	Candidate	Roun
Rewarding Learning	Candidate	Num
General Certificate of Secondary Education 2010		
Information and Communication Technology		
Full Course		
Paper 1		
Higher Tier G5803	For Exa use o	
[G5803]	Question Number	Marks
MONDAY 21 JUNE, MORNING	1	
	2	
ΓΙΜΕ	3	
hour 30 minutes.	4	
nour 50 minutes.	5	
INSTRUCTIONS TO CANDIDATES	6	
Vrite your Centre Number and Candidate Number in the spaces provided	7	
t the top of this page.	8	
Vrite your answers in the spaces provided in this question paper.	9	
Complete in blue or black ink only. Do not write in pencil or with a gel pen. Answer all fifteen questions.	10	
inswer an inteen questions.	11	
INFORMATION FOR CANDIDATES	12	
The total mark for this paper is 140, including a maximum of 7 marks for	13	
uality of written communication.	14	
igures in brackets printed down the right-hand side of pages indicate the	15	
narks awarded to each question or part question.	QWC	
	Total	



			Answer all fifteen questions Examiner Only Marks Remark				
	For question 1 insert the appropriate letter in the space provided						
1	(a) Computer technology allows us to create virtual worlds for gaming and training. Which of the following is NOT a feature of a virtual world?						
		A	Online and interactive				
		B	Online and batch processed				
		С	Online and real-time				
		D	Online and computer based				
			Answer [1]				
	(b)		hich of the following correctly describes what the boot-up program a computer does?				
		Α	It carries out hardware checks and loads the operating system into the hard disc from main memory				
		B	It carries out hardware checks and loads the operating system into cache memory from the hard disc				
		С	It carries out hardware checks and loads the operating system into the hard disc from cache memory				
		D	It carries out hardware checks and loads the operating system into main memory from the hard disc				
			Answer [1]				
6272							
0272							



(c)	Wh	nich of the following statements about <i>teleworking</i> is NOT true?	Examiner Only Marks Remark
	A	Teleworking cuts down on company overheads	
	B	Teleworking means more travelling for employees	
	С	Teleworking requires employees to make use of technology	
	D	Teleworking allows companies to employ people from a wider geographic area	
		Answer [1]	
(d)	Wh	nich of the following is NOT provided by a typical EPOS system?	
	A	Automatic tracking of stock	
	B	Bar code reading	
	С	Itemised receipt	
	D	Immediate transfer of funds	
		Answer [1]	
(e)		ect the memory chip used to store control programs in electronic vices in the home.	
	A	Cache	
	B	ROM	
	С	Main	
	D	RAM	
		Answer [1]	
6272			[Turn over



(f)	Wh	ich statement is TRUE about The Data Protection Act?	
	A	Allows data subjects to view all data held about them and other people in a file	
	B	Allows data subjects to view all data held about them and have it corrected if it is incorrect	
	С	Does not allow all data subjects to view all data held about themselves	
	D	Does not allow data subjects to have data corrected if it is incorrect	
		Answer [1]	
(g)	Acc	cording to The Data Protection Act, the data controller	
	A	Ensures that data is not transferred	
	B	Ensures that data is not accessed by data subjects	
	С	Ensures that data is stored securely	
	D	Ensures that data is accessed by all data subjects	
		Answer [1]	
(272			
6272			



				_
	(h)	Mu	Itimedia presentation software allows Examiner Only Marks Remark	
		Α	The use of slide masters, the inclusion of sound and efficient numeric calculation	
		B	The use of slide masters, the inclusion of navigation buttons and the storage of records	
		С	The storage of records, the inclusion of navigation buttons and the inclusion of sound	
		D	The inclusion of sound, the use of slide masters and the inclusion of navigation buttons	
			Answer [1]	
	(i)	Wh	ich of the following is a magnetic storage device?	
		A	CD-R	
		B	DVD-RW	
		С	Flash Memory Stick	
		D	External Hard Drive	
			Answer [1]	
	(j)	A s	imulation is a	
		A	graphic which has been edited	
		В	spreadsheet which returns correct results	
		С	computer program used to model a real life situation	
		D	database which contains reports	
		2	A [1]	
			Answer [1] Total Question 1	
6272			[Turn over	



2		drew has a photography business. He has bought word processing tware for his computer.	Examiner C Marks Re	Only emark
	(a)	He will use a template to create a brochure advertising his company. What is a template?		
		[2]		
	(b)	The template will allow Andrew to produce the brochure very quickly. List ONE other advantage to Andrew of using a template to create a brochure.		
		[1]		
6272				



