

General Certificate of Education
January 2007
Advanced Subsidiary Examination



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

Monday 15 January 2007 1.30 pm to 3.00 pm

For this paper you must have:

- a 12 page answer book.

Time allowed: 1 hour 30 minutes

Instructions

- Use blue or black ink or ball-point pen.
- 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.
- Do all rough work in your answer book. Cross through any work you do not want to be marked.

Information

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

Answer **all** questions.

1 In the context of ICT systems, explain what is meant by:

(a) malpractice; *(2 marks)*

(b) crime. *(2 marks)*

2 A company is holding your personal data and, according to data protection legislation, you are entitled to a copy of it.

(a) State **two** ways in which you can request a copy of your personal data. *(2 marks)*

(b) What must the company check before it issues the personal data? *(1 mark)*

(c) Why might you have to pay for a copy of your personal data? *(1 mark)*

3 Information is a commodity and it can have a monetary value.

State **three** factors that could affect the value of information. *(3 marks)*

4 A company requests that its customers contact it by e-mail rather than by telephone.

Explain **three** benefits that the company could gain from its customers carrying out this request. *(6 marks)*

5 Three stages of an ICT system are input, processing and output.

Describe, using an example of each one, what is meant by:

(a) input; *(2 marks)*

(b) processing; *(2 marks)*

(c) output. *(2 marks)*

6 Give **four** uses of ICT in education and state a benefit of each use. *(8 marks)*

7 ICT professionals may be required to:

- be willing to work flexible hours
- communicate well orally
- have good problem solving skills.

Explain, giving examples, why ICT professionals should have each of these **three** characteristics.

(6 marks)

8 Companies use ICT systems because of the benefits that they provide.

Giving examples, explain how the use of ICT systems can result in each of the following benefits to a company. Your example must be different in each case.

- (a) Reduction in costs (2 marks)
- (b) Increased speed of operation (2 marks)
- (c) Increased business opportunities (2 marks)

9 A school wishes to allow its students access to the Internet for their coursework. However, the Head Teacher is concerned that *unrestricted* access to the Internet might cause problems.

State **four** problems about which the Head Teacher might be concerned and, for each one, explain a measure that could be taken to try to prevent the problem. (8 marks)

10 Software should be designed to protect the health of the user.

State **three** potential health problems from which users should be protected and, for each one, give a software design feature that could be used, and explain how it might protect the health of the user. (9 marks)

END OF QUESTIONS

There are no questions printed on this page