

Examiner's Report Principal Examiner Feedback

Summer 2018

Pearson Edexcel International GCSE In Information and Communication Technology (4IT0) Paper 1



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General Comments

This was the eighth and final series of 2009 Specification of Pearson's International GCSE ICT, with approximately 5000 students completing the written paper.

The students' performance was similar to previous series, with the majority of the cohort attempting all questions.

Student Performance

Multiple-choice questions

Students performed well in this section, with more than 90% gaining the marks for 7 of the 16 questions. The overall performance was much better than in previous series with only question 14 causing difficulty, where many gave 'stock control' rather than 'logistics' as their response.

Open response questions

Question 17

This is the first open response question on the paper, the majority of marks are targeted at the lower ability students. Overall, the students produced good responses throughout.

Q17(a)

The majority of students performed well on this question, although a significant number missed the final mark for the joystick being used for both input and output.

Q17(b) - Q17(c)

Students scored well on all parts of both questions, the weakest responses was seen in Q17(b)(iv) where a wide variety of incorrect responses were given.

Q17(d)

Whilst the majority of students were able to identify application software in part (i), only a small number were able to identify either utility programs or drivers in part (ii). Many students struggled with Q17(d)(iii) and where marks were gained it was usually for citing new viruses, however expansions were very vague and generally missed the marking points.

Q17(e)

Many students gained one mark for the speed of processing. However, few gained the second mark, with many giving an expansion of Hz to hertz, which was not credit worthy.

Q17(f)

Students generally scored well on this question, correctly stating ROM being permanent and files being lost when the computer is switched off.

Question 18

The question was set in the context of a supermarket chain and Electronic Point of Sales Terminals (EPOS).

Q18(a)

Most students gained the mark for correctly identifying a scanner in Q18(a)(i). However, the responses were weaker in Q18(a)(ii). Students often correctly cited both accurate data input or faster data transactions but were unable to expand upon these to gain the second mark. The vast majority of students correctly cited both the need for fewer operators and the consequent reduction in wages to gain both marks in Q18(b).

Q18(c)

Overall, students did not perform well on this question, with only a few achieving all three marks. Students could have the 'Item identified' and 'Information sent to database' in either order. However, a significant number of students had 'one item being deducted from stock' before the 'information sent to the database'. The mark scheme is shown below;

Steps	0
	rd
	er
Bar code input	1
Current stock calculated	5
Item identified	2
	/
	3
Current stock compared to reorder level	6
One item deducted from current stock	4
Information sent to database	2
	/
	3
Order placed for new stock	7

18(d)(i)

Many students lost marks for repeated methods of checking with customers. Validation and verification were popular credit worthy responses.

18(d)(ii)

This question was well answered with many students giving responses which indicated a good understanding of the legal requirements when storing personal data.

Question 19

The question was based around a home network connected to the internet.

Q19(a) - Q19(b) were both well answered.

Q19(c)(i)

This was not well answered. Many students cited mobility, however, they failed to refer to 'without losing connection to the network'. A large number did, however, correctly cited the lack of trailing wires.

Q19(c)(ii)

This question was slightly better answered with many students stating that wireless is less secure and referring to interference from walls etc. Many students correctly cited that encryption makes the data unreadable / scrambled / coded but failed to give the expansion of needing a key for decryption.

Q19(d)

Very few students gained 3 or 4 marks, with most responses being very vague. Where students adopted a more structured approach they generally gained higher marks. The most popular correct responses included games having large graphic files, with a small number expanding this into taking up a large amount of storage / RAM, and RAM temporarily holding the games' data.

Q19(e)

This was one of two 'level based' questions on the paper, where students were assessed on the whole response and not, as in other questions, point by point. In general, students did fairly well. As in Q19(d) where a structured approach was adopted, students tended to gain higher marks. In general, students showed a good understanding of the advantages and disadvantages of downloading rather than streaming, although there were a significant number who cited increased chance of viruses and the increased need for security.

Question 20

The scenario for this question was based on buying goods online and instore from a toy company.

Q20(a)

This part focussed on a preference for buying in-store and the majority of students scored high marks. Popular responses were being able to inspect goods, immediate collection, and no need to pay delivery charges. A frequent response was about being able to bargain with the shopkeeper, which was not credit worthy. Others concentrated on the security of data, which was given in the question and again not credit worthy.

Q20(b)(i)

This question was the 'opposite' of Q20a and focussed on the preference for online shopping. It was generally well answered, however, a significant number of students cited the lack of need to travel, which was given in the question.

20(b)(ii)

This question produced the weakest answers on the paper, with students showing very little understanding of the precautions that can be taken to reduce the misuse of personal information, before shopping online. Many students focussed on anti-virus and making sure a website was reputable / trustworthy, without any indication of how this was done. Those who did gain marks usually cited looking for a padlock, HTTPS, or coloured address bar and expanding on these to say that this indicated that the website was secure.

Q20(c)

In general, students did well on this question with many correctly citing adjusting contrast, screen resolution, font size and using the zoom / magnifier function. Where marks were lost it was often for responses which did not relate to the operating system, eg using screen overlays or large monitors.

Q20(d)

This question was also well answered with many showing a good understand of the risks and correctly giving solutions. Where students did not score well it was for vague problems such as 'wrist pain' or citing headaches and taking regular breaks, both of which were given in the question.

Question 21

The scenario for this question was students working together across several college sites with files being stored on a network. All parts of the question, unfortunately, produced weak responses.

Q21(a)

Many students gave the benefits of using a network for this part, eg sharing peripherals and central backup of files etc. Very few students were able to focus on the 'ways the college network helps students work together' despite an example being given in the scenario. Many gave vague reference to sharing files but not saving them in a shared area, others talked about being able to use email, but not using the internal chat facilities provided by the network.

Q21(b)

There was very little understanding of internet forums shown and where there was, it was not applied to the scenario. Where marks were gained they were in general for identifying 'threads' and being able to look back at previous conversations. Few students identified that it is possible to select who accesses the forum with many stating that all internet users could join which would help with the projects.

Q21(c)

This was the second 'level based' question on the paper, unfortunately responses were not as good as in Q19(e), with many failing to achieve more than half of the available marks. The responses were often unfocused and showed little solid understanding. As ever, with this type of question, many students went down the risks of being online, eg viruses, lack of data security and undesirable contacts. Others did, however, successfully focus the student aspect, eg wide variety of sources, and the ease of finding answers to questions, although in general, they did not follow this up with the negative aspects of this, ie the need to sift through the vast amount of data to find relevant, accurate information. A small number of students gave response relating to the more generic negative aspects such as lack of ICT and censorship.