

GCSE INFORMATION AND COMMUNICATION TECHNOLOGY

45201/ Unit 1 Systems and applications in ICT
Mark scheme

4520
June 2014

Version/Stage: V0.1 Final

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this Mark Scheme are available from aqa.org.uk

To Examiners:

1. **When to award '0' (zero) when inputting marks on CMI+:**

A mark of 0 should be awarded where a candidate has attempted a question but failed to write anything credit worthy.

Insert a hyphen when a candidate has not attempted a question, so that eventually the Principal Examiner will be able to distinguish between the two (unattempted/nothing credit worthy) in any statistics.

2. This mark scheme contains the correct responses which we believe that candidates are most likely to give. Other valid responses are possible to some questions and should be credited. Examiners should refer to a Team Leader off-mark scheme responses that they believe are creditworthy.

Section A

1	(a)		B [Joystick] C [Keyboard]	Correct answer only Correct answer only	2
1	(b)		A [Bar-code reader]	Correct answer only	1
1	(c)		C [Laser printer]	Correct answer only	1
1	(d)		B [Speakers]	Correct answer only	1
1	(e)		C [USB memory stick]	Correct answer only	1
1	(f)		B [ROM]	Correct answer only	1
1	(g)		C [Netbook]	Correct answer only	1
1	(h)		B [Central Processing Unit]	Correct answer only	1

2	(a)		<p>Bullets</p> <p>Line Spacing</p>	<p>Correct answer only</p> <p>Correct answer only</p> <p>2</p>
2	(b)		<ul style="list-style-type: none"> • Colour – background/ shaded/pattern (not just colour or colour text) • Increase/decrease/change text size / text size made bigger/smaller • WordArt • Font style/ text made bold/italic/underline (NB – not just the word ‘font’ e.g. ‘font style’ is needed) • Numbered points/lists • Centre (text) • Picture/clipart/graphic/image/logo/watermark • Tables • Borders/Border Art • Columns/Tab <p>Naming feature is enough apart from the first four</p> <p style="text-align: right;">Any 2 x 1 mark</p>	<p>2</p>
2	(c)		<p>Spell check – just named or described</p> <p>Grammar check – just named or described</p> <p>Proof read – just named or described (for spelling or grammar)</p> <p>NOT Verification unless it is clearly that it is a visual check</p> <p style="text-align: right;">Any 2 x 1 mark</p>	<p>2</p>

3	(a)	(i)	Qz6&iP23M?jn49	Correct answer only	1
3	(a)	(ii)	<p>Longest Uses/contains/mixture/variety/combination of letters (upper/lower Case) /numbers/characters Hardest/not easy to guess/not easy to guess/not personal data – names etc. Dependant on 3(a)(i) being correct.</p> <p style="text-align: right;">Any 1 x 1 mark</p>		1
3	(b)	(i)	<ul style="list-style-type: none"> • Unsolicited/unwanted/not needed/not asked for/ unknown sender/stranger • Sent – bulk/large amounts /advertisement/prizes/ money/promote service <p>Both ideas needed for mark</p>		1
3	(b)	(ii)	<p>To get you to send/give/steal money To get/obtain/steal personal information/details/commit fraud or theft To get access to your password/secure details/bank account number details /credit card details(or similar details)</p> <p style="text-align: right;">Any 1 x 1 mark</p>		1
3	(c)		Films downloaded from the Internet	Correct answer only	1
3	(d)		<p>Use meaningful/appropriate/suitable/relevant (file) names Create/make/keep organised/put work into folders Use meaningful/appropriate names for folders Delete unwanted files/folders Use version numbers (of files) NOT just ‘better names’</p> <p style="text-align: right;">Any 2 x 1 mark</p>		2