(c) Consider the following features of a word processor. Tick (✓) **TWO** boxes that best describe each feature

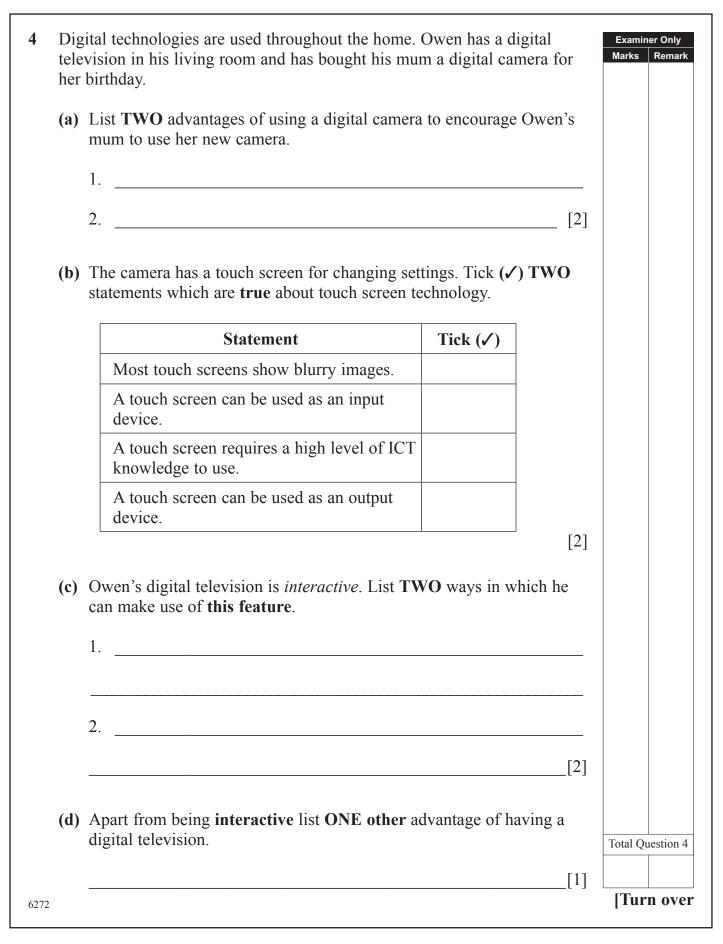
Features	Description			
Mailmerge	Uses a database			
	Provides step by step instructions			
	Helps users complete tasks			
	Requires fields to be added to the main document			
	Can be customised to include new words			
	Helps ensure spelling is correct			
	Is responsible for text formatting			
		[2]		
Wizard	Uses a database			
	Provides step by step instructions			
	Helps users complete tasks			
	Requires fields to be added to the main document			
	Can be customised to include new words			
	Helps ensure spelling is correct			
	Is responsible for text formatting			
		[2]		
Dictionary	Uses a database			
	Provides step by step instructions			
	Helps users complete tasks			
	Requires fields to be added to the main document			
	Can be customised to include new words			
	Helps ensure spelling is correct			
	Is responsible for text formatting		Total Qu	lestion 2
		[2]		



Examiner Only

3	Robert is carrying out a science experiment at school. He needs to monitor the weather temperature in °C and take a reading each hour for a 5 day period.							
	(a)	Robert's science teacher suggests using data logging. Complete the sentence using the following words (note not all words will be used).						
		LIGHT TIME SENSOR CONTROL CAPTURE						
		INTERVAL SOUND TEMPERATURE						
		Data logging involves the use of a to						
		data. The time taken between each reading is called the data logging						
		In this case a sensor would be						
		appropriate. [4]						
	(b)	Data logging will provide accurate data. Give ONE other advantage to Robert of using data logging.						
	(c)	Robert will present his findings to his classmates. Suggest TWO ways in which he can use the computer to assist with his presentation.						
		2 [2]						
6272			Total Qu	estion 3				







5	Eleanor works for the local newspaper. She is responsible for photographs and graphics. She is creating a "50 Years Ago" page for the town.						
	(a)) She has been given old photographs. Suggest ONE method for getting these onto the computer.					
		[1]					
	(b)	Eleanor is using photographs taken by a local photographer 15 years ago. If she does not seek his permission what law is she breaking?					
		[2]					
	(c)	Whilst creating the "50 Years Ago" page, Eleanor's computer breaks down. She discovers that the computer has become infected with a virus.					
		(i) What is a virus?					
		[2]					
		(ii) List TWO things Eleanor could have done to prevent the virus infection.					
		1					
		2					
		[2]					
		(iii) Eleanor discovers that the virus has been created by someone in her office. What law has this person broken?	Total Que	estion 5			
		[1]					
6272		[*]					



