

**General Certificate of Education**

**Information Technology Advanced**

***Module IT04***

***Information Systems within Organisations***

**Module Test**

**Time**

- 2 hours

**Information for candidates**

- Answer all the questions on this paper
- The number of marks is given in brackets at the end of each question or part question
- Question 11 should be answered in continuous prose. Quality of language will be assessed in this answer.

Answer all questions

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- 1      (a)      What is the purpose of a Management Information System? (1)
- (b)      Give one example of the use of a Management Information System within an organisation, clearly stating its purpose. (2)
- 2      The management of a company wishes to introduce a computer-based personnel package which is known to be compatible with the existing software base.
- Give five factors which could influence the success or failure of this exercise. (5)
- 3      A college is planning the introduction of a computer-based, end of term performance review system for sixth form students. The purpose of the system is to produce information for the following end-users:
- Personal tutors
  - Heads of Subjects
  - Senior Management
- For each pupil, the following data will be collected for each course studied:
- Percentage attendance
  - A predicted target grade and grade achieved
  - An effort grade
- (a)      Describe two alternative methods of collecting the data for this system. (4)
- (b)      The data is collected from a number of sources. For each of the data items, suggest one guideline or criterion which is required to enable consistent information to be produced. (3)
- (c)      For each of the different end-users describe, with the aid of examples, information that the system might produce in relation to their requirements. (6)

- 4 With the aid of appropriate examples, explain the difference between formal and informal information flow. (6)
- 5 A college uses a computer-based student record system. A report has been produced that lists the course and examination fees due, against the payments made by each student. The manager responsible discovers that the information in the report does not reconcile with the receipts taken, and wishes to investigate the accuracy of the information.
- (a) Describe the functionality which should have been built into the software to facilitate this investigation. (2)
- (b) State two possible overheads of this functionality. (2)
- 6 An organisation uses a computer network for managing its finance and personnel systems. The network manager is concerned that some members of staff may install unauthorised software onto the network.
- State six reasons why a piece of software should be designated as unauthorised. (6)
- 7 A large supermarket chain uses IT systems to deliver training. Staff receive training throughout their period of employment.
- (a) Describe three considerations that the authors must consider when designing the content of the IT-based training materials. (6)
- (b) Describe two distinct examples of the way that IT systems can be used for the delivery of training. (4)
- 8 A software house has decided to log user support requests, using a web-based facility. In order to ensure that they collect the correct information from the user, the software house has designed an on-line form which must be completed by any user who submits a request.
- (a) State four items of information which must be included within the on-line form, in addition to date, time and contact information. (4)
- (b) State two possible disadvantages of using a web-based facility for this activity. (2)

- 9 The manager of a company complains that the Management Information System (MIS) continually fails to produce the appropriate information at the right time. The person responsible for the MIS responds by stating that there are inadequate data and information flows within the company, and that others fail to realise the significance of information handling.
- (a) State six factors which influence the flow of information within an organisation. (6)
- (b) With the aid of examples, describe two techniques which could be used to review current information flows within an organisation. (4)
- 10 An information system was introduced into an organisation and was considered a failure. This was due to the inability of the organisation to manage the change.
- With the aid of examples describe three factors, other than technical ones, which could have caused this failure. (6)
- 11 "Information systems are critical to the running of any organisation, the consequences of failure could prove disastrous."
- Discuss this statement, including in your discussion:
- The potential threats to the system,
  - The concept of risk analysis
  - The corporate consequences of failure
  - The factors which should be considered when designing a contingency plan to enable recovery from disaster.
- Quality of language will be assessed in this answer. (20)