

FOR OFFICIAL USE

--	--	--	--	--	--

X207/101



* X 2 0 7 1 0 0 1 1 *

Total

--

NATIONAL
QUALIFICATIONS
2011

FRIDAY, 3 JUNE
9.00 AM – 10.00 AM

COMPUTING
STUDIES
INTERMEDIATE 1

Fill in these boxes and read what is printed below.

Full name of centre

--

Town

--

Forename(s)

--

Surname

--

Date of birth

Day

Month

Year

--	--	--	--	--	--

Scottish candidate number

--	--	--	--	--	--	--	--	--	--

Number of seat

--

Attempt Section I and **one** Part of Section II.

Section I – Attempt all questions.

Section II - This section has two parts:

Part A – Computers and the Internet

Part B – Information and the Internet

Choose **one** part and answer **all** of the questions in that part.

Read all questions carefully.

Write your answers in the space provided on the question paper.

Write as neatly as possible.

Use blue or black ink. Pencil may be used for graphs and diagrams only.

Before leaving the examination room you must give this book to the Invigilator. If you do not, you may lose all the marks for this paper.



[BLANK PAGE]

SECTION I

Attempt ALL questions in this section

1. Gordon produces a monthly newsletter for the Dr What fan club. An article from next month's issue is shown below.

Halloween Party

Dr What club members are looking forward to this year's Halloween monster costume party in Glasgow. This is always a well attended event, with fans travelling from all over the UK to show off their best homemade costumes.

Last year's winner, Matthew, spent 20 hours creating his fabulous Devros costume from:

- cardboard
- plastic balls
- tape
- spray paint.



- (a) State the text justification Gordon used on the article's heading.

1

- (b) When the article was spell-checked the word Devros was highlighted.
Explain why the spell checker highlighted this word.

1

- (c) State the word processing facility that was used to make the list of costume materials stand out.

1

[Turn over

1. (continued)

(d) The photograph in the article was posted to Gordon on paper.

- (i) State the hardware device Gordon used to capture the photograph on his computer.

1

- (ii) The photograph was reduced in size before it was used in the article.

What is the correct term for changing the size of a graphic?

Tick (✓) **one** box.

☐

Rotate

☐

Scale

☐

Flip

☐

Group

1

(e) Gordon uses a desktop publishing package to produce the newsletter.

- (i) State an advantage of using a desktop publishing package rather than a word processing package.

1

- (ii) State the facility that allows the user to fit text around the photograph.

1

(f) Gordon prints the newsletter page shown.

State the page orientation that Gordon used.

Halloween Party

Dr What club members are looking forward to this year's Halloween monster costume party in Glasgow. This is always a well attended event, with fans travelling from all over the UK to show off their best homemade costumes.

Last year's winner, Matthew, spent 20 hours creating his fabulous Devros costume from...

- cardboard
- plastic balls
- tape and
- spray paint.



Competition Winners

Thanks to everyone who entered the guess the monster competition. This has been our most successful ever competition with 523 entries. The following members have won cyberwomen masks for correctly guessing that the scrambled picture was indeed a cyberwomen. Well done...

Susan Collart,
Lou Read,
Simon Walsh and
Danni Cole.

Forthcoming Episode News (from our man inside)

Once again our man (Matthew). In a the earth with his on the inside has stunning turn of robot army. We'll come up trumps. We events Dr What's have to wait a while mind is altered by though to find out that this year's Devros and our hero how Dr What gets out Christmas special starts to work with of this one as that is features our old friend our favourite bad guy. all our man could find Devros (as portrayed Once again Devros is out. Exciting stuff. so well by young planning to destroy

Lifelong Membership

The Dr What fan club is proud to announce that lifelong membership has been granted to Shelia McDougall for her many years of service to the club. Shelia and her husband have had a variety of important roles: treasurer, events organiser and vice-president to name but a few. Thanks Shelia for all your hard work!

1

1. (continued)

(g) Part of the newsletter contains columns of text.