BLANK PAGE

(Questions continue overleaf)

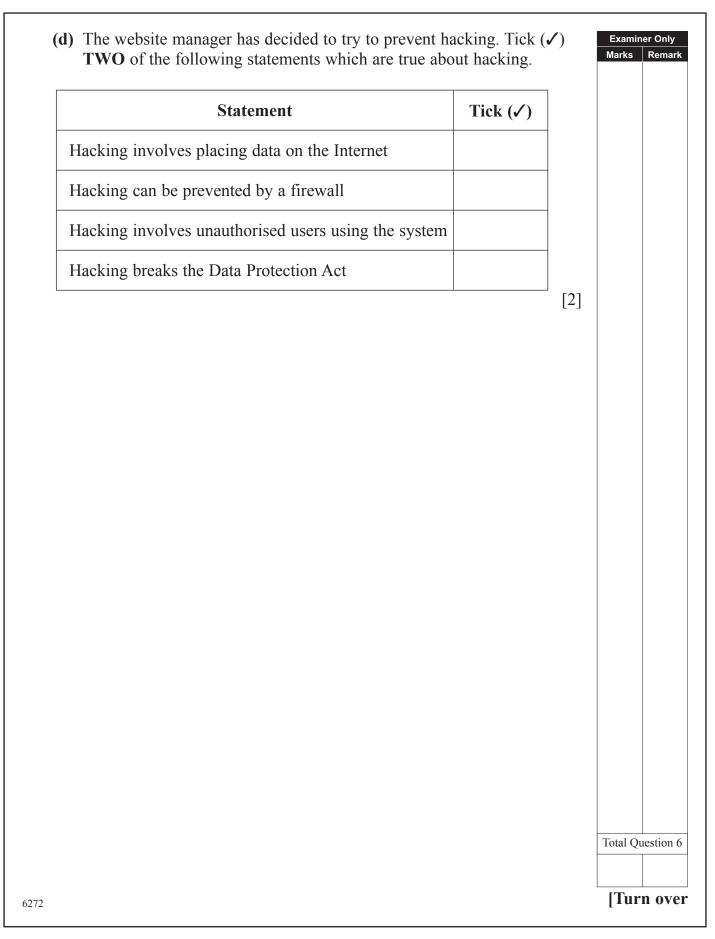
6272

[Turn over



6			INGBOOKS.COM is an online bookshop. Books can be ordered and delivered to customers' homes.	Examine Marks	r Only Remark
	(a)		ry has ordered a book and paid by credit card. Give ONE way of king sure that the website is secure.		
			[1]		
	(b)		n has ordered a book for download to his iPhone. He has also paid credit card. Give ONE advantage of ordering a book for download.		
			[1]		
	(c)	onli	IAZINGBOOKS.COM allow customers to maintain an account ine. Customers submit details to an online form. They are given a rname and password.		
		(i)	What is a username ?		
			[1]		
		(ii)	Give TWO reasons why usernames and passwords are necessary for using customer accounts at AMAZINGBOOKS.COM.		
			2		
			[2]		
6272					







- 14
- 7 Niamh is a GCSE student. She has created the following for her GCSE coursework.















database

Blue hills

GCSE Full

Assignment 1 Assignment 2 Assignment 3

ICT First Edit

(a) In the table below, circle the statement which is correct about each file. The first one has been done for you.

Filename			Statement		
Assignment 1	has been created by a word processor	has been created by a graphics package	has been created by presentation software	has been created by a spreadsheet package	is a folder
Blue hills	has been created by a word processor	has been created by a graphics package	has been created by presentation software	has been created by a spreadsheet package	is a folder
Assignment 2	has been created by a word processor	has been created by a graphics package	has been created by presentation software	has been created by a spreadsheet package	is a folder
Assignment 3	has been created by a word processor	has been created by a graphics package	has been created by presentation software	has been created by a spreadsheet package	is a folder
database	has been created by a word processor	has been created by a graphics package	has been created by presentation software	has been created by a spreadsheet package	is a folder
	<u></u>			[4]	Examiner Only Marks Remark
5272				L	



