



Pearson

Mark Scheme (Results)

Summer 2017

Pearson Edexcel GCSE in Information
and Communication Technology
(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)	Smart TV C			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01a(ii)	Smart TV D			(1)

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

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01b	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01c	Any one from: 1. WiFi 2. Ethernet / LAN / 10/100 / 10/100/1000 / Gigabit / Cat 5e / Cat 5 / Cat 6 3. Powerline			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01d	Any two from: 1. Don't have to wait (for all content to be downloaded) 2. Doesn't store a copy of the file (permanently) 3. Can watch live broadcasts/content 4. You can watch downloaded content offline 5. Streaming 'buffers'/'lags' when watching 6. Quality depends on connectivity	Quicker (without expansion)	Accept the reverse (ways downloading is different from streaming).	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01e	Any two from: 1. Blog (e.g. Blogger) 2. Vlog (e.g. YouTube) 3. Social media / social network / microblog (e.g. Facebook/Twitter) 4. User generated reference sites (Wiki/Forum/Social bookmarking) (e.g. Wikipedia/Stack Exchange/Del.icio.us) 5. Chatroom/Group chat (e.g. WhatsApp/Skype)	Facetime Direct Message (DM / PM)		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01f	Any three from: 1. Third party payment processor (e.g. Skrill) 2. Cryptocurrency (e.g. Bitcoin) 3. Gift card /voucher codes / coupons / e-cheque 4. Debit/credit/bank card 5. Direct debit/Standing order 6. Bank transfer	Online banking Digital Wallet (e.g. Android Pay) Promo codes	Accept proprietary names	(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01g	<p>An explanation to include:</p> <ol style="list-style-type: none"> 1. More portable (1) because not (physically) restrained / restricted (1) 2. Fewer health and safety risks (1) because no trailing cables (1) 3. Quicker/easier to set up (initially) (1) because cables do not have to be laid / chased into walls (etc.) (1) 4. Cheaper (1) as no cables to buy on top of router (1) 5. Supports more types of device (e.g. tablet/smartphone) (1) as some do not have wired connections (1) 	<p>'No cables' / 'no wires' (without expansion)</p> <p>Quicker/easier to connect</p>	<p>A linked response is required for two marks.</p> <p>Accept 'longer range' for more portable</p>	(2)

Question 2

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02a	Any two from: <ol style="list-style-type: none"> 1. Cloud 2. Network Attached Storage (NAS) 3. Memory Stick 4. USB/Pen drive 5. SD (Card) / Memory card 6. (Internal) hard drive 	'USB' on its own		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02b(i)	<p>Award 1 mark for demonstrating knowledge that 1GB = 1024MB (accept 1000MB)</p> <p>Award 1 mark for showing a method that involves dividing the total storage by the size of a single photo OR correct answer (8192 or 8000)</p> <p>Accept alternative method for calculating maximum number of photos that can be stored.</p>		<p>Example response: 1 GB = 1024 MB (allow 1000 MB) (1)</p> <p>Total storage = 1024 MB x 16 Size of single photo = 2 MB Number of photos = total storage ÷ 2 (1)</p> <p>Allow follow through.</p>	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02b(ii)	Any one from: 1. Resolution 2. File type 3. Bit depth / colour depth / number of colours 4. Dimensions 5. Metadata (e.g. geotagging) 6. Change HD to SD Accept 'quality' for 'resolution' Accept 'size' for 'dimensions'	'Colour' (on its own)		(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02c	C			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02d(i)	<p>Any one explanation from:</p> <ol style="list-style-type: none"> 1. Can't remove (if changed mind / make mistake) (1) as cannot retrieve emails once sent (1) 2. Have to spend time / have knowledge (1) to set up email client (1) 3. Can't tag/comment (1) to give interactivity (1) 4. Takes a long time (1) to type in each recipient's address (1) 5. It reduces privacy (1) because emails are not always secure / could be hacked (1) 6. Number of photos / quality of photo may be limited (1) due to restrictions on file/attachment size (1) 	References to 'takes a long time' for mark point 4, unless related to entering email addresses.	Linked response is required for two marks	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02e(ii)	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02f(i)	D			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02f(ii)	Any one from: 1. Like 2. Comment 3. Reply 4. Poke 5. Private/direct message 6. IM 7. Live video (e.g. Facebook Live) /video call (e.g. Hangouts) 8. Post	'Video' (on its own) Tagging / tag	Accept proprietary names for video calls providing it is part of a social network.	(1)

