X207/101

X20710011

Total

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.

SQA
©

SECTION I

Attempt ALL questions in this section.

1. A shoe shop uses a software package for calculating shoe sales.

	A	B	C	D	E	F
1	**Down at Heel**					
2						
3						
4	**Daily Takings**					
5	**Date**	**25/04/2010**				
6	Item Number	Description	Size	Price	Number Sold	Total cost
7	3245	leather boot	5	£45·99	6	£275·94
8	6543	strap sandal	7	£25·67	10	£256·70
9	4312	check boot	4	£36·98	4	£147·92
10						
11					Total	£680·56

(a) State the **type** of application package being used.

(b) State how cell D7 has been formatted.

(c) (i) The Total Cost is calculated by multiplying the Price and the Number Sold.

State a suitable formula for cell F7.

(ii) A similar formula is needed in cells F8 and F9.

Name a feature of the application which should be used to do this.

1. (continued)

(*d*) The number of boots in cell E9 has changed to 6.

Name **one** other cell that would automatically change when this number is entered.

_____

(*e*) The SUM function has been used in cell F11.

What does this function do?

Tick (✓) **one** box.

	Finds the largest value in a range of cells.
	Multiplies the values of a range of cells.
	Adds the values of a range of cells.
	Finds the average of the values of a range of cells.

(*f*) The staff have decided they need to include the colour of the shoes in their sales sheet.

This information must be displayed between Size and Price.

Describe how this change would be made.

_____

_____

(g) Staff are trained by listening to an audio file on an MP3 player.

State **one** item of hardware required to **record** the audio training file.

_____

[Turn over

2. Jimmy McDonald runs a hotel. He has just bought a computer and is setting up an electronic database for guest bookings to replace a paper booking system.

(*a*) State **one** advantage of using an electronic database.

_____

(*b*) The design for Jimmy's database is shown below.

Fill in the **two** blank boxes to complete the design.

Field Name	Field Type	Sample Data
Name	Text	R Nesbit
Address	Text	2 Abbey Towers, Maryhill
Date of arrival		25/10/2010
Number of nights	Numeric	
Type of room	Text	Double
Total Bill	Numeric	200·00
Deposit Paid	Numeric	25·00
Amount Owing	Numeric	175·00

(*c*) When guests book a room, what must Jimmy do to the database?

Tick (✓) **one** box.

☐ Add a field.

☐ Amend a record.

☐ Create a new file.

☐ Add a record.

(*d*) Some guests stay a long time at the hotel. Jimmy would like to create a report with the guest staying the longest time at the top.

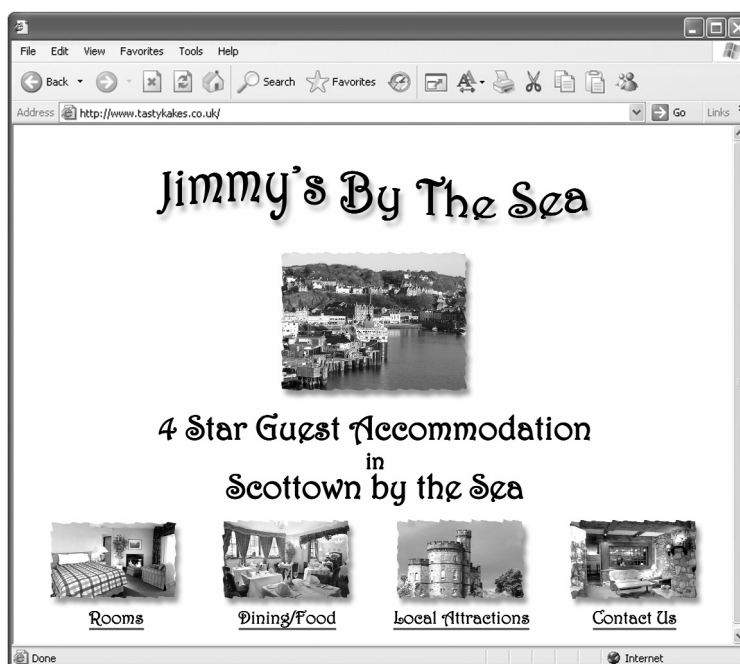Explain how the database could be used to produce this report.

