General Certificate of Education
June 2006
Advanced Level Examination

AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

INFORMATION AND COMMUNICATION TECHNOLOGY ICT4
Unit 4   Information Systems within Organisations

Friday 16 June 2006   1.30 pm to 3.30 pm

For this paper you must have:
- 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.
- The marks for questions are shown in brackets.
- You will **not** gain credit for the use of brand names in your answers.
- 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.

ICT4

Answer **all** questions.

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1 Give **three** reasons why projects are often sub-divided into tasks and allocated to teams.

(3 marks)

2 Introducing new information systems may result in changes to the structure of an organisation. This will need careful management.

State **four** other aspects of change that may need managing. *(4 marks)*

3 Many organisations employ a Health and Safety Officer to enforce health and safety legislation for all users of their ICT systems.

Give **five** ways that this officer could help to ensure that health and safety legislation is being enforced. *(5 marks)*

4 Information flows within an organisation by both formal and informal mechanisms.

(a) What is meant by *formal information flow?* Give an example of a formal information flow mechanism. *(3 marks)*

(b) What is meant by *informal information flow?* Give an example of an informal information flow mechanism. *(2 marks)*

5 Many organisations use industry standard packages.

(a) Name and describe **three** methods of support available to their users. *(6 marks)*

(b) Name and describe **three** methods of training available to their users. *(6 marks)*

6 An accountant calculates an organisation's profit and loss based upon financial information from many sources.

Name **three** characteristics that this information must have to be described as 'good' information for the accountant and, for each characteristic, state why it is necessary.

(6 marks)

7 The development of a successful information system depends, in part, on good teamwork.

   (a) Give **three** other factors that help to ensure the development of a successful information system. *(3 marks)*

   (b) Formal development methods have distinct phases.

      For the following development phases:
- state **one** activity that is undertaken;
- state **one** deliverable that is a typical output.

     (i) Analysis *(2 marks)*

     (ii) Design *(2 marks)*

     (iii) Implementation/Programming *(2 marks)*

     (iv) Testing *(2 marks)*

   (c) Identify **three** characteristics of an effective ICT team, stating why each one is important. *(6 marks)*

8 A high-street building society uses a data processing system to record receipts and withdrawals from its customers' accounts. The data from branches are sent once a day up to the ICT systems at head office in Yorkshire to update all master accounts, and all data is then input into various management information systems.

   (a) For each of the following users, state the level of information that is needed by:

     (i) a Customer Service Clerk in a local branch; *(1 mark)*

     (ii) a Branch Manager; *(1 mark)*

     (iii) the Managing Director of the building society. *(1 mark)*

   (b) For each of the following individuals, name a suitable output, state how it may be used, and give a typical item of data that it may contain.

     (i) a Customer Service Clerk in a local branch *(3 marks)*

     (ii) a Branch Manager *(3 marks)*

     (iii) the ICT Manager, controlling all ICT systems within the building society *(3 marks)*

     (iv) the Managing Director of the building society *(3 marks)*

   (c) Explain why the information used by the Customer Service Clerk is not appropriate for the Managing Director. *(3 marks)*

Turn over ▶

9 Protecting its information systems and the data that they contain is a major concern for an organisation.

Discuss the aspects of system security and data security that an organisation needs to consider, paying particular attention to the following:

- risk analysis;
- security policy;
- audit requirements;
- disaster recovery management.

The Quality of Written Communication will be assessed in your answer. *(20 marks)*

END OF QUESTIONS