



GCSE MARKING SCHEME

**INFORMATION AND COMMUNICATIONS
TECHNOLOGY**

SUMMER 2012

INTRODUCTION

The marking schemes which follow were those used by WJEC for the Summer 2012 examination in GCSE INFORMATION AND COMMUNICATIONS TECHNOLOGY. They were finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conferences were held shortly after the papers were taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conferences was to ensure that the marking schemes were interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conferences, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about these marking schemes.

UNIT 1

Qu	Answer	Mark																										
A bracketed response in the mark scheme () indicates preferred but not essential wording																												
1(a) Auto	<p>One mark for each correct ticked box</p> <table border="1" style="display: inline-table; vertical-align: top;"> <tr><td style="text-align: center;">1</td><td style="text-align: center;">✓</td></tr> <tr><td style="text-align: center;">2</td><td></td></tr> <tr><td style="text-align: center;">3</td><td></td></tr> <tr><td style="text-align: center;">4</td><td style="text-align: center;">✓</td></tr> <tr><td style="text-align: center;">5</td><td style="text-align: center;">✓</td></tr> <tr><td style="text-align: center;">6</td><td></td></tr> <tr><td style="text-align: center;">7</td><td style="text-align: center;">✓</td></tr> <tr><td style="text-align: center;">8</td><td style="text-align: center;">✓</td></tr> </table> <div style="border: 1px solid black; padding: 5px; margin-left: 100px; width: fit-content;"> <p><i>If tick all boxes no marks</i> <i>If tick seven boxes then max one mark</i> <i>If tick six boxes then max two marks</i></p> </div>	1	✓	2		3		4	✓	5	✓	6		7	✓	8	✓	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>										
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2																												
3																												
4	✓																											
5	✓																											
6																												
7	✓																											
8	✓																											
1(b)	<p>Spell checker / spellcheck NOT Autocorrect, word checker, dictionary Do NOT accept if more than one response, e.g. 'spellchecker (and) thesaurus'</p>	1																										
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7		8	✓																									
9	✓	10																										
3(b)	<p>To send a copy of an email without other recipients seeing it (Blind Carbon Copy alone no marks)</p>	1																										
3(c)	<p>Up to three marks for any of:</p> <ul style="list-style-type: none"> • Computer viruses • Spam • Phishing • Hacking • Cyber bullying • Attachments too large <p>Must be use of email not general hardware problems using a computer e.g. loss of internet connection or computer breaks down. NOT people not reading emails regularly or typing the wrong email address.</p>	3																										

5(c)	<p>One mark for statement Consistency of data (1) NOT less errors Easier to search (1) Faster to enter data (1) NOT faster on it's own Saves memory / storage space (1) NOT space by itself NOT save space Security issue if qualified (1) a further mark for expansion e.g. typing in one letter rather than the whole word. (1) NOT quicker to write on standardised data (1) Typing one letter rather than the whole word there is less likelihood of making a mistake. (2)</p>	2
5(d)	<p>One mark for each correct field and search criteria x 2 One mark if both fields are correct but search criteria incorrect One mark if both search criteria are correct but fields are incorrect Search criteria must be spelt correctly but ignore quotation marks</p> <p>Event = Backstroke Gender = F</p>	2
5(e) Auto	1233	1
5(f)	<p>One mark each for identifying two process advantages from:</p> <ul style="list-style-type: none"> • Faster/easier to update • Faster/easier to search • Paper based data / handwriting can be harder to read • Saves on storage space • Can use mail merge • Easier to generate backups • Variety of output reports / easy to produce reports • Validation to reduce data entry errors • Can only access with correct (user name and) password <p>NOT more secure</p>	2
6(a)	Verification	1
6(b)	<p><i>Do NOT accept anything which could be done by phone</i></p> <p>One mark each for three of:</p> <ul style="list-style-type: none"> • No double-booking of seats • Can check availability before booking • Easier for disabled who don't have to leave home to book • Can choose a seat • Can save on travel costs (must be qualified) e.g. of going to Travel Agent to book • Can save on travel time (must be qualified) e.g. of going to Travel Agent to book • Can use comparison websites / check/compare prices • Can do it 24/7 / can book when the shops are shut • Cheaper to book flights online • Special offers / It may be cheaper to book flights and accommodation separately • Links to other peoples comments about accommodation and flights • Less errors due to entering data yourself 	3
6(c)	<p>One mark for reason why from:</p> <ul style="list-style-type: none"> • Typed in wrong date • No month has 34 days 	1
	<p>One mark for prevention method from:</p> <ul style="list-style-type: none"> • Range check • Drop list for day 	1

