



Rewarding Learning

General Certificate of Secondary Education
2010

7	1		
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Candidate Number

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StudentBounty.com

Information and Communication Technology

Short Course

Higher Tier



G5302

[G5302]

MONDAY 21 JUNE, MORNING

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.

Complete in blue or black ink only. **Do not write in pencil or with a gel pen.**

Answer **all fifteen** 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.

For Examiner's use only	
Question Number	Marks
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
QWC	

Total Marks	
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6270

Examiner Number

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J U N 1 0 G 5 3 0 2

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
 - C** Online and real-time
 - D** Online and computer based

Answer _____ [1]

- (b)** Which of the following correctly describes what the boot-up program on a computer does?
- A** 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
 - C** 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]



(f) Which 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
- C 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) According 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
- C Ensures that data is stored securely
- D Ensures that data is accessed by all data subjects

Answer _____ [1]

Examiner Only

Marks Remark



(h) Multimedia presentation software allows

- A** 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
- C** 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) Which of the following is a magnetic storage device?

- A** CD-R
- B** DVD-RW
- C** Flash Memory Stick
- D** External Hard Drive

Answer _____ [1]

(j) A simulation is a

- A** graphic which has been edited
- B** spreadsheet which returns correct results
- C** computer program used to model a real life situation
- D** database which contains reports

Answer _____ [1]

Examiner Only	
Marks	Remark
Total Question 1	

[Turn over



2 Andrew has a photography business. He has bought word processing software for his computer.

- (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]

Examiner Only

Marks Remark



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

Features	Description
Mailmerge	<input type="checkbox"/> Uses a database <input type="checkbox"/> Provides step by step instructions <input type="checkbox"/> Helps users complete tasks <input type="checkbox"/> Requires fields to be added to the main document <input type="checkbox"/> Can be customised to include new words <input type="checkbox"/> Helps ensure spelling is correct <input type="checkbox"/> Is responsible for text formatting <div style="text-align: right;">[2]</div>
Wizard	<input type="checkbox"/> Uses a database <input type="checkbox"/> Provides step by step instructions <input type="checkbox"/> Helps users complete tasks <input type="checkbox"/> Requires fields to be added to the main document <input type="checkbox"/> Can be customised to include new words <input type="checkbox"/> Helps ensure spelling is correct <input type="checkbox"/> Is responsible for text formatting <div style="text-align: right;">[2]</div>
Dictionary	<input type="checkbox"/> Uses a database <input type="checkbox"/> Provides step by step instructions <input type="checkbox"/> Helps users complete tasks <input type="checkbox"/> Requires fields to be added to the main document <input type="checkbox"/> Can be customised to include new words <input type="checkbox"/> Helps ensure spelling is correct <input type="checkbox"/> Is responsible for text formatting <div style="text-align: right;">[2]</div>

Examiner Only

Marks Remark

Total Question 2

[Turn over

6270



0 7

4 Digital technologies are used throughout the home. Owen has a digital television in his living room and has bought his mum a digital camera for her birthday.

(a) List **TWO** advantages of using a digital camera to encourage Owen's mum to use her new camera.

1. _____
2. _____ [2]

(b) The camera has a touch screen for changing settings. Tick (✓) **TWO** statements which are **true** about touch screen technology.

Statement	Tick (✓)
Most touch screens show blurry images.	
A touch screen can be used as an input device.	
A touch screen requires a high level of ICT knowledge to use.	
A touch screen can be used as an output device.	

[2]

(c) Owen's digital television is *interactive*. List **TWO** ways in which he can make use of **this feature**.

1. _____
- _____
2. _____
- _____ [2]

(d) Apart from being **interactive** list **ONE other** advantage of having a digital television.

- _____ [1]

Examiner Only

Marks Remark

Total Question 4

[Turn over



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(Questions continue overleaf)

6270

[Turn over



6 AMAZINGBOOKS.COM is an online bookshop. Books can be ordered online and delivered to customers' homes.

- (a) Mary has ordered a book and paid by credit card. Give **ONE** way of making sure that the website is secure.

