

General Certificate of Education  
June 2004  
Advanced Level Examination



**INFORMATION AND COMMUNICATION TECHNOLOGY    ICT4**  
**Unit 4 Information Systems within Organisations**

Tuesday 22 June 2004    9.00 am to 11.00 am

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

Time allowed: 2 hours

**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 ICT4.
- Answer **all** questions.

**Information**

- The maximum mark for this paper is 90.
- 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. Question 9 should be answered in continuous prose. The Quality of Written Communication will be assessed in this answer.

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Answer **all** questions.

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1 Give **three** characteristics of good information, using an example for each. *(6 marks)*

2 Using examples, distinguish between formal and informal information flows within an organisation. *(4 marks)*

3 New employees at a publishing company are asked to sign an IT Code of Practice.

Name **three** topics that are normally covered in such a Code of Practice. *(3 marks)*

4 For the successful introduction of a new or updated information system, an organisation needs to have clear management objectives and effective staff teams.

(a) Name **four** aspects of an organisation that may need careful management during the introduction of a new or updated information system. *(4 marks)*

(b) Describe **two** characteristics of an effective ICT team. *(4 marks)*

5 Data must be recorded to enable auditing of ICT systems.

For each of the following examples, state **two** items of data and describe how they may be used in the audit of the system:

(a) a company's stock control system; *(3 marks)*

(b) a company's network security system. *(3 marks)*

6 An organisation has recently produced a new information system security policy.

(a) State **four** factors that should be covered in the policy. *(4 marks)*

(b) The organisation would like all staff to be aware of the implications of the security policy as soon as possible.

Describe **four** ways in which the organisation could provide this information. *(8 marks)*

(c) A new member of staff joins the organisation.

State **three** ways in which this member of staff might be made aware of the security policy. *(3 marks)*

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7 A chain of supermarkets uses a number of linked data processing and management information systems, including a point-of-sale system, a stock control system and a management sales information system. Outputs from these systems are aimed at different levels of user.

(a) State the level of information needed for each of the following types of user:

- (i) supermarket stock-checker; (1 mark)
- (ii) manager of the fresh food department in one store; (1 mark)
- (iii) company executive officer, based at head office. (1 mark)

(One word answers are acceptable for this part of the question.)

(b) For each of the following individuals, identify an output from the systems, indicating what it might contain and how it may be used.

- (i) supermarket customer; (3 marks)
- (ii) supermarket stock-checker; (3 marks)
- (iii) manager of the fresh food department in one store; (3 marks)
- (iv) company executive officer, based at head office. (3 marks)

(c) Explain why the information used by the stock-checker is not appropriate for the company executive officer. (3 marks)

8 All commercial companies that employ staff and hold personal data in information systems should comply with current legislation.

(a) State **four** principles of the current Data Protection Act. (4 marks)

(b) Describe **three** methods that companies may use to ensure that their staff comply with data protection legislation. (6 marks)

9 “Information systems are the life-blood of any organisation.”

Discuss this statement with the aid of examples. Include in your discussion:

- the role and relevance of an information system to aid decision making;
- the development and life-cycle of an information system;
- factors which lead to the success or failure of an information system.

*The Quality of Written Communication will be assessed in your answer.*

(20 marks)

**END OF QUESTIONS**

**THERE ARE NO QUESTIONS PRINTED ON THIS PAGE**