

General Certificate of Education
June 2003
Advanced Subsidiary Examination



INFORMATION AND COMMUNICATION TECHNOLOGY ICT2
Unit 2 Information: Management and Manipulation

Thursday 5 June 2003 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 ICT2.
- 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 A photograph is scanned so that it can be included on a web page. The scanning software encodes the image, and the result is then stored for future use.

Name **two** types of encoding that can be used. (2 marks)

(One word answers are acceptable for this question.)

- 2 State, with reasons, **two** elements of hardware that enable a personal computer to be connected to the Internet. (4 marks)

- 3 Name the mode of processing that would be suitable for each of the following ICT systems:

(a) monthly payroll; (1 mark)

(b) controlling a chemical process; (1 mark)

(c) cinema ticket booking; (1 mark)

(d) kitchen designing. (1 mark)

(One word answers are acceptable for this question.)

- 4 Personal computer systems are usually supplied with some system software already installed.

Explain, using examples, the purpose of system software. (4 marks)

*(The use of brand names will **not** gain credit.)*

- 5 A doctor's surgery has recently converted its manual patient record system to a computer-based system.

(a) Describe **two** methods that the surgery could use to keep these computer-based records secure. (4 marks)

(b) The surgery also needs to ensure the privacy of the records.

Using an example from the above system, describe the difference between security and privacy. (3 marks)

6 Describe **two** features of each of the following types of Local Area Network (LAN):

- (a) peer-to-peer network; *(4 marks)*
- (b) client-server network. *(4 marks)*

7 WIMP (Windows, Icons, Menus and Pointers) interfaces are provided by software on most personal computers. However, there are also other types of human/computer interface.

Describe what is meant by each of the following, and for each one give an example of an appropriate use:

- (a) *menu driven interfaces*; *(3 marks)*
- (b) *command line interfaces*. *(3 marks)*

*(The use of brand names will **not** gain credit.)*

8 Software packages contain many advanced features that are often only used by certain people.

Explain, with the use of examples:

- (a) **two** advanced features of a word-processing package that would be useful to an author writing an ICT textbook; *(6 marks)*
- (b) **two** advanced features of a spreadsheet package that would be useful to an accountant preparing a financial report. *(6 marks)*

TURN OVER FOR THE NEXT QUESTION

9 A company faxes orders to its suppliers at the end of each week. An order is only produced if the stock is low. Each order consists of approximately five products.

(a) State **three** items of information that the company would normally send to its suppliers about each product being ordered. *(3 marks)*

(b) The faxes are produced as a paper report generated by the product database system.

Sketch a diagram to show a possible layout for this report.

Annotate your diagram to explain the reasons for each element of your design. *(8 marks)*

(c) The company has decided that, in future, it will e-mail the orders to its suppliers.

Give **two** advantages to the company of using e-mail to send the orders generated by the product database system. *(2 marks)*

END OF QUESTIONS