



Mark Scheme (Results)

Summer 2018

Pearson Edexcel GCSE
In Information and Communication
Technology (5IT01)

Paper 01 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 Number	Answer	Do not accept	Additional Guidance	Mark
Q1(a)(i)	Laptop A			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q1(a)(ii)	Laptop A			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q1(a)(iii)	Laptop B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q1(b)	Ethernet		If either 'WiFi' or 'Bluetooth' appear in the response, then do not award the mark.	(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q1(c)	Any two from: 1. Faster / lower latency 2. More bandwidth / Higher data transfer rate 3. More reliable/stable connection / Less effect from interference 4. Longer range 5. More secure signal (harder to intercept)			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q1(d)	Any three from: 1. Battery powered / doesn't need to be plugged in (to power socket) 2. Built in input devices 3. Built in screen 4. Weigh less / lighter 5. Smaller / Thinner			(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q1(e)	Any two from: 1. Accessible from any location (can work on the move) 2. Accessible from any device 3. Data less likely to be lost (if laptop stolen/damaged) 4. User not responsible for backups / Automatically backed up 5. Less storage used on local system / more storage available for local files / apps 6. Can share data more easily 7. Can collaborate more easily 8. Increases overall storage 9. Could benefit from the host's security 10. Improves performance of local machine	'More secure' for mark point 9, without expansion.		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q1(f)	Any one from: • The data has further to travel • The data has to pass through a network/networks • The user has to carry out more actions (open browser, log in etc.).			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q1(g)	An explanation to include two linked points from : (Apps with fewer features) 1. Use less bandwidth/data 2. Use less of the host's/user's resources (storage/processing etc.) 3. Are easier to use on a mobile device (So they) 4. Will load more quickly / Can be used on a slower connection 5. Reduce the cost to the host/user 6. Increase the performance / quality of the user experience 7. Allow multiple people to use the app simultaneously	'Cheaper' for MP5 when related to the cost of the app.	Linked response required for max marks. Accept responses that relate to apps with more features and the inverse of the mark points. eg an app with more features would use more data (1) so it may take longer to load (1).	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q2(a)	D			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q2(b)(i)	Any two from: - Doesn't have to use data (allowance) - Might not be in a signal area / no Internet access required - Reduces power consumption (of mobile data connection)			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q2(b)(ii)	- They take up storage space / Less space available for apps etc. - Maps could be out of date			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q2(c)	• Blocked signal / Obstructions / Interference			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q2(d)(i)	An explanation such as: • To secure his data/account (1) from unauthorised access (1) OR • To authenticate him as the user (1) so no one else can post as him (1)			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q2(d)(ii)	Any three from: 1. Mix of upper and lowercase 2. Letters and numbers 3. Special characters 4. At least 8 characters/letters/numbers 5. Not a word linked to Mr. Harrison (e.g. not his name / date of birth) 6. Not a common/dictionary word	• Numbers (on its own) • Letters (on its own)		(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q2(e)	An explanation such as: They prevent automatic scripts (1) which cannot read/complete the tests (1) OR To prove that he is a human / not a bot (1) to prevent spam / malicious activity (1)			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q2(f)	A			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q3(a)(i)	D			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q3(a)(ii)	Any one from: (To prevent) • Eye strain • RSI • Health risks			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q3(a)(iii)	An explanation such as: It's a legal protection (1) to prevent / discourage others from stealing it (1) to increase revenue (1). Reference to a relevant Act implies 'legal protection' for MP1		Linked response required for max marks	(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q3(b)	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q3(c)	An explanation such as: To provide a warning / choice (1) about (online) data usage (1) because she could incur costs / run out of data (1)		Linked response required for max marks	(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q3(d)(i)	Change her privacy / security settings.	'settings' without expansion		(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q3(d)(ii)	Any three from: 1. Profile image / avatar 2. Bio (age, gender, etc.) / personal details 3. Hobbies / Interests 4. Design / colour scheme / cover photo 5. Profile name / user name	'add a photo / post'		(3)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q3(e)	Any two from: 1. Blogs / vlog 2. Instant messaging / chat 3. Email 4. Forums 5. Wikis / User Generated Reference Sites 6. VLEs 7. VoIP / WiFi / Video Calling 8. Online games 9. Social bookmarking		Accept proprietary names.	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q3(f)	Any one reason from: 1. Financial 2. Social 3. Religion / beliefs 4. Lack of infrastructure 5. Geographical (terrain/ remoteness) 6. Political		Do not award 'LEDCEs' or 'developing countries' etc.	(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q4(a)(i)	A			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q4(b)(i)	An explanation to include: Latency is (the delay in) time for data to be transferred (1) means [high latency] will cause actions in the game not to be synchronised (1) Example response: The time it takes for the data to get to the server (1) means there will be a delay in the response to his commands / the game will lag (1)			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q4(b)(ii)	Any two from: 1. Reduce the distance (between network devices) 2. Use a wired connection 3. Alter his computer's settings (registry) 4. Change the router 5. Reduce devices / traffic on the network 6. Change the WiFi channel on the router	'people' for mark point 5		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q4(c)	A description such as: The software / game / system matches (1) data stored in a database (1)	Answers that refer to 'he matches'		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q4(d)	D			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q4(e)(i)	Any two from: • Quicker • Doesn't have to travel • Linked to profile / can download again (onto multiple devices / if changes device) • Always in stock / available (to buy)	Responses relating to price	Accept: More buyer rights (1)	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q4(e)(ii)	Any two from: • No packaging • Can't get advice from shop employees • Can't sell it on • Can't share / swap it with friends		Accept reverse points if qualified as such: e.g. Can sell games on if bought in the high street.	(2)

