Centre

Candidate Number

cea
Rewarding Learning

**General Certificate of Secondary Education
2012**
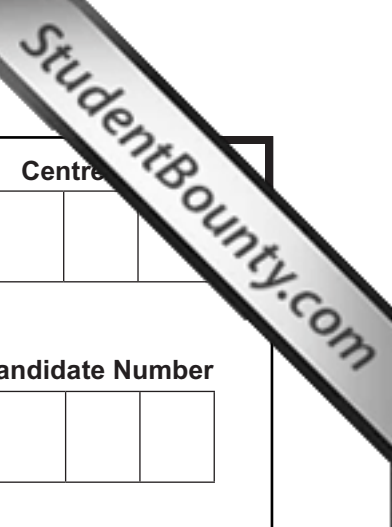
Information and Communication Technology (Short Course)
Unit 2: Understanding ICT Systems in Everyday Use and its Implications for Individuals, Organisations, Society and the Wider World
[GIT41]

GIT41

FRIDAY 1 JUNE, MORNING

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

INFORMATION FOR CANDIDATES

The total mark for this paper is 90.
Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.
Quality of written communication will be assessed in questions **4 and 5(d)**.

7544.04**R**

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

1   **(a)** Select the most appropriate device for inputting a printed photograph into a computer.

    A   Video Camera

    B   Scanner

    C   Tracker Pad

    D   Digital Camera

                        Answer   [1]

(b) Touch screens are commonly found in public areas. Select **one** disadvantage of using touch screens in this way.

    A   A lot of training is needed to use them

    B   Sound can interfere with the input of information

    C   The screens can become dirty and difficult to use

    D   A variety of options are always available for the user

                        Answer   [1]

(c) Alan is an architect and wants to print plans of the house he has just designed. Which device would he use?

    A   Flatbed Plotter

    B   Colour Laser Printer

    C   Tracker Pad

    D   Graphics Digitiser

                        Answer   [1]

(d) Select an appropriate use of cache memory.

    A   Stores the most recently used instructions

    B   Stores data permanently for fast access to the process

    C   Stores the boot up program for the operating system

    D   Stores the drivers for peripheral devices attached to the computer

                                      Answer _____ [1]

(e) Select the statement that correctly explains the difference between CD ROM and CD-R.

    A   New data can be written to a CD-R but not to a CD ROM

    B   CD ROM has a higher storage capacity than CD-R

    C   New data can be written to a CD ROM but not a CD-R

    D   CD ROM has a lower storage capacity than CD-R

                                        Answer _____ [1]

(f) Select the correct definition of the term non-volatile storage.

    A   Storage that holds data even when the power is switched off

    B   Storage that loses data when the power is switched off

    C   Storage used for cache memory

    D   Storage that is connected to the computer by a cable

                                        Answer _____ [1]

[Turn over

7544.04**R**

(g) Select the statement that shows the storage devices in order of capacity from lowest to highest.

    A   CD ROM, DVD ROM, Blu-ray

    B   Blu-ray, CD ROM, DVD ROM

    C   DVD ROM, Blu-ray, CD ROM

    D   Blu-ray, DVD ROM, CD ROM

Answer _____ [1]

(h) Which of the following options contains a feature **not** available when using multimedia presentation software?

    A   Adding video and hyperlinks

    B   Adding animation and slide transitions

    C   Adding sound and filtering data

    D   Adding action buttons and text formatting

Answer _____ [1]

(i) Some presentation packages allow you to create a master slide. What is a master slide?

    A   A slide that all of the other slides in the presentation can be opened from

    B   A slide added at the start of the presentation which contains the title

    C   A slide that stores all of the video and sound files for the presentation

    D   A slide that when edited will update the contents of all slides made from it

Answer _____ [1]

7544.04**R**

(j) Which of the following options cannot be used to change the sequence in which slides are viewed in a presentation?

A Action Buttons

B Hyperlinks

C Hotspots

D Animations

Answer _____ [1]

Total Question 1

[Turn over

7544.04**R**

2 Read the news article below which was published on the BBC website.

Computer viruses make it to orbit

A computer virus is alive and well on the International Space Station (ISS).

Nasa has confirmed that laptops carried to the ISS in July were infected with a virus known as Gammima.AG.

The worm was first detected on Earth in August 2007 and lurks on infected machines waiting to steal login names for popular online games.