_____

_____

2. (continued)

(*e*) Jimmy makes a back-up copy of the database. He has a choice of using a USB Flash Drive or a CD-R. He decides to use a USB Flash Drive.

State an advantage of using a USB Flash Drive for making a back-up copy.

(*f*) Jimmy sets up a website for the hotel. Below is the home page from the website.

(i) The website includes the file "attractions.mpg".

State the **type** of data this file contains.

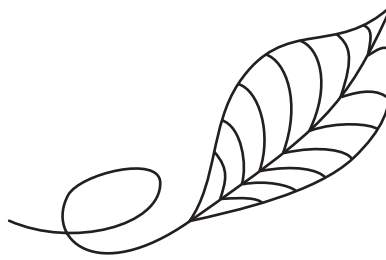(ii) When the Dining/Food image is selected the user is taken to a new web page.

State which web page feature this is an example of.

[Turn over

3. Tracey is studying art at college. Her designs combine a mixture of hand drawn and computer drawn shapes.

(*a*) She creates the following shape in a graphics package.
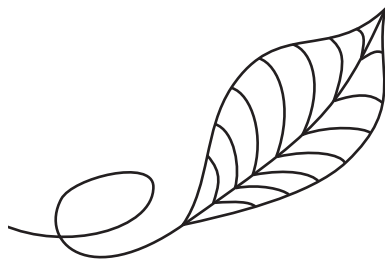
(i) Identify the tool used to make this shape.

Tick (✓) **one** box.

☐ A

☐ ✏

☐ ⬭

☐ ╱

1

(ii) Tracey would like to edit her graphic as shown below.

Original graphic   Edited graphic

Name the **two** operations which have been carried out on the picture.

1 _____

2 _____

2

3. (*a*) (continued)

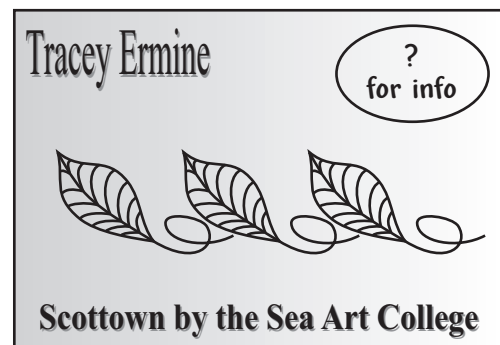(iii) She copies her original single leaf three times and creates the following graphic.

When she clicks on the graphic it can be moved as one shape.

Describe what she has done to make her new graphic into a single shape.

_____

_____

2

(*b*) Tracey has to demonstrate her artwork to the whole college. Below are two pages from her multimedia presentation.
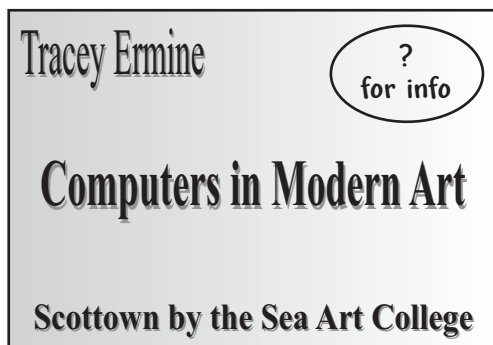
(i) Tracey wants every page to have a similar layout. She uses a feature of the package to do this.

Name this feature.

_____

1

[Turn over

3. (*b*) (continued)

(ii) Tracey used an input device to enter her hand drawn artwork into the computer.

State the type of input device Tracey used.

Tick (✓) **one** box.

☐ Keyboard

☐ Scanner

☐ Web cam

☐ Modem

1

(iii) During the presentation, once the slide has appeared, the slide title disappears slowly, allowing her artwork to fill the screen.