_____ [1]

- (b) John has ordered a book for download to his iPhone. He has also paid by credit card. Give **ONE** advantage of **ordering** a book for download.

_____ [1]

- (c) AMAZINGBOOKS.COM allow customers to maintain an account online. Customers submit details to an online form. They are given a username 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.

1. _____

2. _____

_____ [2]

Examiner Only	
Marks	Remark



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



database



Blue hills



currency



GCSE Full
ICT First Edit



Assignment 1



Assignment 2



Assignment 3

(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

[4]

Examiner Only	
Marks	Remark



(b) Look below, at the details of the **currency** file.



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]

Examiner Only	
Marks	Remark



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(Questions continue overleaf)

6270

[Turn over



1 7

8 Happy Days Bank provide their customers with:

- **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. _____
2. _____ [2]

(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.

Data on a magnetic stripe can be read by humans	Data on a magnetic stripe can be damaged by magnetic fields	Magnetic stripes can hold very large quantities of data	Data on a magnetic stripe must be read by a special reader
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[2]

Examiner Only	
Marks	Remark



(c) Some customers make use of the online banking facility and **ATM**.

(i) Expand the acronym **ATM**.

_____ [1]

(ii) List **TWO** ways in which the bank would benefit if customers use the **ATM**.

1. _____

2. _____

_____ [2]

(d) Karen is a university student who has access to online banking. Apart from being able to access her account 24 hours a day, state **TWO** other ways in which online banking could be useful to her.

1. _____

2. _____

_____ [2]

Examiner Only

Marks Remark

Total Question 8

[Turn over



9 The Internet exists on a **WAN**.

(a) Expand the acronym **WAN**.

_____ [1]

(b) George needs to go online. Tick (✓) **ONE** statement which best explains why he needs each of the following items.

Item	Statement
Search Engine	<input type="checkbox"/> To upload and download files <input type="checkbox"/> To display webpages <input type="checkbox"/> To find webpages <input type="checkbox"/> To get connected to the Internet <input type="checkbox"/> To allow data transfer from his PC to the Internet
Web Browser	<input type="checkbox"/> To upload and download files <input type="checkbox"/> To display webpages <input type="checkbox"/> To find webpages <input type="checkbox"/> To get connected to the Internet <input type="checkbox"/> To allow data transfer from his PC to the Internet
Telecommunications link	<input type="checkbox"/> To upload and download files <input type="checkbox"/> To display webpages <input type="checkbox"/> To find webpages <input type="checkbox"/> To get connected to the Internet <input type="checkbox"/> To allow data transfer from his PC to the Internet

[3]

Examiner Only

Marks

Remark



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) Highlight **ONE** record in the table above. [1]

(b) How many fields are there in the table above?

_____ [1]

(c) Suggest a suitable **data type** for each of the following fields.

(i) **Order ID**

_____ [1]

(ii) **Collected**

_____ [1]

(d) David wants to find all customers who placed orders over £80. He wants to display their Forename, Surname, Street, Town and Postcode only.

(i) Which feature of the database software would he use to do this?

_____ [1]

Examiner Only	
Marks	Remark



- 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	B	C	D	E	F	G
1							
2	RW Hairdresser Supplies						
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

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

_____ [1]

- (b) How has the **Price** column been formatted?

_____ [1]

Examiner Only	
Marks	Remark



- (c) The manager has used a formula to calculate the profit for the **Vent Hairbrush**. Tick (✓) the correct formula used.

Formula	Tick (✓) one only
=E15*F15	
=E15+F15	
=C15*D15	

[1]

- (d) Write down the **cell reference** for the total sales figure for May.

_____ [1]

- (e) Circle the *function* below which is most likely to be used in **G17**.

