and paste). A block can be a character, a sentence, a

paragraph, a graphic image or the whole document. This ability to manipulate large segments of text is very useful when you are editing large documents.

Here are instructions on how to perform common editing tasks.

Move text or graphics

1 Select the text to be moved.
2 Click **Edit** then **Cut**. This removes the text from its current position.
3 Click to position the cursor where you want the text to be placed.
4 Click **Edit** then **Paste**.

Copy text or graphics

1 Select the text to be moved.
2 Click **Edit** then **Copy**. This leaves the original text in its current position and places a copy of it on the clipboard.
3 Click to position the cursor where you want the text to be placed.
4 Click **Edit** then **Paste**.

Search for a specific word

1 Click **Edit** then **Find...**. The dialogue box shown in Figure 13.1 will appear.
2 In the **Find what**: box, enter the text that you want to search for.

3 Select any other options that you want.

As is shown in Figure 13.1, there are several options for finding text such as:

- Match case.
- Find whole words only.
- Find all word forms.

DID YOU KNOW?

Select the **Highlight all items found in:** check box if you want to select all instances of a specific word or phrase at once.

Automatically replace text

1 Click **Replace...** on the **Edit** menu.
2 Enter the text that you want to search for in the **Find what:** box.
3 Enter the replacement text in the **Replace with:** box.
4 Select any other options that you want.
5 Click **Find Next, Replace,** or **Replace All**.

Type over and Insert modes

Your word processor usually inserts new text wherever the cursor is positioned. Existing text is shifted to accommodate the new text. Your computer is in **Insert** mode.

Find and Replace

Find | Replace | Go To

Find what:

☐ Highlight all items found in:

Main Document

Less ▴ | Find Next | Cancel

Search Options

Search: All

☐ Match case
☐ Find whole words only
☐ Use wildcards
☐ Sounds like (English)
☐ Find all word forms (English)

Find

Format ▾ | Special ▾ | No Formatting
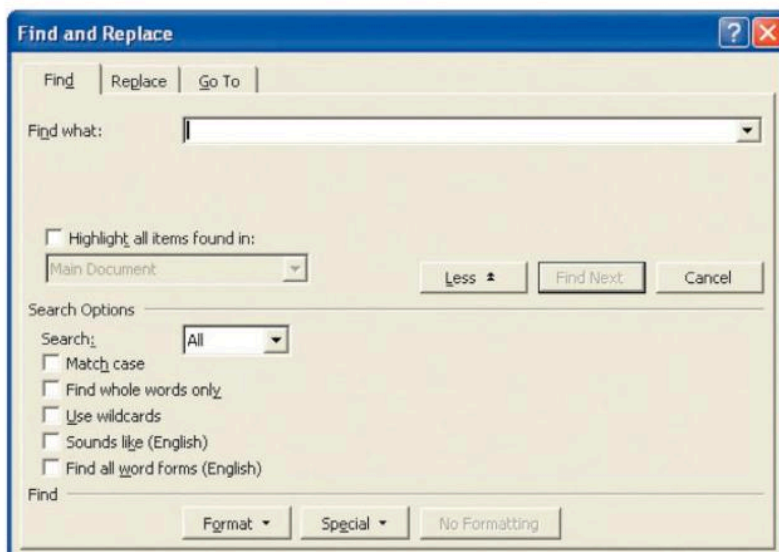
Figure 13.1 *The **Find and Replace** dialogue box*

Existing text is erased as you type when the computer is in **Type Over** or **Overwrite** mode. To change from Insert to Overwrite modes press the **Insert** key on the keyboard. The letters **OVR** will appear on the status bar at the bottom of the document window.

Spelling and grammar checker

The **Spelling and grammar checker** checks for possible errors in your document. The **grammar checker** works by analysing the text for typical or frequent problems. It uses a green wavy line to flag possible errors. Some of these problem areas include:

- Subject–verb agreement.
- Sentence fragments.
- Extremely long or highly complex sentences.
- Incorrect order of words.
- Extra spaces between words.
- Improper capitalisation.

The **spelling checker** compares each typed word against its dictionary. If it comes upon a word that is not in its dictionary, it creates a list of similarly spelt words from which you can choose. The spelling checker does not determine whether a word is appropriate for a sentence. It uses a wavy red underline to flag possible spelling errors.

You can check spelling and grammar either as you type or after typing the entire document.

> ### DID YOU KNOW?
> - **Some correctly spelt words may not be in the spelling checker dictionary. If you are certain that the word is correctly spelt you may ignore the flagging or add the word to the dictionary.**
> - **If you mistype a word but the result is another correctly spelt word (for example, if you type 'hare' when you intended to type 'hear'), the spelling checker will not flag the word.**
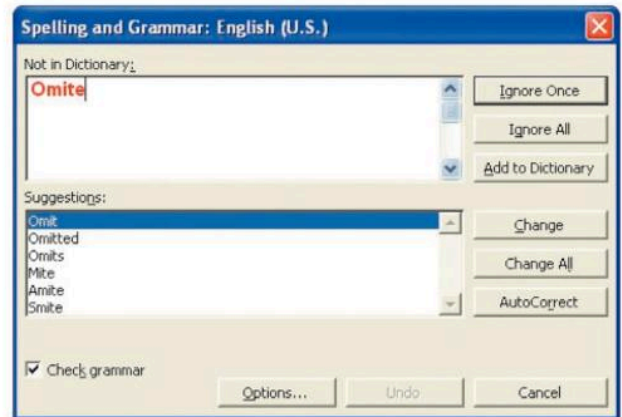
Figure 13.2 *Spelling and grammar checker*

To turn on the automatic spelling and grammar checker:

1 On the **Tools** menu, click **Options...**, and then click the **Spelling & Grammar** tab.
2 Select the **Check spelling as you type** and **Check grammar as you type** check boxes.

To use the automatic spelling and grammar checker:

1 Type the text.
2 Right-click a word with wavy red or green underline, and then select the spelling or grammar alternative that you want.

To check the spelling and grammar all at once:

1 Click **Tools** then **Spelling and Grammar....**
2 Type or select the desired change and click the **Change** button.
3 Make all of the desired corrections until the checking process is complete then click the **Close** button.

The spelling and grammar checker contains several editing options as is shown in Figure 13.2. These include:

- Ignore Once.
- Ignore All.
- Add to Dictionary.
- Change All.

Changing the language

United States (US) English is the default language for the spelling and grammar checker. You may find that words spelt correctly according to United Kingdom (UK)

English are flagged when you type your document. For example, the computer may flag *colour*, expecting you to type *color*.

Figure 13.3 *The language selector*

You may change the language used by the spelling and grammar checker. It is best to do this before you begin typing your document.

To change the language, click on the language selector on the formatting toolbar (Figure 13.3) and click on the language you want to use.
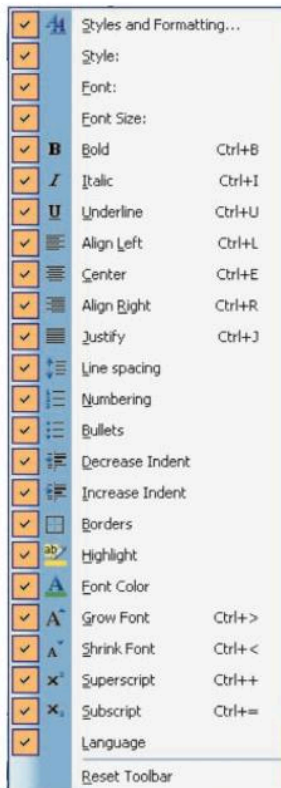

Figure 13.4 *Add or remove options*

If the formatting toolbar is not visible, use the **View** menu to select it. If you still cannot see the language selector, click on the arrow at the end of the formatting toolbar.

Point to **Add or remove buttons**, then point to **Formatting**. Click on **Language** so that a check mark appears.

The thesaurus

The **thesaurus** provides a list of synonyms for words that you type. To quickly access the thesaurus right-click on the typed word and point to **Synonyms** in the menu that appears. Click on the synonym that you want to use.

To do

Type the following document exactly as you see it. Do not correct any errors that you notice.

> Humans have allways looking for ways to make their work easier. When numbers was invented, man imediately looked for easier ways to work with them. One of the first calculating devices, the abbacus, consisted of a set of beeds string in rows on a wooden frame. Still the job was time-consuuming and left room for errors. Another way to managing numbers had to be found.

1 Use the spelling and grammar checker to identify and correct the errors.
2 What errors did you find? You should have identified five spelling errors and four grammatical errors.
3 Use the thesaurus to find a list of synonyms for **frame**. Which synonym would you choose? Why would you not use some of the synonyms?

Examination-type questions

1   What is meant by the term 'edit'? *(1 mark)*

2   Explain the difference between insert mode and write over mode when using a word processor. *(2 marks)*

3   State four kinds of error for which you must search when proofreading. *(4 marks)*

4   Explain how to use the **Find and Replace** feature of a word processor. *(4 marks)*

5   The **Spelling and Grammar Checker** on your computer can identify misspelled words. State three other types of error it can identify. *(3 marks)*

6   Proofread the following passage and correct all errors. Note: you will be penalised for identifying correct entries as errors. *(6 marks)*

Repetitive strain injury (RSI) is a term that refers to a number of conditions caused by repetitive motions, forceful movements and akward postures. ergonomic hazards such as unsuitable furniture or poorly design workstations may also cause injury. RSI can causes pain in the muscles, tendons, joints, and other soft tissues.

14 *Working with manuscripts*

By the end of this unit you should be able to:

- Interpret and apply manuscript signs
- Use different types of headings
- Apply rules governing paragraphing
- Prepare typescript from manuscript or typed notes using accepted rules
- Edit various types of documents

Unit at a glance

- A manuscript is a document prepared in draft form. It may be handwritten or typed.

- Abbreviations are shortened forms of words. These must be typed out in full.

- Corrections are made to a manuscript using standard correction signs.

- When typing a document you may need to identify sections by using headings.

- The following types of headings are used:
  - Main headings.
  - Subheadings.
  - Shoulder headings.
  - Paragraph headings.
  - Marginal headings.

- Paragraphs may have the following layouts:
  - Block.
  - Indented.
  - Hanging.

- A mailable document is one that is error free.

- Abbreviations that must be spelled out.
- Correction symbols or marks that must be interpreted and applied.

Working with abbreviations

When writing a draft the author may use **abbreviations** or contracted words to save time. Some of these abbreviations are commonly used, as is shown in Table 14.1. However, many abbreviations have been made up by the writer. Therefore it is necessary for you to read carefully and interpret the meaning of the document you are typing. Develop a wide vocabulary and learn how to use words correctly.

Headings

A **heading** is a group of text that indicates the topic of a document. There are several types of headings. There are specific formatting rules governing each type of heading. The headings most commonly used in business documents are:

- Main heading.
- Subheading.
- Shoulder heading.
- Paragraph heading.
- Marginal heading.

You may sometimes be given specific instructions for the formatting of the headings. Where no instructions are given, use the formatting information in Table 14.2 as a guideline.

A **manuscript** is the original written or typewritten work of an author that is used to prepare a mailable or printable document. The manuscript may contain:

Table 14.1 *Some commonly used abbreviations*

Abbreviation	Meaning
& or +	and
a/c	account
cd, wd, sd	could, would, should
dept	department
Dr Sir	Dear Sir
ea	each
info	information
mgmt	management
St	Street
wd	would
y	you
yr	your or year
Yrs ffy	Yours faithfully
w, w/o	will, with, without

Abbreviation	Meaning
w, w/o	with or without
bldg	building
mkt	market
th	the, this, that
b	be
nec'y	necessary
wh	which, what, when
cc	complimentary close, carbon copy
para(s)	paragraph(s)
mk	make
PS	postscript
m	may
sls	single line spacing
dls	double line spacing

You can assign a style to each type of heading when typing a document in Microsoft Word. This makes it easy for you to automatically create a table of contents.

Working with styles

To apply a style to text:
1. Select the text you want to change.
2. Open the Styles and Formatting task pane by clicking **Format** then **Styles and Formatting....**
3. Click the style you want in the **Styles and Formatting** task pane.

If the style you want is not listed, click **All styles** in the **Show**: box.

DID YOU KNOW?
- You may also open the Styles and Formatting task pane by clicking

  ⊞ on the Formatting toolbar.
- You can also apply a style by clicking or typing a style name in the Style

  box | Normal ▾ | on the Formatting toolbar.

To use headings to create a table of contents:
1. Click where you want to insert the table of contents.
2. On the **Insert** menu, point to **Reference**, and click **Index and Tables....**
3. Click the **Table of Contents** tab.
4. Click a design in the **Formats**: box to use one of the preset designs.
5. Select any other table of contents options you want. For example, click ▲ or ▼ to set the headings you want to show on your table of contents.
6. Click **OK**.
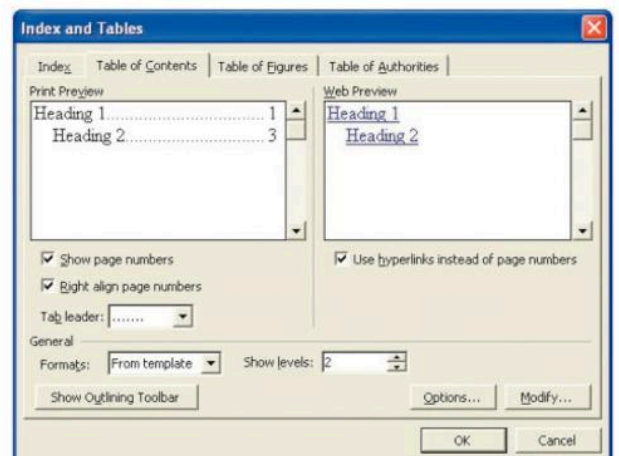
Figure 14.1 *The **Table of Contents** dialogue box*

Table 14.2 *Types of headings*

Heading	Function	Microsoft Word style	Placement	Formatting
Main heading	To indicate the general subject matter of the entire document	Heading 1	At the top of the first page of the document	• Typed in the largest font used in the document • **Either** aligned left **or** centred • Typed in **either** bold closed capitals with one or two spaces between words **or** spaced (expanded) capitals with three spaces between words • May be underscored
Subheading	To indicate the specific subject matter of the document	Heading 2	Immediately below the main heading with a clear line space between	• Typed in slightly smaller font than the main heading • **Either** aligned left **or** centred • Typed in **either** bold closed capitals with one **or** two spaces between words or Initial Capitals (Title Case) with underscoring
Shoulder heading	To indicate the specific ideas of the section of the document	Heading 3	Three line spaces between preceding paragraph and the shoulder heading. Placed above next paragraph with double line spacing between heading and paragraph	• Left-aligned • **Either** closed capitals with or without underscoring **or** Initial Capitals (Title Case) with underscoring or bold • No full stop after heading • May be enumerated using either letters or numbers
Paragraph heading	To indicate the specific idea of a paragraph	Heading 4 or 5	In the first line of the paragraph	• Left-aligned or indented according to the style of the paragraph • **Either** closed capitals with **or** without underscoring or Initial Capitals (Title Case) with underscoring or bold • **Either** followed by a colon or full stop with three spaces after the punctuation mark **or** with two spaces after the last word of the heading **or** with one space after if it is part of the opening sentence
Marginal heading (side headings)	Used when typing display-ed work such as minutes of meetings, programmes, plays and specifications		In the left margin	• Left-aligned or indented • Typed in closed capitals or initial capitals • May or may not be underscored or bold • No full stop after heading

Manuscript correction signs

Manuscript correction signs are a standard set of signs and symbols used to indicate corrections on proofs. These marks are placed both in the text and in the margin. Table 14.3 shows some of the most commonly used manuscript correction signs.
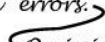
Table 14.3 *Commonly used manuscript correction signs*
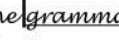
Instruction	Marginal mark	Textual mark	Corrected text
Type in lower case	lc	Manuscript Correction Signs	manuscript correction signs
Type in upper case or closed caps	uc or CAPS	san fernando is a city in Trinidad	SAN FERNANDO is a city in Trinidad
Type in initial capitals (initial caps)	ic	yesterday	Yesterday
Spaced capitals	Sp caps	Chairman's Agenda	C H A I R M A N ' S A G E N D A
Leave unchanged	stet or ✓	set of signs and symbols *stet*	set of signs and symbols
Run on (continue work without a new paragraph	Run on or ⌐	Ensure that your work is free from errors. Omission transposition and insertions are some common typing errors.	Ensure that your work is free from errors. Omissions, transpositions and insertions are some common typing errors.
Delete	⌀ or ⌐	Omissions, transpositions and insertions are ~~some~~ common typing errors.	Omissions, transpositions and insertions are common typing errors.
Insert	λ (new)	Your word processor usually inserts λ text wherever the cursor is positioned → (new)	Your word processor usually inserts new text wherever the cursor is positioned
Insert punctuation mark	⋏	Peaches λ plums and cranberries are some of the imported fruits on sale	Peaches, plums and cranberries are some of the imported fruits on sale.
Insert a space where shown	#	The letters OVR will appear on the status λ bar	The letters OVR will appear on the status bar
Transpose these words	trs.	The grammar and spelling checker contains several editing options	The spelling and grammar checker contains several editing options
Close up space	close up/	To horizontally centre a document you use equal ⌒ left and right margins.	To horizontally centre a document you use equal left and right margins.

Table 14.3 *(continued)*

Instruction	Marginal mark	Textual mark	Corrected text
New Paragraph	*NP* or ⌐ or //	*You can change the spacing between the lines or the spacing before or after each paragraph. ⌐Letters are usually typed using single line spacing*	You can change the spacing between the lines or the spacing before or after each paragraph. 　　Letters are usually typed using single line spacing
Indent	⌐ /	*⌐Letters are usually typed using single line spacing*	Letters are usually typed using single line spacing
Type this word (used when a word is unfamiliar or unclear)	FLAGGED	*Grammatical errors are flagged with a green wavy underline*	Grammatical errors are flagged with a green wavy underline
Move the section in the balloon to the indicated position	⟳→	*The street sweepers reported for duty at 5:30am just before sunrise.*	The street sweepers reported for duty just before sunrise at 5:30am

Footnotes and endnotes

Footnotes are used in printed documents to explain, comment on, or provide references for text in a document. Endnotes are used to cite sources of the information that was used in your document. A footnote or endnote consists of the following parts:

1 **The note reference mark**. This is a number, letter or symbol placed in the text to indicate that additional information is contained in a footnote or endnote.
2 **The note text**. The footnote text appears at the bottom of the page whereas the endnote text appears at the end of the document or section.
3 **Note separators**. These are the horizontal lines that separate the document text from the note text.

To insert a footnote or endnote

Type your document until you reach the point at which you want to insert the note reference mark. Then:

1 Click **Insert**, point to **Reference** and click **Footnote...** .
2 Click **Footnotes:** or **Endnotes:**.
3 Click the format you want in the **Number format:** box.
4 Click **Insert**. Word inserts the reference mark and places the insertion point next to the note number in the footnote or endnote position.
5 Type the note text.
6 Scroll back to your place in the document and continue typing.

Repeat this process, omitting step 3, until your document is complete. Whenever you insert an additional footnote or endnote, Microsoft Word will automatically apply the correct character format.

My glossary

Write definitions of the following terms.

Endnote   Manuscript
Footnote   Reference mark
Heading

Examination-type questions

Kimba has been asked to type a handwritten document with a number of symbols, notations and abbreviations. Help her with the following issues:

1 Differentiate between shoulder headings and paragraph headings.   *(3 marks)*

2 What are the meanings of the following abbreviations?
   a Dept.
   b wd.
   c Yrs ffy.   *(4 marks)*

3 What do the following mean?
   a Transpose
   b Run on
   c Indent   *(3 marks)*

4 What do the following symbols mean?
   a λ
   b ✓
   c #
   d ⋀   *(4 marks)*

5 Explain the purpose of:
   a Footnotes
   b Endnotes   *(2 marks)*

6 Outline the steps to be followed when inserting a footnote in a word-processed document.   *(4 marks)*

Keyboard mastery II

Suggestions for teachers and students:

Teachers

- Students should develop a thorough knowledge of correction signs and their uses.
- Provide manuscripts in a wide variety of handwriting styles to supplement those provided in the text.

Students

- Learn all correction signs and their meanings.
- Carefully read through the whole manuscript to become familiar with its subject and the style of writing before attempting to type.
- Read for meaning. The context will assist you in making sense of abbreviations and corrections.
- Be on the alert for special instructions to the typist. These are usually written within a balloon to keep them apart from the text.
- Use the editing skills you have acquired to edit documents produced from manuscript.
- Note that additional practice exercises can be found on the accompanying CD.

NOTEBOOK 1: MANUSCRIPT

To support what you have learnt about manuscript, this section now introduces actual manuscript exercises with abbreviations and correction signs.

Typing Tips: Type drafts from manuscript in double or treble line spacing. Display the word DRAFT prominently at the top, against the left margin or centred, preferably in red. Set margins at 2.5. cm (1 inch) each.

Print the draft on inferior paper, proofread and correct all errors. Print the corrected mailable copy on good quality paper.

In Unit 14 you learned that most abbreviated words should be typed out in full. Some abbreviations, however, are acceptable in typed documents: these are shown in the following table. Ensure that you observe the specific requirements for open and closed punctuation.

Open punctuation	Closed punctuation
am	a.m.
pm	p.m.
eg	e.g.
etc	etc.
ie	i.e.
Messrs	Messrs.
Mr	Mr.
Mrs	Mrs.
Ms	Ms (full stop not necessary

The following table shows some commonly used abbreviations that must always be spelled out in full.

Abbreviation	Word
accom	accommodation
advert	advertisement
approx	approximate(ly)
appt	appointment
bn	been
co	company
dr	dear
fr	from
hv	have
necy	necessary
ref	reference
sh	shall
shd	should
sin/sinc	sincerely
th	that
wi	will

Exercise 1: The manuscript

Type the following text in blocked style with double line spacing. Use A4 paper. Set the margins at 2.5 cm (1 inch). Make any necessary corrections.

Editing skills application

1 Save the document as 'Manuscript I' on My Computer and close the file.
2 Retrieve Manuscript I and change the font style to Arial Black, size 14, bold.
3 Paragraph 1: Indent 2.5 cm (1 inch) from the left margin. In line 5 replace 'it may' with 'the manuscript could also be'.
4 Save the document to Manuscript I and close the file.

Exercise 2: The draft

Type the following on A4 paper, double line spacing in the indented style. Set the margins at 2.5 cm (1 inch).

THE Draft → centre please

A draft is the rough written form of the book that you and I will enjoy reading so very much that we will never be quick to put it down.

Rather, we shall find extra reading time even if it means giving up other leisurely pursuit for a short while.

In the office typists, stenographers and secretaries understand that 'draft' means 'type the correspondence and return it to the author so that he or she could review it and make changes where necessary. Another meaning of draft is a legal document which one solicitor sends to another for approval or amendment, after which the endorsement will be made.

Engrossment

Editing skills application

1 Save the document as 'The Draft' in My Documents. Close the file.
2 Retrieve the document entitled The Draft. Change the style of the heading to Garamond, bold, italics, upper case.
3 Delete 'will' in line 2, and 'where necessary' in paragraph 2. Then insert 'Sometimes a draft has to be typed more than once before it is approved as a final copy. A good example of this is the textbook you hold in your hand'.
4 Now start a new paragraph that begins with 'Another meaning of draft is …'
5 The last paragraph reads: 'Many people prefer to describe a draft as the first, or any subsequent version of a document where revision or amendment is anticipated. It may be in manuscript or typed form.'
6 Save the changes, print one copy and close the file.

Exercise 3: Typing the manuscript

Type the following on A4 paper. Use double line spacing. Set appropriate margins and save the document. Use the given title. Use the style indicated.

[Handwritten manuscript]

Typing The Manuscript

To display a document typed from ms attractively, you should use A4 paper. The top margin should be set at 3·75cm or 1½". This means you will actually typing the document on the tenth line of the page. Set the left and right margins at 2·5 cm each. **[Start / LINE]**

The ms should be displ typed in double line spacing. Indented or block style may be used. **[typed /]** **[91]**

Before you start to type read the document carefully to be sure you understand the ~~sense~~ message. If the handwriting is difficult, try to ~~make~~ make out whole words, groups of words and sentences. **[make out]** **[91]**

~~If the handwriting is difficult~~ [When you have finished typing, proofread the typescript and correct all errors. Then print the document. You should be aware however, that there are many ways to indicate errors in a ms to the typist. You should learn them all. **[np/]** **[point out]**

Editing skills application

1 Use a suitable storage device for saving the document in the C drive. Name it 'Manuscript II' before closing the file.

2 Retrieve the document entitled 'Manuscript II'. Enlarge the heading by four points and underline.

3 Indent paragraph 1 by 2.5 cm (1 inch) from the left margin.

4 The paragraph heading for the next paragraph is 'Before you start to type'. Make paragraph 3 full-block, and fully justified.

5 Save the changes. Print 1 copy and close the file.

Exercise 4: The market

Type the following.

(This page reproduces a handwritten, heavily edited manuscript draft titled "The Market" with numerous proofreading marks, insertions and deletions.)

The Market

Young children think of the market as the place to be with their parents on a Saturday. Ice cream in cups or cones, thoughts of big brown tooboorys and ice cold water-melons, whet their appetites and excite them. To the householder the major concerns are whether the budget is meet the requirements for the table next week. Money has already been allocated for each item on the list. Putting three meals per day is allowance, the enclusion is curricula and random extra.

To the entrepreneur the mkt might well be the entire population of the country. If for instance, a mkt already exists, the next step is to look at how consumers are responding to existing supplies by conducting a mkt research. The result of a well-structured research tool will show whether intervention by a new supplier is feasible. The people "waiting in the wings" to do the footwork, are recent High Sch graduates. To them doors are opened by children — rude and or mannerly, courteous or even imps playing peek-a-boo running around and between their parents' legs. For others, watch dogs — pedigreed or 'pot' hounds — will greet and prevent them from entering the premises. At each encounter they are warmly welcomed or new experiences, in human interactive relations would be on gaine.

Editing skills application

1 Name the document. It is your personal property. Save it on an appropriate storage device. Close the file.
2 Retrieve the document. Change the font to Comic Sans Ms, size 18. Delete rewrite from the heading.
3 Paragraph 1: change 'Money' to lower case; 'tooloom' to 'toolum'.
4 Paragraph 3: change 'The people' to 'There are people'; insert 'who' before 'are recent'.
5 Justify the document, save the changes, print two copies and close the file.

Exercise 5: Telephone lines

Type the following in double line spacing on A4 paper, indented style.

TELEPHONE LINES
Advantages of Digital Phone lines

uk telephone lines were designed to communicate the human voice. They transmit data using analog data form. Before Computer Signals can be transmitted via the telephone lines th must be converted from the analogue format. This process is called modulation. When the Signal reaches the receiving Computer it is converted back from the analog to the digital form. This is called demodulation.

Some telephone companies have Recently begun providing digital telephone lines. It is not necy to use a modem when using a digital telephone. line Such as an Integrated Services Digital Network line to Connect a Computer. The Signal is already a digital one which the Computer Can process.

Advantages/ Two other are ; that a large volume of data is is transmitted more quickly, and the same line is used for voice, video and data transmission. This means an ISDN user Can receive telephone calls, transmit faxes and Surf the internet at the Same time, using the Same line.

Stet/ * Some networks are using wireless technology. wireless networks are used where cables are inconvenient.

Created

Editing skills application

1 Save the document on the desktop as 'Telephone Lines'. Close the file.
2 Retrieve the document and perform these changes:
  Make the heading font Bookman Old Style, size 16, bold and upper case.
  Insert as Paragraph 1: 'In today's world, it is vital that individuals and organisations be able to communicate quickly and effectively. In fact, the very existence of many organisations depends on their ability to communicate effectively.'
  The shoulder heading is 'Importance of effective communication'.
3 For Paragraph 2 make 'Modulation and emodulation the shoulder heading in title case.
  Marginal heading for Paragraph 3 is 'Digital Telephones'.
4 Perform a spelling and grammar check and make corrections.
5 Save the changes you have made. Print one copy. Close the file.

Exercise 6: Communicating ideas in writing

Type the following in justified style. Use appropriate margins. Type headings in the body using shoulder, para or side/marginal headings. No abbreviations.

COMMUNICATING IDEAS IN WRITING

WHO COMMUNICATES IN WRITING?

We all need to communicate in writing at some time in our lives. To find, read, understand and interpret the first letter ever written would be a great achievement for the finder. The successful man *(business)* will not look for that letter. Instead, he w be looking for new ways to present and have his product impact on the minds of consumers. To do so effectively, he must use a direct, clear and courteous approach. His tone and/or shd be appropriate. He should employ just sufficient words to make the 'message' meaningful to the receiver.

ACCURACY

Accuracy is of utmost importance. The address and attention line on the envelope shd be identical with the inside name and address and attention line in the letter. The salutation and cc shd be carefully selected. The formal salutation requires a formal cc. For example with Dear Sir or Dear Madam use yrs ffly or yrs sincerely. For less formal salutations such as Dear Mr Dobbs or Dear Ms Cudjoe, use the less formal ccs yrs sincerely.

Some firms use a letterhd w/wo a logo. House ruls will determine whether the company's name should appear more than once in a letter. If the latter is the case, then the name of the company is typed after the complimentary close in closed capitals. Some firms leave one clear line after the cc. The signature block may be typed 5 line spaces below the signature block. the

Signature is usually handwritten but sometimes a rubber stamp facsimile of the writer's signature is used. *impression*

and closing

Sh/ The opening paragraphs should be brief. In the opening para the writer refers briefly to a previous corres- pondence or telephone conversation. The closing para will solicit some form of action or express the need for further communication. *above subject*

STATIONERY

the/ The quality of stationery used may or may not convey a good impression to the writer. Whatever quality paper is used it is the length of the message that determines of the correct paper to use. A4 paper is used for long letters of one page or more. But for the short letter use A5 paper. With the introduction of electronic documentation and preparation manage- ment, carbon copies is now a thing of the post. there- is no need to fear blackened finger tips and copies with the impression of trees on them. *receiver whichever*

PROOFREAD BEFORE SIGNING
Before signing a document, the signatory should read it carefully to ensure it accuracy - especially dates, prices and figures in general as well as the correct use of words. *check for* *the order of the layout*

you approve its contents

9

Editing skills application

1 Save the document on My Computer as 'Communicating'.
2 Make Paragraph 1 full-block with a shoulder heading. After personal salutations in paragraph 2, delete 'such as Dear Ms Cudjoe'. Insert 'Dear Mrs Ashby', 'Dear Ms Hosein', 'Dear Ms Rawlins' or 'Dear Customer'.
3 Paragraph 5: Replace 'documentation' with 'document'.
4 Change the font style to another that is compatible with the style used in the body of the document. Change the line spacing in the entire document to 1.5. Perform a spelling and grammar check. Make corrections.
5 Save the changes to this document. Print one copy and close the file.

Tabulation

By the end of this unit you should be able to:
● Prepare documents that contain tabulations

Unit at a glance

Simple tabulations include:

● Creating column and row headings.

● Creating oblique and vertical headings.

● Applying borders.

● Controlling table alignment on the page.

● Sorting data in tables.

Advanced tabulations include:

● Using simple formulae.

● Using spreadsheet or database software to perform predefined functions such as Sum, Average, Minimum and Maximum.

● Inserting charts and graphs.

● Formatting of tables using % and $.

● Creating invoices, debit notes and credit notes.

As you continue to use the computer for educational and business purposes, you will be required to produce many documents that are neatly arranged in rows and columns. Many computer users incorrectly use the space bar in an effort to create columns of text. In this unit you will learn the correct techniques for tabular work using tabs, tables or columns.

Types of tabs

Left tab causes text to flow to the right of the tab stop position as it is typed.

Figure 15.1 shows text positioned at one inch from the margin by a left tab.
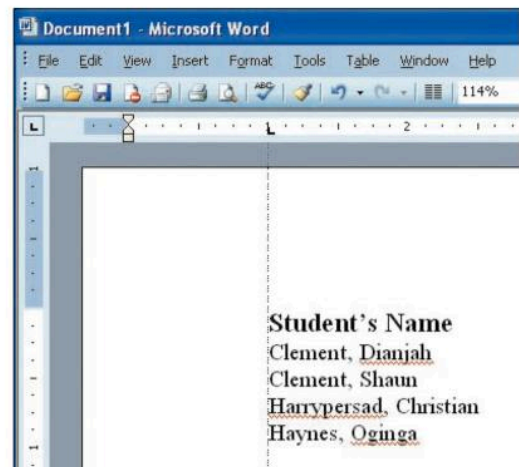
Figure 15.1 *Left tab*

Right tab causes text to flow to the left of the tab stop position as it is typed. Figure 15.2 shows text positioned by a right tab set at two inches.
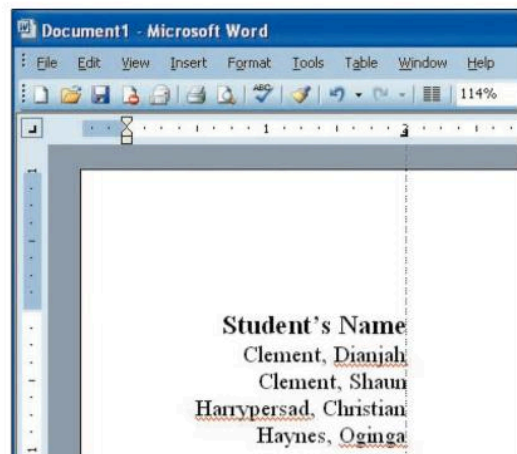
Figure 15.2 *Right tab*

Centre tab causes typed text to flow evenly to the left and right of the tab stop. Figure 15.3 shows a 1.5 inch centre tab.
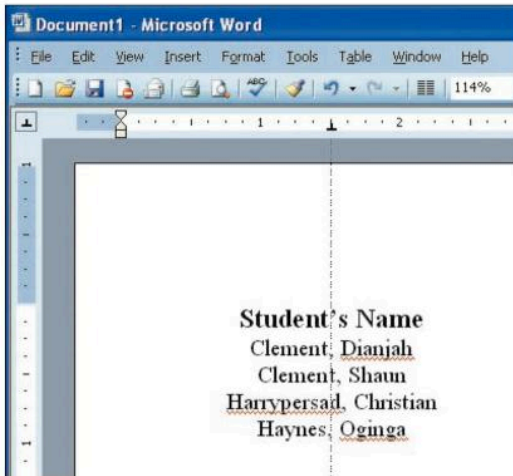

Figure 15.3   *Centre tab*

Decimal tabs line up numbers so that the decimal points are aligned. Figure 15.4 shows a column of numbers that are aligned using a decimal tab stop at 2.5 inches.
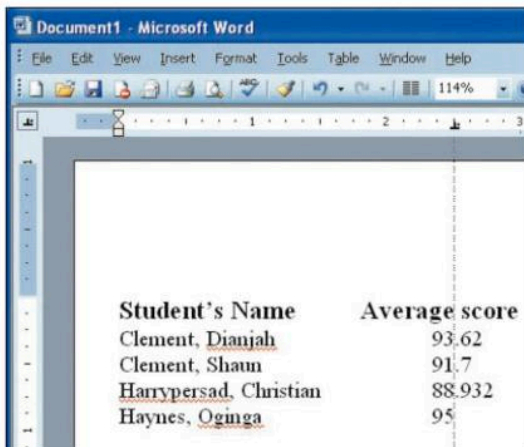

Figure 15.4   *Decimal tab*

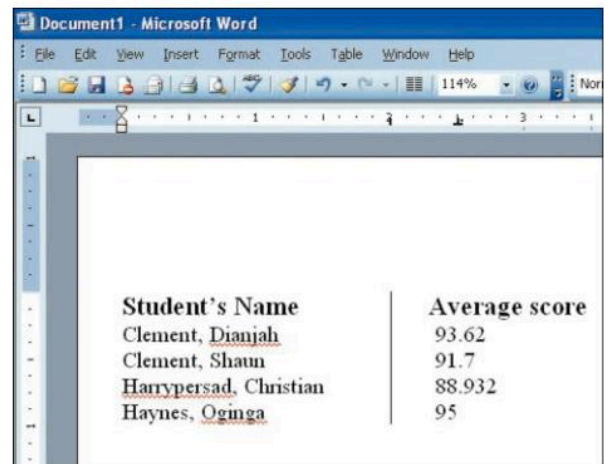**Bar tabs** create a vertical line at the tab stop position. In Figure 15.5 a bar tab was set at 2 inches.


Figure 15.5   *Bar tab*

To set tabs:

1   Select the paragraph in which you want to set a tab stop.
2   Click **Tabs...** on the **Format** menu.
3   Type in the **Tab stop position:**.
4   Click on the tab **Alignment** you want to use.
5   Click **Set**.
6   Click **OK**.

DID YOU KNOW?

You may set more than one tab stop in the line and in the document. You will learn to do this later on in this unit.

Figure 15.6 shows the **Tabs** dialogue box with a 1.5 centre tab.

You may also use the ruler to set tabs. To do this:

1   Click **Left Tab** at the far left of the ruler until it changes to the type of tab you want to set.
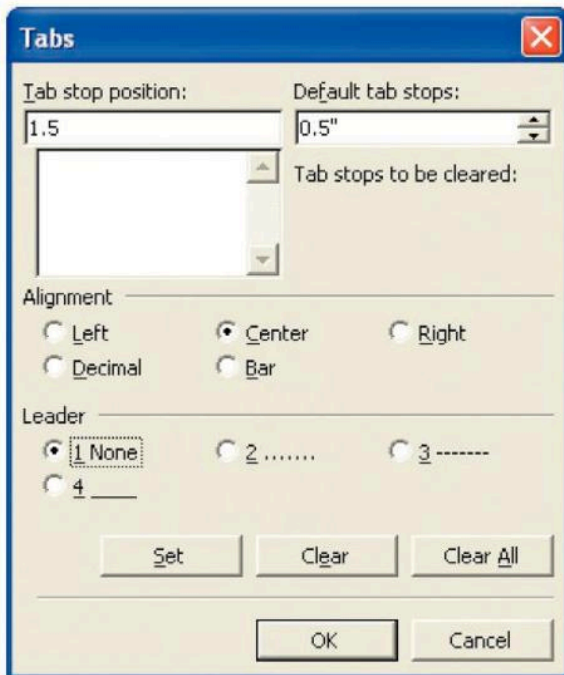2   Click the horizontal ruler where you want to set a tab stop.

Figure 15.6 *The **Tabs** dialogue box*

Leaders

A **leader** is a solid, dotted, or dashed line that is used to fill the space created by a tab character. You may be accustomed to seeing leader dots between the chapter name and the page numbers in a table of contents. Leader dots are used to:

- Lead the reader's eyes across the page to the related text in the next column.......................like this.
- Give a more professional appearance to the typed text.

To set leaders:

1 Select the paragraph in which you want to set a tab stop.
2 Click **Tabs...** on the **Format** menu.
3 Under **Tab stop position:**, type the position for a new tab, or select an existing tab stop to which you want to add a leader.
4 Select the leader type you want to use.
5 Click **Set** then click **OK**.

Adjusting tabs

The horizontal ruler that is located at the top of your document window is used when setting or adjusting tab stops. The shaded sections of the ruler indicate the positions of the margins. If you do not see the horizontal ruler click **View** then **Ruler** on the menu bar. You may change the units of measure on your ruler to imperial (inches) or metric (millimetres or centimetres).

To change the unit of measure:

1 Click the **Tools** menu, and select **Options....**
2 Click the **General** tab.
3 In the **Measurement units:** box, click the option you want.

Note: This will change the unit of measure for all dialogue boxes in Microsoft Word, including the margins and paper sizes.

A **tab stop** is a location on the horizontal ruler that indicates how far from the margin that text should begin. A tab marker appears on the horizontal ruler when you set a tab stop.

Tab stops enable you to:

- Line up text to the left, right, centre, or to a decimal character or bar character.
- Automatically insert specific characters, such as dots or dashes, before the tabs.

Clear tab stops

To clear a tab stop:

1 Select the paragraph in which you want to clear a tab stop.
2 Drag the tab marker down from the horizontal ruler.

DID YOU KNOW?

To simultaneously remove all the tab stops use the **Clear All** command in the **Tabs** dialogue box.

Move tab stops

To move a tab stop:

1 Select the paragraph in which you want to move the tab stop.
2 Click on the tab marker in the horizontal ruler and drag it to the new position.

Note: Press the **Tab** key on the keyboard to move from one tab stop to another.

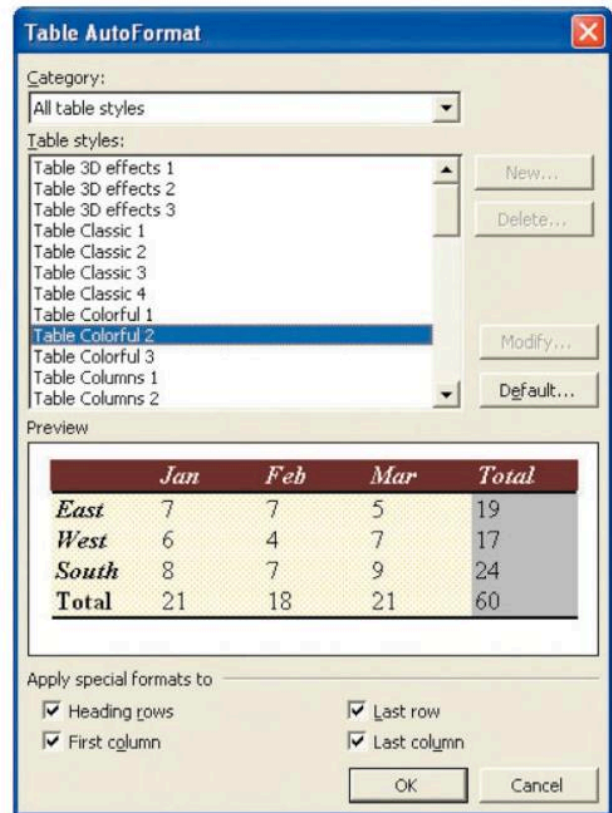**Figure 15.7** *The **Insert Table** dialogue box*

Figure 15.8 *The **Table AutoFormat** dialogue box*

To do

Use the data below to create a document called Tables.
Select a size of stationery that will enable you to print the tables on a single sheet with minimum wastage of paper.
Print your document.