(b) Look below, at the details of the currency file.	Examiner Only Marks Remark
Video Clip 92,013 KB	
Circle the approximate size in Megabytes of this file.	
0.92 Megabytes 9.2 Megabytes 92 Megabytes 920 Megabytes [1]	
(c) Niamh has been told by her teacher to make a backup of her files.	
(i) Explain to her what a backup is and why she should make one.	
[2]]
(ii) Niamh chooses CD-R to make her backup. List ONE feature of CD-R which makes it suitable for backup.	
[1]	
6272	[Turn over



(d)	Nia	mh can only find a DVD-R.	Examin Marks	er Only Remark
	(i)	State the storage capacity of a typical DVD-R .	Marks	Remark
		[1]		
	(ii)	List ONE similarity between a DVD-R and a CD-R.		
	(11)	[1]		
		[1]		
			Total Qu	lestion 7
6272				



BLANK PAGE

(Questions continue overleaf)

6272

[Turn over



8	Hap	ppy Days Bank provide their customers with:	Examin Marks	er Only Remark
	•	Debit and Credit cards Online banking Telephone banking		
	(a)	The debit and credit cards contain smart chip technology. List TWO features of a smart chip . 1.		
		1.		
	(b)	The debit and credit cards also contain a magnetic stripe. Circle TWO of the boxes below which contain statements which are TRUE about magnetic stripes.		
ma ca	nta o agne n be man	tic stripe read by magnetic stripe by magnetic stripe hy magnetic stripe		

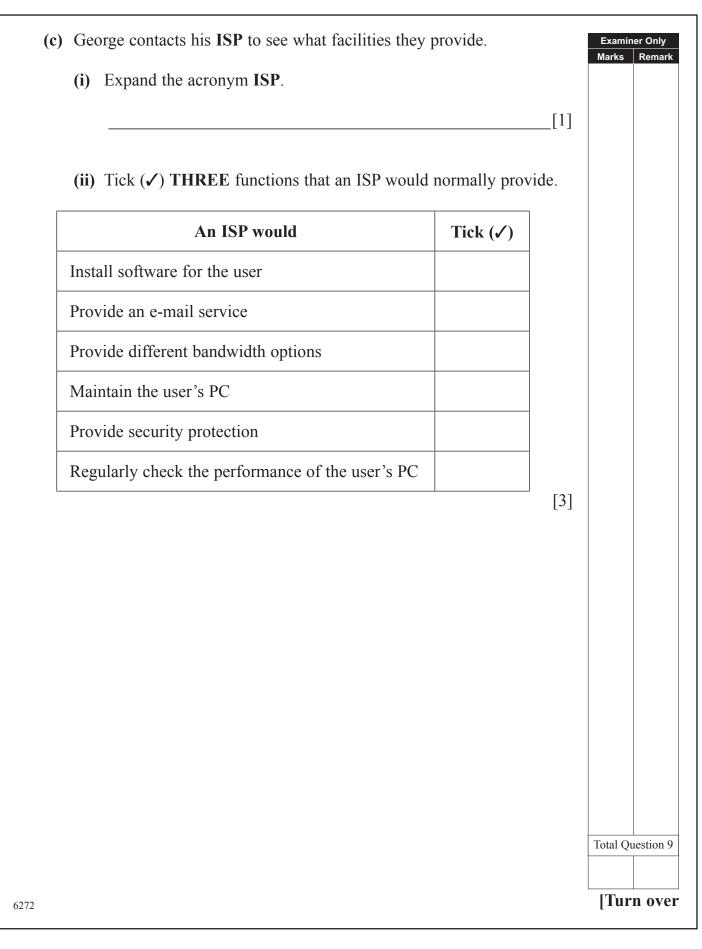


(0	e) Sor	ne customers make use of the online banking facility and ATM.	Examine Marks	er Only Remark
	(i)	Expand the acronym ATM .		
	(ii)	[1] List TWO ways in which the bank would benefit if customers use the ATM.		
		1		
		2		
		[2]		
(0	from	ten is a university student who has access to online banking. Apart m being able to access her account 24 hours a day, state TWO other ys in which online banking could be useful to her.		
	1.			
	2.			
		[2]		
			Total Qu	estion 8
6272			[Turi	1 over



(a) Expand the acr	
	[1]
· · ·	o go online. Tick (\checkmark) ONE statement which best e needs each of the following items.
Item	Statement
Search Engine	To upload and download files
	To display webpages
	To find webpages
	To get connected to the Internet
	To allow data transfer from his PC to the Internet
Web Browser	To upload and download files
	To display webpages
	To find webpages
	To get connected to the Internet
	To allow data transfer from his PC to the Internet
Felecommunications	To upload and download files
link	To display webpages
	To find webpages
	To get connected to the Internet
	To allow data transfer from his PC to the Internet
	[3]







