

Mark Scheme (Results)

June 2014

Pearson Edexcel GCSE ICT (5IT01) Paper 01
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.

Question 1

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01a(i)	Computer A			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01a(ii)	Computer C			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01a(iii)	Computer A			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01b(i)	Any two from: <ul style="list-style-type: none">• USB• Thunderbolt• Firewire• Lightning• e-SATA• Ethernet			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01b(ii)	Any two from: <ul style="list-style-type: none"> • Printer • Plotter • 3D Printer • Laser cutter • Monitor / Screen • Speakers • Headphones / Earphones / Headset • Projector • Smartboard 			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01c(i)	Any two from: <ul style="list-style-type: none"> • Faster / lower latency / greater bandwidth • (More) Stable / not susceptible to interference / stronger signal • (More) secure / Less/no risk of (wireless) hacking 	People outside the network can't access it		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01c(ii)	<p>Any two from:</p> <ul style="list-style-type: none"> • Restricts range (of movement)/less flexible • Can be messy/unattractive • Health and safety / risk of tripping • Logistics / hard to install / cost of setup • Users can interfere with cabling / pull cables out 			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01d	<p>A description to include three from:</p> <ul style="list-style-type: none"> • Can be shared/uploaded (1) • Free (to download) (1) • The (source) code is available / accessible (1) • Can be edited / adapted (1) 	<p>Can be downloaded (without 'free')</p>	<p>e.g. 'One can modify the source code' would gain 2 marks as 'modify' (edit) implies that the code is 'accessible'</p>	(3)

Question 2

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02a	Any three causes from: <ul style="list-style-type: none"> • Remoteness • Can't afford it / Cost of subscription • Lack of ICT expertise/skills • No access to a network / infrastructure • Political /country's restrictions • School/wider culture / Religion 	Lack/cost of computers Cost (without expansion) Digital Divide (without expansion) Disabilities	Accept 'rural' for 'remoteness'	(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02b	A			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02c(i)	<ul style="list-style-type: none"> • Password / PIN / Passcode 			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02c(ii)	Any three from: <ul style="list-style-type: none"> • Image / Avatar / Photo / Video / Audio • Page design / layout / colour / theme • Personal Information / Bio / Hobbies • Status • GPS / location • Hyperlinks 	Username		(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02d	Any two from: <ul style="list-style-type: none"> • Third party payment processor (e.g. PayPal / e-cheque) • Card (bank / debit / credit) • E-voucher / Gift card • Bank transfer / Online transfer • Peer-to-peer payment (e.g. Bitcoin) 	'Direct Debit' Online banking	Accept proprietary names for 'card' (e.g. VISA)	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02e	Any two from: <ul style="list-style-type: none"> • (Sometimes) cheaper (than locally installed software) • (Work/data) backed up • Can access from anywhere with a connection • Possibility of collaborative working • No need for (on-site) support (e.g. less time to install / maintain) • Automatically updates • Less/no local storage required 	Free	Locally installed software can also be free	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02f	Any two from: <ul style="list-style-type: none"> • Add more features/add-ons/bundles/compatibility (to locally installed version) • Provide a hosted version • Provide a free/cheaper version with reduced features • Provide online storage • Reduce price / special offers • Provide online support • Buy hosted application providers' company 			(2)

Question 3

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03a	Any one from: <ul style="list-style-type: none"> • RSI (e.g. neck strain / back ache) • Headaches • Eyestrain /eyesight • Effects of radiation 		Effects on health related to eyes must be related to 'strain' / vision/sight.	(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03b	Any three from: <ul style="list-style-type: none"> • Image refresh rate • Brightness / Contrast • Document Holder • Tilt / angle / height • Avoid glare • Distance of monitor from eyes • Resolution • Add a screen filter 			(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03c(i)	C			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03c(ii)	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03d	<p>Any two from:</p> <ul style="list-style-type: none"> • Switch off when not in use (e.g. Eco-mode/standby / power saving) • Set sleep auto-timer • Adjust brightness • Use an energy efficient screen / bulb 		Accept 'Turn off rather than leave in stand-by mode'	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03e	An explanation to include three from: <ul style="list-style-type: none"> • Making it more engaging/fun (1) • Use of activity (<i>Drawing/Painting, Voting, Drag/Drop activity, Virtual Keyboard, Virtual Instrument</i>) (1) • Improve the learning (1) • Supports students with different learning styles (1) • Helps to explain/reinforce lesson content.(1) • Collaboration (1) 	'games'		(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03f	Any two from: <ul style="list-style-type: none"> • Use a larger screen • Braille display • Adapted keyboard • Use magnifier • (Change) screen resolution • Speech recognition / text to speak / voice over • Increase system/OS font size • Change screen colour (scheme)/contrast/brightness • Increase cursor size 	Use zoom	A mark may be awarded for: "(change) accessibility options" only if a mark has not been awarded for something from the bottom group	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03g	Any three from: <ul style="list-style-type: none"> • Boolean (+/-, And/Not/Or) • Date (recent first) • Specify results type (images/text) • Location • Speech marks (around a phrase) 	Keywords Advanced search Filter Use a phrase (without stating 'speech marks' Apostrophes		(3)