1	2	3	4	5	6	7	8	9	10	11	12
Events			Date/Time			Where					
Halloween Party			31 st October			Glasgow					
AGM			18 th November			London					
New Members Night			5 th January			London					
Torchforest Set Visit			23 rd January			Cardiff					

The columns were moved further apart as shown below.

1	2	3	4	5	6	7	8	9	10	11	12
Events				Date/Time				Where			
Halloween Party				31 st October				Glasgow			
AGM				18 th November				London			
New Members Night				5 th January				London			
Torchforest Set Visit				23 rd January				Cardiff			

What has been changed to make the columns of text move?

1

(h) Gordon prints 50 copies of the newsletter.

Gordon has selected the print options shown below. On the print window diagram, draw a circle round the option he selected to *print efficiently*.

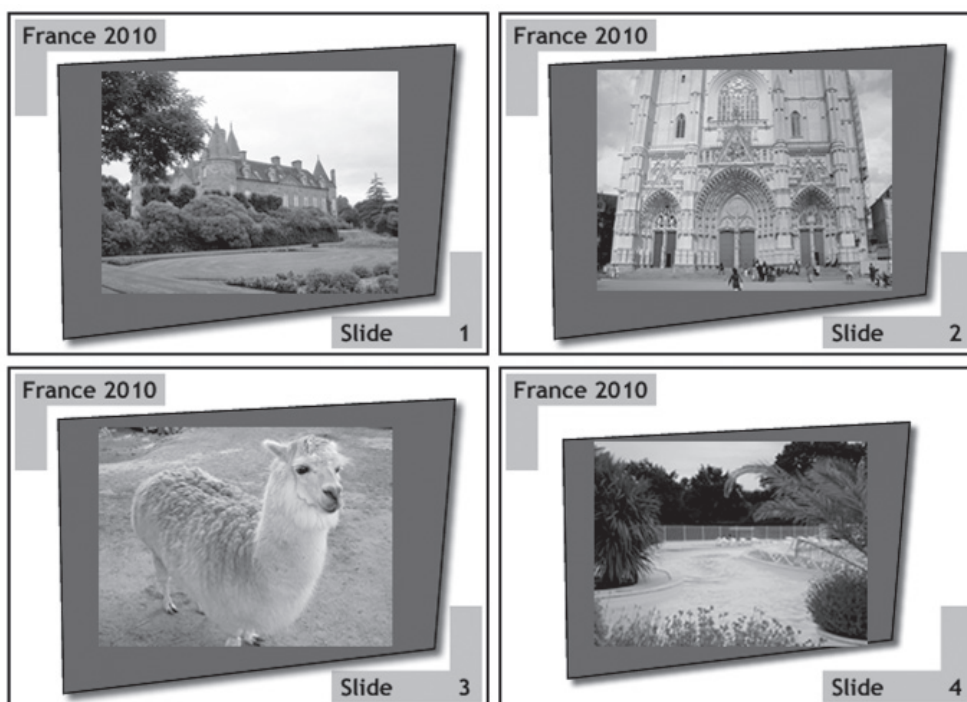
The Print Window dialog box contains the following settings:

- Number of Copies:** 50
- Print Double-Sided Copies:** ☒ Yes
- Page Orientation:** ☐ Landscape, ☒ Portrait
- Print in Economy Mode:** ☐ Yes, ☒ No
- Normal Quality:** ☐ Yes, ☒ No
- Best Quality:** ☒ Yes, ☐ No

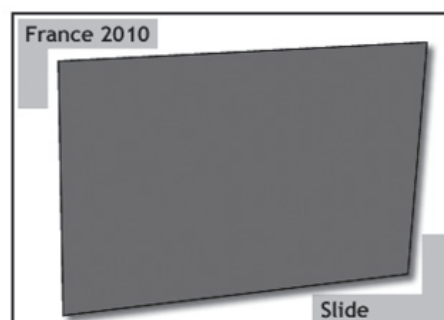
1

[Turn over]

2. Dennis and Jean have just returned from a holiday in France. Jean creates a multimedia slideshow of their favourite photographs.