4	(a)	(i)	C [Podcast]	Correct answer only	1
4	(a)	(ii)	D [Web log]	Correct answer only	1
4	(a)	(iii)	D [Wiki]	Correct answer only	1
4	(b)		<ul style="list-style-type: none"> • A program/software/website • It collects/organises/puts into order (priority) • Content from all over the Internet. • To locate something, enter/type in a query/search on (key)word(s)/text/terms about what you want to find/looking for • The engine provides links to content/web pages that match/selection of related websites <p style="text-align: right;">Any 2 x 1 mark</p>		2
4	(c)		<p>Issues</p> <ul style="list-style-type: none"> • May be out-of-date/old • May be biased/give an opinion which may not be based on fact • Not written by experts/anyone can write it/put information on • Not monitored • No peer review • Mirror-image/fake/look alike websites • (Some sites) can be added to/changed by anyone <p>Not just 'accurate' / 'not correct'/'wrong'/'reliable'(in stem)</p> <p style="text-align: right;">Any 2 x 1 mark</p>		2
5	(a)		C WAN	Correct answer only	1
5	(b)		B Design	Correct answer only	1
5	(c)		D Microprocessor	Correct answer only	1
5	(d)		D Mail merging	Correct answer only	1

5	(e)		B Data logging	Correct answer only	1
6	(a)	(i)	<p>Can choose any suitable/best for them time/day for the appointment/when they are available/avoid clashes</p> <p>Lets them look what day/time is available for the appointment</p> <p>Quicker/faster get confirmation of appointments</p> <p>No/less chance of having to change the appointment time/date</p> <p>More likely to remember to record/put in diary the appointment</p> <p>NOT just faster/quicker</p> <p style="text-align: right;">Any 2 x 1 mark</p>		2
6	(a)	(ii)	<p>No PC</p> <p>Not computer literate/difficulty using the system</p> <p>Internet/hardware issues</p> <p style="text-align: right;">Any 1 x 1 mark</p>		1
6	(b)		<p>Icon/Icon size</p> <p>Menu/submenu</p> <p>Pointer</p> <p>Buttons</p> <p>Hyperlinks/hotspots</p> <p>Window/window operations [open/close, min/max, restore, resize]</p> <p>Toolbar</p> <p>Scrollbar</p> <p>Dialogue box</p> <p>Drag and drop</p> <p style="text-align: right;">Any 3 x 1 mark</p>		3

7	(a)		<p>Sat Nav</p> <p>Plan/Plot your route</p> <p>Get from one place to another/destination/location</p> <p>Get directions (on route)</p> <p>Find your way when lost/in unfamiliar place/area</p> <p>Use as a 'digital map'</p> <p>Spot speed cameras etc. Any 1 x 1 mark</p> <p>Online bulletin boards</p> <p>Message/notice boards on websites/Internet</p> <p>Where messages/discussions/comments/opinions/points/events/issues/ideas/thoughts etc. are posted/added</p> <p>Where posted messages/discussions/comments/opinions/points/events/issues/ ideas/thoughts etc. are read</p> <p>Any 1 x 1 mark</p>	2
7	(b)		<p>cc sends a copy of the email to disclosed recipients (people can see/you want people to see who is getting a copy of the email) 1 mark</p> <p>bcc sends a copy of the email to undisclosed recipients (people cannot see/you don't want people to see who is getting a copy of the email) 1 mark</p> <p>Not just defining the abbreviations i.e. not just 'carbon copy'.</p>	2
7	(c)	(i)	<p>Key elements:</p> <ul style="list-style-type: none"> • Web site(s) • Sign up to • Update status • allow users to create/build online profiles/accounts, • Share/post/upload information, e.g. pictures/images, videos, music clips, etc. • Chat online/chatroom • Can be related to a shared interest • Choose who can see your post/ private messaging /blocking 	3

			<ul style="list-style-type: none"> • Stay in touch with people/build social relationships between members/socialise/communicate with each other <p style="text-align: center;">Any 3 x 1 mark</p>	
--	--	--	--	--

7	(c)	(ii)	<ul style="list-style-type: none"> • ‘Stranger danger’ / pretend to be other people /fake profiles/fake accounts • Grooming • Cyber-bullying • Paedophiles • Hacker/virus issues • Too much time spent on sites instead of..... • Site being looked at by prospective employers etc. • Potential of photos/media etc being owned by the site/ever really taken down (will probably be out there somewhere) • Instant messaging <p>NOT just named examples like Facebook</p> <p style="text-align: right;">Any 2 x 1 mark</p>	2
---	-----	------	---	---

