

71	Ce	ntre Number
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Car	ıdida	te l	Num	ber
			100111	~~

General Certificate of Secondary Education 2009

Information and Communication Technology

Short Course

Higher Tier

[G5302]



TUESDAY 19 MAY, AFTERNOON

TIME

1 hour 30 minutes.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

Write your answers in the spaces provided in this question paper. Answer all fourteen questions.

INFORMATION FOR CANDIDATES

The total mark for this paper is 140, including a maximum of 7 marks for quality of written communication.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

	nminer's only
Question Number	Marks
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
QWC	

Total Marks

Answer all fourteen questions

For question 1 insert the appropriate letter in the space provided.

1	(a)		lect the most appropriate input device for free-hand drawing on a aphics package.
		A	Mouse
		В	Keyboard
		C	Light Pen
		D	Hand-held scanner
			Answer [1]
	(b)		lect the most appropriate output device for creating a hardcopy of eceipt at a supermarket till.
		A	Printer
		В	LCD
		C	Plotter
		D	VDU
			Answer [1]
	(c)		lect the most appropriate storage device for storing pictures on a bile phone.
		A	SIM Card
		В	Network Card
		C	Memory Card
		D	Graphics Card
			Answer [1]

2

(d)	Sel	ect one task that cannot be carried out when banking online.	Examin Marks	er Only Remark
	A	Depositing money	iwai KS	Kemark
	В	Ordering a new cheque book		
	C	Paying bills		
	D	Cancelling direct debits		
		Answer [1]		
(e)	Sel	ect one advantage of storing graphics in bitmap format.		
	A	Images are built up in layers		
	В	Image quality is good		
	C	Images can be edited at pixel level		
	D	Images take up very little storage space		
		Answer [1]		
(f)	A v	web browser:		
	A	Allows users to enlarge text, cannot be used without being connected to the Internet, allows users to enter URLs.		
	В	Allows users to enlarge text, can be used without being connected to the Internet, allows users to enter URLs.		
	C	Does not allow users to enlarge text, can be used without being connected to the Internet, allows users to enter URLs.		
	D	Does not allow users to enlarge text, cannot be used without being connected to the Internet, does not allow users to enter URLs.		
		Answer [1]		

(g)	10	perform a mail merge means:	Marks	Remark
	A	To merge data from a database onto a letter and produce personalised letters.		
	В	To merge text from two letters to produce personalised letters.		
	C	To use a database to send a personalised letter to a group of people.		
	D	To send a personalised letter.		
		Answer [1]		
(h)	An	ATM:		
	A	Is an Automatic Teller Machine and can be used to top up some mobile phones.		
	В	Is an Automatic Teller Machine and can be used to open a bank account.		
	C	Is an Automatic Technical Machine and can be used to top up some mobile phones.		
	D	Is an Automatic Technical Machine and can be used to open a bank account.		
		Answer [1]		
(i)	The	e operating system of a computer:		
	A	Is hardware which manages the communication between the user and the computer system.		
	В	Is software which manages the communication between the user and the computer system.		
	C	Is hardware which creates programs for use by the user and the computer system.		
	D	Is software which creates programs for use by the user and the computer system.		
		Answer [1]		

(j)	The	e csv file format allows:	Examine Marks	er Only Remark
	A	A photograph to be stored and imported into a graphics package.		
	В	Text to be stored and imported into a database.		
	C	Music to be stored and imported into an mp3 player.		
	D	Video to be stored and imported into an mp4 player.		
		Answer [1]		

(a)	List one sensor which could be used in the traffic lights system.	
	[1]	
(b)	Explain the purpose of a sensor in any control system.	
(c)	What is the role of the interface in any control system?	
	[2]	
(d)	What is the purpose of feedback in the central heating control system?	
	[1]	

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(Questions continue overleaf)

	produced	by Mark. (use each					
mp.	3 bmp	o doc	tiff	gif	avi	xls		
	Outp	ut			File For	mat		
Printed cop spreadsheet		ructions for	using					
Sound files instructions								
Video tutor wordproces		ng the						
							[3]	
Give two ad								
Give two ad								
							[2]	
1								
1								
Give two ad							[2]	