AVERAGE function

SUM function

MAX function

[1]

Examiner Only	
Marks	Remark

[Turn over]



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

	A	B	C	D	E	F	G	H
1								
2	RW Hairdresser Supplies							
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	

Look at the values in each of the cells in column H, then tick (✓) **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")	

[1]

Examiner Only	
Marks	Remark



- (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	B	C	D	E	F	G	H
1								
2	RW Hairdresser Supplies							
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	

- (i) What feature of the spreadsheet can he use to do this?

_____ [1]

- (ii) How has the column been organised?

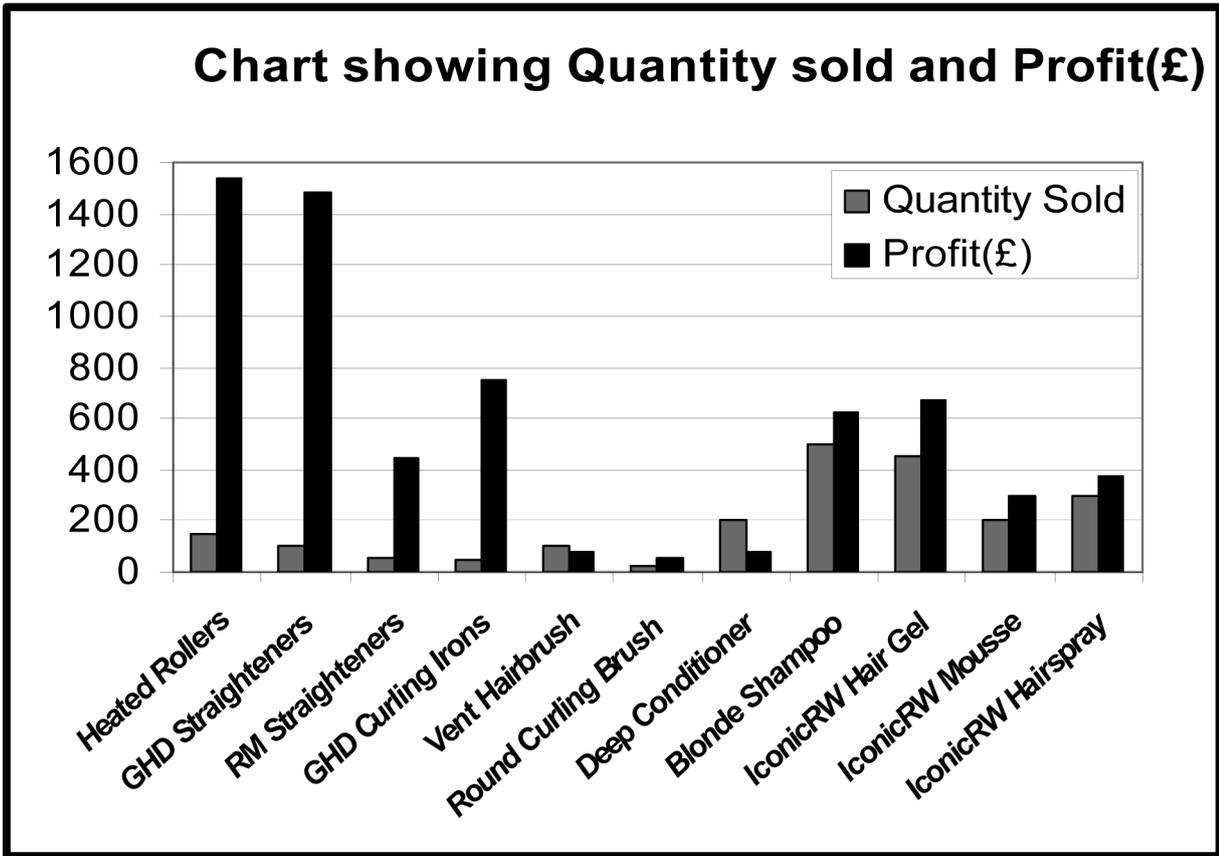
_____ [1]

Examiner Only	
Marks	Remark

[Turn over



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



(i) Give the **cell references** of the cell ranges used to create the graph.

