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Rewarding Learning

General Certificate of Secondary Education
2009

Information and Communication Technology

Full Course

Paper 1

Foundation Tier

[G5801]

G5801

TUESDAY 19 MAY, AFTERNOON

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

TIME

1 hour.

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 100, including a maximum of 5 marks for the 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.

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

1   (a)   Select the **most appropriate** input device for free-hand drawing on a graphics package.

A   Mouse

B   Keyboard

C   Light Pen

D   Hand-held Scanner

Answer _____ [1]

(b)   Select the **most appropriate** output device for creating a hard copy of a receipt at a supermarket till.

A   Printer

B   LCD

C   Plotter

D   VDU

Answer _____ [1]

(c)   Select the **most appropriate** storage device for storing pictures on a mobile phone.

A   SIM Card

B   Network Card

C   Memory Card

D   Graphics Card

Answer _____ [1]

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(d) Select **one** task that cannot be carried out when banking online.

    A   Depositing money

    B   Ordering a new cheque book

    C   Paying bills

    D   Cancelling direct debits

                                 Answer _____ [1]

(e) Select **one** advantage of storing graphics in bitmap format.

    A   Images are built up in layers

    B   Image quality is good

    C   Images can be edited at pixel level

    D   Images take up very little storage space

                                 Answer _____ [1]

(f) A web browser:

    A   Allows users to enlarge text, cannot be used without being connected to the Internet

    B   Allows users to enlarge text, can be used without being connected to the Internet

    C   Does not allow users to enlarge text, allows users to enter URLs

    D   Does not allow users to enlarge text, does not allow users to enter URLs

                                 Answer _____ [1]

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[Turn over

(g) To perform a mail merge means:

    A   To merge data from a database onto a letter and produce personalised letters

    B   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

    B   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 operating system of a computer:

    A   Is hardware which helps to manage the computer system

    B   Is software which helps to manage the computer system

    C   Is hardware which creates programs for use by the computer system

    D   Is software which creates programs for use by the computer system

Answer _____ [1]

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(j) A **csv** file is a:

    A   completely separated variable file

    B   comma separated variable file

    C   comma sequenced variable file

    D   completely sequenced variable file

Answer _____ [1]

[Turn over

2 Computers are used to control **traffic light systems**. An **interface** is also used to help process the data.

(a) From the table below, tick (✓) **two** sensors which could be used in the traffic light system.

Sensor	Tick (✓)
Heat	
Light	
Pressure	
Motion	

[2]

(b) What does the **interface** do in the control system?

_____

_____

_____[2]

3 Mark is a music teacher. He wishes to use a computer to help him to create training material.

(a) From the list below, select the **most appropriate** file format for each output which Mark is going to produce. (Use each file format **only once**)

jpeg   **mp3**   **doc**

Output	File Format
Printed copies of instructions on how to play his music	
Sound files of him playing his music	
Images of the instruments he teaches	

[3]

Mark has decided to set up a website to promote his business.

(b) Give **two** advantages to Mark to encourage him to do this.

1. _____

_____

2. _____

_____[2]

Mark will need equipment to connect to the Internet.

(c) From the list he has written below, select using a tick (✓), the **two** items he will require to **connect** to the Internet.

Equipment	Tick (✓)
Word processor	
Browser	
MODEM	
Telecommunications link	

[2]

Mark decides to sell his products on **DVD** from a stand in the local shopping centre.

(d) What do the letters **DVD** stand for?

_____[1]

[Turn over

4 A local solicitors' office has installed a new **LAN** with 30 computers and a server. The LAN also provides Internet access for the solicitors.

(a) (i) What do the letters **LAN** stand for?

_____[1]

(ii) Give **one** advantage of having a network in the solicitors' office.

_____

_____[1]

(iii) Give **one** disadvantage of having a network in the office.

_____

_____[1]

(b) The solicitors are going to set up a **video conference** with another office in France.

(i) What is **video conferencing**?

_____

_____[1]

(ii) List **three** devices which would be required to provide video conferencing in the office.

1. _____

2. _____

3. _____[3]

(iii) Give **one** advantage to the solicitors of using video conferencing instead of a telephone to talk to solicitors in other countries.

_____

_____[1]

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The company have had a **fax machine** for many years.

