

General Certificate of Secondary Education

GCSE Information and Communication Technology 3521 Full Course

Specification A

3521/F Foundation Tier

Report on the Examination

2008 examination - June series

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General Comments

The standard of performance from the candidates in the written paper was similar to previous years. It must be remembered that in this syllabus, there are elements of the theory that are difficult to teach through the practical coursework alone. These may be best taught by separate theory lessons or as starters or plenaries in practical lessons.

As in previous years, the statistics indicate that most of the paper appeared accessible to the majority of candidates, with nearly all scoring 20 marks or more. In addition, very few candidates left questions not attempted, which is a pleasing trend. 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 scored badly in both parts of the coursework, entry at the higher tier could have been considered.

Questions 1 to 5 (Multiple Choice Questions)

As in previous years, the majority of these multiple choice questions were well answered with many candidates scoring highly on this introductory part of the paper.

Question 1 asked candidates to identify the most suitable software package to use for a given task, with a list of possible applications given at the start of the question.

In question 1(a), almost three quarters of candidates were able to identify a drawing package as the most suitable for the rotation of shapes.

In question 1(b), the vast majority of candidates were able to identify a word processing package as the most suitable for typing text into a novel.

In question 1(c), almost three quarters of candidates were able to identify either a desk-top publishing or a web design package as the most suitable for using frames to position text and graphics on a page.

In question 1(d), most of the candidates were able to identify a spreadsheet package as the most suitable for the replication of cells.

In question 1(e), more than half of candidates were able to identify a database package as the most suitable for carrying out a complex search on two or more criteria.

In question 1(f), more than half of candidates were able to identify a modelling package as the most suitable for a simple flight simulation.

In question 2 the term hard copy did not seem familiar to the majority of candidates and only around a third of them could identify that hard copy meant printed output.

In question 3 which was about the rights of data subjects, few candidates gave the correct answer with a large number of candidates thinking that the correct answer was that individuals data must never be passed on to others.

In question 4 more candidates were able to identify the responsibilities of data users but again many candidates thought that the correct answer to this part of the question was also that data must never be passed on to others by data users.

In question 5 just over half of the candidates were able to identify the logical operator not usually used in the construction of database queries.

Question 6

Answers to part (a) tended to be vague and only just over a third of candidates were able to state or imply that copyright involved legal ownership of the clip-art.

A little surprisingly, in part (b) the majority of candidates thought clip-art is always free of copyright, rather than being sometimes free of copyright.

In part (c) however, the majority of candidates were able to give a suitable penalty such as a fine, if copyright was broken.

The majority of candidates scored at least one mark on this part of the question but just under a quarter scored the full three marks. This was a little surprising, as similar questions have appeared in previous years and the use of DTP software is commonplace today.

Question 7

This question was reasonably well attempted by many of the candidates, and this is now a familiar style of question. Full marks however, were surprisingly few but the vast majority of candidates gained at least one mark. A very small number of candidates did not attempt to answer this question. 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 on each part of the form
- They did not give enough fields to score well on this question (the page was left blank for the answer and the question was out of six marks indicating the candidate needed to give at least six suitable fields)
- As in previous years, they gave some fields that were wrong/irrelevant e.g. National Insurance Number etc. Whilst this did not directly loose any marks, it did not gain marks.

Question 8

Overall, the spreadsheet question was quite well answered and in part (a) over three quarters of candidates could identify the shaded cell as A14.

In part (b) text, date and number were the most common cell formats identified. Most candidates were able to identify at least one cell format used in the spreadsheet.

Most candidates were able to identify a suitable graph in part (c), with the most common correct answers being pie and bar.

In part (d) only a quarter of candidates were able to give an accurate formula for the cell D19. Some candidates tried to explain what was happening in the cell rather than give a mathematical formula.

In part (e), it was pleasing to see quite a number of candidates had experience of goal seek in "what if" situations but very few were able to expand their explanation to score both marks on this question.

Question 9

Most candidates could identify a sensor in part (b) as a suitable input device but less than half of the pupils gave the correct answers for parts (a) and (c).

Very few candidates seemed familiar with the term calibrate as the answer for part (d).

Question 10

Logo style questions have been a common feature in this paper over the years and candidates coped well with this change in context. Parts (a) and (b) were very well answered and many candidates scored full marks.

Part (c) was quite well answered and around half of the candidates scored the full three marks. Candidates came up with a number of different, correct variations that moved the robot along the given route.

Question 11

The term on-line in part (a) was well understood by candidates and the majority gained the mark for this part of the question.

Similarly, part (b) was well answered and just over three quarters gained at least one mark for this part of the question. The most common correct answers were a description of the buyer getting the goods cheaper and having access to a wider/worldwide market for a wide range of goods.

In part (c), quite a lot of candidates lost marks because they gave disadvantages to the customer of buying goods rather than the seller who was selling goods on Interauc.

In part (d) just below half of candidates identified a suitable reason why Interauc would not allow some goods to be sold. The most common correct answer was the sale of illegal goods. Incorrect answers were often too vague to establish if what the candidate was suggesting might not be allowed.

Question 12

Several parts of this question on methods of data capture were well answered but other parts were not well understood by many candidates.

Around half of candidates answered part (b) correctly and parts (c) and (d) were very well answered by candidates with around three quarters getting them correct.

Few candidates were able to identify OMR as the method of data capture in part (a).

Question 13

Almost three quarters of candidates could identify another field that had been coded in part (a) and say how many records were in the given database in part (b). However, only a quarter of

candidates could identify why the Property ID field was needed. This was little disappointing given the increasing use of databases in the coursework.

In part (d), the vast majority of candidates thought incorrectly that data validation would ensure that the data entered into databases was **correct** rather than **sensible**.

In part (e) around two thirds of candidates could identify Max people as a suitable field for a range check.

It was disappointing in part (f) that a little over half of the candidates could not give even **one** suitable advantage of using a database compared to using manual methods. Answers tended to be very vague e.g. cheaper, faster and smaller, these were common answers that gained no marks without further explanation.

Question 14

As candidate's coursework continues to improve it is not surprising that most parts of this question were well answered.

In part (a), almost three quarters of candidates were able to identify at least one task carried out in the Analysis stage of the system life cycle.

Part (b) and part (d) were very well answered, with majority of the candidates gaining marks.

As in previous years, it would seem that the testing phase is the least well understood part of the system life cycle with just under half of candidates able to identify it as the stage for entering test data.

Question 15

The concept of password and what makes a good or bad password, was well understood by the vast majority of candidates and parts (a) and (b) were very well answered.

Half of the candidates also knew the letters WAN stood for Wide Area Network but few could give a sensible reason why the newspaper needed to be connected to a WAN

Question 16

As may have been expected, the term e-mail was well known to candidates and a majority could gain at least one mark for defining the term. Similarly part (b) was very well answered and almost all candidates gained one or two marks for giving advantages of e-mail.

However, in part (c) only around half of the candidates could give a disadvantage of e-mail compared to post. The most common correct answer given by candidates was the inability to send physical objects such as parcels via e-mail.

Part (d) was less well answered and just under a quarter of candidates were able to give a suitable reason why some people may still prefer to use the telephone.

Question 17

Most parts of this question were well or quite well answered by candidates.

Part (a) was correctly answered by half of the candidates and nearly all candidates could give at least one task carried out by an operating system. Similarly part (c) was well answered and two thirds of candidates could identify one type of operating system from the list.

It was disappointing with the widespread use of computers that only a few candidates could name one other type of operating system.

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.