

	Cer	itre ivi	Jilibe

C	andid	ate Nu	ımber

**General Certificate of Secondary Education** 2013

## 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]

THURSDAY 6 JUNE, MORNING

\*GIT41\*

#### TIME

1 hour.

#### **INSTRUCTIONS TO CANDIDATES**

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

You must answer the questions in the spaces provided. Do not write outside the box, around each page or on blank pages.

Complete in blue or black ink only. Do not write in pencil or with a gel pen. Answer all eleven 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 3(b)(ii), 5(c) and 8(b).



Foi	que	estic	on 1 insert the appropriate letter in the space provided.	Examin Marks	er Only Remark	
1	(a)	ΑV	VAN is:			
		Α	A World Area Network			
		В	A Wide Applications Network			
		С	A Wide Area Network			
		D	A World Applications Network			
			Answer [1]			
	(b)	UR	L is:			
		Α	Uniform Record Locator			
		В	User Resource Locator			
		С	User Record Locator			
		D	Uniform Resource Locator			
			Answer [1]			
	(c)		ich statement is true about the use of virtual reality when training ine pilots?			
		Α	The systems are inexpensive to produce and can be used to give pilots experience in a range of environments.			
		В	The systems look like real aeroplanes and actually leave the ground during training exercises.			
		С	The systems can be used for the ongoing training of experienced pilots but cannot always take every factor into consideration.			
		D	The systems can be expensive to produce but can be dangerous for inexperienced pilots to use.			
			Answer [1]			

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(0	d) /	ADSL is:	Examine Marks	er Only Remark
	A	A Asymmetric Data Subscriber Line		
	E	Asymmetric Digital Sensor Line		
	(	Asymmetric Digital Subscriber Line		
		Asymmetric Data Sensor Line		
		Answer [1]		
(6	e) F	Four main features of a GUI are:		
	A	Windows, Icons, Applications, Menus		
		Icons, Menus, Pointers, Windows		
		Software, Icons, Applications, Menus		
	[	Menus, Icons, Pointers, Software		
		Answer [1]		
(f	f) V	Which statement is true about ROM?		
	A	A ROM can be written to but not read from.		
	E	ROM holds the programs currently being used by the computer system.		
	(	ROM can be read from but not written to.		
	[	Programs stored in ROM can be updated.		
		Answer [1]		
			Total Qu	estion 1
8106			[Turi	n over

5. A. E. A



(g)	Wh	nich statement is true about RAM?	Examiner Only  Marks Remark
	A	RAM is non-volatile and the amount of RAM in a computer cannot affect its performance.	
	В	RAM is non-volatile and the amount of RAM in a computer can affect its performance.	
	С	RAM is volatile and the amount of RAM in a computer cannot affect its performance.	
	D	RAM is volatile and the amount of RAM in a computer can affect its performance.	
		Answer [1]	
(h)	Αt	template is:	
	Α	a program which helps the user to complete a task	
	В	a standard layout for a document which can be reused	
	С	a program which protects the computer against viruses	
	D	a document which has been merged with a database	
		Answer [1]	
(i)	Sel	lect the statement which is true about a LAN.	
	Α	A LAN is a Logical Area Network, allows peripherals to be shared and has a file server for storing software.	
	В	A LAN is a Local Area Network, allows data to be shared across the Internet and has a file server for storing software.	
	С	A LAN is a Local Area Network, allows peripherals to be shared and allows users to share data.	
	D	A LAN is a Logical Area Network, allows data to be shared and has a file server for storing software.	
		Answer [1]	

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	(j)	Sel	lect the statement which is true about EFTPOS.	Examin Marks	er Only Remark	
		A	It provides itemised receipts but does not allow payments to be processed.			
		В	It allows barcodes to be scanned but does not allow payments to be processed.			
		С	It provides itemised receipts but does not allow barcodes to be scanned.			
		D	It provides itemised receipts and allows payments to be processed.			
			Answer [1]			
				Total Qu	estion 1	
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2 Joanne has created a spreadsheet to calculate the bonus due to each of her employees. Below is a section of the spreadsheet.