1 Set the following tab stops and then create the table shown below:
  (a) A bar tab at 1.5 inches.
  (b) A left tab at 2 inches.
  (c) A bar tab at 3.5 inches.
  (d) A decimal tab at 4.5 inches.

Name	Department	Salary
A Smith	Marketing	4578.96
L Peters	Maintenance	2734.00
R Singh	Accounts	6823.75

2 Create the following table of contents by setting a left tab with a leader at 4 inches.

Topic .... Page
Function Keys 3
Character Keys 4
The Escape Key 4
Modifier Keys............ 5
Command Keys......... 7
Navigation Keys 10

Inserting tables

A **table** is an arrangement of rows and columns of cells that can be used to organise and present information. A table consists of vertical sections called **columns** and horizontal sections called **rows**. A **cell** is a box that is created where a column intersects a row.

To create a table:

1 Click where you want to create the table.
2 Click **Table** on the menu bar, then point to Insert, and click **Table...**
3 Under **Table size**, select the number of columns and rows.

Table 15.1   *Common tasks when using tables*

Task	Do this
Alter column width and row height	Click **Table**, then **Table Properties....** Click on the relevant tab and make the desired changes.
Insert a row or column	Click on the cell where you wish to make the insertion. Click **Table**, point to **Insert** and click on the desired option.
Delete a row or column	Click on the cell where you wish to make the deletion. Click **Table**, point to **Delete** and click on the desired option.
Convert a table to text	Select the table. Click **Table**, point to **Convert**, and then click **Table to Text....**
To join adjacent cells	Select the cells. Click **Table**, and then **Merge Cells**.
To split a cell	Select the cell. Click **Table** then **Split Cells**. Select the number of rows and columns into which you want the cell to be split.
Change text direction	Right-click on the cell(s). Click on **Text Direction...** in the pop-up menu that appears. Click on the text orientation you wish to use.
Change cell alignment	Right-click on the cell(s). Point to **Cell Alignment** and click on the cell alignment you wish to use.

4 Under **AutoFit behavior**, choose the option you want to use to determine the width of the column.
5 Click **OK**.

Microsoft Word offers several built-in table formats as shown in Figure 15.8. These formats use a variety of colours, borders and fonts. To access this feature click the **AutoFormat...** button on the **Insert Table** dialogue box.

If you have typed text separated by tabs, commas or paragraphs, it is easy to convert your text to a table. Simply select the text, click **Table, Convert,** then **Text to Table....** Click to indicate the type of separator you have used and then click **OK**.

Table 15.1 contains instructions for performing common tasks when using tables.

To do

Create the following table and save it as Products.

Product Name	Model Number	Price
All Cool Air Conditioner	AC234-7	$2799
BrightView 32" TV	10093-LCD	$3500
Chillwell Refrigerator	2DST238	$5275
Clearsound Stereo	CS-781-9F	$1999

1 Insert a row between the second and the third rows and enter the following: Hotspin Microwave Oven HSO8319 $595
2 Insert a column between the second and the third columns with the heading **Quantity** and enter the following:
   3   10   7   12
3 Delete the row with BrightView 32" TV.
4 Delete the column with **Model Number.**
5 Apply a table autoformat and save the document as Products 1.
6 Convert the table to text separated by tabs and save your document as Products 2.

Working with Excel

In Unit 9 you were introduced to working with spreadsheets, using Microsoft Excel. Spreadsheets make it possible to create tables quickly and efficiently, sort the data, perform mathematical calculations and apply a variety of formatting options. The illustrations and instructions in this unit are based on Excel 97 to 2003. If you are using a later version, you will encounter ribbons (Figure 15.9) rather than the menus illustrated in this section. With a little practice you will soon master this program.

Using Autosum

In Unit 9 you learned that you can perform calculations in Excel by using a formula.

Using Autosum

Sometimes you need to add so many cells that it is too cumbersome to type a formula. You may use the **Autosum** function to add the contents of a group of adjacent cells.

To use Autosum:

1 Select the cells for which you want to calculate the total ensuring that the adjacent cell is empty.
2 Click the **Autosum** button Σ on the standard toolbar.
3 The total will be placed in the empty cell.

Some other functions

Microsoft Excel contains functions for many other operations, including finding the average, maximum and minimum from a range of numbers. The following activity will help you to use these functions.

To do

1 Open Microsoft Excel and type the following words in cells A1 to A9: English A, English B, Mathematics, P O B, P O A, E D P M, Highest, Lowest, Average.
2 Type the following numbers in cells B1 to B6: 83, 45, 62, 87, 69 and 92.
3 Type the following function in cell A7 and comment on the results: **=MAX(B1:B6)**
4 Type the following function in cell A8 and comment on the results: **=MIN(B1:B6)**
5 Type the following function in cell A8 and comment on the results: **=AVERAGE(B1:B6)**

Sorting data

To sort data by a single row or column:

1 Select the cells that will be sorted.
2 Click the **Sort Ascending (A–Z)** button or **Sort Descending (Z–A)** button on the standard toolbar.

To sort data by multiple columns:

1 Select the cells, rows or columns that will be sorted.
2 Select **Data** then **Sort** from the menu bar. The **Sort** dialogue box will appear (Figure 15.10).
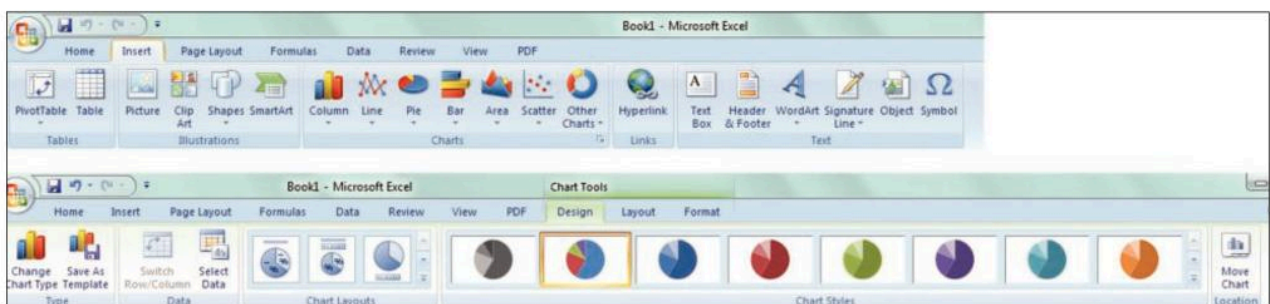3 Select the first column for sorting from the **Sort by** dropdown menu and choose either ascending or descending.
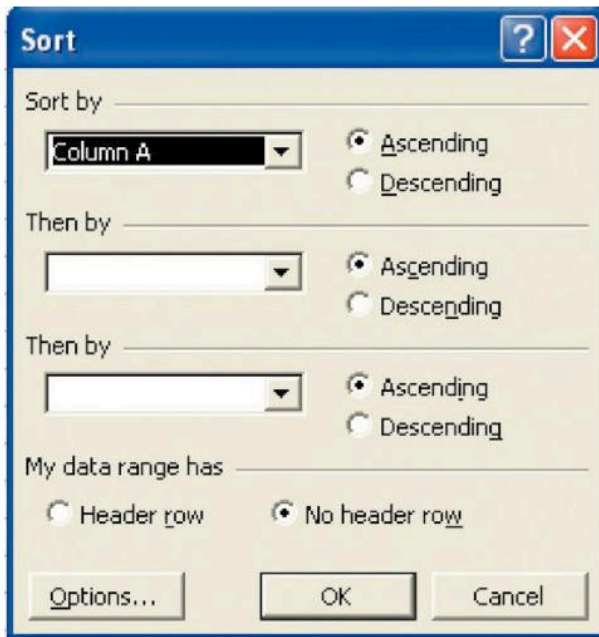

Figure 15.9 *The **Insert** and **Chart tools** ribbons*

Figure 15.10 *The Sort dialogue box*

4 Select the second column and, if necessary, the third sort column from the **Then by** dropdown menus.
5 If the cells you highlighted included the text headings in the first row, mark **My data range has** and **Header row** and the first row will remain at the top of the worksheet.

Formatting cells

You can use number formats to change the appearance of numbers, including dates and times, without changing the number behind the appearance. The number format does not affect the actual cell value that Microsoft Excel uses to perform calculations.

To access a complete list of formats, either right-click on the selected cells and choose **Format Cells** from the shortcut menu or select **Format** then **Cells...** from the menu bar. The **Format Cells** dialogue box will appear.

The **Format Cells** dialogue box contains the following tabs:

- **Number** tab: this tab is used to select the data type. If the cell contains text or numbers on which no calculations will be done, select **General**. General format cells have no particular number formatting. Click on the numerical category for special formatting such as date, time or fraction.
- **Alignment** tab: these options allow you to change the position and alignment of the data with the cell. For example, text is usually displayed horizontally in a cell. To change the cell orientation type in or select the number of degrees.
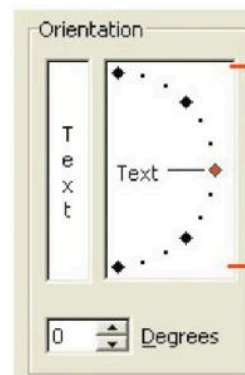
Figure 15.11 *Text orientation*

Figure 15.12   *The **Chart Type** dialogue box*

- **Font** tab: this tab displays all of the font attributes including font face, size, style and effects.
- **Border** and **Pattern** tabs: these tabs allow you to add borders, shading and background colours to a cell. A table that is prepared in Excel is **unruled**. The grey gridlines that you see are simply to identify the limits of the cells. The gridlines are not usually printed.

To prepare a ruled table:

1 Select the cells to be bordered.
2 Click **Format** then **Cells....**
3 Click on the **Borders** tab.
4 Select the border style and colour. The selected border style may be applied by clicking on the **Presets** button or the **Preview** window or the specific **Border** buttons.

Charts and graphs

Charts allow you to present data entered into the worksheet by using a variety of graph types. You must first enter data into a worksheet before you can make a chart.

To create a chart:

1 Enter the data into the worksheet and highlight all the cells that will be included in the chart including headers.

2 Click the Chart Wizard button 📊 on the standard toolbar to view the first **Chart Wizard** dialogue box.
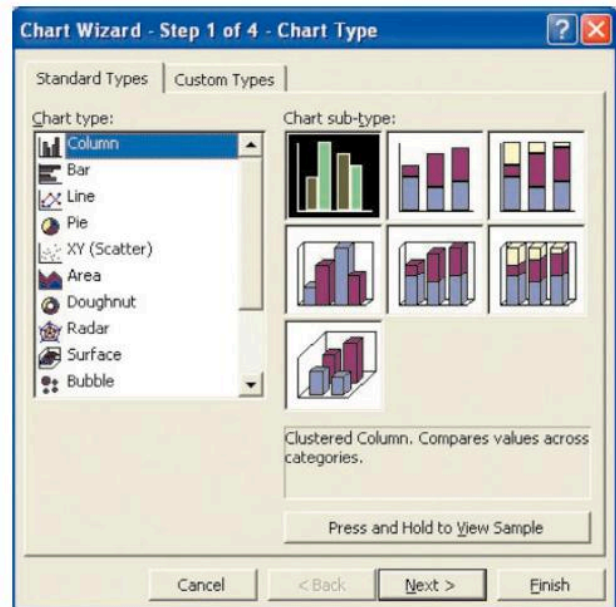
3 Choose the **Chart type:** and the **Chart sub-type:** (Figure 15.12). Click **Next >**.
4 Select the data range (if different from the area highlighted in step 1) and click **Next >** (Figure 15.13).
5 Enter the name of the chart and titles for the X and Y axes and click **Next >** (Figure 15.14).
6 Click **As new sheet** if the chart should be placed on a new, blank worksheet or select **As object in:** if the chart should be embedded in an existing sheet, and select the worksheet from the dropdown menu.
7 Click **Finish** to create the chart.
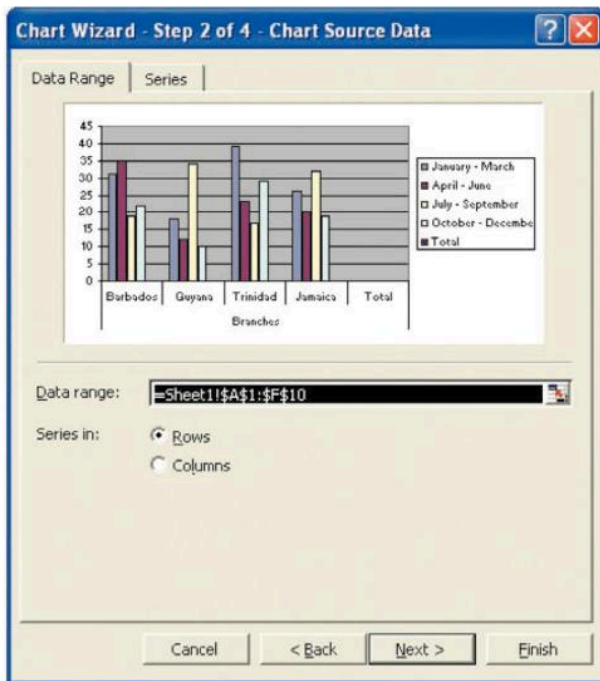
Figure 15.13 *Chart Source Data dialogue box*

Figure 15.14 *Chart Options dialogue box*

> **DID YOU KNOW?**
> You may also move elements within the chart such as the title and labels. Click on the element to activate it, and then drag it with the mouse.

To **format any element within the chart**, right-click on the element and select Format from the menu that will appear. Click on the appropriate tab to change features such as colour, fill effects, alignment and font size.

> **DID YOU KNOW?**
> A chart prepared in Excel can be copied into a Microsoft Word document. Select the chart and click **Copy**. Open the destination document in Word and click **Paste**.

Page setup

To **set the properties of a page**, select **File** then click **Page setup...** from the menu bar to select the paper size, change orientation, set margins, and add headers and footers.

To force a worksheet to print only one page wide so that all of the columns appear on the same page, select **Fit to: 1 page(s) wide**.

Margins

When working with margins you can:
- Change the top, bottom, left and right margins under the **Margins** tab.
- Enter values in the **Header:** and **Footer:** fields to indicate how far from the edge of the page text in this section should appear.
- Check the boxes for centring horizontally or vertically on the page.

Sheet

On the **Sheet** tab you can:
- Check **Gridlines** if you want the gridlines dividing the cells to be printed on the page.
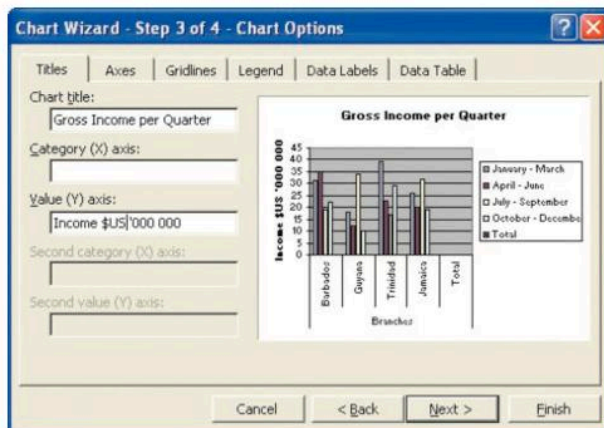
To **resize the chart**, click on its border and drag any of the drag handles. Handles on the corners will resize the chart proportionally while handles on the sides will stretch the chart.

To **move the chart**, select the border of the chart, hold down the left mouse button and drag the chart to a new location.

- Choose a title row that will be printed at the top of each page if the worksheet is several pages long and only the first page includes titles for the columns. To do this select **Rows to repeat at top:**.

Page breaks

You may set page breaks wherever you want to divide your worksheet for printing.
To set page breaks:

1 Select the row you want to appear just below the page break by clicking that row's label.
2 Choose **Insert** then **Page Break** from the menu bar.

Print options

- **Print range:** select either all pages or a range of pages to print.
- **Print what:** choose a selection of cells highlighted on the worksheet, the active worksheet or all of the worksheets in the entire workbook.
- **Copies:** choose the number of copies that should be printed. Check the **Collate** box if the pages should remain in order.

Integrating word processing and spreadsheets

Sometimes it is necessary to work with two different programs to create a document. For example, in Tables in Microsoft Word it is possible to show words in headings either horizontally (across the page) or vertically (down the page). It is not possible to create oblique headings, that is, headings in which the words are printed at an oblique angle as shown in Figure 15.15. Oblique headings can be created in Microsoft Excel. Therefore, if you want oblique headings, you will need to create the table in Excel and then copy it into Word.

Period	Branches			
	Barbados	Guyana	Trinidad	Jamaica
Jan–Mar	31	18	39	26
April–June	35	12	23	20
July–Sept	19	34	17	32
Oct–Dec	22	10	29	19

Figure 15.15 *Oblique headings*

Producing financial statements

You are required to apply the skills you have learned in this unit to create a variety of financial statements that are produced by a business, including:

- Trial balance.
- Balance sheet.
- Profit and loss statement.
- Statement of income and expenditure.
- Invoice.
- Bank statement.
- Receipt.

Financial statements should be prepared in tabular form, using tabs, tables or spreadsheet objects. If you are not given specific guidelines, use the method with which you are most comfortable. The following activity is designed to help you develop your skills with tabular work. Note that all numbers should be correctly aligned. If there is a decimal point, align on that.

My glossary

Write definitions of the following terms.

Autosum	Oblique heading
Bar tab	Right tab
Centre tab	Sort ascending
Decimal tab	Sort descending
Left tab	Tab

Developing work skills

You work with Caribbean Insurance and Investments Limited of #75 Finance Plaza, Port of Spain. You have been asked to display the data below in a worksheet, to show all totals and to create an embedded bar graph. The worksheet is to become part of the company's annual financial report.

1 Create the worksheet with all of the necessary formatting and save it as Gross Receipts.
2 Create vertical and horizontal borders to separate the totals.
3 Set the branch names at a 45° angle.
4 Create a bar graph to represent your data. Modify the colours and fill effects on the bar graph.
5 Save the changes to your worksheet and close it.
6 Insert your data as an active worksheet in a Microsoft Word document that you will call Financial Report. Close the document.
7 You have received updated information for the October to December quarter.
   a Amend the figures in your worksheet to Guyana 19, Trinidad 24 and Jamaica 30.
   b Note what changes, if any, occurred on your graph.

c Close your worksheet and open your Word document Financial Report. Note what changes, if any, occurred to the data in your Word document.
8 Two of your colleagues need information on working with active worksheets in Microsoft Word. Type a brief report of your findings, including clear instructions to assist your colleagues.

DATA

Gross Receipts by Branch ($'000,000)

Period	Branches			
	Barbados	Guyana	Trinidad	Jamaica
Jan–Mar	31	18	39	26
April–June	35	12	23	20
July–Sept	19	34	17	32
Oct–Dec	22	10	29	19

To do

1 a Use Microsoft Excel to prepare the following trial balance with formatting as displayed. Save it as Haynes 1.

Haynes and Sons		
Trial Balance as at 12 April 20XX		
Account	**Debit**	**Credit**
	$	$
Cash in hand	2365.00	
Cash at bank	3764.25	
Capital		34000.00
Purchases	5975.00	
A. Persad		986.00
R. Soong	1375.25	
Sales		14901.50
Furniture and fittings	7000.00	
Equipment	12000.00	
Sales returns	2564.00	
Rent	4500.00	
Advertising	1200.00	
Drawings	6000.00	
Wages	1719.00	
General expenses	2000.00	
Discounts allowed	750.00	
Discounts received		1325.00
	5121.50	**51212.50**

b Amend your trial balance as follows:
R. Soong: 1575
Sales: 15101.50
Furniture: 7500
Equipment: 11500

c Print the amended trial balance on a sheet that is centred vertically and horizontally.

d Save your amended document as Haynes 2.

2 Display (i.e. create) the following profit and loss statement on A5 paper in landscape orientation.

Verniece & Sisters Employment Services
Profit and loss account for the year ended 30 September 20XX

	$		$
Insurance	3 690	Gross profit B/D	95 006
Bank interest	4 908	Rent received	12 000
Transportation-out	3 211	Discounts received	4 590
Telephone	1 210	Total profit	111 596
Stationery and postage	2 400		
Bad debts	1 004		
Salaries	24 000		
Depreciation	3 600		
General expenses	2 145		
Discounts allowed	1 598		
Total expenses	47 766		
Net profit	63 830		
	111 596		111 596

3 Use appropriate software to prepare and print the following pay slip.

Caribbean TransShippers Limited
Federation Drive
Montserrat

PAY SLIP for month ending: 28 May 20XX		BANK NAME National Bank	BANK ID NO 1-890-123-N	ACCOUNT NO 000-1-342-231
EMPLOYEE NO.23561	NAME Khan, Nazir	DEPARTMENT Marketing	N.I.S. NO NI098N12	B.I.R. NO 0G12N123
Gross Earnings $6745.90	NIS Deductions $545.00	PAYE Deductions $ 987.00	Union Dues $95.00	Net Earnings $5118.90

4 Prepare the credit note and debit note as shown.

BookSellers International
Quench Street
Georgetown

CREDIT NOTE

Customer	**Date** 17 August 20XX
Kaysara Claymore	
Rushworth Street	
San Fernando	**Invoice No.:** 43862

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
10	4-Quire Notebooks – defective binding	$12.95	$129.50
E & OE			

BookSellers International
Quench Street
Georgetown

DEBIT NOTE

Customer	**Date** 17 August 20XX
Siparia Technical Institute	**Invoice No.:** 74310

QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
5	**Boxes A4 bond paper – Undercharged**	$8.00	$40.00
E & OE			

5 Print the following statement of income and expenditure on A5 paper.

Valiant Secondary School Youth League
Income and Expenditure Account
For period ending 31 March 20XX

INCOME	$	$
Donations	6900.00	
Sponsorship	3500.00	
Appearance fees	1000.00	
Contribution – School Alumni Assocn.	1000.00	
Profits from VASSYL stationery store	4700.00	
Carnival prizes	5000.00	
Total receipts		22100.00
EXPENDITURE		
Carnival band	8750.26	
Web page hosting ad implementation	3514.19	
Web page design training	3900.00	
Total expenditure		16164.45
BALANCE		5935.55

Examination-type questions

1 Prepare the balance sheet shown below, using spreadsheet software, and save it as **Republic Freighters 1**.

	$	$	Liabilities and capital	$	$	$
			Republic Freighters			
			Balance sheet as at 23 June 20XX			
Assets			Current liabilities:			
Current assets:			Creditors			3 543
Cash in hand	4 890					
Cash at bank	23 600					
Debtors	2 970		Long-term liabilities:			
Stock	3 693		Bank loan		45 000	
		35 153	Mortgage		31 500	
Fixed assets						76 500
Motor vehicle	89 000		Capital at start		93 000	
Equipment	4 300		add Net profit	5 872		
Premises	47 000		less Drawings	3 462		
		140 300			2 410	
			Capital at end			95 410
		175 453				175 453

2 Insert the balance sheet as a spreadsheet object in a word-processing program and save the document as **Republic Freighters 2**.

3 Insert a logo and the words *Republic Freighters* as word art in the header.

4 Print the word-processed document on A4 paper. *(25 marks)*

16 *Database documents*

By the end of this unit you should be able to:
- Generate documents using database software

Unit at a glance

- **Integrated software** combines a number of applications, such as word processing, spreadsheets, database management and communications, into a single application package.

- Microsoft Office Suite is an example of integrated software that consists of Microsoft Word, Excel, Access, PowerPoint, Publisher, and so on.

- Mail merge is a word-processing feature that enables the user to combine data from a database with a typed form letter to create a number of personalised letters and envelopes.

You have already learned how to use several related or *integrated* applications software programs. **Integrated software** combines a number of applications, such as word processing, spreadsheets, database management and communications, into a single application package. This enables data to be transferred easily from one application to the other. Once the user becomes familiar with one application in the package it becomes easier to learn the others because the menus and appearance are usually similar. It is normally cheaper to buy integrated software than to buy each application separately. Integrated software is sometimes called an applications package.

Microsoft Office Suite is an example of integrated software that consists of Microsoft Word, Excel, Access, PowerPoint, Publisher, and so on.

In this unit you will learn how to combine data from Microsoft Access with a Microsoft Word document to create many personalised copies of a single letter.

Mail merge

Mail merge is a word-processing tool that enables you to easily personalise circular letters, labels and envelopes. To do a mail merge you must create the following:

1. **A main document** or **form letter** that contains the text and graphics that are the same for each letter. The main document must contain **merge fields** or placeholders into which recipient information will be inserted. Typical merge fields are <<First_Name>>, <<Surname>> or <<City>>.
2. A **data source** file that contains the information to be merged or placed into the main document. This is usually a table containing the list of recipients' names and addresses. The heading of each column is the same as the name of the merge fields, for example **Surname** or **Company.**

The data source is merged with the form letter to create personalised letters for each recipient. This **merged document** consists of a letter for each recipient listed in the data source.

Instructions for performing a mail merge

Follow these steps to perform a mail merge:

1 Use Microsoft Access (or another database program) to create a data table with names and addresses. Save and close the data table.
2 Open a new blank document.
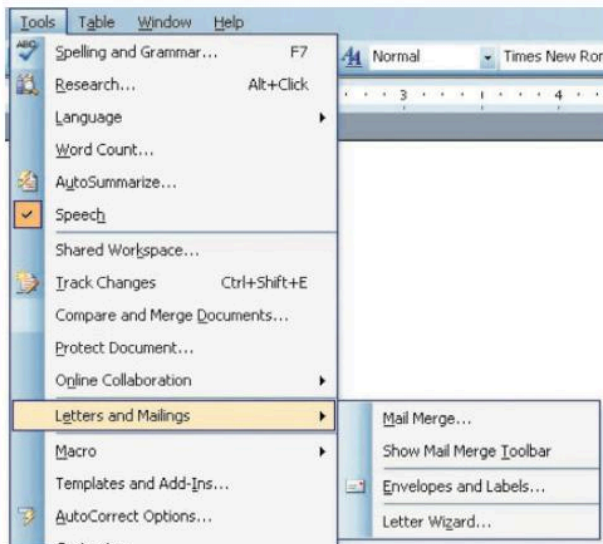3 Click **Tools**, point to **Letters and Mailings** and click **Mail Merge...** as is shown in Figure 16.1.

Figure 16.1 *Mail Merge*

4 The **Mail Merge task pane** will open to the right of your Microsoft Word window as shown in Figure 16.2. Ensure that **Letters** is selected as the document type.
5 Click **Next: Starting document** at the bottom of the task pane. The task pane will change as shown in Figure 16.3. Ensure that **Use the current document** is selected.
6 Click **Next: Select recipients** at the bottom of the task pane. The task pane will change as shown in Figure 16.4. Ensure that **Use an existing list** is selected.
7 Click **Browse...** on the task pane. The **Select Data Source** box will appear as shown in Figure 16.5. Locate and open your data file.

Figure 16.2 *Mail Merge task pane, step 1*
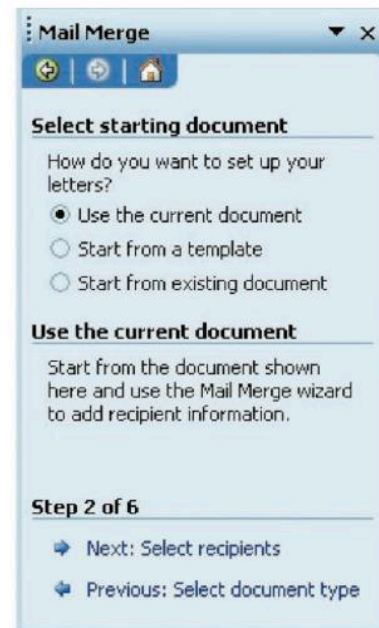
Figure 16.3 *Mail Merge task pane, step 2*

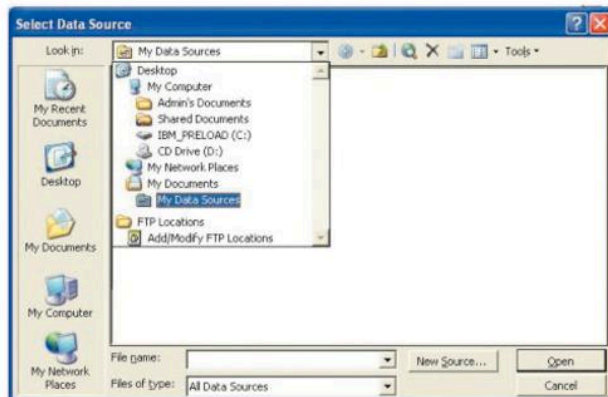Figure 16.4 *Mail Merge* task pane, step 3

Figure 16.5 *Select Data Source* box

8   Your data source will be displayed as shown in Figure 16.6. Edit the data source if necessary. Click **Next: Write your letter** on the **Mail Merge** task pane.
9   Type the form letter. Click **More Items** on the **Mail Merge** task pane to insert the merge fields in the appropriate places as you type. The **Insert Merge Field** box will appear. Select the desired field and click **Insert.**
10 Click **Next: Preview your letters** to see the personalised form letters.
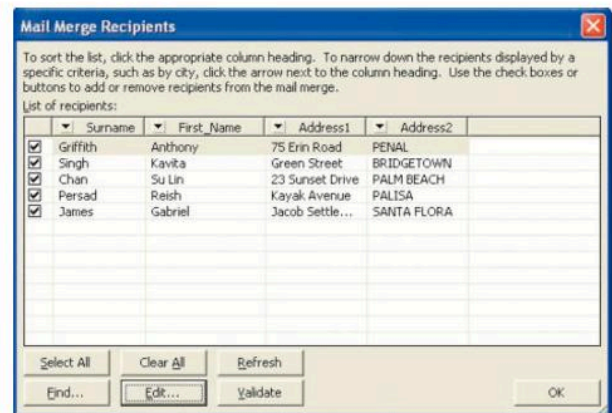
Figure 16.6 *Mail Merge Recipients*

11 If you are satisfied with the results click **Next: Complete the merge**. If you wish to make changes click **Previous: Write your letter** and make the desired changes.
12 Your merged letters are ready for printing. If you wish to make changes to an individual letter click the appropriate command in the **Mail Merge** task pane.

Figure 16.7 *Insert Merge Field* box

As you practise mail merge you will realise that the steps are quite simple. The task pane guides you at every step. You will find that this feature makes producing personalised circular letters a quick and easy task.

Developing work skills

You work with Classic Jewellers located at Room 235, Level 2, OceanView Mall, Lowlands. You want to send a circular letter to a number of preferred customers.
Perform a mail merge using the following information:

1 For the data source use the table below and save the document as Recipients.

First_Name	Surname	Address1	Address2
Anthony	Griffith	75 Erin Road	PENAL
Kavita	Singh	Green Street	BRIDGETOWN
Su Lin	Chang	25 Sunset Drive	PALM BEACH
Reish	Persad	Kayak Avenue	PALISA
Gabriel	James	Jacob Settlement	SANTA FLORA

2 Type the following form letter on a letterhead of your design using A5 paper.
NB: Do not type in the merge fields. Insert them by following the instructions for performing a mail merge. Ensure that you leave a space between <<First_Name>> and <<Surname>>.

Date as postmark

<<First_Name>> <<Surname>>
<<Address1>>
<<Address2>>

Dear <<First_Name>> <<Surname>>

Classic Jewellers is pleased to inform you of a special promotion exclusively for our preferred customers.

<<First_Name>>, you can get a whopping 30% discount on **every item in the store**. Simply bring this letter before 30 November 200_ and enjoy significantly lower prices for your next purchase.

At **Classic Jewellers** we continue to offer a lifetime guarantee on all our products. Visit us today for quality jewellery for every occasion.

Yours sincerely

Hildred Joseph
Marketing Manager

Examination-type questions

1 Prepare and save a database table as **mailing list**, using the following contact information:
   Anthony Perkins, whose address is 237 West Street, Portstown
   Sheerilyn Waters of Apartment 12B, Cedar Towers, Speyside
   Waheeda Ali, who lives at 56 Park Ridge, La Brea
   Mei-Ling Chen, whose mailing address is PO Box 976, San Fernando

2 Use mail merge to prepare personalised copies of **Letter 1** on A4 paper for all the persons in the mailing list. Save as **Excellent Letters**.

3 Prepare addressed envelopes for all the persons in the mailing list and save as **Excellent Envelopes**.

4 Print the letter and envelope for Waheeda Ali.

Letter 1

Excellent Learning Centre
Sunset Drive
Waterloo

Insert current date recipient's first name, surname and address in block layout with appropriate spacing

Dear

Insert recipient's first name

/ini caps/   Excellent Learning Centre is pleased to announce the launch of our new fully integrated online learning environment at www.excellentlearning.com.

/lc/   With Excellent Learning Centre's online learning environment, you can learn anywhere, at any time and at your own pace. We offer a wide range of pre-university, technical and degree programmes that will help you to achieve your career goals.

Please visit our website, come in to our centre or call Melanie on 555 4623 for further information. Let us help you to achieve the certification that you need.

Yours sincerely

Wesley Richards
Programme Coordinator

17 Working with graphics

By the end of this unit you should be able to:
- Make skilful use of graphics to enhance documents

Unit at a glance

- The term 'graphics' refers to drawings, photographs, charts and other visual images.

- **Clip art** is a collection of graphic images, designs and artwork in digital form that you can use in various documents.

- **WordArt** is decorative text that can be rotated, stretched, shadowed, filled with colour and texture or fitted into various shapes.

- **AutoShapes** are ready-made shapes such as circles, rectangles, stars and arrows.

- **SmartArt** is predesigned diagrams such as Venn diagrams, flow charts and organisational charts to which text can be added.

- You can use graphics when preparing display work such as cards, notices and flyers.

You must develop the ability to apply your creativity and good taste to produce a variety of display work. **Display** means the tasteful arrangement of text and graphics on the page. Centring is an important element of display work.

You already know how to apply a variety of formats including font styles, paragraph alignment, page borders and backgrounds. In this unit you will learn how to work with other design elements such as clip art, AutoShapes and WordArt.

Creating graphics

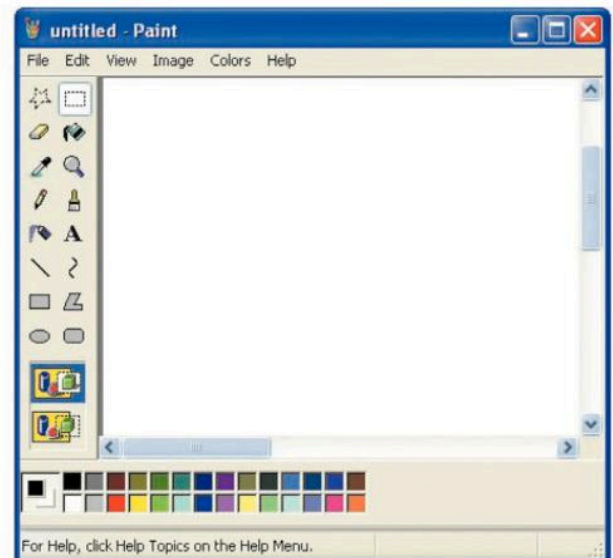Let us create a graphic by using Microsoft Paint. This will be saved as a bitmap.

Figure 17.1 *The Paint window*

Microsoft Paint is a simple program that allows you to draw and edit pictures using the computer. The Paint software is found

in **Accessories**. Turn on your computer. After it boots up or starts up, click on your **start** menu. Point to **All Programs**. In the Programs menu, point to **Accessories**. Now click on **Paint**. The Paint icon may look like this ![icon] or this ![icon]. The white area of your paint screen is called the **bitmap**. This is the area in which you can create your designs.

The tool box

The section of the window shown on the left is called the **tool box**. If it is not visible on the screen, click on **View** in the menu bar. From the menu that appears click on **Tool Box**. Most of the icons on the tool box show what they do. Can you identify the pencil, the eraser, the paintbrush and the airbrush? The **palette** (Figure 17.3) allows you to select the colours you wish to use by clicking on them. If it is not visible, use the **View** menu to activate it.

Figure 17.2 *The tool box*

Figure 17.3 *The colour box*

Let us do a simple exercise called **Walking a Line**. Click on the pencil in your tool box. Draw a line that wanders all over your bitmap page by clicking and dragging your mouse. Make sure that your line crosses itself quite a few times. If you are the kind of artist that I am, your line may look something like Figure 17.4!
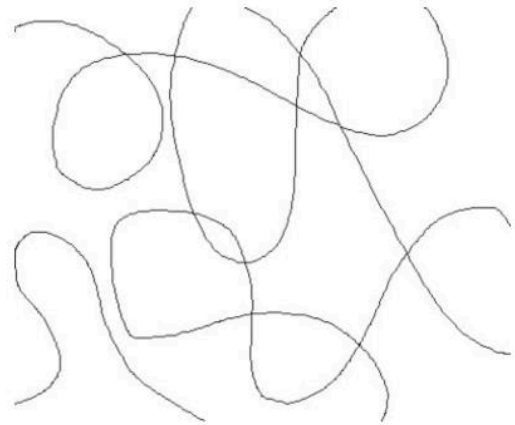
Figure 17.4

Now let us fill each section with colour by clicking on this icon ![icon] in your toolbox. Select your colours from the palette. That does not look so bad, does it? Remember to make your lines cross so that enclosed sections are created for the computer to fill with colour. Save the picture as **Line Art**.
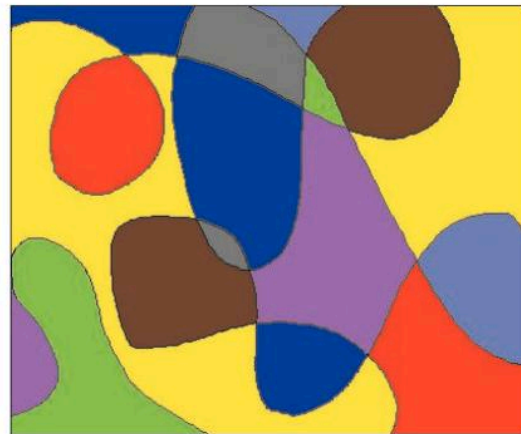
Figure 17.5

If at first you are not satisfied with your results, it is easy to use your eraser to 'rub off' your lines. However, you will realise that with an abstract design like this, each 'mistake' can become a beautiful part of your painting. With practice, you will soon be able to draw a picture that is worth saving. To get a new blank bitmap click **File** then **New** in the menu bar. We will use this new bitmap to get familiar with some other tools.

Using the Paintbrush tool

The flower in Figure 17.6 was drawn in Microsoft Paint using two colours and the paintbrush tool with a medium round brush. To draw using the paintbrush, click on the brush icon in the toolbox ( ).

Your cursor will look like a small dotted cross, with the colour of the brush at the middle.
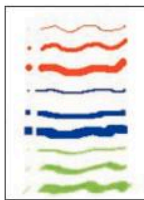
Figure 17.6

Figure 17.7

A number of brush options will become visible just below the toolbox.

Figure 17.8 *Brush options*

The brush options change the thickness and shape of the ends of each line, as is illustrated in Figure 17.7.

Colouring the drawing

We can now colour the picture by using the airbrush , which also comes in a variety of sizes.

Figure 17.9 *Airbrush sizes*

The petals of the flower in Figure 17.10 were coloured with a large spray and the leaves were done with a medium spray. Two shades of green were used on the leaves. The middle of the flower was filled with a small yellow spray. Just as with a real spray can, the longer you click and hold, the more colour is applied. Moving the mouse moves the spray.

Figure 17.10

Filling with colour

Instead of using the paintbrush, you may wish to fill sections of the painting the way that you learnt above.

It may take you a few tries before you are able to control the brush very well, so do not become discouraged if your picture does not come out exactly the way you want it to. I had to redraw this flower many times. You may click **Edit** then **Undo** to reverse your last action. Experiment with the other tools and menu items as you work with this program. Save your drawing as My Flower.

Figure 17.11

To insert into a document any drawings or photographs that are saved on your computer, follow these steps:

1 Click on **Insert** on the menu bar and select **Picture** and **From File**....
2 Select the location in which the picture was saved, such as Documents, Picture Library or a flash drive.
3 Click on the picture that you want to use and click **Insert** at the bottom right of the dialogue box (Figure 17.12).

Figure 17.12 *An **Insert Picture** dialogue box*

To do

1 Open Microsoft Word and type the following paragraph:

> Working with graphics allows me the opportunity to demonstrate my creativity. With persistence and practice I will soon produce attractive displays for a variety of purposes. I can insert my own drawings or photographs that I have taken with a digital camera.

2 Insert a drawing that you did in Microsoft Paint.
3 Save your document as **Using Photographs** on a removable storage medium.

Working with clip art

You will probably have realised that it takes time and effort to create pictures on the computer. Fortunately, The Microsoft Clip Organizer contains drawings and photographs (called **clips**) that you can insert and use in your Word documents.

Clip Art is a collection of graphic images, designs and artwork in digital form that you can use in various documents.

To find a clip:

1 On the **Insert** menu, point to **Picture**, and then click **Clip Art...** .
2 A **Clip Art** task pane will open to the right of the Microsoft Word window.
3 Type a word or phrase that describes the clip you want in the **Search for:** box.
4 Click **Go**.
5 All clips that match the keyword will be displayed in the **Results** section of the task pane as is shown in Figure 17.13.

To insert a clip:

1 Find the clip you want to use.
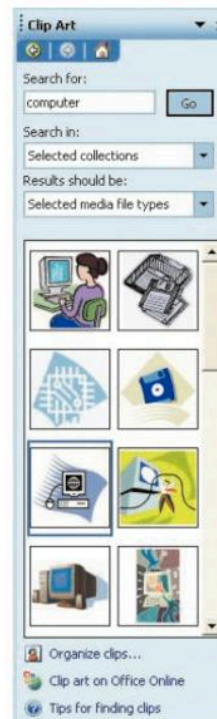2 Click on the clip and it will be inserted wherever the cursor is in your document.

Figure 17.13 *The **Clip Art** task pane*

Microsoft Word offers several different picture layouts (see Figure 17.14). A **layout** controls the relative position of the picture to the text. When you first insert a clip it is placed in line with the text. This sometimes makes it difficult for you to get the document design that you want.