10	The	con	npany	supply computer components and hardware to their custon have a website. The URL for the company website is cglobe.com/index.htm		Examiner Only Marks Remark
	(a)	Exp	olain e	each of the following aspects of the URL:		
		(i)	http	:	[1]	
		(ii)	www	v.pcglobe.com	[1]	
		(iii)	inde	x.htm	[1]	
ſ	(b)		ow is erlin	a page containing contact details. This page contains ks . PC GLOBE		
				Welcome to PC GLOBE		
		iome out Us		Our Mission To meet the needs of all our customers and provide an efficient servi	ice	
	Cal	lendar ovyee Lis		 Contact Information Telephone 028 990 300000 Fax 028 990 300000 Postal Address 38 Long Road, Newtonards, Belfast Email General Information <u>Margaret@pcglobe.com</u> Sales <u>Robert@pcglobe.com</u> 		
6272						



(i)	What is a hyperlink ?		Examir Marks	ner Only Rema
		[1]		
(ii)	List ONE piece of information on the webpage shown which is likely to be a hyperlink.			
		[1]		
(iii)	PC GLOBE have included graphics on the website. List ONE advantage and ONE disadvantage of doing this.			
	Advantage	_		
	Disadvantage			
		[2]		
(iv)	Apart from hyperlinks, list TWO features available in a web design package that have been used to create the web page show			
(iv)	Apart from hyperlinks, list TWO features available in a web design package that have been used to create the web page show 1.	/n.		
(iv)	Apart from hyperlinks, list TWO features available in a web design package that have been used to create the web page show 1.			
(iv)	Apart from hyperlinks, list TWO features available in a web design package that have been used to create the web page show 1.	/n.		
(iv)	Apart from hyperlinks, list TWO features available in a web design package that have been used to create the web page show 1.	/n.		
(iv)	Apart from hyperlinks, list TWO features available in a web design package that have been used to create the web page show 1.	/n.		
(iv)	Apart from hyperlinks, list TWO features available in a web design package that have been used to create the web page show 1.	/n.		
(iv)	Apart from hyperlinks, list TWO features available in a web design package that have been used to create the web page show 1.	/n. [2]	Fotal Qu	restion



11 David is setting up a small printing company. He stores details of his customers in a database, part of which can be seen below.

Order ID	Forename	Surname	Street	Town	Postcode	Order Description	Price	Date Placed	Completion Date	Collected
BRO01	Peter	Brown	22 Highways	Larne	BT56 8UJ	200 Wedding Invites	£100.00	21/03/10	21/04/10	Yes
FOR02	Clarke	Forest	12 Shrewsbury Road	Larne	BT56 8KO	500 Business Cards	£150.00	23/03/10	05/04/10	No
MON08	Aislinn	Mone	45 Heather Way	Belfast	BT5 8MN	50 Party Invites	£25.00	12/04/10	20/04/10	Yes
ARN04	Jane	Arnold	2 The Gardens	Newry	BT34 8AS	40 Thank You Cards	£20.00	12/04/10	15/05/10	No
GRA05	Norman	Grant	16 Grinan Road	Belfast	BT6 2RF	100 Business Cards	£40.00	19/04/10	20/05/10	Yes

(a)	Hig	hlight ONE record in the table above.	[1]	Examiner Only Marks Remark
(b)	Hov	w many fields are there in the table above?		
			[1]	
(c)	Sug	gest a suitable data type for each of the following fields.		
	(i)	Order ID		
			[1]	
	(ii)	Collected		
			[1]	
(d)		vid wants to find all customers who placed orders over £80. H the to display their Forename, Surname, Street, Town and Post y.		
	(i)	Which feature of the database software would he use to do the	nis?	



							[1]		
	Some of which is		er orders are saved below.	in a separa	te datab	ase, part	of		
Order ID	Forename	Surname	Address	Order Description	Price	Date Placed	Completion Date		
BRO00 BRO15	Jack	Brown	19 Main Street, Newry, BT20 3DF	120 Wedding Invites	£60.00	12/02/09	12/05/09		
EN02	Jenny	Jenkins	12 Blacks Road, Belfast, BT3 7AS	120 Business Cards	£30.00	23/03/09	01/05/09		
			ER feature of the of the details into his data		ftware co	ould Day	[1] vid use to		
			ER feature of the of the details into his data		ftware co	ould Dav			
(f)	ente David w	er these		abase?	s who ha	ave not (vid use to [1] [1] collected		
(f)	ente David w	er these	details into his data	abase?	s who ha	ave not (vid use to [1] [1] collected	Total Qu	