- (a) State the facility Jean used to ensure all the slides have the same background.



1

- (b) State the input device that is most suitable for capturing high quality still images.

1

- (c) Jean wonders if adding some animation would improve the slides.

State **one** way the text on the slides could be animated.

1

- (d) Jean and Dennis show the slideshow to thirty of their friends and family.

What output device is used to show a multimedia slideshow to a large audience?

1

2. (continued)

- (e) When the slides are shown, the audience hears a recording of Dennis describing each photograph.

- (i) What **two** items of hardware did Jean need to capture a sound file of Dennis describing each photograph?

1 _____

2 _____

2

- (ii) Which of the file types below is a sound file?

Tick (✓) **one** box.

☐

.txt

☐

.rtf

☐

.avi

☐

.wav

1

- (iii) The sound files were then compressed before they were added to the slides.
Why were the sound files compressed?

1

- (f) Jean's mother asks if she can have a copy of the slideshow.

Which of the backing storage media below should be used to save a copy of the file for Jean's mother?

Tick (✓) **one** box.

☐

CD ROM

☐

DVD ROM

☐

Internal Hard Disk Drive

☐

USB Flash Drive

1

[Turn over

3. Joshway Academy Teen Enterprise Club make and sell boxes of chocolates. They use the application below to calculate how much profit they will make from each box.

	A	B	C
1	Teen Enterprise	Chocolates	
2			
3	1 Box of 20 Chocolates	Quantity	Cost
4	Chocolate	400g	£0.89
5	Sugar	50g	£0.04
6	Milk	75ml	£0.10
7	Cocoa butter	50g	£0.23
8	Vanilla Pod	1	£0.40
9	Cardboard Box	1	£0.32
10	Plastic Insert	1	£0.12
11	Chocolate Wrappers	20	£0.05
12		Total Cost	£2.15
13			
14		Selling Price	£3.50
15			
16		Profit	£1.35

- (a) What **type** of application is shown in the above diagram?

Tick (✓) **one** box.

- ☐ word processor
- ☐ spreadsheet
- ☐ charting
- ☐ database

1

- (b) The Profit is the difference between the Selling Price and the Total Cost. What formula has been entered in cell C16?

1

- (c) Teen Enterprise add “Mint Flavouring” to a new batch of chocolates. How could the file above be altered to include this new information?

1

3. (continued)

- (d) The data is sorted so that the ingredients and packaging costs are all in order from the cheapest to the dearest.

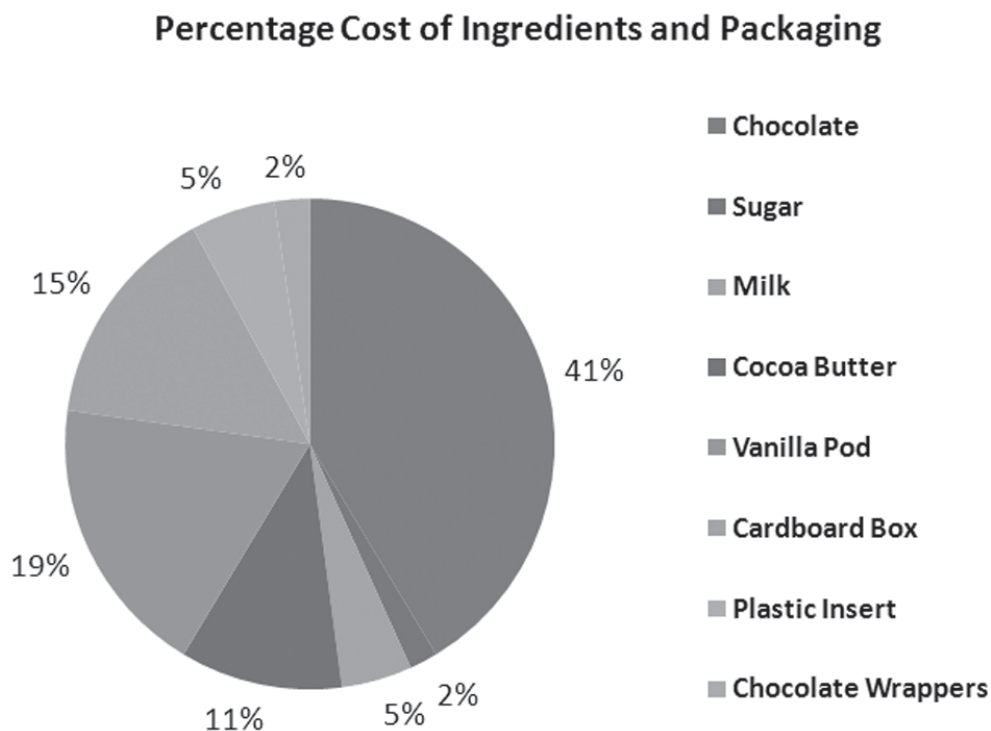
Which sentence below best describes how to sort the data?