To change the layout of the picture:

1 Click on the picture to select it.
2 Click **Format**, then **Picture...** in the menu bar.
3 Click on the **Layout** tab and select the layout you want to use.
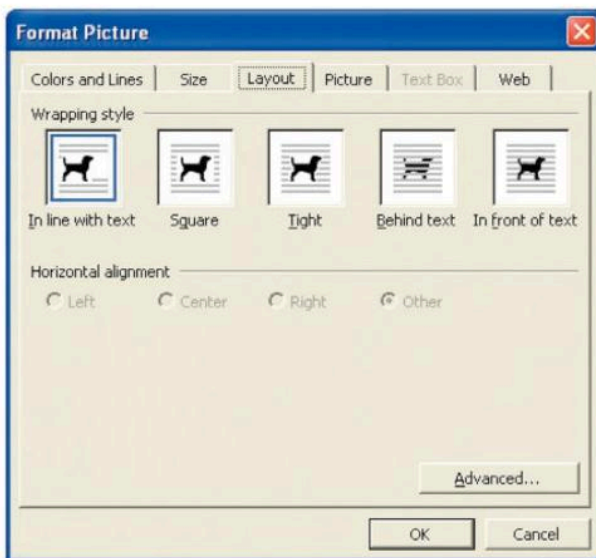4 Click **OK**.

To change the size of a picture:

Figure 17.14 *Picture layout*

1 Select the picture by clicking on it.
2 Handles that look like boxes or circles will appear around the picture. Click and drag these handles to resize the picture.

DID YOU KNOW?

The handles on the corners will resize proportionally while the handles on the straight lines will stretch the image (Figure 17.15).

Figure 17.15 *Resizing a picture*

Working with the Picture toolbar

The **Picture** toolbar (Figure 17.16) should appear when you click on the clip. If it does not appear, click **View**, point to **Toolbars** and click **Picture** from the menu bar to activate it.
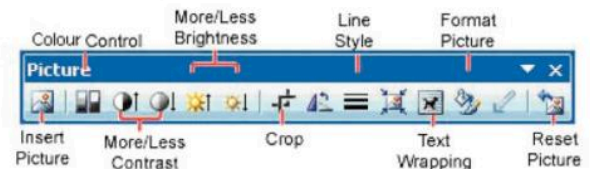
Figure 17.16 *The **Picture** toolbar*

The functions of the various buttons on the **Picture** toolbar are explained in Table 17.1.

Working with AutoShapes

AutoShapes are a variety of ready-made shapes that include lines, connectors, basic shapes, flowchart elements, stars and banners, and callouts (speech bubbles). These are available on the **AutoShapes** toolbar. You can also find more shapes in the Clip Organizer.

You can add text and images to shapes. The text you add becomes part of the shape. This means that if you rotate or flip the shape, the text rotates or flips with it.

Table 17.1 *Functions of the Picture toolbar buttons*

Button	Function
Insert Picture	Enables you to insert a **picture file** that is saved in a folder on your computer. For example, if you have saved photographs from your digital camera or scanner, you can use this command to place your photograph in the document
Color	Allows you to make the image greyscale, black and white, or washed out (a watermark)
More/Less Contrast	Changes the contrast between the colours of the image
More/Less Brightness	Will darken or brighten the image
Crop	Allows you to cut out portions of the picture. Click on **crop** and drag the handles on the activated image to delete outer portions of the image
Line Style	Allows you to add an assortment of borders to the graphic
Text Wrapping	Will modify the way the document text wraps around the graphic
Format Picture	Displays all of the image properties in a separate window. You can then make the changes you want
Reset Picture	Deletes all of the changes that you have made to the image. The picture returns to its original state

To activate the **AutoShapes** toolbar click **Insert**, point to **Picture** and click **AutoShapes**. You may also click **View**, point to **Toolbars** and click **Drawing**.
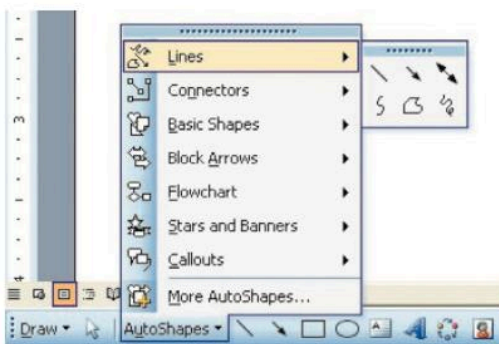

Figure 17.17 *The AutoShapes toolbar*

Figure 17.17 shows some of the items that are on the **AutoShapes** toolbar.

To insert an AutoShape:

1 Click **AutoShapes**, point to a category and click the shape that you want to use.
2 Click the place in your document where you want to put the AutoShape and the **Drawing Canvas** will appear.
3 Click and drag your cursor to the size you want your AutoShape.

To draw a shape:

1 Click **AutoShapes** on the **Drawing** toolbar, and then point to **Lines**.
2 Click **Freeform** to draw an object with both curved and straight segments.
3 Click where you want the shape on your document and drag to draw freehand shapes; click and move the mouse to draw straight lines.

DID YOU KNOW?
- To create an open-ended shape, double-click at any time. To close a shape, click near its starting point.
- If you want to draw a shape with smooth curves, click **Scribble**. Hold down the left button while you draw the design. Let go of the mouse button to stop drawing.
- You can resize an AutoShape the same way that you resize a picture.

To rotate or flip an AutoShape:

1 Click **Draw**, point to **Rotate or Flip** and select the option you want to use. If you select **Free Rotate** then green handles will appear around the shape.
2 Click and drag the handles to rotate the picture to the desired angle.

Working with WordArt

WordArt is a feature that allows you to create interesting and colourful graphical text. WordArt can be rotated, stretched,

shadowed, filled with colour and texture or fitted into various shapes (Figure 17.18). Table 17.2 shows some of the changes that can be made to WordArt.
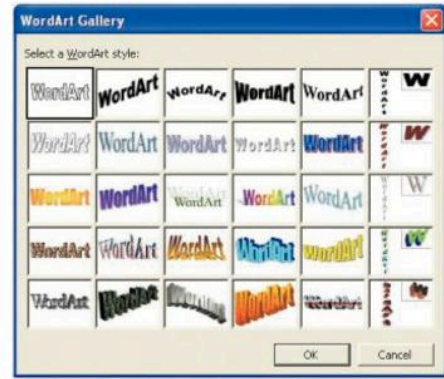

Figure 17.19

To add WordArt:

1   Click **Insert**, point to **Picture** and click **WordArt....**
2   The **WordArt Gallery** will appear.

Figure 17.18   *Examples of WordArt*

Table 17.2   *Drawing and WordArt toolbar buttons*

Button	Purpose	Button	Purpose
	Insert WordArt		Change or apply three-dimensional effects
	Insert Diagram or Organisational Chart	Edit Text...	Edit the WordArt text
	Insert Clip Art		View the WordArt gallery
	Insert a picture from file		Change WordArt colours and fill effects
	Change the fill colour of an AutoShape or WordArt		Change the shape of the WordArt object
	Change the line colour of an AutoShape or WordArt		Adjust the way the document text is wrapped around WordArt
	Change the font colour	Aa	Make the upper-case and lower-case letters the same height
	Change the line style	Ab b	Make the WordArt text vertical
	Change the dash style		Alter WordArt alignment
	Change the arrow style	AV	Change the character spacing in WordArt
	Change or apply shadow effects		

3 Click on the WordArt style that you want to use. Click **OK**.

4 Type in your text in the **Edit WordArt** box (Figure 17.20).

5 Make any changes you want to the font, font size and style. Click **OK**.

To change the text in WordArt:

1 Double-click the WordArt object you want to change.

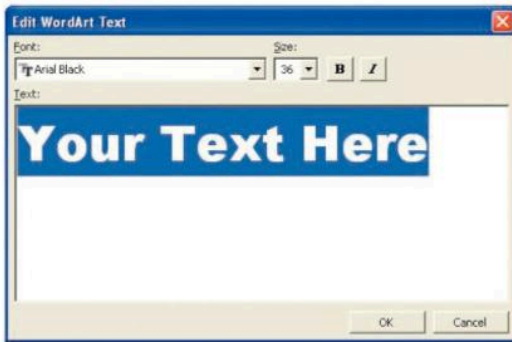2 In the **Edit WordArt Text** dialogue box, change the text, and then click **OK**.

Figure 17.20 *The **Edit WordArt** dialogue box*

Working with text boxes

A text box is a shape in the word-processing program that allows you to place a block of text anywhere in the document. Text boxes are not controlled by the margins or paragraph formatting. Text boxes are frequently used to add labels to pictures, as is shown in Figure 17.21.

Prevent neck pain and injury
Use a telephone headset to answer calls when you are working on the computer.

This is a text box

Figure 17.21 *A text box*

To add a text box:

1 Click **Insert** then click **Text Box**

2 In earlier versions of Word, you must click and drag your mouse in the document where you want the text box to appear. In later versions of Word the text box appears over the cursor.

3 Type the desired text in the rectangle that appears.

4 Click and drag on the text box border to change its position or use the handles to change its size.

Examination-type questions

1 Name two devices that can be used to create graphics on a computer. *(2 marks)*

2 List three types of graphics that can be inserted into a Word document. *(3 marks)*

3 State the purpose of each of the following buttons:

a 　　b

c 　　d 　　*(4 marks)*

4 Explain the meanings of the following terms as they relate to working with graphics:
a Crop
b Wrapping
c Resize
d Reset　　*(4 marks)*

5 State the steps that must be followed to insert the following into a document:
a A clip art image　　*(4 marks)*
b A photograph　　*(3 marks)*

18 Using presentation software

By the end of this unit you should be able to:
● Create presentations using appropriate software

Unit at a glance

● A presentation is a program that combines text editing with graphics to produce electronic versions of slideshows.

● A presentation is prepared in outline format.

● Animations are special visual and sound effects that are added to text or to an object.

● Transitions determine the way in which a screen changes from one slide to another.

In Unit 11 you learned that a presentation is a form of oral communication in which the speaker shows and explains the content of a topic to an audience. A **presentation program** is software that combines text editing with graphics to produce a slideshow that can be used with an oral presentation. There are many different brands of presentation software; however, Microsoft PowerPoint is by far the most popular. Also, there are many similarities between PowerPoint and Corel Show, another type of presentation software. Therefore, in this unit you will learn to create presentations using PowerPoint, but you can apply many of the principles and techniques when using other presentation software.

Presentations may be used to enhance a speech or talk. Remember that the presentation **is not the speech**. It is a tool that is used to improve the quality of the speech and make it more interesting. Consequently the presentation should be prepared in outline form.

You should plan out your presentation using paper and pencil before starting to create it on the computer.

1 Research your topic thoroughly so that you will have enough information to use.
2 Write an outline using the main points.
3 List no more than eight sub-points for each main point. Ideally, each sub-point should consist of approximately 8–10 words.
4 Design a **title slide** that will display information such as the name of the presentation, the presenter's name and the date.
5 Draw the **layout** of your presentation, identifying the position in which you would place your title, subtitles, graphics and text.

To do

You have been asked to talk to your fellow students about a social issue of your choice. Plan a presentation that you can use to enhance your speech.

PowerPoint views

Microsoft PowerPoint has three main views:

1 Normal view.
2 Slide Sorter view.
3 Slide Show view.

Normal view is the view in which you write and design your presentation. Normal view has three working areas:

1 On the left there are two tabs on which you may click to see either an outline of your slide text (**Outline** tab) or your slides displayed as thumbnails (**Slides** tab). You can use the Outline tab to plan how you want to present your ideas, and to move slides and text around. The **Slides** tab enables you to see your slides as thumbnails, that is, as small images. This makes it easy for you to navigate through your presentation and to see the effects of your design changes. You can also rearrange, add or delete slides.

2 On the right there is the **slide pane**, which displays a large view of the current slide. This is the area in which you add elements such as pictures, tables, charts, sounds, animations and text.

3 At the bottom, is the **notes pane** on which you may type notes that you want to accompany a slide. These notes may be printed for distribution. The contents of the notes page are not visible to the audience during a slide show.

Slide Sorter view allows you to see all of your slides in thumbnail form. The slide sorter gives you an overall view of your finished presentation making it easier for you to reorder, add or delete slides and preview your transition and animation effects.

Slide Show view takes up the full computer screen, allowing you to see your presentation the way your audience will. You can see how your graphics, animations and transition effects will look in the actual show.

Use the **View** command on the menu bar to switch from one view to another.

> **DID YOU KNOW?**
> You can exit the slide show view at any time by pressing the Esc key. You may move from one slide to another by using the PgUp and PgDn keys.

Printing slideshows

There are several options for printing a PowerPoint presentation. You can choose whether to print in colour, greyscale or black and white. You can print individual slides, handouts with several slides per page, outlines or notes. Click **Print** in the Office Menu or File Menu to open the **Print** dialogue box. Experiment with the different options until you become familiar with this feature of PowerPoint.

Working with PowerPoint 2003

When you open PowerPoint 2003 or earlier versions, you will see the **Getting Started** task pane on the left (Figure 18.1).
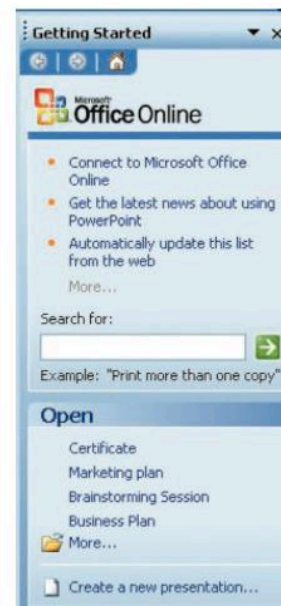

Figure 18.1 The **Getting Started** task pane

1 Click **Create a new presentation….**
2 Choose **Blank Presentation** from the task pane.
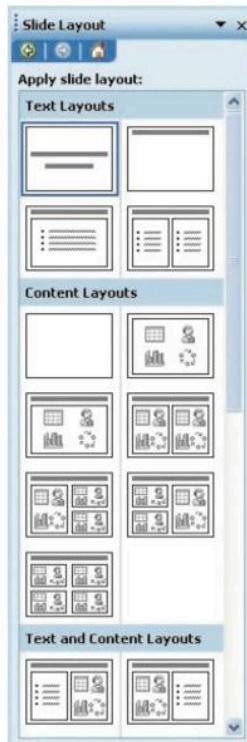3 Choose the layout you want to use from the **Slide Layout** task pane (Figure 18.2).

Figure 18.2 *The **Slide Layout** task pane*

4 Click on the placeholders to insert your slide content (Figure 18.3).
5 Insert a new slide by using the menu bar.
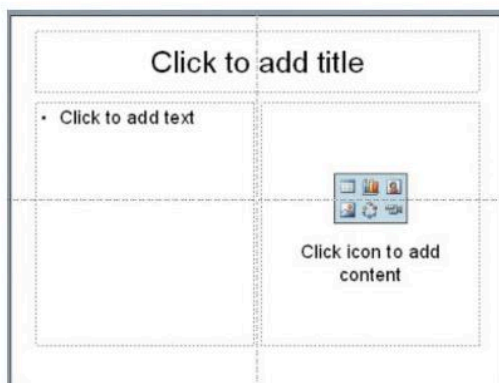
Figure 18.3 *A slide layout*

Working with colour schemes

Each PowerPoint colour scheme consists of a set of eight balanced colours:

- The background colour.
- A colour for text.
- Six other colours that are designed to make text easy to read.

To change the slide colour scheme:

1 Click **Format** then **Slide Design….**
2 Click **Color Scheme** from the list on the **Slide Design** task pane.
3 Select the colour scheme you want to use.

Working with design templates

A design template is a file that contains preset styles in a presentation. Style elements include:

- Type and size of fonts.
- Type and size of bullets.
- Placeholder sizes and positions.
- Background design.

To use a design template:

1 Click **Format** then **Slide Design….**
2 Click **Design Templates** from the list on the **Slide Design** task pane.
3 Select the design you want to use.

Animations and transitions

Animations are special visual and sound effects that are added to text or to an object. For example, you can have your text appear one word at a time or hear the sound of applause when a picture is displayed.

Animation adds interest to your presentation. However, the excessive use of animations can be distracting as your audience may become more interested in your special effects than in your message.

Transitions determine the way in which a screen changes from one slide to another.

Figure 18.4 *Slide transitions*
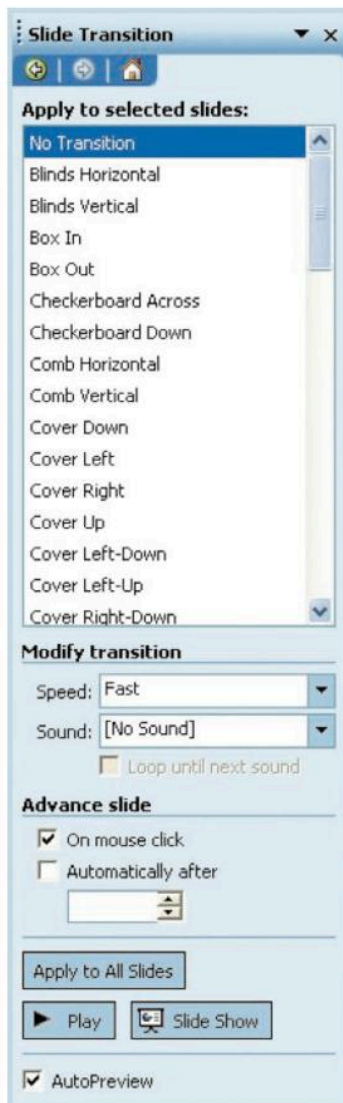
Some transition effects include:

- Appear.
- Fade in.
- Descend.
- Unfold.
- Bounce.
- Pinwheel.

A transition may be applied to all slides simultaneously or you may apply different transitions to selected slides.

To apply slide transitions:

1 Click **Slide Show** then **Slide Transition**.
2 Select the transition you want to use (Figure 18.4).

3 Click **Apply to All Slides** if you want the same transition throughout the presentation.

Timing

You may set your animation and transition effects so that they occur either automatically according to a preset time or each time you click the mouse.

Graphics and sounds

You may add graphics to a slide by applying the skills you mastered in Unit 17 (Working with graphics). PowerPoint makes it easy to work with graphics because you can position objects anywhere on the slide. The clip art gallery also contains video clips and sounds. To find and insert sounds and video:

- Click ▼ next to **Selected media file types** in the **Clip Art** task pane.
- Select the media and click **Go**.

The AutoContent Wizard

The **AutoContent Wizard** helps you to get started by providing ideas and layouts for your PowerPoint presentation. To access the AutoContent Wizard click **New** in the **File** menu. Select **From AutoContent Wizard** in the **New Template** task pane that will appear at the right of your screen. A dialogue box similar to Figure 18.5 will appear on your screen.

Figure 18.5 *The AutoContent Wizard*

Click **Next>** Follow the on-screen instructions to set up the format for your presentation. You will notice that text is displayed on the slide as **placeholders**. Click on the placeholders to change the text.

Working with PowerPoint 2007
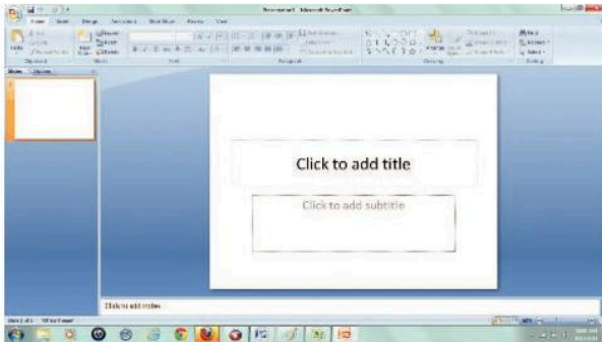
Figure 18.6 *Start up screen in PowerPoint 2007*

The menus and ribbons in PowerPoint 2007 look similar to those in Word 2007 (Figure 18.6). The PowerPoint **Home ribbon** offers similar options for formatting font and paragraphs. However, it also contains the options for inserting and deleting slides and changing the slide layout. The Home ribbon also contains options for inserting and formatting drawings (Figure 18.7).

Slide layout

A slide layout sets out placeholders for items such as text, tables, graphics and movies. There are nine preset slide layouts in PowerPoint 2007, as shown in Figure 18.8.
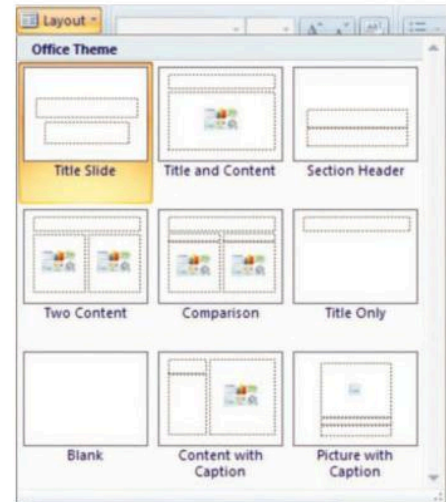
Figure 18.8 *The Slide Layout menu*

The **Title slide** layout is displayed by default when you open PowerPoint 2007. This layout contains two placeholders, the first for the title of the presentation and the second for a subtitle. Click on the placeholder and begin typing to insert the text (words) that you want to use.

You may insert additional slides by clicking on the **New Slide** menu on the Home ribbon. The **Title and Content** layout contains placeholders for text as well as for six items, including tables, charts, pictures from files, and so on. A small box appears showing the purpose of each of these placeholders when the mouse

Figure 18.7 *The PowerPoint Home ribbon*

pointer is placed over the item (Figure 18.9). Experiment with placing different items into the slide until you become familiar with how these options work.
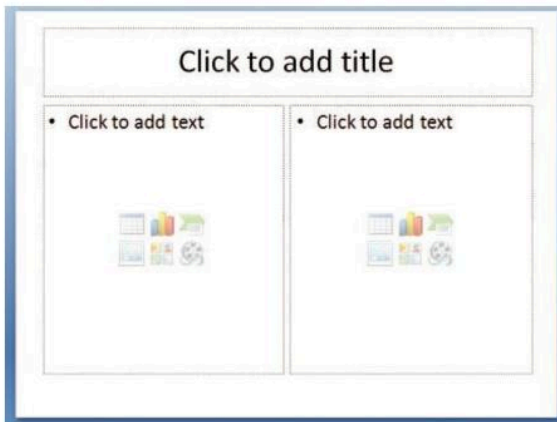
Figure 18.9 *Slide with placeholders*

The Insert ribbon

The **Insert ribbon** displays the various items that may be placed on the slide (Figure 18.10). You may use this ribbon to create your own custom layout with any combination of the following elements:

- Text.
- Pictures.
- SmartArt.
- Charts.
- Tables.
- Diagrams.

- Media.
- Clip art.
- Movies.
- Sound.

You can use the Insert ribbon to add these items to a slide.

The Design ribbon

The **Design ribbon** (Figure 18.11) contains a variety of colour schemes, each consisting of a set of balanced colours, including:

- The background colour.
- A colour for text.
- Six other colours that are designed to make text easy to read.

Click on the various design options to see the changes to the appearance of your slide.

Animations and transitions

The **Animations ribbon** displays options for controlling the movement of items in a presentation. **Animations** are special visual and sound effects that are added to text or to an object. For example, you can make your text appear one word at a time or you can add the sound of applause when a picture is displayed.

Animation adds interest to our presentation. However, the excessive use of animations can be distracting as your audience may become more interested in your special effects than in your message.

Figure 18.10   *The **Insert** ribbon*

Figure 18.11   *The **Design** ribbon*

Transitions determine the way in which a screen changes from one slide to another. Some transition effects include:

- Appear.
- Fade in.
- Descend.
- Unfold.
- Bounce.
- Pinwheel.

A transition can be applied to all slides simultaneously or you may apply different transitions to selected slides.

As mentioned under Timing, you can set your transition effects so that they occur either automatically according to a preset time or each time you click the mouse.

Slide show
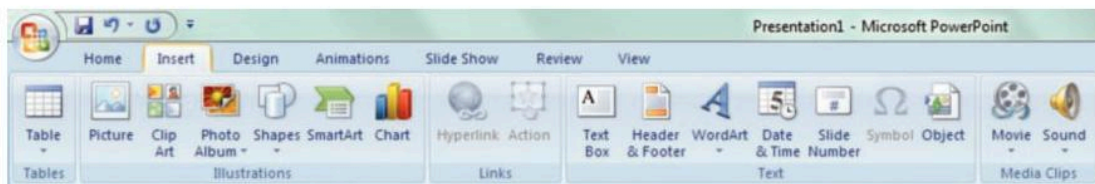
A slide show can be designed to run automatically or it may be set up so that a speaker determines when to advance from one slide to the other. The **Slide Show** ribbon contains the options necessary to set up the presentation. Try out the various options on this ribbon until you become familiar with how they work.
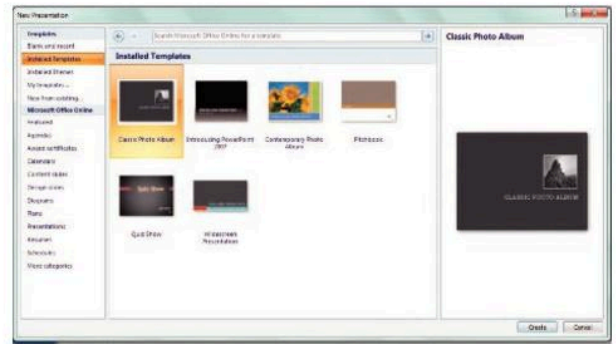
Figure 18.12 *Design templates*

Templates

There is no AutoContent Wizard in PowerPoint 2007 and later versions. Instead, predesigned presentations are available as templates when you click **New** in the Office menu (Figure 18.12). The templates contain text, graphics, backgrounds and colour schemes that you can modify to create the presentation you want.

To do

Create a presentation with graphics, sounds, animations and transitions using the outline you prepared above.

Examination-type questions

1 You have been asked to discuss the peripheral devices used with computers. Prepare a six-slide presentation with appropriate effects. Your presentation will be assessed according to the following criteria:
  a Content. *(3 marks)*
  b Effective communication and grammar. *(3 marks)*
  c Appropriate layout and background. *(2 marks)*
  d Readability (appropriate font size and style, colour and effects). *(2 marks)*
  e Attractive style of presentation, and creativity. *(2 marks)*
  f Effective use of at least three different types of graphics. *(2 marks)*
  g Use of transitions and animations. *(2 marks)*

2 Save a copy of your presentation to an external storage medium. *(2 marks)*

3 Print your presentation as a colour handout on a single sheet of A4 paper. *(2 marks)*

19 Stationery

By the end of this unit you should be able to:
- Identify the different types, sizes and layout of paper
- Identify various types of envelopes
- Select appropriate stationery for a given assignment
- Select the appropriate size envelopes for a given assignment
- Work with templates to produce documents

Unit at a glance

- The types of paper used in the business environment include: bond paper, parchment, onionskin, flimsy, carbon, stencils and document cover.

- Paper is available in a variety of sizes. The most commonly used system for paper sizes is the International Organization for Standardization (ISO) **A Series**.

- **Letter-sized** paper measures 216 mm × 279 mm (8½″ × 11″). **Legal-sized** paper measures 216 mm × 356 mm (8½″ × 14″). **Customised sizes** are cut to the measurements specified by the user.

- A sheet of paper is in **portrait** layout if the shorter sides are at the top and bottom, i.e. if it is taller than it is wide. A sheet of paper is in **landscape** orientation if the shorter sides are at the left and right, i.e. if it is wider than it is tall.

- Envelopes are available in a range of international sizes, quality and types, including **airmail** and **window** envelopes.

- Stationery may be preprinted for a variety of purposes including envelopes, letterheads, memoranda, forms, labels, index cards, document covers and templates.

- A **template** is a preset design for a document that controls elements such as font, page layouts and formatting.

Types of paper

The name 'bond' was originally given to paper which was used for printing bonds and stock certificates. **Bond paper** is a fairly thick, high-quality paper that is now used for letterheads and other printing purposes. Its right side is identified by a gloss finish or watermark. Bond paper is available in a variety of colours.

Parchment is a heavy, expensive, high-quality paper that is grease-proof and water resistant. Parchment is made from the skins of goats or other animals. Most of the parchment now available is a cheaper vegetable parchment. It is made by passing a sheet of pure fibre paper through a bath of sulphuric acid and then washing and drying it very thoroughly.

Onionskin is lightweight, bond-type paper that is thin and semi-transparent. It is used for duplicate copies of typed matter. It is ideal for making carbon copies because it is durable yet thin enough to allow a clear impression to be typed.

Flimsy paper is a thin, low-quality paper that is used for printing unimportant work, multiple copies and drafts.

Carbon paper is a lightweight paper, free of pin holes and with a waxy coating. It is used between the top sheet and flimsy or onionskin paper for making duplicate copies with impact printers or typewriters.

No carbon required (NCR) paper is a set of sheets that are chemically treated so that a copy is made on the second and subsequent sheets without the use of carbon. It is used with impact printers for making multiple copies of invoices and forms.

Document cover is fairly heavy plain or embellished paper, which is used for making covers for books, catalogues, brochures and pamphlets. It is characterised by good folding qualities (easily creased), printability and durability.

A **stencil** is a strong, thin wax-coated sheet of paper. Stencils are used with Risograph printers for the production of hundreds or thousands of copies of a page.

Copier paper or **laser paper** is available in lightweight grades of good quality. It

is used for copying correspondence and documents. This paper is available in several standard sizes. Two commonly used sizes are **letter-sized** and **legal-sized**. Letter-sized paper measures 216 mm × 279 mm (8½″ × 11″). Legal-sized paper measures 216 mm × 356 mm (8½″ × 14″).

Index paper is a stiff, relatively inexpensive paper with a smooth finish. It is a popular choice for printing business reply cards because it has a low weight in comparison to its thickness.

Customised paper is cut to the size specified by the user.

To do

Visit a stationery store and see the various types of paper that are available. Try to determine the purpose for which each type might be used.

Table 19.1 *ISO sizes of paper*

ISO name	Measurement in mm	Measurement in inches (approx.)	Uses
A0	841 × 1189	33.1 × 46.8	Posters, wall maps
A1	594 × 841	23.4 × 33.1	Posters, wall maps
A2	420 × 594	16.5 × 23.4	Posters, folded maps, plans, time tables, travel schedules, wall calendars, advertisements
A3	297 × 420	11.7 × 16.5	Legal documents, balance sheets, financial statements, travel schedules, shares, maps, advertisements
A4	210 × 297	8.3 × 11.7	Business letters, reports, circular letters, minutes, agenda, chairman's agenda, specifications, long memoranda, manuscripts, tabular work, forms, programmes, display work, specifications, itineraries, legal documents, invoices, literary work, advertisements
A5	148 × 210	5.8 × 8.3	Short letters, short memoranda, notices, agenda, invitations, debit notes, credit notes, invoices, circulation slips, forms, vouchers, advertisements
A6	105 × 148	4.1 × 5.8	Postcards, index cards, petty cash vouchers, credit notes, debit notes, invitations, telephone message pads, compliment slips, receipts, agenda
A7	74 × 105	2.9 × 4.1	Address labels, index cards, compliment slips
A8	52 × 74	2.1 × 2.9	Business cards, address labels
A9	37 × 52	1.4 × 2.1	Folder and document labels

Sizes of paper

The most commonly used system for paper sizes is the **International Organization for Standardization** (ISO) **A Series**. The largest ISO size is A0, which measures 841 mm × 1189 mm. Each subsequent size is obtained by dividing the paper in half. A1 is half the size of A0. A2 is half the size of A1 and so on.

Table 19.1 lists the ISO sizes of paper and the purposes for which each size is used. Use this table as a guide for selecting the appropriate stationery for your assignments as you progress.

Paper layout

A sheet of paper is in **portrait** layout if the shorter sides are at the top and bottom, that is, if it is taller than it is wide. A sheet of paper is in **landscape** orientation if the shorter sides are at the left and right, that is, if it is wider than it is tall.
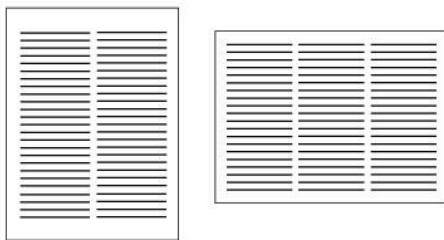
Figure 19.1 *Portrait and landscape orientation*
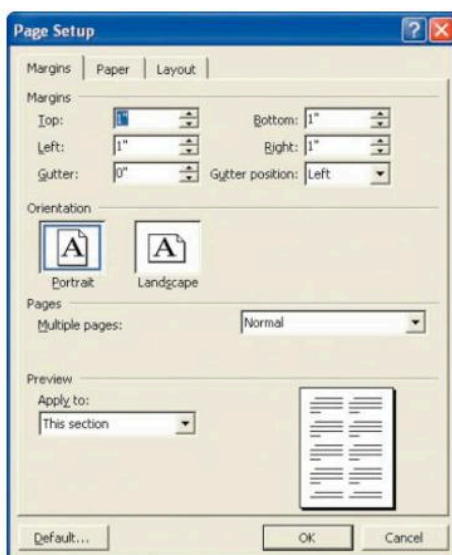
Figure 19.2 *The **Page Setup** dialogue box*

To change the orientation in which your document is printed:

1 Click **File** then **Page Setup...** in the menu bar. The **Page Setup** dialogue box will appear as shown in Figure 19.2.
2 Click on the orientation you want.
3 Click **OK**.

Envelopes

Envelopes come in a wide range of sizes, styles and colours. Different styles of envelopes are created by changing the shape of the faces, flaps and side seams. Figure 19.3 shows these parts.
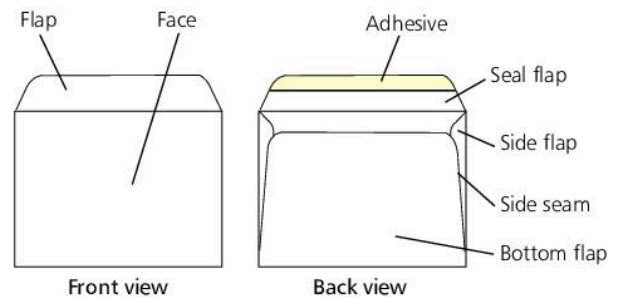
Figure 19.3 *Parts of an envelope*

Envelopes may be classified as **banker (commercial)** or **pocket** (Figure 19.4). Banker envelopes open on the longer side, pocket on the shorter. Banker envelopes usually have diagonal seams. In some sizes they are available with side seams (Figure 19.5).

The flap seals the envelope when it is folded. Many envelopes now come with an adhesive strip rather than the gummed edge that needs to be moistened. As shown in Figure 19.6, the seal flap may be square, pointed or commercial (slightly curved at the tip) in shape.
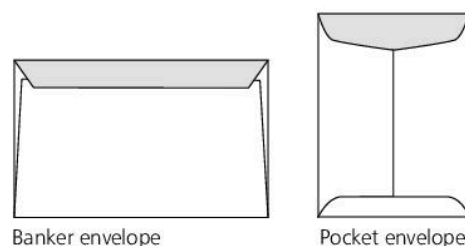
Figure 19.4 *Shapes of envelopes*
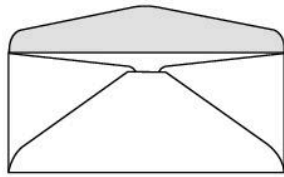
Envelope with diagonal seams
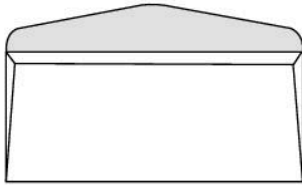
Envelope with side seams

Figure 19.5   *Seams on banker envelopes*

Pointed   Commercial   Square
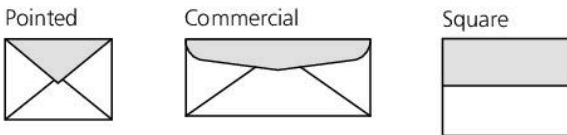
Figure 19.6   *Flap styles*

Types of envelopes for various purposes

Window envelopes have a cut-out opening that allows a portion of the contents of the envelope to be seen, such as a mailing address or a special message (Figure 19.7). The opening in some envelopes is plastic-covered to protect the contents. If the opening is uncovered it is called an **aperture** envelope. Window envelopes are normally used for bills, but they may also be used for marketing purposes. They are cost and energy efficient as the name and address shows through the window thereby eliminating the need to address the envelope.
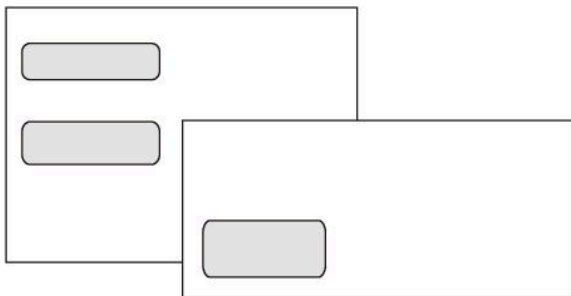
Figure 19.7   *Window envelopes*

Figure 19.8   *Airmail envelope*

**Airmail envelopes** are used for overseas airmail and international correspondence. These envelopes are recognised by their distinctive red, white and blue border (Figure 19.8). The airmail envelope is lightweight, which helps to keep the mailing weight and therefore cost to a minimum.

Catalogue envelopes are mainly used for catalogues, magazines and reports (Figure 19.9). They are available in a variety of sizes.

Inter-office envelopes are used to distribute inter-office mail within an organisation. They are generally preprinted with routing information (the circulation list) on the front and back of the envelope (Figure 19.10). They are punched throughout the body of the envelope to allow you to see if there is anything inside. Inter-office envelopes are generally opened and closed many times. Therefore it is necessary to secure the envelope with a device that can be used numerous times, such as a button and string or a metal clasp.
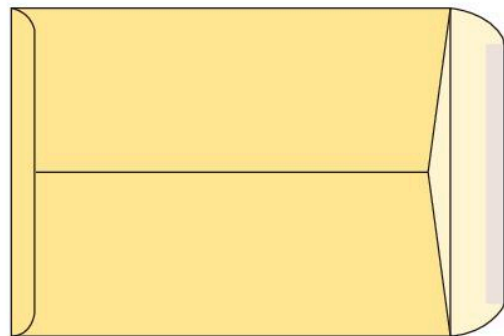
Figure 19.9   *Catalogue envelope*
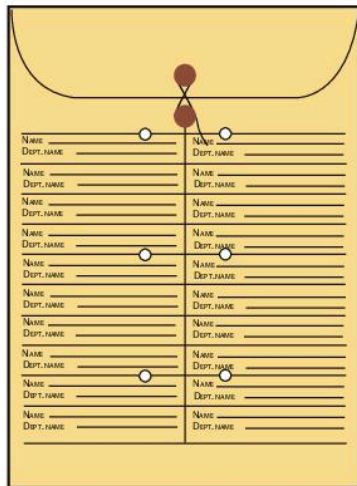
Figure 19.10 *Inter-office envelope with button and string closure*

Quality of envelopes

Envelopes are available in a wide variety of qualities including parchment, manila and bond. Usually an organisation matches the quality of their envelopes with their correspondence paper.

- **Parchment envelopes** are heavy and water resistant.
- **Manila envelopes** are strictly speaking made from manila paper, which is strong, and long-lasting, and usually brown. In practice, many people use this term to refer to any brown envelope.
- **Bond envelopes** are high quality and durable. They are usually made from heavy white paper with a gloss.
- **Padded envelopes** are constructed with a cushioned inner layer to help protect their contents.

Envelope sizes

The C series of envelope sizes was designed to accommodate ISO A paper sizes. For example, a C5 envelope will accommodate an A5 sheet flat or an A4 sheet folded once. The B and DL series offer some alternatives to the C series.

Use Table 19.2 to guide your selection of appropriate envelopes for your assignments.

Table 19.2 *Envelope sizes*

Name	Measurement in mm	Measurement in inches	Content Format
C3	324 × 458	12¾ × 18	A3 sheet flat; A2 sheet folded once
C4	229 × 324	9 × 12¾	A4 sheet flat; A3 sheet folded once
C5	162 × 229	6⅜ × 9	A5 sheet flat; A4 sheet folded once
C6	114 × 162	4½ × 6⅜	A5 sheet folded once; A4 sheet folded in quarters
C5/6	114 × 229	4½ × 9	A4 sheet folded in thirds
C7/6	81 × 162	3¼ × 6⅜	A5 sheet folded in thirds
C7	81 × 114	3¼ × 4½	A5 sheet folded in quarters
B4	250 × 353	9⅞ × 13⅞	C4 envelope, A4 sheet flat
B5	176 × 250	7 × 9⅞	C5 envelope, A5 sheet flat
B6	125 × 176	5 × 7	A4 folded in quarters
DL	110 × 220	4¼ × 8¾	A4 sheet folded in thirds, A5 sheet folded in half lengthwise (this envelope is similar in size to the C5/6)

Working with templates

A **template** is a preset design for a document that controls elements such as font, page layouts and formatting. Microsoft Word contains templates for a variety of documents such as letters, faxes, reports, proposals and memoranda.

To use a template in Microsoft Word:

1 Click **File** then **New...** in the menu bar.
2 A **New Document** task pane will open to the right of the document window (Figure 19.11).
3 In the **Templates** section click **On my computer....** The **Templates** box will appear (Figure 19.12).
4 Click on the tab to select the type of document you want to use.
5 Click **OK**.
6 Make any changes to the document.
7 Save and/or print your document.

Figure 19.11 *The **New Document** task pane*
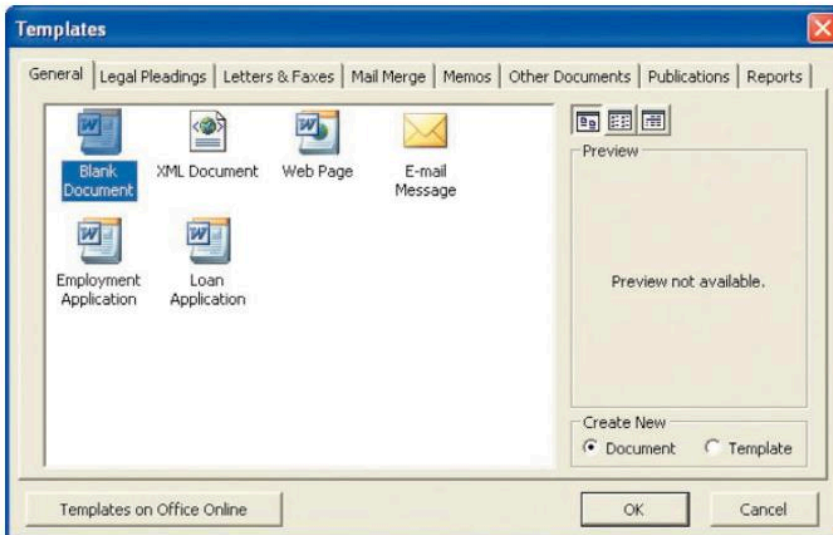
Figure 19.12 *The **Templates** dialogue box*

My glossary

Write definitions of the following terms.

