

### **General Certificate of Education**

# Information and Communication Technology 5521

Unit 2 Information: Management and Manipulation

## Report on the Examination

2007 examination – June series

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#### **Question 1**

This question was generally well answered with most candidates gaining full marks. A wide range of acceptable formats were seen as answers.

#### Question 2

Better candidates gained full marks for this question giving answers that accurately described a suitable *method* of data capture. However, weaker candidates gave answers that only identified an input device. For example, 'barcode reader' is not a creditworthy answer for part (c), but 'use of a barcode reader to scan library book details' would gain a mark.

#### **Question 3**

It was pleasing to see better candidates giving good descriptions of a macro and providing a suitable example of use thus gaining full marks for this question. Weaker candidates usually provided only an example of macro use.

#### **Question 4**

The rubric for this question was taken directly from the Software: Nature, Capabilities and Limitations section of Module 2.

For part (a) only a minority of candidates could explain the possible technical implications of changing software. Few candidates gained full marks for this part of the question. Creditworthy answers explained the need to upgrade existing hardware and software, that existing hardware/software may be incompatible with the new software and that existing data may need converting to a new format.

Candidates gave better answers for part (b) of the question, with many giving good explanations of possible human implications of changing software. For example, staff may need training as they are unfamiliar with new features in the software.

#### **Question 5**

For part (a) most candidates could identify four factors to consider when designing backup procedures. Better candidates then described what would be suitable for a large hospital e.g. identification that, 'frequency of backup needed to be considered,' would gain one mark, describing a suitable frequency, 'continuous backup (using mirroring) because patient records may be needed at any time,' would gain the second mark.

For part (b) few candidates correctly identified the factors that the manager must consider when designing recovery procedures. Many candidates incorrectly cited factors considered for backup; these could not be credited. A suitable answer could have read as follows, 'The manager would need to have procedures to ensure that there were staff available to perform the recovery when necessary, and that there was alternative equipment available for use if required.'

#### **Question 6**

Most candidates could identify four features of a GUI. Many candidates could also describe the features, but only the best candidates showed their understanding of human/computer interaction by explaining benefits of the features of the interface. For example, identifying an icon as a feature would gain 1 mark, describing an icon as a pictorial image used to represent a program would gain no further credit, but explaining that using clearly recognisable icons made

program launching easier as commands did not have to be remembered would gain the second mark.

#### **Question 7**

In part (a), the term validation yielded better descriptions than verification. Many candidates identified that verification requires data entry to be repeated, but then failed to explain that, in order to find errors, the two entries must be compared and any differences identified.

Part (b) was well answered. Most candidates gained full marks.

Only the best candidates answered the sub-question (c) as set, explaining *why* the data entered needed verifying e.g. Surnames may take many different forms so it would be difficult to design suitable validation checks.

In part (d) most candidates gained 2 of the 3 marks available here. An explanation of why a drop down list was appropriate was not always included.

Part (e) was well answered by all but the weakest candidates.

#### **Question 8**

For part (a) better candidates explained why it was more efficient to store the data in two tables.

In part (b) nearly all candidates identified the field required to link the tables and better candidates referred to its use as a primary key in one table and a foreign key in the other table e.g. the account number is present in both tables. It is used as a primary key in the Customer table and as a foreign key in the Transaction table.

It was pleasing to see that most candidates provided a credible design for a monthly bill for part (c). A very small minority of candidates did not follow the instructions in the question to use the entries for Smith & Co. to illustrate the layout and contents of the report and thus could not gain full marks for their design.

#### Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the **Results statistics** page of the AQA Website.