Question Number	Answer
Q4(f) QWC (i-iii)	Indicative content for a discussion on the benefits and drawbacks of using a smartphone rather than a console for gaming: Benefits: 1. Portability (weight / size etc.) means games can be played anywhere 2. GPS and camera / location based gaming (<i>Pokémon Go</i>) is a possibility 3. Other features can create unique experiences (messaging / touch screen etc.) 4. Cheaper, all-in-one multifunctional solution 5. Can use smartphone as a controller for other devices 6. Don't need to plug in additional speakers Drawbacks 1. Small screen (could lead to health risks) 2. Limited storage means lower quality graphics can be stored 3. Limited processor speed reduces experience 4. Speakers are not high quality 5. Controls are limited to possibilities of a touch screen interface 6. Touch screen means that part of the game is obscured during play 7. Limited playing time if on battery power 8. Play interrupted by notifications / calls

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 gaming.
		Candidates' responses will be general . There may be no examples provided. May present only benefits or drawbacks.
		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 gaming is unclear.
		Examples will be used to support some of the points made. The discussion is not balanced.
		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 use of smartphones for gaming.
		Examples will be used to support most points made . A balanced discussion of advantages and disadvantages 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 .

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q5(a)	C			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q5(b)	Any two from: • Cost / cheaper / free • Not restricted by mobile phone (cellular) network reach / availability • Clearer sound			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q5(c)	An explanation to include: Two from: • Older people didn't grow up with these technologies • so, developed their communication techniques using offline technologies such as phone calls, texts and letters • therefore, they have less familiarity/experience/skill/digital literacy to make use of the smartphone features / to go online • so, require an intuitive user interface Or (More) older people may have reduced mobility / poorer eyesight (1) so require a larger keypad / screen (1) Or Older people use smartphones for calls / texts (1) and use other devices (such as PC) for going online (1)		Linked response required for max marks Accept reverse points e.g. Younger people typically more experienced in using digital devices (1) so don't require an intuitive user interface (1)	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q5(d)	C			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q5(e)(i)	Any two from: 1. Other devices / people on the network 2. Too many applications running 3. Interference 4. Obstructions 5. 'Throttling' / ISP restrictions	'Choice of ISP'		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q5(e)(ii)	A			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q5(f)	A description to include three from: It can be encrypted (1) with a key (1) that is shared with / by the intended recipient (1)	'Password' for 'key'	Do not accept statements implying 'cannot be read without key' for mark point 3. This is explaining why not describing how .	(3)

Question Number	Answer
Q5(g) QWC (i-iii)	Indicative content for a discussion on the challenges of preventing unacceptable behaviour in online communities. Preventing unacceptable behaviour can be decomposed into three strands: • Zip it (be careful what you publish) • Block it (ignore users who are abusive etc.) • Flag it (Report unacceptable behaviour) Some challenges to using these strategies are: 1. Anonymity (vs privacy) means it is harder to authenticate users (Flag it) / (Block it) 2. People don't realise the social/legal impact of what they publish online / digital footprint (Zip it) 3. Ability to have multiple accounts (Block it) 4. Online communities are available from anywhere, 24/7 (Block it) 5. Moderation of comments is expensive (staff / time etc.) (Block it) 6. Acceptable use policies are not always read / abided by (Zip it) 7. People do not act in the same way online as they do in real life / some people pretend to be different online (Zip it) 8. Online communities can self-moderate to help the site owner (Block it) 9. Concerns about repercussions (Flag it) / (Block it) 10. Quantity/volume of posts/users make it difficult to moderate (Flag it)

Level	Mark	Descriptor
	0	No rewardable content
Level 1	1-2	The response identifies some methods of prevention or identifies some challenges faced when implementing them. The response will be related to online communities.
		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	The response clearly describes one challenge faced when implementing methods of preventing unacceptable behaviour in online communities .
		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 response clearly describes two or more challenges faced when implementing methods of preventing unacceptable behaviour in online communities .
		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 .