Airmail envelope
Aperture envelope
Banker (commercial) envelope
Bond paper
Carbon paper
Catalogue envelope
Copier paper

Customised paper
Document cover
Flimsy paper
Index paper
Inter-office envelope
ISO A Series
Landscape
Laser paper

Legal-sized
Letter-sized
Manila envelope
No carbon required (NCR)
Onionskin
Padded envelope
Parchment

Pocket envelope
Portrait
Stencil
Template
Window envelope

Developing work skills

Imagine that you have completed CSEC examinations and wish to seek employment. Click on the **Other Documents** tab and open and amend the **Elegant Resume** template to include your personal information. Save and print your CV.

Examination-type questions

1 What is meant by the term 'orientation' as it relates to stationery? *(1 mark)*

2 Differentiate between portrait and landscape orientation. *(1 mark)*

3 Copy and complete the table below by writing in the relevant information.

Paper ISO Name	Size	Three uses	Envelope ISO name	Folding of letter
A2				Folded once
		Notices, short letters, agenda		Folded in thirds
	210 mm × 297 mm (8.3" × 11.7")		C6	
A3			C4	

(12 marks)

20 *Business correspondence*

By the end of this unit you should be able to:
- Produce letters in various styles including continuation pages
- Print letters and envelopes using appropriate stationery
- Fold different types of documents to fit various envelopes
- Prepare envelopes and labels including using wizards
- Prepare correspondence from skeleton notes
- Produce memoranda in various styles using appropriate stationery
- Prepare documents for meetings

Unit at a glance

- A **business letter** may be typed using one of the following layouts:

  - Full-blocked.
  - Semi-blocked.
  - Indented.

- A **circular letter** is a standardised letter that is sent to many recipients.

- Letters may contain special formatting such as tabulation, enumeration and inserts.

- Business letters should not be folded more than twice.

- If you prepare correspondence (including audio messages) from an outline, ensure that it is error free and of the highest quality.

- A **memorandum** is a brief written message used for communication within an organisation.

- The following documents are prepared for meetings:

  - Notice of meeting.
  - Agenda.
  - Minutes.
  - Chairman's agenda.

Business letters continue to be an important form of communication despite the increase in alternative means such as emails and telephone. Letters are written to give and to obtain information. A business letter:
- Conveys information from the writer to the intended reader.
- Gives the reader the opportunity to re-read complicated material as often as necessary.
- Provides a permanent, written record of business communication.
- Confirms oral communication.
- Permits people to send and receive information when it is convenient for them.
- Allows the writer time to think about and research a topic or situation before writing or responding.

Business letters often leave a lasting impression on the recipient, so they should be as accurate, clear and neat as possible. Documents that meet all requirements for business correspondence are described as of **mailable** standard. The following are some general guidelines for the preparation of business letters:
- Letters should be neat and clean.
- They must be free of errors in grammar, punctuation and spelling.
- They should be typed on good-quality paper.
- A4 or letter-size paper should be used for long letters and A5 for short letters.

Letter layouts

Business letters may be typed using one of three layouts:

- Full-blocked.
- Semi-blocked.
- Indented.

The following are the major elements of a business letter:

1. Sender's address (letterhead).
2. References.
3. Date (there may be an attention line between the date and the receiver's address).
4. Receiver's address (inside name and address).
5. Salutation (opening greeting).
6. Subject heading.
7. Body of letter (in which the subject matter is discussed).
8. Complimentary close.
9. Signature block.
10. Designation (job title or position).
11. Enclosures, copy notation, postscript.

The full-blocked layout

In the **full-blocked** layout (Figure 20.1) all of the letter elements are aligned to the left-hand side. This modern layout is simple and effective.

Open punctuation is used with the full-blocked layout. The open punctuation style omits all unnecessary punctuation. Full stops or commas are not used in the addresses, salutation or complimentary close of the letter. Full stops are removed from abbreviations. However, punctuation must be used in the body of the letter. The aim of the full-blocked style with open punctuation is to increase efficiency by reducing the number of keystrokes that must be made when typing the letter.

The semi-blocked layout

In the **semi-blocked** layout (Figure 20.2) the following elements are right-aligned or start from the centre of the page:

1. Sender's address (if a letterhead is not used).
8. Complimentary close.
9. Signature block.
10. Designation.

The following elements are aligned to the left:

2. References.
4. Recipient's address.
5. Salutation.
6. Subject heading (may also be centred).
7. Body of the letter.
11. Enclosures, copy notation, postscript.

Figure 20.1 *Full-blocked layout*
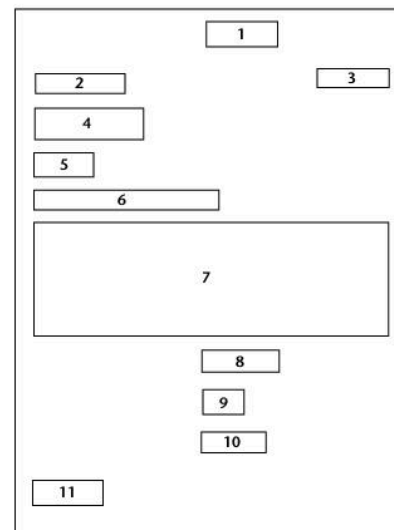
Figure 20.2 *The semi-blocked layout*

The following element is aligned to the right:

3 Date (typed in the same line as
   the reference. Where there are two
   references, the date is typed in the same
   line as Our Ref.).

The indented layout

In the **indented** or traditional layout (Figure
20.3) the first line of each paragraph starts
approximately five spaces or half an inch
from the left margin.
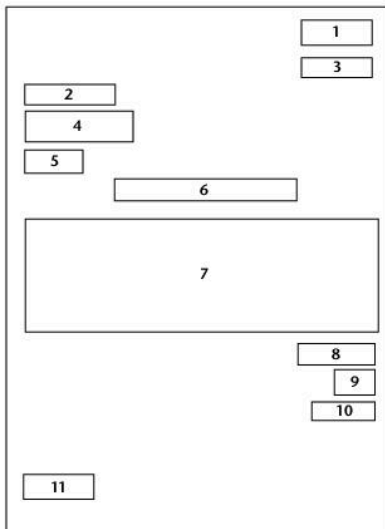
Figure 20.3 *The indented layout*

The following elements are right-aligned:

1 Sender's address (if a letterhead is not
   used).
3 Date.
8 Complimentary close.
9 Signature block.
10 Designation.

The following elements are left-aligned:

2 Reference.
4 Recipient's address.
5 Salutation.
11 Enclosures/copy notation/postscript.

The following element is centred:

6 Subject heading.

Full punctuation is used with the indented
layout. Commas are used after the lines of
the addresses and a full stop is used at the
end of the final address line. Full stops are
typed between the letters of abbreviations.

Letterheads

A letterhead is a sheet of stationery
predesigned with the name, contact
information such as address, telephone
number and email address, and logo of an
organisation. It is distinctive and enables
correspondence from that business to be
recognised immediately.

The letterhead is prepared in the
header of the document and is normally
approximately 3.8–5 cm (1½–2 in) in height.
It should be saved as a template or as a read-
only document, so that it cannot be easily
changed by other users. The letterhead
document is used for all of the organisation's
official correspondence. A letterhead is used
only for the first page of the letter; additional
pages are typed on matching paper without
the letterhead.

To do

Look back at the exercise you did in Unit 12,
page 106 (the document called Skills Bank
Letterhead). Open the file and make the
following changes:
1 Add an appropriate graphic as a logo.
2 Create a suitable slogan for the company
   and type it in the footer.
3 Save the letterhead as a template with the
   name Skills Bank 2.

DID YOU KNOW?

You can open and edit a read-only
document. However, if you want to
keep the changes, the document must
be saved with a new name.

Table 20.1 gives examples and details of the major components of a business letter.

Look back at Unit 17 for information on inserting graphics into a document.

Table 20.1 *Business letter structure*

	Part of the letter	Example	Details
1	**Letterhead/ address** Leave 1 or 2 clear line spaces consistently	Communication Solutions Limited Southern Main Road Vessigny Village LA BREA Trinidad	Contains the sender's name, address and telephone number, fax number and email address. If you are using a preprinted letterhead there is no need to repeat this information in the typed part of the letter
2	**Reference** Leave 1 or 2 clear line spaces consistently	Our ref.: OH/MJ/2963C Your ref.: KF/ce/197-1	Used to trace and file the correspondence. **Our reference** often consists of the originator's initials followed by the typist's initials and file number. **Your reference** quotes any reference number on the letter to which the reply is being sent
3	**Date** Leave 1 or 2 clear line spaces consistently	1 April 20XX	The date sent
4	**Inside Address** Leave 1 or 2 clear line spaces consistently	Ms Karlene Fraser Cutting Edge Designs Clement Street SCARBOROUGH Tobago	The recipient's name and address typed in single-line spacing. The name of the town is usually typed in upper case or with initial capitals and underscored. The country is usually typed in lower case with initial capitals. If there is a postal code the sections will be separated by two spaces. If the letter is addressed to an organisation (Dear Sirs), an **attention line** may be included above or below the inside address (one or two line spaces consistently). This line indicates that the sender wants the matter to be attended to by a particular individual
5	**Salutation** Leave 1 clear line space	Dear Ms Fraser	**Formal:** Dear Sir, Dear Madam, Dear Sir/Madam, Dear Sirs **Informal:** Dear Ms Fraser, Dear Mr Peters, Dear Customer
6	**Subject heading** Leave 1 clear line space	**Product Catalogue**	Succinctly states the subject of the letter. Left-aligned for full-blocked and semi-blocked layouts, centred for indented layout. Optional

Part of the letter	Example	Details
7 Body **(a) Opening Introduction** Leave 1 clear line space	I have received your letter dated 17 March, in which you requested a catalogue of our products.	The body may consist of only one paragraph, if the heading and references have clearly indicated the subject matter and the message to be conveyed is brief. Usually it consists of three paragraphs: ● The opening introduction acknowledges receipt of any correspondence to which it is replying and briefly states what the letter is about.
(b) Main paragraph Leave 1 clear line space	I am pleased to enclose our catalogue for April–June 2007. Communication Solutions Limited is offering as much as 33% discount on all products purchased before 15 May 2007.	● The main paragraph gives further information and sets out the information being conveyed. ● The closing paragraph sets out the conclusion. Paragraphs are usually typed in single-line spacing. If the letter is very short 1.5 line spacing may be used
(c) Closing Leave 1 clear line space	We look forward to satisfying your need for the best in communication equipment at the most affordable prices.	
8 Complimentary Close. **Name of firm (optional)** Leave 4 clear line spaces	Yours sincerely, COMMUNICATION SOLUTIONS LIMITED	Use 'Yours faithfully' where the salutation was 'Dear Sir', 'Dear Madam', etc., and 'Yours sincerely' where the recipient was addressed by name in the salutation
9 Signature **10 Name** **Designation** 1 or 2 line spaces consistently	*Okello Haynes* Okello Haynes Marketing Manager	The use of a **designation** is optional and is usually determined by company policy. The designation states the sender's job title or department

11 Enclosures/ Copy notation/ Postscript
Leave 1 or 2 line spaces consistently between each
	enc
	
	cc Sales Manager
	
	PS You are welcome to visit our store for a demonstration of our latest products
		The **enclosure line** (**enc**, **encl**, **Encl** or **ENC** or **encs** or **ENCS**) indicates that there are additional documents in the envelope.
		    The **copy notation** is used if copies of the letter are sent to other recipients. If the sender does not want the main recipient to know that copies are being sent, the abbreviation **bcc** (blind carbon copy) is typed on the copies only.
		    A **postscript** is a note added after the main body of a letter. It is usually initialled by the sender. Postscripts are seldom used when preparing a document electronically because it is so easy to amend the letter and reprint.

Letters with continuation sheets (two-page letters)

Business letters should be typed on a single sheet of paper whenever possible. For this reason it is preferable to type a long letter on a single A4 sheet rather than two A5 sheets.

When a letter is more than one sheet long, the other pages are called **continuation sheets**. The following guidelines should be followed when you are preparing a letter with a continuation sheet:

- Leave 2.5 cm or 1 inch of space at the foot of each page before beginning a continuation sheet.
- Do not end a page with the first line of a new paragraph.
- Do not carry over only the last line of a paragraph to the continuation page.
- Ensure that the continuation sheet contains at least two lines of text in addition to the complimentary close and signature block.
- Headed paper (letterhead) should be used for the first sheet only.
- Continuation sheets should be of the same size, colour and quality as the first sheet.
- Use only one side of each sheet of paper.
- The style and layout of the continuation sheet should be consistent with that of the first page.
- The first sheet should not be numbered. All subsequent pages are numbered.
- The heading of the continuation sheet should include:
  - The page number.
  - The addressee's name.
  - The date of the letter.
- The name of the organisation may be typed below the addressee, but this is optional.
- The spacing between each header item on the continuation sheet should be consistent with that of the first page.
- The first item is typed one inch from the top of the continuation page with at least one line of space between the continuation headings and the text of the letter.

Page 1	Continuation page
Lisa James Book Suppliers Ltd Dionne Avenue NEW CITY	*(Leave one inch or 2.5 cm before beginning to type)*
23 September 20XX	-2-
Ms Jillian Phillip Party Supplies Limited Elma Lessey Boulevard WILLIAMSVILLE	Ms Jillian Phillip 23 September 20XX

Circular letters

Circular letters are identical letters that are sent out to a large number of recipients. The following are guidelines for the preparation of circular letters:

- Unless otherwise instructed type one of the following for the date:
  - The words **Date as postmark**.
  - The month and year only (enough space may be left for the day of dispatch to be inserted individually).
- For the addressee information type one of the following:
  - A general name such as **All Customers** or **Dear Sir/Madam**.
  - Ten single-line spaces for the insertion of personalised recipient information.

- For the salutation either type **Dear** then leave space for a name to be inserted, or leave the required number of line spaces.
- The signature is often represented in typed form.
- There is usually no reference.

If the letter includes a cut-off slip to be filled and returned, you should follow these guidelines:

- Finish the cut-off slip 2.5 cm (1 inch) from the bottom of the page.
- Separate the cut-off slip from the rest of the document by using a continuous line of unspaced hyphens from one edge of the paper to the other.
- The symbol of a pair of scissors may be inserted to the left or centre of the separation line.
- Leave two line spaces after the separation line.
- The blank spaces to be filled in (writing lines) should be drawn using continuous unspaced full stops or underscore. Leave at least one space after a word before beginning a writing line.
- Leave double-line spacing between writing lines and triple-line spacing for the signature.

Letter with a table

- Leave two clear line spaces between the table and the preceding paragraph.

Letter with an inset

- The inset is typed in single-line spacing.
- With the full-blocked and semi-blocked letter the inset is typed against the left margin. In the indented letter it is centred.

Letter with enumeration

- Enumeration (a numbered list) is typed in single-line spacing.

- It may consist of Arabic or Roman numerals or letters. The Roman numerals may be either upper or lower case.
- Type the enumeration first, then move two or three spaces consistently to begin the text. Alternatively, you may set a tab stop at the desired position.
- In the full-blocked and semi-blocked letter it is typed against the left margin. In the indented letter it is indented five spaces or half an inch from the left margin.

Composition of correspondence

You will sometimes be required to compose correspondence from skeleton notes and dictation. **Skeleton notes** are brief outlines of a document to which you must add details. The following guidelines will help you when you need to compose a business letter:

- Letters should always be courteous.
- Your letters must have a clearly defined and stated purpose.
- They should deliver information clearly, completely and concisely.
- Always communicate the feeling that you care about the reader and want to work together to solve a problem or discuss a concept.
- Write positively and with confidence.

The purpose of your business letter will influence its content. Table 20.2 shows some common types of letters.

Composing the letter

Focus on the purpose for writing the letter and the results you want to achieve. Use one paragraph for the body of the letter if the heading and references clearly state the subject matter and the message is brief and simple. Where more than one paragraph is needed then the opening introduction should acknowledge receipt of any correspondence to which it is replying and briefly state what the letter is about.

Table 20.2 *Types of letters*

Type of letter	Purpose	Guidelines
Application	To introduce an applicant to a prospective employer	Emphasise what the applicant has to offer the employer. Give information on experience, qualifications, skills, personal qualities, interests. When writing: ● State the purpose of the letter, e.g. I wish to apply for the position of … as advertised in …. ● Provide background information on the applicant. ● Request an interview. Note: Sometimes the background information is enclosed on a separate document called a **résumé** or **curriculum vitae (CV)**. A résumé is typed on a single sheet of paper. It summarises the applicant's background information in tabular form.
Enquiry	To obtain information from the recipient	When writing: ● State your purpose. ● List your questions or requested action. ● Encourage a prompt response.
Response to enquiry	To supply information in response to an enquiry	When writing: ● Answer the questions as clearly and as concisely as possible. ● If you cannot answer the questions, explain the reasons and offer to assist with alternate methods. ● Close by expressing willingness to assist where possible.
Order	Written to a manufacturer, wholesaler or retailer to request products or services	State if order is placed in response to an advertisement. Include all of the information that the recipient will need to identify the product, such as: ● Product name. ● Model number. ● Dimensions. ● Capacity. ● Material. ● Quantity. ● Price.
Sales	To sell a product or service	Provide clear, specific information that will explain to the reader why they should be interested in buying your product or service. When writing: ● Attract the reader's attention. ● Describe the product or service you are trying to sell. ● Convince your reader that your claims are accurate by providing facts. ● Give the reader opportunities to learn more about your product or service: enclose a catalogue, provide the reader with a phone number, a website address or some way for them to seek out information on their own.

Type of letter	Purpose	Guidelines
Complaint	To convince the reader that you have a valid complaint and to obtain a desired response	When writing: ● State the issue briefly but clearly. ● Identify the product or service. ● Explain the problem. ● Propose a solution. ● End the letter respectfully. Make sure that your tone is positive and courteous, not quarrelsome, demanding or insulting.
Response to a complaint	To tell the customer how you plan to handle the situation	Make sure to express how much you value the customer's business and concerns. Show that your company is fair and reasonable. **If you can solve the customer's problem:** ● Express your regret about the situation. ● State the correction you will make. ● End on a positive note by encouraging future business with your company. **If you cannot resolve the complaint:** ● Thank the customer for bringing it to your attention. ● Express regret (not an apology). ● Clearly and concisely explain why your company is not at fault. ● Clearly state that your company is denying the request, and supply reasons for this denial: **Note:** Make this statement at the end, because if it is at the beginning, the customer may not finish reading the letter. ● End on a positive note. Try to create goodwill for future business transactions. For example, you may offer a special discount on the next transaction.

The following statements may be used to start the introductory paragraph.

Suggested introductions:

> I have received your letter dated XXXX in which …
> I am writing in connection with your letter of …
> Referring to your letter dated XXXX, we are pleased to inform you that …
> Thank you for your enquiry of …
> I am seeking information on …
> Please could you confirm the following:
> Thank you for your prompt reply …
> With reference to your advertisement in the Guyana Chronicle of 13 September, I would like to …
> Please accept our apologies for …
> I am writing to express my regret that …
> I am writing to make a complaint about …
> I have investigated the above matter and …

(Note: You must use a subject line to identify the matter being addressed.)

The main paragraph gives further information and sets out the information being conveyed. It should be brief without being either inadequate or abrupt. This means that it should give all of the required information without being so long that it puts off the reader.

The closing paragraph sets out the conclusion, and often indicates some follow-up action. Always try to end on a positive note but avoid sounding insincere. Some suggested conclusions are listed below.

Suggested conclusions:

> If you have any further queries, please feel free to contact me.

If you require any further information, please do not hesitate to contact us.

We look forward to hearing from you in the near future.

We are always pleased to be of service to you.

Do let me know if there is anything else I can do for you.

I look forward to hearing whether my application has been accepted.

Please accept our assurance that matters will be sorted out as soon as possible.

I look forward to a quick resolution of this matter.

I look forward to hearing how you intend to correct this error.

Should you require any further assistance, please do not hesitate to contact us.

We remain committed to helping in whatever way we can.

We look forward to receiving ... by XXXX.

Correct folding of letters

Business letters should be folded and inserted in the envelopes in such a way that when they are opened and unfolded, the name of the receiver is at once visible. The style of folding varies with the size of the stationery and the envelope to be used. Use the correct size of envelope to avoid unnecessary folds. Do not fold any business letter more than twice.

Table 19.2 in Unit 19 gives the dimensions of envelopes and the way the paper should be folded.

Leave ½–¾ inch on the loose edge so that the letter may be taken out of the envelope without risk of damaging the contents.

To practise folding into thirds:

1 Place a sheet of A4 paper face up on a flat surface in portrait orientation.
2 Subtract ½ or ¾ inch from the length of the page. Divide the remainder by three. Measure the paper from the bottom and mark each third very lightly (Figure 20.4a).
3 Fold the first third from the bottom up.
4 Fold the second third from the top down.

Note that you made only two folds.
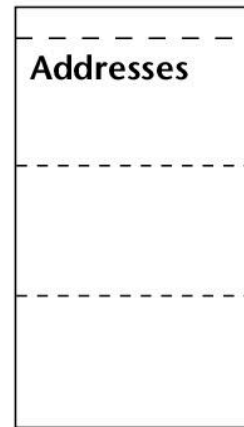
Figure 20.4a *Step 1*

Figure 20.4b *Step 2*

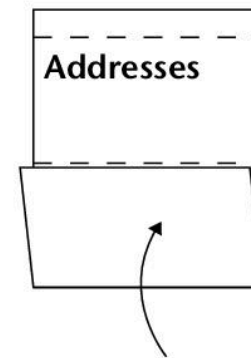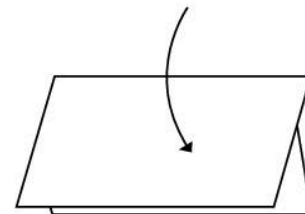**Figure 20.4c** *Step 3*

To practise folding into quarters:

1 Place a sheet of A4 paper face up on a flat surface in landscape orientation.
2 Subtract ½ to ¾ inch from the width of the paper. Divide the remainder by two. Measure and lightly mark the midway point of each side.
3 Fold the right side over to the left.
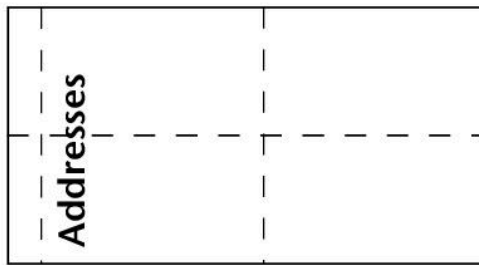4 Fold the top over to the bottom.

Note that you made only two folds.
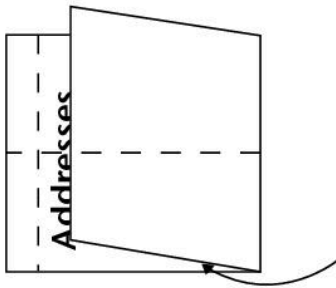
Figure 20.5a *Step 1*
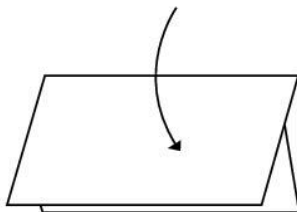
Figure 20.5b *Step 2*

Figure 20.5c *Step 3*

As you practise you will soon discover that you do not need to draw the guide lines.

DID YOU KNOW?

Try this alternative method to quickly fold your letters in thirds. You will need to use an A4 sheet and a C5/6 envelope.

Place one edge of the paper under the flap of the envelope, so that it touches the crease of the flap. Fold the bottom edge of the paper up to meet the bottom of the envelope. Fold up again.

Envelopes and labels

It is now the practice to address envelopes using open punctuation. This means that there is no comma at the end of each line or full stop at the end of the address. The following are general guidelines for addressing envelopes:

- The name and address must be typed parallel to the longer side of the envelope.
- The address occupies the lower half of the envelope, so the first line of the name and address should be typed halfway down. The entire address should occupy one-third of the envelope.
- It is easiest to use a full-blocked format for addressing envelopes.
- The town should always be typed in closed capital letters.
- If a post code is used this should be typed last with no punctuation or underscoring.
- Each part of the address should be typed on a separate line.
- Use single or 1.5 line spacing. If the address is very short or if a large envelope is being used, then type in double-line spacing.
- If the letter is to be identified as confidential, personal, urgent or some similar designation, this should be typed above the name. There should be at least one clear line space before the name. This information may be typed in closed or initial capitals in bold format or underscored.

Microsoft Word enables you to automatically address envelopes and create labels. The software selects the text that is in the appropriate place in the letter and inserts this into an envelope template. However, you may edit these entries.

To address a single envelope, type the letter then:

1 Click the **Tools** menu, point to **Letters and Mailings**, and then click **Envelopes and Labels...** .
2 Click the **Envelopes** tab.
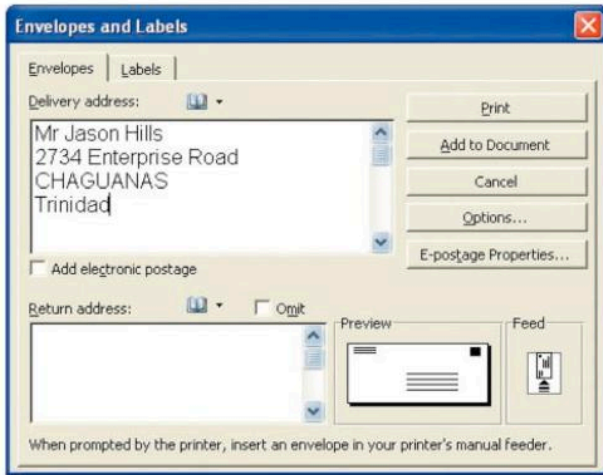
Figure 20.6 *The Envelopes and Labels dialogue box*

3 In the **Delivery address**: box, enter or edit the mailing address.
4 In the **Return address**: box you can do one of the following:
   (a) Accept the default return address.
   (b) Enter or edit the return address.
   (c) Omit a return address by selecting the **Omit** check box.
5 Click the **Options...** button to adjust the formatting and layout.
6 Insert the envelope into the printer as shown in the **Feed** box and click **Print** to print the envelope.

If you do not want to print the envelope immediately click **Add to Document**. The envelope is added to the document in a separate section with its own formatting.

A **label** is a self-adhesive piece of paper on which an address is printed. The labels come on a sheet that is arranged in rows and columns.
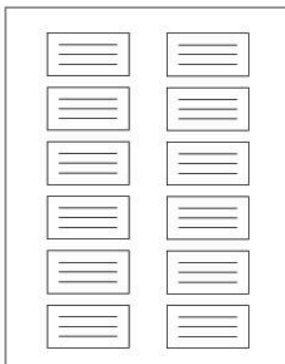
Figure 20.7 *Label sheet*

To create a single label, type the letter then:
1 Click the **Tools** menu, point to **Letters and Mailings**, and then click **Envelopes and Labels...** .
2 Click the **Labels** tab.
3 In the **Address**: box, do one of the following:
   (a) Enter or edit the address.
   (b) If you want to use a return address, select the **Use return address** check box, and then edit the address if necessary.
4 Under **Print**, do one of the following:
   (a) Click **Single label** to print a single label, then type or select the row and column number on the label sheet for the label you want to print.
   (b) Click **Full page of the same label** to print the same information on a sheet of labels.
5 Click the **Options** button to select the label type, the type of paper feed and other options and then click **OK**.

You may also create and print envelopes and labels for your Mail Merge documents.

To create and print labels for a circular letter:

1 Click **Tools**, point to **Letters and Mailings**, and then click **Mail Merge**.
2 Under **Select document type**, click **Labels**.
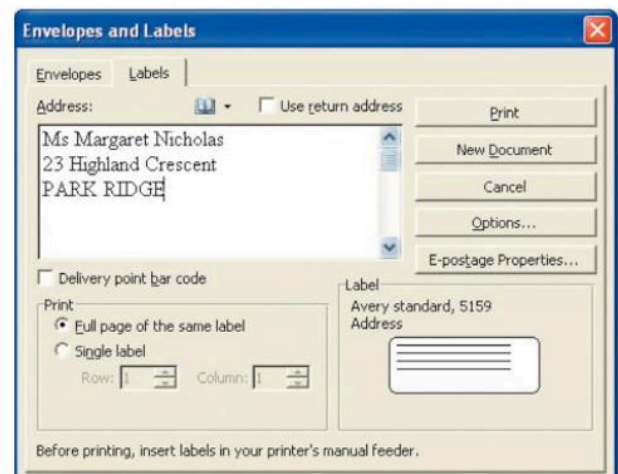3 Follow the step-by-step instructions that will appear in the task pane.

Figure 20.8 *The Labels tab*

Memoranda

A memorandum (**memo**) is a brief written message used for communicating within an organisation. It is one of the most widely used forms of written business communication. A memo is usually concerned with a specific topic. It is used to:

- Convey information.
- Ask for information.
- Give instructions.
- Make reports.

There may be variations in the formatting and design of a memo from one organisation to another. However, all memoranda consist of the following elements:

1. The heading **Memorandum** or **Memo**, usually preprinted on special stationery.
2. **To:** followed by the name or job title of the addressee.
3. **From**: followed by the name or job title of the sender.
4. The date.
5. A reference (optional).
6. Subject heading.
7. The message.
8. Authentication initials (optional).
9. Enclosure notification.
10. Postscript.

Note the following:

- The heading 'memorandum' may be typed in close or expanded capital letters, with or without underscoring. It may be in bold font and larger than the text in the rest of the document.
- There is no address for either the sender or the recipient.
- There is no salutation or complimentary close.
- A memo is not usually signed, though in certain circumstances the writer may authenticate the memo by adding his or her initials.

- If the memo is being sent to more than one person, a **circulation list** identifying who is to receive the memo is typed at the bottom.

The two most commonly used layouts for the memorandum are:

- Full-blocked.
- Indented.

In the **full-blocked** style the heading 'memorandum' may be centred or aligned left. All other elements are left-aligned. An example of a full-blocked memo is shown in Figure 20.9.

In the **indented** style the word 'memorandum' is centred. The reference and date are aligned right in the same lines with TO and FROM. SUBJECT is centred. The first line of each paragraph is indented approximately half an inch from the margin. A sample of a semi-blocked memo is shown in Figure 20.10.

DATE 10 March 20XX

(1 line space)

(1 line space)

SUBJECT   **Preparation for induction programme**

(1 line space)

The induction programme for new recruits will be conducted from 17 to 23 March 20XX. Please meet with me in my office at 9:45 am tomorrow for a brief discussion on the preparation necessary for this programme.

(1 line space)

Please bring along the action plan and review from last year's programme. These should be useful in helping us address the challenges and issues that arose.

(4 line spaces)

JR

(1 line space)

Cc Khellye Simms
   Adesh Ramrattan

Figure 20.9 *Full-blocked memorandum*

MEMO

(2 or 3 line spaces)

TO All Staff   DATE   13 Jan 20XX

(1 or 2 line spaces)

FROM The Principal   REF   SM1301

(1 line space)

(1 line space)

SUBJECT   Adjustment to dismissal time

(1 line space)

    We have received permission from the Ministry of Education to adjust our dismissal time to 1:00 p.m. during the week of the Borough Celebrations from 01 to 05 May 20XX.

(1 line space)

    To ensure that students have the same amount of classroom contact time, the following changes have been made to our daily schedule:

1. There will be no morning assembly.
2. The first period will begin promptly at 8:20 a.m.
3. Lunch time will be shortened to ½ hour
4. There will be no mid-afternoon break

(4 line spaces)

M St C

(1 line space)

Cc The Head of Security

Figure 20.10 *Indented memorandum*

Short memoranda are typed on A5 paper in either portrait or landscape orientation. **Long memoranda** are prepared on A4 paper. Occasionally a memorandum is long enough to use a continuation page. The layout, size, colour and quality of the continuation page must be consistent with the top page. The continuation page is numbered 1.5 or 2 inches from the top. The headings TO and DATE are typed with the same layout as the top page.

It is better to do a long memorandum on A4 paper than to do a two-page memo on A5 paper.

Documents for meetings

Four documents are commonly used in connection with meetings. They are:

- Notice of meeting.
- Agenda.
- Chairman's agenda.
- Minutes.

A **Notice of meeting** is usually sent no less than 14 days in advance to all persons who are entitled to attend. It communicates the following information:

- Name of the organisation.
- Day.
- Time.
- Venue.
- Type and purpose of meeting.

A Notice of meeting is brief and is usually typed on A5 paper.

An **Agenda** presents a numbered list of the items of business that will be addressed in a meeting. It is prepared by the secretary in consultation with the chairman. The agenda is sent in advance of the meeting to all who should attend.

A **Chairman's agenda** is a specially prepared agenda that contains details that assist the chairman in conducting the meeting. The typed text of the chairman's agenda occupies the left side of the page. One half or more of the page is left blank for the writing of notes.

The **Minutes of a meeting** are a brief, accurate written report of the proceedings and discussions at a meeting. The secretary usually writes down everything during the meeting and then types this up in an orderly way afterwards.

Additional practice in producing meeting documents can be found in Exercises II.34–8 on the CD that accompanies this book.

Developing work skills

Preparing minutes

- Do not offer your own opinions unless they were actually stated in the discussion during the meeting.
- Ensure that your report is completely unbiased.
- Follow the sequence of the items in the Agenda.
- If a speaker requests that a statement should not be 'minuted', do not write it down.
- Notes should be as brief as possible while recording all of the essential points.
- Prepare the Minutes as soon as possible after the meeting, while the ideas are fresh in your mind.

Working with Wizards

A **Wizard** is a feature that asks questions and then creates an item, such as a form, letter or fax according to your answers. You may need to install the wizards from your Microsoft Office CD. The following are some Wizards that are available in Microsoft Word.

- Envelope.
- Fax.
- Letter.
- Legal pleading.
- Memo.
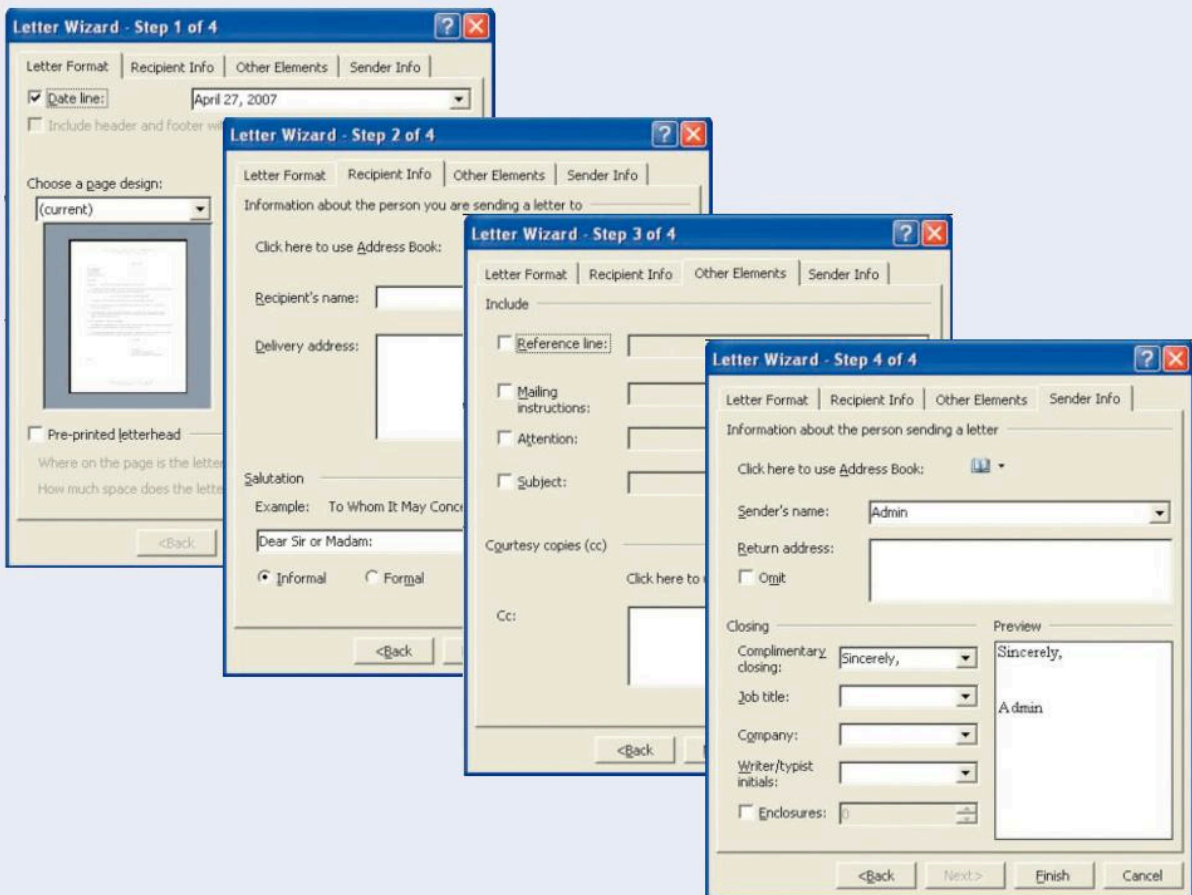- Résumé.
- Agenda.
- Calendar.
- Form.

Figure 20.11 *Steps in using the Letter Wizard*

To use the Letter Wizard:

1 Click **File** then **New...** to open the **New Document** task pane.
2 In the Templates section click **On my computer...** .

By now you should have learnt how to use many of the commands available in the Microsoft Word menu bar. Explore the other options that are available and experiment with their use. Prepare

3 Click the **Letters and Faxes** tab.
4 Double-click **Letter Wizard**.
5 Follow the instructions in the Letter Wizard as shown in Figure 20.11.

a table showing the function of the commands and practise using them. A few have been done for you in the table below.

Command	Function
File... New...	Opens a new blank document
Insert... Date and Time...	Inserts the current date and time. Offers a wide variety of format options
Tools... Word Count...	Displays the number of pages, words and characters in selected text or the entire document
Format... Change Case...	Changes the case of selected text. Available options include title case, sentence case and upper case
Table... Heading Rows Repeat	Enables the heading row to be automatically inserted when the table runs over to a next page. (You must select the entire table to activate this command)

Examination-type questions

1 You have been asked to assist Mistrelle, a new student in your EDPM class, with the preparation of a business communication.
   a State three guidelines she should follow to ensure that her letters are of mailable standard. *(3 marks)*
   b State three major differences between the full-blocked and indented styles of letters. *(3 marks)*

2 A digital camera that you purchased online has not been delivered and it is now six weeks after the promised delivery date. You

have made several telephone calls without getting results. Write a letter of complaint in semi-blocked style to the Manager, International Technologies Limited, 24 High Street, Bridgetown. *(10 marks)*

3 The principal of your school has granted permission for the Sea Scout Troop from your district to hold a camp during the second week of the school vacation. They will be using the auditorium, bathroom and kitchen facilities. Compose an indented memorandum to the security staff. *(4 marks)*

Keyboard mastery III

Suggestions for teachers and students:
- Enable the auto correct option in the word-processing software.
- The exercises in this section are intended for classroom supervision. Ensure that the correct posture and fingering techniques are used. Students should also practise independently.
- For additional practice students may type each letter using the alternative layouts.
- Note that additional practice exercises can be found on the accompanying CD.

NOTEBOOK 1: Business Correspondence

In the following exercises you will learn to type business correspondence. Pay particular attention to the structure of both the letter and the memorandum. Note their similarities and differences. Your teacher will tell you that very high standards will be expected of you in the office. Evidently each letter you produce must be ready for signature and mailing. Do also remember that whether or not an enclosure is referred to in the text, the typist must indicate when it is included by typing Enc or Encl etc.

Exercise 1: Full-blocked letter
This exercise introduces the date, inside name and address, salutation, body and complimentary close.
Type the following letter in full-blocked layout on A5 paper. The figure in the box, e.g. ③ shows the number of clear line spaces that should be left between the parts of the letter.

Caribbean Shipping Company Limited

Building 1175
Point Lisas Industrial Complex
Republic of Trinidad and Tobago

19 April (insert year)

②

The Manager
Honeyman Ltd
SAUTEURS
St Patrick
Grenada

②

Dear Sir

①

Thank you for your enquiry of 3 April (insert year). Our suppliers of barrels have informed us that prices have gone up. We expect the new prices early next week. We would be happy to quote the latest prices as soon as we receive them.

①

Please be reminded that all of our quotations are subject to our standard terms and conditions as stated overleaf. When placing your order please refer to Quotation 50765/07.

①

Yours faithfully

Exercise 2: Indented letter

This exercise introduces the letterhead, Our reference (typed as Our ref), attention line after the date, subject heading, name of the firm, signature block with designation. The **Reference** is used for filing documents. It is usually made up of the initials of the dictator typed in upper case and the typist's initials typed in lower case.

In the indented letter type the reference against the left margin and the date ending against the right margin on the same line. Our ref is the reference mark of the firm issuing the letter. The complimentary close and signature block are right-aligned.

Type the following indented letter on A4 paper. Print one copy.

Republic Freighters Ltd
234 South Quay
Adventure
Guyan
(Insert today's date)

2

Our ref ATB/yd

2

ATTENTION: Ms Carmelita Rosario

2

The Accountant
Caribbean Citizens Bank Limited
27 Sweet Briar Road
RUIMVELOT
Guyana

2

Dear Madam

1

Mr Lyndon Besson: Overpayment of Salary

1

I wish to draw your attention to an oversight by our Accounts Department which resulted in overpayment of salary being deposited into the Paramin branch account of your client Mr Lyndon Besson.