_____ [1]

_____ [1]

_____ [1]

(ii) Identify the best selling item from this graph.

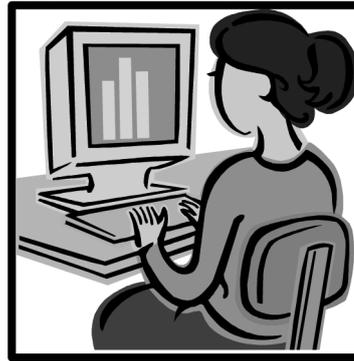
_____ [1]

Examiner Only	
Marks	Remark
Total Question 12	



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.*)

Rotate Flip Crop Group Order

Image	Effect
<p>Header</p>  <p>Electronic Supermarket · 21 Long Road · Bangor · Co Down www.electronicssupermarket.com email: office@electronicssupermarket.com</p>	
<p>Header</p>  <p>Electronic Supermarket 21 Long Road Bangor Co Down www.electronicssupermarket.com email: office@electronicssupermarket.com</p>	
<p>Header</p>  <p>Electronic Supermarket 21 Long Road Bangor Co Down www.electronicssupermarket.com email: office@electronicssupermarket.com</p>	

[3]

Examiner Only	
Marks	Remark



(b) Below is a section of a letter produced.

Examiner Only

Marks Remark



Electronic Supermarket · 21 Long Road · Bangor · Co Down

www.electronicssupermarket.com

email: office@electronicssupermarket.com

25th March 2010

Mrs Elaine Green
13, The Rushes
Cultra

Dear Mrs Green,

This is a reminder. You have not submitted payment for the following :

<i>Item</i>	<i>Description</i>	<i>Cost</i>
<i>14 Booklets photocopied</i>	<i>Photocopying</i>	<i>£7.00</i>
<i>12 Colour photocopies</i>	<i>Colour Photocopying</i>	<i>£12.00</i>
<i>14 Booklets Bound</i>	<i>Binding</i>	<i>£14.00</i>
		£33.00

Please submit payment for these items within 7 days.

Yours Sincerely

Anthony Mahon

(i) List **TWO** formatting features used in the body of the document.

1. _____

2. _____ [2]

(ii) Give **ONE** advantage to the company of using a letterhead when writing to customers.

_____ [1]

Total Question 14

6270

[Turn over



3 3

15 Great Times School has purchased notebook computers for GCSE ICT pupils. The pupils can use the notebooks anywhere in the school.

Here is part of the specification of the computer

Processor Type	Intel Pentium Dual-Core processor SU2700
Processor speed	1.3GHz, 800MHz, 2MB
Memory Size	3GB
Hard Drive Capacity	250 GB
Optical Drives	None
Floppy Disk Drive	NO
Screen Size/Type	11.6"
TV-out	NO
Wireless Enabled	YES
No. of USB Connections	3
Infrared Port Included	NO
Battery life (up to)	8 hours
Weight	1.58 kg
Colour	Glossy Black



© iStockphoto/Thinkstock

<http://www.pcworld.co.uk/martprd/product/seo/938594>

Examiner Only	
Marks	Remark

(a) What is the function of the processor in any computer?

[2]

(b) What impact does processor speed have on the computer's performance?

[1]

(c) Give **TWO** ways in which USB connections can be used.

1. _____
2. _____

[2]



(d) Why are each of the following useful to the pupils:

(i) Battery life (up to) 8 hours

_____ [1]

(ii) Weight 1.58 kg

_____ [1]

(e) Tick (✓) **ONE** feature which would be most suitable for completing each of the following tasks.

Task	TV-Out	Hard Disk	Optical Drive	Wireless Enabled
Connecting to the network				
Installing new software				
Connecting to a TV				
Storing coursework files				

[4]

THIS IS THE END OF THE QUESTION PAPER

Examiner Only

Marks Remark

Total Question 15

Quality of Written Communication



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