7(a)	<p>One mark for describing a <i>distinctly different</i> example. Must describe how the sensor is used, e.g.</p> <table border="1"> <tr> <td>(i) Temperature sensor</td> <td>To switch boiler/heater in the heating system on or off at particular temperature, To measure boiling point of a liquid in a science experiment</td> </tr> <tr> <td>(ii) Pressure sensor</td> <td>Measuring depth of liquid in a science lesson, Pressure pads can be placed under mats to activate a burglar alarm</td> </tr> <tr> <td>(iii) Movement sensor</td> <td>Passive infra red sensors used to turn lights on when someone approaches</td> </tr> <tr> <td>(iv) Light sensor</td> <td>Turns security light on when it gets dark, To see how light levels affect the growth of plants</td> </tr> </table> <p>Can have two examples involving security as long as they are distinctly different. Do NOT credit same example twice. Accept any valid detailed response.</p>	(i) Temperature sensor	To switch boiler/heater in the heating system on or off at particular temperature, To measure boiling point of a liquid in a science experiment	(ii) Pressure sensor	Measuring depth of liquid in a science lesson, Pressure pads can be placed under mats to activate a burglar alarm	(iii) Movement sensor	Passive infra red sensors used to turn lights on when someone approaches	(iv) Light sensor	Turns security light on when it gets dark, To see how light levels affect the growth of plants	1 1 1 1
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(iv) Light sensor	Turns security light on when it gets dark, To see how light levels affect the growth of plants									
7(b)	<p>One mark each for any three of:</p> <ul style="list-style-type: none"> • Graphs • Text • Numbers • Animation / video • Tables / spreadsheet / database • Lights <p>NB must be displayed so NOT sound</p>	1 1 1								
8(a) Auto	May	1								
8(b) Auto	A	1								
8(c)	<p>B4-F4 B4-C4-D4-E4 B4-(C4+D4+E4) Condone SUM(B4-F4) or SUM(B4-(C4+D4+E4)) Accept any alternative which works Do NOT accept F4-B4</p>	1								
8(d)	<p>NOT Income, Heating, Phone, Food as these are already in the table. One mark for each of any two suitable examples: e.g.</p> <ul style="list-style-type: none"> • Community charge • Mortgage • Savings • Gas • Electricity • Water <p>Accept any suitable answer</p>	2								
8(e)	<p>One mark for each of two different advantages from:</p> <ul style="list-style-type: none"> • Accurate calculations NOT just <i>accurate</i> • Doesn't make mistakes • Save formula and data • Can do 'what if' • Automatic recalculation • Can display graphs • Can replicate cells / standard monthly bills <p>NOT quicker NOT general advantages of using a computer</p>	2								

9(a)(i)	<p>One mark for each of any two features from:</p> <ul style="list-style-type: none"> • Simulations • Tests/quizzes • Games • Animation • Built in help files • Video • Sound/podcasts • Selection of language • Examples of interactivity 	2
9(a)(ii)	<p>One mark for each of any two descriptions from:</p> <ul style="list-style-type: none"> • To help students understand complex situations • Let students know how well they have learnt the topic / instant feedback but NOT teacher to monitor progress • Introduce fun into the learning process • To hold people's attention • Available 24/7 • No teacher required • Can work at own pace • Can access from home / flexibility of location • On screen demonstrations can be given • Customisation for pupils with learning difficulties • Cost effective if qualified 	2
9(b)	<p>One mark for each of:</p> <ul style="list-style-type: none"> • Braille keyboard • Virtual reality helmets / thought headset • Virtual reality glove • Microphone • Sip and puff pipes • Touch Sensitive devices • Foot mouse • Tracker ball / roller ball / specialist mouse balls • Joystick • Pointing device • Movement detection device <p>Do NOT accept Webcam</p>	3
10(a)	<p>One mark each for any two of:</p> <ul style="list-style-type: none"> • Smart cards / Swipe cards • Mobile devices / Bromcom • Radio • Online systems • Fingerprint • Retinal scanning • Facial recognition • PC based <p>NOT databases, spreadsheets, OMR, SIMS, VLE</p>	2

