



## **General Certificate of Education**

# **Information and Communication Technology 5521**

## **Unit 2      Information: Management and Manipulation**

# **Report on the Examination**

*2007 examination – January series*

Further copies of this Report are available to download from the AQA Website: [www.aqa.org.uk](http://www.aqa.org.uk)

Copyright © 2007 AQA and its licensors. All rights reserved.

#### COPYRIGHT

AQA retains the copyright on all its publications. However, registered centres for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to centres to photocopy any material that is acknowledged to a third party even for internal use within the centre.

Set and published by the Assessment and Qualifications Alliance.

## General Comments

In this January series of the examination both the AS and A2 units showed candidates achieving a good range of marks. There was clear evidence that many candidates were well prepared for the unit that they were attempting.

Candidates do need to be reminded to read the front of the question paper before beginning to read the questions themselves. It is clearly stated on the front of all GCE ICT question papers that, '*...the use of brand names will not gain credit.*' Marks were therefore lost by candidates using brand names of specific software packages as they must respond to questions with reference to generic types of software.

Some candidates gave answers to questions which have appeared on previous question papers or they repeated their answers within the same question. In any examination it is unlikely that any response in whole or in part would be credited more than once. Also the importance of reading a question properly cannot be stressed enough. It is imperative that candidates answer a question as it is asked, rather than simply give stock answers remembered from previous examination series.

Often questions cover topics that have been used many times in a similar, straightforward manner, yet some candidates fail to recognise the different topics, despite clues in the questions. A study of the specification, alongside past papers and mark schemes that are available on the web-site, might have helped candidates to prepare more thoroughly.

### Question 1

Most candidates could state two modes of processing. Only the better candidates clearly stated specific uses e.g. 'processing of cheques' as an example of batch processing.

### Question 2

A minority of candidates succeeded in gaining full marks for this question. The vast majority of candidates overlooked the fact that the question clearly referred to data.

- (a) Encoding of data is the conversion of data into a machine-readable form that a computer can understand. Candidates who provided an example of a suitable format e.g. ASCII, bitmap, jpeg or other file formats were credited with one mark of the two available.
- (b) For encryption, few candidates correctly identified that the data needed to be scrambled, and referred to the use of passwords. A common misconception was that once the data was encrypted no-one would be able to understand the data. Only the best candidates realised that authorised viewers would have a decryption key.

### Question 3

- (a) Candidates needed to answer this part by referring to the mobile phone use mentioned in the question, so answers that referred to computer use generally could not gain credit.
- (b) Most candidates could identify two other types of user interface. Candidates are reminded not to use brand names for examples of use.

#### **Question 4**

Most candidates provided excellent answers to this question. However, a few candidates did not read the question carefully enough and gave un-creditworthy answers about rules on lengths of password for part (a).

#### **Question 5**

Many weaker candidates did not gain the marks available for examples as they only mentioned branded software.

- (a) System software is required because a computer is being used. There are many examples of this type of software other than an operating system e.g. anti-virus program, disk formatters.

(b)&(c) Many candidates gave clear, detailed answers for these parts of the question.

#### **Question 6**

This question was well answered by most candidates with good candidates gaining full marks.

#### **Question 7**

- (a) Most candidates could provide an advantage for choosing a laptop computer.
- (b) In contrast to part (a), this part of the question was answered poorly. Most candidates scored one mark, often to do with factors associated with performance or features of a desktop. Unfortunately, they rarely got the second mark as they didn't write about comparative budgets, flexibility of the machine due to its size, expansion slots etc, or health and safety issues.

#### **Question 8**

- (a) Better candidates identified problems including data redundancy and inconsistency, then illustrated their answers with appropriate examples from the two files given. Weaker candidates did not read the question carefully enough and wrote about linked tables in a database context so they could not gain the full marks available.
- (b) A range of answers was seen from excellent to very poor.
- (c) Most candidates could identify the validation required. Better candidates both named the check and gave a good description. It was pleasing to see that very nearly all candidates realised that the checks needed to be different.

#### **Mark Ranges and Award of Grades**

Grade boundaries and cumulative percentage grades are available on the [Results statistics](#) page of the AQA Website.