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ASSESSMENT and QUALIFICATIONS ALLIANCE

## General Certificate of Secondary Education

# GCSE Information and Communication Technology 3527 Short Course

*Specification A*

## 3527/H Higher 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 last year. As was stated last year, it must be remembered that in this syllabus, 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 appear to be entered for the correct tier and low scores were rare.

## Questions 1 to 5 (Multiple Choice Questions)

Overall, 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 application.
In question 1(a), majority 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), a good majority 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), the vast majority of candidates were able to identify a spreadsheet package as the most suitable for the replication of cells.
In question 1(e), around three quarters 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), around three quarters of candidates were able to identify a modelling package as the most suitable for a simple flight simulation.
In question 2, 3 and 4, almost all candidates could identify the input, output and storage devices.
In question 5 the term hard copy did not seem familiar to a sizable number of candidates and only a little over half of the candidate of them could identify that hard copy meant printed output.

## Question 6

Most candidates had a good working understanding of the application of a DTP package. In part (a) and part (b) of this question, a very high percentage of candidates gained at least one mark in each part. In part (b), where candidates were asked to give additional possible features of a DTP package and reasons why these would be used, over half of the candidates gained the full four marks.

## Question 7

Part (a) of this question was well answered with almost all candidates gaining at least one mark for identifying the most suitable field type for the fields given. However, only a handful of candidates gained all four marks.
Part (b) was well answered and the vast majority candidates could give at least one suitable additional field. Common correctly identified fields were:
- Mobile phone number/Emergency phone number
- National Insurance number
- Job title
- Date started
- Qualifications
- E-mail address

In part (c), a little under a third of the candidates managed to score at least one mark on this part of the question, which was a little disappointing with data validation usually being an element of the AQA set Assignment.

## Question 8

Overall, the spreadsheet question was quite well answered and in part (a) almost all of candidates could identify A14 as a cell, from a given list.
In part (b) a high percentage of candidates could choose at least one correct cell format.
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) a little over half 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 quite pleasing to see 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. Around two thirds of candidates could correctly identify the terms data logging in part (a) and logging interval in part (c). However, fewer than half the candidates seemed familiar with the term calibrate as the answer for part (d).

## Question 10

Many centres now seem to be teaching their students the key elements of the Data Protection Act and full marks were not uncommon. The question was well answered and almost three quarters of candidates gained at least one mark. A common misconception (or guess) was that data users could not give any information to anyone under any circumstances at all.

## Question 11

Logo style questions have been asked on this higher tier paper before and as might be expected many candidates appear to have found both parts (a) and (b) reasonably easy to score marks. However, whilst the vast majority of candidates scored full marks in part (a), only about three quarters of candidates scored full marks in part (b). As with the foundation paper, candidates came up with a number of different, correct variations that moved the robot along the given route.

## Question 12

The majority 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). In addition, a little under a half of candidates could identify why the Property ID field was needed.
Over three quarters of candidates in part (d) could give at least one suitable advantage of using a database compared to using manual methods.
It was very pleasing to see all sections of part (e) were very well answered, showing candidates increasing familiarity with database software.
In part (fi) most candidates could give a suitable reason why the pets allowed field may have been left blank but only around half of the candidates could go on to explain how validation could reduce the chance of this happening.

## Question 13

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 a large percentage of candidates gained at least one mark for this part of the question and around a third gained full marks. 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) almost a half of candidates identified a suitable reason why Interauc would not to 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 had suggested might not be allowed.

## Question 14

As may have been expected, the term e-mail was very well known to candidates and a vast 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.

In part (c) over 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 half of candidates were able to give a suitable reason why some people may still use the telephone to communicate.

## Question 15

This year's essay style question was quite well answered by many candidates who had an understanding of the need for the information stored to be accurate. In part (a) many candidates were able to describe at least one possible consequence of inaccuracies, although some answers were too vague to score marks.

Answers to part (b) were even better than part (a) with the vast majority of candidates gaining at least one mark for describing ways in which the information stored may have become inaccurate. The most common correct answers were:

- Typed in wrongly/inaccurately accidentally
- Back storage problems/failure
- Hackers changing data
- Virus attack

Similarly part (c) was also well answered with majority of candidates scoring at least one mark for describing ways of reducing the risk of inaccurate data being stored on a computer system. The most common correct answers were:

- Data validation
- Data verification/Proof reading
- Keep backup copies
- Firewall
- Virus checker

### *Mark Ranges and Award of Grades*

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