8	(a)	(i)	Data must be kept secure	Correct answer only	1
---	-----	-----	--------------------------	----------------------------	---

8	(a)	(ii)	<ul style="list-style-type: none"> • Obtain/Process data fairly/lawfully • Data not kept longer than necessary/destroy data when no longer needed/ than needed • Use/Process only for specified/registered purpose • Process within the rights of the data subjects/inform data subject of data held on them/prevent processing of their personal data for marketing purposes/compensation if they can prove non compliance with the Act. • Keep up-to-date/accurate • Data must not be excessive for the purpose/adequate and relevant • Data must not be transferred to countries outside European Economic Area/EEA (accept EU or EEC) / (unless the country has adequate protection for individuals in place.) <p>(NB accept UK/or just sent ‘without adequate protection in place’ if clear)</p> <p>NOT ‘Data must be kept secure’</p> <p style="text-align: right;">Any 2 x 1 mark</p>	2
---	-----	------	--	---

8	(b)	(i)	Hacking was made illegal	Correct answer only	1
8	(b)	(ii)	Fine(d) Prison/sentence(d)/jail/arrest/prosecuted	Any 1 x 1 mark	1
8	(b)	(iii)	Software/program/code Replicates itself To access/damage/delete/corrupt/destroy data/files on a computer [system]	Any 2 x 1 mark	2
8	(c)		To stop unauthorised people/hackers/criminals/strangers/ random people/none employees/not just anyone/nobody else/ only people allowed (or similar) accessing the system/stealing information Can limit access to certain parts of the system to certain users Audit trail [trace you logged on and did what]	Any 1 x 1 mark	1
8	(d)		Lock/bars on doors/windows Key pads/swipe cards Locks/clamps on computers themselves Alarms/alarm system on doors/windows/rooms/areas Access codes (biometrics) Locate room above ground level Surveillance (security cameras/CCTV)	Any 2 x 1 mark	2
9	(a)		Don't have to pay/cheaper than paying/employing/hiring someone/anyone/web designer/expert/a company Don't have to pay someone Usually faster to get updated/update at any time Pupils/students may get real life experience of/teach them/learn to make building websites/web design NB – not just faster or cheaper without qualification	Any 1 x 1 mark	1

9	(b)		Playlist	Correct answer only	1
9	(c)	(i)	See/display/record/count/measure/check/show how many/the amount people visit/view/access/go on/looked the website/webpage/site See how popular the website is	Any 1 x 1 mark	1
9	(c)	(ii)	(Text/link when clicked on) goes to/sends you to/takes you to/directs you to/navigates you to another part/page/place of the website/new/another website	Any 1 x 1 mark	1
9	(c)	(iii)	Scrolling text/banner Grab people's attention/advertise	Any 1 x 1 mark	1
10	(a)		Software that; Allows user/end user to carry out a task e.g. database, spreadsheet (if not clear an example should help) Allow less clear words such as purpose/function if supported by an example	Any 1 x 1 mark	1
10	(b)	(i)	(Application and associated data) held on a remote server/ cloud/not stored locally. Used without needing to be installed/downloaded On Internet/Accessed via an Internet/WAN connection	Any 2 x 1 mark	2
10	(b)	(ii)	Words in bold are to help get the key feature of the bullet point given. Advantages <ul style="list-style-type: none"> • Can be accessed from anywhere (with Internet connection) • Instant and continuous access to the latest technology you need to run your business - without the risks, costs 		2