Equipment	Tick (✓)	
Vordprocessor		
Browser		
MODEM		
ITML files		
Broadband link		
preadsheet		[3]
ist one protocol which will sup		[1]
ist one protocol which will suplive one piece of advice to Manaickly when a customer is view	oport this. rk to ensure that his websi	te loads
ive one piece of advice to Ma	oport this. rk to ensure that his websi	
ive one piece of advice to Ma	pport this. rk to ensure that his websiving it.	te loads
ive one piece of advice to Manaickly when a customer is view	pport this. rk to ensure that his websiving it.	te loads

(i) Give two adv	vantages of having a network in the solicitors' or	ffice.
1.		
2		
		[2]
Networks are exp	pensive.	
(ii) Give one oth	ner disadvantage of installing a network in the of	ffice.
		[1]
(iii) List three fu	unctions of the server on a network.	
1		
2		
		[2]
3		[3]
	n which the solicitors would use Internet access	to
assist them with	their work.	
1		
2.		
		[2]

	Vhat is the correct name of the processivity?	11		
(7	Fick one answer only)			
	Protocol	Tick (✓)		
V	Wireless Additional Protocol			
Z	Wireless Application Protocol			
7	Wire Application Protocol			
7	Wire Additional Protocol		[1]	
confe	been suggested that the solicitors rencing to meet with solicitors in What is video conferencing?			
confe	rencing to meet with solicitors in What is video conferencing?	other countries.	of video	
confe	rencing to meet with solicitors in	other countries.	of video	
confe	what is video conferencing? ———————————————————————————————————	other countries.	of video [1] nications link	
confe	what is video conferencing? The office manager knows that a conferencing for video conferencing in List three other devices which	omputer and a commung. would be required to	[1] nications link	
confe	he office manager knows that a cre required for video conferencing. i) List three other devices which facility in the office.	omputer and a commung. a would be required to	f of video [1] nications link provide this	
confe	he office manager knows that a cre required for video conferencing i) List three other devices which facility in the office. 1	omputer and a commung. a would be required to	f of video [1] nications link provide this	
confe	he office manager knows that a cre required for video conferencing i) List three other devices which facility in the office. 1	omputer and a commung. a would be required to	f of video [1] nications link provide this	

rather	vo advantages to than email and to r countries.					
1						
					_[2]	
company h		a chine for ma	any years.			
Give one u	ave had a fax m se for the fax m			ely to be use	ed in	
Give one u	ave had a fax m se for the fax m			ely to be use	ed in [1]	
Give one u	ave had a fax m se for the fax m			ely to be use		
Give one u	ave had a fax m se for the fax m			ely to be uso		
	ave had a fax m se for the fax m			ely to be use		
Give one u	ave had a fax m se for the fax m			ely to be uso		
Give one u	ave had a fax m se for the fax m			ely to be uso		
Give one u	ave had a fax m se for the fax m			ely to be uso		

() (•)	W71 4 4 1 1 1 0		- 1
a) (i)	What is teleworking ?		
	[2]		
	· _	'	
(ii)	Give two ways in which teleworking could help a company in this situation.		
	1		
	2		
	·)		
	2		
h) GA	[2]	I	
wh		I	
wh	[2] AMESTATION LTD are going to place an advert on the Internet ich will highlight the advantages of teleworking to employees.		
wh	MESTATION LTD are going to place an advert on the Internet ich will highlight the advantages of teleworking to employees. List two advantages to employees of teleworking. 1		
wh	MESTATION LTD are going to place an advert on the Internet ich will highlight the advantages of teleworking to employees. List two advantages to employees of teleworking. 1	I	
wh	MESTATION LTD are going to place an advert on the Internet ich will highlight the advantages of teleworking to employees. List two advantages to employees of teleworking. 1		
wh	MESTATION LTD are going to place an advert on the Internet ich will highlight the advantages of teleworking to employees. List two advantages to employees of teleworking. 1		
wh (i)			

GAMESTATION LTD are developing a driving simulation game for the PC. It has high quality graphics and 14 levels. Players can select from 150 cars.

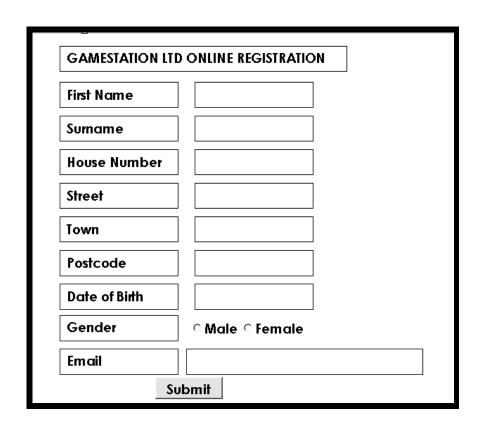
Examiner Only

Marks Remark

(c) What advice would you give players about the **RAM** and **Monitor** on their PC?