	Α	В	С	D	E	F	G
1							
2		F	RW Hairdress	er Suppli	ies		
3	DATE	1st-31st May					
4							
5	Stock No	Description	Price	Quantity Sold	Sales Total	Percentage Profit	Profit (£)
6	CC01	Deep Conditioner	£4.00	200	£800.00	10%	£80.00
7	CC02	Blonde Shampoo	£5.00	500	£2,500.00	25%	£625.00
8	CC03	Heated Rollers	£41.00	150	£6,150.00	25%	£1,537.50
9	KE03	GHD Straighteners	£99.00	100	£9,900.00	15%	£1,485.00
10	TO67	RM Straighteners	£54.00	55	£2,970.00	15%	£445.50
11	TV14	IconicRW Hair Gel	£6.00	450	£2,700.00	25%	£675.00
12	TV35	IconicRW Mousse	£4.99	200	£998.00	30%	£299.40
13	DP01	IconicRW Hairspray	£4.99	300	£1,497.00	25%	£374.25
14	BR01	GHD Curling Irons	£75.00	50	£3,750.00	20%	£750.00
15	EC10	Vent Hairbrush	£7.99	100	£799.00	10%	£79.90
16	DI23	Round Curling Brush	£8.99	25	£224.75	25%	£56.19
17				Total	£32,288.75		£6,407.74

12 RW Hairdresser Supplies sell electrical equipment. The manager creates a spreadsheet to calculate the profit from the sales in the store each month. An example for May 2010 is included below.

- (a) The text in *Row 2* has been centred. State **ONE** other way in which the cells in *Row 2* have been formatted.
- (b) How has the **Price** column been formatted?

[1]

[1]





	A	В	С	D	E	F	G	Н
1								
2		R	W Hairdress	er Supp	lies			
3	DATE	31/04/2010						
4								
5	Stock No	Description	Price	Quantity Sold	Sales Total	Percentage Profit	Profit (£)	Buy More?
6	CC01	Deep Conditioner	£4.00	200	£800.00	10%	£80.00	Yes
7	CC02	Blonde Shampoo	£5.00	500	£2,500.00	25%	£625.00	Yes
8	CC03	Heated Rollers	£41.00	150	£6,150.00	25%	£1,537.50	No
9	KE03	GHD Straighteners	£99.00	100	£9,900.00	15%	£1,485.00	No
10	TO67	RM Straighteners	£54.00	55	£2,970.00	15%	£445.50	No
11	TV14	IconicRW Hair Gel	£6.00	450	£2,700.00	25%	£675.00	Yes
12	TV35	IconicRW Mousse	£4.99	200	£998.00	30%	£299.40	Yes
13	DP01	IconicRW Hairspray	£4.99	300	£1,497.00	25%	£374.25	Yes
14	BR01	GHD Curling Irons	£75.00	50	£3,750.00	20%	£750.00	No
15	EC10	Vent Hairbrush	£7.99	100	£799.00	10%	£79.90	No
16	DI23	Round Curling Brush	£8.99	25	£224.75	25%	£56.19	No
17				Total	£32,288.75		£6,407.74	

(f) A new column has been added to the spreadsheet to help with re-ordering stock.

Look at the values in each of the cells in column H, then tick (\checkmark) **ONE** formula you would expect to find in cell **H7**.

Formula	Tick (✓)
=IF(D7 > = 150, "Yes", "No")	
=IF(D7 < 150, "Yes", "No")	
=IF(D7 > 150, "Yes", "No")	

 Examiner Only

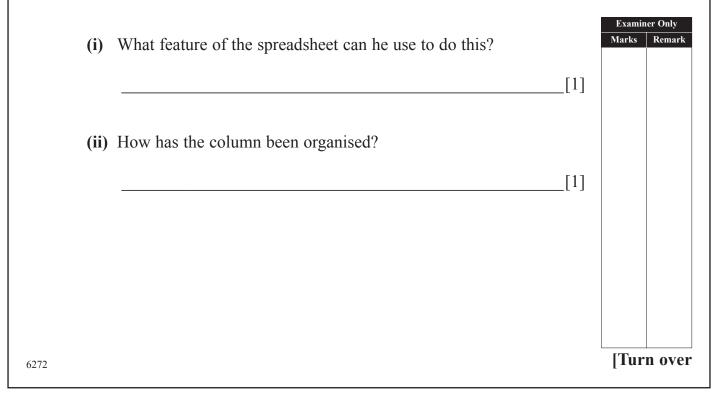
 Marks
 Remark

[1]