Question 3

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03a(i)	C			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03a(ii)	<p>Any two from:</p> <ol style="list-style-type: none"> 1. Share workload / others can help 2. More people to check the work 3. Share expertise/ideas/resources 4. (May) take less time 5. Work can be broken down into sub-tasks 6. Can work on a document at the same time <p>Accept 'quicker' for mark point 4</p>			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03(a)(iii)	An explanation to include any two limitations caused by: <ol style="list-style-type: none"> 1. Coordination of people 2. Planning/deciding processes 3. Reaching agreement on different ideas 4. More stages of editing/versions/footage 5. Discussion / distractions 			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03b	Any three from: <ol style="list-style-type: none"> 1. (Touch) screen 2. GPS 3. Sensors (e.g. Accelerometer) 4. Microphone 5. Speakers / Headphone port 6. Camera 7. Connectivity (e.g. WiFi, NFC, USB) 8. Applications / apps / software 		Allow 'button' (as buttons use a sensor)	(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03c	<p>A description to include three from:</p> <ol style="list-style-type: none"> 1) Pair/connect/link the devices (1) 2) using wireless/wired connection (1) 3) to share the smartphone's mobile broadband/data (1) 4) using the smartphone as a router/hotspot (1) 		<p>Accept 3G/4G etc. for 'mobile broadband'</p> <p>Accept WiFi/Bluetooth etc. for 'wireless connection'</p> <p>Accept USB etc. for 'wired connection'</p>	(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03d	<p>Any two from:</p> <ol style="list-style-type: none"> 1. Fingerprint (scanner) 2. Voice recognition 3. Facial recognition 4. Pattern (lock) 5. PIN / passcode 6. Two factor authentication 7. Iris / retina / eye recognition <p>Allow 'biometric' if no example of biometrics already awarded.</p>		<p>Allow proprietary names (e.g. TouchID)</p>	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03e(i)	<p>One explanation from:</p> <ol style="list-style-type: none"> 1. Developer is responsible for quality/errors (1) and provides updates/maintenance/support (1) 2. Source code is not freely available / changeable (1) making it harder for hackers / harder to find/exploit vulnerabilities (e.g. hide a virus in code)(1) 3. Proprietary software often has more dedicated support services (1) that can assist with technical problems (1). 		<p>A linked response is required for 2 marks.</p> <p>Accept reverse responses i.e. disadvantages of Open Source software</p>	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03e(ii)	C			(1)

Question 4

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04a(i)	C			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04a(ii)	An explanation to include: 1. Greater data allowance limit (1) as 'on demand' TV/streaming uses a lot of data / so more can be streamed / it will last longer (1) 2. NextNet's allowance is smaller / if they go over [it] (1) they will be charged / capped (1)			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04b	Any two from: 1. (High) cost / (Low) affordability 2. Remoteness 3. Lack of skills/understanding 4. Lack of infrastructure/connectivity 5. Political restrictions 6. Cultural/religious restrictions 7. Disabilities	'Lack of device' without reason 'Digital divide' without expansion	Accept 'lack of parental permission' against mark point 6.	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04c	A description to include: To store video/audio/image files (1) that can be accessed/played (by connected devices) (1)			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04d	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04e(i)	A description to include: Spyware can track/obtain data/information/keystrokes (1) and send it to a third party (1) Accept 'view' for 'track'			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04e(ii)	Any two from: 1. Hackers 2. Viruses/malware/ransomware 3. Phishing 4. Pharming	Spyware		(2)

Question Number	Answer
Q04 f QWC (i-iii)	<p>Indicative content for an argument to support the view that the internet has a positive effect on socialising:</p> <ol style="list-style-type: none"> 1. Lots of devices are internet-enabled so can socialise on the move and 24/7 365. 2. Can have face-to-face communication with people far away (using video calling). 3. Can speak to lots of people at once (e.g. using VoIP and IM). 4. Devices have social integration (Twitter on TV). 5. Online gaming provides new ways of socialising, encourages collaboration and improves communication skills. 6. Social features help improve interaction and provide richer communication. 7. Can share multimedia. 8. Can find/meet new friends based on shared interests. 9. Safer to meet friends online than in some real-world locations. 10. Can use technology to help organise real world social life. 11. Can increase confidence / overcome social anxiety. 12. Some people feel more comfortable if not face-to-face (e.g. someone with a speech impediment). 13. Location based services can help meet up with friends. 14. Can limit contact to only those friends she wants to interact with. 15. Easy to report antisocial behaviour.