			<ul style="list-style-type: none"> • No administrative responsibilities associated with developing and maintaining the required IT infrastructure. • Improved ability to focus resources on core business issues, rather than IT concerns. • Access to (comprehensive) security, back up, disaster recovery and support services. • Cheaper/Lower total expense because – You do not have to buy any dedicated servers, storage, backup systems, security infrastructure, worry about upgrades and hire experienced (thus expensive) IT professionals. • Not take up/use local storage <p>NB – not just faster or cheaper without qualification</p> <p style="text-align: right;">Any 1 x 1 mark</p> <p>Disadvantages</p> <ul style="list-style-type: none"> • Costs money for the service • Security – the company’s most valuable information asset: customer, prices, orders and products are not protected behind your own firewall, but rather accessible through the Internet. As the data travels back and forth from your hosting provider to your users, there is no way for you to monitor what happens. If your hosting provider is hacked, your data is at risk. • Customisation – hosted system providers run multiple instances of different companies on a single installation. That makes customisation somewhat more difficult, as the code running the core system is shared between instances. • Internet connectivity dependence - when all your information and business processes are located outside of your network, reliable Internet connectivity becomes vital. If your link is down, your business is down. <p>NB – not just faster or cheaper without qualification</p> <p style="text-align: right;">Any 1 x 1 mark</p>	
--	--	--	--	--

10	(c)	(i)	<p>It is more likely to be free or purchased at a low cost</p> <p style="text-align: right;">Correct answer only</p> <p>Users have the ability to access the source code and modify it</p> <p style="text-align: right;">Correct answer only</p>	2
----	-----	-----	--	---

10	(c)	(ii)	<ul style="list-style-type: none"> • Some tend to be less reliable/little money spent on development • Often no quality support (usually through forums etc) • Some not compatible with Windows and other apps (hence increased installation costs) 	1
----	-----	------	---	---

			<ul style="list-style-type: none"> No guarantee of regular updates <p style="text-align: right;">Any 1 x 1 mark</p>	
--	--	--	---	--

Section B

11	(a)		Number/numerical/numeric/integer	1
----	-----	--	----------------------------------	---

11	(b)	(i)	Wrap	Correct Answer Only	1
----	-----	-----	------	----------------------------	---

11	(b)	(ii)	Bold Colour/shading Borders Merge NOT alignment/highlight/wrap	Any 1 x 1 mark	1
----	-----	------	---	-----------------------	---

11	(c)	(i)	=SUM(C3:C6)	Correct Answer Only	1
----	-----	-----	-------------	----------------------------	---

11	(c)	(ii)	=IF(C3>75,25,0)	Correct Answer Only	1
----	-----	------	-----------------	----------------------------	---

11	(c)	(iii)	Checks C3/attendance (or D3G3) is greater than/bigger than/over 75 25 (points) is returned/given(get)/awarded 25 (points) given for attendance 25 (points) put in C8 NB - (allow adds here as the result will be 25) Possible variation The 'If' statement will determine which one of two answers is used.	<p style="text-align: right;">1 mark</p> <p style="text-align: right;">1 mark</p> <p style="text-align: right;">1 mark</p>	2
----	-----	-------	---	---	---

11	(d)		Firstly read the whole answer . Next decide which mark band's description best matches the answer given. Finally [if needed], is the answer given, at the top or the bottom of	5
----	-----	--	---	---

		the mark range No rewardable material 0 marks	
		Lower mark range 1 – 2 marks One mark is gained where there are simple even vague statements possibly just naming devices or media for backup or just describing safety (no device named). Two marks would be gained – where a device is named with limited description but an advantage or disadvantage is given.	
		Mid mark range 3 – 4 marks There is evidence of some understanding shown through the use of mostly correct examples that describe advantage(s) and disadvantage(s) relating to each ‘devices and media’ (that could reasonably be used to backup data with limited reference to safe). At least two examples given are supported by some relevant description/reasoning.	
		High mark 5 marks There is evidence of a clear understanding shown through the use of correct examples that clearly describe advantage(s) and disadvantage(s) relating to each ‘devices and media’ that could be used with some reference to safely backing up data. At least two examples given are well supported by reasoned arguments.	
		Examples of devices (appropriate associate media is allowable too) <ul style="list-style-type: none"> • CD-R /DVD-R/DVD-W (drives) • Floppy disc (drive) • Hard disc (drive) • Solid state drive/USB drive / pen drive • External hard drives • Online/Cloud storage Any sensible/suitable suggestion	

12	(a)	(i)	7	Correct Answer Only	1
----	-----	-----	---	----------------------------	---

12	(a)	(ii)	9	Correct Answer Only	1
----	-----	------	---	----------------------------	---