1

We have already contacted Mr Besson who has agreed in writing that from 28 February (insert year) a reduced sum will be deposited into his account each month until the deduction for the overpayment is completed.

1

Yours faithfully

REPUBLIC FREIGHTERS LTD

4-5

Jean Sandy
Accountant

Exercise 3: Semi-blocked letter

This exercise introduces your reference (typed as Your ref, below Our ref), the attention line, below the inside name and address, the enclosure and postscript. Your ref is the reference mark of the firm to which the letter is being sent.

Type the following semi-blocked letter on A5 paper with today's date appropriately positioned. Save and print one copy.

<div align="center">

HONEYMAN LIMITED

2345 Erin Road, Rancho Quemado, Trinidad WI
Telephone 648 3345 Fax 5538

</div>

②
Our ref HML/emn   **27 February (insert year)**
Your ref DH342/07

②
Norville Enterprise
125 Carib Rock Reserve
Kingstown
St Vincent

②
Attention: Irene Norville (Ms)

②
Dear Madam

①
Order No 0235: Gs Barrels

①
With respect to the above subject, we are returning immediately the defective items listed in the attached Goods Return Form No 0176/07.

①
Based on our telephone conversation this morning, we expect to have replacement goods of a superior quality delivered to us within seven days, in lieu of a cash refund.

①

<div align="right">

Yours respectfully
HONEYMAN LIMITED
4–5
Joseph C Nyack
Manager
②

</div>

Enc 1

②
PS: I suggest that in future whenever we place an order with you, the goods should be thoroughly scrutinised before delivery. This is because our clients have come to expect very high standards from us and we do not wish to disappoint them.

Exercise 4: Letter with inset

Mr Sherwin Daniel is a typing instructor at the Caribbean Secretarial College, #23 Enterprise Street, Adventure Town. He is replying to an enquiry about how to type a semi-blocked letter with inset from Ms Judith Nibbs, an EDPM teacher at Charlestown High School, Eastern Main Road, Arouca. Type the following letter with an inset as displayed below. Use an appropriate subject line and the current date. Print on A4 paper.

In response to your request for help on how to type insets, I am pleased to provide the following information.

> An inset is a block of text that is typed at a set distance from the left and right margins of a document. Inset is used to emphasise a portion of text. Insets may also be used when typing bulleted or numbered lists. The inset text is typed five spaces (½ inch or 1¼ cm) from both the left and right margins as is shown in this paragraph.

An easy way to create an inset is to set left and right indents for the paragraph. When you have finished typing the inset matter, press the **Enter** key to create a new paragraph. You may then return the indents to their original positions.

If you need guidance on how to work with indents I recommend that you consult A M Jacob's textbook *Electronic Document Preparation and Management for CSEC*. I am confident that you will find the instructions quite easy to follow.

Please feel free to contact me with any other queries that you may have.

Exercise 5: Circular letter

Type the following circular letter on a letterhead of your design.

(insert today's date)

Dear Valued Customer

I am honoured to be chosen to introduce my company's latest line of products to your home and community. BEST-EVAR range of healthy juices includes today's sample package of 7-Hills Pineapple Mango Cocktail Bits which is delivered to you free of charge today.

The latest consumer poll shows that BEST-EVAR range of juices is now unsurpassed in taste, quality and shelf life. Our aim is to introduce our customers to a healthy drink for all occasions. As such, we are inviting you to detach the **self-addressed, Post-Paid Reply**, tear-off portion of this letter and submit your comments about our juices within 7 days. Please state the different ways in which your family used the package. Responses may be in the form of an essay or recipe.

Our Connoisseur Committee is made up of a group of professionals from the Caribbean's leading nutrition firm, Herber-Maharaj, Daniel and Wildman Limited. They will select the five most 'innovative responses' for an award of a hamper of our products. The respondent who gives the most outstanding response will win the BEST-EVAR SUPER PRIZE of $1000.00.

Yours truly

Sudesh Persad
Marketing Manager

BEST-EVAR HEALTH PRODUCTS LIMITED
84–86 Sincere Avenue
Godineau Settlement

SOUTH OROPOUCHE

NAME: --- TELEPHONE: -----------

ADDRESS: ---

HOW I used BEST-EVAR 7-Hills Pineapple Mango Cocktail Bits.

Exercise 6: Letter with a table

Type the following letter with a table on A4 paper. Leave an appropriate number of line spaces between the sections of the letter. The Principal is presently in St Thomas attending the Caribbean Council of Principals Annual Seminar. Print three copies and leave them on his desk. He will sign the letter when he returns in two days. Include Our reference.

ST HILLARY PRIVATE SECONDARY SCHOOL

12A Toncabin Fields, 3 Hands, LA BREA Republic of Trinidad and Tobago
Telephone 648 5673-6 Fax 648 5673-4

(Insert current date)

Mr Solomon Tompeke
53 John Compton Gardens
Caribville
GROS PITONS
St Lucia

Dear Mr Tompeke

STUDENT REPORT: Maria Tompeke

We were quite happy for your visit on Monday last. As promised, I am outlining below the report on Maria's performance for Terms I, II and III.

END TERM EXAMINATION RESULTS – MARIA TOMPEKE FORM V

Term	English Language	Principles of Accounts	Principles of Business	Office Procedures	Social Studies	Mathematics
I	65	86	94	87	98	93
II	74	93	89	94	95	97
III	88	97	90	98	87	100

Attendance: 98%   Advanced parental permission for absence confirmed by you

No. Times Late: 3   Two morning sessions with advanced request from student's guardian

1   One afternoon session. Student was ill and sent to rest in the sick room

Discipline: Excellent.

Extra Curricula activities: School's Drama and Debating Club. President of Young Leaders Committee. She is the Goal Shoot for the school's netball team.

I hope the above information will be suitable for your needs. You can contact us for any additional information you may require.

Additional Comments: Maria is a very promising young lady. Within one week of her arrival, it was difficult to tell that she was a new student in the class. She had no problems settling in her new environment.

Yours faithfully
ST HILLARY PRIVATE SECONDARY SCHOOL

C Bose Chattergoon
Principal

Exercise 7: Letter with enumeration

An enumeration (numbered list) can be displayed using Arabic numerals, upper or lower case Roman numerals, or letters as ID marks. Start each line two or three spaces after the longest ID mark. Leave one line clear clear line between items.

Type the following letter with an enumeration for the attention of the Vice-Principal. Set a 1.25 cm (half-inch) outdent for the enclosure mark in the second paragraph. Use A4 paper. Leave appropriate line spacing between sections of the letter.

TRAVEL INCLUSIVE UNLIMITED

36 Jasper Street, Macaripe, Cayman Islands
Telephone 798 4531, 798 4563; Fax 798 4563

Ref VM /cl 256

Today's date
The Principal
St Antonio Girls College
36–38 Jasper Lands
OTAHEITE
St Thomas VI

ATTENTION: 'MR ROHIT RAMKISSOON'

Dear Sir

We are happy to have your enquiry about our (insert year) Summer Special for Form One students.

I am enclosing the latest edition of 'Sunshine Destinations.' On page 6 you will find full details of the tour package. However, I must emphasize the following:

1 An advance payment of 25% is required to initiate the booking process.

2 The next instalment is 50% upon confirmation of arrangements.

3 The final payment is 25% upon arrival and registration.

4 Payment for additional services must be made on demand.

5 Hotels in the country districts provide three meals per day. Most of them provide laundry facilities/services.

6 Tours leave at 0900 hours daily and are expected to return by 1700.

7 Babysitting and geriatric care are available but arrangements should be made when booking.

Please forward to us within seven days the details requested on page 16 of the brochure. Please provide the information exactly in the same order as shown in the sample booking form.

Yours sincerely
TRAVEL UNLIMITED

Wayne Morris
Manager
Encl

Exercise 8

Type the following full-blocked memorandum on A5 portrait.

MEMORANDUM

[4]

FROM   The Chief Accountant

[2]

TO   The General Manager

[2]

DATED   1 March

[3]

SUBJECT   DRAFT ESTIMATED BUDGET (insert year)

[3]

I refer to our telephone conversation on 2 March (insert year), on the above subject. Hereunder is the draft estimated budget for the year 2012 for the items listed below as requested.

[2]

The estimated costs include allowances for any future rise in prices but I hasten to add that any savings would revert to the general budget.

[2]

I am pleased to mention that the Junior Accountant, Mr Wells, has been extremely helpful with this exercise.

[3]

ENCL

Exercise 9

Type the following indented memorandum (fully displayed) on A5 portrait.

Education Specialists Limited

MEMORANDUM

[4]

To: The Typing Pool Supervisor   Ref. HRM: 065/07

[2]

From: Human Resources Manager   Dated: (Today's date)

[3]

ELECTRONIC DOCUMENTATION

[3]

As you are aware, the second training session for the changeover from typewritten documents to electronic documentation begins on 8 May (insert year). Please forward to me by tomorrow morning, as a matter of urgency, the list of candidates who will be attending. The deadline has already passed.

[2]

The venue is the Audio Visual Room. The morning sessions start at 09.00, and the afternoon sessions at 1300. There will be a 20-minute break in both sessions. Refreshments and lunch will be provided.

Exercise 10

When typed on plain paper display the memorandum heading as follows:

Type M E M O R A N D U M in spaced capitals seven lines from the top edge, leave three line spaces, type FROM, then leave two line spaces after FROM, TO, and REF. After DATED leave two line spaces. Type the body.

Type the following memorandum on A4 portrait. Correct all spelling, grammatical and consistency errors.

MEMORANDUM

3

FROM   HUMAN RESOURCES MANAGER

2

TO   PUBLIC RELATIONS OFFICER

2

REF   PRO/78:07

2

DATED   (today's date)

2

SUBJECT   **ELECTRONIC DOCUMENTATION STAFF TRAINING**

3

Edusyservices & Systems Ltd informed us this morning that the presenter for the first session today is unable to attend because of illness. She has however sent her PowerPoint presentation entitled **The Memorandum** which the Typing Pool Supervisor has agreed to present. The Main Points for discussion with detailed information are listed below:

2

MEMORANDUM: The Memorandum (plural: Memoranda) is the form of communication used internally within an organisation between the Head Office, branch offices and departments or between departments. Unlike the letter, the memorandum does not have an inside name and address, salutation, complimentary close or signature block, but the sender of the message may initial the memorandum.

2

Heading: The heading states who the memo is from, to whom it is being sent, the reference, date and subject heading.
If the firm uses headed paper, the typist will fill in the information as needed.

2

The Body: The subject will be discussed in the body of the memo. The body is typed in single-line spacing. The sender of the memorandum may wish to initial it. If he/she wishes to have the initials typed, instead, then it should be typed 3 line spaces below the body.

2

Enclosure: The enclosure is typed 3 line spaces below the body. Also, an enclosure may be indicated within the margin by backspacing 5 times into the left margin and typing 3 full stops then returning to the normal typing position in the line.

2

Postscript: Type the postscript 3 line spaces below the enclosure.

3

HRM

Encl

Remember: additional exercises can be found on the CD that accompanies this book.

Examination-type questions

1 Type the following letter on A4 paper. The return address is Boalts, Gaites and Sons Limited, 23 Forrester Avenue, Nelson's Estate, St John, Antigua, West Indies. Telephone 1 268 6778007-9, fax 1 268 677 8001-2. The letter is for despatch tomorrow. Print one copy.

(25 marks)

Your Ref   SCM/bs

bc/ Our Ref   MGB/RT 734   (75 Point D'or Road)

The Manager
Dress-to-Suit Limited
Blanchichuerse
Hopeville

by Attention: Mrs Susheila Chuffin-Mohohar

Dear Madam

CLASSIC STEAM Iron FY23A

classic/ Thank you for your letter dat 24 February 20-- in wh   April/
of You complained th the/ steam iron you purchased on 23rd April last is leaking. Also, that it does not hv the capacity y expected.

In order to find out the exact nature of the problem, the/our technician had to dismantle the iron. He found that there is a hole in the base of the tank which had lost its original *capacity/s* and *size/shape*. The cause of the   [PLASTIC]
This/ problem is that hot water was poured into the plastic water-tank, caused the tank to warp, shrink and leak through the hole mentioned above.

Indent NP [I wish to draw your attention to the following:

— at the time of purchase a very clearly worded user's manual was delivered to you.

— filling of the water tank was demonstrated to your expressed satisfaction.

— During the demonstration the water tank was filled to minimum capacity.   maximum/

Due to our findings, we do not hold ourselves responsible for the damages incurred. Nevertheless, because of the goodwill th exists between our establishments, I shall replace yr iron w another iron of identical (value) at no cost to your firm. Our unsolicited (description and) advice is that in future, whenever new shop assistants are employed, they should exercise greater caution to and ensure th he or she is sufficiently knowledgeable abt the equipments and machines in use at the time.

PS

(Supervisor)

I am taking the opportunity to inform y that th gds about wh y have been arrived yesterday and sorting should be completed this afternoon. We wd therefore be pleased to have you or yr assistant buyr come in between 08 30 and 1100 hrs to (enquiring) select the specific items in which you are interested

yrs sincerely

Marjorie Gaites-Boalb (Ms)
Sals Manager

Typist: insert name of the firm after the bcc

2 Type the following memorandum on A5
paper in landscape orientation.

(25 marks)

Type the following on A4

MEMO

FROM   HRM   REF   RSWF   013/2007

TO   All members of Staff   DATE   November 20—

(refurbished)   REFURBISHED
~~Upgraded~~ STAFF FACILITIES

Typist: no abbreviations. Represent time consistently

The newly ~~staff~~ facilities are now ready for use.

Canteen. opening hours: Breakfast at 0800hrs ~~to~~ 0900hrs.
Lunch 1100hrs ~~to~~ 1330hrs. A tv set has been installed and
the Wash rm upgraded to the satisfaction of all parties.
(two points up)

Recreation Rooms the pool ~~lift~~ and installation of a pool (staff welfare)
table and don't count on Thursday upgraded our facilities
to Arform C. (Project)

Recreation grounds the footpath, cycle track, tennis court, football
and cricket field facilities have all been completed within budget
and time allotted for the work.

(insert)   ~~Medical Plan/Insurance~~ The new MIP is ready for signature
of the consenting parties.

* With the exception of the MIP, the refurbishing was done at (of expenditure)
no cost Staff. Other costs were borne by management. A
brief financial statement is outlined below

←——— Canteen $95 000
Rec Rm $7 000
Rec gds   1 250 000

The cost of the MIC is shared by management and Staff. the final
figure will be released after all signatures are affixed to
relevant documents.

Display Subhdgs as: shoulder, para and side hdgs

Either: IC & underlined & Bold, or as all caps

(last)   * Financing Projects ←This is the new hdg

(25)

3 Type and print the following memorandum
on A5 paper in portrait orientation.   *(15 marks)*

uc ⟶ Memorandum

(circled note: IC. Type in full)

FROM   THE OFFICE Mgr

TO   THE Mail Rm Sup

DATED   October 30--

SUBJECT   POSTAGE FOR ADVICE NOTES

Our telephone conversation (on the above
subject refers. *(circled: this morning)*

This is the second time/ *your* attn is being drawn
to the postage paid for mailing advice notes, to *(in full)*
customers. *(circled: extreme)*

The practice of using First cl post for this
purpose shd cease immediately. /So treat
this matter so seriously. Otherwise future our
payments will be charged directly to you.

Mark Kelly, the marketing manager, wants to
send the following memo to Ms Davika Salandy.
Type it in indented layout, using the current year.   *(10 marks)*

Ref: MM/DS/C127   Subject: Photographs for new brochure

You said you would let me have the photographs for the new brochure two
days ago. All other aspects of the layout have been prepared – see attached
sheet – so the matter is now urgent.

I have not been able to meet you at your office or get you on the phone. I
am told that you have a hectic conference schedule. Please get in touch
with me as soon as possible.

21 *Simple displays*

By the end of this unit you should be able to:
- Produce effective and creative displays, given a specific task

Unit at a glance

- Display work involves using formatting and layout to create documents that are clear, well laid out and have aesthetic appeal.

- Display work is usually centred on the page.

- Displays should use fonts, graphics and layouts that are attractive and communicate the desired message.

- Simple displays include:
  - Columnar work (ruled and unruled).
  - Cards.
  - Notices.
  - Flyers.
  - Menus.
  - Invitations.
  - Programmes.

- Advanced displays include:
  - Flow charts.
  - Organisation charts.
  - Graphs (linked and embedded).
  - Newsletters.
  - 4-, 6- or 8-page leaflets.

You have already developed many skills that can be applied to create documents that are visually appealing. For example, in Unit 17 you learned how to use a variety of graphics, including text boxes and clip art. In this unit you will be applying those skills to produce a range of effective and creative displays such as invitations, menus, programmes and flyers.

Columnar work

Columnar work involves presenting data and information in columns by using tabs, tables or worksheets. Think of some of the documents that have been produced by the

To do

1 Use appropriate tabs to produce the following price list:

Item	Unit price
80-page exercise books	$1.50
Large notebooks	$8.95
Florescent gel pens	$3.99
4 GB flash drives	$160.00

2 Use a word processing program to create and save the following table, using the text direction as shown.

Subject	Term 1	Term 2	Term 3
English A	89	86	91
English B	75	64	82
Mathematics	68	57	69
EDPM	92	83	81
Office Administration	59	65	73
Social Studies	77	81	79
Spanish	69	66	76

3 Use a spreadsheet program to present the above table with oblique headings. Paste the table as an object in a word-processing document. Save the document as Marks.

school office. Can you identify any that involve columnar work? Can you identify any other business documents that represent information in columnar form?

Notices and flyers

A **notice** is a document that concisely presents urgent or important information to its readers. It is designed to attract attention and usually states what action the readers should perform. The most vital information is usually given distinctive formatting. **A flyer** is a printed advertisement. Flyers give you the opportunity to demonstrate your creativity and style.

Your notice may include design elements such as borders, colour, clip art, AutoShapes and WordArt (Figure 21.1).

Notice

SBA PROJECTS DEADLINE

The deadline for submission of
EDPM SBA Projects is

4 March 2008

Kindly ensure that all projects are
submitted **on or before** that
date.

Note: Late submissions will not
be accepted

Head of Department
Business Studies

Figure 21.1 *An example of a notice*

Developing work skills

Prepare notices on A5 paper for the following:

1 Quality Real Estate Company is advertising the sale of a commercial building and land at #231 Main Street, Enterprise. Offers must be submitted in sealed envelopes by 1 April 20XX to PO Box 2351 Port Of Spain. Phone 555 9002 for an appointment to view.

2 All members of Twin Island Hiking Association are informed of the postponement of the hike to Kaleidoscopic Waterfall on Saturday, 3 August 20XX. The new date is Saturday, 31 August. Departure from the Marquee at 6.30 a.m. Please be on time.

Prepare flyers on A4 paper for the following events:

1 The Child Welfare Association is holding a Grand Easter Bonnet Parade and Tea Party on 12th April, 20XX, 6:30 p.m. at Festive Villa, Hibiscus Street, Pleasantville.

2 Y. O. P. Electronics of 22 Peter Street Georgetown is having a Christmas Sale on all products. As much as 50% discounts on selected items. The sale begins on 12 December 20XX and continues while stocks last.

Invitations and menus

Invitations are used to encourage the invitee to attend an event. They contain information on the date, time, venue and nature of the event (Figure 21.2).

Invitations are usually centred horizontally and vertically in double-line spacing. You can use the **Mail Merge** function that you learnt in Unit 16 to personalise your invitations by including the invitee's name. An invitation may be printed on A5 portrait or A6 landscape paper. Usually thick paper with an appropriate colour or texture is used.

A menu is an attractively presented list of dishes for a restaurant or a special event. The layout for a menu typed in single-line spacing is as shown opposite.

Venue
(1 line space)
Address
(2 line spaces)
Meal
(2 line spaces)
Appetiser
(1 line space)
Divider (symbol or picture)
(1 line space)
Main Course
(1 line space)
Divider (symbol or picture)
(1 line space)
Dessert
(1 line space)
Divider (symbol or picture)
(1 line space)
Drinks

Rhyme & Reason Debating Society

cordially invites

_____

to

A Night of Speech and Poetry

at the

Vessigny Secondary School Auditorium

on XX 11 May 20XX at 7.00 p.m.

Light refreshments will be served

RSVP

1 868 648 7302
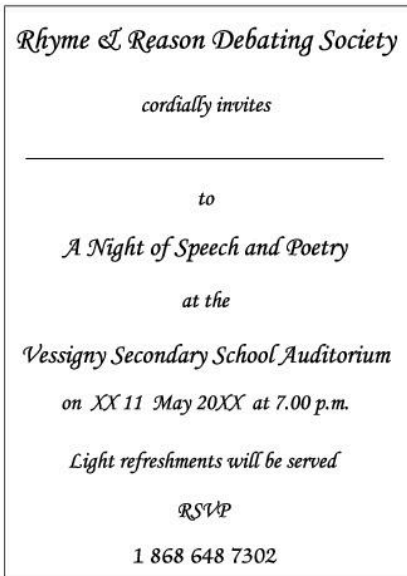
Figure 21.2   *An invitation*

Formatting guidelines for a menu include the following:

- Centre the menu horizontally and vertically.
- Use an outside border (a single border enclosing all text).
- Use large and/or expanded text for the venue.
- Use initial capitals, underlined or bold for the meal name.
- Type each menu item in a separate line.
- You may use decorative but easy-to-read font.
- Use a symbol or small picture as the divider between each course.

Sometimes an invitation is combined with a menu to create a single document (Figure 21.4). This is usually printed on A4 paper.

S E A V I E W   R E S T A U R A N T

Seaside Terrace, Castries

Dinner Menu $45

Caribbean Fish Broth
Seafood Salad Platelet

�ⵣ

Tropical Fried Rice
Festive Baked Kingfish
Vegetable Camboulay

ⵣⵣⵣ

Mango Soufflé
Cheese and Biscuits

ⵣⵣⵣ

Citrus Chiller
Coffee
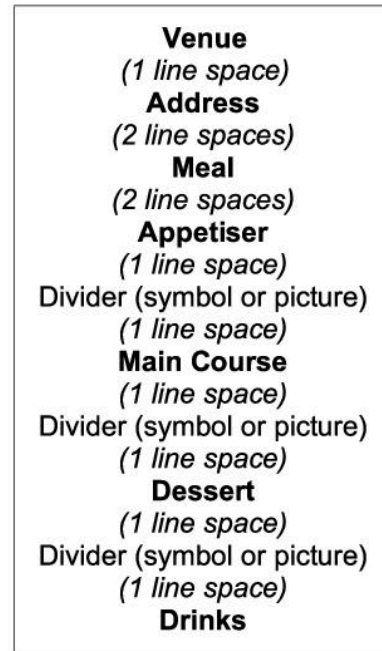
Figure 21.3   *A menu*

When you create an invitation with a menu there is no need to repeat venue and address information in the menu section. The following sample is provided to guide your formatting and layout.

Trendsetters International
cordially invites you to its
Annual Christmas Extravaganza
on the evening of
Saturday xx December 20xx
At Trendsetters Sports Club
227 Exclusive Heights, Westmoorings

Menu
Price: $250 per person all inclusive

Ham Rolls
Spicy Cheese Wheels

Three Kings Salad
Jewelled Rice with Fresh Pigeon Peas
Crispy Parang Chicken
or
Roast Beef with Wine Sauce
or
Traditional Baked Turkey

Christmas Fruit Cake
Mango Soufflé
Ice Cream Medley

Ponche De Crème
Sorrel Spectacular
Coffee

Figure 21.4 *An invitation with a menu*

To do

Create the invitations and menus shown in Figures 21.3 and 21.4. You may use different fonts, colours and graphics.

Business cards

Business cards are small rectangular documents that name the business and provide contact information. Cards are usually printed on thick, durable paper. They measure approximately $2'' \times 3.5''$. Several cards may be printed on a single sheet because they are small.

Elvo's Woodworking
#237 Southern Main Road, Marabella
Phone 555 9301

Figure 21.5 *A business card*

To design a business card:

1 Open a new document. Set the left and right margins to 0.6 inches.
2 Click **Insert** then **Text Box**. Click and drag to draw the text box on the document page.
3 Click **Format** then **Text Box....**
4 Click on the **Size** tab. Type in 2.5 in the **Height**: box. Type 3.0 in the **Width**: box. Click **OK**.
5 Design your business card within the Text Box, using text, WordArt and ClipArt.
6 Select the Text Box by clicking on its border and click **Edit** then **Copy**.
7 Click **Edit** then **Paste**. Click and drag the pasted Text Box so that it is to the right of the original with approximately 0.1 inches between them.
8 Repeat step 7 until you have pasted several text boxes. Print the page.

You may use this process to create other small documents such as index cards, compliment slips and labels.

Index cards are used in a manual filing system to type the names and related information of clients, employees,

patients, stock, etc. These cards may serve as a backup for data that is stored on your computer database.

A **compliment slip** is a small card that is enclosed with a sample of a product. It states: With the compliments of … and the business name.

Postcards

Firms may send **postcards** to acknowledge receipt of letters and orders. These are usually printed on thicker paper than letters. A postcard is printed on A6 paper. Because of the relatively small size it is sometimes easier to print two postcards on an A5 sheet and then cut the paper to separate them.

Postcards are typed like memos, with no salutation or complimentary close.

Programmes

A **programme** is a sequential list of activities that are scheduled to take place at an event. It may be prepared as a single page, a **leaflet** or a **tri-fold** document. A leaflet is a printed sheet folded vertically in the centre to produce four pages. A tri-fold document is folded into three parts.

Before you begin to type your programme plan it out on a sheet of paper. Fold your paper for a leaflet or tri-fold programme. Mark the position in which you want each section of your programme. Open your page. Leaflet layout:

1 Front cover.
2 Inside page.
3 Inside page.
4 Back page.
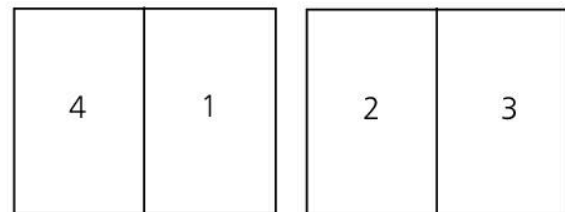
Figure 21.6a

To do

Create a postcard thanking customers for inquiring about your company's products. State that a catalogue is enclosed. Invite the customers to include the postcard with their orders for a 15% discount.

1 Set A5 paper in portrait orientation.
2 Set the top margin to ¾″ and all other margins to ½″.
3 Use single-line spacing with a clear line space between paragraphs.
4 Type the firm's name and address, using a logo if available.
5 Leave two line spaces and type the reference. In the same line set a right tab at the right margin and type the date.
6 Leave a clear line space and type the body.
7 Repeat steps 1–6 starting half-way down the page.
8 Insert a page break.
9 Type the first recipient's name and address starting a quarter of the way down the page.
10 Type the second recipient's name starting approximately three-quarters of the way down the page.
11 Do a draft quality printing of the first side of your document on low-quality paper. Reinsert the paper into your printer and print the second side. Ensure that the addresses are properly lined up and make adjustments if necessary.
12 Print the final copy of the postcard with high-quality ink settings on appropriate card paper.
13 Save your card design as Postcard.

Tri-fold layout (single-sided printing):

1 Cover.
2 Inside page.
3 Inside page.
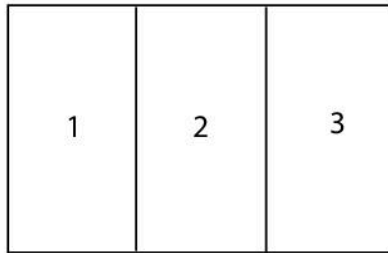
Figure 21.6b

To create a leaflet:

1 Open a new document and put it in landscape layout.
2 Click **Format** then **Columns...**.
3 Select **Two** from the **Presets** section of the Columns dialogue box (Figure 21.7).
4 Click **Equal Column Width** so that a check mark ☑ appears. Change the **Spacing** to 1 inch.
5 Click **OK**.
6 Design the back page of your leaflet.
7 Click **Insert** then **Break...** in the menu bar. Click **Column Break** and click **OK**.
8 Design the front cover of your leaflet.
9 Click **Insert** then **Break** in the menu bar. Click **Page Break** and click **OK**. Design the first inside page of your leaflet.
10 Insert a column break and design the second inside page.
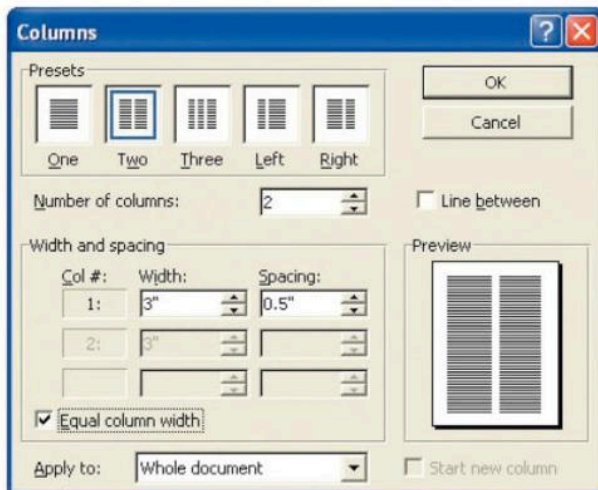
Figure 21.7 *The **Columns** dialogue box*

To print your leaflet:

1 Press **Ctrl + Home** on the keyboard to go to the beginning of the document.
2 Click **File** then **Print...**.
3 Click **Current page** then **OK**.
4 After the first page is printed, insert the paper back into the printer to print the next side.
5 Press **Ctrl + End** on the keyboard to go to the end of the document.
6 Print the current page (that is, repeat steps 2 and 3).
7 Fold your leaflet.

The layout for a leaflet may also be used when designing **greeting cards**. Stationery stores usually stock letter-sized card paper in a variety of colours and textures.

A six-paged leaflet is created by printing on both sides of a tri-fold page. To create an eight-page leaflet, four columns should be used. It is best to use legal-size paper in landscape orientation for eight-page leaflets.

To do

Set three columns to create a tri-fold leaflet on a landscape page.

To do

Design a tri-fold programme for a show to be held at your school auditorium. The sample programme in Figure 21.8 is only a guide. Use your own formats and graphics. Be creative.

Figure 21.8 *Programme*

To do

Design a programme in **leaflet format** for your school graduation.

Page 1: A cover that includes the date, time and venue.

Page 2: The sequence of events with the names of the participants as shown below:

Page 3: Recipients of achievement awards

Page 4: Names of graduates

```
Programme
Procession
Anthem...................Lian Peters
Invocation ...............Ed Wills
Welcome..................Andy James
Chairperson's Remarks .....Ms Kia Ali

Song
Principal's Address .......Ms J.L.Cheng
Dance....................Shelly Jacob
Greetings from Ministry. ..Una Haynes
Presentation of Certificates

Song
Feature Address ..........Mr Ken Lyle
Presentation of Achievement Awards
Presentation of Principal's Awards
Valedictory Address.......O'Neal Phill
Vote of Thanks ...........Ann Bailey
Recession
```

Flow charts

A **flow chart** is a pictorial representation of the steps, sequence, and relationship of the various operations involved in a process. Figure 21.9 shows a simple flow chart.
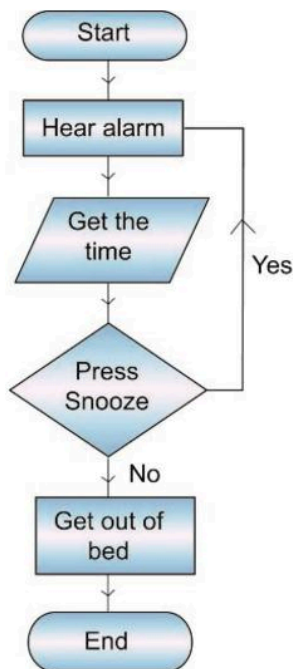
Figure 21.9   *A simple flow chart*

Each shape in a flow chart has a specific meaning (Table 21.1). Most flow charts use only five of the process symbols: **Terminator, Process, Data, Decision** and **Connector**. If you use other flow chart shapes you should add a key that identifies the meanings of the shapes that are used in your diagram.
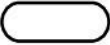
To draw a flow chart:

1   On the **Drawing** toolbar, click **AutoShapes**, point to **Flow chart**, and then click the shape you want.
2   Click where you want to draw the flow chart shape.
3   If you want to add extra shapes to the flow chart, repeat steps 1 and 2, and then arrange them in the order you want.

To line up your shapes evenly:

1   Hold the **Shift** key on the keyboard and click on each shape to select them all.
2   Click **Draw** on the drawing toolbar.
3   Point to **Align or Distribute**.
4   Click **Align Left**.
5   Repeat steps 2 and 3.
6   Click **Distribute vertically**.

Table 21.1 *Flow chart symbols*

Symbol	Name	Meaning
(oval)	**Terminal, Terminator, Oval**	Shows the beginning and the end of the process. When used as a Start symbol, terminators represent an action that sets the process flow into motion
(rectangle)	**Process**	This is the most common symbol in process flow charts. An operation is performed whenever some change in an item/service occurs
(diamond)	**Decision Point**	Shows a point where a decision is made that leads to different processing steps. Indicates a question or branch in the process flow. Used when there are two options (Yes/No, Go/Don't Go)
(circle A)	**Connector**	Shows a jump from one point in the process flow to another. Connectors are usually labelled with capital letters (A, B, AA). They are used to avoid flow lines that cross other shapes and flow lines
(document)	**Document**	Represents a document introduced into the process or created by the process
(parallelogram)	**Data**	Indicates inputs to and outputs from a process. As such, the shape is more often referred to as an I/O shape than a Data shape
(arrow)	**Direction of Flow**	Shows the direction and order of the process steps
(circle with cross)	**Or**	Shows when a process diverges – usually for more than two branches. When using this symbol, it is important to label the outgoing flow lines to indicate the criteria to follow each branch
(circle with X)	**Summing Junction**	Shows when multiple branches unite into a single process
(stored data)	**Stored Data**	Used for any process step that stores data
(cylinder)	**Database, Magnetic Disk**	Depicts a database stored on a magnetic disk
(cylinder horizontal)	**Direct Access Storage**	Represents the hard drive
(internal storage)	**Internal Storage**	Symbolises information stored in memory as opposed to on a file

Connectors are lines that link shapes in a flow chart. You must add connectors between each of the shapes.

To add a connector:

1 On the **Drawing** toolbar click **AutoShapes**, point to **Connectors**, and then click the connector line you want.
2 Point to where you want to lock the connector.
3 Click the connection site you want on the first shape. Point to the other shape, and then click the second connection site.
4 Locked connectors will keep the shapes connected even when you move the shapes.

Arrows are used to show the direction and order of the steps in the process. To add an arrow, select the arrow from the **AutoShapes** toolbar. Click and hold where you want the arrow to begin and drag to the point where you want it to end. You can add text to the shapes in your flow chart. To add text to the shapes right-click the shape, click **Add Text**, and begin to type. You must insert a text box to place text near to a line or connector.

Use the buttons in the **Drawing** toolbar to change elements such as the fill colour of shapes, line style and line colour.

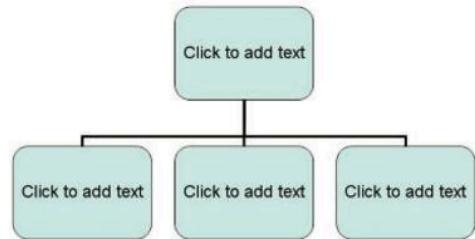**Figure 21.10** *The Diagram Gallery*

Figure 21.11 *Organisation chart*

Organisational charts

An **organisational chart** is a diagram that shows the lines of responsibility between departments of an organisation. It is called a **hierarchical diagram** because it represents the structure of an organisation in terms of rank. The organisational chart usually shows the managers and sub-workers who make up an organisation.

To do

Plan the organisational chart for the following case study on paper using the guidelines that are given.

Case study

The sporting products manufacturers Fitness Solutions International is led by a President, who is also called the Chief Executive Officer. The President has an Administrative Assistant, who reports only to her. An Accountant reports to the President and the Vice-President of Production. Three Vice-Presidents report to the President. They are in charge of Production, Sales and Marketing, and Research and Development, respectively. The Production, Quality Control, and Stock Control departments report to the V-P of Production. Sales and Marketing are two separate departments that report to the V-P of Sales and Marketing.

The staff are as follows (assume that all members of the staff are of equal rank):

● Production: 25 assembly workers, 1 production clerk.
● Quality Control: 2 QC inspectors.
● Stock Control: 3 stock clerks, 2 forklift operators.
● Sales: 6 lorry drivers, 15 sales representatives, 2 clerks.
● Marketing: 3 marketing representatives.
● Research and Development: 4 lab technicians, 1 research assistant.

Guidelines:

1 Place a box for the President.
2 For the Administrative Assistant, place a box to one side of the President's box, but make it smaller than that of the President.
3 Add three boxes for Vice-Presidents under the President's box and label them 'V-P of Production' and 'V-P of Sales and Marketing' and 'V-P of Research and Development', respectively.
4 The Production, Quality Control, and Stock Control departments report to the V-P of Production. Put a box for each of these under the box for V-P of Production.
5 Sales and Marketing are two separate departments that report to the V-P of Sales and Marketing. Place the name of each department in its box.
6 There is no sub-department under Research and Development.
7 Place the Accountant's box between the President and V-P of Production and connect him to each with a dotted line. Dotted lines are used to show dual reporting structures within an organisation.
8 Create small boxes for the staff in each of the departments. Where there are many members holding the same position, simply list the title with the number of people assigned to that title in that department (e.g. Assembly 25).

It is used to show relationships among employees, titles and groups.
To create an organisational chart in Microsoft Word:

1 On the **Drawing** toolbar, click **Insert Diagram or Organization Chart** .

2 The **Diagram Gallery** will appear (Figure 21.10). Click the **Organization Chart** diagram, and then click **OK**.

3 A two-level organisational chart will be placed in your document. Click in each box to add the title.

4 To add another relationship, click on the border of the box (small circles will appear around the shape). On the menu that appears select **subordinate**, **assistant** or **co-worker** according to the nature of the relationship.

5 Format the shape as you would a text box or AutoShape to change font, colour, fill effects, etc.

To do

Draw an organisational chart of your school.

Newsletters

A **newsletter** is a simple form of newspaper or informational letter. It is a periodically published document that is normally non-commercial and distributed to a selected readership. To create a newsletter you must be able to work with section, column and page breaks.

> **D**rop cap is a formatting feature that creates a text box with a significantly larger capital letter at the beginning of a paragraph.

Figure 21.12 *The **Drop Cap** dialogue box*

To add a drop cap:

1 Click in the paragraph in which you want to apply the drop cap.
2 Click **Format** then **Drop Cap....** The **Drop Cap** box will appear.
3 Select the drop setting you want to use.
4 Select the font you want to use for the drop cap.
5 Select the number of lines by which you want the cap dropped and the distance from the text.
6 Click **OK**.

Written reports

A **report** is a document that communicates the findings of some individual or group accurately, clearly and logically. It is prepared after an investigation is done. A report should be written in a formal style and should conclude by recommending a course of action. Sometimes you may be given an outline of the structure in which the report should be prepared. If no guidelines are given, you may use the

To do

Let us create a newsletter for the Achievers Youth League (Figure 21.13). This is the first issue and first volume.

1 The top of the newsletter contains its title. This is usually a single column. Insert a continuous section break after typing the title information.
2 Create two columns. The first should be 4.1 inches and the other 2 inches wide.
3 Type the first headline.
4 Insert a column break and type the second headline.
5 Insert a continuous section break.
6 Create three columns of equal width.
7 Type the text for the first article using a drop cap with the first paragraph.
8 Insert a column break halfway through the first article.
9 Insert a column break at the end of the article. You should now be in the third column.
10 Type the second article.
11 Insert a continuous section break.
12 Create one column.
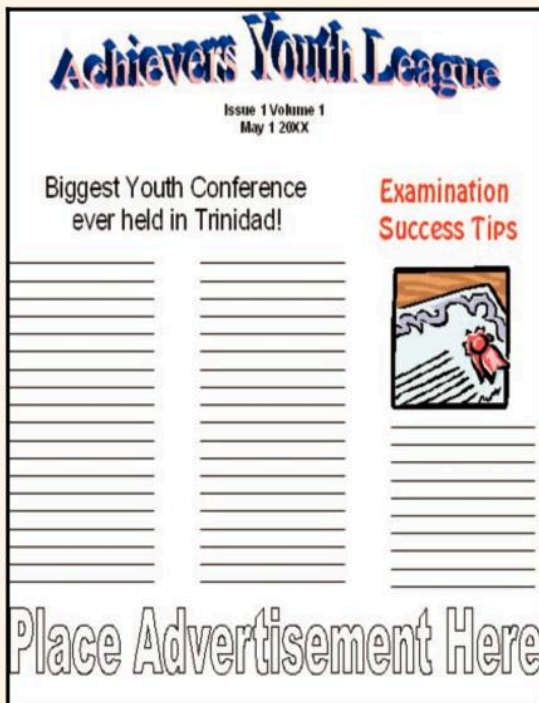13 Design an advertisement with clip art, WordArt and text boxes.

Achievers Youth League

Issue 1 Volume 1
May 1 20XX

Biggest Youth Conference ever held in Trinidad!

Examination Success Tips

Place Advertisement Here

Figure 21.13   *A newsletter*

structure that is outlined in Table 21.2 on the next page.

Guidelines for preparing a report:

- Make sure you know exactly what you are being asked to do.
- Gather the required data and information. This may be original data that you gather or data you obtain from secondary sources such as books, magazines and the Internet. Write down all sources of data and information.
- Sort, study, arrange and analyse the material.
- Create an outline of the main headings and briefly note what will come under each heading.
- Write a draft of the report.
- Proofread your draft. Always consider to whom your report is directed. Do not use technical words unless you can reasonably expect your readers to know what they mean. Prepare a list of definitions of technical terms if these are unavoidable.
- Avoid wordiness; do not repeat yourself merely to extend the length of your report. If you find that your report is too short, do additional research or further analysis of your statistical data.
- Produce the finished document.

To do

Your classmates are having difficulty finding information on the use of satellites in information and communication technology. Obtain the required information from the Internet and prepare a short, informal report. Include links to your sources of information.

