Mark Scheme (Results)

June 2011

International GCSE

Information Communication
Technology
Paper 01

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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	Mark
1	C	1

Question Number	Answer	Mark
2	B	1

Question Number	Answer	Mark
3	D	1

Question Number	Answer	Mark
4	C	1

Question Number	Answer	Mark
5	A	1

Question Number	Answer	Mark
6	A	1

Question Number	Answer	Mark
7	C	1

Question Number	Answer	Mark
8	D	1

Question Number	Answer	Mark
9	B	1

Question Number	Answer	Mark
10	B	1

Question Number	Answer	Mark
11	C	1

Question Number	Answer	Mark
12	D	1

Question Number	Answer	Mark
13	A	1

Question Number	Answer	Mark
14	C	1

Question Number	Answer	Mark
15	B	1

Question Number	Answer	Mark
16	D	1

Question Number	Answer				Mark
17(a)		Input	Output	Processing	
	Mouse	X			
	Speaker		X		
	Tracker ball	X			
	Graphics card			X	
	Monitor		X		5

Question Number	Answer	Do not accept	Additional Guidance	Mark
17 (b) (i)	Diagram 1 – Optical Mark Recognition / OM Reader / OM scanner (1) Diagram 2 – OCR / Optical Character Recognition / OC Reader / OC scanner (1)	Mark reader Character reader		2

Question Number	Answer	Do not accept	Additional Guidance	Mark
17 (b) (ii)	Any two points from: • Faster to input data (1) • More accurate data entry / no human error (1) • Capture and entry is a single process (1) • No need to pay staff to enter data (1)			2

Question Number	Answer	Additional Guidance	Mark

17 (c)	Desktop
	1 ⊞ My Documents
	2 ⊟ My Computer
	3 ⊞ Local Disk (C:)
	4 ⊞ DVD/CD-RW Drive (D:)
	5 ⊞ KINGSTON (E:)
	6 ⊞ Removable Disk (F:)
	7 ⊞ Control Panel
	8 ⊟ Shared Documents
	9 ⊞ Shared Music
	10 ⊞ Shared Pictures
	11 ⊞ Shared Video
	12 ⊞ Examinations Officer's Docum
	13 ⊞ Madame Snaith's Documents
	14 ⊞ tech's Documents
	   ⊞ My Network Places
	   Recycle Bin
	
	Folder
	1, 8, 12, 13, 14
	
	Subfolder
	9, 10, 11
	
	Fixed storage device
	3
	
	Removable storage device
	5
			3

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

Question Number	Answer	Do not accept	Additional Guidance	Mark
18 (b)	Gigabyte 1 000 000 000 bytes approx 1 073 741 824 bytes 1 000 megabytes/Mb approx 1 024 megabytes/Mb			1

Question Number	Answer	Do not accept	Additional Guidance	Mark
18 (c)	Application (software)	Types of application software eg word processing		1

Question Number	Answer	Do not accept	Additional Guidance	Mark
18 (d)(i)	Two points from: • Wireless communication / wireless connection /WiFi (1) • short range / up to 10 metres (1) • radio waves (1) • unlicensed / anyone can set up connection (1) • relatively slow compared to other connections (1)			2

Question Number	Answer	Do not accept	Additional Guidance	Mark
18 (d)(ii)	Connecting Bluetooth enabled device to a laptop (1) e.g. any **one** of • photos from phone to laptop / laptop to phone (1) • files from phone to laptop / laptop to phone (1) • files/photos from one laptop to another (1) • synchronise (1)		In each instance it could be a laptop to any other Bluetooth enabled device	1

Question Number	Answer	Do not accept	Additional Guidance	Mark
18 (e) (i)	Any **three** features from: Webcam (1) Battery Life (1) Weight (1) (Screen) Size (1) Operating system (1) No Bluetooth (1)			3

Question Number	Answer		Do not accept	Additional Guidance	Mark
18 (e) (ii)	**Feature**	**Reason**		**No award for explanation without correct feature** **Allow explanation and feature in (ii)** **Explanation must match feature in (i)**	
	Webcam	B has a webcam (A doesn't) (1) Enhanced VOIP/video messaging (1) Useful for video /telephone conference (1)			
	Battery Life	Longer in B (1) Won't need charging as often (1) No power available on the train (1)			
	Weight	B is lighter (1) better for carrying (1)			
	(Screen) Size	Smaller in B (1) Indicative of dimensions (1) Better in confined areas (1)			
	Operating system	Windows 7 is: More stable (1) More secure (1) Smaller (1) Has better support (1) More familiar (1)			
	No Bluetooth	More secure (1) Other people cannot access laptop (1)			6