Tick (✓) **one** box.

- ☐ Highlight cells C4 to C11 and sort in ascending order on column C.
- ☐ Highlight cells A4 to C11 and sort in ascending order on column C.
- ☐ Highlight cells C4 to C11 and sort in descending order on column C.
- ☐ Highlight cells A4 to C11 and sort in descending order on column C.

1

- (e) The Enterprise Club use the application to produce the chart below.



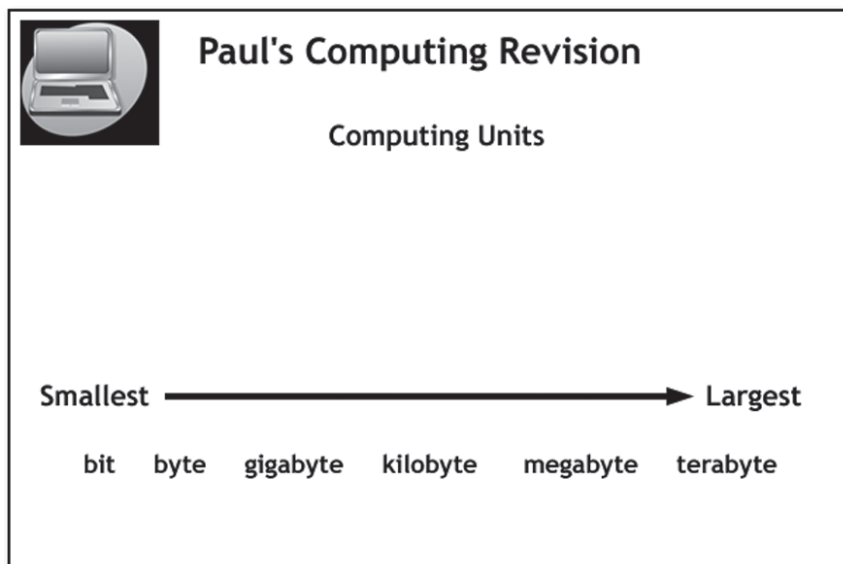
State the **type** of chart shown above.

1

[Turn over

4. Paul has created a multimedia slideshow on computer hardware as part of his computing revision.

(a) Paul's first slide shows six storage capacities written in order from the smallest to the largest. Paul notices one of these is in the wrong place.



State the storage capacity that Paul has typed in the wrong place.

1

- (b) Paul's next slide contains three graphics of input devices.

Describe how Paul could **find** graphics of input devices and then **add** them to his multimedia slideshow.



2

4. (continued)

(c) Paul adds a transition to his slides.