Table 21.2 *Parts of a report*

Part of the report	Features
The heading or title page	• The writer's name and department • The name and department of the person or persons for whom the report is written • The reference number for the report, if there is one • The title of the report Note: If the report is short or informal the heading may be placed at the top of the first page. If it is a formal, full-length report these details must be placed on a separate title page
Table of contents	A list of the sections of the report and the corresponding page numbers. This is not necessary in a short informal report
The reason for the report	A statement of why it is necessary for the report to be compiled and what it aims to achieve In a full-length report this is an **abstract**. An abstract is a summary of the basic findings of the report that includes a formal statement of the terms of reference; that is, of exactly what the writer was asked to do
The body of the report	• An introduction that gives additional details on the statement of the reasons for the report and briefly states how the report was undertaken • A description of the methodology used to gather your information • A description of the research undertaken and details of the findings. This should include analysis of statistical data, photographs, charts and graphs that are well-integrated into the body of your report
Conclusion and recommendations	Statements of what conclusions have been drawn from the research and what recommendations the writer is making
Appendix	This includes the detailed statistical data that was analysed in your report. Any other data that is pertinent to the information and findings in your report
References	A statement of all sources of information. The style in which your bibliography should be prepared is discussed in Unit 28

Proposals

A **proposal** is a detailed presentation of a concept, and is used to gain the interest and services of the reader. If it is a written request for a grant or contribution then the proposal will:

• Outline why the grant/contribution is needed.
• Identify the purpose it will serve.
• Detail the plan for meeting the need.
• State the amount of money needed and how this money will be used (proposed budget).
• Give details about the background of the applicant.

Make sure that your proposal answers the basic questions who, what, where, when, why and how.

• **Who:** Who the applicant is (background information), who will do the work, who is responsible for what.
• **What:** What need(s) you propose to meet, what must be done, what will be required to do it, what it will cost.
• **Where:** Where the work will be done, where the centre of activities will be, where it will be delivered.
• **When:** When the project will begin, when key stages in the project will be achieved, when the project will be completed, when finance will be required.

Developing work skills

You work with an advertising agency. You have been asked to plan a television commercial for a new brand of sneakers. Write out a plan for an advertisement that will attract teenagers. Draw the storyboard for the advertisement (you may use stick figures).

- **Why:** Why this project is viable and necessary, why you have chosen these approaches and alternatives, why your proposal should be supported or funded.
- **How:** How the project will be managed, how the work will be done, how you will achieve your goals, how long it will take, how risks will be managed, how the project will be of benefit.

To do

Your school youth group wants to initiate a project to establish a photography club. Write a project proposal to your principal.

News releases

A **news release** is a document containing timely information that is sent to the media for publication. It may be an announcement to the news services about new products, mergers, the opening of new facilities, achievements and the like. Many organisations have their own style for news releases but most have the same basic structure.

A news release consists of:

1 A cover page or heading that contains:
   (a) The sender's address and telephone number (a letterhead may be used).
   (b) The heading **News Release**.
   (c) The **embargo** or terms of the release – usually the date after which the release may be published.
   (d) The writer's name and position (if sent from an organisation).
2 The date the release is created.
3 The subject of the release.
4 The information for publication.

A news release may be prepared in full-blocked format, as is shown in Figure 21.14.

To do

Prepare the news release shown in Figure 21.14. You may use different graphics and fonts for your letterhead.

The Tippy Toes School of Dance
245 Ballet Boulevard, Montserrat
Phone/Fax 555 5665 emailtippy@carib.net

NEWS RELEASE

Embargo: For Release Upon Receipt

From: Sherry Ann Phill Principal

19 August 20XX

TIPPY TOES REIGNS AT DANCE FIESTA

The **Tippy Toes Dance School** has just returned from a highly successful appearance at the International Dance Fiesta held in Bridgetown, Barbados from 12 to 18 August 20XX.

Tippy Toes students participated in six different categories:
Classical (individual)
Classical (Pairs)
Classical (Group)
Modern (Group)
Interpretative (Individual)
Open

The participants returned home with four gold medals, three silver and two bronze. DeeDee Clement was judged the most outstanding female dancer, while Saadiq Barrow received the award for the most outstanding male. Shaun 'Mocha' Clement was awarded the prize for the most promising student.

(END)

Encs   Four photographs of dance troupe

Figure 21.14

Examination-type questions

1 Display a flow chart to show the following process. Centre the heading. Insert appropriate terminators.

How to Create a Document Using Microsoft Word
1 Is the computer turned on? No – Turn on computer Yes – Click on the Start button
2 Is the Microsoft Word shortcut icon visible? No – Point to All Programs Yes – Click on the Word icon
3 Type the document
4 Click File…Save
5 Type an appropriate document name
6 Select the folder in which your file will be saved
7 Click the Save button
8 Close the document   *(25 marks)*

2 Display an organisational chart for a small company with three levels of workers. *(15 marks)*

3 Type the programme below on A4 paper, following all of the instructions. Use the following margins: 3.8 cm (1.5 inches) left, 2.5 cm (1 inch) right, 2.5 cm (1 inch) top and bottom.
Insert an appropriate background picture. Use an Art page border that is 15 points from the text on all sides. *(25 marks)*

Technology in Business Communication Seminar   *All caps + bold*

Time: _____ 13 April _____ (Insert day and year)

Venue: School of Business and Information Technology
     Commercial Boulevard, Port of Spain

Programme   *spaced caps   centre*

Typist:
Use title case for all programme items

9.00 a.m.   Welcome
9.15 „   Chairman's address
9.35 „   An overview of Computer technology in business Mr D Hills
10.15 „   Tea break
10.45 „   creating effective multimedia presentations
11.45 „   Lunch
12.45 p.m.   THE EXCITING WORLD OF E-COMMERCE Mr O Somerin
1.30 „   Tour of booths and demonstrations
3.00 „   Closing remarks

Prof. A Nichols

4 Prepare and print an attractively laid out invitation with menu on A4 paper, using appropriate graphics and borders. The invitation is for Seafarers Environmental Club's fundraising dinner at the Hotel Royale, High Street, Plymouth on 25 July of this year. The club plans to serve the following meal:

Appetisers: Caribbean puffs with a spicy tamarind dip
       Sweet potato rolls
       Island lime seafood salad
Main course: Either
       Jamaican Jerk Chicken with Rice and Beans
       Or
       Tropical Seafood Platter with Grilled Vegetables and Fiery Lemon Sauce
       Or
       Honey Mustard Steak with Mashed Potato and Sweetcorn Salsa
Dessert: Tropical fruit tartlets
       Home-style ice cream

(25 marks)

22 Legal, technical and literary documents

By the end of this unit you should be able to:
- Create:
  - Legal documents: endorsements, wills, lease, conveyancing documents, agreements, contracts
  - Technical documents: specifications, bills of quantity
  - Literary documents: plays, actors' scripts
- Create and save templates

Unit at a glance

- Legal documents include wills, leases, conveyance documents, agreements, endorsements and contracts.

- When typing legal documents ensure that there are no erasures, indentations, punctuation marks and line end divisions.

- The final copy of a legal document for signature is called an engrossment while a duplicate copy is called a counterpart.

- The attestation clause is the section of the legal document where witnesses sign to testify that they have actually seen a particular person sign the document.

- An endorsement is a brief statement of the nature of a business document that is printed on the back of the document or on the outside of a covering sheet.

Legal documents must be prepared according to specific guidelines, particularly because their terms and conditions are enforceable by law. Legal documents include wills, leases, conveyancing documents, agreements, endorsements and contracts. The final copy of a legal document for signature is called an **engrossment** while a duplicate copy is called a **counterpart**.

Table 22.1 gives general guidelines for the preparation of legal documents.

Endorsements

An **endorsement** is a brief statement of the nature of the business document, usually a will, that is lodged at a court. It is printed on the outside of the envelope into which the document is placed. The envelope is usually sealed. The names and addresses of the person making the will and of the executors, as well as the date of signature, are typed in the endorsement. While the law may vary in different countries, the endorsement is usually as shown below:

12 July 20XX

This sealed packet contains the
last Will and Testament of

Stephen King
of 139 Potter's Lane, Arima

whereof

Stephanie King-Francis
of 96 Carite Street, Mona

and

Osunyemi Collins, Solicitor of
Hibiscus Street, Petit Valley

are appointed executors, and the
same are brought into the
Registry of the Supreme Court
in Port-of-Spain by me for safe
custody, there to remain deposited
until after my death.

Figure 22.1 *Endorsement*

Table 22.1 *Guidelines for legal documents*

Paper-size	A4 or Legal (8.5″ × 14″)	**Line-end division**	Do not divide words at the end of a line
Margins	Top 1.5–2″ Left 1½″ Right ½″ Bottom 1″	**Punctuation**	Do not punctuate. Start each sentence on a new line
Alignment	Full justification	**Corrections/ changes**	Do not erase or use liquid paper. If the document has already been printed, draw a line through the text to be changed. The person signing the document should initial all changes made. Ideally the document should be checked and corrected before it is printed
Line fillers	Short lines are filled in with a series of unspaced hyphens. Set a right tab with a leader at the right margin of the document		
Line spacing	Usually typed in double-line spacing	**Attestation clause**	The section of the legal document where witnesses sign to testify that they have actually witnessed the signing of the document. The name, occupation and address of each witness are included
Figures	All numbers must be typed out in full, e.g. the date 12/10/2007 will be typed as **The twelfth day of October Two Thousand and Seven**. This does not include numbers in addresses such as street or apartment numbers and postal codes		
Indentation	No indentation is used	**Folding**	**Either** in three equal parts. Place the sheet face up on the table. Turn the bottom third up and crease flat. Turn the top third down and crease flat. **Or** in four equal parts. Place the sheet face up on the table. Turn the bottom edge up to meet the top. Crease flat. Take the folded edge, turn upwards and crease flat again
Upper case	Use upper case for the following: 1. Names of people when they are first stated or stated in the attestation clause 2. The first words of each new statement 3. Connecting words such as HEREBY, WHEREAS, BETWEEN		

- Date.
- Names of parties.
- Name and description of document.
- Name and address of solicitor.

To prepare an endorsement set your document in landscape orientation.

Set three columns of equal width. Insert a column break so that your cursor is in the middle column. Type the endorsement as shown in Figure 22.1.

To do

Wills: Type the final copy of the following will on A4 paper in double-line spacing except for the attestation clause which should be typed in left-aligned spacing. Type an endorsement on a separate sheet.

Hint: Use tabs when typing the attestation clause.

1 I, STEPHEN KING, of 139 Potter's Lane, Arima, HEREBY REVOKE all former wills and testamentary dispositions whatsoever heretofore made by me and declare this to be my last Will and Testament -----

2 I HEREBY APPOINT my sister STEPHANIE KING-FRANCIS of 96 Carite Street Mona and OSUNYEMI COLLINS of Hibiscus Street Petit Valley Solicitor to be Executors and Trustees of this my Will and I give to each of them if he shall prove my Will the sum of Five thousand dollars --

3 I GIVE TO my cousin KATHY-LEE TURNER of 53 South Peak Los Charos my house at 23 Writers Lane Couva with all its contents both movable and immovable ---------

4 SUBJECT thereto and to the payment of my debts and funeral and testamentary expenses I DEVISE AND BEQUEATH all my real and personal estate wheresoever and whatsoever not hereby otherwise disposed unto my said sister STEPHANIE KING-FRANCIS absolutely ---

5 I DECLARE THAT the said OSUNYEMI COLLINS shall be entitled to charge and be paid all professional or other charges for any business or act done by him or his firm in connection with this my Will and the trusts thereof including acts which an executor could have done personally --------------------------------

IN WITNESS whereof I have hereunto set my hand this eighth day of November Two thousand and (**Insert current year**) ---

Signed by the said STEPHEN KING   )
as and for his last Will and Testament   )
in the presence of us both and we in his
presence and in the presence of each   )
have hereunto subscribed our names as witnesses:-   )
)
)
)
  ....   )
  Signature of witness   )
)
)
)
  ....   )
  Signature of witness   )

  ....
  STEPHEN KING

To do

Leases: Type the following lease and print on legal paper using double-line spacing.

POINT FORTIN, ST LUCIA

1 **Parties:** This lease is made on (*Insert today's date*) between **PEG SOOKDAR** of Syfoo Trace, Granville, Cedros, hereinafter called Landlord, and **LEN SINGH** hereinafter called Tenant.

2 **Properties:** Landlord hereby lets the real property known as Apartment B of #35 Richardson Street, Balmain to Tenant for the terms of this Agreement.

3 **Term:** The term of this Agreement shall be for **one year** beginning on (*Insert today's date*) and ending on (*Insert date one year from today*)

4 **Rent:** The total rent for said property shall be **twelve thousand dollars**, to be paid monthly in amounts of **one thousand dollars** due and payable on the first day of each month.

5 **Security Deposit:** Tenant shall deposit with the Landlord **two thousand, five hundred dollars** to be held as security deposit. This deposit will be returned in full when this lease expires if, after inspection by the Landlord, the premises are in good condition (normal wear and tear excepted) and Tenant owes no back rent.

6 **Subleasing:** Tenant shall not lease or sublease nor assign the premises without the written consent of the Landlord (but consent of the Landlord shall not be unreasonably withheld).

7 **Access to Premises:** Landlord may enter premises at reasonable times for the purposes of inspection, maintenance or repair, and to show the premises to buyers or prospective tenants. In all instances, except those of emergency or abandonment, the Landlord shall give 24-hour notice prior to such an entry.

8 **Maintenance of Premises:** Tenant agrees to occupy the premises and shall keep same in good condition, reasonable wear and tear excepted, and shall not make any alterations without the written consent of the Landlord. Tenant further agrees to notify Landlord immediately if any repairs are necessary. Landlord agrees to maintain the building and grounds regularly in a clean, orderly, and safe manner. Landlord further agrees upon notice by Tenant to complete, within a reasonable time, all necessary repairs.

9 **Use of Premises:** Tenant agrees not to use the premises in such a manner as to disturb the peace and quiet of other tenants in the building and the immediate neighbours. Tenant further agrees not to maintain public nuisance and not to conduct business or commercial activities on the premises.

10 **Termination:** Tenant shall, upon termination of this Agreement, vacate and return the premises in the same condition that it was received, less reasonable wear and tear, and other damages beyond the control of the Tenant.

```
SIGNED SEALED AND DELIVERED              )
by the within named LEN SINGH           )
in the presence of                      )
                                        )
.................................       )     ..............................
                                        )        LEN SINGH
                                        )
SIGNED SEALED AND DELIVERED              )
by the within named PEG SOOKDAR         )
in the presence of                      )
                                        )
                                        )
.................................       )     ..............................
                                        )        PEG SOOKDAR
```

To do

Conveyancing: A **Deed of Conveyance** is a legal document signed, sealed and delivered to cause a transfer of property and to show the legal right to possess it. Conveyance documents usually follow a standard format as shown below.

Prepare the following deed of conveyance on A4 paper.

THIS DEED OF CONVEYANCE is made on (*Insert current date*) between PERRY ELLISON of 234 Garlin Heights, Arima (hereinafter referred to as the 'Vendor') of the One Part, and RICHARDSON JAMES of Maddison Trace, Wallerfield (hereinafter referred to as the 'Purchaser') of the Other Part.

WHEREAS the Vendor is absolutely the owner or otherwise well and sufficiently entitled to the piece of land situate at 19-23 ALLEYNE LANE, HUBERTSTOWN and more particularly described hereunder written:

That parcel of land three hundred metres by two hundred metres having a frontage to Damson River to the East, a frontage to Alleyne Lane to the North, and bounded by Lot #732 to the West and Park Ridge to the South as shown on the plan of the whole of the said land, by red coloured boundary line.

AND WHEREAS the Vendor has agreed to sell the said portion of the land described in the Second Schedule hereunder written to the Purchaser at the price of **SIX HUNDRED AND TEN THOUSAND DOLLARS** and has received from the Purchaser a sum of as earnest money on the execution of the said Agreement.

NOW THIS DEED WITNESSETH that pursuant to the said agreement and in consideration of the sum of **SIX THOUSAND AND ONE HUNDRED DOLLARS** paid as earnest money as aforesaid and of **SIX HUNDRED AND THREE THOUSAND AND NINE HUNDRED DOLLARS** on or before the execution of these presents, making together the said sum of **SIX HUNDRED AND TEN THOUSAND DOLLARS** agreed to be paid by the Purchaser to the Vendor (receipt whereof the Vendor hereby admits) he, the Vendor, doth hereby convey and transfer by way of sale unto the Purchaser all that piece of land situate at 19-23 ALLEYNE LANE, HUBERTSTOWN.

SIGNED SEALED AND DELIVERED
by the said PERRY ELLISON
as and for his act and deed in the
presence of

....
                                                 PERRY ELLISON

SIGNED SEALED AND DELIVERED
by the said RICHARDSON JAMES
as and for his act and deed in the
presence of

....
                                                 RICHARDSON JAMES

To do

Agreements: Type and print the following hire purchase agreement on both sides of a sheet of legal-sized paper. Use a left margin of 2 inches on the first page and a right margin of 2 inches on the second page.

DOLLAR STRETCHERS INTERNATIONAL
Hire Purchase Agreement

DATE OF THIS AGREEMENT (being the date when this hire purchase begins)
....

HIRER

Full Name	Address
Telephone No	
Mailing Address (*If different from above*)	
Name and Business Address of Employer	
Occupation	Duration of Employment
Bank	Account No. (*If payment by Banker's Order*)

ITEMS PURCHASED

DURATION OF HIRE
Period of Hire .... Weeks
.... Months
The Balance of Hire is payable
by consecutive weekly/monthly
instalments as follows:
.... of $......... followed by
.... of $......... commencing
on the .... day of ....

PAYMENTS

Cash Price of Goods Including Taxes	$.........
Add Insurance	$.........
Add Hire Purchase Charges	$.........
Hire Purchase Price	$.........
Less Initial Cash Instalment	$.........
BALANCE OF HIRE	$.........

PAYMENT METHOD (check which):
[   ] in person directly to firm
[   ] by Banker's Order

TERMS AND CONDITIONS OF HIRE

By this Hire Purchase Agreement made between **DOLLAR STRETCHERS INTERNATIONAL,** hereinafter called "The Owner", and the hirer named in the schedule above, hereinafter called "the Hirer", the Owner agrees to let and the hirer agrees to hire the goods, described in the Schedule, hereinafter called "the goods", upon the following terms and conditions:

1 The hiring shall begin on the date specified in the schedule and unless specified by the Hirer or by the Owner as hereinafter provided shall continue for the period specified in the schedule. The Hirer shall, upon the making of this agreement, pay the initial installment specified in the Schedule and shall punctually pay the several instalments of the balance as specified in the Schedule.
2 The Hirer shall pay interest at the rate of three per cent per month on all overdue instalments until the payment thereof.
3 The Hirer may pay off this agreement in a shorter period than specified herein, in which case a rebate shall be given.

4 For the duration of this agreement the Hirer shall ensure that the goods are kept in his possession and shall not remove them nor permit them to be removed from the address stated in the Schedule without the prior written consent of the Owner.
5 The goods shall remain the property of the owner until the last and final instalment is paid on or before the said period of hire, after which the goods shall become the property of the Hirer.
6 The Hirer may at any time put an end to this agreement by returning the goods at his own expense to the Owner in good working order and condition.
7 In the event that the goods are returned to the Owner, the Hirer must pay any instalment that is in arrears.
8 If more than seventy per cent of the Hire Purchase Price has been paid the Owner cannot repossess the goods without the consent of the Hirer unless by an order of the Court. In the event that the instalment becomes past due, if less than seventy per cent of the Hire Purchase Price has been paid the Owner cannot repossess the goods unless the Owner gives twenty-one days clear written notice of his intention to do so.

In witness whereof the said parties have placed their signatures:

....
                                       ....

Hirer   For and on behalf of   Witness
                               Dollar Stretchers International

To do

Contract of work: An employment contract is an agreement to the terms and conditions of employment agreed by both the employer and employee. By law, a contract is created as soon as a person agrees to work under the conditions of employment stated by the employer. It is best, however, to formalise this verbal contract with a written agreement.

An employment contract usually contains the following details:
1 Names of both the employer and employee
2 Starting date of the employee
3 Job title and description
4 Address of the workplace
5 Details of remuneration (hourly rate or salary) and when it is paid (weekly or monthly)
6 Hours worked each week
7 Holiday entitlement
8 Sickness entitlement
9 Details of any pension schemes and insurance
10 Grievance arrangements
11 Termination of Contract Notice
12 Redundancy
13 Disciplinary procedures
14 Signatures of both the employer and employee

1 Research the meaning of the following terms:
  Job description
  Job specification
  Grievance
  Termination
  Redundancy
  Remuneration
  Wage
  Salary

2 Use the outline presented above to prepare a contract of work for two of the following:
  (a) An administrative assistant at an advertising agency
  (b) A nursing assistant at a private hospital
  (c) A health and safety supervisor for a construction project expected to last two years

Documents on specifications

If a person wants some building work done, they will ask the contractors to supply a **specification** as a guideline for the builder who will be carrying out the work. The specification:

- Identifies the location of the work site.
- Outlines by trades and tasks the work that must be undertaken.
- Indicates the sequence in which the tasks are to be done.
- Identifies the work to be done and the materials to be used in performing each task.

The layout of specifications may vary from one form to another but they usually have the elements shown in Table 22.2.

Table 22.2 *Specifications*

Heading	1. Introductory paragraph describing the work to be done and the location of the site. Typed in double-line spacing. Placed at 1½" from the top with a full left indentation at 2½" beginning with the word SPECIFICATION in spaced capital letters 2. Name and address of architect or contractor. Typed in left-aligned spacing with a left indent of 3" two line spaces below the introductory paragraph 3. Date typed at the left margin two clear line spaces below the name and address of the architect or contractor
Body	Side or shoulder headings for each section. Trades are typed in closed capital letters with underscore or bold

To do

Type the following document of specifications.

SPECIFICATION of work to be carried out and materials to be used for the expansion and paving of a car park at Lot No. 17, Arena Road, ERIN for SAFECO Security Services to the satisfaction of:
Kelly and Singh Architectural Enterprises
23 North Street
Quarry Village
FYZABAD

19 March 20XX

GENERAL CONDITIONS

<u>Visit to Site</u>
The contractor should become thoroughly familiar with the site and surrounds before the initiation of the project.

<u>Environmental Impact</u>
The contractor shall be responsible for the removal of all excavated material, rubble or other waste produced in the construction of the car park. The contractor must ensure that there is no damage to the area surrounding that designated for the car park. The contractor will be held liable for any damages incurred to the surrounding area that is incurred in the process of constructing the car park.

SITE PREPARATION

<u>Clearance</u>
Remove old asphalt paving on original car park area. Remove vegetation and roots of area identified for the expansion of the car park.

<u>Levelling</u>
Level and ram the entire area identified for paving of the car park ensuring a gradient that will facilitate run-off to the drains at the eastern and western limits of the car park.

<u>Steel Work</u>
Lay 6 inch BRC wire reinforced with ½ inch steel set diagonally across at 4 foot intervals.

<u>Framework</u>
Set a framework of 1″ × 3″ profiles parallel with distancing of 6 feet transversed by profiles at 10 feet intervals.

<u>Casting</u>
Spread and level 4 inches of concrete between the profiles over the surface of the car park sloping to the drains to the east and west.

PAINTING OF CAR PARK

<u>Parallel parking</u>
Painting of lines for parallel parking as depicted in Drawing No. SS3/A.

Reflective border
Painting of a 4 inch wide red reflective border at the eastern and western limits of the car park 1½ feet before the drain.
STEEL GRILL
Installation of a steel grill cover over the length of the drains at the eastern and western limits of the car park.

To do

Type and print the following bill of quantity. You may use your own design for the logo.

Cutting Edge Designs

Building 236 LABIDCO Industrial Estate, MONTSERRAT

Phone 555 0900 Fax 555 4843 email orders@cuttingedge.biz

BILL OF QUANTITY	
Date	2 March 20XX
Customer name	SAFECO Security Services
Address	Lot No 17, Arena Road, Erin
Work description	Sewing of estate constables' uniforms
Order no.	SSL1231-4

Item No.	Description	Unit	Quantity	Price	Cost
1	Tetrex	Metres	36	9.95	358.20
2	Serging thread	Reels	12	10.00	120.00
3	Press-on Reinforcement	Metres	7	12.00	84.00
4	Gold Cord Piping	Metres	15	2.00	30.00
5	Sewing		10	120.00	1200.00
TOTAL					1792.20

Bills of quantity

A **bill of quantity** is a document prepared by a contractor that lists the detailed costs that will be incurred in undertaking a job. The bill of quantity itemises the following:

- Name of the job.
- Customer details such as name, address and telephone number.
- Date.
- Job details such as job ID number and location.
- The quantities, unit prices and costs of materials.
- The cost of labour.

Poems

The following general rules should be followed when you are typing poetry:

- Type the title in upper case, centred.
- Use left-aligned spacing with one or two clear line spaces between verses.
- Begin each line with a capital letter.
- Centre the poem vertically and horizontally if it is the only item on the page.
- Blank verse (where no line rhymes) or successive rhyming lines should be typed in block format.
- If all lines rhyme they start at the margin (block format).
- Alternate rhyming lines should be indented two or three spaces. If the lines are of significantly different lengths they may be centred.

> Bring your money with you
>   Bring your kids and let them play.
> Let me tease them and tempt you
>   For today is market day.

- When there are too many words for one line to carry, 'hook in' the remaining words; type them to end evenly with the last word of the preceding line.

> On and on it goes
> That tramping, stamping
> Dancing, prancing
> Playing, swaying
> Of revellers' feet
> To the rhythmic beat of those magical
>   drums of steel.

- Indent several extra spaces for a chorus.
- Align the poet's name with the longest line of the poem one clear line space below the last line. To do this set a right tab in line with the last word of the longest line.

> When these days of life are done
> And our earthly race is run
> With angel's wings we'll fly
> To our new home in the sky
>   HAYNES

To do

Select and type poems that are written in each of the following styles:
- Blank verse.
- Successive rhyming lines.
- Alternate rhyming lines.
- With a chorus.

Plays

The layout of plays may vary according to individual preference. However, the following guidelines are generally acceptable unless you are given specific instructions.

- Plays are usually typed on A4 paper on one side only.
- If the play is to be bound, set a left gutter margin of at least ½". Set all other margins for 1".
- The **introductory pages** are not usually numbered. They are as follows:
  - **Title page**: the title and type of play and author's name are typed in capitals and centred vertically and horizontally.
  - **Synopsis**: the synopsis of acts and scenery is centred vertically and horizontally. Acts are typed in capital letters.
  - **Characters**: the list of characters is typed in upper case. If the names of the cast are included, the characters are in initial capitals and the cast in capitals. Type these in double-line spacing, centred horizontally and vertically. You may include the list of costumes on this page.
- **Start of play**: use a **dropped head** for the act and act number, that is, leave 2" at the top of the page. The name of the act
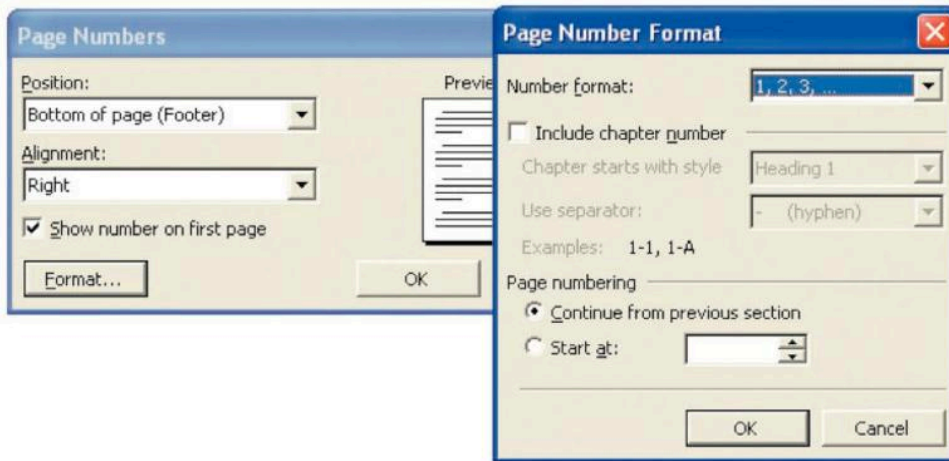
Figure 22.2 *Adding page numbers*

may be centred. Scenes are left-aligned in initial capital letters with small Roman numerals e.g. Scene iv.

- **Scene directions**: scene directions are bold, left-aligned, one clear line space below scenes.
- **Scenes**: start each new scene of an act on a new page.
- **Dialogue**: the name of the character speaking is typed as a side heading. Set a tab stop and hanging line indent at 1½" from the left. Type the character's name in upper case. Press tab. Type the dialogue in left-aligned spacing.
- **Unspoken words**: unspoken words, such as instructions, are underscored or bold and in brackets.
- **Numbering pages**: pages are numbered consecutively at the top right side leaving ½" from the top. Number formats may be any of the following:

  2

  -2-

  2-1-3 or **II-i-3** (This means Act 2, Scene 1, Page 3).

To automatically number the pages:

1 Set a section break before beginning to type the start of the play.
2 Click **Insert** then **Page Numbers**... in the menu bar.

3 Click **Format...**.
4 Set the **Position** at **Top of page (header)** and alignment at **Right** (Figure 22.2).
5 Click **Start at**: and insert **1** in the box.
6 Click **OK**.

To do

Select and type a short scene or excerpt from a play. Save as Play.

Actors' scripts

An **actor's script** is formatted so that the character's dialogue and instructions are distinctive from the rest of the play. The individual's dialogue is typed in double-line spacing in a font colour that is different from the rest of the play.

To do

Prepare an actor's script for any of the characters in the play you typed.

Working with templates

You were introduced to templates in Unit 19. There you modified a template to write a résumé. You may save any frequently used document layout as a template. For example, the design for a contract may be saved as a template. Thereafter you will only need to type in the relevant information when a new employee is hired.

To create a template:

1 Design your document.
2 On the **File** menu, click **Save As....**
3 In the **Save as type:** box, click **Document Template**.
4 The default folder is the **Templates** folder in the **Save in:** box.
5 In the **File name:** box, type a name for the new template, and then click **Save**. Click **Close** on the **File** menu.

Examination-type questions

1 Type a fair copy of the following lease in double-line spacing on A4 paper.   *(25 marks)*

ST VINCENT

THIS AGREEMENT dated the *eighth day of August in the Year of Our Lord Two Thousand and (Insert current year)* between **KAY ANN RICH** of # 20 Moore Avenue Point Fortin (hereinafter called **"the Landlord"**) of the one part and **ANDEL SMITH** of **DAVDIN MARINE LTD** of #81 Richardson Street Point Fortin (hereinafter called **"the Tenant"**) of the other part.

WHEREBY IT IS AGREED as follows:

1 **The Landlord** agrees to let and the Tenant agrees to rent the furnished property known as **# 26 George Road, Mahaica Point Fortin** (hereinafter called **"the premises"**)

2 **The tenancy** commences on the *25th Day of August in the Year of Our Lord Two Thousand and (Insert current year)* for a period of **three years** and shall end on the *24th Day of August in the Year of Our Lord Two Thousand and (Insert year)*

3 **A rental fee of *Nine Thousand Dollars ($9000)*** per month shall be due and payable by the Tenant on or before the *25th Day of August* of each and every month

4 **A deposit of *Nine Thousand Dollars ($9000)*** by the Tenant against damages to the premises must be made on or before the *25th Day of August in the Year of Our Lord Two Thousand and (Insert current year)*, said deposit being refundable **thirty (30) days** after expiration of the term of the lease less any sum necessary to repair any damages done to the premises during the period of the tenancy

IT IS HEREBY AGREED that the said promise shall in no way prejudice or affect any right of the Landlord to recover damages in excess of the said deposit in respect of any breach of the terms and conditions herein contained. **The deposit is not to be used as the last month's rent unless agreed to by the Landlord in writing**

THE TENANT AGREES TO RENT THE PREMISES FROM THE LANDLORD ON THE FOLLOWING CONDITIONS

1 To pay the telephone, gas and electricity rates to the Companies concerned during period of the tenancy, along with any increase over the present rates and taxes, whether as a result of the introduction of a metered supply or otherwise

2 Not to sublet to any other person or organisation without the written consent of the Landlord

3 Not to injure the said premises or make any alterations in the internal and/or external structure of same without the written consent of the Landlord

THE LANDLORD UNDERTAKES TO

1 Be responsible for the insurance of the premises and its fittings

2 Pay all property rates and taxes

IN WITNESS WHEREOF the parties have set their hands the day and year first hereinabove written

SIGNED by the within named **KAY ANN RICH**

in the presence of

....

                 KAY ANN RICH

SIGNED by the within named **ANDEL SMITH**

in the presence of

....

                 ANDEL SMITH

2 Type and print a fair copy of the following handwritten will. Insert the attestation clause. *(25 marks)*

3 Type and print an appropriate endorsement on a C5/6 envelope. *(25 marks)*

LAST WILL AND TESTAMENT OF KIM WILLIAMS

1. I, KIM WILLIAMS, of #375 Peters Settlement, St Clements Village, Thomas Town, married out of community of property to MARVIN DAVIS WILLIAMS of the same address (hereinafter referred to as my spouse), being of sound and disposing mind, hereby revoke all wills and testamentary dispositions previously made by me and declare this to be my Last Will and Testament.

2. I appoint my spouse as personal representative of my will. If unable or unwilling to act, or to continue to act, as executor of my will, I then appoint my sister KERRY LASHLEY-JAMES as personal representative of my will.

3. I direct that my executor pay all of my funeral expenses, all taxes, administration costs and all of my debts subject to statute of limitations, except mortgage notes secured by real estate, as soon as practical.

4. I bequeath the residue of my estate to my spouse. If my spouse does not survive me for a period of 30 (thirty) days, then I bequeath the residue of my estate to my children, to be divided equally among them. I direct that the share of any child of mine who shall have died leaving no descendants shall be divided among my surviving children in equal shares.

IN WITNESS whereof I have hereunto set my hand this EIGHTH day of SEPTEMBER
(Insert current year)

(Insert the attestation clause)

23 Electronic communication

By the end of this unit you should be able to:
- Discuss various types of electronic communication
- Discuss the advantages and disadvantages of email
- Discuss various features of email
- Discuss file organisation methods using email

Unit at a glance

- There are several methods of electronic communication, including:

  - Telecommuting, teleconferencing, video conferencing and online meetings.
  - Facsimile and multifunctional devices that scan to mail and scan to file.
  - The Internet and World Wide Web.
  - Electronic mail.

- Many businesses find it advantageous to use electronic mail because of:

  - Speed of delivery.
  - Low cost.
  - The ability to send to multiple recipients simultaneously.

- The features of electronic mail include:

  - Sending to one or more recipients by using To, Cc and Bcc.
  - Sending attachments.

- It is more efficient to organise email files into folders. Email file organisation includes:

  - Storing and sorting mail by date, sender and subject.
  - Creating address books or contact lists.

In today's business world it is vital that people and organisations are able to communicate with each other quickly and effectively. In fact, the very existence of many organisations depends on their ability to communicate data.

> ## To do
>
> Analyse the international money transfer services provided by **Western Union** or **MoneyGram** or any similar organisation in your country.
> - What are the means used to conduct the transactions?
> - What difficulties may arise if transfers are not done quickly and accurately?
>   Discuss your answer in your group. Share your ideas with the class.

Efficient data communication must be:

- Accurate.
- Timely.
- Cost effective.

Data communication allows users to transmit and receive data and information. This information is used to identify and solve problems and to make informed choices.

In modern business, a significant amount of communication is done electronically, using the telecommunication services, computers and the Internet.

Electronic communication

Electronic communication is the transmission of information that has been transformed to digital code, usually by a computer. The forms of electronic communication include teleconferencing, video conferencing, electronic mail and facsimile.

Telecommuting is the arrangement in which an employee uses information and communication technology such as the telephone, computer and the Internet to work from home or another location instead of being physically present in the workplace. One example of the use of telecommuting is the work done by lecturers and tutors at the Open Campus of the University of the West Indies. The lecturers and tutors place course notes and assignments on the Open Campus website, and they view and respond to the students' assignment submissions, queries and viewpoints in this forum. It is a **virtual** campus that does not exist in a physical location. Similarly, many businesses have **virtual offices** to which employees report for work via the Internet.

Sometimes it is not practical or affordable for persons to meet face to face. **Teleconferencing** uses telecommunications technology to allow participants in two or more locations to speak with each other. A teleconference is a group call, using telephones or computers, in which all participants are able to speak to each other. This saves time and money on travel and accommodation and enables even large groups to interact. Participants do need to speak slowly and distinctly to ensure that all persons understand what is being said. This is particularly important if participants speak with different accents. Equipment failure or technical difficulties may adversely affect the quality of teleconferences.

Video conferencing allows users in distant locations to see each other. The development of PC cameras and related software make video conferencing increasingly common. Each participant has a microphone, speakers and a video camera attached to a computer. Voices and images are transmitted to each computer (Figure 23.1). Video conferencing has all the advantages of teleconferencing, and it is also possible to share visual information such as PowerPoint slides. Non-verbal messages such as gestures and facial expressions can be communicated. Participants find it more interesting to be able to see as well as hear each other.

Figure 23.1 *A video conference*

Online meetings allow computer users to use the Internet to create a chat room in which they can exchange typed messages instantaneously in a written conversation. The messages may be saved on the computer or printed to provide a permanent record of what was written. Alternatively, individual text messages may be sent instantaneously by using cellular telephones, the Internet or the organisation's internal computer network.

Facsimile

A facsimile, or fax, is the transmission of a scanned document via the telephone by using fax machines (Figure 23.2) or the Internet. The sending machine scans

the document and converts it to a code called a bitmap image. This code is sent as electrical signals along the telephone line. The receiving machine interprets the signals representing the bitmap and prints the image on paper. A fax is an instantaneous means of communication that is faster and usually more economical than mail or courier services. Some computer users invest in **multifunctional devices** that combine a scanner, printer, photocopier and fax machine in a single unit.

Figure 23.2   *A fax machine*

Sending faxes

There are three options for sending faxes electronically:

1 Using a fax machine or multifunctional device.
2 Using a modem.
3 Using an Internet fax service provider.

To send a fax using a fax machine or multifunctional device:

1 Prepare a cover letter or a fax transmission form (see Figure 23.3). The cover letter briefly identifies the document being faxed, the number of pages, the sender's name and fax number, and the name and fax number of the intended recipient.
2 Place the cover letter or transmission form on top of the document and put them in the outgoing fax tray (follow the instructions supplied by the machine's manufacturer).
3 Enter the recipient's fax number into the fax machine, similar to placing a telephone call.

4 The recipient's fax machine will 'answer' the call and emit a high-pitched beeping sound. If a person answers, you should ask for a fax tone and wait for the beep.
5 Press the Send button on the fax machine.
6 The paper will be fed through the machine one sheet at a time. At the end of the transmission the machine will emit a beep and display a message to say it has finished.
7 Most machines print out a confirmation page showing the date and time, number of pages, sender's telephone number and the number to which the fax was sent. File the confirmation page as evidence that the fax was sent.

[COMPANY NAME]
[COMPANY ADDRESS]

FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
[Name]	[Name]
COMPANY:	DATE:
[Company name]	10/6/2011
FAX NUMBER:	TOTAL NO. OF PAGES, INCLUDING COVER:
[fax]	[number of pages]
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
[phone]	[reference number]
RE:	YOUR REFERENCE NUMBER:
[subject of fax]	[reference number]

☐ URGENT   ☐ FOR REVIEW   ☐ PLEASE COMMENT   ☐ PLEASE REPLY   ☐ PLEASE RECYCLE

NOTES/COMMENTS:

Figure 23.3   *A fax transmission form template*

To send a fax using a modem:

(In order to use this method you must have a fax modem installed on your computer.)

1 Prepare the fax cover sheet and document on the computer. If necessary scan and save the documents that you want to send.
2 Click **File**, point to **Send To**, and select **Recipient using a Fax Modem**.
3 Follow the steps in the **Fax Wizard** that will appear on your screen.

To send a fax using the Internet:

1 In Microsoft Word click **File**, point to **Send To**, and select **Recipient Using Internet Fax Service**.

Note: You will be prompted to sign up the first time you use fax services. Click OK to open your Web browser and then follow the on-screen instructions.

2   Close the Web browser, and return to Microsoft Word.
3   Click **File**, point to **Send To**, and select **Recipient Using Internet Fax Service**. An email message will open in Outlook with your document attached as an image file.
4   Fill in the Fax Recipient, Fax Number, and Subject sections of the message window.
5   Complete the fax cover sheet to ensure that the recipient can identify the sender and the purpose for which the fax is sent.
6   Click **Send**.

The Internet

The Internet is a worldwide system of interconnected computer networks. The Internet is linked by various telecommunications media including telephone lines, cable and satellites.

The following are essential requirements if you want to connect to the Internet:

- A computer with a fast processor and a large memory.
- A modem.
- Browser software.
- An Internet Service Provider (ISP).

A **Browser** is the program that allows users to locate and view web pages. **Internet Explorer** and **Netscape Navigator** are the two most popular browsers.

An **Internet Service Provider (ISP)** is a company that provides access to the Internet. When you register with the ISP you are assigned a user name and asked to select a password. These are used to identify you whenever you log on to the Internet.

The World Wide Web

The **World Wide Web** consists of the vast number of **websites** that are available on the Internet. A website is an electronically stored document that is made up of individual **web pages**. Each web page may consist of a number of files including text, graphics, sounds, frames and style sheets.

You can create your own web page and have it hosted on a **domain** or website. Your information may then be available to people using the Internet.

Social media and services

The increased availability and use of the **Internet** has made it possible for individuals and organisations to use a wide range of web-based communication methods, such as discussion boards, blogs and wikis. A **discussion board** (or **forum** or message board) is the online version of a bulletin board. Members of the discussion forum are able to post messages such as questions or comments. A **blog** (a contraction of 'web log') is an online journal. The author of the blog frequently posts items such as articles, commentaries, web links and photographs. A **wiki** is a website that allows users to create and edit entries. A wiki is useful for collaborative work. For example, a team may prepare a report on a project by using a wiki in which each member can add information. **Podcasts** are audio (sound) files that can be downloaded to a computer or mobile phone. Businesses can use this medium to send messages to a large number of persons.