12	(b)		Children - allow with ‘any’ additional information/word /letters /symbols if the Category field - Children can clearly be seen. Provided that is the only one shown.		1
----	-----	--	--	--	---

12	(c)	(i)	Range check Presence check	Correct Answers Only	2
----	-----	-----	-------------------------------	-----------------------------	---

12	(c)	(ii)	Under/overcharging or overpriced/underpriced customers Harm the reputation of the company Loss of business/profits (if customers put off by poor service) Angry customers that complain Possible legal issues	Any 2 x 1 mark	2
----	-----	------	---	-----------------------	---

12	(d)		<p>Firstly read the whole answer.</p> <p>Next decide which mark band's description best matches the answer given.</p> <p>Finally (if needed), is the answer given, at the top or the bottom of the mark range</p> <p>No rewardable material 0 marks</p>		5
			<p>Lower mark range 1 – 2 marks</p> <p>There are simple even vague statements relating reasons for linking data tables.</p> <p>This mark could also be awarded for a 3-4 mark quality answer but only one example is considered.</p>		
			<p>Mid mark range 3 – 4 marks</p> <p>There is evidence of some understanding shown through the use of mostly correct examples that describe advantages relating to linking data tables.</p> <p>At least two examples given are supported by some relevant description/reasoning.</p>		
			<p>High mark 5 marks</p> <p>There is evidence of a clear understanding shown through the use of correct examples that clearly describe advantages relating to linking data tables.</p> <p>At least two examples given are well supported by reasoned arguments.</p>		
			<p>Examples</p> <ul style="list-style-type: none"> • Have a relational database • Data only stored once – reduces/avoids data 		

		<p>redundancy/duplication</p> <ul style="list-style-type: none"> • Relationships 1 to many or many to 1. • Quicker/Easier to make data changes/delete/add/edit (no multiple record changes needed) (all records in other tables having a link to that entry will show the change) (avoids inconsistent records) • Quicker/Easier to make data format changes • Complex queries (SQL) • Better security - different levels of access for users for each table if needed. (some people can only see one/some tables) • Better suited to be adapted to meet needs in the future • Limited reduced storage space used 	
--	--	---	--

13	(a)	<p>Tablet</p> <p>Laptop</p> <p style="text-align: right;">Correct Answer Only</p>	2
----	-----	--	---

13	(b)	<p>A location/area</p> <p>Where WiFi enabled devices can</p> <p>Connect to the Internet/network/WAN</p> <p>Uses a router</p> <p style="text-align: right;">Any 1 x 1 mark</p>	2
----	-----	--	---

13	(c)	<p>Bluetooth</p> <p>Zigbee</p> <p>Wimax</p> <p>HiperLAN</p> <p>Cellular (2G, 3G, 4G)</p> <p>IrDa</p> <p style="text-align: right;">Any 1 x 1 mark</p>	1
----	-----	--	---

13	(d)	<p>Access the Internet from any room within range</p> <p>No need to have wires running round the house</p> <p style="text-align: right;">Correct Answers Only</p>	2
----	-----	--	---

13	(e)	<p>Firstly read the whole answer.</p> <p>Next decide which mark band's description best matches the answer given.</p> <p>Finally [if needed], is the answer given, at the top or the bottom of the mark range</p> <p>No rewardable material 0 marks</p>	5
----	-----	---	---

	<p>Lower mark range 1 – 2 marks</p> <p>There are simple even vague statements relating to entertainment systems.</p> <p>This mark could also be awarded for a 3-4 mark quality answer but only one example is considered.</p>	
	<p>Mid mark range 3 – 4 marks</p> <p>There is evidence of some understanding shown through the use of mostly correct examples that describe the use of entertainment systems in the home.</p> <p>At least two examples given are supported by some relevant description/reasoning.</p>	
	<p>High mark 5 marks</p> <p>There is evidence of a clear understanding shown through the use of correct examples that clearly describe the use of entertainment systems in the home.</p> <p>At least two examples given are well supported by reasoned arguments.</p>	
	<p>Examples</p> <ul style="list-style-type: none"> • On-demand TV - pay per view • Digital TV - pause, record • Download games/movies – not physically buying DVDs • Music streaming • Online gaming – multiplayer • Digital radio [artist/track details viewed] • Internet radio – vast choice • Games consoles – advanced graphics/realism 	