Question Number	Answer	Do not accept	Additional Guidance	Mark
19 (a)	Any one of • Router (1) • Gateway (1) • Modem (1)			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
19 (b)	URL / IP address (for ISP) / phone number (for dial up)			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
19 (c)	Accept any **two** points from: Method • Network key / WEP / WPA / WPA2 (1) Description • stop people accessing his router/gateway/modem (1) • encryption system (1) • password access system (1)			**2**

Question Number	Answer		Do not accept	Additional Guidance	Mark
19 (d)	**Risk**	**Action**		Must have risk to gain mark for each action	
	Hackers (1)	Firewall (1) Passwords (1) Encryption (1) Install operating system security updates (1) Change default settings on routers (1)		Accept "files might be stolen" or similar for hackers	
	Identity theft / phishing / spyware (1)	Anti-Adware / spyware / phishing (1) Don't reply to suspicious emails (1)			
	Viruses (1)	Install anti virus software (1) Update regularly (1) Treat unknown files / email attachments with caution (1) Use a browser add-on to block known attack sites (1)		Accept types of virus as a risk e.g. Trojan	6

Question Number	Answer		Do not accept	Additional Guidance	Mark
19 (e)	**Benefit**	**Explanation**		**Allow benefit and explanation to be reversed**	
	Wired generally faster/bigger bandwidth than wireless (1)	Better performance when playing games (1)			
	Wired more reliable/stable (1)	Less risk of interference (from other devices) (1)			
	Wired not affected by walls etc (1)	Can be further away from the router (1)			
	Wired simple to configure (1)	Very easy for beginners to set up (1)			**4**

Question Number	Answer	Do not accept	Additional Guidance	Mark
20 (a)	Browser (1)	Brand names eg Internet Explorer, Google		**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
20 (b) (i)	Any three points from • No need to leave home / travel to shops / take children shopping (1) • No queuing (1) • Online discounts / special offers / lower overheads passed to customers (1) • Available 24/7 (1) • Know instantly if in stock (1) • Immediate confirmation (1) • Comparing prices with other retailers (1) • Wider range of retailers/stock available (1) • Ability to search for items (1)	Cheaper, quicker, easier without qualification		**3**

Question Number	Answer	Do not accept	Additional Guidance	Mark
20 (b) (ii)	Any three points from: • Can't try clothes on / check goods / wrong items may be sent (1) • Children's clothing sizes often inconsistent (1) • Can't judge quality (1) • Bogus websites (1) • No cash payments / you need a card or an account (1) • Have to wait for goods to be delivered / can't have the goods immediately (1) • Sales advice not available (1) • Have to pay postage / delivery charge (1)	Card Payment issues		**3**

Question Number	Answer	Do not accept	Additional Guidance	Mark
20 (c) (i)	Any two points from: • Pop ups / Ads / links on other company's sites / web ring (1) • Email (1) • Social network sites (1) • Sponsored links on search engine / search engine optimisation (1)	Online newsletter (this would be emailed or on their website Named social networking sites e.g. Facebook, YouTube etc		**2**

Question Number	Answer			Do not accept	Mark
20 (c) (ii)	**Facility**	**Company advantage**	**Customer advantage**	Online chat	
	email / contact us (1)	no need to man phones(1)	24 / 7 (1)	Repeated answers	
	FAQ / customer support pages (1)	cuts down on support staff requirement (1)	no need for phone calls (1)	Advantages for incorrect facility	
	sign ups for newsletter / special offers… (1)	gives targeted advertising (1)	receives offers, upgrade info etc. (1)		
	search facility (1)	present active pages / create specialised pages / present tailored info to client (1)	easy to find what you need (1)		
	Method for customers to post comments e.g. forum, reviews (1)	Develops good customer relationships (1) Improve customer service (1)	Provides independent comments about the goods (1)		
	Customer history (1)	Target advertising (1)	Can quickly go back to other items you have looked at (1)		
	Customer account facility (1)	More accurate entry (1) Improved security (1)	Convenience (1)		
	Size guide (1)	Improved customer service (1)	Helps select the correct size (1)		

Allow "increased business" as a company advantage for any facility but only once

Allow "improved customer experience" as a customer advantage for any facility but only once | | | | | **6** |

Question Number	Answer	Do not accept	Additional Guidance	Mark
20 (c) (iii)	Any two points from: • Data should be kept secure (1) • Data should be accurate (1) • Data should not be misused (1) • Data should be collected fairly (1) • Individuals should be able to see the data held about them (1) • Data should be held for only as long as necessary (1) • Data should only be used for the purpose for which it was collected (1) • Data must be kept up-to-date (1)			**2**

