

Mark Scheme (Results)

June 2011

GCSE ICT (5IT01)

Unit 1 - Living in a Digital World

Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

Through a network of UK and overseas offices, Edexcel's centres receive the support they need to help them deliver their education and training programmes to learners.

For further information, please call our GCE line on 0844 576 0025, our GCSE team on 0844 576 0027, or visit our website at www.edexcel.com.

If you have any subject specific questions about the content of this Mark Scheme that require the help of a subject specialist, you may find our **Ask The Expert** email service helpful.

Ask The Expert can be accessed online at the following link:
<http://www.edexcel.com/Aboutus/contact-us/>

Alternatively, you can contact our ICT Subject Advisor directly by sending an email to Gareth on ICTSubjectAdvisor@EdexcelExperts.co.uk.

You can also telephone 0844 372 2186 to speak to a member of our subject advisor team.

June 2011

Publications Code UG028260

All the material in this publication is copyright

© Edexcel Ltd 2011

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.

Question 1

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

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(a)(ii)	B			(1)

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

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(b)	<p>Any two from:</p> <ul style="list-style-type: none"> • Set a password/code/pin/security pattern/ biometrics • Lock the device manually or automatically after a certain length of time / inactivity • Deactivate/Password protect/hide the Bluetooth/wireless sharing • Remote management (deactivation) • Hard reset feature (to protect data if device sold/disposed of) • Encryption (of data) • Antivirus • Backup features 			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (c) (i)	Any one from: <ul style="list-style-type: none"> Does not use (as much) storage space. No need to wait for file to download before watching video/downloading takes longer/ (streaming) saves time Allows user to watch live/real time video 	<ul style="list-style-type: none"> 'Faster/ quicker' (without expansion) 	Note: Streamed videos do make use of temporary files but these storage requirements are much smaller. Must be an advantage to Laura to gain credit.	(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
1 (c) (ii)	Any one from: <ul style="list-style-type: none"> Video is not available to watch offline / can't keep (own) a local copy / internet connection unavailable Limited availability for some streamed video User experience is dependent on connection quality / Playback might be affected by buffering / video may lag / video may freeze 	<ul style="list-style-type: none"> Reverse of advantage from (c) (i) 'Poor connection' (without expansion) 	Must be a disadvantage to Laura to gain credit. Candidates could gain the mark for connection quality by referring to latency or buffering.	(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)	Any two from: <ul style="list-style-type: none"> • To fix/patch bugs/problems • To add new features/function • To improve performance/functionality/ User Interface (UI) 	<ul style="list-style-type: none"> • Security fix (as it is in the question) 		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(f)	Any two from: <ul style="list-style-type: none"> • Headphones/earphones • Speakers • Docking station • Remote control • FM receiver/transmitter • Bluetooth receiver/transmitter • GPS receiver • Fitness sensor • Camera 	<ul style="list-style-type: none"> • Charger • GPS transmitter 		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
1(g)	<p>Any two from:</p> <ul style="list-style-type: none"> • Media players use 'solid state' memory / playback not affected by movement • Portable / lightweight / small • Long battery life • Set playlists • She can carry a large amount of media with her (music, podcast, radio programme, audiobook) • Can be locked to prevent accidental use/activation 			(2)

Question 2

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

Question Number	Answer	Do not accept	Additional Guidance	Mark
2(a)(ii)	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
2(a)(iii)	<p>Explanation:</p> <p>To enhance security / protect Laura's personal information / protect payment information / stop information being read (1) from people who may be looking at the screen (1)</p>		What data (1) and how (1).	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
2(a)(iv)	<p>Any two from:</p> <ul style="list-style-type: none"> • Check to see if seats are available • Receive confirmation immediately • Being able to view others' 'ratings' • Select seats • 24x7x365 availability • Do not need to travel / convenience / increases accessibility • Compare prices from different sources • No pressure from sales staff 	<ul style="list-style-type: none"> • Delivery (without expansion) • Easier / quicker / cheaper without justification 		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
2(b)(i)	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
2(b)(ii)	<p>Two benefits from:</p> <ul style="list-style-type: none"> • Cannot be damaged/lost in transit. • Process can be automated. • Cheaper as no paper/P+P costs • Can be reissued (more easily) • Less environmental impact (less paper used) • Cheaper than printing • Security staff do not have to collect tickets • Prevents fraud/touting/counterfeiting 	<ul style="list-style-type: none"> • Free to send • Cheaper (without expansion) • Cannot be lost (without expansion) 	Must be benefits to City arena in gain credit.	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
2(b)(iii)	<p>Two drawbacks from:</p> <ul style="list-style-type: none"> • Accidental deletion • Dependent on battery life • Don't have a 'real' product • Need a compatible device to receive/display the e-ticket/has to take her phone to the concert • Some people might find it complicated. • Vulnerable to security flaws (hacking/virus/corruption etc) • Might make the receiving device more of a target for theft 	<ul style="list-style-type: none"> • Can't sell/give the ticket away • Phone lost/stolen 		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
2(b)(iv)	D			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
2(b)(v)	<p>Explanation: She would still be able to access her e-ticket (1) if she had no connectivity/ (MMS) message was deleted / lost (1)</p>	<ul style="list-style-type: none"> • Can be forwarded • Can't be lost 	Students must refer to the continued availability of the ticket, not simply the availability.	(2)