State the text effect used on her titles.

_____

1

(iv) State the most appropriate output device to display her presentation to the whole college.

_____

1

[Turn over for Question 4 on *Page ten*

4. Mike is studying pottery at college. He has to create a manual detailing step-by-step how to make a pot.

(a) State **one** advantage of using a word processor rather than hand writing when creating this manual.

1

(b) Mike's hands are often covered in clay. He creates this manual while working on a pot.

State a method he could use to enter text without using the keyboard.

1

(c) Part of his manual is shown below.

How to Make a Pot

Making a clay pot takes patience, talent, time and persistence. The value of practice cannot be underestimated. The quality of the clay used is also of vital importance, and the best clay in Scotland is available from Scottown by the Sea. Your pots will be prettier and last longer if you follow these steps carefully.

Requirements

- Good quality clay
- A potter's wheel
- A kiln

On the following pages I will explain the steps and show some photographs demonstrating how to make a pot.

(i) State the feature of the word processing package used to make the list of requirements stand out.

1

(ii) Mike inserted the photograph into his manual and made the text flow around the photograph.

Name this feature.

1

4. (continued)

(iii) Mike has set the manual up so that his name and the page number appear at the bottom of every page automatically.

What feature of the package has Mike used to do this?

_____

1

(*d*) Mike spell checked the manual and found that some correctly spelled words were highlighted as errors.

Explain why this happens.

_____

_____

1

(*e*) The finished manual is too large to e-mail to his teacher.

Without changing the manual, what can he do to reduce the file size?

_____

1

[Turn over

5. Li decides to buy her son Tim a laptop for Christmas.

The shop suggests that they include Easy Home Office 2007 to help Tim with his school work.

Easy Home Office 2007
The Best Word Processing software for all users!

EHO

Includes online tutorials and online help.

System Requirements:
  • 1 Gb RAM
  • 2·8 GHz Processor
  • 1·5 Gb Available hard disk space
  • CD or DVD ROM drive
  • Keyboard and mouse or other pointing device
  • Speakers or headphones

(*a*) State what "other pointing device" could be used with Easy Home Office.

Tick (✓) **one** box.

☐ Monitor

☐ Printer

☐ Microphone

☐ Touchpad

1

(*b*) Easy Home Office has an online tutorial.

Explain why you would use an online tutorial when learning to use Easy Home Office.

_____

_____

1

5. **(continued)**

(*c*) At school, Tim joins the magazine club which is producing a printed magazine for pupils. What **type** of application should they use?

Tick (✓) **one** box.

☐ Presentation

☐ Multimedia authoring

☐ Desktop publishing

☐ Graphics

1

(*d*) They start by creating the front cover of the magazine. They print out two versions.

A

The Scotspupil
Welcome to the first edition of the Scottown School magazine, The Scotspupil. Our job is to keep you in touch with the news and views of pupils around the school. First a few words from Mrs Skinner the Principal.

B

The Scotspupil
Welcome to the first edition of the Scottown School magazine, The Scotspupil. Our job is to keep you in touch with the news and views of pupils around the school. First a few words from Mrs Skinner the Principal.

(i) State the page orientations shown above.

A _____

B _____

1

(ii) The headings in A and B have been centred.

State which type of text justification has been used in the body of the articles.

_____

1

[Turn over

5. **(*d*)** **(continued)**

(iii) One of the articles must appear on one page but it is too long.

> The Scotspupil
>
> Well a new term begins for all and what is on the cards for the happy students of Scottown on the Sea. We are all looking forward to our annual donkey derby on the beach where the favourite to win is Shergar ridden by Miss J

Without reducing the size of the text or changing the font, how could Tim alter the page format to allow more text on the page?

1

(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. D-Bay is a commercial website that allows customers to buy and sell anything they like, as long as it begins with the letter D.

(*a*) Alan plans to use D-Bay to sell his collection of china dogs.

  (i) State the most appropriate input device to capture high quality still images of the dogs.

