

Centre Number						Candidate Number				
Surname										
Other Names										
Candidate Signature										

For Examiner's Use	
Examiner's Initials	
Question	Mark
1	
2	
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7	
8	
9	
TOTAL	



General Certificate of Secondary Education
June 2011

Information and Communication Technology (Short Course)

45204

Written Paper

Thursday 16 June 2011 1.30 pm to 2.30 pm

You will need no other materials.
You may use a calculator.

Time allowed

- 1 hour

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **eight** questions.
- Answer **all** questions in Sections A and B. In Section C answer **either** Question 8 **or** Question 9, which should be answered in continuous prose. In this question you will be marked on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 60.
- You are reminded of the need for good English and clear presentation in your answers.



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45204




Section A

Answer **all** questions in the spaces provided.

1 (a) Six output devices have been labelled A to F in the table below.

Label	Name
A	Actuator
B	Digital projector
C	Monitor/screen
D	Plotter
E	Printer
F	Speakers

Write **one** label in each box to name the output device shown.

	Output device	Write one label in each box
(i)		<input type="text"/>
(ii)		<input type="text"/>
(iii)		<input type="text"/>

Images © Thinkstock

(3 marks)



1 (b) Which **one** of the following is **not** an input device?

- A Bar-code reader
- B CD-ROM
- C Keyboard
- D Mouse

Answer

(1 mark)

1 (c) Tick **two** boxes to show which of the following are mobile devices.

	Tick two boxes only
Desktop computer	<input type="checkbox"/>
File server	<input type="checkbox"/>
Interactive whiteboard	<input type="checkbox"/>
Laptop computer	<input type="checkbox"/>
PDA	<input type="checkbox"/>

(2 marks)

6

Turn over for the next question

Turn over ▶



- 2 (a)** A school secretary uses a computer to type details about each pupil into a database. Part of the database file for one pupil is shown below.

Pupil ID	Surname	Other Names	Date of Birth	Form
GS0889967	Abbot	Sarah	20/11/1999	7TP

It is important that the information stored is accurate, so data validation is used to help prevent mistakes. From the list given below, choose the best method of data validation to check the information given in the '**Information**' column of the table below. Write your answer in the space provided.

Check digit
Look-up list
Presence check
Range check
Spelling/grammar check

	Information	Best method of data validation to use on this field
(i)	Pupil ID	
(ii)	Form	
(iii)	Date of Birth	

(3 marks)

- 2 (b)** Data verification is also used to help improve the accuracy of the information input. Name **two** methods of data verification.

Method 1

Method 2

(2 marks)

5



3 (a) There are concerns, both legal and moral, that must be taken into consideration when using ICT.

Match the correct letters from **A, B, C, D, E** and **F** with the concerns in **(i) – (iii)** in the table given below.

- A** Data Protection Act
- B** Denial of service
- C** Hacking
- D** Phishing
- E** Plagiarism
- F** Viruses

	Concern	Letter
(i)	Gaining unauthorised access to a computer system and changing the data or programs	
(ii)	A student downloading an essay from the Internet and handing it in as their own work	
(iii)	Sending false messages in an attempt to gain user names and passwords from other people	

(3 marks)

3 (b) An increasing number of people spend a long time each day working with computers. This can lead to a range of health issues such as back problems.

Give **two** different steps that can be taken to help these people reduce the risk of back problems.

Step 1

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Step 2

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(2 marks)

3 (c) Give **one** other health problem that can occur as a result of using a computer for long periods of time each day.

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(1 mark)

6

Turn over ▶





4 A student is experimenting with some of the software packages on her new computer.

4 (a) Firstly she tries out the graphics package. Five features of a graphics package have been labelled **A** to **E** in the table below.

Label	Feature
A	Airbrush
B	Brush
C	Curves
D	Layering
E	Repeating pattern

Write **one** label in each box below that names the feature used to produce the image.

	Image	Write one label in each box
(i)		<input type="text"/>
(ii)		<input type="text"/>

(2 marks)



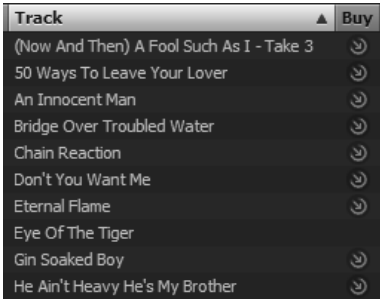


4 (b) She then tries out the audio software.