RAM:	
	[2]
Monitor:	
	[2]

GAMESTATION LTD have decided to make the game available online. Players must fill out the online form below before they can play.



ents	have complained that the form contains personal data.	Examiner Only Marks Rema
(i)	Which law must GAMESTATION LTD uphold when managing personal data?	
	[1]	
cor	AMESTATION LTD have sold the data of member players to a mpany in the USA and a number of members have found that the a held about them is not correct.	
(ii)	State which two principles of the law have been broken by GAMESTATION LTD.	
	1	
	2	
	[2]	
(111) Which official can the parents complain to if they wish to take action about the way in which GAMESTATION LTD manage their data? [1]	
	AMESTATION LTD have been advised to appoint a Data ontroller to manage queries from Data Subjects .	
(iv)	Explain the two terms in bold.	
	Data Controller	
	Data Subject	
	[2]	

reservat	y Villa Hotels have hotels in major cities in Europe made online, by email, by telephone, or by faxing tions.		Ма	
Holiday	Villa Hotels give special offers online.			
(a) (i)	Give one other advantage to the customer of boonline.	ooking a hotel		
			_[1]	
(ii)	Give one disadvantage to the company of using booking system.	an online		
			_[1]	
(iii)) State one reason why a customer may choose to telephone.	book by		
	as using the WWW (World Wide Web) and Intern	net for business	_[1] s,	
	npany provide an Intranet for employees.		5,	
the com	npany provide an Intranet for employees. Tick () which three of the following statement		5,	
the com	npany provide an Intranet for employees. Tick (✓) which three of the following statement the WWW and the Internet.	s are true about	5,	
the com	npany provide an Intranet for employees. Tick () which three of the following statement the WWW and the Internet. Statement The WWW is the information stored on the	s are true about	5,	
the com	npany provide an Intranet for employees. Tick (✓) which three of the following statement the WWW and the Internet. Statement The WWW is the information stored on the Internet	s are true about	5,	
the com	Tick () which three of the following statement the WWW and the Internet. Statement The WWW is the information stored on the Internet The Internet is a set of web addresses The Internet is a network of computers and	s are true about	5,	
the com	Tick () which three of the following statement the WWW and the Internet. Statement The WWW is the information stored on the Internet The Internet is a set of web addresses The Internet is a network of computers and communication links	s are true about	5,	

						Marks I
					[1]	
Describe to benefit em	vo ways in wl ployees .	hich the con	npany could	d use the I	ntranet to	
1						
2						
					[2]	

	rry runs a sn ents in a data	nall printing coabase.	ompany. He w	ants to stor	e details abo	out his	Examin Marks	er Only Remark
(a)		he following poord only onc		g the word	s provided.			
	REPORT	RECORDS	CRITERIA	FORMS	FIELDS	TABLE		
	Data is stor	red in tables of	f	Each re	ecord is mad	e up of		
		A databa	se package all	ows users	to query data	a which		
	meet	·	ca	n be used	to capture d	ata		
	on screen.					[4]		

Barry wants to store the following details about his clients.

Examin	er Only
Marks	Remark

Details				
Title	Mr			
Name	Barry Greene			
Address	1 Long Road			
Postcode	BT56 9II			
Phone number	(020)-344-999			
Date of first order	12/12/2008			
Priority	Yes			
Discount Rate	10%			

(b)	(i)	Barry wants to sort the table. Suggest a field for sorting which will help Barry group deliveries to customers.	
			[1]
	(ii)	How could Barry use the Discount Rate field when processing orders?	
			[1]
	(iii)	What feature of a database would Barry use to select all of the Priority customers?	
			[1]
	(iv)	Barry's database does not include a keyfield . What is the purpos of a keyfield ?	se
			[1]

8 "Clarendon Limos" are a small Limousine hire company. They have four cars. Below is part of a spreadsheet with their car hire information for the month of November 2008.