Some of the most popular websites on the internet are developed by **social networking** (e.g. Facebook, Twitter, MySpace). A social networking site allows users to create a profile and display media such as photos and videos. Users post messages or chat, using computers or **smartphones** (mobile telephones with advanced computing capabilities).

How to connect to the Internet

First find out whether the computer you are using has access to the Internet. If it does, then follow these guidelines to connect to the Internet:

1   Open the browser by double-clicking on the icon (Figure 23.4).

Figure 23.4   *Browser icons*

2 Depending on your internet settings, a box will appear in which you must type a user name and password.

3 The web page that is set as your **Homepage** will be displayed on your monitor. This may take some time depending on the speed of your Internet connection.

The Uniform Resource Locator

Each web page is identified by a series of letters called the **Uniform Resource Locator (URL)** or web address. One example of a URL is: http://www.1caribbeanvoice.com/intro/1.

Let us examine this URL more closely. It is typed as a continuous string of text with no spaces between. However, the URL actually consists of the following parts:

- The Internet Protocol e.g. **http**, **ftp** and **mailto**. This code tells the web browser what type of computer it will be communicating with and the programming language in which the web page was prepared. The protocol is followed by **://**.
- The second part of the URL consists of the address of the website on the host computer: www.1caribbeanvoice.
- The third part identifies the domain, e.g. .com or type of service that hosts the website. Other domain names include **.org**, **.edu** and **.gov**. The domain name may indicate the type of site, such as commercial or educational. Some domain names are abbreviations of country names such as **.tt** (Trinidad and Tobago), **.gy** (Guyana) and **.jm** (Jamaica).
- The next section is called the **path**, e.g. /intro/1. It leads the browser to the specific page on the website.

Make sure to use the dots, colons and slashes. They are an essential part of the URL and cannot be omitted. For example typing \ instead of / will result in you being informed that the web page cannot be located.

How to open a web page

If you know the URL for the web page, type it in the **Address** bar at the top of your browser window, then click the button labelled **Go**.
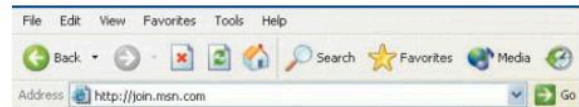
Figure 23.6 *Address bar*

If you do not know the address of the site then you will have to use a **search engine**. A search engine is a program that collects, sorts and categorises information from the Internet. The following is a list of some of the more popular search engines and their addresses:

- Bing: http://www.bing.com.
- Google: http://www.google.com.
- Lycos: http://www.lycos.com.
- Yahoo!: http://ww.yahoo.com.
- AltaVista: http://www.altavista.com.
- Ask Jeeves: http://www.ask.com.

The user types in **keywords** for which the program will search. For example, if you want to find information about the origins of characters used in folklore in the Caribbean, you might type in the keywords *folklore characters Caribbean origin*. Usually a keyword search yields tens of thousands of results. If possible, use more specific keywords to narrow your search. For example, you may include the names of characters such as **Anansi**, **douen** and **La Diablesse**. You may also use phrases in quotation marks, such as **"characters in Caribbean folklore"**. The quotation marks instruct the Search Engine to look for that specific group of words.

The search engine displays the search results as **hyperlinks** accompanied by a brief description. A hyperlink (also called a link) is coloured and underlined text or graphics on which you click to go to a web page. When you place your mouse pointer

over a hyperlink the pointer changes to a pointing hand. The new page may open in the same window or in its own. Click on the **Back** button on the toolbar to return to the preceding page.

To do

1 Open a search engine and perform a search for Caribbean Sporting Heroes.
   How many results did you get?
2 Now do a search for Cricket World Record Holders from the West Indies.
   Were there fewer results?

Copying from a web page

You may copy text and graphics from the Internet and paste these into a document. The procedure for copying from a web page is quite similar to that for copying from one Microsoft Word document to another: you need to open both the Internet browser and Microsoft Word. However, always be aware of the laws and principles governing intellectual property rights (discussed more fully in Unit 28). Much of the material on the Internet is copyrighted and cannot be reproduced and published without permission from its author.

Method 1:

1 Select the text or graphics on the web page that you want to copy.
2 Click **Edit** then **Copy**.
3 Click on the document in which the selection will be pasted.
4 Click **Edit** then **Paste**.

Method 2:

1 Select the text or graphics on the web page that you want to copy.
2 Right-click on the selection.
3 Left-click **Copy** on the pop-up menu that appears.
4 Click on the document in which the selection will be pasted.
5 Right-click and click **Paste**.

Saving a web page

A web page can be saved in more than one format as is shown in Table 23.1.
To save a web page:

1 On the **File** menu, click **Save As…** .
2 Double-click the folder you want to save the page in.
3 In the **File name**: box, type a name for the page or accept the default name that is there.
4 In the **Save as type**: box, select a file type.
5 Click **OK**.

Table 23.1 *Formats for saving a web page*

Format (file types)	Properties
Web page, complete	Saves each file needed to display this page, including graphics, sound and style sheets separately, in its original format.
Web archive	Saves a snapshot of the current web page in a single file.
Web page, HTML only	Saves the information on the web page, but does not save the graphics, sound or other files.
Text only	Saves the information on the web page in straight text format.

Printing a web page

To print a web page simply click **File**, then **Print**. If you want to print a specific part of the web page, select that section and use the **Selection** option on the **Print** dialogue box. Remember to click **File** then **Print Preview** to see how the web page will be printed. You may need to make changes to the paper size or margins.

To do

1 Find a web page that contains information on places of interest in your country or region.
2 Save it as a web archive.
3 Select and print a block of text.
4 Print a photograph only.
5 Print the current page.
6 Copy a photograph and a paragraph of text into Microsoft Word.
7 Acknowledge the source of your information by typing **Source:** followed by the URL.
8 Print the Word document on A5 paper and close without saving the changes.

Electronic mail

Electronic mail (email) is the electronic alternative to sending correspondence through the postal services. It allows information to be sent quickly anywhere in the world from one computer to another via the telecommunications system. Most email messages consist of text, such as letters, memos or brief notes. However, you can also send non-text files, such as video clips, graphics and sound files as attachments.

The email address

To send and receive email you must have an email account. Each email account is identified by a unique **email address**. An email address is easily recognised because it contains the @ symbol, e.g. csec_edpm@ hotmail.com. The email address is typed as a continuous string of letters, numbers and symbols. Spaces are created by striking the underscore _ key.

Email addresses actually consist of three parts:

1 The account name, e.g. csec_edpm.
2 The @ symbol.
3 The name of the ISP or email service provider, e.g. hotmail.com.

An email account allows you to:

- Send and receive messages.
- Edit a message.
- Check spelling.
- Forward messages that you receive to other recipients.
- Save the addresses of other people in an address book.
- Send the same message to multiple recipients.

When composing emails you should:

- Keep paragraphs and sentences brief, but be clear.
- Use correct grammar and spelling.
- Proofread your message before sending it to ensure that it is free from errors.
- Use the line labelled 'Subject' to type a brief clear statement that indicates the content of the email.
- Avoid using fancy font (typing styles) because the recipient may have different email software that is unable to display the font you chose.

Creating an email account

Your Internet Service Provider will most likely include email services with your package. **Outlook Express** is an email program that is installed along with Internet Explorer on most computers. Also, many organisations offer email services, some for free and others for a fee.

To do

Use a search engine to locate sites that offer free email. Make a list of their names and URLs.

This book will explain how to set up a **Hotmail** account. The process for creating an email account varies from one provider to another. In fact, providers often redesign their products so that you may find that the process varies from one day to another!
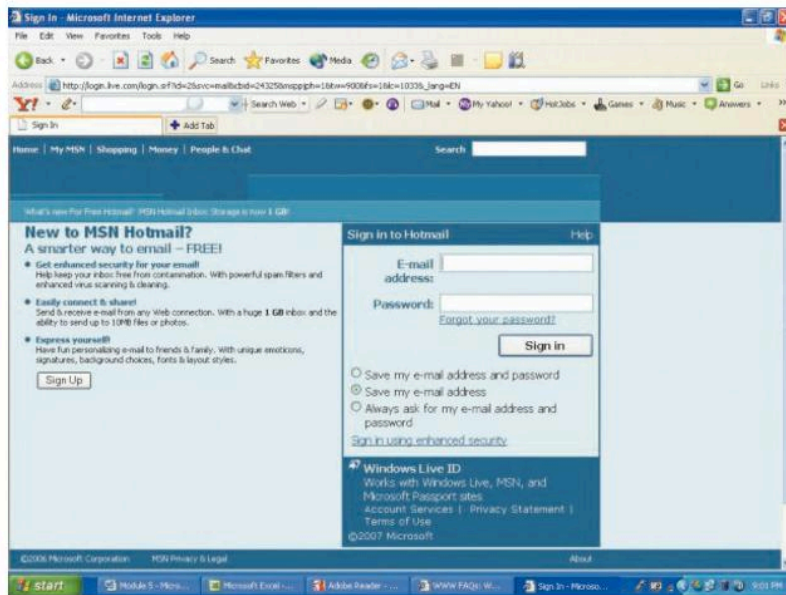
Figure 23.7 *Creating an email account in Hotmail*

However, the basic elements remain almost the same.

When choosing an account name you should be aware that your name may be the only thing that a business contact may know about you. You certainly cannot expect to be taken seriously if your email account name sounds like crybaby, loves_to_party or something equally playful. Similarly, do not choose a name that sounds obscene or disrespectful. Some people choose to have several email accounts, one for business associates, another for friends and so on.

Figure 23.8 *Accepting the agreement*

To create an email account:

1 Log on to the website of the email service provider and click **Sign Up** (Figure 23.7).
2 You will be asked to select the type of account you want to open. Click **Get it free**.
3 You will be taken to a page with spaces for you to enter your account name and other information. Follow the on-screen instructions.

4 Read the terms and conditions of using the account in the **Service Agreement** then click **I Accept** (Figure 23.8).
5 You may be taken to a page advertising products and services. Scroll down the page until you meet a link to take you to the next page. Click that link and you will be taken to your **Hotmail Today** window (Figure 23.9).

6 Click on the **Mail** tab to read and compose messages.
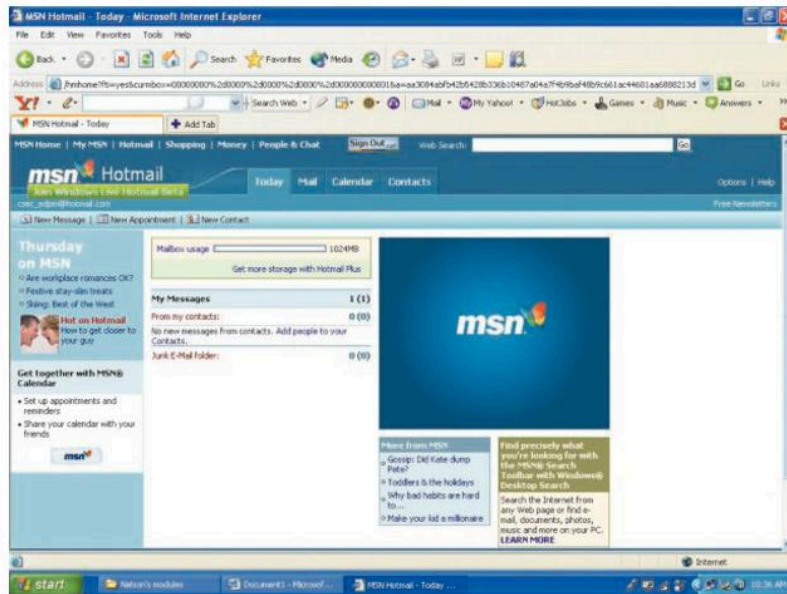
Figure 23.9 *Your Hotmail Today page*

To do

1 Create a Hotmail account.
2 Obtain the email address of a classmate and send him/her the following message:

> Hi,
>
> I just wanted to let you know that I have successfully created my hotmail account. You may respond to my message by clicking the Reply button on your email window.
> I look forward to hearing from you soon.
> (Type your name)

3 Log out of the email site.
4 Log back in to your email account to see whether you have received a reply. You may need to wait some time to see a reply, depending on how quickly your classmate reads and answers your message.

Using your email account

Sending an email

1 Click the **Mail** tab.
2 Click **New** and select **Mail Message** from the drop-down menu.
3 Type the recipient's email address in the **To** box.
  Note: You can send an email message to several recipients at the same time. Type the addresses of the other recipients in the Cc box if you want the primary recipient to know to whom copies have been sent. Otherwise, type their addresses in the Bcc box.
4 Type your message in the space provided.
5 Click **Send** and your letter email will be simultaneously sent to all recipients.

Figure 23.10 *Writing a message*

Creating an address book

The address book saves the names and contact information of people to whom you will be sending emails. To create an address book:

1 Click **New Contact**.
2 Enter the required information such as the person's name and email address (Figure 23.11).
3 Click **Save and Add another contact**.
4 Repeat this process until you have added all of the contacts then click **Save**. You will be taken back to the main screen.

Click the **Contacts** tab whenever you need to view the contents of your address book.
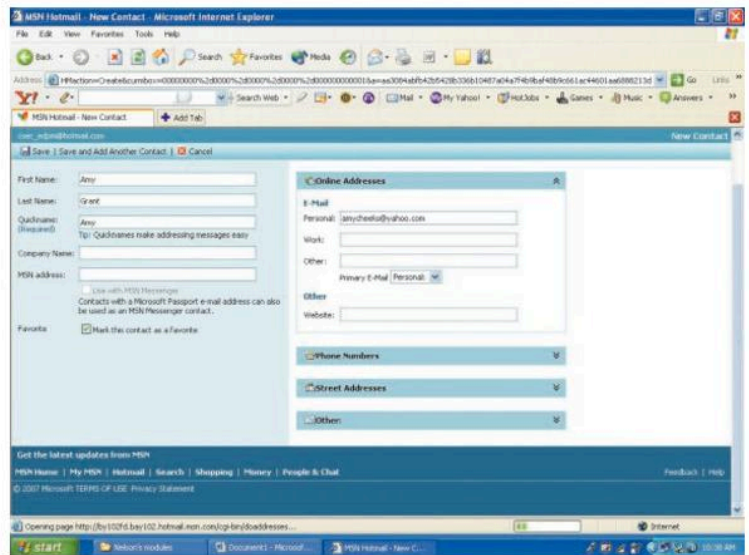
Figure 23.11   *Creating an address book*

Routing copies via email

You may also use your address book to send letters to multiple recipients.

To send a letter to multiple recipients:
1 Compose the letter.
2 Click the **Contacts** tab.
3 Click the names of the people to whom you want to send a message so that a ☑ appears.
4 Click **Send Mail**.

To do

Create an address book using the addresses of at least five of your classmates.

Use the Contacts tab of the address book to select three recipients to whom you will send the following letter.

```
Dear classmates,
I am experimenting with the address
book feature of my email account.
Please reply to this letter to
assure me that I am using this
feature correctly.
(Type your name)
```

DID YOU KNOW?

- Your email program may support rich text formats. **This means that you will be able to format fonts, change alignment, add symbols and so on.**
- **Most email programs automatically change a URL or email address to a hyperlink when you type the address. To create a link in your email message type the URL and press either the spacebar or enter. The URL becomes blue and underlined. Your message recipient will be able to go directly to the website by clicking on its URL.**

Working with attachments

You may want to send a file from your computer via email. This can be sent as an attachment to your email message.

To send a file as an attachment:

1 Click the **Attach** button.
2 Click **Pictures** or **File** from the drop-down menu that appears.
3 The screen will change. Click **Browse** to search for the file on your computer (Figure 23.12).
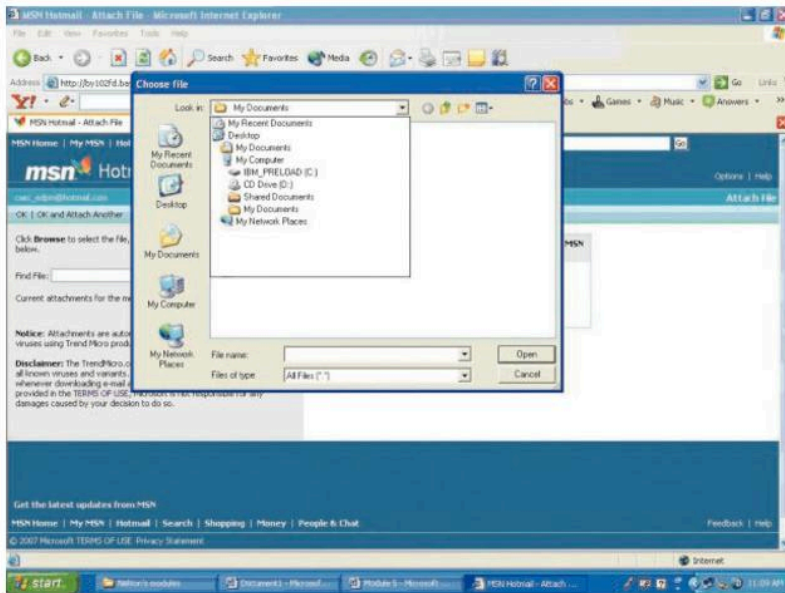
Figure 23.12 *Adding an attachment*

4 Click on the file you want to attach and click **Open**.

5 Click **OK and attach another** if you want to attach more than one file. (Note that your email provider usually sets a limit on the total size of the files that may be attached to an email.)

6 Click **OK** when you have finished attaching your files. Your screen will change back to the **New message window**.

To save an online copy of your message, click the **Save Draft** tab at the top of the message window.

DID YOU KNOW?

A screen shot is a picture of whatever is displayed on your computer screen. To take a screen shot press the Prt Scrn key on the keyboard. The computer makes a copy of the screen on its clipboard. You can then paste this picture into a document. You can also paste your screenshot into Paint and save it as a bitmap.

Storing and sorting emails

The **Inbox** tab allows you to view all of the messages that you have received. As you continue to communicate via email, you will notice that your inbox can become quite crowded. Hotmail allows you to create folders to store related emails. The email program automatically creates the following folders:

- **Sent** for messages that have already been delivered.
- **Draft** for messages that have been created and saved but have not yet been sent.
- **Junk** for mail that the email program has identified as unsolicited bulk mail such as advertisements that are sent out to vast numbers of recipients.

You can create additional folders to sort your emails. Emails can be sorted in various ways such as by date, sender or subject. For example, you might choose to place all emails that you receive about this course in a folder called EDPM.

To sort email

The pane to the left of your Inbox screen shows the folders that are in your email account (Figure 23.13).

1 Click on **New Folder** to create and name an additional folder.

2 Type the name of the folder and click **Save**.
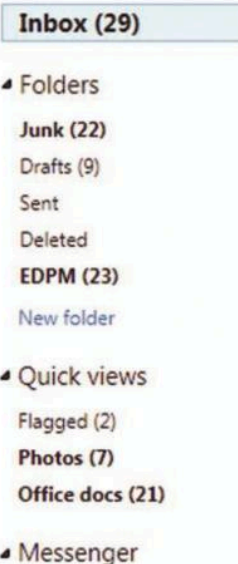
Figure 23.13 *The Folders pane of the Inbox window*

3 Click on **Inbox** in the pane at the left of the screen.
4 Click and drag messages from the inbox list into the folder you have made.

My glossary

Write definitions of the following terms.

Browser
Electronic mail
Facsimile (fax)
Hyperlink
Internet
Internet Service
   Provider (ISP)
Online meetings

Telecommuting
Teleconferencing
Uniform Resource
   Locator (URL)
Web page
Website
World Wide Web

To do

Working with email
As you do this activity, take screen shots of each stage of the process and paste each into a Microsoft Word document that you will save as **email project**.
1 Create an email account.
2 Create an address book with the email addresses of at least five of your classmates.
3 Compose a letter outlining the benefits of email.
4 Create links to three email providers.
5 Paste a screenshot of your email window into **Paint** and save it as **email 1**.
   Make a note of the folder in which you save the picture.
6 Attach your picture **email 1** to your letter.
7 Send your letter to all of the contacts in your address book.

Developing work skills

Prepare a table summarising each skill introduced in this unit and at least one way of performing it.

Examination-type questions

1 Kashmir wants to get familiar with using the Internet but she does not fully understand several things.
   a Help Kashmir by defining the following terms:
      URL   search engine   keyword
         attachment   ISP   *(10 marks)*
   b Explain what a browser is.   *(2 marks)*
   c Kashmir wants to fax a letter from her computer. Clearly explain two methods she may use.   *(4 marks)*

   d She has set up an email account and wants to send the same letter to 10 recipients.
      i) List the steps she should follow to set up an address book for her email account.
      ii) Would it make a difference if she uses **cc** or **bcc** when sending the letters? Explain your answer.
                                    (4 marks)

24 Selecting communication media

By the end of this unit you should be able to:
- Identify factors to be considered in the selection of communication media

Unit at a glance

- When selecting which communication medium to use, the following factors should be considered:

  - Degree of urgency.
  - Genre (oral, written, visual).
  - Level of confidentiality.
  - Location and time zone.
  - Cost, efficiency, effectiveness.

A wide range of media exists for the transmission of business communications. There is the telephone, radio and television for transmitting oral communication. In addition to face-to-face interviews, meetings and conferencing, teleconferencing and video conferencing may be used to transmit messages to the desired audience. Written communication may be sent via instant messaging, electronic mail or facsimile as well as in traditional letters, memoranda, and so on. Visual messages may be communicated by using charts, graphs and signs as well as electronically using multimedia projectors. A number of factors should be considered when choosing the medium or channel to be used for conveying a message including:

- Degree of urgency.
- Genre (oral, written, electronic).
- Level of confidentiality.
- Location and time zone.
- Cost, efficiency, effectiveness.

Urgency

The urgency of communication relates to the time period within which the message must reach the recipient for action to be taken and/or feedback delivered. Time is a major consideration when selecting the medium to be used in transmitting a message. If a message needs to reach its recipient immediately, then electronically facilitated media such as facsimile or email will be best. Communication that is less time sensitive can be sent by conventional mail.

Genre

The genre or nature of the message influences the choice of media. Communication must be written if a permanent record is necessary or if it is required by law. For example, governmental agencies may require a response in writing within a stipulated period of time. The amount of detail or length of the message also influences the choice of media. Where the information is long and complicated it is best to choose a form of written communication such as a letter, report, brochure or web page. This allows the recipient to re-read the information as many times as necessary in order to understand it. Shorter, simple messages may be communicated orally. A memorandum can be used for written communication within an organisation. Visual communication is achieved by using graphics such as

organisational charts or flowcharts. Presentations such as PowerPoint or Corel Show also allow visual communication.

Level of confidentiality

The different types of communication media offer varying levels of privacy and this is an important consideration when transmitting confidential messages. A sealed letter that is hand-delivered to the recipient is one of the most confidential means of communication. Electronic mail is not usually confidential. Unauthorised persons can access, copy and change emails if they are not protected by special programs called encryption software. Additionally the recipient can forward the email to a third party, although it is unethical to do so without the consent of the original sender. Although a fax is routed to a single telephone user, there is no guarantee that the intended recipient will be the one to collect the fax unless arrangements have been made in advance. Several communication media are intended to be public, e.g. signs and announcements over the radio, television and public address systems.

Location and time zone

Messages may be transmitted within an organisation (internal communication) or to persons outside the organisation (external communication). It may be within the country or region (local), international or global. Most of the internal communication in a business may be done face to face or by using memoranda (memos). External communication may be achieved via telephone, letters, printed publications or the electronic media.

It is now common for businesses to have dealings with organisations around the globe. A company in the Caribbean may buy from and sell to markets in Europe, Asia and the Americas. A large number of multinational corporations have operations in this region. Consequently it is necessary to have an understanding of time zones in regions around the world. You probably know, for example, that when the West Indies cricket team is playing in Australia, cricket fans in the West Indies must listen to the live coverage while it is still night in the Caribbean. What if you needed to communicate with a Japanese company? What will be the best time to make a telephone call or set up a video conference? It might be more feasible to use letters or email to communicate with persons in countries with significantly different time zones.

Several websites offer features that enable users to quickly calculate the time in other parts of the world. Some examples include:

- www.timeanddate.com
- www.timezoneconverter.com
- www.travelmath.com.

To do

Research time zones and then answer the following questions:

1 If it is 10.00 a.m. in your country, what time is it in each of the following cities?
   a Brasilia, Brazil.
   b Manila, Philippines.
   c Beijing, China.
   d Addis Ababa, Ethiopia.
2 What time is it in your country when it is 8.00 a.m. in each of the following cities?
   a Los Angeles, US.
   b London, England.
   c New Delhi, India.
   d Tokyo, Japan.

Cost, efficiency and effectiveness

All communication comes at a cost. Even oral communication has a cost, because the time taken to communicate may have otherwise been spent producing goods or services for sale to earn a profit. Telephone calls are a popular means of communicating with persons who are not physically present.

However, a growing number of businesses are finding that it is more affordable to use computer technology for communicating.

The desired level of **personal contact** will logically influence the choice of communication media. Direct oral communication allows for the highest level of personal focus, with telephone calls being a little less personal.

The **targeted audience** must always be considered when selecting communication media, because communication is ineffective if it is not received and correctly understood by the intended recipient. Where the audience is small and nearby, direct oral communication may be the preferred medium. If the sender and recipient are a long way apart, then telephone may be chosen. For larger audiences, a meeting or conference may be necessary if oral communication is preferred. Computer and telecommunications technology may be used to facilitate teleconferencing or video conferencing. The recipient's ability, access to and willingness to use technology is also important. For example, it is not practical to send an email if the recipient does not have Internet access.

Although written communication remains the medium of choice for a significant amount of business communications, the literacy level of the recipients must also be considered. Functional literacy, the ability to use reading, writing and computational skills effectively in everyday situations, is a challenge for some persons. Consequently it may be necessary to use a variety of media to cater for the differing abilities of the recipients. For example, oral presentations in a meeting or conference may be enhanced with visuals such as charts, graphs and photographs using a multimedia projector and followed up by printed handouts, transcripts or reports.

Examination-type questions

1 Give one example of each of the following types of communication:
   a Oral
   b Visual
   c Written
   d Electronic   *(4 marks)*

2 Explain how each of the following issues influences the selection of communication media:
   a Cost
   b Urgency
   c Time zone
   d Confidentiality   *(12 marks)*

3 State which type of communication you would use in each of the situations below.
   a To quickly send a letter to 50 recipients who are in different Caribbean countries.
   b To send copies of a contract to a supplier in a foreign country.
   c To present information to a mixed-ability audience.
   d To publish the annual financial statements of a business to its shareholders.   *(4 marks)*

Filing systems

By the end of this unit you should be able to:
- Distinguish between a manual and electronic filing system
- Identify types of documents for data processing

Unit at a glance

- A manual filing system organises documents by hand using folders in filing cabinets. Some advantages of manual filing are:

  - It enables the organisation and storage of physical documents.
  - It cannot be affected by hackers, viruses or the failure of computer equipment.
  - Employees can use the system with little or no specialised training.

- Some disadvantages of manual filing are:

  - It occupies more physical space and equipment than electronic systems.
  - Records are typically available to one user at a time.
  - It can take a lot of time to organise, find and retrieve documents.

- An electronic filing system organises electronic files on a computer. Benefits of electronic filing systems include:

  - The amount of physical space required for storing documents is reduced.
  - Documents are located and retrieved more quickly.
  - It helps to ensure that only authorised persons are able to access records.
  - The documents are less likely to be misfiled, misplaced, damaged or lost.

- Limitations of electronic filing systems:

  - Records may be lost if the computer system crashes and they can be inaccessible if there is a power failure.
  - Some countries have not yet modified their laws to accommodate electronically stored documents.

- Types of documents for data processing include:

  - Source documents.
  - Turnaround and machine-readable documents.

A filing system is a method of collecting, storing, preserving and allowing the retrieval of information. Each unit of information is called a **record**. Examples of records include:

- The personnel file for an employee.
- Minutes of meetings.
- A sales invoice.
- A contract of employment.

Records are kept as evidence that transactions were performed. Records such as contracts, bills and receipts are routinely created as part of the daily activities of a business. Some records must be created because they are not automatically generated as part of the business activity. Examples include minutes of a meeting, notes from a telephone conversation or correspondence sent and received. Records are used to analyse past performance and plan the future direction of an enterprise. A number of records are legally required according to

government regulations. Not all documents are records. A document is filed as a record if it:

- Is necessary for the successful operation of the organisation.
- Is required by law.
- Serves as evidence of a transaction.

Records should be filed as frequently as possible. In a busy office documents can accumulate very quickly and it is difficult and time-consuming to locate items if documents are disorganised. The item may be misplaced or lost. Proper management of records enables documents to be found easily and helps to keep them clean and neat. It also helps you to function efficiently – there is more on this in Unit 29.

Filing systems

Documents can be stored manually or electronically. A manual filing system organises documents by hand using folders in filing cabinets. An electronic filing system organises electronic files on a computer, creating an electronic database (also see Units 10 and 16). Table 25.1 summarises some advantages and disadvantages of each system.

Table 25.1 *Advantages and disadvantages of manual and electronic filing systems*

Advantages of manual filing	Disadvantages of manual filing
Enables the organisation and storage of physical documents such as signed contracts	Occupy more physical space and equipment than electronic systems
Safe from unauthorised access by computer hackers	Records might be located in a centralised location that is far from the persons who need to use them
Cannot be destroyed by viruses	Records can be destroyed by fire or flood
Files are safe in the event of failure of computer equipment	Records are normally available to only one user at a time
Records can be accessed even when there is no electricity	It takes a lot of time to manually organise, find and retrieve documents
Employees can use the system with little or no specialised training	It is easy for documents to be misfiled or lost
Advantages of electronic filing systems	**Disadvantages of electronic filing systems**
Reduces the physical space required for storing documents	Paper documents must be scanned into the computer system; this can be time-consuming in organisations that have a lot of written communications
Information is immediately available online to workers and customers	Staff must be trained in computerised records management
Reduces the number of staff that must be hired to manage records	Records cannot be accessed if there is a power failure
Increases the speed with which documents can be located and retrieved	Records may be lost if the computer system crashes. Hence there must be a schedule for the automatic backing-up of all records
Records created in various departments are available throughout the organisation	Some countries have not yet modified their laws to accommodate electronically stored documents. Hence the organisation may need to store paper documents, such as signed contracts
Enables documents to be available for viewing by different persons at the same time	Hackers can access, change or destroy records
Files can be password protected to ensure that only authorised persons are able to access records	
Documents are less likely to be misfiled, misplaced, damaged or lost	

Documents for data processing

Data processing involves the entry of records into an electronic filing system. The data can be obtained from the following types of documents:

- Source documents.
- Turnaround documents.
- Machine-readable documents.

Source documents are the documents that are created whenever business is conducted. They are used as evidence to prove that the transaction occurred. You have already learned how to prepare many source documents, such as credit and debit notes, invoices, leases, hire purchase agreements and contracts of work. Source documents usually contain data such as the name of the business and the customer, the transaction type, the date, description of the product or service and the cost. The data from these source documents are typed into the electronic filing system.

In order to improve the speed, efficiency and accuracy of data entry, many businesses choose to use documents that can be entered into the computer system using magnetic ink character readers, bar-code scanners, optical mark readers (OMR) and optical character readers (OCR).

A **turnaround document** is a record of company data that is sent to an external party and then returned to the company's computer system as input. It is a paper document that is designed to gather data that will automatically be entered into the electronic filing system. Turnaround documents are machine readable. A **machine-readable document** can be scanned directly into the computer and does not need to be typed in by a person. It is a fast, efficient and accurate method for inputting data.

Turnaround documents are preprinted forms that:

- Contain information that is produced by the computer.
- Have additional information entered by a person.
- Are 'read' by the computer using OCR or OMR.

One example of a turnaround document is the meter-reading card that is mailed to customers by some electricity companies. These cards contain preprinted information such as the customer name, service address, meter number and billing period dates. The customer is required to shade the numbers that represent the present reading on the meter and then return the card to the company. The card is inserted into a reader that is used to automatically enter the electricity usage into the computer system. This data is then used to produce the electricity bill.

Figure 25.1 *A signature capture pad*

Some businesses have chosen to use electronically generated transaction records in order to reduce the amount of paper source documents that are produced and stored. Many transactions, including purchases and sales, are now done online. Customers have the option of receiving electronic or printed copies of their transaction records. For example,

some banks no longer use withdrawal and deposit slips. Instead, the customers provide the tellers with their account numbers, signatures are recorded electronically on a signature capture pad (Figure 25.1), the transactions are performed on the computer and a computer-generated receipt is produced. An electronic filing system (automated data management system) is used to organise and store all of the records.

Examination-type questions

Reliable Workers Incorporated is an employment agency with branches in several Caribbean countries. The company is planning to change over from manual filing to an electronic system.

1 What are three benefits of making that change? *(3 marks)*

2 State three challenges that the company might face in implementing the electronic system. *(3 marks)*

3 Propose a solution to each of the challenges you identified in point 2. *(6 marks)*

4 Explain the difference between source documents and turnaround documents. *(2 marks)*

5 State three data items that are usually found on a source document. *(3 marks)*

6 State three devices that the company can use to input business data into the computer system. *(3 marks)*

Electronic file management

By the end of this unit you should be able to:
- Manipulate an electronic filing system
- Discuss the traceability of document versions

Unit at a glance

- **Computer files** are identified by their **extensions**, the letters that appear after the full stop (period) at the end of the file name. These extensions tell the computer what kind of file it is and which program to use to open the file. The following are some of the most common file extensions.

Extension	Meaning
.doc	document
.txt	text

.jpg	photograph
.gif	graphic file
.bmp	bitmapped picture
.wav	sound file
.mp3	sound file
.mpg	movie file
.avi	video clip
.exe	executable file, i.e. a file that contains coded instructions for the computer to perform an operation

Files stored in a computer should be organised into a hierarchical structure with folders and subfolders.

Files and folders can be moved by using techniques such as **cut and paste**, **drag and drop** and the **Send to** command.

It is sometimes necessary to create more than one version of a document. To show the successive creation of these files, they can be numbered sequentially, e.g. Ver. 1.1, Ver. 1.2, Ver. 1.3, and so on.

Files and file extensions

The data and programs in your computer are saved as files. Each file in a location has a unique file name. The computer identifies each type of file by using an extension after the file name. When you save

a typed document in Microsoft Word the computer automatically places **.doc** after the file name. This extension tells the computer to use Microsoft Word whenever you open the document. A file with the extension **.exe** contains instructions in binary code that a computer can execute. Programs that you use for various purposes all have the .exe extension.

Pictures may be saved with a variety of extensions. If a file is an image taken with a digital camera or scanner then the extension will most likely be **.jpg**. Some images carry the extension **.gif**. This is an abbreviation of **graphics interchange format**. One version of the gif file format allows several images to be stored in one file. These separate images are then shown in a cycle, creating a simple animation. Many of the animations you

see on the Internet are created this way. A **bitmap** is a picture whose individual pixels (picture elements) can be changed by changing the value of its stored binary code. These files are identified by the extension **.bmp**.

To do

Prepare a list of file extensions and their meanings.

Manipulating an electronic filing system

As you use the computer frequently you will realise the importance of managing files effectively. For example, if you save all of your files in **My Documents** this folder will soon become cluttered. This is equivalent to dumping all the documents for an office into a desk drawer or cupboard. You will find it difficult and time-consuming to find the item you want. To organise your documents it is best to create folders and subfolders.

A well-organised system of folders and subfolders is called a **hierarchical structure**. For example, think of the set of folders and subfolders that your EDPM teacher can use to manage EDPM documents submitted by the students of your school. The main folder might be labelled EDPM Students. Within the EDPM Students folder there might be subfolders for each of the teacher's classes. Inside each class folder there will be a folder for each student in that class. The EDPM documents that you submitted will be found in a folder with your name on it, within a folder for your class, within the EDPM Students folder.

Different versions of a saved filed can be named sequentially. For example, if you were assigned to create a PowerPoint presentation on harmful software, the first presentation you do might be named Malware 1.1. Your teacher might make recommendations for

improvement, but request that you keep the original. The improved versions could be named Malware 1.2, Malware 1.3, and so on. This technique will enable you to trace the successive changes that you have made.

Creating a new folder

To create a new folder:

1 Open **My Documents**. To do this, click **start**, and then click **My Documents** (Figure 26.1).
2 Under **File and Folder Tasks**, click **Make a new folder**. A new folder is displayed with the default name, **New Folder** (Figure 26.2).
3 Type a name for the new folder, and then press **Enter**.
   - You can also create a new folder by right-clicking a blank area in a folder window or on the desktop, pointing to **New,** and then clicking **Folder**.
   - You can follow the same procedure to create a **subfolder**, that is, a folder within a folder. In fact, **My Documents** is a folder, so the folder you create will be a subfolder.

Figure 26.1 *My Documents in the start menu*

Figure 26.2 *A new folder created in **My Documents***

Renaming a file or folder

1   Open **My Documents**. If the file you want to rename is not located in My Documents or its subfolders, use Search to find it. To open Search, click **start** and then click **Search**. (Follow the instructions given for using Search.)

Figure 26.3 *The **File and Folder** Tasks option*

2   Select the file you want to rename.
3   On the **File** menu, click **Rename**.
4   Type the new name, and then press **Enter**.

Moving a file or folder

1   Open **My Documents**. If the file or folder you want to move is not located in My Documents or its subfolders, use **Search** to find it.
2   Click the file or folder you want to move.
3   Under **File and Folder Tasks**, click **Move this file** or **Move this folder**.
4   In **Move Items**, click the new location for the file or folder, and then click **Move** (Figure 26.4).
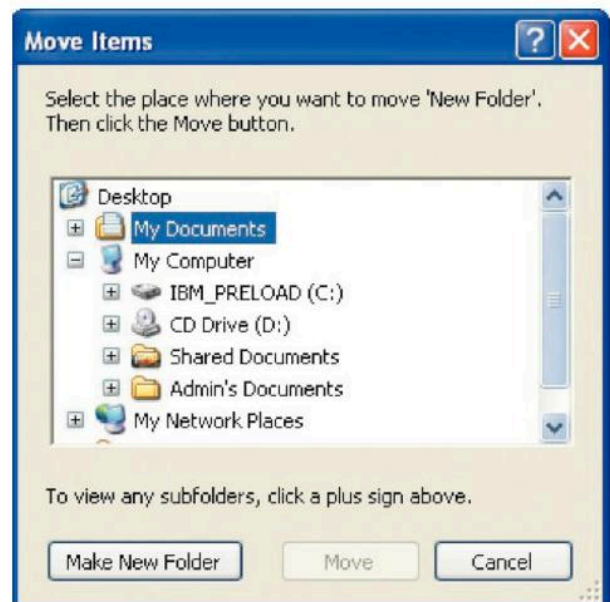
Figure 26.4 *The **Move Items** dialogue box*

If you want to move more than one file you may select them simultaneously. To select a consecutive group of files, click the first file, press and hold down the Shift key, and then click the last file. To select files or folders in non-consecutive order, press and hold down Ctrl, and then click the items you want.

You can also move a file or folder by dragging it to the desired location.

To move files by dragging:

1 Open **Windows Explorer** (Figure 26.5). To open Windows Explorer, click **Start**, point to **All Programs**, point to **Accessories**, and then click Windows Explorer.

2 The left side of the Windows Explorer window shows the folders on your computer (Figure 26.6). Click on a folder in this section to select it. The right side of the window shows the contents of the selected folder. The plus sign (+) next to some folders indicates that they contain subfolders. Search the folders and subfolders to find the file or folder you want to move as well as the destination folder.

Figure 26.5 *Finding Windows Explorer*

3 Left-click with your mouse on the file or folder. Hold the left mouse button in whilst you drag the file/folder to the destination.

Another way of moving a file or folder is by using **Cut** and **Paste**.

1 Right-click on the file or folder you want to move. Click on **Cut** in the pop-up menu that appears.

2 Click in the destination you want to place the item. Right-click and select **Paste** from the pop-up menu.
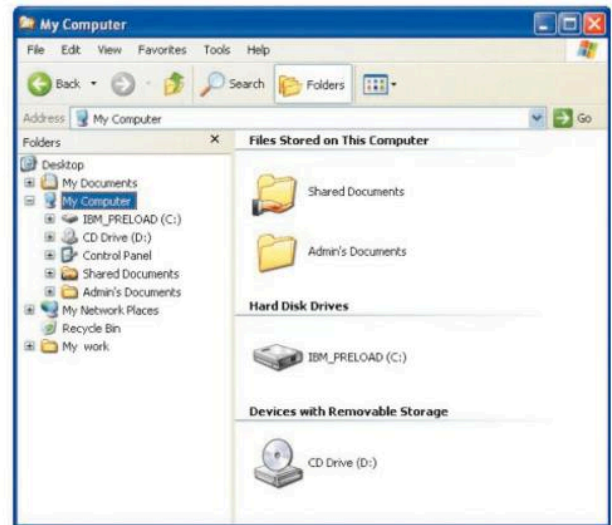
Figure 26.6 *Using Windows Explorer*

To do

Apply these steps to move any document that you have typed from the **My Documents** folder and place it in the **Articles** subfolder.

You can send a file or folder to **My Documents** or to a removable storage device such as a floppy disk or flash drive. Click with your right mouse button on the item that you want to move. Point to **Send To** and select the location to which you wish to send the item (Figure 26.7).

Open	
Edit	
New	
Print	
@ Scan EDPM text outline.doc	
Open With	▶
Send To	▶
Cut	
Copy	
Create Shortcut	
Delete	
Rename	
Properties	

- 🗀 Compressed (zipped) Folder
- 🗐 Desktop (create shortcut)
- 🗐 Mail Recipient
- 🗀 My Documents
- 🗐 Removable Disk (E:)
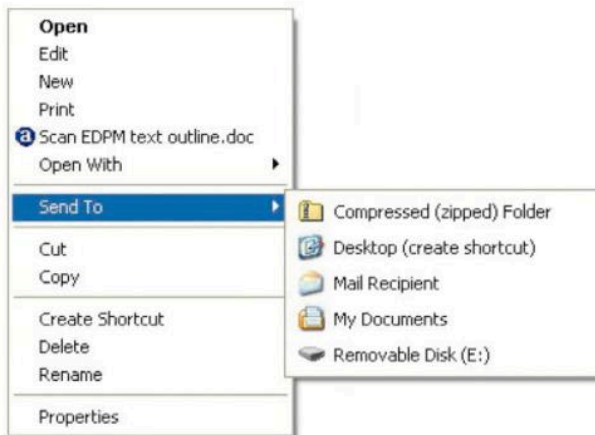
Figure 26.7 *The Send To option in the pop-up menu*

If you send an item to a removable storage device a copy is made and the original remains on the hard drive.

