



**General Certificate of Education  
Advanced Subsidiary/Advanced**

407/01

**INFORMATION AND  
COMMUNICATION  
TECHNOLOGY  
ICT1  
INFORMATION SYSTEMS**

P.M. MONDAY, 14 January 2008  
(1½ hours)

**ADDITIONAL MATERIALS**

In addition to this examination paper, you will need an 8 page answer book.

**INSTRUCTIONS TO CANDIDATES**

Answer **all** questions.

The intended marks for questions or parts of questions are given in brackets [ ]. You are advised to divide your time accordingly. The total number of marks available is 60.

You are reminded of the necessity for good written communication and orderly presentation in your answers.

## SECTION A

Answer **all** questions.

1. Define the term *knowledge* and use a suitable example to illustrate the relationship between data, information and knowledge. [4]
  
2. (a) A company improved its performance by having *up-to-date, accurate and complete* information. Describe **two** ways in which such information has added value to the company. Illustrate your answers with suitable differing examples. [2 × 2]  
  
(b) Other than data collection, describe **two** of the costs in terms of *money, time and human resources* in obtaining good quality information. Use a suitable *different* example to illustrate your answer in **each** case. [4]
  
3. A design company uses specialist CAD software. Describe an advantage of **each** of the following features of a CAD package to a designer when designing a new product.  

*Rotate, zoom, wire drawing, 2D/3D.*

 [4]
  
4. Information Technology is widely used in business to process large amounts of data.  
  
(a) Discuss **two** advantages of ICT over manual methods of processing data, using suitable examples in each case. [4]  
  
(b) Describe **three** factors affecting the efficiency of data processing systems. [3]
  
5. A large number of people are now involved in producing web pages.  
  
(a) Explain the following terms in relation to web authoring, giving suitable examples in **each** case.  
  - (i) hyperlinks
  - (ii) frames. [4]  
(b) Web pages are often used as an entry into email systems. Describe advantages and disadvantages of email in a workplace situation. [3]
  
6. Validation and verification are very important in online shopping systems. Describe using suitable relevant examples, how these methods are used to reduce data entry errors in online shopping systems. [2 × 2]
  
7. Discuss the different methods of registration that are used in schools, looking at the benefits that they bring to a school and their drawbacks. [8]

**SECTION B**

*Answer **all** parts of this question.*

**8.** ICT is having a big impact on commerce in the modern world.

(a) Describe what is meant by EFTPOS and discuss the advantages it gives the customer and the business. [7]

(b) Online banking has allowed customers to have more flexible access to their bank accounts. Discuss the advantages *and* disadvantages this has brought the bank's customers. [5]

(c) Discuss **two** different crimes (other than mugging at the ATM) associated with the use of debit/credit cards, and give, in each case, an appropriate method of prevention of misuse of the cards. [4]

*Quality of Written Communication.* [2]