er Only
Remark

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	Α	В	С	D	E	F	G	Н	I			
1		Holiday Bonus Calculator - Joanne's Jewellery										
2	Forename	Surname	Hours Worked	Rate of Pay Per Hour	Total before Bonus	Bonus	Bonus Amount	Total Earned	Taxable			
3	Anne	Dellby	20	£ 10.00	£ 200.00	10%	£ 20.00	£ 220.00	Yes			
4	Jack	Beale	8	£ 6.00	£ 48.00	5%	£ 2.40	£ 50.40	No			
5	Alex	Bowen	30	£ 10.00	£ 300.00	10%	£ 30.00	£ 330.00	Yes			
6	Ewan	Rawdon	15	£ 8.00	£ 120.00	10%	£ 12.00	£ 132.00	Yes			
7	John	Mahon	17	£ 9.00	£ 153.00	10%	£ 15.30	£ 168.30	Yes			
8	Marc	Smyth	10	£ 7.00	£ 70.00	5%	£ 3.50	£ 73.50	No			
9			100		£ 891.00		£ 83.20	£ 974.20				
10												
11												
12	Higher Bonus Rate	10%										
13	Lower Bonus Rate	5%										
14												
15	Tax Boundary	£100.00										

(a) Write down the formula you would expect to find in cell H9.

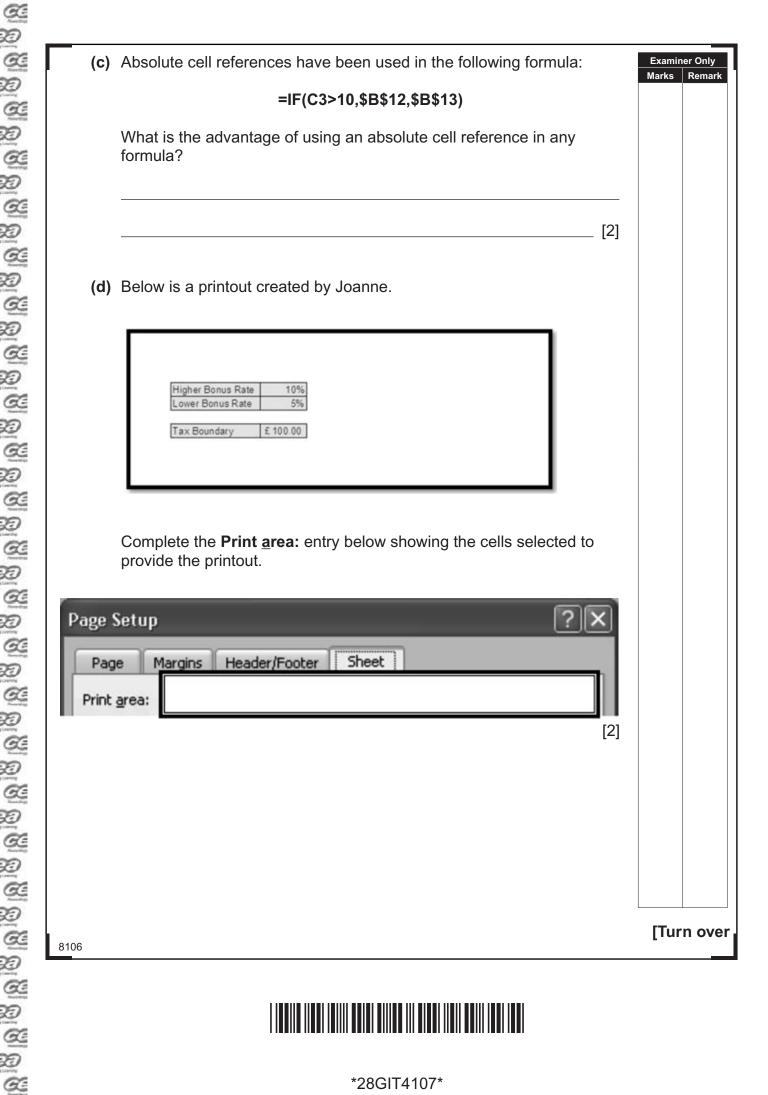
[1]

(b) If an employee's Total Earned is more than £100.00, they must pay tax. Tick (✓) one formula which you would expect to find in cell I3.

