

Mark Scheme (Results)

Summer 2013

GCSE Information and Communication Technology (5IT01) Unit 1: Living in a Digital World

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## **General Marking Guidance**

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded.
   Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.
- Candidate can be credited where they have given two or more correct responses in a single answer space, but have given incorrect or blank responses elsewhere.
- Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:
- i) ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear
- ii) select and use a form and style of writing appropriate to purpose and to complex subject matter
- iii) organise information clearly and coherently, using specialist vocabulary when appropriate.

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(a)(i)	Home entertainment system A			(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
1(a)(ii)	Home entertainment system A			(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
1(a)(iii)	В			
				(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
1(b)	<ul> <li>Any one from: <ul> <li>Try out / try on / touch / feel / see the goods</li> <li>Can pay using cash</li> <li>More personal experience / deal direct with shop staff / face to face if there is a problem</li> </ul> </li> </ul>		Guidance	
	<ul> <li>Can negotiate price/ask for a discount</li> <li>Less chance of being scammed</li> <li>Don't have to wait/pay for delivery</li> <li>Easier to return goods</li> </ul>			(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
1(c)	Any <b>one</b> from:	Wireless		
	• GPRS	WiFi		
	• 2G	Bluetooth		
	• 2.5G/EDGE			
	<ul> <li>Mobile broadband / cellular data</li> </ul>			
	• 3G			
	<ul> <li>3.5G HSPA / HSDPA / HSUPA</li> </ul>			
	• 4G/LTE			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(d)	D			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(e)(i)	<ul> <li>Any one from: <ul> <li>Better (audio) quality</li> <li>Can listen to wider selection of stations / stations outside of (FM/AM) broadcast range</li> <li>(More) programme information provided in the broadcast to display</li> <li>Don't need a radio/can listen on other devices</li> <li>Listen to catch-up / control playback</li> </ul> </li> </ul>	<ul> <li>Connection always there</li> <li>You can choose the music</li> </ul>	Guidance	
	<ul> <li>Less interference / better signal</li> </ul>			(1)