Question 4

Question Number	Answer	Do not accept	Additional Guidance	Mark														
Q04a	<p>A description to include linked responses from:</p> <table border="1"> <thead> <tr> <th>Way in which VLE used</th> <th>How enhances learning</th> </tr> </thead> <tbody> <tr> <td>Feedback to / monitor students / track progress</td> <td>Supporting 'assessment for learning'.</td> </tr> <tr> <td>Set up student groups</td> <td>to tailor courses to students' individual needs</td> </tr> <tr> <td>Teachers can share/Students can access: work/resources/links</td> <td>so students can work more flexibly (anywhere/anytime) / independently</td> </tr> <tr> <td>Provides a safe online environment</td> <td>to enable students to get feedback from others without being at risk</td> </tr> <tr> <td>Students can share documents / communicate with others</td> <td>to facilitate collaborative working / support/help</td> </tr> <tr> <td>Parental access</td> <td>increases (parental) support</td> </tr> </tbody> </table>	Way in which VLE used	How enhances learning	Feedback to / monitor students / track progress	Supporting 'assessment for learning'.	Set up student groups	to tailor courses to students' individual needs	Teachers can share/Students can access: work/resources/links	so students can work more flexibly (anywhere/anytime) / independently	Provides a safe online environment	to enable students to get feedback from others without being at risk	Students can share documents / communicate with others	to facilitate collaborative working / support/help	Parental access	increases (parental) support		<p>If two statements are given from the same column, award 1 mark max.</p> <p>A valid response, linking one statement from each column, is required to gain both marks.</p>	(2)
Way in which VLE used	How enhances learning																	
Feedback to / monitor students / track progress	Supporting 'assessment for learning'.																	
Set up student groups	to tailor courses to students' individual needs																	
Teachers can share/Students can access: work/resources/links	so students can work more flexibly (anywhere/anytime) / independently																	
Provides a safe online environment	to enable students to get feedback from others without being at risk																	
Students can share documents / communicate with others	to facilitate collaborative working / support/help																	
Parental access	increases (parental) support																	

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04b	An explanation to include three from: To improve security (1) preventing/checking for spam / (automated) scripts (e.g. sign-ups /DOS attacks) (1) ensuring the 'user' is human / not software/code/[ro]bot (1) only humans can interpret the 'challenge test' / (bots) cannot interpret/read (1)			(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04c	D			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04d	Any two from: Don't: 1. Disclose your password / don't use other's accounts 2. Violate copyright laws/plagiarism 3. Use inappropriate language 4. Send anonymous messages 5. Engage in cyberbullying 6. Pretend to be someone else 7. Access/download/upload inappropriate sites/material 8. Install software/virus 9. Don't use personal online accounts 10. Use for anything other than school work 11. Consequences of breach / Must report issues / Signed agreement	Copyright (without expansion)		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04e	<p>A description to include four from:</p> <ul style="list-style-type: none"> • Feature[s] (up to 2 marks) that allow: • How (one given feature) facilitates communication or collaboration (1) that helps students to: • Plan/edit/combine/manage/feedback (1) on work/tasks that are: • Shared [with others] (1) <p>Examples of features: Use chat / IM / video conferencing / file management / Calendars / Announcements</p>		<p>Can gain 4 marks from describing the use of two different features that enable collaboration. Mark from MP2 must be from linked part of response awarded from MP1.</p>	(4)

Question Number	Indicative Content
Q04f QWC (i-iii)	<p>Indicative content for a discussion on whether the widespread use of the internet allows people to operate safely</p> <p>The internet acts as a 'backbone' for many services (email, www, ftp, gaming, VoIP, broadcast, mobile data, apps)</p> <p>+ve</p> <p>It is easier to track criminal activity through 'digital footprints'</p> <p>People could become more resilient through their interaction with and exposure to a wider range of people/ideas</p> <p>Support is readily available for those that suffer from those with bad intentions</p> <p>Communities help to moderate activity</p> <p>-ve</p> <p>People have many accounts that are stored on many devices and servers that use the backbone, therefore passwords are often stored on many different servers.</p> <p>Multiple passwords for different services are difficult to remember, so people often use just one. This is more risky as provides just one key to many stores of personal data.</p> <p>Widespread use means that many types of people use the internet, including those with bad intentions.</p> <p>The nature of the wide distribution of services means that it is easier for those with bad intentions to misuse data</p> <p>Resultant threats to data that exist (viruses etc.)</p> <p>Physical threats (online grooming, cyber-bullying) that are caused by the way in which some users misuse the internet.</p> <p>Anonymity afforded by the internet.</p>