Formula	Tick (√)
=IF(H3>100,"Yes", "No")	
=IF(H3<100,"Yes", "No")	
=IF(H3=100, "No", "Yes")	

[1]







(e) Below is a chart produced from the spreadsheet data shown. Examiner Only Marks Remark £350.00 £300.00 £250.00 £200.00 £150.00 £100.00 £50.00 £-Dellby Beale Bowen Rawdon Mahon Smyth Write down the **three** cell ranges used to produce this chart. 3. \_\_\_\_\_\_ [3]

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**Examiner Only** Joanne creates another chart, shown below. Describe the information Marks Remark presented on the chart. Smyth Dellby 10% 20% Mahon 17% Beale 8% Rawdon 15% Bowen 30% \_\_\_\_\_[2] **Total Question 2** [Turn over 8106



					_
3			rm create digital and painted images of Northern Ireland pes. The company has its biggest client in the United States.	Examiner O Marks Rei	nly mark
	(a)		ents in the United States wish to meet the artists, so JK Artform e proposed using video conferencing for this purpose.		
		(i)	What is video conferencing?		
			[1]		
		(ii)	What advice would you give to the company about the bandwidth required for video conferencing?		
			[2]		
		(iii)	Describe <b>one</b> way in which video conferencing is better for the environment.		
			[2]		
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(b) The director of JK Artform has decided to employ a n teleworkers.	umber of	Examiner Only  Marks Remark
(i) The statements below are about teleworking. Wr FALSE beside each. The first one has been done		
Statement	TRUE/FALSE	
Teleworking is the use of the telephone to make sales to customers.	FALSE	
Teleworking allows employees to work flexible hours.	[1]	
Teleworker activity is more difficult for managers to monitor.	[1]	
Teleworking allows for a lot of face-to-face contact between workers.	[1]	
in terms of:  Recruiting employees Training employees Expenses and costs  Recruiting employees  Training employees		
		[Turn over



	Expenses and costs	Examir Marks	ner Only Remark
	[6]		
		Total Qu	uestion 3
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2

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People regis  Tick (  ) one	ter using an online form. The must enter their surname ont must be aged 10–18. can set up a member's accord of at least eight characters may enter a budget for tutoric.00.	to the form.  unt. If they do, they must select a s.	Examiner Only  Marks Remark
Data	Validation Check	Reason for choice	
(a) Surname	☐ Presence check ☐ Range check ☐ Length check ☐ Type check [1]	[1]	
(b) Budget	<ul><li>□ Presence check</li><li>□ Range check</li><li>□ Length check</li><li>□ Type check</li><li>[1]</li></ul>	[1]	
(c) Age	<ul><li>□ Presence check</li><li>□ Range check</li><li>□ Length check</li><li>□ Type check</li><li>[1]</li></ul>	[1]	
(d) Password	<ul><li>□ Presence check</li><li>□ Range check</li><li>□ Length check</li><li>□ Type check</li><li>[1]</li></ul>	[1]	Total Question 4
8106			[Turn over



Increased usage of the Internet has changed the way people live. Most	t	Examiner C	Only
people do some shopping online.		Marks Re	ema
(a) Circle <b>two</b> advantages that online shopping has brought to the customer.			
No premises required 24/7 shopping Fewer staff required Larger range of shops Goods are received immediately	[2]		
In order to shop online customers can use their Credit or Debit Card.			
<b>(b)</b> List <b>two</b> pieces of data they will have to enter from their card when purchasing goods online.			
1			
2	[2]		
2.	_ [4]		
<ul> <li>(c) Explain how the following help ensure that customer details are processed securely when shopping online.</li> <li>SET</li> </ul>			
<ul> <li>Encryption</li> </ul>			
SET			
			_

