General Certificate of Education
June 2005
Advanced Level Examination

AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

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

Tuesday 21 June 2005   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 11 should be answered in continuous prose. The Quality of Written Communication will be assessed in this answer.

    ICT4

Answer **all** questions.

1 During the development life-cycle of an information system, there is a need for agreed deliverables, e.g. a test plan with data that is produced at the design stage.

Give **two** other examples of such deliverables, stating at which stage of the life-cycle each one would be produced. *(4 marks)*

2 Managers at the highest, or strategic, levels of an organisation have particular requirements from an information system.

  (a) Give **one** example of an information system that would be useful to managers at this level, and explain how they would use it. *(3 marks)*

  (b) State the **two** other levels of task and/or personnel within an organisation. *(2 marks)*

3 The introduction or development of an information system will result in change that must be managed.

Describe **three** areas that will need effective management. *(6 marks)*

4 The structure of an organisation can influence the flow of information through it.

Explain **two** effects that the structure of an organisation could have on the flow of information. *(4 marks)*

5 Any personal data that an organisation holds on a computer about its employees, or its customers, is covered under Data Protection legislation.

Describe **three** methods by which a company can ensure that the requirements of Data Protection legisation are followed. *(6 marks)*

6 Management's understanding and involvement can play an important part in the introduction of a Management Information System (MIS).

Give **three** actions that managers could take to increase the chances of a MIS being successful. For each action state how it would help to ensure success. *(6 marks)*

7 Information produced by ICT systems may be required both within (internal) and outside (external) organisations such as schools and supermarkets.

   (a) Describe **two** examples of *internal* information requirements, stating for each:

   - who needs the information;
   - what information they require;
   - what it is to be used for. *(6 marks)*

   (b) Describe **two** examples of *external* information requirements, stating for each:

   - who needs the information;
   - what information they require;
   - what it is to be used for. *(6 marks)*

8 There are a number of social, moral and ethical issues associated with the introduction, and use, of ICT systems. Some of these issues may possibly be covered in an organisation's ICT Code of Practice.

   Describe **four** issues that could affect an ICT professional. *(8 marks)*

9 A growing organisation has been advised to write a corporate information systems security policy.

   (a) What is the rôle of such a policy? *(2 marks)*

   (b) State **four** topics that should be covered in a security policy. *(4 marks)*

   (c) Give **three** methods of making sure that staff in the organisation are aware of the security policy and, for each one, state why it is suitable. *(6 marks)*

10 (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) approval to proceed. *(2 marks)*

TURN OVER FOR THE NEXT QUESTION

Turn over ▶

11 When introducing new or improved ICT systems, successful organisations know that, in order to achieve a successful transition, they must provide both initial training and on-going support.

A national supermarket chain relies heavily on various information systems. It employs both full-time and part-time staff working in stores and warehouses sited around the country, or at the head office.

Discuss the options available for both training and support. Make suitable recommendations for this particular company for the training and support of the different groups of staff identified below, namely:

- part-time store staff;
- full-time store staff;
- warehouse and home delivery staff;
- head office staff;
- managers at all levels.

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

END OF QUESTIONS