Question	Answer		Do not accept	Additional	Mark
Number				Guidance	
1(e)(ii)	Any two from:  • Memory card (any type)  • Optical disc (any type e.g. DVD-RW)  • Digital audio cable (e.g. SPDIF/HDMI)  • USB  • Firewire  • Thunderbolt  • Bluetooth  • Ethernet/ Powerline  • Cloud  • Hard drive/USB Drive (any type)	•	Cable Email	Students can be awarded two marks if they've stated 'USB (connection)' and 'USB drive'	
	Allow 'Infrared'				(2)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
1(f)	Any <b>one</b> from:			
	Copyright Designs and Patents Act (1988)			
	Copyright			
	Digital Economy Act (2010)			(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
1(g)	<ul> <li>Any two from: <ul> <li>Don't have to trust a third party with your data</li> <li>It is more secure / less likely to be hacked</li> <li>No restrictions on file types/sizes</li> <li>Faster read/write speeds / reduce lag/latency/buffering</li> </ul> </li> </ul>	<ul> <li>References to reliability</li> <li>Quicker/easier without expansion</li> <li>Less likely to be lost/deleted</li> </ul>		(2)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
1(h)	Any <b>two</b> reasons from:	<ul> <li>Make money (without</li> </ul>		
	It is a legal requirement / WEEE	qualifying their response)		
	<ul> <li>Financial incentives (avoid penalties)</li> </ul>			
	<ul> <li>Customer service / enhances reputation</li> </ul>			
	<ul> <li>Company policy / environmental concerns</li> </ul>			
	<ul> <li>So they can sell it / so they can give it to</li> </ul>			
	charity			
	So they can reuse it			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Number			Guidance	
2(a) (i)	В			(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
2(a)(ii)	Any one from:     Faster/quicker download     Faster/quicker load     Improved/Enhanced/Better/More positive user experience     Improved reliability     Improved download speed			(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
2(a)(iii)	Any <b>two</b> from:	Physical damage (without	Accept any one type of virus	
	<ul> <li>Viruses / malware</li> </ul>	reference to data corruption)	(eg: Trojan etc)	
	<ul> <li>Spyware</li> </ul>			
	<ul> <li>(Tracking) Cookies</li> </ul>			
	<ul> <li>Scareware</li> </ul>			
	<ul> <li>Physical damage to phone (storage) that</li> </ul>			
	corrupts data			
	Theft of the device			
	<ul> <li>Blue-jacking</li> </ul>			
	<ul> <li>Loss of power</li> </ul>			
	<ul> <li>Application / system error</li> </ul>			(2)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
2(b)	A description to include <b>two</b> from:	Answers relating to validity		
	<ul> <li>Encourage interaction with the site</li> </ul>	(tagging)		
	Increase reliability of reviews (through use of			
	community)			
	<ul> <li>To enable a wider group of users to moderate</li> </ul>			
	content			(2)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
2(c)	Any two from:     Social Networks     Blogs (including photo and videoblogs)     Microblogs     Wikis / user generated reference sites / social bookmarking     Chat / videochat     Online work spaces / web conferencing     Virtual worlds     Massively multiplayer online (gaming communities)     VLEs     Webmail	Message boards	Responses that are exclusively proprietary names gain one mark max.	(2)
	Accept 'dating sites'			(2)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
2(d)(i)	Any <b>one</b> from:			
	She can personalise her posts			
	<ul> <li>So she can post / review / comment</li> </ul>			
	<ul> <li>Can receive (email) updates</li> </ul>			
	<ul> <li>She can set content preferences</li> </ul>			
	<ul> <li>Can access more features</li> </ul>			
	<ul> <li>Can report (inappropriate) content / users</li> </ul>			(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
2(d)(ii)	Any <b>three</b> from:	Any answers relating to 'Name'		
	<ul> <li>Username/Screen name</li> </ul>	(in Q)		
	<ul> <li>Email address</li> </ul>			
	<ul> <li>Date of birth/age</li> </ul>			
	<ul> <li>Location (e.g. address/postcode)</li> </ul>			
	<ul><li>Image/Avatar</li></ul>			
	<ul> <li>Social networking info/details</li> </ul>			
	<ul> <li>Password/PIN</li> </ul>			
	<ul> <li>Bio/Favourites</li> </ul>			
	<ul> <li>Gender</li> </ul>			
	<ul> <li>Security question/memorable information</li> </ul>			
	<ul> <li>Phone number/contact details</li> </ul>			
	<ul> <li>Language/regional settings</li> </ul>			(3)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
2(e)	An explanation to include:			
	Users can scan / don't have to insert their card /			
	enter PIN (1) because NFC is a			
	contactless/wireless payment method (1)			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(a)(i)	Removes /reduces (trip) hazard	Less messy		(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
3(a)(ii)	Any <b>one</b> from:	'Faster' without qualification		
	<ul> <li>WiFi has greater signal range/Bluetooth has</li> </ul>			
	lower signal range			
	<ul> <li>More bandwidth/lower latency</li> </ul>			
	<ul> <li>Carries more data/higher transfer speed</li> </ul>			
	<ul> <li>WiFi (signal) less likely to be blocked (by</li> </ul>			
	physical objects)			
	<ul> <li>WiFi is stronger (signal)</li> </ul>			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(b)	А			(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
3(c)	<ul> <li>An explanation to include:</li> <li>Some users might not have sufficient bandwidth (1) as high definition video uses more data than standard (1)</li> <li>Standard definition video uses less data / does not need as much bandwidth (1) and users pay for bandwidth (1)</li> <li>The video will not play smoothly / may buffer (1) if Alex does not have sufficient bandwidth (1)</li> <li>The video will play smoothly / not buffer (1) because standard definition uses less data / needs less bandwidth (1)</li> </ul>	<ul> <li>Standard definition loads faster</li> <li>High definition takes longer to load</li> <li>Compatibility with device (e.g. screen resolution / RAM)</li> </ul>	Linked responses are required for both marks. Individual statements score a maximum of <b>one</b> mark.	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(d)	D		Odidanioc	(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
3(e)	<ul> <li>Any one from:</li> <li>Wider audience/market / viral marketing</li> <li>Cheaper/faster than producing/distributing physical media</li> <li>Users can promote/recommend the videos</li> </ul>	Cheaper/faster (without qualification)	'Anyone can access' is not enough to gain a mark.	(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
3(f)	A			
				(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
3(g)(i)	A description to include <b>three</b> from:	<ul> <li>Other forms of connectivity</li> </ul>		
	Transfer from camcorder to laptop (1) using	(that are not listed in the		
	Firewire (1) then uploaded via WiFi router (1) to	question)		
	blog using ADSL (1)	<ul> <li>'Firewire' without reference</li> </ul>		
		to camcorder and laptop.		(3)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
3(g)(ii)	An explanation to include:	Locate where the video was	1 mark for type of service	
	A mapping service / social network (1) (could locate	filmed (without expansion).	(accept proprietary names).	
	where the video was filmed)		1 mark for how it uses data.	
	And <b>one</b> of:			
	<ul> <li>show other videos/blogs in the area</li> </ul>		A linked response is required	
	<ul> <li>show a 'heat' map of videos</li> </ul>		for 2 marks.	
	<ul> <li>use augmented reality</li> </ul>		Individual statements score	
	<ul> <li>show shops/businesses in the area / targeted</li> </ul>		max 1 mark.	
	marketing			(2)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
3(h)(i)	<ul> <li>One advantage from:</li> <li>Do not have to use local storage</li> <li>Can work collaboratively</li> <li>Can work from any device with an internet connection</li> <li>Software updates are automatic</li> </ul>	Free Any advantage that is reverse of disadvantage (or vice-versa)		
	<ul> <li>Reduces the use of system resources (e.g RAM, processor)</li> </ul>			(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
3(h)(ii)	Two disadvantages from:	Any disadvantage that is reverse		
	<ul> <li>(Online applications are) not as feature rich /</li> </ul>	of advantage (or vice-versa)		
	(locally installed software) have more features			
	Not as responsive / Slow			
	Need internet connection			(2)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
4(a)	С			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(b)	A		Guidance	(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
4(c)(i)	<ul> <li>Any three from: <ul> <li>'Account Holder' (doesn't use name of recipient / uses)</li> <li>Email address (@fr33mail.com)</li> <li>Account details (bank would not put in an email)</li> <li>Request for secure details (banks never ask for these)</li> <li>Originating location (from the US)</li> <li>Wording includes pressure (to act quickly e.g. "Open within 5 mins")</li> <li>(Transaction) Report/link/attachment (to the PDF ends in .exe / .exe is not a pdf file extension)</li> <li>Transaction IDs (don't match / are included)</li> <li>GMT offset (is +3) / time difference</li> <li>Spelling errors</li> </ul> </li> </ul>	'e-mail' on its own		(3)
	- Spenning Cirors			(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(c)(ii)	Any <b>two</b> from:  Delete/ignore/don't respond Report (the email) Mark/flag/filter as junk/spam			
	<ul><li>Block the sender</li><li>Scan for viruses</li></ul>			(2)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
4(d)	Any <b>one</b> from:			
	<ul> <li>Can send/receive/view anytime</li> </ul>			
	<ul> <li>Can find information sent/received quickly</li> </ul>			
	<ul> <li>Can attach files/media</li> </ul>			
	<ul> <li>Can send group emails</li> </ul>			
	Keeps a record			
	<ul> <li>Can check if read / allows read receipts</li> </ul>			
	<ul> <li>Cheaper than post/mail</li> </ul>			
	<ul> <li>Environmental benefit/saves paper</li> </ul>			(2)