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Encryption		Examiner Only Marks Remark	
	[6]		
	Т	otal Question 5	
		[Turn ove	ا •r



**6** Lucy is creating a database for her school project.

2a

Ms Caitlin Rooney

(a) Below is a section from the **Customer** table. Shade **one** record in the table.

Name	House number	Street	Town/City	Postcode
Mr Joe Watson	1	High Street	Belfast	BT4 6TD
Mr Jim Donald	31	Mary Street	Newry	BT24 6TL
Miss Amy White	52	West Street	Armagh	BT62 8TY

Church Walk

Lisburn

[1]

BT18 5FG

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Examiner Only

Marks Remark

(b) Lucy needs to include a primary key in the Video table below.

Title	Genre	Rating	Number in stock
High School Musical	Musical	U	4
The Secret of the Unicorn	Comedy	PG	5
The Lion King	Musical	U	3
Footloose	Musical	12A	6

what is a primary key?	
	[1]
	• •



The table below is a sample of data taken from the **Rental** table.

Rental No	Video ID	Member ID	Date Borrowed	Days Rented	Price per night
01	COM01	WAL01	20/05/2013	3	£3.50
02	CLA06	SMI01	20/05/2013	2	£3.00
02	MUS09	SMI01	20/05/2013	2	£4.00
03	THR11	BES02	24/05/2013	2	£3.50
04	DRA05	CLA05	26/05/2013	3	£3.00

(c) Suggest data types for the following fields in the Rental table.

Field Name	Data Type
Rental No	
Member ID	
Price per night	

[3]

Total Qu	lestion 6

Examiner Only

Marks Remark

[Turn over

8106



James is a GCSE student and needs some help in selecting appropriate storage media for his coursework. He has asked about the following storage devices.

Examiner Only	
Marks Remark	

Storage Device	Capacity
USB Memory Stick	2 Gigabyte
External Hard Drive	1 Terabyte
CD-R	650 Megabyte

(a) Complete the table below by inserting the name of the storage devices in order of their capacity, largest first.

Rank	Storage Device
1.	(largest capacity)
2.	
3.	(smallest capacity)

[3]

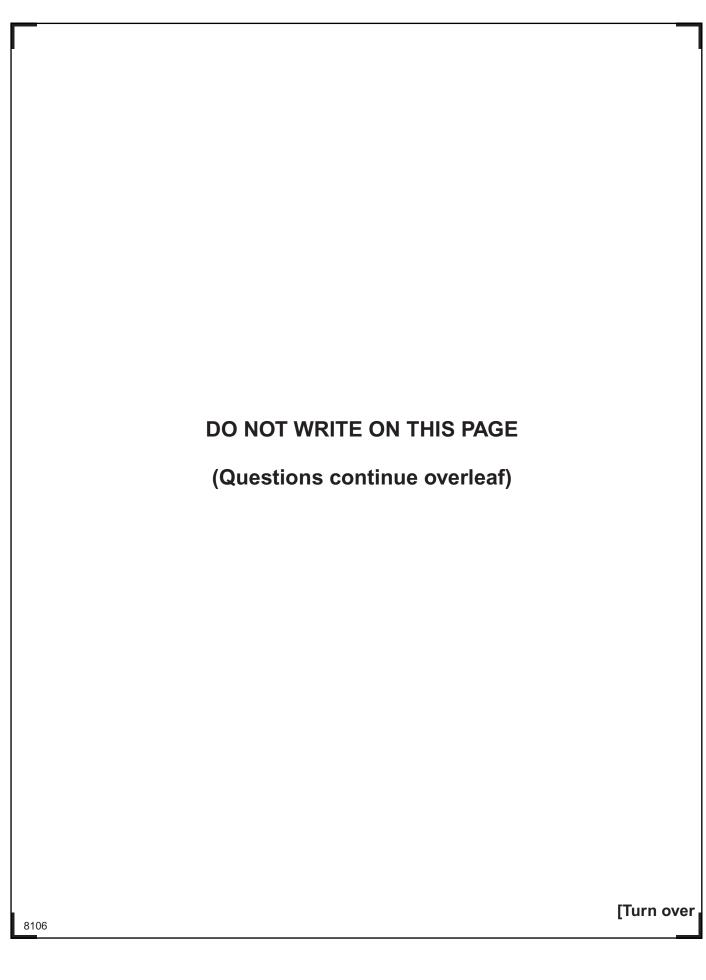
(b) James has decided to use either a DVD-RW or DVD-R. Tick (✓) two statements that are true about these storage devices.

