

Candidate Style Answers

OCR GCSE ICT J461 / J061

Unit B061 ICT in today's world: Examined Assessment

Mid-Grade Candidate Response

This support material booklet is designed to accompany the OCR GCSE ICT specifications for teaching from September 2010.

Introduction

OCR has produced these candidate style answers to support teachers in interpreting the assessment criteria for the new GCSE specifications and to bridge the gap between new specification release and availability of exemplar candidate work.

This content has been produced by subject experts, with the input of Chairs of Examiners, to illustrate how the sample assessment questions might be answered and provide some commentary on what factors contribute to an overall grading. The candidate style answers are not written in a way that is intended to replicate student work but to demonstrate what a “good” or “excellent” response might include, supported by examiner commentary and conclusions.

As these responses have not been through full moderation and do not replicate student work, they have not been graded and are instead, banded “middle” or “high” to give an indication of the level of each response.

Please note that this resource is provided for advice and guidance only and does not in any way constitute an indication of grade boundaries or endorsed answers.

Candidate Response

Q. 1

Tick **one** box in each row to show whether the component is input, output or storage.

Component	Input (✓)	Output (✓)	Storage (✓)
camera	✓		
ear phone		✓	
flash memory card			✓
keypad	✓		
microphone	✓		
speaker		✓	

Q.2

The correct term is “icons”.

Q.3

In the table below, write down the letter for each of the labelled items. The first one has been done for you.

Item	Letter
email address	B
address of the page being shown	A
hyperlink to another webpage	D
plain text	C

Q.4 (a)

Julian would use his email application and to write his message. He would put in the email addresses of his students from his address book, attach the report and send the email.

(b)

Advantage 1
Email can be used to send to many people.

Advantage 2

You can attach files such as videos or images to emails. Emails will arrive quicker than ordinary post.

Q. 5 A computer virus is a program that damages files.

Q. 6 (a) Sensors send analogue data but the computer can only read digital data.

(b) Computer systems need electrical power and this might be difficult if used outside. If the computer systems fail then no recordings are made and the data is lost.

(c) The data will be collected and put into a spreadsheet and used to make a chart. The chart could have titles and legends added and then put into a report in a word-processor to show to the owners. The computer could be connected to the heating system so that the computer can use the data from the sensors to control the temperature of the pool.

(d) Sensor:

A light sensor.

Use of sensor:

The robot will use the sensor to detect when the pool is dirty because the amount of light reaching the bottom would be less.

Q.7 (a) He could use formulas to calculate the total of his trip.

(b) John could base his model on predictions of future currency rates.

(c) Computer models have many drawbacks because they do not include all the possible changes or effects that happen in real life. This makes the model unable to produce completely accurate predictions because it will not have included any unexpected problems such as problems with the economy of countries.

The model may use formulas and functions with rules that may be very complicated to set up. The model may contain small errors in the programming or formulas that make the predictions wrong but no-one notices at the time. If the model was used to predict what it would cost for the trip then the total cost of the trip when it happens could be much more than expected.

Q.8 The internet is used for buying and selling goods all over the world. Customers can use the internet to search for goods that they may not be able to find locally or in their own country and can choose the best price to buy them. They will have to pay for delivery and be at home when the goods arrive but they do not have the cost of travelling to the shops, parking or buying tickets to travel. Customers must have a credit or debit card, a computer and an internet connection but goods can usually be bought cheaper from online shopping websites. Customers should make sure that the site they are using is secure so that their personal details and bank account details are not intercepted and used by other people for fraud.

If you are selling goods, using the internet allows you to have customers from all over the world and this means that you have more customers. The seller will have to arrange and possibly pay for post and packaging and have a returns system if the customer does not like the goods or they are faulty. The customer has to be sure that the seller keeps any data safe, and complies with the Data Protection Act, so will only buy from secure sites that show the "padlock" symbol when in use.

Q.9 Bluetooth and WiFi are communications systems that use radio waves to connect computers and devices to networks. Bluetooth is slower than WiFi and is not secure so is not suitable for connecting computers but is used for sending data between small devices like mobile phones. WiFi is fast and can be made secure so is used for connecting computers to a LAN for internet access. "Hotspots" can be set up so people can connect their laptops in a café or hotel room without having

to sue wires. Bluetooth cannot be sued for this as it is too slow and only works over short distances.

Q. 10 Many people use chat rooms, blogs, and social network sites to put information about themselves and what they are doing. Information on “Facebook” and other sites that let people post their details and pictures can be seen by many people and may be used for purposes that are different from what the person wanted. For instance, the information could be used for research into habits or interests, or could be used by stalkers or cyberbullies to track down the person and hurt or bully them.

Using chat rooms should be done with caution. People should not give out their personal details as they might not know who they are talking to and the other person may not be who they seem to be. Details of where you live, what school you go to, or when you are on holiday should not be given out as these could be used to find you or your home. If someone asks to meet up, the person should refuse and report it to their parents or a teacher. Any other suggestions that the person is not comfortable with should be refused or ignored. Pictures of the person should not be posted or shown either as these could be used to identify the person or to embarrass them.

People should be very careful about using social networks but Twitter and blogs can be very useful for keeping in contact with others when on holiday or away from school because they are a simple way to communicate.