Question	Ansv	wer	Do not accept	Additional	Mark
Number			-	Guidance	
4(e)	Linked explanation: Some people will be less a goods online (1), because of the internet) (1)  Due to:			Linked responses are required for maximum marks, including both points in the explanation and a linked constraint and cause.	
	(one linked constraint and Constraint	cause for 2 marks)  Cause		Two marks for a linked constraint and cause can	
	Cost / affordability Lack of infrastructure	Low income  Remoteness / political factor		only be awarded where the responses are from the same row.	
	Lack of ICT skills / confidence Social factor Physical factor	Lack of training / age Religion / gender Disability			(4)

Question	Indicative content		
Number			
4(f)	Indicative content for an argument in support of how ICT has improved banking and other financial services.		
QWC	1. Saves time to complete transactions (e.g. BACS/CHAPS/Faster Payments System)		
(i-iii)	2. Can see and manage transactions online		
	3. Can compare financial products using online tools.		
	4. Telephone banking for those without internet access.		
	5. 24/7/365 access to accounts		
	6. Increased security e.g. due to encryption technologies		
	7. Chip and PIN / NFC		
	8. ATMs		
	9. Globalisation / international transfers		
	10.Manage stocks and shares easily e.g. track real-time		

Level	Mark		Descriptor
	0		No rewardable content
Content General example(s) of the use of IC		Content	General example(s) of the use of ICT for banking OR financial services
Level 1	1-2	Argument	They have a <b>limited</b> argument that <b>may not</b> support the statement.
		QWC	Everyday language is used. Lacks clarity and organisation. Spelling, punctuation and the rules of grammar are used with limited accuracy.
		Content	Example(s) of how ICT has <b>improved</b> banking <b>OR</b> financial services  Mostly accurate.
Level 2	3-4	Argument	They have <b>used reasons</b> to develop a <b>supportive</b> argument, but this may be <b>simplified</b> or <b>exaggerated</b> .
		QWC	Some specialist terms are used. Some focus and organisation. Spelling, punctuation and the rules of grammar are used with some accuracy.
		Content	Example(s) of how ICT has <b>improved</b> banking <b>OR</b> financial services  Factually accurate.
Level 3	5-6	Argument	Presents valid reasons, OR a conclusion that successfully validate(s) the identified improvements.
		QWC	Appropriate specialist terms are used consistently. Good focus and organisation. Spelling, punctuation and the rules of grammar are used with considerable accuracy.