  _____

1

  (ii) Alan uses his palmtop computer to check if his dogs have been sold.

  State **two** differences between a palmtop computer and a desktop computer.

  1 _____

  _____

  2 _____

  _____

2

(*b*) Alan tries to access D-Bay while he is at work but gets an error message stating that the website has been blocked.

Warning

! **Contact your administrator**

This website has been blocked!

Done

Which of the answers below correctly describes what has happened in this case?

Tick (✓) **one** box.

☐ Alan's hard disk drive is broken.

☐ Alan's computer system does not have Internet access.

☐ Alan's employers are using filtering software.

☐ Alan has accidentally deleted D-Bay's web pages.

1

Part A—Computers and the Internet (continued)

6. **(continued)**

   (*c*) Customers can only use D-Bay to sell items when they log in to the website.

   (i) Fill in the box below with the term used to describe the first item of login information shown.

   | Enter your | [   ] → | Alan1635 |
   | Enter your Password | → | ****** |

   1

   (ii) The login information is required because D-Bay is an *e-commerce* website.

   Explain why security is important to e-commerce websites.

   _____

   _____

   1

   (*d*) Alan decides to create his own website using the *Software Development Process*.

   Match the stages of the Software Development Process to their correct descriptions by drawing a line between them.

   One has been done for you.

Implementation	Decide what will be required on each web page.
Testing	Create each web page.
Evaluation	Type user and technical guides for the website.
Analysis	Sketch the layout of each web page on paper.
Design	**Check the website fulfils it specification.**
Documentation	Check that each link works.

   2

[Turn over

Part A—Computers and the Internet (continued)

6. (continued)

(*e*) While working on his website, Alan's computer gives an error message stating that it can no longer access his e-mail because one of his hardware devices is broken.

(i) Circle the hardware device that must be working properly in order to connect to his e-mail.

Printer

Monitor

Keyboard

Mouse

Modem

Scanner

1
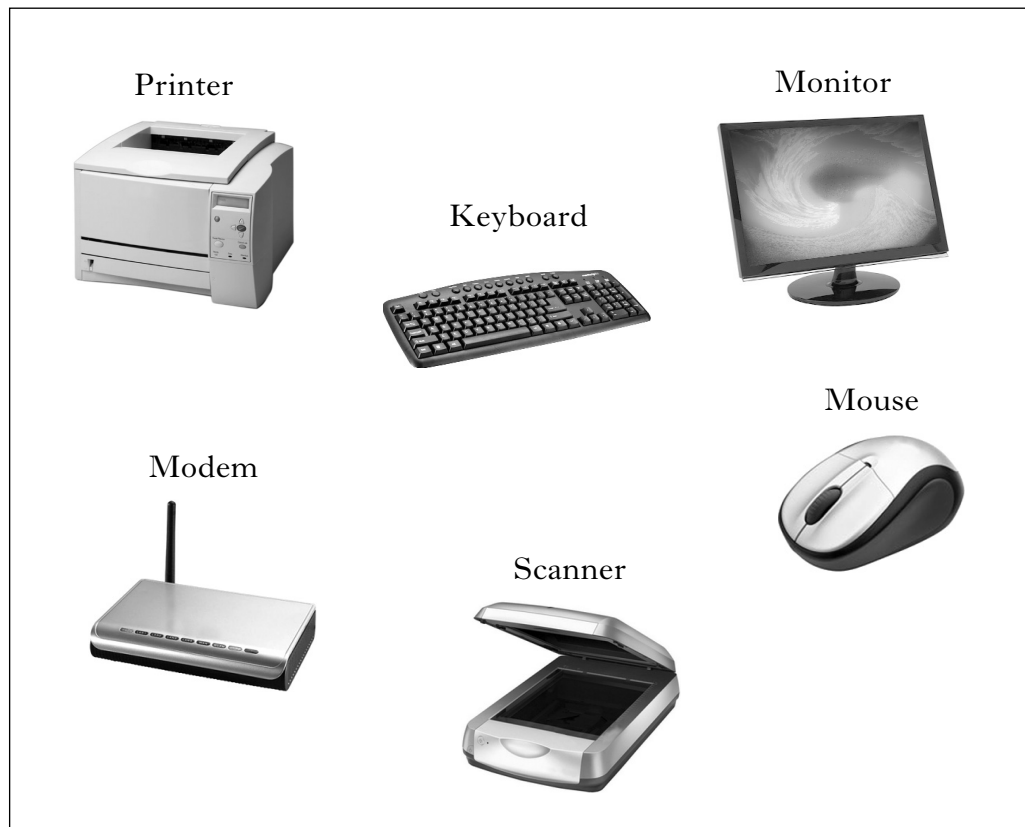
(ii) Alan phones his ISP *helpline* for advice and is charged for this service.