10(b)	<p>One mark each for any two of:</p> <ul style="list-style-type: none"> • Yr 9/Yr12 option choices • Timetable software • Examination entries • SEN / Special Educational Needs • Finance / Budget • Inventory • Library administration • Behaviour • Pupil progress • Pupil contact details • Locate a pupil • Spotting truancy / attendance patterns • Sending letters/newsletters to parents • Medical needs • Cafeteria administration <p>Any reasonable answer NOT anything to do with taking registers</p>	2
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11	<p>9-12 marks Candidates give a clear, coherent answer fully and accurately describing different uses, benefits and problems. They use appropriate terminology and accurate spelling, punctuation and grammar.</p> <p>5-8 marks Candidates describe some different uses, benefits and problems but responses lack clarity. There are a few errors in spelling, punctuation and grammar</p> <p>1-4 marks Candidates simply give a brief description of a few different uses, benefits and problems. The response lacks clarity and there are significant errors in spelling, punctuation and grammar.</p> <p>0 marks No valid response.</p> <p>Indicative content One mark for stating four different uses and one each for a matching different benefit and different disadvantage. Answers must cover four different uses to get full marks Max 9 marks if only three different uses covered Max 6 marks if only two different uses covered Max 3 marks if only one use covered</p> <p>EXAMPLES Benefits or disadvantages could apply to more than one use but can only be awarded once. Valid benefits or disadvantages not listed below can be credited.</p> <table border="1"> <thead> <tr> <th>Use</th> <th>Benefits</th> <th>Disadvantages</th> </tr> </thead> <tbody> <tr> <td>DVDs/watching movies</td> <td>Can watch when you want / flexibility Can watch in own room</td> <td>Couch potato syndrome Solitary activity can prevent social interaction Need storage space</td> </tr> <tr> <td>CDs/mp3 payers/listening to music</td> <td>Can listen to favourite music Navigate to favourite tracks</td> <td>Need storage space Intrusive nuisance in certain situations</td> </tr> <tr> <td>Mobile phones</td> <td>Staying in touch is easy Text, email, games, etc</td> <td>Intrusive nuisance in certain situations Can be expensive Loss of signal / no signal</td> </tr> <tr> <td>Music downloads</td> <td>Huge number of songs to select from Almost any kind of music can be found</td> <td>Music could be copied illegally Record companies close down</td> </tr> <tr> <td>Social networking</td> <td>Sites are usually free Long lost family/friends can be traced New friends can be made</td> <td>Showing photos or revealing information which may be regretted later Online bullying Grooming People may use false identities Could be addictive (only award once)</td> </tr> <tr> <td>Web cam</td> <td>Can see who you are talking to Relatives abroad can see pictures of you Remote sites can be monitored</td> <td>Could be tempted to do something foolish which you may later regret Privacy could be compromised</td> </tr> <tr> <td>Gaming</td> <td>Can learn as you play with educational games Collaborative games involve teamwork and interaction with others Games are fun</td> <td>Solitary activity can prevent social interaction Spending too much time at computer can lead to health problems, e.g. RSI Could be addictive (only award once)</td> </tr> <tr> <td>Interactive TV, 3D TV, betting, voting, dating</td> <td>Active rather than passive user of the system Improves viewing experience Number of different activities available Can use online learning</td> <td>Expensive to buy or set up Need to wear special glasses Arguments over who to vote for</td> </tr> <tr> <td>Digital photography</td> <td>Editing photos Enhancing photos Transmit photos over internet / display on social network site</td> <td>Cost of camera and software</td> </tr> <tr> <td>Researching family history</td> <td>Ease of access to data Saves time on travelling</td> <td>Cost of access with no guarantee of success</td> </tr> <tr> <td>Online shopping</td> <td>Wide range of products Search for best deals Discounts available</td> <td>Can't see/feel quality Delivery costs Security issues Returning faulty goods</td> </tr> </tbody> </table> <p>NOT email</p>	Use	Benefits	Disadvantages	DVDs/watching movies	Can watch when you want / flexibility Can watch in own room	Couch potato syndrome Solitary activity can prevent social interaction Need storage space	CDs/mp3 payers/listening to music	Can listen to favourite music Navigate to favourite tracks	Need storage space Intrusive nuisance in certain situations	Mobile phones	Staying in touch is easy Text, email, games, etc	Intrusive nuisance in certain situations Can be expensive Loss of signal / no signal	Music downloads	Huge number of songs to select from Almost any kind of music can be found	Music could be copied illegally Record companies close down	Social networking	Sites are usually free Long lost family/friends can be traced New friends can be made	Showing photos or revealing information which may be regretted later Online bullying Grooming People may use false identities Could be addictive (only award once)	Web cam	Can see who you are talking to Relatives abroad can see pictures of you Remote sites can be monitored	Could be tempted to do something foolish which you may later regret Privacy could be compromised	Gaming	Can learn as you play with educational games Collaborative games involve teamwork and interaction with others Games are fun	Solitary activity can prevent social interaction Spending too much time at computer can lead to health problems, e.g. RSI Could be addictive (only award once)	Interactive TV, 3D TV, betting, voting, dating	Active rather than passive user of the system Improves viewing experience Number of different activities available Can use online learning	Expensive to buy or set up Need to wear special glasses Arguments over who to vote for	Digital photography	Editing photos Enhancing photos Transmit photos over internet / display on social network site	Cost of camera and software	Researching family history	Ease of access to data Saves time on travelling	Cost of access with no guarantee of success	Online shopping	Wide range of products Search for best deals Discounts available	Can't see/feel quality Delivery costs Security issues Returning faulty goods	12
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UNIT 3