Section C

14	<p>Read the full answer first before you start to mark it.</p> <p>No rewardable material</p> <p>Level 1 Lower mark range</p> <p>Subject Criterion Context Simple statements/examples about at least one possible advantage or disadvantages of using video conferencing. These are supported by no comments or very limited comments.</p> <p>Lots of just these limited statements, still remain in this mark range.</p>	12				
	<table border="1" style="width: 100%;"> <tr> <td style="width: 80%;"></td> <td style="text-align: center;">0 marks</td> </tr> <tr> <td style="width: 80%;"></td> <td style="text-align: center;">1-3 marks</td> </tr> </table>		0 marks		1-3 marks	
	0 marks					
	1-3 marks					

<p>This mark could also be awarded for a 4-6 mark quality answer but only one point is considered.</p> <p>Quality of Written Communication The candidate has used a form and style of writing which has many deficiencies. Ideas are not often clearly expressed. Sentences and paragraphs are often not well-connected or at times bullet points may have been used. Specialist vocabulary has been used inappropriately or not at all. Much of the text is legible and some of the meaning is clear. There are many errors of spelling, punctuation and grammar but it should still be possible to understand much of the response.</p>		
<p>Level 2 Lower mid mark range</p> <p>Subject Criterion Context There is evidence of some understanding shown by considering sensible issues that each briefly look at possible advantages and disadvantages of using video conferencing. At the lower end of this mark range least two points need to be considered including advantages or disadvantages. At the higher end of this mark range least three points need to be considered including advantages and disadvantages. Examples are supported by limited descriptions.</p> <p>Quality of Written Communication The candidate has used a form and style of writing which has some deficiencies. Ideas are not always clearly expressed. Sentences and paragraphs may not be well-connected or at times bullet points may have been used. Specialist vocabulary has been used on a limited number of occasions. Most of the text is legible and some of the meaning is clear. There are some errors of spelling, punctuation and grammar but it should still be possible to understand most of the response.</p>	4-6 marks	
<p>Level 3 Higher mid mark range</p> <p>Subject Criterion Context There is evidence of a more developed understanding shown by describing sensible issues that each look at possible advantages and disadvantages of using video conferencing with very limited reference to working collaboratively. At least five points need to be considered, including advantages and disadvantages. Examples are supported by descriptions.</p> <p>Quality of Written Communication The candidate has mostly used a form and style of writing</p>	7-9 marks	

<p>appropriate to purpose and has expressed some complex ideas reasonably clearly and fluently. The candidate has usually used well linked sentences and paragraphs. Specialist vocabulary has been used on a number of occasions but not always appropriately. Text is legible and most of the meaning is clear. There are occasional errors of spelling, punctuation and grammar.</p>		
<p>Level 4 High mark range</p> <p>Subject Criterion Context There is evidence of a clear understanding shown by clearly discussing sensible issues that each look at possible advantages and disadvantages of using video conferencing with some reference to working collaboratively. At least five points need to be considered, including advantages and disadvantages. Examples are well supported by reasoned arguments.</p> <p>Quality of Written Communication The candidate has selected and used a form and style of writing appropriate to purpose and has expressed complex ideas clearly and fluently. Sentences and paragraphs follow on from one another clearly and coherently. Specialist vocabulary has been used appropriately throughout. Text is legible and the meaning is clear. There are few if any errors of spelling, punctuation and grammar.</p>	<p>10-12 marks</p>	
<p>Quality of Written Communication Skills The candidate's quality of written communication skills will be one of the factors influencing the actual mark an examiner will give within a level of response. The quality of written communication skills associated with each level is indicated above</p>		
<p>Examples of possible advantages [relating to video conferencing/collaborative] Can see colleagues virtually 'face to face' Communication is interactive/real time Can show objects/papers etc. need during the project Can see presentations/displays by colleagues Can share the work/ideas Workers could have different skill sets</p> <p>Examples of possible disadvantages [relating to video conferencing/collaborative] Possible time difference issues Meetings need to be scheduled and synchronised – timetable</p>		