What is this an example of?

Tick (✓) **one** box.

☐ Hardware costs

☐ Initial costs

☐ Setup costs

☐ Running costs

1

(*f*) E-mail is one **type** of *communications software*.

State one **other** type of communications software.

_____

1
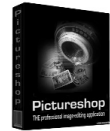
Part A—Computers and the Internet (continued)

7. Ellen has just started a digital photography course at college.

(*a*) Ellen's teacher recommends that she buys software called Pictureshop to edit her digital photographs.

Ellen has an old computer system. The specification of Ellen's computer and the hardware requirements for Pictureshop are shown below.

Ellen's Computer	**Pictureshop requirements**
2·3 GHz Processor	1·6 GHz Processor
512 Mb RAM	1 Gb RAM
256 Mb Graphics Card	256 Mb Graphics Card
80 Gb Hard Disk Drive	750 Mb of available Hard Disk space
DVD Rewriter	DVD Drive
ReidOS 2006 Operating System	Operating System – ReidOS 2007 (or later)

(i) From the information above, state how much extra memory Ellen will have to install on her old computer system.

_____

1

(ii) State what software must also be upgraded before Pictureshop will run on Ellen's computer system.

_____

1

(iii) What is the purpose of a *graphics card* on a computer system?

Tick (✓) **one** box.

☐ A graphics card is used to load photos from backing storage.

☐ A graphics card is used to display images on a monitor.

☐ A graphics card is used to save images to hard disk.

☐ A graphics card is used to connect a digital camera to a computer system.

1

[Turn over

Part A—Computers and the Internet (continued)

7. **(continued)**

(*b*) Ellen's 5000 digital photos are stored on her computer system.

Which backing storage media is best suited to create a back-up of the 5000 photos?

Tick (✓) **one** box.

☐ CD ROM

☐ Floppy disk

☐ Internal Hard Disk

☐ DVD-RW **1**

(*c*) Ellen wishes to record a short film to introduce a slideshow of her favourite photographs.

What input device could Ellen use to record a film?

_____ **1**

(*d*) At college, Ellen has been given permission to upload 10 digital photographs, from her computer, onto the college *server*.

(i) Ellen can upload the photographs to the server from any computer system in the college, since all the computers are linked together.

State the term used to describe two or more linked computer systems.

_____ **1**

(ii) State **one** task carried out by a server.

_____

_____ **1**

(*e*) In the classrooms, the computer systems have large flat screen (TFT) monitors.

State **one** advantage of using flat screen (TFT) monitors.

_____ **1**

Part A—Computers and the Internet (continued)

7. (continued)

(*f*) Ellen has to buy external storage for her computer system.

Sort the storage media below into order, starting with the device that can store the least.

The highest capacity has been done for you.

Hard Disk Drive			Low Capacity
Floppy Disk			
16 Gb USB Flash Drive			↓
CD-RW			
DVD-RW		**Hard Disk Drive**	High Capacity

1

(20)

[*END OF PART A—COMPUTERS AND THE INTERNET*]

[Turn over

Part B—Information and the Internet

6. Norbert John Denim has just bought a new personalised number plate for his car. The number plate is shown below.

NJD 41

(a) Norbert has to contact the Driver and Vehicle Licensing Agency (DVLA) who will then amend Norbert's "number plate" field in their database.