To do

Open the **Articles** subfolder. Send the documents you placed there to **My Documents**.

Creating shortcuts

If you drag an item while pressing the right mouse button, you can move, copy or create a shortcut to the file in its new location. A shortcut is a link to any item accessible on your computer or on a network, such as a program, file, folder, disk drive, web page, printer or another computer.

You can put shortcuts in various areas, such as on the desktop, on the **start** menu or in specific folders. Deleting a shortcut has no effect on the file or program to which it is linked.

To do

Create a shortcut to the **Articles** folder on the desktop.

Copying files or folders

You may want to copy a file or folder instead of moving it.

1. Open the location in which the item is stored.
2. Click the file or folder you want to copy.
3. Under **File and Folder Tasks**, click **Copy this file** or **Copy this folder**.
4. In **Copy Items**, select the drive or folder you want to copy to, and then click **Copy**.

Copying while dragging

- To copy an item, press and hold down Ctrl while dragging.
- If you drag an item to another disk, it is copied, not moved. To move the item, press and hold down the Shift key while dragging.
- Dragging a program icon to a new location creates a shortcut to that program.

You should note that some files cannot be copied by dragging and dropping. For example, if you try to drag and drop a program, a shortcut will be created instead. The program file remains in its original location, but you will be able to use the shortcut to open the program.

To do

Make a copy of the **Articles** folder on the desktop.

Deleting a file or folder

To delete a file or folder:
1. Click the file or folder you want to delete.
2. Under **File and Folder Tasks**, click **Delete this file** or **Delete this folder.**

The file or folder will be sent to the **Recycle Bin**.

To delete files in the Recycle Bin:

1. On the desktop, double-click **Recycle Bin**.
2. To delete an item, right-click it, and then click **Delete.**

3 To delete all of the items in the Recycle Bin, on the **File** menu or **Recycle Bin Tasks** click **Empty the Recycle Bin**.

WARNING! Deleting an item from the Recycle Bin permanently removes it from your computer. Items deleted from the Recycle Bin cannot be restored.

You can also delete items by dragging them into the Recycle Bin. If you press Shift while dragging, the item is deleted from your computer without being stored in the Recycle Bin.

To do

Send the **Articles** folder on your desktop to the Recycle Bin. Be careful not to permanently delete it by emptying the Recycle Bin.

Restoring a file and folder

- To retrieve a file you have deleted, double-click the **Recycle Bin** icon on your desktop. Right-click the file you want to retrieve, and then click **Restore**.
- Restoring an item in the Recycle Bin returns that item to its original location.

To do

Restore the **Articles** folder.

Some items are not stored in the Recycle Bin and so cannot be restored. These include:
- Items deleted from network locations.
- Items deleted from removable media (such as 3.5 inch disks).
- Items that are larger than the storage capacity of the Recycle Bin.
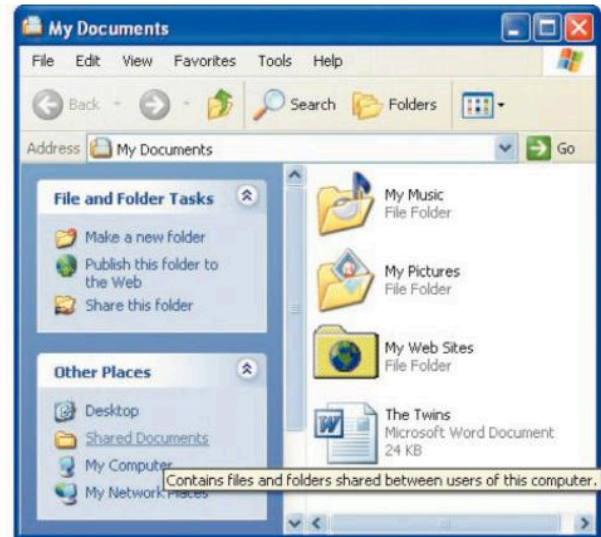
Figure 26.8 *The **Shared Documents** option*

Sharing a file or folder

Shared files and folders become available to other users when they log on to the computer. To share files and folders on your computer:

1 Open **My Documents**.
2 Click the file or folder you want to share.
3 Drag the file or folder to **Shared Documents** in **Other Places** (Figure 26.8).

If you are connected to a network, the Shared Documents, Shared Pictures and Shared Music folders are not automatically available. To be available to all users, shared files must be placed on the network server.

Formatting a storage medium

Storage media such as rewritable compact disks, floppy disks and flash drives must be **formatted** before they can be used. Formatting lays down clearly defined recording areas. Most storage media are formatted when they are produced (pre-formatted). However, sometimes you might need to reformat the medium. Formatting erases all of the data that is on the storage medium, so be very careful when using this feature.

To format a storage medium:

1 Insert the medium into the disk drive or USB slot.
2 Click on **My Computer** in the **start** menu. A window showing all of the computer storage devices will open.
3 Right-click on the storage device icon.
4 Select **Format...** from the menu that appears.
5 Click **Start** in the box that appears.

Remember that when you format a disk all of the previous information is erased.

When you format a disk the computer scans it to identify whether there are any bad sectors. The **Quick Format** option removes files from the disk but does not scan the disk for bad sectors. Use this option only if this disk has been previously formatted and you are sure the disk is not damaged.

Labelling a storage medium

The format disk dialogue box allows you to label your storage medium by clicking and typing in the **Volume label** section. For example, if your storage medium contains your term's projects, you may type your name followed by the letters EDPM.

Observe the following guidelines when labelling storage media:

- Your systems software may limit the length of your volume label to 11 characters, although some may permit as many as 32 characters.
- Do not use the following characters when typing your volume label:
  * ? / \ | . , ; : + = [ ] < > "

To do

1 List the procedures that help to organise the files on your computer.
2 List the measures that help to maintain file security on your computer.
3 List the methods that will ensure that your computer performs at its best.

My glossary

Write definitions of the following terms.

Bitmap
File extension
Formatting

Developing work skills

1 You are responsible for maintaining the computers in your office. Prepare a list of guidelines to assist your co-workers in keeping your computers secure and well organised.

2 Prepare a table that summarises each skill introduced in this unit and at least one way of performing it.

Examination-type questions

1 State two guidelines that should be followed when labelling storage media. *(2 marks)*

2 a What is a file extension? *(2 marks)*
   b Give three examples of file extensions and state what they each mean. *(3 marks)*

3 a Explain two measures you can take to maintain the order of the files on a computer. *(4 marks)*
   b What are three benefits of keeping your files well organised? *(3 marks)*

4 List the steps that should be followed to:
   a Create a folder *(3 marks)*
   b Restore a deleted file *(3 marks)*

27 File integrity and security

By the end of this unit you should be able to:
- Discuss issues related to the integrity and security of files
- Discuss issues related to the retention of files

Unit at a glance

- The safety and integrity of files can be ensured in the following ways:

  - Using passwords to ensure confidentiality of files.
  - Applying read-only access and overwrite protection.
  - Restricting access.
  - Virus protection and encryption.
  - Disaster recovery strategies.
  - Fireproof and waterproof cabinets.

- It is a legal requirement and sound business practice to retain files for an appropriate period of time.

- **Archiving** is the process of removing records from the active filing system to a storage area.

- **Retention periods** indicate the period of time for which a type of record must be kept by a business. Some retention periods are specified by law.

- Records that are no longer needed should be disposed of properly. Electronically stored data can be retrieved from a computer even if they have been deleted.

- Applying read-only access and overwrite protection.
- Using passwords to ensure confidentiality of files.
- Restricting access by locking away confidential files when they are not in use.
- Using virus protection and encryption.
- Developing and using disaster recovery strategies such as the frequent backing up of files to an external storage medium.
- Storing files in waterproof, fireproof cabinets.

You will learn how to perform some of these file security techniques in this section (Figure 27.1).

Figure 27.1 *Elements of file security and integrity*

Write protecting a file

Sometimes you may want to ensure that people do not change a file to which they have access. For example, you may design a company's employment application form

It is important for an organisation to ensure that the information system is safe from unauthorised access, alteration, tampering or destruction of records. This includes:

using Microsoft Word. You may want to have this available so that all office workers can print a copy when necessary. However, you may want to ensure that they do not make changes to your carefully planned layout. To write protect the document:

1 Open **My Documents**.
2 Right-click on the file you want to write protect.
3 Select **Properties** from the pop-up menu that appears.
4 Click on **Read-only** in the Attributes section of the **Properties** dialogue box (Figure 27.2) so that a check mark appears in the box. Click **OK**.

Figure 27.2 The **Properties** dialogue box

You may also write protect a file by doing the following:

1 Open the document.
2 Click **Tools** in the menu bar, then click **Options...** (Figure 27.3).
3 Click on the **Security** tab.
4 Click **Read-only recommended** so that a check mark appears in the box. Click **OK**.
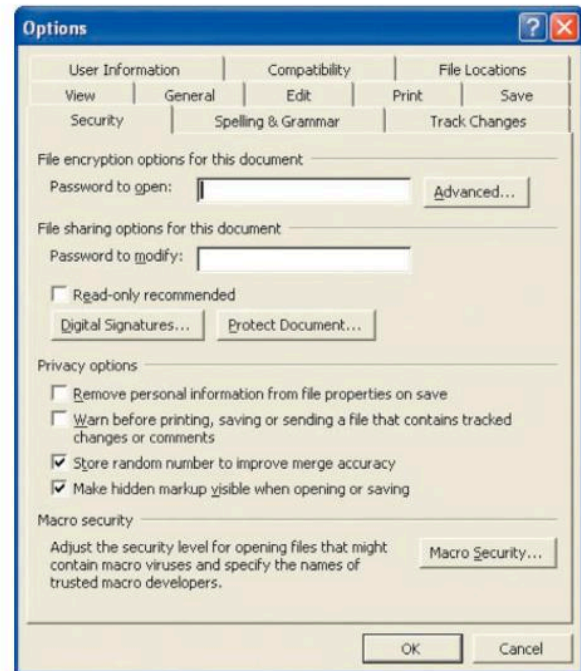
Figure 27.3 The **Options** dialogue box

You can open and make changes to a read-only document. However, you will be unable to save the changes you have made. If you attempt to save the changed document, the **Save As** dialogue box will appear and you will have to save it with a new file name. The original document will remain unchanged.

DID YOU KNOW?
The term **metadata** refers to the set of structured data that describes the characteristics or attributes of a file. It includes the identity of the person who created the file, the dates that it was created, modified and accessed, its size, and so on (See Figure 27.2).

To do

Write protect a document that you have saved. Open the document and type a new paragraph. Click **File** and **Save**. What happened? Do you know why?

Password protection

For a higher level of security you may require a password to be used to open and/or make changes to the file. A password is a security measure used to restrict access to sensitive files. To password protect a file:

1 Open the file.
2 On the **Tools** menu, click **Options...**, and then click **Security**.
3 Do one of the following:
    (a) If you want to create a password to open the file:
        (i) In the **Password to open** box, type a password, and then click **OK**.
        (ii) A box will appear asking you to confirm the password (Figure 27.4). In the **Reenter password to open:** box, type the password again, and then click **OK**.
        The password will appear as a series of asterisks or some similar **placeholder** symbol. This prevents an onlooker from seeing your password.
    (b) If you want to create a password to modify or change the file:
        (i) In the **Password to modify** box, type a password, and then click **OK**.
        (ii) In the **Reenter password to modify**: box, type the password again, and then click **OK**.

Figure 27.4 *The* **Confirm Password** *dialogue box*

Remember that if you forget the password you will be unable to open the document.

Use a password with a combination of upper- and lower-case letters, numbers and symbols, for example 82see*B. Your password should be about eight characters long. Memorise your password so that you do not have to write it down.

To do

Password protect your document.

To remove a password

1 Open the document.
2 Enter the password when asked.
3 On the **Tools** menu click **Options...**, and click the **Security** tab.
4 In the **Password to open** box or the **Password to modify** box, select the placeholder symbols that represent the existing password.
5 Press **Delete**, and then click **OK**.

To change a password

1 Open the document.
2 Enter the password when asked.
3 On the **Tools** menu click **Options...**, and click the **Security** tab.
4 In the **Password to open** box or the **Password to modify** box, select the placeholder symbols that represent the existing password.
5 Type the new password, and then click **OK**.
6 Re-enter the new password, and then click **OK**.

To do

1 Change the password to your document.
2 Remove the password from your document.

Antivirus and encryption

In Unit 7 you learned about using an antivirus program to protect your computer from harmful software. However, antivirus software does not protect computer files from hackers. **Encryption** is one means of protecting files from unauthorised access. Encryption is the process of scrambling the code that makes up a file so that it appears in a different pattern. This makes the file impossible to read. The person performing the encryption is given an **encryption key**, which is the sequence of characters that is used to scramble the file. The file can only be used if it is decrypted or restored to its original code. The user must first provide the correct encryption key before the file can be decrypted.

Encryption is the strongest form of file protection that is provided by the Windows operating system. Encryption is also used to protect sensitive information such as a customer's name, address, phone number and credit card number when business is transacted online.

Firewalls

A **firewall** is a set of related programs designed to control all incoming and outgoing messages on a computer network, protecting it from unauthorised access (hackers) and destructive or offensive websites.

Using backup

The backup utility helps you create a copy of the information on your hard disk. If the original data on your hard disk is lost or damaged, you can use the copy to restore the information on the hard disk. You will need a CD-RW or DVD-RW drive and disk to store the backup information.

To start backup, click **start**, point to **All Programs**, point to **Accessories**, point to **System Tools**, and then click **Backup** (Figure 27.5). Follow the on-screen instructions.

Figure 27.5 *The backup utility*

Error checking

You can use the **Error-checking tool** to check for file system errors and bad sectors on your hard disk.

1 Open **My Computer**, and then select the hard disk you want to check.
2 On the **File** menu, click **Properties**.
3 On the **Tools** tab, under **Error-checking**, click **Check Now...** .
4 Under **Check disk options**, select the **Scan for and attempt recovery of bad sectors** check box.

Using the disk defragmenter

Fragmentation is the scattering of parts of the same disk file over different areas of the disk. Fragmentation occurs as files on a disk are added, updated or deleted. When files are updated, the computer tends to save these updates on the largest continuous space on the hard disk, which is often on a different sector from the other parts of the file.

When files are fragmented, the computer must search the hard disk each time the file is opened to find all of the file's parts. Fragmentation therefore slows down response time. Defragmentation is the process of rewriting fragmented parts of a file to nearby sectors on a hard disk. This increases the speed at which information is accessed and retrieved. The **Disk**

Defragmenter also consolidates the free space on the hard disk, making it less likely that new files will be fragmented.

To open **Disk Defragmenter**, click **start**, point to **All Programs**, point to **Accessories**, point to **System Tools**, and then click **Disk Defragmenter** (Figure 27.6).
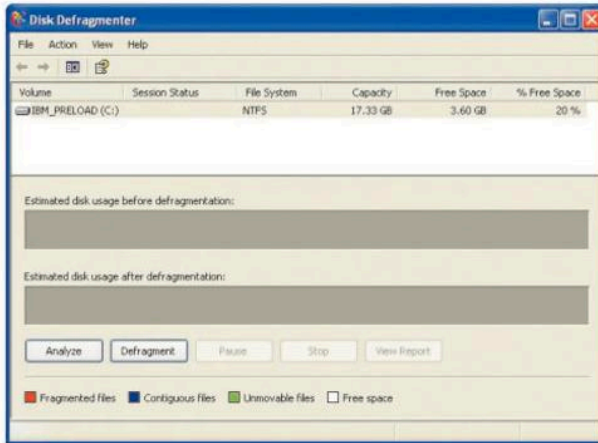
Figure 27.6 *The **Disk Defragmenter** utility*

File retention

Each business should have a file retention policy that specifies the period of time for which a record should be retained. In many countries business letters must be retained for at least three years and financial records must be kept for a minimum of seven years. Other records may be identified as permanent records that should never be destroyed. Some examples of permanent records are company registration documents, contracts, annual financial statements and tax returns. The organisation should ensure that:

● An inventory of records is maintained.
● Records are classified according to their purpose and retention period as Permanent, Temporary, Current, Inactive, and so on.
● Files are periodically examined to determine whether they are to be retained or disposed of.

The organisation's policy for retaining records is determined by several factors, including:

● How often the record is requested or used.
● What type of information it contains.
● What laws govern the period of retention.
● How useful the information will be in future decision making.

It is beneficial for an organisation to have a retention system with a planned, systematic method for dealing with outdated files. Some of the benefits are:

● It is easier to retrieve records.
● It saves space and prevents overcrowding.
● Filing equipment and computer storage space is utilised more efficiently.

Archiving

Archiving is the process of relocating records from the active filing area to storage. For example, disks containing scanned documents that are no longer in use can be stored in an archive. Records are archived if they have legal, financial, administrative, or historical value. Factors that must be considered when creating an archive area include:

● Size: is the area capable of accommodating future storage needs?
● Access and security: is it conveniently close to the office area? Is it safe from unauthorised access? Is there a system for documenting when a record is removed from the archive?
● Environmental controls: can the temperature and humidity be regulated? Is it safe from the risk of water damage in the event of a flood? Is it safe from fire?
● Work area: is there adequate shelving? Is it well lit and well ventilated?
● Maintenance: is the area cleaned and maintained to prevent the accumulation of dust and clutter?

- Organisation: are the records placed in storage cartons? Are they well labelled with the department name and date of archiving? Is there an index of archived records?

Disposal of files

Records that are identified as worthless at the end of their retention period can be permanently removed from the filing system and destroyed. Some documents may simply be discarded in the rubbish. However, sensitive documents must be shredded or incinerated. This includes documents that contain information given in confidence, personal details about individuals, or commercial, legal or financial information. To ensure the safety of sensitive information, the hard drives from old computers should be removed and destroyed before the computers are discarded. Failure to do so can have serious consequences. For example, in 2000 a bank in the UK sold an old computer without ensuring that the hard drive was destroyed. Thousands of financial records of customers were later retrieved.

My glossary

Write definitions of the following terms.

Backup
Defragmentation
Fragmentation

Password
Write protect

Examination-type questions

1 Explain the difference between the following terms as they relate to the protection of computer files:
   a Encryption and backup
   b Write protection and password protection *(4 marks)*

2 List the steps that need to be taken to write protect a file. *(4 marks)*

3 State three factors that should be considered when deciding on the retention period for documents. *(3 marks)*

4 What is meant by archiving? *(2 marks)*

5 State three factors that should be considered when selecting an archive area. *(3 marks)*

6 Explain why unwanted files should be disposed of properly. *(2 marks)*

7 State two effective disposal methods for unwanted documents. *(2 marks)*

28 *Intellectual property*

By the end of this unit you should be able to:
- Explain the concept of intellectual property
- Describe the rights that are protected by intellectual property laws
- Explain the concept of copyright
- Explain the concept of plagiarism
- List guidelines to avoid plagiarism

Unit at a glance

- The term 'intellectual property' denotes the specific legal rights of people who produce, gather or disseminate ideas and information, including inventors, authors, singers, film makers and journalists.

- Moral rights protect the integrity and reputation of the author from misrepresentation or misquoting of the work.

- Economic rights involve the payment for use of a product by a third party.

- Copyright enables the producer of a work to control the use of the material in a number of ways including:

  - Making copies and issuing them to the public.
  - Publishing the work online.
  - Broadcasting or performing the work in public.

- Plagiarism is the use of another person's intellectual property without clearly acknowledging the source of the ideas.

- To avoid plagiarism you should:

  - Use the information to develop your own ideas.
  - Obtain approval for the use of the work of another person.
  - Use a bibliography to cite all sources of information.

These days we have access to technology and websites that mean we can make exact copies of work such as disks, books, songs or movies that have been produced by others. The United Nations has set up the World Intellectual Property Organization (WPO) to define and establish guidelines that govern the use of work produced by others. This unit summarises some of these guidelines.

Intellectual property

The term **intellectual property** denotes the specific legal rights of persons who produce, gather or disseminate ideas and information including inventors, authors, singers, film makers and journalists. Their work is the product of the mind and involves their creativity, innovation and self-expression.

Table 28.1 shows some terms commonly used in connection with intellectual property.

Intellectual property protects the way in which the ideas and information are expressed and not the ideas themselves. For example, two authors may write about the same topic without infringing intellectual property. However, if one author uses words, scenes, a plot or characters from the other's work then intellectual property has been violated.

Intellectual property protects the economic and moral rights of the owner of the work.

Table 28.1 Intellectual property terms

Term	Exclusive rights of owner
Copyright	To control reproduction or adaptation of creative and artistic works for a certain period of time. Copyright protects works such as music, books, software, films, paintings and photographs
Industrial design right	To own and use the style or form of appearance of an industrial object such as the patterns on a carpet, the design of furniture or parts of a machine
Patent	To commercially exploit (produce and sell or rent) a new invention, whether it is a product or a process, for a certain period of time (usually 20 years). The patent holder must register the product to obtain this right

Term	Exclusive rights of owner
Plagiarism	To be clearly acknowledged as the source of ideas and words used in written or performed work including speeches
Trade secret	To hold secret information concerning the commercial practices or knowledge of a business, for example KFC's 11 herbs and spices or Angostura's bitters recipe
Trademark	To use a distinctive sign to differentiate the products or services produced by a particular business. Trademarks must be registered

Economic rights involve the right to receive payment for use of the product. The owner of the property can control the way in which it is used. For example, if you write and film a play, you have the right to be paid if it is broadcast on television.

Moral rights protect the integrity and reputation of the author from misrepresentation or misquoting of the work. This means that a person should not isolate sections from a work and then put them together in such a way that it distorts the writer's original message. Moral rights include not having a work falsely attributed to the author.

Copyright

Copyright occurs automatically when there is some record of what has been created. For example, if you compose a poem, letter or email then you automatically own the copyright of that document. Copyright enables the producer of a work to control the use of the material in a number of ways. A copyright holder may permit or prohibit the following:

- Making copies by any means including typing, photocopying, scanning into a computer, taping live or recorded music and copying CDs or DVDs.
- Issuing copies of the work to the public. However, if a legal copy is already in circulation then that copy can be sold. Copyright holders can control the rental of their product. For example, if a DVD is sold for home use only, then renting it out at a video club would be illegal.
- Publishing the work on the Internet or making it available online for download to a computer.
- Broadcasting or performing the work in public.

People affected by copyright include the following:

- **Producers or owners** are the people who own or control the material and receive financial reward from those who publish or use their work.
- **Publishers or distributors** are the people or organisations who make legal agreements with the producers to print, film or record the work and distribute it. The agreement seeks to secure financial

rewards for both the producer and the publisher and prevents the unethical use of the work.

- **Consumers or users** are those who can access and use the work of the copyright owner. The consumer must acknowledge the source of the information. If a substantial part of the work is being used in another published work, the user must seek permission from the producer through the publisher. A fee may be charged for the use of the work.

Plagiarism

Plagiarism is the use of someone's intellectual property without properly acknowledging the source. This includes the close imitation of a work. The aim of plagiarism is to unfairly get credit for someone else's work. For example, a student may take a source document and change a few words or alter the sequence of the ideas and then pass it off as their own. This is plagiarism.

The following guidelines will help you to avoid plagiarism:

- Read the source documents and make notes in your own words.
- Use the information to develop your own ideas.
- Use several different sources of information rather than relying on one or two texts.
- Acknowledge the source of any ideas, opinions or theories that are not your own.
- Indicate when you are quoting or paraphrasing another person's words.
- Obtain approval from the producer before using a substantial part of any work. A substantial part may be as small as a verse from a poem or a paragraph from an essay. For example, using the chorus from an existing song when composing a calypso may be considered a substantial part. However, if you are

doing an analysis or discussion of a work you may quote as often as you wish from that work. For example, if you are analysing Shakespeare's *Romeo and Juliet* then you may quote liberally from the play. However, even then you must obtain permission if you quote more than 50 words in one block.

- State the source of any pieces of information that are not common knowledge including statistics, graphs, charts, drawings and photographs.

References and bibliographies

References and bibliographies must be used whenever you prepare a document that includes information that you have obtained from someone else's work. Several styles are used to create bibliographies. However, it is recommended that you use the **APA style** for your CSEC documents. The APA style, developed by the American Psychological Association, offers the following guidelines.

Books

- Use a hanging indent of three spaces (approximately ¼ inch).
- List the author, surname first with initials for given names. When there are two authors separate their names with an ampersand (&).
- Type the year of publication within parentheses followed by a full stop.
- Type the title of the book in italics or underscored.
- Capitalise only the first word of the title and subtitle and proper nouns.
- Type the place of publication followed by a colon, then type the publisher's name.
- Where you use two or more works by the same author, cite them chronologically.

Example

Jacob, A. & Augustine, A. (2012). <u>Electronic document preparation and management.</u> Cheltenham: Nelson Thornes.

Internet

- List the author, surname first with initials for given names. When there are two authors separate their names with an ampersand (&).
- For online newspapers or magazines type the year of publication followed by a comma, then the month and day in parentheses followed by a full stop.
- Type the title of the article with initial capitals for major words.
- Type the name of the book, journal or complete work and volume number in italics or underlined, if that information is provided, followed by a full stop.
- Type the word **Retrieved** followed by the date of access and the source followed by a colon.
- Type or paste in the URL.

Example

Caines, K. (2005, May 12). Library and Research Skills Explained. _Trinidad Library Online._ Retrieved 3 December 2011 from the World Wide Web: http://www.trinilib.edu/resskill.pdf

The American style for typing dates is as follows: Month/Date/Year, for example May 5, 2012. In the Caribbean the UK style is more commonly used: Date/Month/Year, for example 5 May, 2012.

My glossary

Write definitions of the following terms.

Copyright	Patent
Consumers	Plagiarism
Economic rights	Producers
Industrial design right	Publishers
Intellectual property	Trade secret
Moral rights	Trademark

Examination-type questions

1. a i Explain the concept of intellectual property. *(3 marks)*
   ii What rights are protected by intellectual property? *(3 marks)*
   b What is the difference between plagiarism and copyright violation? *(3 marks)*
   c You have to prepare a research paper. Outline the steps that you will follow to ensure that you do not commit plagiarism. *(6 marks)*

2. Define the following terms as they relate to copyright:
   a Producers.
   b Publishers.
   c Consumers. *(3 marks)*

3. Write out the following reference in APA style: The book called Writing Winning Letters was written by Peter Evans, Robin Mahabir and Jenny Choo and published by International Publishers of Bridgetown Barbados in 2010. *(2 marks)*

29 Desirable work habits and attitudes

By the end of this unit you should be able to:
- Plan and order priorities to ensure acceptable standards of work
- Demonstrate awareness of desirable habits and work attitudes

Unit at a glance

- Ensure acceptable standards of work:

  - Organisation of work.
  - Quality of assignments for submission.
  - Effective time management.
  - Follow-up procedures.

- Elements of desirable habits and work attitudes:

  - Individual responsibility or working without supervision.
  - Willingness.
  - Meeting deadlines.
  - Team spirit.
  - Cooperation.
  - Recognition of diversity.
  - Courtesy.
  - Punctuality and regularity.
  - Good grooming.
  - Personal integrity.
  - Respect for others.

Standards of work

The skills you acquire during this course will be valuable as you pursue your career after leaving school. The world of work is far more demanding than school. You are expected to consistently produce high standards of work. There are far fewer allowances for errors. You should start to develop now the skills, ethics and moral values that will make you a valuable member of your society. Let us examine some guidelines that will assist you.

Organisation of work

- Arrange your work area so that you can function efficiently and effectively.
- Ensure that items frequently used are always close at hand.
- Make a list of tasks that must be done and stick to it. Tasks should be scheduled in order of priority. Check and amend your list daily.

Standard of assignments for submission

Your work is a reflection of yourself. Ensure that your assignments are always of the highest possible quality and mailable standard. A document is of mailable standard if the layout used is appropriate and it is free of errors.

- Make sure that all assignments are neat and well organised.
- Ensure that your information is accurate, relevant, sufficiently detailed and well researched.
- Make certain that your work is free from errors in grammar, spelling and punctuation.
- Business documents must be prepared according to established rules and guidelines.

Follow-up procedures

- Ensure that your documents are saved where they are safe and can be easily retrieved.
- When work is returned for improvement, make the required corrections promptly.
- Maintain a checklist and mark off assignments as you complete them.

Elements of desirable habits and work attitudes

Individual responsibility

- Be prepared to work without supervision.
- Know what you have to do and **do it without having to be reminded**.

Willingness

- Be enthusiastic about your work.
- Be keen to accept responsibilities and face new challenges.

Meeting deadlines

- Make careful notes of all deadlines for work.
- Develop a detailed plan of what needs to be done by a specified time so that the deadlines can be met comfortably.
- Use reminder systems. Consult them, your teacher and class where necessary before making decisions/appointments.
- Ensure that dates and times are correct and agreed upon.
- Ensure that assignments are allotted reasonable time for completion.

Team spirit

- Be willing to work together with others to achieve common goals.
- Accept responsibility as a group member for the outcomes of the group's activities.
- Come up with ideas, even if they are not eventually accepted by the group.
- Do your fair share of the group's activities.

Figure 29.1   *What effect does your work area have on your ability to function efficiently?*

- Papers should be presented in a neatly labelled, attractive folder.
- Electronically presented assignments (such as PowerPoint presentations) should be saved on a well-labelled CD or diskette.

Effective time management

- Always be punctual.
- Use an electronic or paper diary to record all assignments.
- Aim to complete work assignments well in advance of deadlines.
- Avoid distractions.
- Motivate your study group to take early action and prepare a research timetable.
- Consult with your teacher and parents/guardian to prepare a home-study timetable.

Cooperation

- Be willing to listen and accept other people's ideas.
- Modify your own ideas to fit with emerging plans and decisions.
- Work together with others to achieve common goals and share in decision making.

Recognition of diversity

- Recognise that each individual has different strengths, weaknesses, talents and skills.
- Do not expect that others will think and act exactly the way you would.
- Show equal respect and courtesy to persons of all ethnic groups.
- Avoid prejudice of all kinds.

Courtesy

It is said that courtesy is the oil that reduces the friction caused when we interact with others. It is important for us to be courteous at all times.

- Be polite in your dealings with all people.
- Make it your habit to greet people upon entering a room.
- Learn how to introduce yourself to strangers that you meet in the course of your work.

- When answering the telephone state the name of the organisation and then state your name.
- Use expressions such as **please**, **thank you**, **I am sorry**, **how may I help?**, **you are welcome**.

Punctuality and regularity

Being punctual and regular contributes to efficiency and helps you to become reliable.

- Always arrive in good time. Make allowances for unexpected delays such as traffic congestion or vehicle breakdowns.
- Be on time for all appointments.
- Avoid being absent, especially for trivial reasons.

Good grooming

Good grooming improves self-confidence and will eventually be a good sales pitch for you and your future employer.

- Ensure that your appearance is neat and consistent with the requirements of your workplace.
- If a uniform is used, conform to all the requirements.
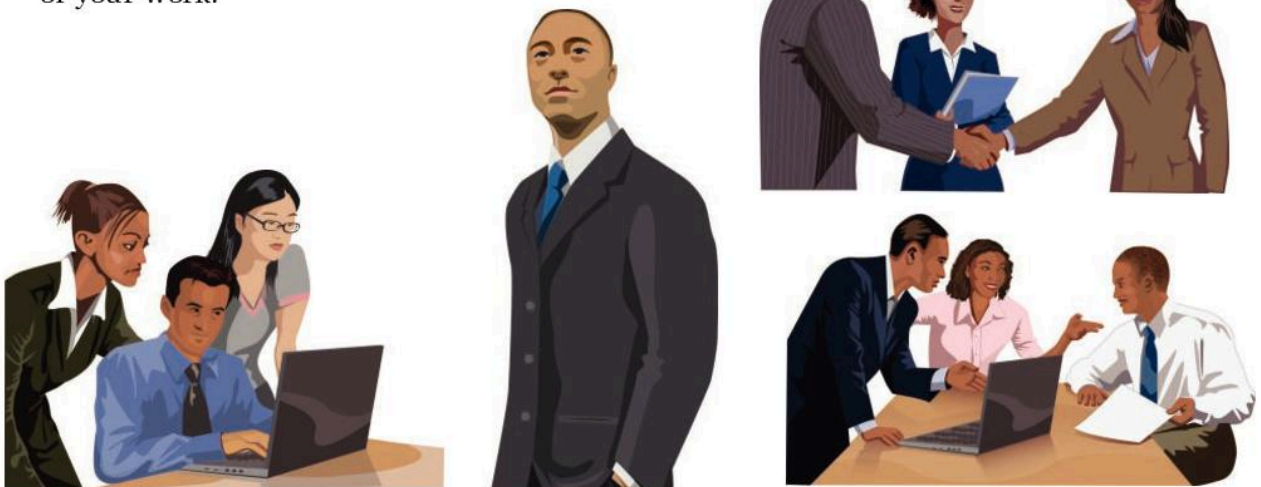
Figure 29.2 *Discuss the elements of desirable habits and attitudes shown here*

- Long hair should be tied back so that it does not fall into your face or cover your eyes.
- Fingernails should be kept short enough to allow efficient use of the keyboard.
- Do not wear dangling earrings or long necklaces.

Personal integrity

- Be trustworthy in all matters.
- Be honest.

Respect for others

Recognise that each person deserves to be treated with consideration an esteem. Appreciate the value of everyone in the workplace: colleagues, supervisors, customers and suppliers. Never insult, disparage ('diss'), ridicule or ill-speak others. Above all, treat each person the way that you would want to be treated yourself.

Developing work skills

It is important to develop a personal code of ethics and the moral values that would guide you when you encounter challenging circumstances. Consider each of the following situations and explain what you would do and why.

1 You have recently started to work and you observe that a colleague frequently takes extended breaks, even when there is a lot of work to be done. This is the person who told you about the job vacancy and personally showed you around when you started. What would you do?

2 Your best friend frequently makes racist remarks, especially when there is no one else around. You believe that all persons are equal and appreciate the cultural diversity of your country/region. How would you deal with this situation?

3 Employees at your place of work are required to sign the attendance register in the order in which they arrive. It is the usual practice for latecomers to sign in early when the supervisor is not around. You know that the right thing to do is to sign the time you actually arrive, but others coming in after you will be forced to put a later time. You do not want to anger your co-workers. What will you do?

4 You suspect that a co-worker is using alcohol in the workplace. This person is a good friend and is liked by everyone. How will you handle this situation?

Develop at least five other scenarios that may challenge your morals and ethics. Write these out.

Try role-playing with your classmates to demonstrate how you would deal with the issues you have identified.

Examination-type questions

Figure 29.3

1 a Examine Figure 29.3 carefully and identify
five hazards. *(5 marks)*

b State what action you would take to prevent
these hazards and bring order to this
chaotic scene. *(5 marks)*

c Devise a five-step plan/procedure to
maintain a proper environment in the
workplace. *(10 marks)*

2 a List five guidelines to follow when interacting
with others. *(5 marks)*

b Outline five personal attributes or qualities
that would be an asset in the workplace.
(5 marks)

c You are responsible for assisting Childon, a
new employee in your place of work. Give
him six guidelines he can follow to ensure
that he always meets deadlines.
(6 marks)

d Your friend Osei has asked you for advice
on how to ensure that his typed work is of
the highest possible standard. What advice
will you give? *(4 marks)*

30 *The School-Based Assessment*

The School-Based Assessment (SBA) enables you to apply and further develop the knowledge, skills and attitudes that you learn during this course. The SBA is worth 40% of your final examination score and consists of the following components:

- The portfolio.
- Assignment 1 – Working with a manuscript.
- Assignment 2 – Research project to be disseminated via email.
- Assignment 3 – A slide presentation.

The portfolio

The portfolio is a compilation of 10 of the documents that you have learnt to prepare. It will serve as a reference book that you can use at job interviews and in the actual performance of your duties at work. Each document must be of mailable standard. By now you know that this means that the document should be neat, completely free of errors and prepared according to established guidelines. The display component of the portfolio provides an opportunity for you to develop your artistic talent and creative abilities. However, display documents must be constructed to facilitate easy reading and efficient use.

Guidelines for preparing the portfolio

1 Each specimen must be labelled clearly to indicate which document is being presented, e.g. two-page indented letter with enumeration.
2 Each specimen should include your name in the header or footer (consistently).
3 Specimens may be prepared in any order. However, before submission they should be arranged in logical order, numbered and put together in a folder.
4 The folder should include the following:
   (a) Table of contents.
   (b) Title page.
   (c) Bibliography listing the resources used by the candidate.

Contents of the portfolio

Table 30.1 *Contents of the portfolio*

Section	Items	Skills to be demonstrated
A Letters	(i) Two-page indented or blocked style letter	The ability to produce multiple-page documents, e.g. SBAs, thesis or reports with continuation pages
	(ii) A circular letter or form with a tear-off slip	The insertion and use of symbols, tabs with leader dots, circular documents, form and form filling, e.g. questionnaires in SBAs
B Manuscript	A report **or** specification or play (with actor's part)	The use of page endings, continuation page, reports, footnotes and endnotes, types of headings, margins, script formatting, font usage and superscript
C Tabular work	A ruled table with main heading and multiple columnar headings	Applying oblique or vertical heading and A–Z formatting
D Committee documents	(i) A notice of a meeting with an agenda for a meeting (ii) A chairman's agenda **or** minutes of a meeting	Producing the correct layout for committee documents
E Display	(i) An invitation with a menu or programme (a creative design should be used) (ii) A flow chart **or** organisational chart (with or without use of a template)	Insertion of shapes, lines, symbols, clip art, SmartArt, correct page layout and presentation
F Legal work	(i) A lease **or** hire purchase agreement **or** a will *with* an endorsement (ii) A contract of employment	Utilising the correct layout for legal documents

Assignment 1

Your teacher will provide a manuscript containing amendments and correction signs for you to type in the classroom within a specified time. This is a teacher-supervised activity. The manuscript must be saved on a removable medium and printed.

Assignment 2

Your teacher will provide a topic on which you will do some research using the Internet. You must summarise the information obtained and prepare a bibliography. The information must be saved on a removable medium. The file containing the research project must then be simultaneously distributed to several recipients via email. The activity at the end of Unit 23 (the Email Project file) will help you to apply the requirements for Assignment 2.

Assignment 3

Your teacher will provide a scenario or topic for which you must prepare a slide presentation. You are required to save your presentation on a removable medium and make a printout of the slides.

The activities in Unit 18 are designed to help you with this assignment.

Other consolidation exercises

The following To do exercises will help you to reinforce the skills you have acquired and assist you in preparing for your final examinations.

To do

Working with graphics

1 Design a flow chart to illustrate the process of filling a vacancy in a company.
2 Visit a business in your community. Write a description of the organisational structure of the business. Draw an organisational chart of the business.
3 Your school has just had a highly successful reunion. Compose the press release.
4 Prepare the storyboard for a short skit.
5 You have formed an association for EDPM students. Prepare a two-page newsletter with any three of the following feature articles:
   (a) Managing diversity in the workplace.
   (b) How to care for your computer.
   (c) Computer tips and tricks.
   (d) New computer games on the market.
   (e) How to make your own music CD compilation.

Working with wizards

1 Use the memo wizard to compose a memorandum to all students from the principal informing them that school will be dismissed at 12.45 p.m. on Wednesday, 12 May 20XX.
2 Use the agenda wizard to prepare an agenda for a meeting of the Lawson Village Sports Club.
3 Use the résumé wizard to compose a résumé for a friend or relative seeking employment.
4 Use the letter wizard to compose an application for a job that was advertised in the daily newspaper.

Creating forms

1 Design an employment application.
2 Your firm has decided to offer a scholarship to sixth-form students. Design an appropriate application form.

Legal, technical and literary documents

1 Your neighbour has discovered that you know how to prepare leases and has come to you for assistance. Type a fair copy of a lease for her.
2 Prepare a bill of quantity for the construction of a wall at the front of your house.
3 Type an actor's script for any character in a scene from any of Shakespeare's plays.

Letters

1 (a) Your expensive cellphone is malfunctioning after only three months of use. You visit the store from which you bought it but the service representative informed you that it can neither be replaced nor repaired. Write a letter of complaint to the manager.
   (b) You are the manager of the cellphone store mentioned in (a) above. You investigate the matter and the service representative tells you that the evidence shows that the phone has been immersed in water. Write a response to the complaint.
2 You decide to purchase a computer as a result of an advertisement in the *Daily Express* newspaper. The advertisement states that it will be sent to your home, cash on delivery. Type and print an order letter showing the specifications in a bulleted list.
3 (a) You are interested in purchasing a range of office equipment for an employment agency that you intend to open. Write a letter of enquiry to M C Business Supplies.
   (b) You are the sales manager of M C Business Supplies. Write a reply including a table.

Index

Electronic Document Preparation and Management for CSEC®

2nd Edition

The computer has revolutionised the world of work and become an indispensable tool. As a result, the ability to use the computer is now a fundamental skill for students who want to work in an office. This course is a response to that revolution and will allow students to develop the necessary skills to take part in it.

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- Objectives at the beginning of each unit to outline coverage
- Unit at a glance, summarising the content of the unit
- Did you know?: useful points and tips
- To do: frequent exercises and practical activities throughout to reinforce learning
- My glossary: key words for students to list and define for themselves
- Developing work skills: end-of-unit exercises to consolidate learning and practise skills
- Examination-type questions, so that students can prepare themselves fully for the exam
- Extensive Keyboard Mastery sections. This unique feature allows students to develop their keyboarding and typewriting skills in a systematic and methodical way, so that they are able to use technology to present documents accurately and speedily
- A separate chapter detailing SBA requirements.

The book also includes a CD containing typing exercises linked to the Keyboard Mastery sections.

Ann Margaret Jacob has taught Information Technology in Trinidad for over 25 years. Agatha Augustine taught typewriting and office skills for many years in Trinidad.