	issues More likely to have technical issues Cost		
--	--	--	--

15	<p>Read the full answer first before you start to mark it.</p> <p>No rewardable material</p> <p>Level 1 Lower mark range</p> <p>Subject Criterion Context At the lower end examples are stated. These are supported by no comments or very limited comments.</p> <p>Or there are limited advantages or disadvantages with no reference to a named method.</p> <p>At the higher end at least one example is supported by brief advantages or disadvantages.</p> <p>Lots of just these limited statements, still remain in this mark range.</p> <p>Quality of Written Communication The candidate has used a form and style of writing which has many deficiencies. Ideas are not often clearly expressed. Sentences and paragraphs are often not well-connected or at times bullet points may have been used. Specialist vocabulary has been used inappropriately or not at all. Much of the text is legible and some of the meaning is clear. There are many errors of spelling, punctuation and grammar but it should still be possible to understand much of the response.</p> <p>Level 2 Lower mid mark range</p> <p>Subject Criterion Context There is evidence of some understanding shown by considering sensible issues that each briefly looks at possible advantages and disadvantages of different ICT data collection methods. At the lower end of this mark range at least one method needs to be considered including advantages and disadvantages. At the higher end of this mark range at least two methods need to be considered including advantages and disadvantages.</p> <p>Examples are supported by limited descriptions.</p> <p>Quality of Written Communication The candidate has used a form and style of writing which has some deficiencies. Ideas are not always clearly expressed. Sentences and paragraphs may not be well-connected or at times bullet points may have been used. Specialist vocabulary has been used on a limited number of occasions.</p>	12
	<p>0 marks</p> <p>1-3 marks</p> <p>4-6 marks</p>	

<p>Most of the text is legible and some of the meaning is clear. There are some errors of spelling, punctuation and grammar but it should still be possible to understand most of the response.</p>	
<p>Level 3 Higher mid mark range</p> <p>Subject Criterion Context There is evidence of a more developed understanding shown by describing sensible issues that each look at possible advantages and disadvantages of different ICT data collection methods. At least three methods need to be considered, including advantages and disadvantages across the methods. Examples are supported by descriptions.</p> <p>Quality of Written Communication The candidate has mostly used a form and style of writing appropriate to purpose and has expressed some complex ideas reasonably clearly and fluently. The candidate has usually used well linked sentences and paragraphs. Specialist vocabulary has been used on a number of occasions but not always appropriately. Text is legible and most of the meaning is clear. There are occasional errors of spelling, punctuation and grammar.</p>	<p>7-9 marks</p>
<p>Level 4 High mark range</p> <p>Subject Criterion Context There is evidence of a clear understanding shown by clearly discussing sensible issues that each look at possible advantages and disadvantages of different ICT data collection methods. At least three methods need to be considered, including advantages and disadvantages for each. Examples are well supported by reasoned arguments.</p> <p>Quality of Written Communication The candidate has selected and used a form and style of writing appropriate to purpose and has expressed complex ideas clearly and fluently. Sentences and paragraphs follow on from one another clearly and coherently. Specialist vocabulary has been used appropriately throughout. Text is legible and the meaning is clear. There are few if any errors of spelling, punctuation and grammar.</p>	<p>10-12 marks</p>
<p>Quality of Written Communication Skills The candidate's quality of written communication skills will be one of the factors influencing the actual mark an examiner will give within a level of response. The quality of written communication skills associated with each level is indicated above</p>	

<p>Examples of possible methods of data collection</p> <p>Data collection methods relating to ICT (Feasibility study)</p> <p>Interviews Questionnaires Observations Looking at existing documentation</p> <p>Manual data capture</p> <p>Keyboard/mouse/touch screen Data capture form/questionnaire</p> <p>Automatic data capture for example</p> <p>Bar code reader Biometrics Chip and pin Magnetic stripe cards OMR/OCR/ICR Online forms Questionnaires RFID tags Voice recognition</p>		
--	--	--

UMS conversion calculator www.aqa.org.uk/umsconversion