Question 3

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(a)	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(b)(i)	To provide an accurate location / tell you where you are	<ul style="list-style-type: none"> • To give directions 		(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(b)(ii)	<p>Any one from:</p> <ul style="list-style-type: none"> • Stores / saves the geo-data with a user-friendly name so Shameela can recall it later • Saves time – she does not need to enter the address again 	<ul style="list-style-type: none"> • Quicker/easier/saves time (without expansion) 		(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(b)(iii)	Any one from: <ul style="list-style-type: none"> The Sat Nav / GPS device cannot pick up a good enough signal from the satellites. Loss of signal 	<ul style="list-style-type: none"> 'Signal' (without expansion) 'In a tunnel' 	Must state that the signal is affected.	(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(b)(iv)	<p>Description:</p> <ul style="list-style-type: none"> Distractions, stress, or lack of understanding of device (1) may cause an accident/stress (1) <p>OR</p> <ul style="list-style-type: none"> Incorrect positioning of device (1) may cause a blind spot / affect visibility (1) 	<ul style="list-style-type: none"> 'Radiation' (etc) 	Accept any sensible risk and related cause/description.	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(b)(v)	<p>Any two from:</p> <ul style="list-style-type: none"> • Can deal with unexpected incidents/ provide alternative routes • Provides traffic updates • Plots speed • Shows current location/position/ where you are • Estimated arrival time • Current distance to destination • Easily updatable • Can map petrol stations / motorway services on your route • Easier for people driving alone – audio prompts • Do not have to stop to look at map • Can be voice activated 			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(c)(i)	<ul style="list-style-type: none"> • Any one of: • A way of linking/connecting people using their personal information. • A way of creating/maintaining an online community 	<ul style="list-style-type: none"> • 'Networking' • 'A way of socialising' • An online community • Any proprietary name 	Definition of social networking must include concept of linking / connection for first mark point.	(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(c) (ii)	Any two from: <ul style="list-style-type: none"> • Only have to post one message / message is distributed quicker • Allows chat (real-time conversation) • SMS requires payment for each person receiving message • Can send message without mobile phone signal/with internet connection • Can add metadata (such as geo-data) • People can comment on / discuss the message • Can add multimedia to the message 	<ul style="list-style-type: none"> • Easier / faster (without justification) • 'Free' (without expansion) 		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(c) (iii)	Any one from: <ul style="list-style-type: none"> • Block users • Choose to make her profile private / choose to only allow people who she adds to her access/'friends' list/ change her privacy settings . • Categorise friends and allow certain ones access. • Send invitations to friends to view content 	<ul style="list-style-type: none"> • Set a password on her account • Answer relating to security settings 		(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(d)(i)	<p>Any one from:</p> <ul style="list-style-type: none"> • Virtual worlds (E.g. Second Life) • Forums / news groups / message boards • Microblog / blog • Chat room • Wiki • Social bookmarking • Web conferencing 	<ul style="list-style-type: none"> • Social networks e.g. Facebook • IM/Instant Messaging 	<p>Accept valid proprietary names</p> <p>Blog could be 'Youtube' as is a video log</p>	(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
3(d)(ii)	<p>Virtual worlds: any three from:</p> <ul style="list-style-type: none"> • Build image/ video/ music objects • They could stream live performances • Create/ Alter avatars (to represent their image) • Use audio/ text chat to hold conversations <p>Forums: any three from:</p> <ul style="list-style-type: none"> • Set up discussions • Read comments from fans/ interact with fans • Add images/ songs / videos for discussion <p>Microblog / blog: any three from:</p> <ul style="list-style-type: none"> • Keep a diary of their activities • Read comments from fans on their posts/ interact with fans • Add images/ songs/ video • Allows fans to subscribe to latest news feeds 		<p>Candidates must give suitable uses related to communicating with fans.</p> <p>The band are unlikely to use: wikis, social bookmarking and web conferencing for this</p>	(3)

