

General Certificate of Education
June 2008
Advanced Subsidiary Examination



INFORMATION AND COMMUNICATION TECHNOLOGY
Unit 2 Information: Management and Manipulation

ICT2

Friday 16 May 2008 9.00 am to 10.30 am

For this paper you must have:

- a 12-page answer book.

Time allowed: 1 hour 30 minutes

Instructions

- Use black ink or black 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.
- 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 A document, containing both text and graphics, is about to be printed out from a computer system.

Give **two** types of printer that may be used. (2 marks)

2 A map has been scanned and its image saved in a file.

State **three** ways in which the image of the map could be manipulated before it is printed. (3 marks)

3 Describe the characteristics of a natural language interface.

Illustrate your answer with examples of the use of this type of interface. (4 marks)

4 A report is to be produced using a word processing package. The report is divided into several sections. Each section starts with a heading and finishes with a brief conclusion.

(a) State **two** features of the word processing package that could be used to ensure that the headings stand out. (2 marks)

(b) State **two** features of the word processing package that could be used to ensure that the final paragraphs containing the conclusions stand out. These features must be different from those stated in part (a). (2 marks)

5 (a) Explain, using a suitable example, what the term *batch processing* means. (3 marks)

(b) Explain, using a suitable example, what the term *transaction processing* means. (3 marks)

6 A school has a Local Area Network (LAN).

(a) Describe **three** benefits to the students of using a LAN. (6 marks)

(b) Describe **two** limitations of using a LAN, rather than stand-alone computers. (4 marks)

(c) Explain what extra facilities would be available to the students if the LAN was expanded to a Wide Area Network (WAN) with Internet access. (3 marks)

(d) Describe **two** ways that students can try to protect their work, which is stored on the computer network, from malicious or accidental alteration or deletion. (4 marks)

7 A swimming club keeps records of all its members using a relational database. There are two sections to the club, Junior and Senior.

- (a) Explain why members' dates of birth are stored, rather than the members' ages. *(2 marks)*
- (b) Design a suitable record structure for storing the members' details. *(5 marks)*
- (c) Junior members must transfer to the Senior section on 31st December after their fourteenth birthday. A set of test data is needed to ensure that the correct records will be updated on 31st December 2008.

The following set of test data for the members' dates of birth has been proposed.

08/10/1993
01/01/1994
12/03/1994
31/12/1994
01/01/1995

Explain why these particular test dates have been chosen. *(4 marks)*

8 A shoe shop faxes orders to its suppliers at the end of each week. An order is only produced by its product database system if the stock level is low. Each order consists of approximately five products.

- (a) State **three** items of information that the company would send to its suppliers about each product being ordered. *(3 marks)*
- (b) The orders are generated by the product database system, and printed ready to be faxed to the suppliers.

Sketch a diagram to show a possible layout for the order.

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

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

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

END OF QUESTIONS

There are no questions printed on this page