Level	Mark	Descriptor
	0	No rewardable content
Level 1	1-2	Candidates will identify a few superficial/generic points. Most points are not fully relevant to socialising .
		Candidates' responses will be general . May present a limited argument for or against.
		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	Candidates will describe a few key points . Most points relevant , but the link to socialising or the Internet is unclear.
		Examples will be used to support the argument.
		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	A range of points described , or a few points explained in depth . The majority of points are relevant and there is a clear link to the Internet's impact on socialising.
		Reasons are given to support the argument.
		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(i)	<p>An explanation such as:</p> <ol style="list-style-type: none"> 1. It is a secure/trusted/encrypted/safer (connection / website) (1) which protects data/information / gives customers confidence (1), customer's data is not intercepted/stolen/used maliciously (1) <p>OR</p> <ol style="list-style-type: none"> 2. It is a secure (connection / website) (1) to protect customers' data (1) as banks are responsible/may suffer from financial implications (1) <p>OR</p> <ol style="list-style-type: none"> 3. Online data is vulnerable (1) to unauthorised access (1) by hackers (1) 		<p>Linked response required for three marks</p> <p>Linked marks can be awarded from different blocks</p>	(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05a(ii)	Any two from: <ol style="list-style-type: none"> 1. Money transfers / standing orders / direct debits / bill payments 2. Product sales (savings/insurance/loans/open account etc.) 3. Check balance/statements/recent transactions 4. Order chequebooks/statements 5. Communication (chat/email) / support 		Accept 'cash' when linked to transfers etc. (but not cash withdrawals etc.).	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05a(iii)	Any one from: <ol style="list-style-type: none"> 1. Cash/cheque withdrawals/deposits 2. Meeting in person (face-to-face customer service/advice) 3. Paperwork requirements (e.g. changing signature/name). 			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05b	<p>Typical response structure: People/devices do x (1) which means that customers can do y (1) so organisations have done z (1) OR People/devices do x (1) which means organisations have done y (1) because this means organisations can do z (1)</p> <p>Example responses:</p> <p>Customers can use digital devices on the move (x) and expect to be able to interact with organisations wherever they are (y) so organisations provide access via mobile devices (z) OR Digital devices often include GPS (x) that track the location of users (y) so organisations can send them relevant information (z) OR People watch TV and use their smartphone/tablet at the same time (x) which means that they can interact with each other/about programme content (y) media organisations incorporate social media functionality (z) OR Devices can connect from anywhere (x) so customers want to control home systems remotely (y) Companies provide systems such as <i>Hive</i> from <i>British Gas</i> (z)</p>		Linked response required for max marks	(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05c	An explanation such as: Many services are online (1) and those without access (1) are disadvantaged/treated unfairly (1)		Linked response required for two or three marks. Accept examples of services. Accept (for mark points 2 and 3): those <i>with</i> access (1) are <i>advantaged</i> (1)	(3)

Question Number	Answer
Q05d QWC (i-iii)	<p>Indicative content for a discussion on the impact of the use of the Internet on how people work.</p> <p>Access to work</p> <ol style="list-style-type: none"> 1. Working from home / on the move to fit with people’s lifestyles. 2. Ability to use video conferencing (e.g. <i>Google Hangouts</i>) to avoid travelling to meetings. 3. Can work anytime, so more flexible working. 4. Extra expectations placed on workers. 5. Monitoring of work is easier by employers so added pressure to perform. 6. Distractions from social media mean some workers may not work as effectively. 7. Creation of new customer service jobs (working on social media etc.). [Allowable.] <p>Access to information</p> <ol style="list-style-type: none"> 8. Workers (doctors/teachers) can check facts on online databases, so less reliant on supervisors for this. 9. Teachers can set work for students online and can access work from home. 10. Collaboration and sharing information is more possible and team work can be emphasised. 11. Can become more isolated and lose out on face to face interactions with co-workers. 12. Communication is enhanced (using email / IM / VoIP). <p>Automation:</p> <ol style="list-style-type: none"> 13. Self-service on websites. 14. Software can be created to carry out tasks that do not need human attention. <p>Artificial intelligence</p> <ol style="list-style-type: none"> 15. Individuals can take advantage of automated online sales systems and artificial intelligence for marketing.

Level	Mark	Descriptor
	0	No rewardable content
Level 1	1-2	Candidates will identify a few key points , which are superficial/generic and not applied to working practices.
		Candidates' responses will be general .
		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	Candidates will describe a few key points . Most points relevant , but the link to working practices is not always clear .
		Most points are expanded .
		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	A range of points described , or a few points explained in depth . The majority of points are relevant and there is a clear link to working practices.
		A balanced discussion is presented.
		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 .