Source: http://news.bbc.co.uk/1/hi/7583805.stm

(a) What is a virus?

_____

_____ [2]

(b) What type of virus is Gammima.AG?

_____ [1]

(c) Describe **two** ways in which a computer can be infected by a virus.

1. _____

_____

2. _____

_____ [2]

Total Question 2

7544.04**R**

3 Ciara has been asked by her teacher to visit the CCEA website and download the specification for GCSE ICT. The screenshot of Ciara's search is shown below.

(a) What other website is currently open on Ciara's computer?

_____ [1]

(b) The URL for the webpage is www.ccea.org.uk/ict

State what each of the following are within the URL.

(i) www _____ [1]

(ii) ccea.org.uk _____ [1]

(iii) ict _____ [2]

[Turn over

7544.04**R**

(c) Some documents are provided in pdf format. Tick **(✓) two** correct answers about pdf files.

Statement	Tick (✓)
Special software is required to read pdf files	
pdf files can be viewed on a PC but not on any other computer	
pdf files can be viewed on computers with different operating systems	
pdf means Portable Document File	

[2]

(d) Teachers have suggested that the website should contain digital videos and podcasts for their use.

(i) Using the list below complete the table by inserting the most appropriate file format for each file.

txt   jpg   rtf   mp3   mp4

File	File Format
Video	
Podcast	
Photographs	

[3]

(ii) Some information is provided in a compressed or zipped file. List **two** features of this file type.

1. _____

2. _____ [2]

4 Molly's ICT teacher uses a VLE.

Explain the term VLE and describe **three** ways in which Molly could use the VLE when learning and studying.

VLE _____

_____

_____

1. _____

_____

_____

2. _____

_____

_____

3. _____

_____

_____

[8]

Total Question 4

[Turn over

7544.04**R**

5 John's school uses a LAN and WAN to provide students with ICT facilities.

(a) Expand the following acronyms:

   (i) LAN _____ [1]

   (ii) WAN _____ [1]

(b) Complete the paragraph below by selecting the appropriate words from the list provided. Use each word only once.

DATA	**ACCESS**	**WORKSTATION**
VIRUS	**FILESERVER**	**PERIPHERALS**

When using a LAN people can share _____ .

A _____ stores all user _____ and

users can log on at any _____ to access their files. [4]

(c) Students can access the Internet, the Intranet and the WWW using the school network.

   (i) List **two** differences between the Internet and the Intranet.

     1. _____

     _____

     2. _____

     _____ [2]

7544.04**R**

(ii) Explain the difference between the Internet and the WWW.

_____

_____

_____

_____ [2]

(d) Apart from Usernames and Passwords, name and describe **three other** measures that can be used to protect information systems from misuse or attack.

Measure 1: _____

Description: _____

_____

_____

Measure 2: _____

Description: _____

_____

_____

Measure 3: _____

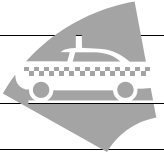Description: _____

_____

_____ [6]

[Turn over

7544.04**R**

6 Cabs4U provide local companies with a taxi service. Companies receive an invoice each month and must pay the Amount Outstanding. This is part of an invoice for Margaret Greenway.

	A	B	C	D	E	F
1			Invoice Cabs4u			
2						
3	Customer Name	*Margaret Greenway*			After Hours Charge (Applies between 00:30 and 06:00)	15%
4	Customer Address	*1 Ivy Road*			VAT	20%
5		*Castledawson*				
6		*BT5 7PT*				
7	Date	*05/05/2012*				
8	Month	*April*				
9						
10	Date	Time	Details	Fare	After Hours Charge	Journey Cost
11	04/04/2012	14:00	City Hotel to Townhall	£ 5.00	No	£ 5.00
12	04/04/2012	18:20	TownHall to Ivy Road	£ 7.70	No	£ 7.70
13	04/04/2012	05:30	Ivy Road to Train Station	£ 8.90	Yes	£ 10.24
14	05/04/2012	17:55	Ivy Road to Airport	£ 82.50	No	£ 82.50
15	06/04/2012	01:00	Ivy Road to 37 Drummond Walk	£ 14.50	Yes	£ 16.68
16	06/04/2012	10:00	Train Station to City Hotel	£ 12.50	No	£ 12.50
17						
18					Total	£ 134.62
19					VAT	£ 26.92
20					Total(including VAT)	£ 161.54
21						
22					Payments Made up to 30th April	£ 125.00
23					Amount Outstanding	£ 36.54

(a) What formatting feature has been used to centre the heading Invoice Cabs4u?