Six features of audio software have been labelled **A** to **F** in the table below.

Label	Feature
A	Fast forward
B	Mute
C	Pause
D	Playlist
E	Start
F	Volume adjustment

Write **one** label in each box below that names the feature used.

	Feature used	Write one label in each box
(i)		<input type="text"/>
(ii)		<input type="text"/>
(iii)		<input type="text"/>

(3 marks)

4 (c) Describe briefly the purpose of these e-mail related terms.

4 (c) (i) Mailbox/inbox

.....

4 (c) (ii) Cc

.....

(2 marks)

7

Turn over ▶



5 Students at a school in England use video conferencing facilities to work on a collaborative history project with a school in the USA.

5 (a) Give **two** advantages of using video conferencing for this collaborative project rather than using e-mail.

Advantage 1

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Advantage 2

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(2 marks)

5 (b) (i) Explain what is meant by collaborative working.

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(2 marks)

5 (b) (ii) Give **two** advantages to the students at the school of taking part in a collaborative project rather than working on individual projects.

Advantage 1

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Advantage 2

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(2 marks)

6



Turn over for the next question

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**

Turn over ▶



Section B

Answer **all** questions in the spaces provided.

- 6 The finance officer uses a spreadsheet to plan a budget for the school production of 'Grease'. The first plans are shown below.

	A	B	C	D
1	Grease			
2				
3				
4	Planned Spending			
5		Cost per night	No. of nights	Cost
6	Licence to perform	£125.00	3	£375.00
7	Costume hire	£200.00	3	£600.00
8	Props to hire	£110.00	3	£330.00
9	Printing Tickets	£35.00	3	£105.00
10	Cost of refreshments	£50.00	3	£150.00
11	Advertising			£250.00
12	Total of other small costs			£125.00
13	Total spending			£1,935.00
14				
15	Planned Income			
16	Price of ticket	£1.75		
17	Refreshments (per person)	£0.50		
18				
19		Per night	No. of nights	Income
20	Ticket sales	300	3	£1,575.00
21	Sale of refreshments	150	3	£225.00
22	Total income			£1,800.00
23				
24	Profit/loss			-£135.00
25				

- 6 (a) The title 'Grease' has not been fully displayed. Tick **one** box to show which of the following would be the best way to fully display the title.

	Tick one box only
Make row 2 higher	
Make row 2 wider	
Make the size of the text in row 2, 2 point	
Make the colour of the text in row 2, red	

(1 mark)