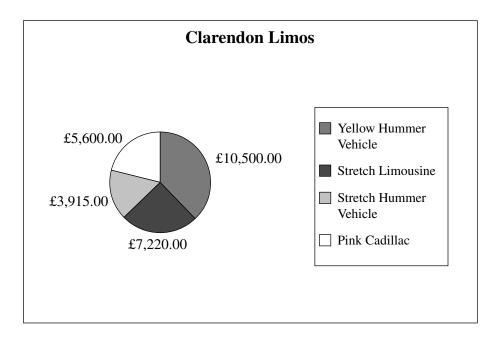
	Α	В	С	D	Е	F	G
1		Clarendon	Limos – In	come Nove	mber 2008		
2	Car	Cost Per Hour	Number of Hours Hired	Total Income	Fuel Cost Per Hour	Total Fuel Cost	Total Profit for each Car
3	Yellow Hummer Vehicle	£ 400.00	35	£14000.00	£ 100.00	£3500.00	£10500.00
4	Stretch Limousine	£ 500.00	19	£ 9500.00	£ 120.00	£2280.00	£ 7220.00
5	Stretch Hummer Vehicle	£ 550.00	9	£ 4950.00	£ 115.00	£1035.00	£ 3915.00
6	Pink Cadillac	£ 700.00	10	£ 7000.00	£ 140.00	£1400.00	£ 5600.00
7							
8						Total Profit	£27235.00

ring cell references, write down the formula used in each of the owing cells. D6 G6 G8	[1] [1]
G6	[1]
G8	F13
	[1]

(c) The chart below has been produced from the spreadsheet data.

Examiner Only

Marks Remark



(i)	List the cell references of the two cell ranges used to produce this
	chart.

Cell range 1:

Cell range 2: ______[2]

(ii) Give **one** advantage to Clarendon Limos of viewing information in chart form.

[1]

(iii) Give **one** piece of information that Clarendon Limos can see by examining the chart.

_____[1]

(iv) Apart from using colour, suggest **one** way in which the chart could be improved.

____[1]

(d) Clarendon Limos have decided to hire drivers and need to include the cost of drivers in the spreadsheet.

	Α	В	С	D	E	F	G	Н
1	Clarendon Limos – Income November 2008							
2	Car	Cost Per Hour	Number of Hours Hired	Total Income	Fuel Cost Per Hour	Total Fuel Cost	Driver Costs	Total Profit
3	Yellow Hummer Vehicle	£ 400.00	35	£14000.00	£ 100.00	£3500.00	£1050.00	£9450.00
4	Stretch Limousine	£ 500.00	19	£ 9500.00	£ 120.00	£2280.00	£ 570.00	£ 6650.00
5	Stretch Hummer Vehicle	£ 550.00	9	£ 4950.00	£ 115.00	£1035.00	£ 270.00	£ 3645.00
6	Pink Cadillac	£ 700.00	10	£ 7000.00	£ 140.00	£1400.00	£ 300.00	£ 5300.00
7								
8								£25045.00
9								
10								
11								
12								
13	Driver Costs Per Hour	£30.00					_	

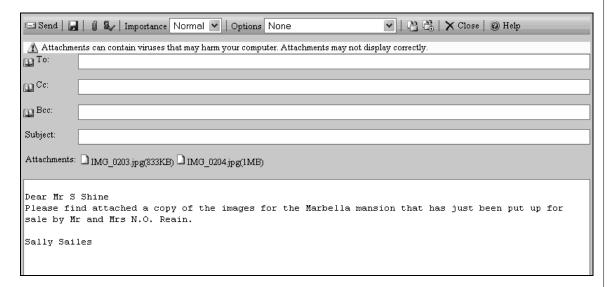
(i)	Write down the formula for cell G6 .	Examiner Only Marks Remark
	G6:[1]	
	n decides to use an absolute cell reference when calculating the iver Costs .	
(ii)	What is an absolute cell reference?	
	[2]	
(iii)	Which cell on the spreadsheet above should be included in the formula as an absolute cell reference?	
	[1]	
(iv)	How could using an absolute cell reference keep John's work to a minimum when making changes to this spreadsheet?	

Arlene is word processing her Chemistry coursework.	Examiner On Marks Rem
She wishes to include her candidate number in a header and page numbers in a footer .	
a) What is a footer ?	
[1]	
After she has added her page numbers to the document she goes into the page setup and selects an option for different first page headers and footers.	
b) Give one reason why she might do this.	
Arlene has copied a graphic from the Internet. When it is clicked she is automatically taken to the original website.	
c) What must she do to prevent this from happening?	
When she runs the spellchecker, it highlights a lot of words that Arlene nows are spelt correctly.	
d) Give one reason why the spellchecker might still highlight these.	
e) Give one example when the spellchecker may not highlight a word when it is spelt incorrectly.	

