

General Certificate of Secondary Education

GCSE Information and Communication Technology 3527 Short Course

Specification A

3527/H Higher 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 slightly each year. As was stated last year, it must be remembered that in this specification, there are elements of the theory that are difficult to teach through the practical coursework and these may be best taught in separate theory lessons. Again, most of the paper was accessible to the majority of candidates and it was very rare to see parts of the paper left not attempted. The vast majority of the candidates were entered for the correct tier and low scores were rare.

Question 1

This question was extremely well answered and candidates at this level had a clear idea of a range of input, output and storage devices. The vast majority of candidates could identify input/output devices in/not in, the list, as appropriate.

Questions 2 to 5 (Multiple Choice Question)

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

In question 2, a pleasing majority of candidates were able to identify that RAM lost its contents when the computer is switched off.

In question 3, a sizeable majority of candidates were able to identify a description of a search engine.

In question 4, three quarters of candidates were able to identify that merging files was not a method used to restrict access.

In question 5, only around a half of candidates were able to identify hard copy as printed output.

Question 6

Over the years, questions relating to DTP and word processing have tended to be well answered, especially on the higher tier 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 very well answered and many candidates could fully describe the cut and paste process.

Question 7

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 few 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 8

Logo style questions have been a common feature in this paper over the years and it is pleasing that around three quarters of the candidates scored full marks in part (a).

Candidates were even better at drawing the correct shape and a very pleasing high number of candidates gained full marks in part (b).

Question 9

Almost all of candidates were able to link at least one term to the correct definition but only just under half were able to score all four marks.

Question 10

Overall, candidates showed a very 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 many candidates gaining the mark for part (b) and part (c).

Surprisingly, only just over 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

Over the years the term virus seems to have been well understood by candidates, so it is a little surprising in part (a) that only a minority of candidates could select both descriptions of a virus from the list given. However, in part (b) the vast majority of candidates could give at least one way a virus could get into a computer system.

Most candidates could identify at least one advantage of the doctor using a database but only a small number could give suitable two reasons.

Question 12

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 only around a quarter candidates were able to gain both marks. In part (c) most candidates were able to give a suitable disadvantage of ordering their groceries

Question 13

on-line.

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 part (b)(iii), just over half of the candidates could give 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

The idea of computer simulators was very well understood by the vast majority of candidates and they scored well in parts (a)(i) and (a)(ii). Perhaps this springs 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 with only very few candidates gaining both marks.

Question 15

Despite being an important element of the coursework, the concept of data validation is still not well understood by many candidates and in part (a) few candidates gained both marks. A common error was that data validation was "fool proof" and would make sure that the answer was always correct.

Part (b)(i) in which candidates were asked to state an error were both well answered. However, some candidates gave too vague answers that did not clearly identify the error (e.g. in part (b)(i) they did not clearly identify that there was no entry for the registration group of Susan Carr).

In part (b)(ii) most candidates were able to identify suitable methods of data validation to reduce the possibility of an error.

It was also quite pleasing to see in part (d) that just over half of candidates could give a reason why a pupil name is not a suitable key field.

Question 16

Part (a) - the Data Protection Act part of this question was well answered with the majority of 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 very 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 also quite well answered and most candidates could suggest a sensible additional table.

Higher candidates still found part (d) very difficult and only a small number could give a suitable reason such as the reduction in redundant data.

Question 17

This year's essay style question was well answered by many candidates who had an understanding of some of the health and safety implications of the use of computers in an office. In part (a) many candidates were able to describe several possible health and safety implications, the most common correct ones being: -

Health issues

- Back/Neck pain/problems
- Headaches
- Eye strain
- Wrist problems/Carpel Tunnel Syndrome/RSI(finger problems)
- Possible radiation from monitor
- Possible epilepsy from monitor
- Overheating of the room

Safety issues

- Trailing wires
- Electrical faults
- Overload sockets/supply

In this part of the question few candidates gained all 5 marks. Around two thirds of candidates gained at least 3 marks and there were very few who failed to score any marks.

Part (b) was also well answered and many candidates could give sensible steps to alleviate some of the problems outlined in part (a), some of the most common correct ones being: -

Health issues

- Regular breaks/walk around/relaxation techniques/fresh air
- Correctly adjusted chair/back support correct in chair/footrest
- Adjust monitor distance/brightness
- Visit doctor/eye test
- Use wrist support/ergonomically designed keyboard
- Check radiation level/change type of monitor/possible "screen shield"
- Use of air conditioning/ventilation

Safety issues

- Make sure all leads are secure/out of reach
- Repair faults/report faults
- Regular service and checks/PAT tests
- Use of blinds/fluorescent diffusers
- Install additional sockets

In this part of the question some candidates gained all 4 marks. Around half gained at least 3 marks and few failed to score any marks.

Candidates who scored badly had a tenancy to come up with sensible one point and repeat it for the rest of there answer; this usually scored one mark.

Mark Ranges and Award of Grades

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