Question 4

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

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(b)	Any two from: <ul style="list-style-type: none"> • interference • physical block • frequency overload • distance from receiver 	<ul style="list-style-type: none"> • Batteries might start to fail 		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(c)	<p>Explanation:</p> <p>Images may be out of time with the sound/live performance (1) and this gives a poor audience experience (1)</p>		<p>Synchronisation issue (1)</p> <p>Impact on audience (1)</p>	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(d)(i)	Any two of: <ul style="list-style-type: none"> • Blu-ray • HD-DVD • DVD • CD 		Accept suffixes for DVD and CD, e.g. CD-R, DVD-ROM.	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(d)(ii)	Explanation: One student response from (d)(i) (e.g. Blu-ray) has larger storage capacity (1) so can hold more data to provide better quality sound (1)		Optical media types, in storage size order: <ul style="list-style-type: none"> • Blu-ray • HD-DVD • DVD • CD 	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(e)(i)	Explanation to include two differences from: <ul style="list-style-type: none"> • less data used to store audio information • makes it quicker to download • It is a popular format • increases compatibility 	<ul style="list-style-type: none"> • Lower quality (without explanation) • Smaller files (without explanation) • Can be copied 		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
4(e)(ii)	Reduced audio quality / low quality / sound quality			(1)

Question Number	Indicative content
<p>4 (f) QWC (i-iii)</p>	<p>Accessibility</p> <ul style="list-style-type: none"> • Consumers need particular (format compatible) devices to listen, which limits the market for the band (unless they provide for a range of formats). • 24x7x365 access to music. • Digital divide (access dependent on internet access and digital literacy). • Understand and use range of formats / incompatibility. <p>Copyright and piracy</p> <ul style="list-style-type: none"> • DRM reduces opportunity for consumers to share files / can limit storage of files to certain (numbers of) devices. • DRM helps protect musicians' revenue. • Consumers must abide by new laws (Digital Economy Act 2010). • Downloadable content is more easily shared than physical products. • Musicians may rely more on other revenue (subscriptions / concerts etc). <p>Variety</p> <ul style="list-style-type: none"> • Musicians may create more popular music (that sells in higher volumes) due to reduced sales caused by piracy. • Only certain labels / artists distribute online. <p>Revenue/Marketing</p> <ul style="list-style-type: none"> • Different style of advertising required for downloads. • Musicians may/can choose to be independent by self promote / break from publishers. • Payment systems and/or payment technologies. <p>General / Personal preference</p> <ul style="list-style-type: none"> • Need software and hardware to listen back to music. • Download does not have same 'feel' as material product. • Sound quality: some people prefer sound of vinyl/tape etc.

- 1) level is set based on content
- 2) position in level is set based on the quality of discussion
- 3) if at top of level, and the candidate's response does not match the Quality of Written Communication (QWC) descriptor within that level a decision is made whether to reduce the mark within the level. Candidate's responses will not be marked down a level due to QWC.

	Mark		Descriptor
	0		No rewardable content
Level 1	1-2	Content	The candidate will make a limited number of simple statements, probably with limited reference to the benefits and/or drawbacks to customers or musicians of downloadable content.
		Discussion	Candidate's responses will be general .
		QWC	They have used everyday language and their response lacks clarity and organisation . Spelling, punctuation and the rules of grammar are used with limited accuracy.
Level 2	3-4	Content	The candidate's responses will be mostly accurate and will include a number of relevant benefits and/or drawbacks to customers and musicians of downloadable content.
		Discussion	There is a limited attempt to justify the identified benefits
		QWC	They have used some specialist terms and their response shows some focus and organisation . Spelling, punctuation and the rules of grammar are used with some accuracy.
Level 3	5-6	Content	The candidate will produce a factually accurate response that includes a range of appropriate benefits and drawbacks to customers and musicians of downloadable content.
		Discussion	The benefits are clearly justified .
		QWC	They have used appropriate specialist terms consistently and the response shows good focus and organisation . Spelling, punctuation and the rules of grammar are used with considerable accuracy.

