General Certificate of Education
June 2002
Advanced Subsidiary Examination

AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

INFORMATION AND COMMUNICATION TECHNOLOGY ICT2

Thursday 30 May 2002   Afternoon Session

In addition to this paper you will require:
  a loose insert;
  a 12-page answer book.

Time allowed: 1 hour 30 minutes

Instructions
- Use 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 60.
- Mark allocations are shown in brackets.
- You are reminded of the need for good English and clear presentation in your answers.

Answer **all** questions.

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1   Give **two** functions that should be incorporated into a software package to prevent accidental deletion/alteration of data. *(2 marks)*

2   Modern personal computer systems usually include a CD-Rewriter.

State **two** legal uses for a CD-Rewriter. *(2 marks)*

3   State **two** advantages and **two** disadvantages of using a computer on a server based network rather than stand-alone. *(4 marks)*

4   All employees of a company have an eight-digit password to access the company's computer network.

State **three** rules that the employees should follow to ensure the effective use of the password system. *(3 marks)*

5   A large national bank updates customers' bank accounts overnight with deposits made during the previous day.

 (a)   Name an appropriate type of processing that the bank could use for this operation. *(1 mark)*

 (b)   Give **three** features of this type of processing. *(3 marks)*

6   Explain the difference between the terms *verification* and *validation* when applied to data. Illustrate your answer with an example of each. *(4 marks)*

7 Applications software can be described as being *generic package software, specific package software* or *bespoke software*.

Describe, using examples, the characteristics of these **three** types of software.

*(The use of brand names will **not** gain credit.)* *(9 marks)*

8 A small business has been forced to purchase new computer hardware and software to replace its 10 year old system which has been destroyed in a fire.

(a) Describe **four** items of software that the company will need to buy, explaining why each item is required.

*(The use of brand names will **not** gain credit.)* *(8 marks)*

(b) The staff have used the old system successfully for the past 10 years.

Give **two** reasons why it will be necessary for the company to provide training for all its members of staff on the new system. *(2 marks)*

TURN OVER FOR THE NEXT QUESTION

Turn over ▶

9 A flat file system is used to store orders taken by an electrical retailer. Examples of records from the file are shown below.

Customer	Address	Order No.	Date of Order	Item No.	Description	Price	Phone No.	Sales Staff No.	Sales Person
Paul Smith	38 Beech Road	2345	4/11/2001	456	Steam Iron	£35.45	01234-665577	78	Sue Sneath
Anne Chu	27 Ash Square	2359	4/11/2001	764	Toaster	£19.99	01234-897645	62	Bert Jones
Anne Chu	27 Ash Square	2359	4/11/2001	798	Kettle	£19.99	01234-897645	62	Bert Jones
Sean Page	19 Elm Lane	2361	5/11/2001	461	Microwave Oven	£125.00	01234-567483	78	Mrs Sneath
Joan Patel	16 Oak Close	2362	5/11/2001	764	Toaster New	£15.99	01234-192837	78	Sue Sneath

(a) Referring to the examples above, describe the problems that have occurred by storing the data in a single flat file. *(6 marks)*

(b) The flat file system is to be replaced by a relational database.

What structures would be needed in this database to allow for the effective updating and retrieval of data? *(4 marks)*

10 A mail order company receives orders from its customers, handwritten on pre-printed forms. These are then used by clerks to enter the data into a computerised system. A sample blank customer order form **(Figure 1)** and input screen **(Figure 2)** are shown on the loose insert provided with this question paper.

(a) With reference to **Figure 1** and **Figure 2**, describe **three** features of the input screen that provide an effective human/computer interface. *(6 marks)*

(b) Identify **three** data items that the software will enter automatically and, for each item, state the event that triggers the automatic entry. *(6 marks)*

END OF QUESTIONS