(iv) Give **one** disadvantage of using a fax machine instead of email.

_____[1]

(v) Give **one use** for the fax machine where email is unlikely to be used in the solicitors' office.

_____[1]

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5 (a) A company, GAMESTATION LTD, which develops games software, cannot find people with the correct skills in the local area. They have decided to offer **teleworking** contracts.

(i) What is **teleworking**?

_____

_____

_____[2]

(ii) Give **two** advantages **to the company** of using teleworking.

_____

_____[2]

GAMESTATION LTD are developing a driving **simulation** game for the PC.

(b) A lot of **RAM** and a **high resolution** monitor is needed to run the new game.

    (i) What do the letters **RAM** stand for?

    _____[1]

    (ii) What does **high resolution** mean when referring to the monitor?

    _____

    _____[1]

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

GAMESTATION LTD ONLINE REGISTRATION

First Name

Surname

House Number

Street

Town

Postcode

Date of Birth

Gender   ○ Male   ○ Female

Email

Submit

(c) Which law must GAMESTATION LTD uphold when managing personal data?

_____[1]

[Turn over

6 **(a)** Holiday Villa Hotels allow reservations to be made online, by email, by telephone, or by faxing the central reservations.

Holiday Villa Hotels give special offers online.

(i) Give **one** other advantage **to the customer** of booking a hotel online.

_____[1]

(ii) State **one** reason why a customer may still choose to book by telephone.

_____[1]

As well as using the (World Wide Web) WWW and Internet for business, the company provide an **Intranet** for employees.

(b) (i) From the table below tick (✓) which **two** of the following statements are true about the WWW and the Internet.

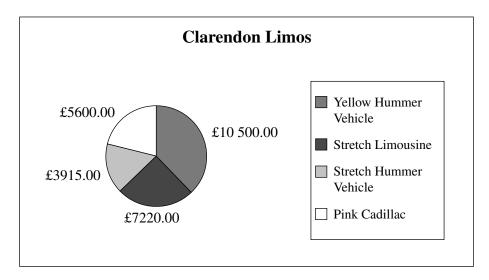| Statement	Tick (✓)
The WWW is the information stored on the Internet	
The Internet is a set of web addresses	
The Internet is a network of computers and communication links	
The WWW is a set of web addresses	

[2]

(ii) What is an **Intranet**?

_____

_____[1]

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7 Barry runs a small printing company. He wants to store details about his clients and when they first ordered from him, in a database.

(a) Complete the following paragraph using the words provided.
Use each word only once.

RECORDS   FORMS   FIELDS

Data is stored in tables of _____. Each record is made

up of _____. _____ can be used to

capture data on screen. [3]

(b) List **two** features of a database which Barry could use to provide his business with information.

1. _____

2. _____[2]

[Turn over

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

	A	B	C	D	E	F	G
1	**Clarendon Limos – Income November 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	£14 000.00	£ 100.00	£3 500.00	£10 500.00
4	**Stretch Limousine**	£ 500.00	19	£ 9 500.00	£ 120.00	£2 280.00	£ 7 220.00
5	**Stretch Hummer Vehicle**	£ 550.00	9	£ 4 950.00	£ 115.00	£1 035.00	£ 3 915.00
6	**Pink Cadillac**	£ 700.00	10	£ 7 000.00	£ 140.00	£1 400.00	£ 5 600.00
7							
8						**Total Profit**	**£27 235.00**

(a) Cells **A8:F8** have been: (*circle the correct answer from the list below*)

> **Cleared   Merged   Pasted**   [1]

(b) Using cell references, write down the **formula** used in each of the following cells.

    (i) D6 _____[1]

    (ii) G6 _____[1]

The **Cost Per Hour** for the Stretch Limousine has been changed to £600.00.

(c) List **three** other cells that change as a result of this.

    1. _____

    2. _____

    3. _____[3]

The chart below has been produced from the spreadsheet data.

Clarendon Limos

£5600.00

£10 500.00

£3915.00

£7220.00

☐ Yellow Hummer Vehicle

■ Stretch Limousine

☐ Stretch Hummer Vehicle

☐ Pink Cadillac

(d) (i) What type of chart is this?

_____[1]

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

Cell range 1: _____

Cell range 2: _____[2]

(iii) Name **one** other **chart type** which can be produced using data from cells on a spreadsheet.