_____ [1]

(b) The spreadsheet contains the data type *text*. List **two** other data types which have been used in this spreadsheet.

1. _____

2. _____ [2]

(c) In the table below place a tick (✓) beside the formula you would expect to find in cell **F18**.

Formula	Tick (✓)
=Sum(F11+F16)	
=F11*F16	
=Sum(F11:F16)	

[1]

(d) Cell **F23** contains a calculation for the amount outstanding. Write down the **two** cell references which make up the formula for cell F23.

Formula = (_____ − _____)   [2]

(e) An After Hours Charge of 15% is added onto taxi fares if needed.

(i) Why has Margaret been charged the After Hours Charge on two of her taxi fares?

_____

_____ [1]

(ii) When calculating the After Hours Charge an absolute cell reference was used.

What is an absolute cell reference?

_____

_____ [2]

(iii) Formulae have been used in cells F13 and F19. Write down the absolute cell references that would be used in these formulae.

F13 _____ [1]

F19 _____ [1]

[Turn over

7544.04**R**

7 Jenny sells handmade cards in her spare time. She uses the database structure shown below to keep track of her customers and orders.

CustomerTable

Field Name	Data Type
CustomerID	AutoNumber
Title	Text
Surname	Text
Forename	Text
Address 1	Text
Address 2	Text
Town	Text
County	Text
Post Code	Text

OrderTable

Field Name	Data Type
OrderID	AutoNumber
CustomerID	Number
CardType	Text
Quantity	Number

CustomerID is the key field in the CustomerTable.

(a) Why is a key field needed in the CustomerTable?

_____ [1]

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Jenny wants to set up a validation check to ensure Quantity in the OrderTable can only be between 1 and 50.

(b) (i) Place a tick (✓) beside the correct validation rule in the table below.

Validation Rule	Tick (✓)
>=0 AND <=50	
>0 AND <50	
>=1 AND <=50	
>1 AND <=50	

[1]

(ii) Name **two** other types of validation you can use to help reduce errors when entering data into a database.

1. _____

2. _____ [2]

Jenny has created a one-to-many relationship between the CustomerTable and the OrderTable.

(c) Name **one** other type of relationship which can be created in a relational database.

_____ [1]

(d) Jenny uses the following data in a lookup list under the field heading CardType

- Birthday
- Baby Boy
- Baby Girl
- Wedding

(i) Give **one** advantage of using a lookup list for data entry.

_____ [1]

(ii) Give **one** disadvantage of using a lookup list for data entry.

_____ [1]

(e) Jenny uses the following criteria to select all customers who live in Lurgan.

Town = "Lurgan"

Write down the criteria Jenny would use to select all customers who live in Belfast and have ordered Birthday cards.

_____

_____ [3]

(f) Jenny uses mailmerge to send a letter to all customers who have purchased Birthday cards from her. Outline the steps she would have to follow to do this.

_____

_____

_____ [3]

Total Question 7

8 Asma supermarket uses EFTPOS for processing customer sales.

(a) Give **one** advantage to Asma of using EFTPOS.

_____ [1]

(b) Identify **two** output devices used at an EFTPOS.

1. _____

2. _____ [2]

[Turn over

7544.04**R**

9 John's laptop has the latest Windows operating system installed.

(a) State the purpose of the operating system on a computer system.

_____

_____ [1]

(b) John describes the Windows operating system as a GUI.

(i) Expand the acronym GUI.

_____ [1]

(ii) Describe the main features of a GUI.

_____

_____

_____

_____

_____

_____ [4]

7544.04**R**

10 Edele is a computer programmer. Her employer is giving her the opportunity to telework three days per week.

(a) (i) Edele has a young family, give **two** reasons why teleworking would be a good idea for her.

1. _____

_____

2. _____

_____ [2]

(ii) Give **two** problems Edele might experience if she decides to telework.

1. _____

_____

2. _____

_____ [2]

(b) Give **two** advantages to the employer of using teleworking.

1. _____

_____

2. _____

_____ [2]

THIS IS THE END OF THE QUESTION PAPER

Total Question 10

DO NOT WRITE ON THIS PAGE

7544.04**R**