Statement	Tick (✓)
Both DVD-R and DVD-RW are read only.	
DVD-R can be written to only once.	
DVD-RW can be written to many times.	
Both DVD-R and DVD-RW can be written to only once.	

Total Question 7

[2]





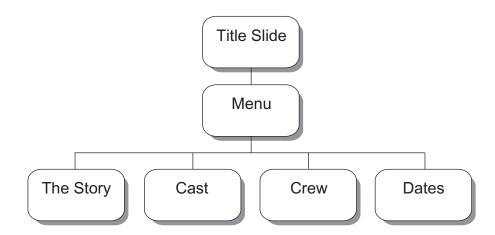


**8** Liz wants her friend to make a multimedia presentation to advertise her high school musical "South Pacific" to parents at the Open Evening.

Examiner Only Marks Remark 20

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She wants parents to be able to select their own pathway through the presentation, so Liz creates this navigation plan to show how slides should be linked



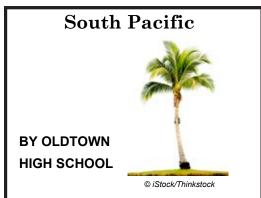
(a) In the table below, place a **tick** (✓) beside **two** presentation tools that would allow users to select different pathways through Liz's presentation.

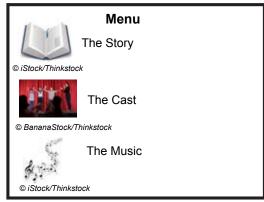
Tool	Tick (√)
Timings	
Buttons	
Hyperlinks	
Master slide	
Templates	

[2]



Examiner Only Liz draws up the following storyboard for the first two slides of her Marks Remark presentation. She says she wants the presentation to contain animation and sound. **Title Slide** Menu Slide Graphic Menu Link Link Link Production and Link School Her friend creates the following slides for the start of Liz's multimedia presentation. **South Pacific** Menu The Story





[Turn over



Liz needs some advice on testing the completed presentation.	Examiner Only  Marks Remark
(b) Identify <b>three</b> elements of the completed presentation Liz should test and say how she would carry out each test.	
Test 1	-
	-
	-
Test 2	-
Test 2	-
	-
	-
Test 3	-
	-
	-
[6]	]
	Total Question 8
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cla	•		•	nts from his English icle and comment on	the	Examir Marks	er Only Remark
(a)	) Give <b>one</b> reason why instant messaging would not be suitable for this task.						
					[1]		
The	e students dec	cide to use a bulle	etin board for the	e task.			
(b)		a bulletin board	-	e sentences which or this task ( <b>not all</b>			
	Offline	Replies	Online	Interactive			
	Bulletin board	ds are not		Not everyon	е		
	in the group	has to be		at the same time	to		
	take part in tl	ne discussion. Us	sers can comme	ent on the article and			
	read the		from othe	er group members at			
	anytime.				[3]		
As Vol	•	son the pupils wi	ll also link with a	another school using			
(c)	Explain to Ju	de what is mean	t by VoIP.				
					[2]	Total Qu	uestion 9
						[Tur	n over



**10** Jack's school uses a form to collect data from new students. The data is used to create information that can be used by the school.