_____[1]

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

_____

_____[1]

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

_____

_____[1]

[Turn over

9 Arlene is word processing her Chemistry coursework.

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 chooses to look at a print preview of the document.

(b) Give **one** reason why she might do this.

_____

_____[1]

Arlene has copied a graphic from the Internet. When it is clicked she is automatically taken to the original website.

(c) Why does this happen?

_____

_____[1]

When she runs the spellchecker it highlights a lot of words that Arlene knows are spelt correctly.

(d) Give **one** reason why the spellchecker might still highlight these.

_____

_____[1]

(e) Give **one** example when the spellchecker may **not highlight** a word when it is spelt incorrectly.

_____

_____[1]

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BLANK PAGE

(Questions continue overleaf)

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.

(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]

☐ Send | 🖫 | 📎 ⬇ | Importance Normal ☑ | | Options None ☑ | 🗗 🗗 | ✕ Close | ❓ Help

⚠ Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

📖 To: _____

📖 Cc: _____

📖 Bcc: _____

Subject: _____

Attachments: 📄 IMG_0203.jpg(833KB) 📄 IMG_0204.jpg(1MB)

```
Dear Mr S Shine
Please find attached a copy of the images for the Marbella mansion that has just been put up for
sale by Mr and Mrs N.O. Reain.

Sally Sailes
```

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 as well as their manager, but does not want them to see the email address for their manager.
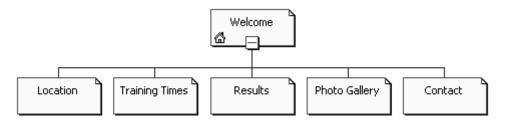
(c) Write the manager's address into the correct place in the section of the email shown below. [1]

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

[Turn over

11 Mr J. Brown is opening a new corner shop. He wants an Electronic Funds Transfer Point of Sale (EFTPOS) system in his store.

(a) Complete the following sentences using the words below to help explain how EFTPOS systems operate. (**Use each word only once**)

        beep   database   description   scanner

Barcodes on products are read by a _____.   [1]

The barcode is used to search a _____ for the item. [1]

When the product is found a _____ is output.   [1]

The price and _____ are added to an itemised receipt. [1]

(b) List **two** items of data stored on a product barcode.

1. _____

2. _____[2]

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

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]

June wants to add video footage of a training session to the Welcome Page of the website.

(b) Give **one** disadvantage of adding videos to a web page.

_____

_____[1]

[Turn over

13 Page orientation can be portrait or landscape.

(a) The page orientation of the calendar below is (*circle the correct answer from the words below*):

<div align="center">

PORTRAIT   LANDSCAPE   [1]

</div>

NOVEMBER 2008

M	T	W	T	Fr	S	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

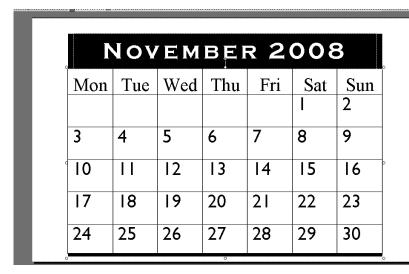**(b)** State **two** features available within Desktop Publisher which will make it easier for users to produce publications like this.

1. _____

2. _____[2]

(c) The page orientation of the calendar below is (*circle the correct answer from the words below*):

<div align="center">

PORTRAIT   LANDSCAPE   [1]

</div>

NOVEMBER 2008

Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

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(d) (i) The title **NOVEMBER 2008** on the calendar below has been (*circle the correct answer from the words below*):

CENTRED   LEFT JUSTIFIED   RIGHT JUSTIFIED   [1]

NOVEMBER 2008						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

(ii) Look at the table below. Tick (✓) the **two** features which have been included on the calendar above.

Feature	Tick (✓)
Right Justify	
Underline	
Table	
Left Justify	
Italics	

[2]

[Turn over

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).

Virus   Protocol   CD-Rom   Encryption

Bandwidth   Resolution   Check Digit

Scanner   Digital   ISP

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.	
A measure of the amount of data which can travel along a communication cable.	
A set of rules used for communicating over networks.	
A name used to describe data held as 1s and 0s.	

[10]

THIS IS THE END OF THE QUESTION PAPER

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