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1b	<p>Using many media such as image/picture, sound/music/audio, animation, text and video Must give at least two media Do NOT accept reference to devices</p>	1																
1c Auto	<p>One mark for each correct ticked box</p> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td style="text-align: center;">1</td><td></td><td style="text-align: center;">2</td><td style="text-align: center;">✓</td></tr> <tr><td style="text-align: center;">3</td><td style="text-align: center;">✓</td><td style="text-align: center;">4</td><td></td></tr> <tr><td style="text-align: center;">5</td><td style="text-align: center;">✓</td><td style="text-align: center;">6</td><td></td></tr> </table> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p><i>If tick all boxes no marks If tick two boxes in a row, i.e. 1 and 2, 3 and 4, 5 and 6 then no mark for that row</i></p> </div>	1		2	✓	3	✓	4		5	✓	6		1 1 1				
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1d	<p>An answer which mentions or implies connection - 1 mark An answer which also mentions or implies communication – 1 mark Both connection and communication required for 2 marks</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Examples of connection</th> <th style="text-align: left;">Examples of communication</th> </tr> </thead> <tbody> <tr><td>Connected</td><td>Communicate</td></tr> <tr><td>Linked</td><td>Input</td></tr> <tr><td>Plugged</td><td>Output</td></tr> <tr><td>Attached</td><td>Editing</td></tr> <tr><td>Transfer to computer</td><td>Play back</td></tr> <tr><td>Analogue to digital</td><td>Compose</td></tr> <tr><td></td><td>NOT Save</td></tr> </tbody> </table>	Examples of connection	Examples of communication	Connected	Communicate	Linked	Input	Plugged	Output	Attached	Editing	Transfer to computer	Play back	Analogue to digital	Compose		NOT Save	2
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3a	Graphical User Interface or GUI NOT WIMP	1																