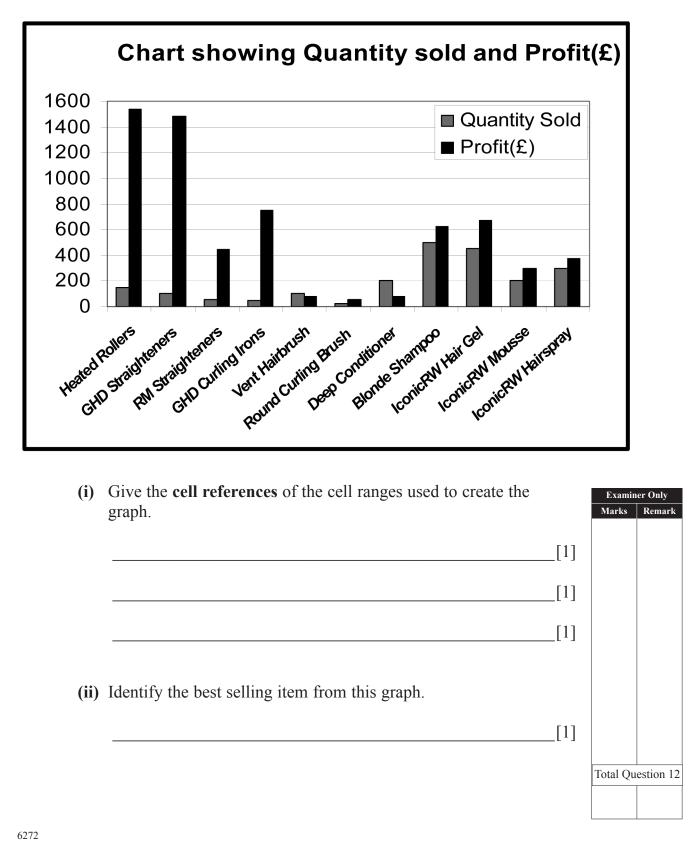
(g) The manager wants to change the spreadsheet so that the **Buy More?** column (H) is organised in the same way as the diagram below.

	A	В	С	D	E	F	G	Н
1								
2		F	W Hairdress	ser Supp	lies			
3	DATE	31/04/2010						
4								
5	Stock No	Description	Price	Quantity Sold	Sales Total	Percentage Profit	Profit (£)	Buy More?
6	CC03	Heated Rollers	£41.00	150	£6,150.00	25%	£1,537.50	No
7	KE03	GHD Straighteners	£99.00	100	£9,900.00	15%	£1,485.00	No
8	TO67	RM Straighteners	£54.00	55	£2,970.00	15%	£445.50	No
9	BR01	GHD Curling Irons	£75.00	50	£3,750.00	20%	£750.00	No
10	EC10	Vent Hairbrush	£7.99	100	£799.00	10%	£79.90	No
11	DI23	Round Curling Brush	£8.99	25	£224.75	25%	£56.19	No
12	CC01	Deep Conditioner	£4.00	200	£800.00	10%	£80.00	Yes
13	CC02	Blonde Shampoo	£5.00	500	£2,500.00	25%	£625.00	Yes
14	TV14	IconicRW Hair Gel	£6.00	450	£2,700.00	25%	£675.00	Yes
15	TV35	IconicRW Mousse	£4.99	200	£998.00	30%	£299.40	Yes
16	DP01	IconicRW Hairspray	£4.99	300	£1,497.00	25%	£374.25	Yes
17				Total	£32,288.75		£6,407.74	





(h) The manager produced the following chart to compare the Sales Total with Profit(£) for each product.





