General Certificate of Education
June 2001
Advanced Subsidiary Examination

**AQA**

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

# INFORMATION AND COMMUNICATION TECHNOLOGY     ICT2

Friday 25 May 2001          Afternoon Session

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

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Time allowed: 1 hour 45 minutes

**Instructions**
- Use blue or black ink, or a 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 70.
- Mark allocations are shown in brackets.
- You are reminded of the need for good English and clear presentation in your answers.

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Answer **all** questions

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1   State **two** types of data, other than alphanumeric, that can be stored in a computer file.        *(2 marks)*

2   Give **four** advantages of using a relational database rather than a flat file system.        *(4 marks)*

3   A new printer is supplied with printer driver files.  The files are provided both on a floppy disk and on a CD-ROM.  The CD-ROM also contains sound files for use with the printer.

    (a)   Describe the functions of a printer driver.        *(2 marks)*

    (b)   State **one** reason why the sound files are not provided on a floppy disk.        *(1 mark)*

    (c)   Give **one** possible use of the sound files.        *(1 mark)*

4   Most modern PCs make use of a GUI (graphical user interface) and have a WYSIWYG (what you see is what you get) word-processing package.

    (a)   State **four** characteristics of a GUI.        *(4 marks)*

    (b)   Describe **three** advantages to the user of a WYSIWYG word-processing package.        *(6 marks)*

5   The head of a company's IT services department is to give a presentation on data security to all computer users within the company.

    (a)   Give **three** methods of ensuring data security that she should include in the content of her presentation.        *(3 marks)*

    (b)   She decides to develop a  computer-based presentation to be displayed using an LCD projector rather than creating overhead projector transparencies.

       (i)   State **three** functions of the presentation software that are only available for use with the LCD projector.        *(3 marks)*

       (ii)   Describe **two** design considerations that she needs to take into account in order to develop an effective presentation.        *(4 marks)*

**6** A small company is purchasing a new computer system and software. The new software includes an operating system, and generic package software which contains an application generator.

(a) Give **three** tasks that are performed by an *operating system.* *(3 marks)*

(b) State **three** characteristics of *generic package software*. Illustrate your answer with **three** different examples of the type of packages that could be chosen by the company.
(*The use of brand names will not gain credit.)* *(6 marks)*

(c) State **two** characteristics of an *application generator.* *(2 marks)*

**7** A company that organises music festivals sells tickets via the Internet. An on-line booking form has to be completed to reserve the tickets.

(a) State **three** fields other than Name, Address and Postcode that you would expect to find on the booking form. *(3 marks)*

(b) Name and describe a different validation check for each of the fields you have chosen. *(6 marks)*

**8** In a solicitor's practice there are ten employees working in three offices. Each employee has a stand-alone computer system and there is a shared printer in each office. The head of the practice has been advised that it would be more efficient if the ten computers were formed into a server-based network.

(a) State **three** benefits that the practice would gain from networking their computer systems.
*(3 marks)*

(b) Give **two** reasons for choosing a server-based system rather than a peer-to-peer system. *(2 marks)*

(c) State **two** items of hardware that will be needed to connect these ten computers as a server-based network. State why each item is required. *(4 marks)*

**Turn over ▶**

**9** The local council wishes to store the contents of documents on a computer system. The documents consist of hand-written and typed text. The documents will be scanned and OCR (Optical Character Recognition) software will be used to interpret the text and export it to files that can be read by word-processing software.

(a)   (i)   Describe **two** problems that could occur when scanning and interpreting the text. *(4 marks)*

      (ii)   Describe **two** advantages to be gained by using OCR software. *(4 marks)*

(b)   State **three** types of material, other than text, that could also be input using the scanner. *(3 marks)*

**END OF QUESTIONS**