3b Auto	<p>One mark for each correct ticked box</p> <table border="1"> <tr> <td>1</td> <td>2 ✓</td> <td>3</td> </tr> <tr> <td>4</td> <td>5</td> <td>6 ✓</td> </tr> <tr> <td>7 ✓</td> <td>8</td> <td>9</td> </tr> </table> <div style="border: 1px solid black; padding: 5px;"> <p><i>If tick all boxes no marks If tick two or three boxes in a row, i.e. 1, 2 and 3 4, 5 and 6 7, 8 and 9 then no mark for that row</i></p> </div>	1	2 ✓	3	4	5	6 ✓	7 ✓	8	9	1 1 1
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4	5	6 ✓									
7 ✓	8	9									
3c	<p>Any two of:</p> <ul style="list-style-type: none"> • Speech input is much faster than keyboard input NOT writing in • No need to learn to type • Less danger of RSI • Reduces typing mistakes such as spelling / hitting wrong key • Keyboard takes up room on the desk • Faster to issue commands (e.g. open word processor) • People with a disability that prevents typing can use speech input / helps with dyslexia • Users can do something else with their hands • Increased security (setting a voice password) but NOT just recognise the user <p>NOT No training required NOT quicker, faster without qualifying NOT answers related to cost or hardware</p>	2									
3d	<p>Any two of:</p> <ul style="list-style-type: none"> • It takes a long time to train the computer to understand how someone speaks • Background noise interferes with speech recognition – cannot use computer with music in background • Unable to have a chat or use telephone and perform input at same time • Computer will never know all the proper nouns, for example Nantyyffyllon • Will not understand user when they have a speech impediment, sore throat or cold DO NOT accept ill or reference to illness which does not affect voice. • Will not understand user when they have a strong accent • Will always need a keyboard for special keys e.g. function keys, ctrl, alt / to make alterations / as a backup if the voice recognition system fails • People with a disability that prevents speech could use a keyboard • Can't use in a quiet environment like library or quiet train • Can't keep private as people can hear what you are saying so no good for entering passwords • May not recognise words that sound the same such as 'too' and 'two' <p>NOT answers related to cost or hardware</p>	2									
3e Auto	<p>One mark for each correct ticked box</p> <table border="1"> <tr> <td>1 ✓</td> <td>2</td> </tr> <tr> <td>3</td> <td>4 ✓</td> </tr> <tr> <td>5 ✓</td> <td>6</td> </tr> <tr> <td>7 ✓</td> <td>8</td> </tr> </table> <div style="border: 1px solid black; padding: 5px;"> <p><i>If tick all boxes no marks If tick two boxes in a row, i.e. 1 and 2, 3 and 4, 5 and 6, 7 and 8 then no mark for that row</i></p> </div>	1 ✓	2	3	4 ✓	5 ✓	6	7 ✓	8	1 1 1 1	
1 ✓	2										
3	4 ✓										
5 ✓	6										
7 ✓	8										

4a	<p>Any two of:</p> <ul style="list-style-type: none"> • File size is smaller / saves memory / storage space NOT 'space' • Saves time typing it in / faster to type in / editing is easier/faster • More data can be displayed on screen • Accuracy if qualified, e.g. less mistakes / fewer mistakes / less chance of error • Faster to search if qualified WHY? e.g. to find size / colour / match in table <p>NOT easier to search NOT just 'hacking' NOT so you know if they are small, medium or large NOT easy to read S or M NOT just 'quick and easy' NOT 'don't have to write whole word' NOT 'faster' NOT 'saves time' NOT 'easier' NOT 'simple to write' NOT 'shorter for small, medium and large' NOT security related encoding</p>	2
4b	<p>Problem: One letter colour codes could be confusing, e.g. B = Black or Blue or Brown,</p> <p>Solution: Use codes with more than one letter, e.g. BLA = Black, BLU = Blue, BRO = Brown etc. Accept examples with different codes as long as they are sensible, e.g. K=Black and B=Blue, or BA=Black and BU=Blue NOT different coloured text e.g. blue in blue and brown in brown.</p>	1 1
4c	<p>Any two advantages from:</p> <ul style="list-style-type: none"> • Data is easily shared • Data is easier to back-up / copy • Data is easily transferred using networks • Data can be accessed/processed more quickly – searches, sorts • Data can be encoded when stored • Less physical storage space needed NOT less space • Data can be edited more easily • (Different) reports can be produced <p>DO NOT accept environmental issues</p> <p>Any two disadvantages from:</p> <ul style="list-style-type: none"> • Loss of data / corrupted data due to power cuts / hardware failure • Copying data - copyright issues • Data can be copied quickly - personal data can be stolen • Reliance on networks - network failures • Training needed to enable staff to access data • Security issues - viruses • Hacking <p>DO NOT accept cost</p>	2 2
5ai	Tweening Motion/Shape Tween	1
5aii	Onion skinning	1
5aiii	<p>Any two of:</p> <ul style="list-style-type: none"> • A frame rate that is too slow will have a <u>stop and start / jittery / jumpy / flickering</u> effect. • A higher frame rate means that your animation <u>plays smoothly</u>. • If the frame rate is <u>too fast it will blur the details</u> of the animation. <p>NOT (a higher/different/lower rate will affect the size/duration of your file/movie) NOT if you increase/decrease frame rate it will run faster or slower</p>	2