Part of the form the school uses is shown below:

# City High School

Pupil Number:	
Address:	
Telephone Number:	
DOB:/	
How do you travel to school?	
LUNCHES?	
SCHOOL CANTEEN?	_
PUPIL NAME:	-



Font:		
Tick Boxes:		
	[1]	
Instructions:		
	[1]	
		Total Ques



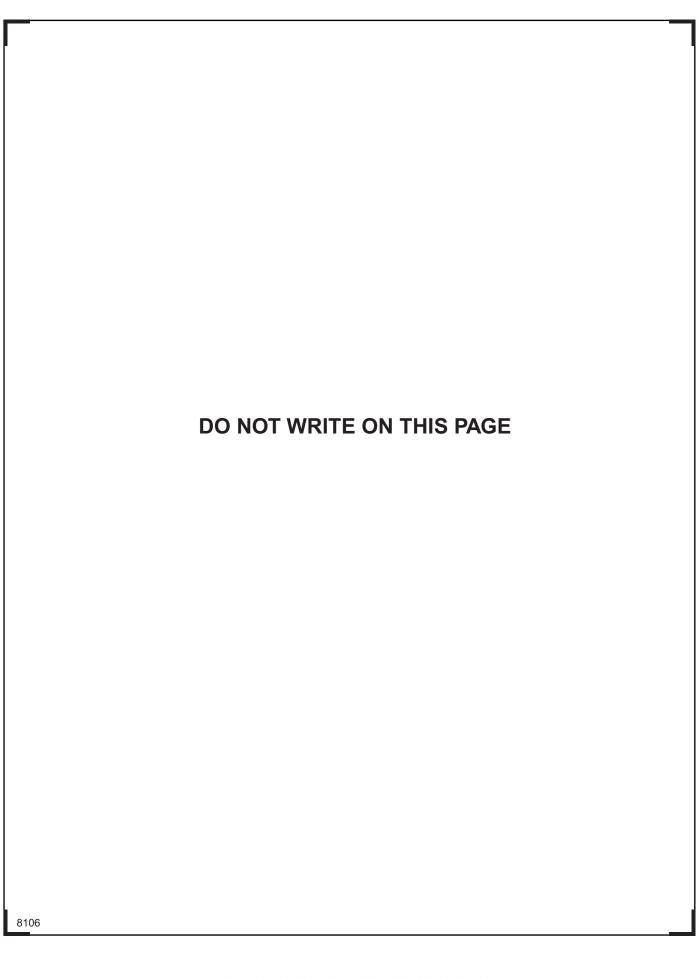
BACKUP	SEARCH ENGINE	FIREV	VALL	FIBRE O	PTIC		
VIRTUAL LE	ARNING ENVIRONME	NT	BLUET	ООТН	CSV		
OPTI	CAL MARK RECOGNIT	ΓΙΟΝ	MIDI	RTF			
TOUC	H SCREEN JPEC	3 S	EARCH	CRITERIA	<b>L</b>		
Definition		Terr	m				
Software desigr from hacking via	ned to protect a network a the Internet						
0,	ch allows musical connect to a computer						
A software tool courses online	designed to deliver						
A type of cable bight pulses	which sends data using						
A program used Internet	d to find information on t	he					
	nology which can be use adset to a mobile phone	I					
A set of words ι the Internet	used to find information	on					
A compressed f	ile format						
	ta capture which detects bencil marks on a form	;					
A copy of data o	currently held on a m						
					[10]		
THIS IS	S THE END OF T	HE QU	ESTIC	N PAPE	R	Total Qu	estio

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### DO NOT WRITE ON THIS PAGE

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

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Total Marks

**Examiner Number** 

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