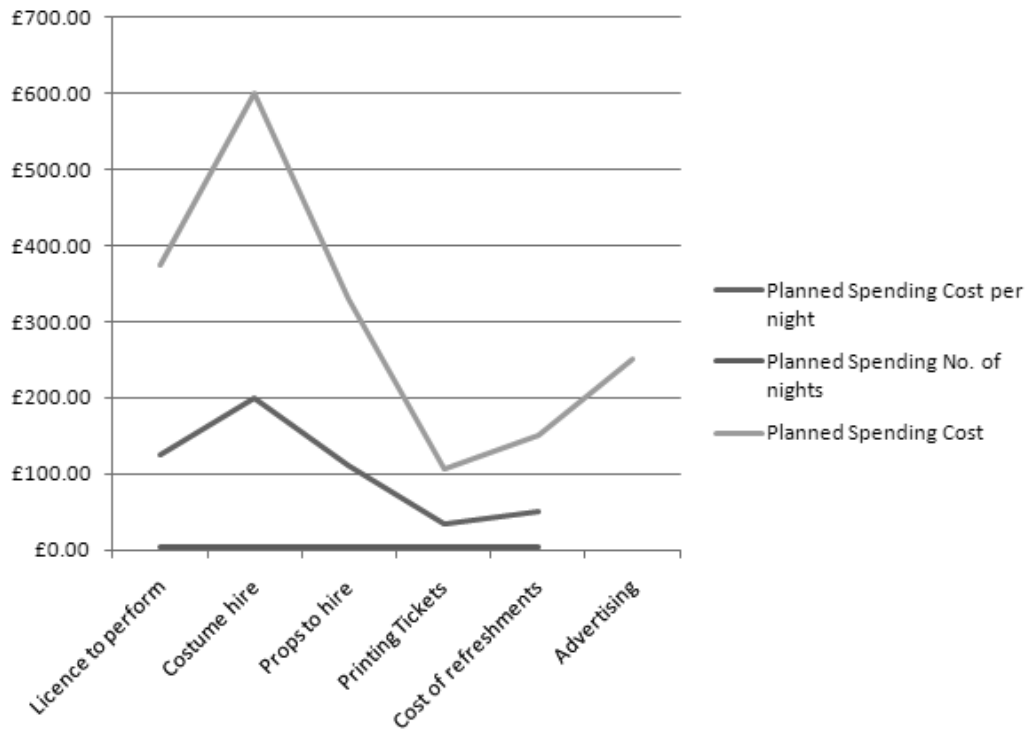


6 (b) Which **one** of the following is the formula used in highlighted cell D24?

	Tick one box only
=D22+D13	<input type="checkbox"/>
=D13+D22	<input type="checkbox"/>
=D13-D22	<input type="checkbox"/>
=D22-D13	<input type="checkbox"/>

(1 mark)

6 (c) The finance officer uses this spreadsheet to produce the graph below showing the planned spending costs.



Explain why the finance officer might not find this graph very useful.

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(2 marks)

Turn over ▶



6 (d) An aim of putting on the production was to raise at least £1000 for charity. Explain, giving examples, ways in which the software could be used as a model to answer 'what if' questions and show ways in which £1000 profit could be made.

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(5 marks)

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7 (a) A family are planning a last minute summer holiday. They use the Internet to find details of holidays that are still available leaving on Saturday 2nd July or Sunday 3rd July from Manchester. The result of the search from one travel company's website is shown in the database table below.

Booking code	Country	Resort	Date of Departure	No. of nights	Hotel	Cost per adult (£)	Included in the price
CR0005	Croatia	Dubrovnik	2 nd July	7	3 star	585	Breakfast
CR0023	Croatia	Korcula	3 rd July	7	2 star	565	Half board
EG0098	Egypt	El Gouna	3 rd July	7	2 star	465	Room only
EG0003	Egypt	El Gouna	2 nd July	14	3 star	865	All inclusive
EG0132	Egypt	Luxor	3 rd July	7	4 star	695	Half board
GR0034	Greece	Corfu	2 nd July	7	2 star	399	Breakfast
GR0234	Greece	Corfu	3 rd July	14	3 star	665	Breakfast
GR0111	Greece	Zante	2 nd July	14	2 star	549	Half board
TE0056	Tenerife	Los Gigantes	2 nd July	7	2 star	349	Breakfast
TE0134	Tenerife	Los Gigantes	3 rd July	14	3 star	799	All inclusive
TU0398	Turkey	Kalkan	3 rd July	7	4 star	585	Half board
TU0022	Turkey	Kas	2 nd July	14	3 star	599	Breakfast
TU0267	Turkey	Marmaris	2 nd July	7	2 star	325	Room only

7 (a) (i) What is meant by the term field?

.....

 (1 mark)

7 (a) (ii) How many fields are shown in each record in this database table?

(1 mark)

7 (a) (iii) Which is the key field in this database table?

(1 mark)

7 (a) (iv) State why a key field is needed in a database table.

.....

 (1 mark)

Turn over ▶



Section C

You should answer **either** Question 8 **or** Question 9, but **not** both.

You will be marked on your ability to use good English, to organise information clearly and to use specialist vocabulary where appropriate.

EITHER

- 8** Discuss the possible effects on people who live in some developing countries of having no access or very limited access to ICT.

This space is available for planning your answer if you wish to use it.

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Turn over ▶



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(12 marks)

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Turn over for the next question

Turn over ▶



You should answer **either** Question 8 **or** Question 9, but **not** both.

OR

9 Discuss the effects on companies of the increasing use of ICT and network technology.

This space is available for planning your answer if you wish to use it.

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(12 marks)

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END OF QUESTIONS