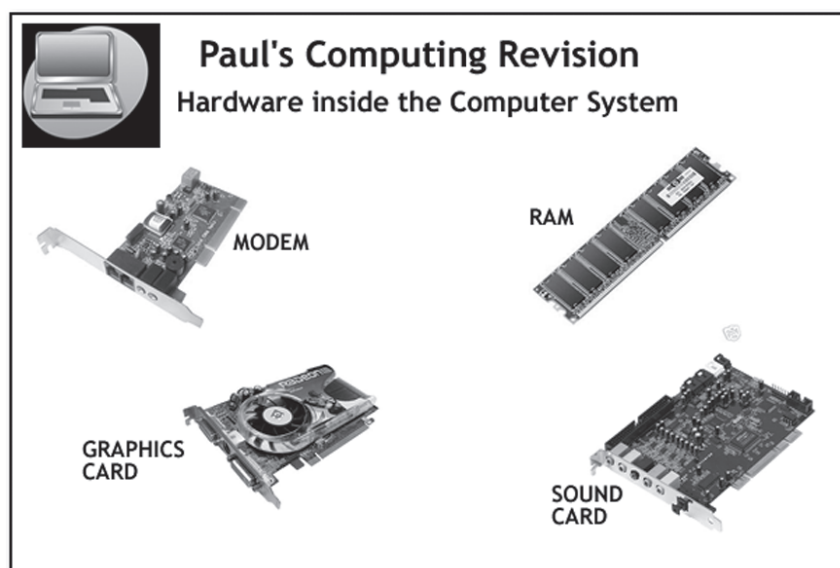


Describe what would happen when the slideshow is viewed.

1

(d) Paul has created a slide of hardware inside the computer system.

Draw a circle round the hardware device below that needs to be upgraded to improve the picture quality on a monitor.



1

(e) Paul adds notes to his slides. His keyboard stops working before he finishes his notes.

Describe another method Paul could use to enter text without his keyboard.

1

[Turn over

5. Fantastic Games have an information system in each of their computer game shops. They enter details of each computer game into a database.

(a) Part of the database is shown below.

Game Title	Beyond the Rift
Format	ZBOX 360
Date of Release	05/05/11
Genre	Adventure
Price	£34.99
Online Players	16

- (i) What term is used to describe the information shown above?

Tick (✓) **one** box

- ☐ application
- ☐ record
- ☐ sort
- ☐ file

1

- (ii) State the **type** of data stored in the “Online Players” field.

1

- (b) Describe how a customer would search the information system to look up which ZBOX 360 games can have more than eight players playing online.

2

5. (continued)

- (c) Fantastic Games make their information system available on the Internet. The Internet version has many good quality graphics.

What output device is required to view good quality graphics?

Tick (✓) **one** box

- ☐ low resolution monitor
- ☐ low resolution printer
- ☐ high resolution monitor
- ☐ high resolution printer

1

- (d) Fantastic Games use the icons below to represent different genre (types) of game.



- (i) The icons were drawn using a variety of different shapes and lines.

State the **type** of graphics package that was used to draw the above icons.

1

- (ii) The two objects in the icon shown are identical.

What graphics operation is used to create an identical copy of an object?



Tick (✓) **one** box

- ☐ scale
- ☐ rotate
- ☐ flip
- ☐ duplicate

1

[Turn over]

5. (d) (continued)

- (iii) When the website designer tries to move this icon, only the hat moves.

State the graphics operation that should have been performed on the objects in the icon.



1

- (e) Each icon is saved to backing storage by selecting “Save As”.

What **two** items of information should a user enter into a Save As window before clicking on the Save button?

1 _____

2 _____

2

(40)

[END OF SECTION I]

SECTION II

There are two parts to this section.

Attempt **ONE** part only.

Tick the part that you intend to attempt.

Computers and the Internet

☐

Information and the Internet

☐

[Turn over

Part A – Computers and the Internet

6. Carol runs a property company that buys and sells houses. Her estate agents enter details of houses onto small hand held computers.



- (a) (i) Name this **type** of computer.

1

- (ii) Name **one** input device used with this type of computer.

1

- (b) In the office Carol downloads the house details on to a desktop computer and uses the details to prepare house brochures.



State **two** advantages of desktop computers over hand held computers when creating the brochures.

1 _____

2 _____

2

- (c) The desktop computers in the office are part of a network.

State the type of computer that controls the running of a network.

