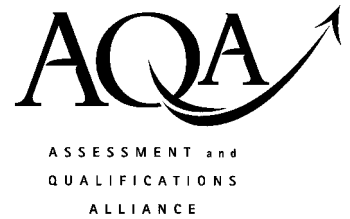


General Certificate of Education  
June 2007  
Advanced Level Examination



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

Friday 15 June 2007 1.30 pm to 3.30 pm

**For this paper you must have:**

- a 16-page answer book.

Time allowed: 2 hours

**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 ICT4.
- 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 90.
- The marks for questions are shown in brackets.
- You will **not** gain credit for the use of brand names in your answers.
- Question 10 should be answered in continuous prose. In this question you will be marked on your ability to use good English, to organise information clearly and to use specialist vocabulary where appropriate.

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Answer **all** questions.

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1 What is a *Management Information System*? (3 marks)

2 Name **three** items of ICT-related legislation that could impact on procedures within organisations. (3 marks)

3 When an organisation introduces a new information system, changes may occur that affect both the organisation and its staff. These changes must be managed.

State **four** changes that may occur and, for each one, explain a possible effect on either the organisation or its staff. (8 marks)

4 A new appointments and records system for patients is being developed for use in a large medical centre.

(a) Staff employed at the centre will need training in those parts of the system that they will be required to use.

For each of the following individuals working at the medical centre, suggest a method of training that is appropriate to their use of this system, and explain why you have suggested it. Each training method should be different.

(i) the centre manager (2 marks)

(ii) a doctor (2 marks)

(iii) an appointments receptionist (2 marks)

(b) The medical centre is also updating its generic software to a new industry standard.

Describe **three** methods of support that could be available for the staff at the medical centre. (6 marks)

5 A large supermarket chain has a hierarchical organisation structure.

(a) State the **three** levels of staff within this organisation and, for each one, give an example job title. (6 marks)

(b) Owing to the size of the supermarket chain, information is passed using formal methods of information flow.

Define the term *formal information flow*, giving an example in this context. (3 marks)

- 6 Correct use of company time is one topic that is commonly found in an organisation's ICT Code of Practice.

Name and describe **four** other topics that might be found in such an ICT Code of Practice.

(8 marks)

- 7 (a) Explain why ICT projects are often sub-divided into tasks and allocated to teams. (3 marks)
- (b) Within ICT projects, describe the need for:
- (i) clear timescales (2 marks)
  - (ii) agreed deliverables (2 marks)
  - (iii) approval to proceed. (2 marks)

- 8 A newly developed Information System can fail because of a lack of teamwork during its development.

Describe **three** other factors that might cause the Information System to be unsuccessful.

(6 marks)

- 9 When buying concert tickets over the Internet from an on-line booking company, customers access the company's booking and payment systems.

- (a) Within this context, and using a different example for each one, describe **four** characteristics of good information. (8 marks)
- (b) Good information is vital to both the on-line booking company and its customers. Within this context:
- (i) state **two** benefits to the company of having good information (2 marks)
  - (ii) state **two** benefits to the customers of using a company that has good information. (2 marks)

- 10 The security of both personal data and corporate data that is held in information systems is a major concern for most organisations. As a security consultant you have been asked to write a report for senior management on the subject of data security in information systems.

Your report should cover:

- the risks and threats associated with holding personal and corporate data in information systems
- measures that an organisation could use to help prevent security breaches
- measures that an organisation could use to detect security breaches
- policies and procedures that should be in place for the protection of data in information systems.

*The quality of written communication will be assessed in your answer.*

(20 marks)

**END OF QUESTIONS**

**There are no questions printed on this page**