

General Certificate of Education
January 2008
Advanced Level Examination



INFORMATION AND COMMUNICATION TECHNOLOGY
Unit 4 Information Systems within Organisations

ICT4

Wednesday 23 January 2008 9.00 am to 11.00 am

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 answer.
- Question 9 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** The internal procedures that are used in an organisation may change when a new ICT system is introduced.

State **two** other ways in which a new ICT system may affect the organisation. *(2 marks)*

- 2** Responsibility when accessing and using company data is one topic that is often found in an organisation's ICT Code of Practice.

Give **five** other topics that are often found in an ICT Code of Practice. *(5 marks)*

- 3** Whilst developing a new or improved information system, a formal method of project control is often used.

Explain the need for:

(a) clear timescales; *(2 marks)*

(b) agreed deliverables; *(2 marks)*

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

- 4** One way of classifying information is by its type. Examples of types of information are disaggregated, aggregated and sampled.

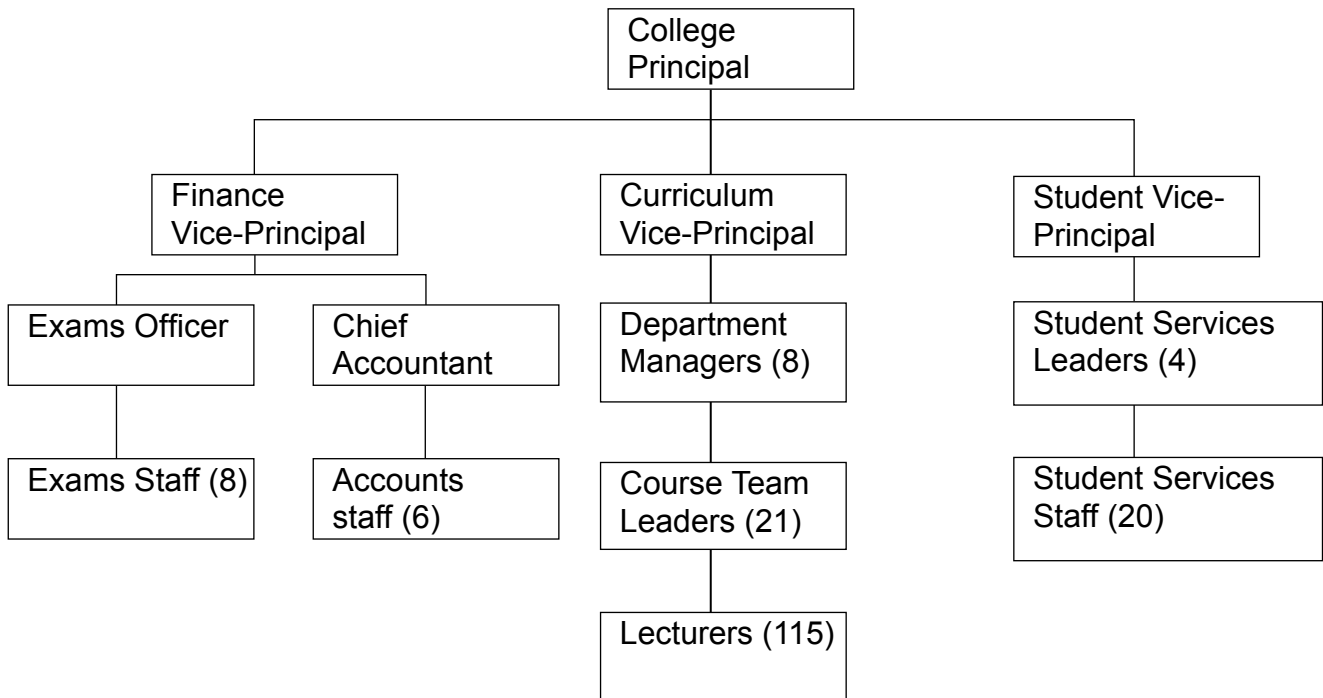
Give **three** other ways of classifying information, and give an example for each one. *(6 marks)*

- 5** ICT projects are often sub-divided into tasks and allocated to ICT teams.

Describe **four** characteristics of a good ICT team. *(8 marks)*

- 6** Name and describe **three** methods of user support that are available with industry standard packages. For each method of support, give a different example of a type of user for whom it would be suitable. *(9 marks)*

- 7 The diagram below shows the hierarchy of a further education college. The number of staff in each rôle is shown in brackets.



- (a) For each of the following levels of staff, give **two** examples from the hierarchy shown in the diagram of someone who would be using information from college ICT systems at that level:
- (i) strategic; *(2 marks)*
 - (ii) tactical; *(2 marks)*
 - (iii) operational. *(2 marks)*
- (b) Information flows around an organisation in a variety of ways, using both formal and informal methods.

For the college shown in the diagram, suggest a method, using ICT, of providing the following information to the intended recipient(s), stating whether this method is formal or informal.

- (i) Monthly attendance figures for the whole college, to the Student Vice-Principal *(2 marks)*
- (ii) Weekly attendance figures for individual students, to Course Team Leaders *(2 marks)*
- (iii) Annual income and expenditure, to the College Principal *(2 marks)*
- (iv) Date of the annual college Open Day, to all college staff *(2 marks)*
- (v) Details of a student disciplinary action and its outcome, to the Student Vice-Principal *(2 marks)*

Turn over ▶

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- 8 A firm of solicitors deals with personal injury claims and stores sensitive personal data on its ICT systems. The firm has been advised by an ICT consultant to look at the security of its ICT systems, to carry out a risk analysis, and then to plan how to reduce the risks.
- (a) Explain what is meant by *risk analysis*. (3 marks)
- (b) State **three** different potential threats to the firm's ICT systems, give a counter-measure for each one and explain why or how it could counteract the threat. (9 marks)
- (c) Describe **three** of the criteria that could be used to decide on a disaster contingency plan for the firm. (6 marks)

- 9 'An organisation needs information like a human being needs blood.'
'Information flows up and down the veins and arteries of an organisation.'

Discuss the above statements with reference to:

- the organisational structure and style of an organisation
- the importance of data collection, input and processing
- the dissemination of information
- the rôle of the people involved with creating and using information.

The quality of written communication will be assessed in your answer. (20 marks)

END OF QUESTIONS