1

- (d) Carol is having a website created for her company. The web developer, Stefan, follows the stages of the Software Development Process.

- (i) Stefan is planning what he will do each week. His plan contains a mistake.

Week 1 Analysis - Interview Carol
Week 2 Implementation - Set up pages
Week 3 Implementation - Insert images
Week 4 Testing - Test hyperlinks

What stage of the Software Development Process has Stefan missed out?

1

Part A – Computers and the Internet (continued)

6. (d) (continued)

(ii) Name the Stage of the Software Development Process described below.

Stage	Tasks that the web developer does
	<p>Answers the following questions</p> <ul style="list-style-type: none"> Does the website meet the specification? Could the website be improved?

(e) Below is the first page of Carol's new website.



(i) Identify **two types** of data from this page.

1 _____

2 _____

(ii) Identify **one** way to access “This Week’s Specials” from this page.

[Turn over

Part A – Computers and the Internet (continued)

7. Marta has a new laptop. She uses it to access websites, type up essays and send them electronically to her teacher.



- (a) (i) Marta's Internet access and e-mail stop working.

State **one** way that she can get her file onto the college computers.

1

- (ii) E-mail is one type of communication software. State **one other type** of communication software.

1

- (iii) State a running cost that Marta will have to pay for using the Internet.

1

- (b) (i) Marta is typing a new essay, where is the data stored before she saves the essay?

1

- (ii) Which **type** of file is Marta's saved essay?

Tick (✓) **one** box

☐

Program file

☐

Systems software

☐

Data file

☐

Application software

1

Part A – Computers and the Internet (continued)

8. Ali wants to buy Internet security software for his computer, he looks up the system requirements for Supersafe Software.

System Requirements

- 300 MHz or faster processor
- 512 MB of RAM
- 300 MB of free hard-disk space
- ReidOS 2010 Operating System minimum

Recommended

- High resolution monitor
- Broadband or high-speed Internet connection



His laptop has the following specification

- 2.8 GHz Processor
- 2 Gb of RAM
- 15" Widescreen TFT Screen
- ReidOS 2009
- 512 GB Hard Disk



- (a) What will Ali have to do before he can successfully install Supersafe Software?

1

- (b) Ali is running graphics and database software. When he tries to run his favourite game at the same time he notices that the game runs slowly.

Explain why the game runs slowly.

1

[Turn over

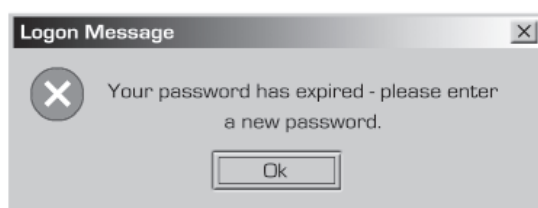
Part A – Computers and the Internet (continued)**8. (continued)**

- (c) Select the best software for each of the following tasks, the first one is done for you.

<u>Task</u>	<u>Software</u>
Typing up letters •	• Operating System Software
Renaming/moving/deleting files •	• Multimedia Software
Editing photographs •	• Database Software
Storing information, sorting and searching •	• Word Processor Software
Create a Presentation •	• Graphics Software

2

- (d) Ali logs onto the computer. After logging on the following message appears.



Which of the following should Ali use to create his new password for best security?

Tick (✓) **one** box

- ☐ His favourite football team.
- ☐ The first six letters of the alphabet.
- ☐ Random letters, numbers and symbols.
- ☐ His cat's name.

1

(20)

[END OF PART A—COMPUTERS AND THE INTERNET]

Part B – Information and the Internet

6. Heather runs an adventure holiday business and uses a database to record bookings. One of the holiday bookings is shown below.

Customer Name	A Stalker
Holiday	Sky diving in Africa
Departure Date	01/07/2011
Number of Nights	6
Cost per night	£136·00
Extra	Hippo watching with Dr Brody Bart
Cost of Extras	£845·50

- (a) State the **type** of data for Customer Name.