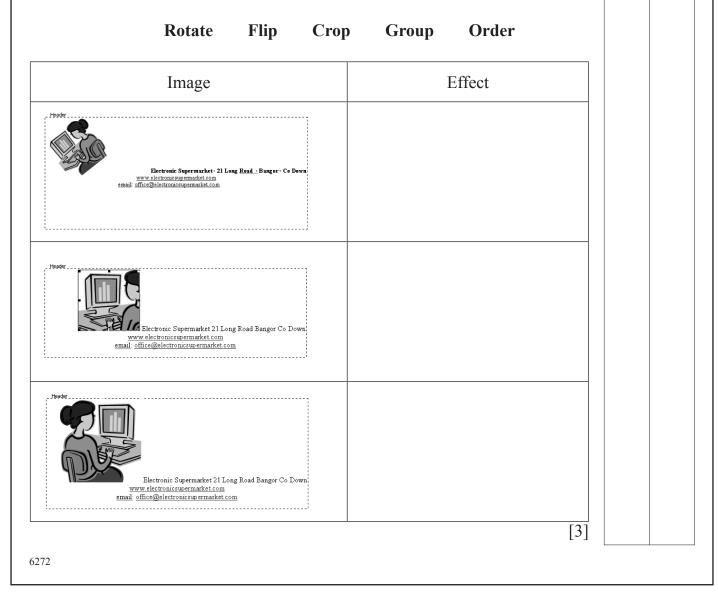
13	Using the terms in the list below choose definition in the left-hand column (<i>not al</i>		Examir Marks	ner Only Remark
	BLIND CARBON COPY GRAPHICAL USER INTERFACE LASER PRINTER VIDEO CONFERENCING CARBON COPY MODEM JOYSTICK UPLOADING	CD-ROM FACSIMILE INKJET PRINTER COMPRESSION INTERNET WEB FILTERING BITMAP		
D	efinition	Term		
	oftware which includes windows, icons, nenus and pointers			
	device which allows the electronic ansmission of paper documents			
	ommunicating across a network using bund and images			
А	method of making a file smaller in size			
	method used to prevent websites and vebpages from being accessed			
Ca	ending an e-mail to recipients when they an only see their own details and not nose of other recipients			
	n output device which uses toner to lace images on paper			
	storage medium which can only be read			
	picture file which has not been ptimised for use on the Internet			
А	method of placing files on the Internet			estion 13
0]	ptimised for use on the Internet		[10]	[10] [T ur



14 Anthony runs "Electronic Supermarket" and is creating a letterhead for his business.

Here is the original image Anthony used. He then resized it and placed it in a header.

(a) Look at the images below and select **one** word *from the list* which best describes what effect has been applied to the image in each case. (*Not all words will be used.*)







Examiner Only Marks Remark

	Electron	ic Supermarket - 21 Long Road - Ba www.electronicsupermarket.com email: office@electronicsupermarket	<u>n</u>		
			25 th March 2010		
	Mrs Elaine Green 13, The Rushes Cultra				
	Dear Mrs Green,				
		ve not submitted payment for	the following :		
	Item	Description	Cost		
	14 Booklets photocopied	Photocopying	£7.00 £12.00		
	12 Colour photocopies 14 Booklets Bound	Colour Photocopying Binding	£12.00 £14.00		
			£33.00		
	Yours Sincerely Anthony Mahon	r these items within 7 days.			
(i)	Anthony Mahon		ed in the body of the	document.	
(i)	Anthony Mahon			document.	
(i)	Anthony Mahon List TWO forma 1.	atting features use	ed in the body of the		
(i)	Anthony Mahon		ed in the body of the	document. [2]	
	Anthony Mahon List TWO forma 1. 2.	atting features use	ed in the body of the	[2]	



	nas purchased notebook comp n use the notebooks anywhere		Examiner Only Marks Remark
Here is part of the sp	ecification of the computer.		
Processor Type Processor speed Memory Size Hard Drive Capacity Optical Drives Floppy Disk Drive Screen Size/Type TV-out Wireless Enabled No. of USB Connections Infrared Port Included Battery life (up to) Weight Colour	Intel Pentium Dual-Core processor SU2700 1.3GHz, 800MHz, 2MB (3GB 250 GB None NO 11.6" NO YES 3 NO 8 hours 1.58 kg Glossy Black	© iStockphoto/Thinkstock	
			_[2]
(b) What impact doe performance?	es processor speed have on the	e computer's	
			_[1]
(c) Give TWO ways	s in which USB connections of	can be used.	
1			_
2			[2]
6272			



(i) Battery	life (up to) 8	hours			Marks Rem
				[1]	
(ii) Weight	1.58 kg				
()	0				
				[1]	
	NE feature wh following task	iich would be mo	ost suitable for	r completing	
			Ontical	Wireless	
Task	TV-Out	Hard Disk	Optical Drive	Enabled	
the network Installing new					
the network Installing new software Connecting to					
the network Installing new software Connecting to a TV Storing coursework					Total Ouestion
Connecting to the network Installing new software Connecting to a TV Storing coursework files				[4]	Total Question



Permission to reproduce all copyright material has been applied for. In some cases, efforts to contact copyright holders may have been unsuccessful and CCEA will be happy to rectify any omissions of acknowledgement in future if notified.

