

General Certificate of Education
January 2008
Advanced Subsidiary Examination



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

ICT1

Monday 14 January 2008 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. 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.
- 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 answer.
- You are reminded of the need for good English and clear presentation in your answers.

Answer **all** questions.

- 1 Three stages of a data processing system are input, processing and output.

State, using an example for each one, what is meant by the following terms.

- (a) Input *(2 marks)*
- (b) Processing *(2 marks)*
- (c) Output *(2 marks)*

- 2 A company is recruiting a new member of staff for its ICT support desk. The head of Human Resources has asked the manager of the support desk what personal qualities the new employee should have in order to be able to carry out the job effectively.

State, with reasons, **three** personal qualities that the manager would want a new support desk employee to have. *(6 marks)*

- 3 A Sales Manager requires good information that has value and importance.

Describe **three** characteristics of information that give it value and importance for the Sales Manager. *(6 marks)*

- 4 For each of the following areas, state **one** use of ICT (other than the Internet) and a benefit of that use.

Your benefits must be different for each area.

- (a) Education *(2 marks)*
- (b) Medicine *(2 marks)*
- (c) Banking *(2 marks)*
- (d) Travel Industry *(2 marks)*

5 Information systems need to be protected.

- (a) (i) Explain, using an example, what is meant by an *internal* threat to an information system. (3 marks)
- (ii) Describe a measure that a company can take to protect its information system from an *internal* threat, stating how the system will be protected from it. (2 marks)
- (b) (i) Explain, using an example, what is meant by an *external* threat to an information system. (3 marks)
- (ii) Describe a measure that a company can take to protect its information system from an *external* threat, stating how the system will be protected from it. (2 marks)

6 People who access computer systems *without authorisation* can be prosecuted for committing an offence under the Computer Misuse Act.

- (a) For each of the three sections of the Computer Misuse Act, describe the section and give an example of an offence under that section. (6 marks)
- (b) Explain why there are few prosecutions under the Computer Misuse Act. (2 marks)

Turn over for the next question

- 7 (a) The Internet is used by many organisations.

For each of the following activities, state how the Internet can be used by an organisation and explain the benefit of that Internet use to the organisation.

- (i) Advertising *(2 marks)*
- (ii) Selling *(2 marks)*
- (iii) Researching *(2 marks)*

- (b) Individuals and organisations make use of the Internet for communication.

Describe **three** ways of communicating that the Internet supports and give a benefit to the user of each one. *(6 marks)*

- (c) An employee works away from both her home and her company's offices. The company wants to be able to contact the employee wherever she is, including abroad.

- (i) Suggest an electronic device that the company could provide her with so that she can be contacted. *(1 mark)*
- (ii) Explain why the device you have suggested would be a good choice for the company. *(2 marks)*
- (iii) What would be a disadvantage to the employee of having to use this device? *(1 mark)*

END OF QUESTIONS