5b	(The human eye / retina / brain continues to) see an image for a short period after the image has disappeared or The process by which the eye is fooled into thinking that still pictures are moving Look for the idea of retention of image when it is no longer there.	1									
5c	One mark for each of: <ul style="list-style-type: none"> • Tracing/drawing around/over an image • Gives a cartoon like appearance / creating a life like motion 	1 1									
5d	Must have idea of a small change between each frame/picture, e.g. Moving an object a small amount each time between taking photographs or Making a slight change to each picture Plus When you play the pictures/frames back it appears as if the image is moving. Cannot gain second mark without the first.	1 1									
6a Auto	One mark for each correct ticked box <table border="1"> <tr><td>1</td><td><input checked="" type="checkbox"/></td></tr> <tr><td>2</td><td><input type="checkbox"/></td></tr> <tr><td>3</td><td><input checked="" type="checkbox"/></td></tr> <tr><td>4</td><td><input type="checkbox"/></td></tr> </table> <table border="1"> <tr><td><i>If tick all boxes no marks</i> <i>If tick three boxes then max one mark</i></td></tr> </table>	1	<input checked="" type="checkbox"/>	2	<input type="checkbox"/>	3	<input checked="" type="checkbox"/>	4	<input type="checkbox"/>	<i>If tick all boxes no marks</i> <i>If tick three boxes then max one mark</i>	1 1
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3	<input checked="" type="checkbox"/>										
4	<input type="checkbox"/>										
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6b	Any three of: <ul style="list-style-type: none"> • Cash • Change PIN Number • Check/print balance • Transfer money between accounts • Printed mini statement • Order cheque books and statements • Select language • Order theatre tickets • Mobile phone top ups 	3									
6c	Any two of: <ul style="list-style-type: none"> • Provide 24-hour services • Access ATM's in many locations • Cuts down on queues in banks / faster service for customers (Not shorter queues at the ATM) NOT Services listed in 6b	2									
6d	Any two of: <ul style="list-style-type: none"> • Save on staff costs • Allows staff to concentrate on other work e.g. selling mortgages or other • Save on building costs/services/utilities • Increased revenue from withdrawal fees NOT Less queues	2									
7a	i) HTML is a language used to create a webpage. ii) The unique address for every website on the internet is called a URL . iii) In order to allow people to view a website over the internet it must be hosted (1) on a web server (1).	1 1 2									

