

Principal Examiner Feedback

Summer 2012

International GCSE ICT (4IT0/01)
Paper 1
Written Paper

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This was the second sitting of the written paper examination for Edexcel's International GCSE ICT specification.

The total mark for the paper is 100; 16 marks are available for multi-choice responses and 84 for free response questions.

Multi-choice questions

It was pleasing to note that as in the last series candidates performed well on the multi-choice responses. There was an improvement on the 2011 examination in that there was only one question where less than half of the candidates gained the mark; this question was at the end of this section and targeted the higher ability candidates.

In some instances candidates failed to answer all questions; it should be noted that marks are not deducted for incorrect answers and candidates should attempt all questions.

Free response questions

Question 17

Candidates generally scored high marks on this question. However, a surprising number were unable to identify a webcam as an input device in (a) and many gave webcam as being used for both input and output in (b).

Most candidates were able to identify two types of optical discs and gave sensible examples of data that could be stored on them in (c).

Many candidates correctly identified a device that uses flash memory in (d), although a significant number gave incorrect answers such as floppy / hard discs and others lost marks by merely writing USB, but no device name e.g. USB stick / USB pen.

Question 18

The majority of candidates were able to identify a LAN and a server, however there were many incorrect responses in (c) where candidate gave examples such as dial-up and broadband, some repeating the question and giving 'wireless'.

18(d)(i) was generally very well answered and the vast majority of candidates gave a good example of a strong password and went on to explain why the example was strong. 18(d)(ii) was not as well answered, whilst many gave awardable responses others mis-read the question and described other factors contributing to a strong password such as not using personal information.

18(d)(iii) was poorly attempted with only a minority of candidates demonstrating any understanding of access rights. Incorrect responses often related to blocked websites, unauthorised access or increased security and a significant number mentioned lower level workers feeling resentful.

18(e) proved to be more problematic for candidates than expected. Where candidates had covered the topic they were often able to gain at least three of the available marks; however, many candidates showed little understanding and a significant number gave responses relating to the benefits of access rights.

Question 19

The majority of candidates were able to identify Hz as the units used to measure the speed of a computer processor in (a)(i).

The responses to (a)(ii) were often very vague and the majority of candidates showed little understanding of the need for a large amount of RAM. The majority gave responses which indicated that they thought RAM was permanent memory and therefore a large RAM helped to provide storage space for saving files generated by downloading music, watching videos and playing games. The most commonly correct responses were for mentioning multitasking and a large RAM helping games / videos to run smoothly.

There were very mixed responses to 19(c), with some candidates showing a very clear understanding and others who clearly had no understanding at all. In the latter category many candidates mentioned copyright but, it appeared, only because they knew it related in some way to a licence.

The majority of candidates did very well in 19(d)(i), although a significant number thought that a webcam was a means of communication. However only a small percentage linked parts (i) and (ii) of the question; subsequently the responses were not put in the context of staying safe while communicating on the internet, but rather general e-safety e.g. firewalls, passwords and anti-virus. The most commonly correct responses related to not giving out personal information.

19(e) was the first level marked question on the paper and the quality of response varied widely; the candidates who gained the higher marks had often drawn up brief plans and presented well reasoned, logical responses. Many candidates showed a good understanding of both streaming and downloading and their relative merits and were able to gain high marks. A significant number of candidates thought that downloading was inferior to streaming as downloaded files may contain a virus, and a minority concentrated on the benefits of downloading and/or streaming as against going to a video store.

Question 20

20(a) related to controlling the temperature in a greenhouse and in general candidates gained either both or neither of the marks.

Candidates generally performed well in 20(b)(i) where many correctly identified setting such as brightness and resolution, a small number however incorrectly put a screen filter in this part. There were also a high

number of good responses in 20(b)(ii) with the majority being able to identify the need to take regular breaks and having suitable lighting. Marks were however lost for vague responses about the position of the person in relation to the computer. Many gave medical solutions and/or the need to drink lots of water, with a small number suggesting that the operator should spend only a small amount of time working on the computer.

20(c) was a question where candidates did very well or very badly, presumably as a result of what had been covered by the centre. The better candidates were able to give clear correct responses about keeping relevant data, up to date, accurate and only for the specified purpose. Others gave vague responses which often related to not passing data on or getting permission to store the data and a small minority gave lists of fields that should be included in the database.

Many candidates failed to read 20(d) carefully and subsequently confused their responses to (i), unauthorised access and (ii), other risks. However where candidates understood what was being asked they often scored well. The most commonly correct responses in (i) were firewalls and encryption, with only a very small number mentioned WEP / WPA. In (ii) the successful candidates often mentioned virus / anti-virus software and physical problems / backups.

Question 21

Question 21(a) was not as well answered as expected, again largely because candidates did not read the question carefully. The emphasis was the impact on the 'working lives' of people in each of the three areas; manufacturing, education and retail. Many gave detailed accounts of how IT had impacted on the three areas but made no reference to the workers, subsequently the responses could not be credited. In general, where marks were gained they were for manufacturing and occasionally education with only a minority gaining credit for retail.

Many candidates gained both marks in 21(b)(i), checking against other sources, multiple websites, books and with experts were all commonly correct responses.

21(b)(ii) was the second of the level marked questions on the paper and again the candidates who gained the higher marks had often drawn up brief plans and presented well reasoned, logical responses. Candidates did however find this question more of a challenge and few achieved high marks.

The focus of the question was the lack of regulation of the internet and many candidates failed to identify this aspect, instead giving answers relating to the benefits and drawbacks of using the internet e.g. the availability of large amounts of information, access to downloaded music / videos etc. Few mentioned freedom of speech, freedom of expression or government intervention.

Many candidates also gave responses relating to the reliability of information, this had been examined in 20(b)(i) and 20 (b)(ii) asked for 'other' benefits and drawbacks.

Key Areas for improvement:

- Answer all multi choice questions
- Read all of the information given in the question
- Answer questions in context
- Plan answers to level marked questions

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