



Pearson

# **Examiners' Report**

## Principal Examiner Feedback

Summer 2017

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

## **Edexcel and BTEC Qualifications**

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at [www.edexcel.com](http://www.edexcel.com) or [www.btec.co.uk](http://www.btec.co.uk). Alternatively, you can get in touch with us using the details on our contact us page at [www.edexcel.com/contactus](http://www.edexcel.com/contactus).

## **Pearson: helping people progress, everywhere**

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: [www.pearson.com/uk](http://www.pearson.com/uk)

Summer 2017

Publications Code 4IT0\_01\_1706\_ER

All the material in this publication is copyright

© Pearson Education Ltd 2017

## **Multiple-choice questions**

Candidates performed well in this section, with more than 90% of candidates gaining the marks for 4 of the 16 questions, and 80% gaining the marks for 8 of the questions.

Three questions caused difficulty, questions 9, 10 and 16. Question 16 was aimed at the higher ability candidates and this result was not unexpected, but question 8 and question 9 were not answered in accordance to the expected standard.

- Question 9 – only a minority of candidates were able to identify 'logistics' as the ICT system used to plan, implement and control the delivery of goods, despite this being explicit in the Specification.
- Question 10 – approximately 50% of candidates identified that an internal hard disk is secondary storage.

It was pleasing to see a large majority of candidates gaining marks for questions 11, 13 and 15, all of which were aimed at the higher ability candidates.

It is also pleasing to note that in this series that the vast majority of candidates attempted all multi-choice questions.

## **Free response questions**

### **Question 17**

Candidates in general made a very good start to this section with a significant number gaining all of the marks available for question 17a.

Question 17b was well attempted by most candidates. Marks were lost in question 17bii for vague answers such as 'naming files' but not specifying 'relevant' file names.

It is pleasing to note that candidates generally gave correct answers in both questions 17bii and 17biv, rather than, as in previous examination series, giving named software such as Microsoft Office and Windows 10.

### **Question 18**

This question proved to be problematic for many candidates, showing little understanding of computer modelling and in particular applying their understanding to a given scenario.

A very small minority were able to identify a spreadsheet as the most appropriate type of software to use in producing a computer model. While some candidates were able to identify at least one variable to be used as input to the model - often the number of students - very few were able to identify outputs. Approximately 50% of candidates successfully identified a chart or graph as a way to display outputs from the model.

Candidates showed insufficient understanding in the early parts of the question and were unable to identify advantages or drawbacks of computer modelling. Responses often related to generic answers such as 'easy to set up in difficult situations' and 'people aren't put in danger' which wasn't applicable in this situation.

Very few candidates were able to identify live testing as a method of checking the accuracy of the results from a model.

Candidates were generally more successful in question 18b, although the benefits of using a pre-paid card provided vague answers, such as 'it will be quicker', without explaining why. Marks were not awarded for this type of response.

### **Question 19**

Candidates were in general able to gain the mark in question 19ai for correctly identifying a LAN, and the majority gained a mark for identifying 'IP address' in question 19aaii. However, others failed to gain a mark in question 19aaii by giving vague answers, such as name and not specifying 'unique'.

Question 19aiii was reasonably well answered with many candidates gaining two of the three marks. Encryption, firewalls, anti-malware and backing up were popular responses with a small minority identifying transaction logs.

In question 19aiv, many candidates lost marks by giving generic answers which did not apply in the scenario. The question was based on a small admin office and the benefits to the staff of using the network. Many candidates picked up on the 'staff', but not on the 'office' and gave responses relating to staff using a school / college network. Other candidates gave more generic answers, or answer relating to students using a school / college network. In addition, marks were lost when responses related to security, which was given in the question.

In question 19av the majority were only able to give one correct connection method used to connect the agency to the internet, a surprising number citing 'modem'.

Question 19avi asked candidates how the wireless router connects a mobile device to the network (a LAN in this instance). Responses were often very vague showing little or no understanding and, therefore, gained no marks. Many cited the router sending out signals searching for a device, rather than receiving signals from the device and very few realised that the router assigns the IP address.

Question 19avii was answered slightly better than question 19av, however, there were many vague, generally incorrect responses. Discussions often focussed incorrectly on the 'key' being a type of password, which was needed to access / prohibited entry to the network. Few showed any understanding of the key being used to encrypt / decrypt the data / signal.

Questions 19bi and 19bii were, as in previous examination series, well answered showing that centres are teaching this topic well.

Question 19c produced few good responses, again largely due to candidates not fully understanding the question. The focus should have been on health and safety measures the agency could take to help staff reduce the risks of headaches. Many incorrectly gave generic responses relating to all aspects of health and safety, i.e. backache, RSI etc. Others focussed, incorrectly, on measures that staff could take. Candidates must be trained to read the question carefully, ensuring they are answering what the question asks rather than writing all they know about a given topic.

## **Question 20**

The responses to question 20a were not of a high standard, with the majority of candidates achieved less than half of the allocated marks. The application of presentation software is frequently examined in Paper 2 and candidates should be taught features of the software which extend beyond the creation and editing of pages. The image included in the paper was provided to help candidates, however, many appeared to have randomly selected responses from the image.

Candidates made a better attempt at question 20bi and the majority were able to gain marks from responses related to saving cost and / or time travelling. Similarly, candidates gained marks in question 20bii for identifying technical problems and the need to have IT equipment and / or being IT literate.

Question 20biii produced many vague answers with the majority gaining a mark for answers relating to receiving clarification / feedback from teachers or interaction with fellow students / teachers.

Candidates in general gained one or two marks in question 20ci. Responses focussed on the ability to view downloads at any time / repeatedly, or the fact that the internet is not required when viewing downloaded videos. Few candidates gained all three marks. Candidates were less successful in question 20cii with many struggling to gain any marks. Where marks were gained they generally related to storage capacity.

## **Question 21**

Question 201a was well answered by the majority of candidates who gained at least two of the marks for correctly identifying viruses / malware and hackers / unauthorised access as risks when connected to the internet. Unfortunately, many lost marks by giving repeated answers, e.g. citing viruses and malware as two separate risks.

Question 21bi proved to be problematic for many candidates. Many incorrect responses suggested using 'CC' and 'BCC', which were answers to a paper used in a previous examination series, but unfortunately incorrect in this instance. Correct answers frequently cited encryption and VPN. Very few identified the fact that encryption can be used on both the content of the email and transmission of the email.

Questions 21ci and 21cii were not well answered with many candidates failing to gain any marks. Answers were often vague, in question 21ci many incorrect responses cited costs, giving both higher and lower costs of eBooks and printed copies. Similarly in question 21cii many gave vague responses relating to the need for internet connectivity, but not specifying when downloading.

Question 21d was well answered with the majority gaining at least half of the marks. Social networking is a familiar topic for most candidates and in general marks were lost for vague, unstructured responses. Some candidates produced small plans before writing their responses and their responses often gained the highest marks.