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
5(a)	В			
				(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
5(b)	Explanation to include a feature (1) and associated	<ul> <li>Easier to use</li> </ul>	Allow two features/benefits	
	benefit (1):	<ul> <li>Portable/travel with/carry</li> </ul>	for both marks.	
	<ul> <li>Lightweight/small/less bulky (1) makes them</li> </ul>	Interactive		
	easier for young people to handle (1)			
	<ul> <li>Touchscreen (1) is more user friendly (1)</li> </ul>			
	<ul> <li>(App/OS has a) more accessible interface (1)</li> </ul>			
	which is intuitive (1)			(2)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
5(c)	Any <b>one</b> from:			
	<ul><li>Log out / sign out</li></ul>			
	<ul> <li>Set a password/PIN</li> </ul>			
	<ul> <li>Disable/don't enable automatic payments</li> </ul>			
	<ul> <li>Don't save payment/account details</li> </ul>			(1)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
5(d)	Explanation to include:	Addiction	Explanation can link across	
	<ul> <li>Looking at screen too long (1) could cause headaches/eyestrain (1)</li> </ul>		mark points.	
	<ul> <li>(Too much) inactivity (1) reduces active lifestyle / increases risk to health / increases risk of obesity (1)</li> <li>Using input devices for too long (1) increases risk of RSI (1)</li> </ul>		1 mark max for two effects (e.g. eyestrain and headaches), without a cause being stated.	
			Both marks can be awarded	
	Negative impact on education (1 mark max)		if two causes only are given.	(2)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
5(e)	Linked explanation to include <b>one</b> of:		Marks awarded for:	
	<ul> <li>Consoles have/tablets may not have</li> </ul>		Appropriate feature (1)	
	dedicated graphics features (GPU/Graphics		Associated benefit (1)	
	RAM) (1) which result in smoother/high			
	definition graphics (1)		A linked response is required	
	<ul> <li>Storage capacity of a games console is</li> </ul>		for 2 marks.	
	greater (1) so more detail can be stored(1)		Individual statements score	
	<ul> <li>Consoles can produce 3D gaming (1) for a</li> </ul>		max 1 mark.	
	more immersive experience (1)			(2)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
5(f)	Explanation to include:		Linked responses are	
	Deters/prevents people from sharing games /		required for maximum	
	Encourages people to buy legitimate copies of games		marks.	
	(1), which provides more money to companies (1),		Individual statements score	
	which is used to fund the development of better		a maximum of <b>two</b> marks	
	games (1)			(3)

Question	Answer	Do not accept	Additional	Mark
Number			Guidance	
5(g)	Any one from:  • Allows adverts to be personalised/targeted	'Recommend' without reference to personalisation		
	<ul> <li>Know your preferences/interests</li> </ul>			(1)

Question	Indicative content
Question Number 5(h) QWC (i-iii)	Indicative content for a supportive argument: Mobile devices have features that have enhanced young people's free time. These include: Portability, performance, storage, user interface, connectivity, media support, applications, multi-functional nature of devices Responses may discuss how these features have impacted upon young people's ability to improve their: Leisure/Entertainment  Media is available on the move Can record events and share them with friends/family Find way around to places more easily Apps have developed which can solve problems ad-hoc. Socialising and Communications Can keep in touch with friends and family using email / phone / social networks / VoIP etc Organise their time 'on the move' so more flexible arrangements can be made and altered as events change. Reduced the cost of talking to others. Developing new types of language and methods of communication. Culturally / Socially More politically aware Able to form relationships more easily
	Learning  • Have access to learning materials (formal or informal) from anywhere, so can continue to learn in free time: the concept of 'Hidden learning'

Level	Mark		Descriptor
	О		No rewardable content
		Content	General example(s) of the use of digital devices by young people.
Level 1	1-2	Argument	They have a <b>limited</b> argument that <b>may not</b> support the statement.
		QWC	Everyday language is used. Lacks clarity and organisation. Spelling, punctuation and the rules of grammar are used with limited accuracy.
		Content	Example(s) of the <b>features/types</b> of mobile digital devices, <b>OR positive use(s)</b> of <b>mobile digital devices</b> in <b>free</b> time. <b>Mostly accurate</b> .
Level 2	3-4	Argument	They have <b>used reasons</b> to develop a <b>supportive</b> argument, but this may be <b>simplified</b> or <b>exaggerated</b> .
		QWC	Some specialist terms are used. Some focus and organisation. Spelling, punctuation and the rules of grammar are used with some accuracy.
		Content	Example(s) of the <b>features/types</b> of mobile digital devices <b>AND positive use(s)</b> of <b>mobile digital devices in free</b> time. <b>Factually accurate.</b>
Level 3	5-6	Argument	Presents valid reasons, OR a conclusion that successfully validate(s) the positive impact of the identified content.
		QWC	Appropriate specialist terms are used consistently. Good focus and organisation. Spelling, punctuation and the rules of grammar are used with considerable accuracy.

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