

General Certificate of Secondary Education

GCSE Information and Communication Technology 3521 Full Course

Specification A

3521/F Foundation Tier

Report on the Examination

2007 examination - June series

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General Comments

The standard of performance from the candidates in this paper continues to improve each year. However, centres are reminded that in this specification there are elements of the theory that are difficult to teach through the practical coursework alone. These maybe best taught by separate theory lessons or as starters or plenaries in practical lessons.

As in previous years, most of the paper appeared accessible to the majority of candidates with the vast majority achieving 20 marks or more. The highest grade that can be awarded on the Foundation Tier is grade C but quite a few candidates scored very high marks on this paper. Unless these candidates performed poorly in both parts of the coursework, entry at the higher tier should have been considered.

Questions 1 to 5 (Multiple Choice Question)

Overall, these multiple choice questions were well answered with many candidates scoring well on this introductory part of the paper.

In question 1, almost three quarters of candidates were able to identify that a hard disk drive was not an input device.

In question 2, just over two thirds of candidates were able to identify that a microphone was not an output device.

In question 3, the vast majority of candidates were able to identify that a touch sensitive screen was not a storage device.

In question 4, just over half of candidates were able to identify that RAM lost its contents when the computer is switched off.

In question 5, just over three quarters of candidates were able to identify a description of a search engine.

Question 6

This question was reasonably well attempted by many of the candidates, as this is now a familiar style of question. However, this year some of the most obvious answers were already given in the question and many candidates struggled to give more additional fields other than telephone numbers. Full marks were surprisingly rare but most candidates gained at least one mark. Candidates who did not score well on this question usually did one or more of the following: -

- They gave too few boxes (or similar) to fill in each part of the form.
- They did not give enough fields to score well on this question (much of a page was left for the answer and the question was out of four marks indicating the candidate needed to give at least four more suitable fields)
- As in previous years, they gave some fields that were wrong/irrelevant e.g. National Insurance Number, Name of doctor. Whilst this did not directly loose any marks, it did not gain marks.

Question 7

Over the years, questions relating to DTP and word processing have tended to be well answered and this year was no exception.

Parts (a) and (b) were very well answered and the vast majority of candidates scored one or two marks for each part.

Part (c) was also well answered but some candidates could not give a feature of software that could be used to check the accuracy of text.

Part (d) was also well answered and the majority of candidates could fully describe the cut and paste process.

Question 8

Logo style questions have been a common feature in this paper over the years and it is surprising that less than half of the candidates scored full marks in part (a). This was usually due to lack of precision or failure to complete the commands needed to draw the shape. Candidates were better at drawing the correct shape and a pleasing majority of candidates gained full marks in part (b).

Question 9

This question on operating systems was quite well answered and the vast majority of candidates scored at least one mark in part (a). However, only a minority of candidates were able to gain full marks in this part of the question.

In part (b), most candidates were able to identify multi-user as a type of operating system.

Question 10

Overall, candidates showed a good understanding of the spreadsheet in this question.

Parts (a) and (d) were very well answered, with correct answers being given by the vast majority of candidates.

Other parts of this question were also well answered, with most candidates gaining the mark for part (b) and part (c).

Surprisingly, less than half of candidates could identify the correct disadvantage of using a spreadsheet. A common wrong answer was that the formulae could be wrong, which of course could also be true of a calculator.

Question 11

Parts (a)(i), (a)(ii) and (a)(iii) of this question were extremely well answered with candidates showing a good understanding of the process of ordering groceries on the Internet.

Similar questions on advantages/disadvantages of using the Internet have been asked on previous papers and candidates' answers overall have improved. However, a number of candidates still try to give vague answers such as faster, cheaper and easier with little if any qualification.

In part (b), most candidates were able to gain at least 1 mark for giving advantages of using the Internet to order groceries but relatively few were able to gain both marks.

In part (c) two thirds of candidates were able to give a suitable disadvantage of ordering their groceries on-line.

Question 12

Some parts of this question on monitoring and control systems were well answered but other parts were not well understood by many candidates.

Part (a) was quite well answered with most candidates gaining at least one mark. However, only a minority of candidates were able to gain full marks for this section.

Despite similar questions to part (b) on previous papers, only a small number of candidates could name a suitable device such as a heat sensor.

Answers to part (c) were also disappointing with only a minority of candidates able to give a sensible reason why there was a need for "such a device in each room".

Part (d) was answered correctly by most candidates.

Question 13

As may have been expected a clear majority of candidates could define the term e-mail and could give one advantage of e-mail compared to post.

However in parts (b)(i) and (b)(ii), only around half of the candidates could give a second advantage or a disadvantage of e-mail compared to post.

A common mistake was that candidates thought that video/sound clips could be added as attachments to e-mails but they could not be sent by post.

Question 14

Despite being an important element of the coursework, the concept of data validation is still not well understood by many candidates.

Even most of the "tick box" elements in part (a) which describes how data validation works, were not well answered. Most candidates answered 'software' correctly but few identified 'input' and 'it is reasonable' as correct.

In part (c) only a small minority of candidates gained 1 or 2 of the possible marks for explaining how a range check could be used to validate an examination mark.

Question 15

The idea of computer simulators seem very well understood by the vast majority of candidates and they scored well in parts (a)(i) and (a)(ii). This may be from their direct experience of related computer simulations/games.

In stark contrast in part (c), few candidates had any real idea of the term modelling. Very few candidates gained either 1 or 2 marks.

Question 16

Part (a) - the Data Protection Act part of this question was well answered with most candidates scoring at least 1 mark for this part of the question (but few scored all three marks). The most common wrong answer was "Information must be changed at the request of the customer".

Overall part (b) of this database related question was quite well answered and this could relate to the increasing number of candidates who attempt a system project in their coursework, centred round a database solution to the problem.

Part (c) was reasonably well answered but a little under half of the candidates could suggest a sensible additional table such as video table.

Candidates found part (d) very difficult and few could give a suitable reason such as the reduction in redundant data.

Question 17

Parts (a)(i) and (a)(ii) of this question were correctly answered by the vast majority of candidates. However, the idea of observation being used to collect information was far less well understood and only a minority of candidates could give a suitable advantage.

Although in (b)(i) many candidates could link "planning the layout of reports" to the design section, surprisingly few were able to answer correctly (b)(ii).

Question 18

Most candidates were able to link at least one term to the correct definition but few were able to score all three marks.

Question 19

User interface questions are not usually well answered but many candidates were able to gain the mark for part (a). In part (c) however, few candidates scored both marks and were able to give any other factor that needs to be considered when designing a new user interface. The most common correct answers were the use of colour or sound.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the <u>Results Statistics</u> page of the AQA Website.