  (i) State the **data type** of the "number plate" field.

  _____

1

  (ii) "NJD 41" is entered into the "number plate" field.

  Explain why, to Norbert, this is *information* not *data*.

  _____

  _____

1

(b) Norbert wants to buy the number plate NJD 42 for his second car. He finds that the number plate is already owned by another driver.

Why can't Norbert access the name and address of the other driver?

  _____

1

(c) If the DVLA lost a CD containing Norbert's details, what Act of Parliament would they have broken?

  _____

1

(d) Some *manual* information systems have not been replaced by *electronic* information systems.

State **one** advantage of a *manual* information system.

  _____

1

(e) Jimmy Nasty has been caught speeding. He accesses the DVLA's information system and changes his details, removing any mention of his speeding offence.

What law has Jimmy broken by accessing the DVLA's information system?

  _____

1

Part B—Information and the Internet (continued)

6. **(continued)**

(*f*) An example record from the DVLA database is shown below.

Name	Dave Stott
Address	40 Oak Grove Edinburgh EH1 1AC
Date of Birth	12/04/1968
Car Manufacturer	Orchid
Model	Sporty
Number Plate	H234 RSL
Road Tax Due	31/08/2010

(i) What type of record layout is shown above?

Tick (✓) **one** box.

☐ List format

☐ Card format

☐ Column format

☐ File format

1

(ii) Describe how the DVLA could display the details of all the people who are due to pay their road tax on 31 August 2010.

_____

_____

_____

_____

2

[Turn over

Part B—Information and the Internet (continued)

6. **(continued)**

(*g*) Car owners can enter their bank details on the DVLA website to pay their road tax.

What type of website should this be?

Tick (✓) **one** box.

☐ Secure

☐ Manual

☐ Filtered

☐ Blocked

1

(*h*) Car owners can send e-mails to the DVLA requesting information.

What type of software is e-mail?

Tick (✓) **one** box.

☐ Operating system

☐ Anti-virus

☐ Communications

☐ Gaming

1

Part B—Information and the Internet (continued)

7. Carol has bought both houses in a semi-detached building. She is browsing through web pages on the Internet looking for information on how to combine the two houses into one.

(*a*) One of the many websites Carol visits is www.knockinghousestogether.com.

What do the letters www stand for in the above website address?

_____

1

(*b*) As Carol clicks on links, each web page downloads very slowly to her desktop computer.

State the **type** of Internet connection Carol is using to browse the Internet.

_____

1

(*c*) Identify which of the costs below are **setup** or **running** costs of using the Internet.

The first **one** has been done for you.

Purchasing a computer system	setup
Paying an ISP Subscription	
Maintenance	
Purchasing new software	
Upgrading the hard disk of a computer system	
Training staff to use new hardware	

2

(*d*) The websites Carol browses are *educational* websites, since they show her how to do the work required to her house. She also uses *leisure* websites for playing games.

State **one** other type of website Carol could visit when using the Internet.

_____

1

[Turn over

Part B—Information and the Internet (continued)

7. **(continued)**

(*e*) After she has finished work on her house, Carol creates her own website to help others. She lists the information she wishes to have on her website and draws a sketch of how each page will be laid out.

(i) What two stages of the Software Development Cycle has Carol completed?

Tick (✓) **one** box.

☐ Analysis and Implementation

☐ Design and Testing

☐ Analysis and Design

☐ Documentation and Evaluation   **1**

(ii) State **one** type of data that could appear on Carol's website.

_____   **1**

(*f*) Carol's website has a *home page*.

Describe what is meant by a home page

_____   **1**

(*g*) Carol can't copy and paste images from other websites into her own as she would be breaking the law.

State the Act of Parliament Carol would be breaking if she did this.

_____   **1**

(20)

[*END OF PART B—INFORMATION AND THE INTERNET*]

[*END OF SECTION II*]

[*END OF QUESTION PAPER*]

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