Mark Scheme (Results)

Summer 2016

Pearson Edexcel GCSE
in ICT (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 1

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01a(i)	Media Station A			**(1)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01a(ii)	Media Station D			**(1)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01a(iii)	Media Station C			**(1)**

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

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01c	Any **one** from: • Router • WiFi Adapter		Accept 'Dongle' for WiFi Adapter	**(1)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01d(i)	C			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01d(ii)	An explanation to include: More people / more demand for data/bandwidth (1) which has to be shared / bandwidth available for video is reduced (1)	Latency	Examples of responses: Limited bandwidth is available (1) meaning there is more demand for WiFi (1) Data has to be shared (1) meaning there is reduced data available to represent video (1)	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01e	Any **two** from: • Password / passcode • Hide SSID/Name • MAC address filtering / block devices • Disable WiFi • Set up timed access Allow: Only have Ethernet connections / Do not provide network points			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01f	Any **two** from: • Television / TV • Projector • Monitor • Earphones / Headphones • Speakers • Keyboard • Remote (control) / Controller			**(2)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01g	(A legal) protection (for the creator/owner) of work / data			**(1)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q01h	Any **one** from: • Enable filtering / safe search settings • Only allow certain sites • Black list / white list • Parental control/browser settings			**(1)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02a(i)	Any **three** from: • Smartphone • Laptop / netbook • Tablet • Desktop / PC • Smartwatch • Smartglasses • Portable media player • (Smart) television • Games console • Single Board Computer (SBC) • PDA	Phone / mobile phone	Allow proprietary names	**(3)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02a(ii)	Any **one** from: IMAP IMAP4 Internet Mail Access Protocol Interim Mail Access Protocol		Accept 'IMAPn' (where 'n' is a number between 1 and 4).	**(1)**

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

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02c	An explanation to include **two** from: Some people don't have access to / want to access the internet/WiFi/email/digital devices (1) because they can't afford it/not digitally literate etc. (accept any reasonable cause) (1) and might (otherwise) be excluded/not be informed about the visit (1) Allow: If nursery's web host fails (1) an alternative can be provided (1)		Alternative wording: To make sure people get the information (1) if they don't have access to the page/internet (1)	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02d(i)	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02d(ii)	Any **one** from: • Cheaper (than a merchant account)/ reduced costs • Increases customer trust • Nursery will have buyers' contact details • No need to design their own payment system • Reduces work for the nursery / Third Party Payment Processor checks the payment details	'easier' Responses related to cash payments		**(1)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02d(iii)	Any **three** from: • CCV • (Cardholder's) name • Card number • Expiry date • Start date • Credit/Debit • Card Type (VISA/MasterCard/AMEX etc.) Accept: • Account number • Verified by Visa password	 Password (without expansion)	Accept variants for CCV (including 'last three digits')	 **(3)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02e(i)	C			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q02e(ii)	Any **one** from: • Needs to be close to reader • Limited to small amounts/transactions			(1)

Question 3

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03a	An explanation such as: 1. Users can comment/like (the photos) (1), raising their profile / increasing interest (1) 2. Less data is used (sharing them) (1) reducing costs (1) 3. Incorrect email addresses cannot be used (1) due to typos made by nursery staff / parents changing email address (1) 4. Photoblogging allows one central location to be accessed (1) so no need to send them to each recipient (1) 5. Can set to auto upload the photographs (1) saving time (1) 6. Some people do not use email (1) so would not see the photos (1) 7. Quicker to view the photos (1) because the thumbnails are displayed first (1) 8. Some email services restrict the size of attachments (1) so may have to send in batches / may be bounced back (1)		Linked responses required for 2 marks. Links can be made between mark points Answers related to disadvantage of using email should be accepted.	**(2)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03b	A description to include: • Sharing/Tagging/Commenting (1) could mean others/strangers see images of them. (1) OR • GPS (tagging) / identifiable features in the photo (1) could mean others/strangers know their location. (1)		Identifiable features should include landmarks, nursery logo etc. Linked responses must be from same mark point.	**(2)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03c	Any **two** from: • Remove the GPS 'tag' / metadata / location (data) (from the images) • Ask (parents') permission • Blur children's faces / location features • Choose photos where children/features are unrecognisable/absent • Setting up privacy/accounts/passwords for the blog. Allow: • Don't put children's names on the photos.			**(2)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03d(i)	B			(1)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03d(ii)	Any **two** from: • Browser • Operating System • IP Address • Location • If/when visited page previously • Pages visited previously • Links followed (next page visited)			(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03d(iii)	Any **one** from: • Analyse which pages/photographs that are clicked/visited are popular/not. • Help decide which photos to display • Targeted marketing (e.g. Launching an app to send to smartphone users) • Personalisation (e.g. Mobile version of page, accessibility settings, including user details in welcome message)		Candidates may give examples of personalisation or targeted marketing.	**(1)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03e	A description to include **three** from: Download (1) (the photos) to his laptop (1) use USB/Firewire/Bluetooth/media card (1) to transfer/send/insert [to Laura's tablet] (1)			**(3)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q03f	Any **three** positive and/or negative implications related to: • Shopping (e.g. may miss out on 'online only' deals / better 'personal'/face-to-face experience when shopping in the high street) • Health (e.g. can't see health information online / less time spent in front of a screen reduces health risks such as eye strain) • Money management (e.g. more convenient to bank online / not at risk from hackers) • Travel / Leisure (e.g. no access to online booking systems so may miss out on tickets) • Work (e.g. can't use professional networks) • Education (e.g. reduced access to multimedia learning materials / less distraction from studies) • Communication (e.g. likely to socialise more in person, can't socialise online using email/social media) • Entertainment (e.g. can't catch up on TV shows, limits choice/less variety of programmes, can't download/stream films). • News and Information (e.g. can't access latest stories)	General responses that are restates of the topic such as: 'earning', 'learn' (which can be done without access to the internet)	Candidates may gain marks by providing examples from the same mark point.	**(3)**

