

General Certificate of Secondary Education

Information and Communication Technology 3522 Full Course

Specification B

3522/H Higher Tier

Report on the Examination

2007 examination - June series

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General

Most candidates attempted most of the questions on the paper. There were some excellent answers showing a good breadth and depth of knowledge at this level.

When answering the questions on the written papers, a few candidates gave the answers 'quicker', 'cheaper', 'easier', 'neater', 'more powerful', 'makes fewer mistakes', 'it could breakdown', etc. without further qualification, and credit was not given for these simplistic answers. More successful candidates explained, what is 'quicker', why it is 'quicker', what are the consequences because 'it could breakdown', etc. in relation to the context of the question. In addition, one word answers were not usually awarded a mark when a description or explanation was required. Similarly, no marks were given for repeating the question without elaboration, and vague, repetitive or inaccurate answers. Better answers related well to the context of the question, were detailed and accurate, used appropriate technical language, and had illustrative examples. It was not uncommon for candidates to be awarded marks because they had given a good example, where marks could not be given for a weak explanation or a vague description. Diagrams were sometimes poorly labelled and not well drawn.

Many candidates demonstrated a good standard of literacy and many answers were clear and well structured. However, some candidates expressed themselves very poorly. Such candidates often answered multiple choice and short answer questions with greater success and would have had better opportunities to fully demonstrate their knowledge and understanding if they had been entered for the foundation tier. It is likely that inappropriately entered candidates obtain lower grades as questions on the Higher tier paper are less accessible to them than questions on the Foundation tier paper, perhaps causing them to be awarded significantly fewer marks. Centres are urged to enter for the Foundation tier candidates who do not express themselves clearly in written English.

The marking of the Higher paper was computer based (e-marking). Whole written scripts are scanned and saved in electronic form, and each clip (subsection of a question) is marked separately. Each clip is marked in one of three categories: auto, general and expert. Auto marking is particularly appropriate for multiple choice questions; general marking for short answer questions and diagrams requiring a straight forward response; and expert marking for more complex and extended answers. At the end of the marking period an audit of the e-marking process was carried out to ensure its accuracy. As a result of the e-marking process, item level analysis of candidates' responses is practical. The comments on specific questions are grounded in the judgement of the Principal Examiner; however, these are underpinned by reliable and accurate statistics.

Comments on specific questions:

Question 1

Most candidates answered most questions well. In 1c, some candidates were awarded partial marks as their descriptions were insufficiently detailed to demonstrate a full knowledge of what happens when you click on a hyperlink to send an e-mail. In 1f, almost half of candidates were awarded full marks. Popular misconceptions were that zipping a file improves security and helps protect it from viruses. In 1g, around half of candidates were awarded no marks and showed little understanding of what information might usefully be included in an e-mail signature.

Question 2

Most candidates answered most questions well. In 2eii, around half of candidates were awarded full marks with both applications and spreadsheet functions mentioned. However, some candidates repeated the question and were not awarded marks. In 2f, some candidates were awarded full marks but many did not mention the need to position the cursor in the word processing software before pasting. In 2g, most candidates were awarded at least one mark but few were awarded full marks. Most candidates recognised that the main security threat to data on a memory stick was the loss of the memory stick. However, fewer candidates could clearly describe a second security threat and associate each of the threats with a valid way of improving security.

Question 3

Most candidates answered most questions well. In 3b, most candidates recognised www.pqrest.org.uk as a valid website address but a few were unable to identify a second valid address. In 3 c ii, a wide range of creative responses were given; however, a few answers were too vague to be awarded a mark, for example, 'the public', 'adults' or 'people browsing the web'. In 3d, most candidates were awarded marks but few achieved full marks. Some candidates referred to 'quality' or 'size' without further explanation which was too vague to be awarded a mark. In 3f, some candidates were not awarded marks because answers were too brief or not expressed in ways which were sufficiently meaningful, for example, 'delivery' or 'fraud'. Some candidates incorrectly believed that when an item that is delivered is faulty it is not possible to return it.

Question 4

Most candidates answered most questions well. In 4c, most candidates demonstrated some understanding of hierarchical file structures but some candidates could describe only a single level, and a significant minority could not describe how to organise the music files. In 4eii, most candidates could not describe a disadvantage of using a PDA rather than a flash memory stick to store music files. In 4f, some candidates wrote in answers in one part then swapped them with answers in another part. Candidates should be encouraged to read related parts of a question thoroughly before attempting to answer. In 4fi, most candidates answered correctly although some incorrectly believed that music in MP3 format would be of a better quality than music on CDs. In 4fii, the majority of candidates were awarded no marks with very few giving correct and well expressed answers which demonstrated that they know that it is illegal to resell CDs and retain copies.

Question 5

Most candidates answered questions 5b and 5c correctly. In 5a, most candidates did not answer correctly and in full. This suggests that candidates do not understand the basic ICT systems life cycle that is also the basis of the coursework. In 5di, very few candidates achieved full marks although most were awarded at least one mark. Many candidates could draw a diagram of a basic LAN topology but could not go beyond this; and many drawings lacked clarity. Some candidates did not include other hardware. In 5dii, a significant minority of

candidates were awarded no mark and showed little understanding of the question. In 5ei, most candidates were awarded one mark with some showing greater understanding; however, there were many vague answers. In 5eii, around half of candidates were awarded a mark with correct answers often mentioning the relative reliability of the signal.

Question 6

Most candidates answered most questions well. In 6c, most candidates were awarded at least two marks with a range of good suggestions as to why the totals might differ. Most candidates were awarded a mark for two boats entering or leaving at the same time. There were a wide range of creative suggestions for improvements some of which would not have improved the accuracy of the control system. In 6ei, some candidates did not know that passwords are changed regularly so that when an unauthorised person finds out a password the time they can access the system is limited. Most incorrect answers to this question stated that it makes it harder for an unauthorised person to discover the password. 6eii was answered correctly and in full by nearly all candidates.

Question 7

Most candidates answered most questions well. In 7c, there were some correct and accurately expressed search conditions but around half of candidates did not understand what was required. Some incorrectly stated a list of those items in the table that should be reordered. In 7d, most candidates understood why the Bar Code Number is printed under the bar code and were awarded full marks. Of the remaining candidates most could not clearly explain this and were awarded no marks.

Question 8

Most candidates answered most questions well. In 8bii, few candidates were awarded a mark. Many incorrect answers suggested a lack of familiarity with such systems and answers went well beyond what is currently available and possible. Many candidates incorrectly repeated points made in 8bi. In 8c, most candidates were awarded full marks. In 8d, the question requires an extended written answer based on an unsupported analysis of the question and answering this type of question is often very demanding for candidates. Most candidates attempted this question well with some being awarded full marks. Very few candidates were awarded no marks. Many candidates demonstrated a good understanding of the capabilities and limitations of this type of software although many incorrectly believed that the software would be real time. In response to the request to discuss who would use the software, some candidates incorrectly believed that 'some people' would be sufficiently clear.

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