1

- (b) Heather would like the database to work out and store the total cost of the holiday automatically.

Explain how she should do this.

2

[Turn over]

Part B – Information and the Internet (continued)**6. (continued)**

(c) Heather has created the report below.

Customer Name	Holiday	Departure Date	Number of Nights
Clarke, O	Monte Carlo	23/05/2012	10
Clarke, O	Wine tasting	01/07/2011	5
Clarke, O	Gourmet tour	09/09/2012	3
Grisham, A	Vampire watching	01/07/2011	6
Mooney, W	Water skiing	01/07/2011	5
Price, K	Pony trekking	01/07/2011	10
Price, K	Shopping in New York	20/07/2011	4
Stalker, A	Sky diving in Africa	01/07/2011	6
Windsor, B	Glacier skiing	01/07/2011	8
Windsor, E	Gourmet tour	09/09/2012	3

(i) What has Heather done with the database to create this report?

Tick (✓) **one** box

- ☐ Sort on Departure Date ascending and sort on Number of Nights descending.
- ☐ Sort on Customer Name ascending and sort on Number of Nights descending.
- ☐ Sort on Number of Nights ascending and sort on Customer Name descending.
- ☐ Sort on Holiday ascending and sort on Customer Name ascending.

1

(ii) State the output format used for this report.

1

Part B – Information and the Internet (continued)**6. (continued)**

- (d) The database is part of a networked information system.

Why would Heather prefer to use the database on networked computers rather than on stand-alone computers?

1




- (e) Heather is having a website developed. The web developer, Stefan, is using the Software Development Process.

- (i) Describe what Stefan will do during the Analysis stage of the Software Development Process.

1**[Turn over**

Part B – Information and the Internet (continued)**6. (e) (continued)**

- (ii) Later in the Software Development Process he produces the following table.

Page Name = Index.htm			
Image	Filename	Result	Action
	Skydiver.gif	Appears in correct place, opens quickly. When clicked Skydiver page opens.	None
	Tiger.jpg	Appears in correct place, opens slowly. Larger than needed.	Check with Heather
	Logo.gif	Appears in correct place, opens quickly, colours match page well. When clicked gives information on company.	None

State which stage of the Software Development Process produces this output.

1

- (f) Describe what is meant by a “homepage” on a website.

1

Part B – Information and the Internet (continued)

7. Carol runs a property company. She is searching for plumbers and electricians to do work on her houses.



Carol uses a telephone directory on the Internet to find them.

- (a) (i) What **type** of information system is she using?

Tick (✓) **one** box

- ☐ Public, electronic
☐ Private, electronic
☐ Public, manual
☐ Private, manual

1

- (ii) State **one** advantage of using the Internet version of the directory rather than the paper version.

1

- (b) Carol stores the details of the plumbers and electricians in a database. She includes their bank details.

- (i) Explain why the details of the plumbers are an example of information rather than data.

1

- (ii) Under which law must Carol register before storing personal details on her database?

1

- (iii) State what Carol should do to prevent hackers from gaining access to her database.

1

[Turn over

Part B – Information and the Internet (continued)

8. Billy bought his computer two years ago.

- (a) He upgrades his computer with more RAM and a new operating system.

What type of cost is this?

1

- (b) He wants to access the Internet.

Name the device required to access the Internet.

1

- (c) Billy buys all his shoes online from www.downatheel.co.uk.

Complete the table below by adding the correct type for each website, the first one has been done for you.

Use of website	Type of website
To buy shoes	Shopping website
To read about current events	
To find musical concerts in the local area	

2

Part B – Information and the Internet (continued)**8. (continued)**

- (d) Billy's son also uses the computer to access the Internet. If he tries to access www.downatheel.co.uk the following message is seen.



Explain why he is unable to access this website.

1

- (e) State the term used to describe interlinked pages of information on the Internet.

1

(20)

[END OF PART B—INFORMATION AND THE INTERNET]

[END OF SECTION II]

[END OF QUESTION PAPER]

[BLANK PAGE]