Question 4

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

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04b	A description to include: They could use WiFi (1) with VoIP / Video call (1) Use WiFi (1) calls/calling/VoLTE (1)		Accept proprietary names for VoIP e.g. Skype 'calls/calling' can only be awarded if linked with 'WiFi'	(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04c(i)	(Hyper)linked/Connected/A network of (1) documents/pages/content/(web)sites (1)	'Data'/'Information' for documents/pages/content		(2)

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04c(ii)	A statement to include **two** from: A connected (1) network (1) **of** devices/computers (1)	Servers/devices/computers (on their own)	Award 2 marks for: 'a network of networks' (connected networks)	(2)

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

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04e	Any **one** from: • Operating System • Apps • Storage (e.g. SD card) • Energy efficiency/consumption • Security features • Camera • Audio output/speakers • Screen			**(1)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q04f	A description to include **three** from: Devices are connected (1), using connectivity type (1), reason (1) sensors used (1)		Example of response: Devices can be connected (1) using wireless technology (1), to record movement/biometrics (1) using sensors (e.g. GPS/accelerometers/ heart rate monitor) (1) 'movement' = 'steps' etc. 'biometrics' = 'heart rate'	**(3)**

Question Number	Answer
Q04 g **QWC** **(i-iii)**	Indicative content for a discussion about environmental issues related to the use of digital devices: +ve Paper versus e-paper for books, emails vs letters (fuel costs for delivery and use of paper), downloads versus physical products, reduction of the need to travel (to meetings / to shops) through the use of video conferencing / VoIP, online workspaces. Recycling of old devices for use in less economically developed areas. 'Smart home' devices, Digital devices used to monitor pollution levels / increase communication about 'green' issues (e.g. wildlife 'counting' apps, social networking used to spread agenda of environmental 'activist' groups, etc) -ve Materials / consuming resources for construction of devices and peripherals, (e-waste) toxins / landfill, power requirements / battery life / efficiency, servers' cooling systems, renewable sources, destroying habitat for (wired) infrastructure

Level	Mark	Descriptor
	0	No rewardable content
Level 1	**1-2**	Candidates will **identify** one or more **key points**, which are **superficial/generic** and **not applied** to the use of digital devices, or the environment.
		Candidates' responses will be **general**. **Only one viewpoint** considered.
		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** one or more **key points**, some of which are **relevant** to the environment, but the **link** to digital devices **is not always clear**.
		More than one viewpoint will be considered, but **unbalanced**, with one viewpoint over-emphasised.
		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 with examples**, or **a few points explained with reasons**. Most points are **relevant to the environment** and there is a **clear link** to the use of digital devices.
		Both viewpoints are considered with 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**.

Question 5

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05a	Any **two** from: • Liking • Sharing • Tagging • Commenting		Accept 'Paid promotion'	**(2)**

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

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05c	Any **two** from: • Report • Block • Delete/Remove • Ignore			**(2)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05d	A description of a process to include **three** from: Request change (1) Receive something (1) Verify identity (1) Make change / update / reset (1) (only in the context of a process by which this happens)		Linked process required for max marks Example response: Use forgot password link (1) to receive an email (1) with a link to a temporary password / sms with a code (1) that needs to be changed/entered (1)	**(3)**

Question Number	Answer	Do not accept	Additional Guidance	Mark
Q05e	Explanation to include **two** from: - Being distracted (1) impacts on children's health and safety / learning (1) - It is unprofessional (1) leading to negative impact on business / poor reputation of the nursery (1) - Possible impact on staff health (1) for which the employer is responsible (1) - The content may be visible (1) to children/parents/colleagues (1)		Linked response required for max marks	**(4)**

Question Number	Answer
Q05f **QWC** **(i-iii)**	Indicative content for a discussion about the impact of the widespread use of the internet on the availability, accuracy and control of online information about an individual. **Availability** An organisation can learn about their candidates and employees to protect the organisation's reputation. The linked, searchable nature of online information leads to information being readily accessible. 'Digital footprint' – information is permanently recorded. Individuals can use social and specialist business networks to promote themselves or their views. **Accuracy** Others could post misleading information about an individual without them knowing. People's opinions/habits change, but an old opinion / action might still exist online. **Control** Possibility for others to share (with and without permission) leading to unintended audiences. Makes us more considerate of what we post online. Personal information should not be available to others – impacts on individuals right to privacy. Difficult to get archived/legacy data/information removed. Data Protection Act means individuals have a level of control over what data is held about them and safeguards for organisations. **Impact (+ve / -ve) on:** Employment opportunities, reputation, relationships

Level	Mark	Descriptor
	0	No rewardable content
Level 1	1-2	Candidates will **identify a few key points related to availability, accuracy and/or control of online information**.
		Candidates' responses will be **general**. Point(s) are generic and may not be developed.
		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 related to availability, accuracy and/or control of online information**.
		Key points are **relevant to the widespread use of the internet**.
		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 key points related to availability, accuracy and/or control of online information are described with examples**, or one or more **points explained with reasons**.
		The points will be relevant to the **impact** of the **widespread use of the internet**.
		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**.