

General Certificate of Education
June 2008
Advanced Level Examination



INFORMATION AND COMMUNICATION TECHNOLOGY
Unit 4 Information Systems within Organisations

ICT4

Thursday 5 June 2008 1.30 pm to 3.30 pm

For this paper you must have:

- a 16-page answer book.

Time allowed: 2 hours

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 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 answer.
- Question 8 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.

Answer **all** questions.

1 An ICT team needs an effective leader.

Give **four** other characteristics that an ICT team must have to ensure the successful completion of its work. (4 marks)

2 The development of a new management information system for an organisation can succeed or fail depending on various factors.

Describe **three** factors that would be important in making a success of the development, stating why they are important. (6 marks)

3 Discuss how the following factors might influence choices made by management when writing a corporate information systems strategy:

- organisational structure
- legal and audit requirements
- hardware and software
- behavioural factors.

(8 marks)

4 All students are asked to sign a school's ICT Code of Practice at the start of every academic year.

(a) Why does the school have an ICT Code of Practice for its students? (2 marks)

(b) Give **four** topics that might be in the school's ICT Code of Practice for its students, stating why they might be included. (8 marks)

(c) Why might the school's ICT Code of Practice for its employees be different from the one for its students? (3 marks)

5 When a new ICT system is introduced into an organisation, the changes that occur must be managed. Employees may be affected as their jobs might change.

Give **four** examples of what may change, and explain how each change might affect the employees. (8 marks)

- 6 A market research organisation collects data for particular purposes. One purpose is to find out people's shopping habits and this data is collected from around the country in the form of questionnaires.
- (a) For each of the following styles of question, describe a suitable method of data capture, explaining why you have chosen this method.
- (i) Questions that offer limited choice through the use of tick boxes or a mark in a pre-defined space. *(3 marks)*
 - (ii) Questions that allow the respondent to give a description that the interviewer writes down on the form. *(3 marks)*
- (b) Describe **two** methods of ensuring that data from the forms are entered accurately into the data processing system. *(4 marks)*
- 7 A school has introduced a computerised student attendance and tracking system. Classroom teachers will be entering attendance data for every lesson, as well as scores and grades for students' work. Heads of department will be using attendance and performance data to identify problems and to take action. Senior managers, such as the Deputy Head, will be looking at results and trends to help their decision-making.

All these staff will need training on the new system.

- (a) For each of the following staff, suggest the most suitable method of training, describe what it would entail and explain why your choice is the most suitable.
- (i) Classroom teachers *(3 marks)*
 - (ii) Heads of Department *(3 marks)*
 - (iii) The Deputy Head. *(3 marks)*
- (b) After training has been carried out, there will be a need for continued support to be provided for users of the attendance and tracking system. Support also needs to be provided for the users, including students, of other ICT systems within the school.
- Select and justify an appropriate user support system for the school. *(12 marks)*

Turn over for the next question

- 8** Organisations that use ICT systems have to ensure that they comply with current relevant legislation.

Discuss the implications for an organisation of complying with such legislation, showing how these may affect the operational procedures used by the organisation.

Your discussion should cover:

- data protection legislation
- software copyright and licensing legislation
- computer misuse legislation
- health and safety legislation.

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

(20 marks)

END OF QUESTIONS