10 SunShine Properties sell houses all around the world. One of their employees wants to send an email to their manager at manager@sunshineproperties.co.uk.

Examiner Only				
Marks	Remark			

- (a) Read and complete the following email to the manager so that:
 - (i) The employee is sending the email to the correct person and [1]
 - (ii) The person receiving the email knows what it relates to before they open it [1]



The warning shown on the email tells the employee that **Attachments may not display correctly**.

(b) Give **one** reason why attachments may not display correctly when they are opened by the recipient.

[1]

The agent needs to send a copy of the email to Mr and Mrs Reain and the manager. The agent does not want Mr and Mrs Reain to see the email address for their manager.

Examiner Only

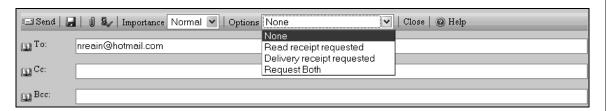
Marks Remark

(c) Write the manager's address in the correct place in the section of the email shown below.

To:	nreain@hotmail.com	
Cc:		
Bcc:		
Subject:		

[1]

(d) The employee wants to know when the email has been opened, but does not know whether she should select "Read receipt requested" or "Delivery receipt requested".



(i) Explain the difference between the two options.

_____[2]

(ii) State which option she should select so that she knows that the email has been opened.

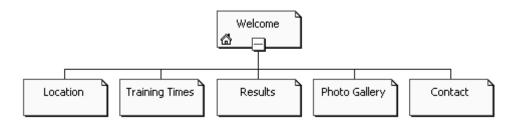
_____[1]

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	J. Brown is opening a new corner shop. He wants an EFTPOS system is store.	Marks
(a)	Expand the acronym EFTPOS .	
		1]
(b)	Explain to him the difference between EPOS and EFTPOS .	
		- 1]
(c)	List two disadvantages to a store owner of not having EFTPOS in the store.	eir
	1[1]
	2[1]
(d)	Complete the following sentences by inserting the most appropriate word in the spaces provided. Use a different word in each space. beep database description price scanner assistant	
		1]
	The barcode is used to search a for the item. [1]
	When the product is found a is output. [1]
		1]
(e)		
(e)	The price and are added to an itemised receipt. [Apart from Product Code list one item of data stored on a product barcode.	

12 June designed a website for her son's sports club. The site she created has the following pages:

Examiner Only					
Marks	Remark				



June is not sure what format she should use when she is saving the web pages.

(a) Tick (✓) one option below that is not an appropriate file format to use when saving web pages.

File Format	Tick (✓)
.htm	
.http	
.html	

[1]

When she has completed the website she tests it on **one** web browser only.

(b) Why is this not a good idea?

__[1]

When she uploads the site and opens the Photo Gallery page she sees the **Examiner Only** image below instead of some of the pictures she expects. (c) Give one reason why this might have happened. June wants to add video footage of a training session to the Welcome Page of the website. (d) Give one disadvantage of adding videos to a web page. [1] Anyone who wants more information from the club can either complete a form on the Contact Page or they can send the club secretary an email. (e) Give one advantage to the club of using forms to collect details about enquiries instead of allowing people to email the secretary. [1] People who want to join the club must download a pdf application form from the website. (f) Give one disadvantage of providing the application form in pdf format.

13 The calendar below has been produced using a template from Desktop Publishing software.

Examiner Only				
Marks	Remark			



(a)	What page	orientation	has been	used?
-----	-----------	-------------	----------	-------

		Г 1

(b) State **one** feature available within a Desktop Publisher which will make it easier for users to produce publications.

		Г11
 	 	[1]

14 Using the terms in the list below, choose **one** term that best matches the definition in the left-hand column (not all words in the list will be used).

Pixel HTTP Hard Disk

CD-Rom Analogue Encryption RSI

Resolution Check Digit Scanner Protocol

Digital ISP Hacking

Virus

Definition	Term
A program designed to damage a computer system.	
A digit added to the beginning or end of a number to verify that the number entered is an authentic code.	
A way of encoding data before transmitting it on a network.	
A company which provides the user with a connection to the Internet.	
A measure of the quality of an image.	
A device used to capture data by passing light over the image.	
An optical storage device.	
An injury which occurs as a result of using the same wrist muscles over and over again.	
A set of rules which govern the way in which data is transmitted on a network.	
A name used to describe data held as 1s and 0s.	
	[10]

Quality of written communication

Examiner Only