Question Number	Answer	Do not accept	Additional Guidance	Mark
21 (a)	Any three points from: • share printers / peripherals (1) • staff can upload files to share with students (1) • (files to be shared) uploaded into central area / collaborative working (1) • access from any machine / roaming profile (1) • easy to install software / software only needs to be installed on server (1) • security centrally managed (1) • backup centrally managed (1) • communicate with other workstations without using the internet / internal email (1) • simultaneous access to the internet / only one internet connection needed (1) • terminals often cheaper than stand alone machines (1)	Share software Control / monitor users – is given in question		**3**

Question Number	Answer	Do not accept	Additional Guidance	Mark
21 (b)	Access rights (1) **Accept** file or folder permissions (1) Password protection of folders/files (1)		**Allow account rights, group rights, group policy**	**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
21 (c)	Any 3 of: • communicate with other workstations (via intranet) (1) Students • can collect homework (1) • can submit homework (1) • notice boards (1) • administration e.g. absence recording, pupils' marks (1) Teachers • central area for accessing student data (1) • notice boards (1) • central area for administration documents (1) • central area for educational information (1) • can post homework for students (1)			**3**

Question Number	Answer	Do not accept	Additional Guidance	Mark
21 (d) (i)	Any 1 from: • Do not interfere with cables / switches / plugs (1) • Keep food and drink away (1) • Don't overload sockets (1)			**1**

Question Number	Answer	Do not accept	Additional Guidance	Mark
21 (d) (ii)	Any 2 from • Adjust seats to suit self / proper posture – correct height / back support (1) • Adjust monitor – correct angle / not reflecting light / contrast (1) • Use wrist rests / other ergonomic equipment provided / use wrist / hand exercises (1) • Focus on a distant object to avoid eye strain	Take regular breaks (given in question)		**2**

Question Number	Answer
21 (e)	*Indicative content for a discussion on the factors to be considered when gathering and using information from the internet.* When researching: • Should consider that not all information found on the internet is accurate • check the 'reliability' and validity of the author / use reliable websites • Compare information from several sources • use websites recommended by teachers / other reliable people / trusted organisations • recognise that some information may be biased • consider relevance of the information provided When using the information (e.g. in a report): • copyright rules must be considered • must get permission to use the information • acknowledge source • avoid plagiarism

Level	Mark	Descriptor
	0	No rewardable content
Level 1	1 - 2	The candidate will have produced brief responses. Only a limited number of points will have been considered. Very limited understanding will be shown.
Level 2	3 - 4	The candidate will have provided some examples for both researching and producing their report.
Level 3	5 - 6	The discussion will show a clear understanding of the issues. The candidate will have provided clear examples for both researching and producing their report.

Question Number	Answer	Do not accept	Additional Guidance	Mark
22 (a)(i)	Any 3 points: • improved communication with customers / suppliers (1) • improved internal communication (1) • wider access to markets (1) • new methods of production (1) • reduction in staff as IT takes over jobs (1) • flexible working (home working and hot-desking) for staff reduces costs of office space / can select staff from wider area / may be able to hire cheaper staff (1) • Improved image / brand awareness (1)	Cheaper, quicker, easier without qualification	Change in staff levels must be qualified	**3**

Question Number	Answer	Do not accept	Additional Guidance	Mark
22 (a)(ii)	Any point from • increased problems of data security (1) • more competition from organisations from wider area (1) • increased training (1) • flexible working for staff –more difficult to monitor / difficult to team build (1)			**1**

Question Number	Answer

22 (b)	Indicative content for a discussion on the factors contributing to the widening gap between 'information rich' and 'information poor'.
	• Lack of communication networks in some countries / regions restricts access
	• Cost of technology prohibitive for some societies / individuals
	• Link between economic development and ICT use
	• Access to digital technologies provides:
	    • access to more information about a wide range of topics
	    • better education / training leading to better jobs (gap reduction)
	    • access to up-to-date information e.g. news
	    • ability to share ideas with like minded people
	• Those without access can't take advantage and fall further behind.
	• Impact on different groups (rich, poor, level of education, age, location)

Level	Mark	Descriptor
	0	No rewardable content
Level 1	1 - 2	The candidate will have provided some examples. The discussion will have little reference to widening gap. There may be a reference to different countries / groups.
Level 2	3 - 4	The candidate will have provided a number of examples and described some contributing factors. The candidate will have given some explanation for underlying causes and a reference to different countries or groups.
Level 3	5 - 6	A well balanced discussion. The candidate will have discussed a number of examples and described some contributing factors. The candidate will have described the underlying causes behind the lack of technology. The candidate will have considered different countries or groups.

Ofqual

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