	Level	Mark	Descriptor
		0	No rewardable content
	Level 1	1-2	Candidates will produce brief responses, making a limited number of simple statements , probably with a limited reference to the topic.
Candidates' responses will be general with little or no development.			
They have used everyday language but their response lacks clarity and organisation . Spelling, punctuation and the rules of grammar are used with limited accuracy .			
	Level 2	3-4	Candidate's responses will be mostly accurate and will include a number of relevant points .
Candidates will have developed some of the points that they have made.			
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	The candidate will produce a factually accurate response that includes a range of relevant points.
Candidates will have developed many of the points in context .			
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
Q05a	D			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05b	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05c(i)	An explanation to include: <ul style="list-style-type: none">• Phone/he can use the network/service (1), (which) operate on different frequencies (1).		Award mark for responses that imply: 'he couldn't otherwise use'	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05c(ii)	<p>A description to include 1 mark for: Use WiFi / USB / Bluetooth (1) or to connect to a hotspot (1)</p> <p>and 1 mark for: to use email / IM / VoIP / social spaces / video call (1)</p>	3G (etc.)	Accept proprietary names e.g. Viber for 'VoIP' e.g. Twitter for 'social spaces'	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05d	<p>An explanation to include one of:</p> <ul style="list-style-type: none"> • Faster access to storage / the photos load quicker (1) Because there is no delay (1) caused by (low) bandwidth / (high) latency (1) • Cheaper (1) because data does not have to be transferred (1) using up mobile data allowances / requiring a (data) contract (1) <p>OR up to two marks for an explanation that includes:</p> <ul style="list-style-type: none"> • Data does not have to be entrusted to a third party (1) whose storage is out of the students' control (1) <p>OR allow one mark for answers relating to:</p> <ul style="list-style-type: none"> • can access phone storage / can view photographs without a phone signal / access to the internet (1) 		An explanation requires linked responses for maximum marks. Individual statements score 1 marks max.	(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
<p>Q05e</p>	<p>Description to include:</p> <p>People of different genders may/may not have different personal interests/preferences (1) [required feature] (1) that provides [particular functionality] (1)</p> <p>Example answer A: (As the source indicates,) more women like to regularly play games on their mobile phone (1) so they will choose a mobile phone with a fast graphics processor (1) to improve display quality (1)</p> <p>Example answer B: (A person's gender does not affect their choice of mobile phone because) all genders have an equal interest in the use of social media (1) and will require WiFi connectivity (1) to access the internet (1)</p>	<p>Colour (as a required feature).</p> <p>Examples of differences related to types of game.</p>	<p>A linked description is required for maximum marks.</p> <p>Example answer A is based on the source material given in the question.</p>	<p>(3)</p>

Question Number	Indicative Content	
Q05f QWC (i-iii)	Students should discuss the impact of new uses of information technologies on people’s daily lives by using this <i>indicative</i> content:	
	Impact:	Example of uses of tech:
	6.1. security issues that arise when information is transmitted and stored digitally	Chip and PIN / Biometrics
	6.2. privacy issues associated with the use of ICT	GPS/Cookies
	6.3. ways in which ICT can be used to monitor individuals’ movements and communications	RFID/GPS
	6.4. health and safety issues that arise from individuals’ use of ICT	Wireless control / wearable tech / gesture control / Wireless charging
	6.5. the impact on society of the widespread use of networks and the ability of individuals to access networks anywhere	4G / WiFi / Mobile digital devices / ‘The internet of things’
	6.6. legislation relating to the use of ICT, including copyright and data protection	DRM
	6.7. the causes and implications of unequal access to ICT (locally, globally)	Mobile broadband / Speech recognition / accessible interfaces
	6.8. safe and responsible practice when using ICT	Possible risk to privacy through lack of care when using social networks or similar
6.9. sustainability issues and ways of minimising/mitigating the environmental impact of ICT.	Renewable technologies / increased storage	

	Level	Mark	Descriptor
		0	No rewardable content
	Level 1	1-2	Candidates will produce brief responses, making a limited number of simple statements , probably with a limited reference to the topic.
Candidates' responses will be general with little or no development.			
They have used everyday language but their response lacks clarity and organisation . Spelling, punctuation and the rules of grammar are used with limited accuracy .			
	Level 2	3-4	Candidate's responses will be mostly accurate and will include a number of relevant points .
Candidates will have developed some of the points that they have made.			
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	The candidate will produce a factually accurate response that includes a range of relevant points.
Candidates will have developed many of the points in context .			
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 .			

