General Certificate of Education
January 2001
Advanced Subsidiary Examination

AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

INFORMATION AND COMMUNICATION TECHNOLOGY   ICT2

Wednesday 17 January 2001   Afternoon Session

In addition to this paper you will require:
   a 16-page answer book.

Time allowed: 1 hour 45 minutes

Instructions
- Use a blue or black ink or ball-point pen. Pencil should only be used 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 ICT2.
- Answer **all** questions.

Information
- The maximum mark for this paper is 73.
- Mark allocations are shown in brackets.
- You are reminded of the need for good English and clear presentation in your answers.

Answer **all** questions

1 State **two** editing facilities that are offered by word processing software. *(2 marks)*

2 Describe **two** differences between a Local Area Network (LAN) and a Wide Area Network (WAN). *(4 marks)*

3 State a suitable medium for transferring sound files, and give a reason for your choice. *(2 marks)*

4 A spreadsheet package has macro capabilities.

(a) Describe what is meant by the term *macro*. *(2 marks)*

(b) Give **two** examples of situations where the use of macros would be appropriate. *(2 marks)*

5 A company is experiencing difficulties with its computerised flat file information storage and retrieval system. Describe **three** benefits that the company would gain by converting to a relational database system. *(6 marks)*

6 All the staff in a small office use the same word-processing, spreadsheet and database packages. These packages all have a common user interface.

(a) Give **four** advantages of having a common user interface. *(4 marks)*

(b) State **four** specific features of a user interface which would benefit from being common between the packages. *(4 marks)*

7 A video and games rental shop uses a database package to record membership details of customers who wish to borrow videos or games. The following details must be entered for each new member; full name, address, postcode and date of birth.

(a) Name and describe a validation check that could be used when data is first entered into the following fields for a new member. Your validation check must be different in each case.

(i) Full_Name *(2 marks)*

(ii) Postcode *(2 marks)*

(iii) Date_of_Birth *(2 marks)*

(b) The database package automatically generates a membership number. Explain why this is required. *(2 marks)*

8 A college uses a computer-based batch processing system for keeping the students' records. The students provide their details, or changes to their existing records, on pre-printed forms. The completed forms are collected into batches ready to update the master files. These occur every night at certain times of the year, and once a week at other times.

(a) Explain what the term *batch processing* means. *(3 marks)*

(b)   (i)   Give **one** advantage of batch processing to the college. *(1 mark)*

   (ii)   Give **two** disadvantages of batch processing to the college. *(2 marks)*

The college decides to install a transaction processing system with which student records are keyed in on-line by a clerk.

(c) Explain what the term *transaction processing* means. *(3 marks)*

9 An Internet sales company carries out its business with the assistance of a database system running on a network of PCs. The main tasks are the processing of customer orders and the logging of payments. You have been asked to advise the company on backup strategies and to explain their importance.

(a) Give **two** reasons why it is essential that this company has a backup strategy. *(2 marks)*

(b) State **five** factors that should be considered in a backup strategy, illustrating each factor with an example. *(10 marks)*

10 A village store has just installed a computerised point of sale system including a bar code reader.

(a) Describe **two** advantages that the store gains by using a bar code reader attached to a computerised point of sale system. *(4 marks)*

(b) Describe **one** disadvantage to the store of using a bar code system. *(2 marks)*

11 Employees can often be responsible for causing loss or damage to their company's data. Regular backups are taken by the company, but in order to prevent employees from causing such loss or damage, describe:

(a) **two** measures that could be incorporated into the hardware used; *(4 marks)*

(b) **two** software features that could be used; *(4 marks)*

(c) **two** other procedures that the company could introduce. *(4 marks)*

END OF QUESTIONS

THERE ARE NO QUESTIONS PRINTED ON THIS PAGE