

General Certificate of Education
June 2001
Advanced Subsidiary Examination



INFORMATION AND COMMUNICATION TECHNOLOGY ICT1

Tuesday 22 May 2001 Morning Session

In addition to this paper you will require:
a 16-page answer book.

Time allowed: 1 hour 45 minutes

Instructions

- Use a blue or black ink or ball-point pen. Pencil should only be used 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 74.
- Mark allocations are shown in brackets.
- You are reminded of the need for good English and clear presentation in your answers.

Answer **all** questions

- 1 Explain what is meant by Information and Communication Technology. *(3 marks)*
- 2 The expression “Garbage in, garbage out”, or “GIGO”, is often used in connection with information processing systems.
- Explain, using an example, what is meant by this expression. *(4 marks)*
- 3 A travel firm arranging package holidays in Spain for the 2001 season uses data obtained from a survey of their customers’ favourite holiday resorts in 1997. Explain
- (a) why the data from 1997 might not be suitable for use to predict the requirements for 2001,
- (b) what the effect on the company might be if it used the 1997 data. *(4 marks)*
- 4 Mrs Jones has bought a book on gardening from a book company on the World Wide Web. She has now started to receive e-mails about garden furniture, and plant catalogues through the post.
- (a) Explain why Mrs Jones has started to receive the e-mails and the catalogues. *(2 marks)*
- (b) Some people are worried about ordering goods using credit cards over the Internet. Explain what can be done by the book company to prevent credit card details being misused. *(2 marks)*
- 5 A supermarket chain operates an automatic ordering system between the stores and a central warehouse.
- (a) State **two** advantages for the store of using an automatic system. *(2 marks)*
- (b) Explain **one** advantage for the supermarket’s customers of the store using an automatic stock control system. *(2 marks)*

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- 6 (a) *Browsers* and *search engines* are two items that are associated with the use of the Internet. Explain what is meant by:
- (i) a browser (2 marks)
 - (ii) a search engine. (2 marks)
- (b) In order to use the Internet, the owner of a PC at home normally needs to register with an Internet Service Provider (ISP). State **two** services, in addition to e-mail, that an ISP could provide. (2 marks)
- (c) Changes in technology now mean that it is no longer necessary to have a PC to be able to use some Internet services. Give **two** devices that can be used instead. (2 marks)
- (d) Explain why it is possible to send e-mail successfully to someone who has not got his or her PC switched on. (2 marks)
- 7 (a) Describe what is meant by a software licensing agreement. (2 marks)
- (b) Mr Patel has a single user software licensing agreement for a word processing package which specifies that there must only be one copy in use at any one time.
- Would he be guilty of breaking the agreement if he installed the package on his laptop PC, as well as on his stand-alone PC at work. Explain your answer. (2 marks)
- (c) A college network has a server and 20 stations. What type of licensing agreement would be suitable for a word processing package that may be used at the same time on all 20 stations? (2 marks)
- (d) Breaking the licensing agreement is one type of offence that a computer user can commit. Some other offences are covered by the Computer Misuse Act.
- Explain, using examples, level 1, 2 and 3 offences under the Computer Misuse Act. (9 marks)
- 8 An advertisement for an IT support worker to join the PC support team in a company specifies that the applicant must be “willing to work flexible hours, be able to communicate well orally, have good written skills and get on well with a wide variety of people”.
- Explain, giving examples, why **each** of these characteristics is important for someone working in such a role. (8 marks)

TURN OVER FOR THE NEXT QUESTION

- 9** Poorly designed computer workstations can lead to health problems. State **three** features of a well-designed workstation, and for **each** one state the health hazard that will be prevented. *(6 marks)*
- 10** (a) State why an organisation must apply for entry on to the Data Protection Register. *(1 mark)*
(b) State **three** items of information that must be provided by the data user about the data that is to be stored. *(3 marks)*
- 11** Explain, with reasons, **two** levels of access that could be given to different categories of users of an on-line stock control system. *(4 marks)*
- 12** A firm of engineers in the United Kingdom has been given the task of designing a new building in Australia. As one of their methods of communicating with their clients, it has been suggested that the company uses videoconferencing.
(a) Explain what is meant by the term videoconferencing. *(4 marks)*
(b) Give **two** advantages and **two** disadvantages to a company of using this approach as compared with non-ICT methods. *(4 marks)*

END OF QUESTIONS