7b	<p>One mark for each of:</p> <table border="1"> <thead> <tr> <th>Term</th> <th colspan="2">Meaning</th> </tr> </thead> <tbody> <tr> <td>Hotspot</td> <td colspan="2">An image/area of an image used as a link on a webpage</td> </tr> <tr> <td>Home Page</td> <td colspan="2">The main/first webpage that the user will see on a website</td> </tr> <tr> <td>Hyperlink</td> <td colspan="2">A link that takes/leads/directs the user from one part of a website to another, or one webpage to another webpage</td> </tr> <tr> <td>Leader Board</td> <td colspan="2">A banner (used for advertising) or scrolling/animated marquee</td> </tr> </tbody> </table> <p><i>Accept different wording if answer shows clear understanding</i></p>			Term	Meaning		Hotspot	An image/area of an image used as a link on a webpage		Home Page	The main/first webpage that the user will see on a website		Hyperlink	A link that takes/leads/directs the user from one part of a website to another, or one webpage to another webpage		Leader Board	A banner (used for advertising) or scrolling/animated marquee		1 1 1 1
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7ci	Golden triangle			1															
7cii	<p>Any of: To ensure their website gets as much traffic as possible So that more people go to their site Because it is the best place to be noticed It is the place people look first</p> <p><i>Accept different wording if answer shows clear understanding</i></p>			1															
8a Auto	<p>One mark for each correct ticked box</p> <table border="1"> <tr><td>1</td><td>✓</td></tr> <tr><td>2</td><td>✓</td></tr> <tr><td>3</td><td></td></tr> <tr><td>4</td><td>✓</td></tr> <tr><td>5</td><td></td></tr> <tr><td>6</td><td></td></tr> </table> <div style="border: 1px solid black; padding: 5px; margin-left: 200px;"> <p><i>If tick all boxes no marks</i> <i>If tick five boxes then max one mark</i> <i>If tick four boxes then max two marks</i></p> </div>			1	✓	2	✓	3		4	✓	5		6		1 1 1			
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9	<p>7-9 marks Candidates give a clear, coherent answer fully discussing recent developments impacting on working practices, listing advantages and disadvantages for workers and employers. They use appropriate terminology and accurate spelling, punctuation and grammar.</p> <p>4-6 marks Candidates describe some aspects of recent developments impacting on working practices and list some advantages and disadvantages for workers and employers but responses lack clarity. There are a few errors in spelling, punctuation and grammar</p> <p>1-3 marks Candidates simply give a brief description or list of recent developments but may not mention advantages and disadvantages. The response lacks clarity and there are significant errors in spelling, punctuation and grammar.</p> <p>0 marks No valid response.</p> <p>Indicative content</p> <p>Recent developments To gain full marks candidates must mention a maximum of three recent developments. These could include: faster broadband, wifi, video conferencing, webinars, mobile devices (tablets, smartphones, etc), hot desking, teleworking, cloud computing, solid state storage (usb devices, etc), robotics, e-commerce, online banking, expert systems.</p> <p>Candidates can gain a maximum of 6 marks for advantages / disadvantages (at least one of each) – these could include examples where general advantages / disadvantages of recent developments are discussed but a specific recent development is not named.</p> <p>Candidates must clearly refer to working practices NOT leisure activities. The following examples are not exclusive – accept any relevant, sensible response.</p> <p>Examples of advantages to employees</p> <ul style="list-style-type: none"> • Easier / faster access to large amounts of data • Savings in journey to work time • Can share expertise more easily • Less stressful without delays at airports / road works / accidents • Savings in travel and hotel expenses going to meetings to discuss topics or see products • Less time away from home / Improved family life • Greener less pollution • Ideal for disabled/housebound people • More flexible working hours, especially for worker with young children - No need to take time off when workmen calling • Can work in a different location to where you live • Limits the amount of travelling people need to do so has environmental benefits reducing carbon footprint • Can see people talking and read their body language 	9
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Examples of disadvantages to employees

- Weak signals or blind spots can make mobile working difficult/impossible
- Unemployment due to competition from online shopping / e-commerce / automated production
- Never get to 'leave the working environment' and can end up working longer hours than being paid for
- Less face to face contact with customers
- Need to be digitally literate
- Social isolation from colleagues. Some people feel they go unnoticed and get passed over for promotion. / Delays in finding out what is going on in the organisation
- Home heating / lighting costs higher
- Some teleworkers paid less than office workers
- Loss of status - no fancy office
- Increased need for security against theft / mugging for expensive equipment
- Greater risk of work related health problems such as rsi
- People could feel Impersonal and isolated / People still like to have face to face discussions when making important decisions / People can be self-conscious and not perform well

Examples of advantages to employers

- Savings on office space
- Savings on costs of retail outlets, etc, as orders can be sent directly wherever in the world that warehouse or producer is
- Can take advantage of a global market
- Retain skilled staff due to maternity or who have children at home - flexible working hours
- Meetings can be held at short notice and can be anywhere in the world
- Can lead to easier international collaboration for example with designers in far away countries being able to show designs to fashion designers in UK
- Cut down on absences due to babysitting problems
- Hiring on short term basis of productivity or hire only when needed e.g. processing orders in a batch processing system
- Greater productivity per individual who are not distracted by office colleagues
- Factories can work 24/7 / robots don't need holidays

Examples of disadvantages to employers

- Loss of personal contact with colleagues
- Initial cost of providing the hardware and software at home
- Security issues in transferring data electronically across the Internet/extranet
- Difficulties in monitoring productivity
- Expensive to buy peripherals
- Digital documents can be passed around but objects cannot
- Increase in online shopping might lead to shops closing
- Robots are expensive to buy / maintain



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