Question 5

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

Question Number	Answer	Do not accept	Additional Guidance	Mark
5(a)(ii)	Any two explanation points from: <ul style="list-style-type: none"> • Discs use different formats • Not compatible • Unable to be read • Blu-ray uses a different laser 	<ul style="list-style-type: none"> • DVD player is lower quality • Will not fit • Copyright 		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
5(a)(iii)	Modem / Ethernet cable / (Wireless) dongle / (Wireless) Router / Wireless adapter	<ul style="list-style-type: none"> • Blu-ray disc / Blu-ray player • 'Adapter' (on its own) 		(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
5(a)(iv)	Explanation: To stop the media from being shared / copied and sold illegally / prevent it being ripped. (1) This helps protect the rights/revenue of the copyright owner. (1)	<ul style="list-style-type: none"> • 'To stop it being copied' (without expansion) • 'To stop it being sold' (without expansion) 	Allow 'copied and sold' only if together.	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
5(b)(i)	<p>Explanation: To improve Laura's experience (1) by increasing the relevance of the adverts (1)</p> <p>1 mark (max) may be awarded for:</p> <ul style="list-style-type: none"> • Laura has opted in to receive emails from the company (or not opted out) (1) <p>or,</p> <ul style="list-style-type: none"> • reference to an organisation's marketing strategy (1) <p>or,</p> <ul style="list-style-type: none"> • answers relating to: persuading her to buy more (1) 		Some way of improving experience (1) with reason (1)	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
5(b)(ii)	<p>Description: The online shop have stored/tracked data from her previous transactions (1) and matched that data with other items for sale (1).</p>		Key points are: the storing of transactional data (1) and the querying of it (1).	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
5(b)(iii)	<p>Any two from:</p> <ul style="list-style-type: none"> • Contact the sender to opt out / unsubscribe • Filter her emails / block sender / mark address as spam • Change her email address • Deactivate her email account 	<ul style="list-style-type: none"> • Put in spam folder 	Putting email in spam folder is not same as marking mail as spam.	(2)

Question Number	Indicative content for a discussion
<p>Q05 c QWC (i-iii)</p>	<p>Data collection and use:</p> <p>(Covert)</p> <ul style="list-style-type: none"> • Online companies gathering statistics about users' searches and browsing habits actions for marketing purposes. • Cookie installation and spyware • ISPs are able to view data that pass through them. • Government / Police looking at individuals' computers without a warrant. (Big Brother concept) • Identity theft <p>(Overt)</p> <ul style="list-style-type: none"> • Filling out forms / buying goods. Users provide personal data knowingly without realising implications • Requirements for users to 'opt in' to gain access to services • Complicated 'opt out' methods. • Privacy policies <p>Social (networking) concerns</p> <ul style="list-style-type: none"> • Personal information made available to all in social network. • GPS tools now provide means to publish individual's location • Individuals may appear in media when they are not aware. (eg photos/videos on social media or Google's "Street view" service) • Users need to be mindful what they look at online. Fear of social 'control'. • Vulnerable (at risk) groups face an increased threat. <p>Legal issues:</p> <ul style="list-style-type: none"> • Difficult to enforce the Data Protection Act

- 1) level is set based on content
- 2) position in level is set based on the quality of discussion
- 3) if at top of level, and the candidate's response does not match the Quality of Written Communication (QWC) descriptor within that level a decision is made whether to reduce the mark within the level. Candidate's responses will not be marked down a level due to QWC.

	Mark		Descriptor
	0		No rewardable content
Level 1	1-2	Content	Candidates will make a limited number of simple statements, probably with limited reference to privacy concerns associated with individuals' use of the internet.
		Discussion	Candidates' responses will be general .
		QWC	They have used everyday language and their response lacks clarity and organisation . Spelling, punctuation and the rules of grammar are used with limited accuracy.
Level 2	3-4	Content	Candidates' responses will be mostly accurate and will include a number of relevant privacy concerns associated with individuals' use of the internet.
		Discussion	Candidates will have made some attempt to explain the identified concerns.
		QWC	They have used some specialist terms and their response shows some focus and organisation . Spelling, punctuation and the rules of grammar are used with some accuracy.
Level 3	5-6	Content	Candidates will produce a factually accurate response that includes a range of appropriate privacy concerns associated with individuals' use of the internet.
		Discussion	Candidates will have clearly explained the identified concerns.
		QWC	They have used appropriate specialist terms consistently and the response shows good focus and organisation . Spelling, punctuation and the rules of grammar are used with considerable accuracy.

Further copies of this publication are available from
Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467

Fax 01623 450481

Email publication.orders@edexcel.com

Order Code UG028260 June 2011

For more information on Edexcel qualifications, please visit
www.edexcel.com/quals

Pearson Education Limited. Registered company number 872828
with its registered office at Edinburgh Gate, Harlow, Essex CM20 2JE

Ofqual




Llywodraeth Cynulliad Cymru
Welsh Assembly Government



5IT01_01