

General Certificate of Education
January 2004
Advanced Subsidiary Examination



INFORMATION AND COMMUNICATION TECHNOLOGY ICT1
Unit 1 Information: Nature, Role and Context

Tuesday 13 January 2004 Afternoon Session

In addition to this paper you will require:
a 12-page answer book.

Time allowed: 1 hour 30 minutes

Instructions

- Use a blue or black ink or ball-point pen. Use pencil only for drawing.
- Write the information required on the front of your answer book. The *Examining Body* for this paper is AQA. The *Paper Reference* is ICT1.
- Answer **all** questions.

Information

- The maximum mark for this paper is 60.
- Mark allocations are shown in brackets.
- The use of brand names in your answers will **not** gain credit.
- You are reminded of the need for good English and clear presentation in your answers.

Answer **all** questions.

1 Explain, using examples, what is meant by each of the following terms:

- (a) *Data*; (2 marks)
- (b) *Information*; (2 marks)
- (c) *Knowledge*. (2 marks)

2 A company, which is selling goods by mail order, purchased a mailing list of names and addresses in the year 2001.

- (a) Explain why it was an advantage to the company to purchase the mailing list. (2 marks)
- (b) Explain the disadvantage that the company now has of using this list. (2 marks)
- (c) The mail order company has data of a personal nature that they wish to sell.
 - (i) Whose permission must they first obtain? (1 mark)
 - (ii) Whom should they inform of their intentions? (1 mark)

3 Using examples, describe **four** benefits that ICT can offer to an organisation. (8 marks)

4 Students at a university are provided with free Internet access by the university.

- (a) Describe **one** advantage to the university of providing this Internet access. (2 marks)
- (b) Describe **one** advantage (other than a financial one) to the students of having Internet access provided by the university. (2 marks)
- (c) Describe **two** disadvantages to the students of using the Internet for study. (4 marks)

5 A webcam is a video camera that captures images, which can be transmitted across the Internet.

Describe **one** way in which a company can make use of this technology to benefit its business.

(2 marks)

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- 6 When producing a requirements specification for an ICT solution to a task, an IT professional needs to use certain personal skills.

State **two** such personal skills, and explain why **each** of them will benefit the IT professional when preparing the requirements specification. *(4 marks)*

- 7 For each of the following items, describe **two** ways in which a company can prevent malpractice in the use of:

(a) its data; *(4 marks)*

(b) its hardware; *(4 marks)*

(c) its communication networks. *(4 marks)*

- 8 (a) Describe what is meant by a software copyright and licensing agreement. *(2 marks)*

(b) Explain why software copyright and licensing agreements are needed. *(2 marks)*

(c) Describe the possible consequences for a company of an employee using unlicensed software on a computer belonging to that company. *(2 marks)*

- 9 The Computer Misuse Act was introduced to allow the prosecution of people who accessed computer systems without authorisation.

(a) State, and give an example of, each of the three sections of the Computer Misuse Act. *(6 marks)*

(b) Explain why few companies ever prosecute people under the Computer Misuse Act. *(2 marks)*

END OF QUESTIONS