

# **Mark Scheme for June 2011**

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by Examiners. It does not indicate the details of the discussions which took place at an Examiners' meeting before marking commenced.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the Report on the Examination.

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Question	Expected Answer	Mark	Rationale														
1	<p>Marks awarded for stating software as shown.</p> <table border="1"> <thead> <tr> <th>Task</th> <th>Type of software</th> </tr> </thead> <tbody> <tr> <td>To access a newsfeed</td> <td>Web browser or email software or mobile phone software</td> </tr> <tr> <td>To create a folded leaflet</td> <td>DTP</td> </tr> <tr> <td>To develop a website</td> <td>HTML or Web design software</td> </tr> <tr> <td>To model numerical data on environmental emissions</td> <td>Spreadsheet</td> </tr> <tr> <td>To send an SMS text message from a desktop computer</td> <td>SMS software/network software or Web Browser or email software</td> </tr> <tr> <td>To store membership data</td> <td>Database</td> </tr> </tbody> </table>	Task	Type of software	To access a newsfeed	Web browser or email software or mobile phone software	To create a folded leaflet	DTP	To develop a website	HTML or Web design software	To model numerical data on environmental emissions	Spreadsheet	To send an SMS text message from a desktop computer	SMS software/network software or Web Browser or email software	To store membership data	Database	[6]	No marks for branded software.
Task	Type of software																
To access a newsfeed	Web browser or email software or mobile phone software																
To create a folded leaflet	DTP																
To develop a website	HTML or Web design software																
To model numerical data on environmental emissions	Spreadsheet																
To send an SMS text message from a desktop computer	SMS software/network software or Web Browser or email software																
To store membership data	Database																
2	<p>One mark for each correct method e.g.</p> <ul style="list-style-type: none"> <li>• Passwords</li> <li>• Keeping backup copy</li> <li>• Locked file, read-only, limited access rights</li> </ul> <p>The second marks are for an expansion of how their suggested methods would prevent the database being replaced e.g.</p> <ul style="list-style-type: none"> <li>• A password could restrict the people who should not save file.</li> <li>• A backup would allow the organisation to return to a previous version</li> <li>• If the file is locked it cannot be changed.</li> </ul>	[4]															

Question	Expected Answer	Mark	Rationale
3 (a)	<p>No marks should be awarded unless there is a <b>comparison</b> between the two. One mark for each point up to four marks.</p> <ul style="list-style-type: none"> <li>• Is more readily available than IM</li> <li>• and people do not have to be on-line at the same time</li> <li>• but IM is concurrent which makes it more suited to quick messages</li> <li>• Email can also have attachments.</li> </ul>	<b>[4]</b>	<p>Accept any sensible answer.</p> <p>Do not accept repeats and only award marks if there is a comparison.</p>
(b)	<p>No marks should be awarded unless there is a <b>comparison</b> between the two. One mark for each point up to four marks.</p> <ul style="list-style-type: none"> <li>• Online discussion forums can be read by anyone</li> <li>• You can restrict people from reading your chat</li> <li>• People must be on-line at the same time to chat</li> <li>• People do not have to be on-line at the same time for forums</li> <li>• Chat is concurrent</li> <li>• Forums are better for clubs and companies</li> <li>• Chat is better between friends</li> <li>• Chat can involve more than two people</li> <li>• Forums usually involve hundreds of people.</li> <li>• Forums allow user to re-trace discussion threads</li> </ul>	<b>[4]</b>	

Question	Expected Answer	Mark	Rationale
4 (a)	<p>One mark for each point up to three. Points MUST relate to Our Future needs.</p> <ul style="list-style-type: none"> <li>• They can take pictures of companies abusing the environment</li> <li>• Send them immediately to other members as picture messages.</li> <li>• Mobile phones are more discreet so you can hide them more easily.</li> <li>• Readily available so most members would have one.</li> </ul> <p>One mark for each point up to three. Points MUST relate to Our Future needs.</p> <ul style="list-style-type: none"> <li>• The members don't need an internet connection and this would be hard to find on site</li> <li>• It is easy to send a message from a mobile phone using the normal mobile network</li> <li>• Emails can have picture messages, attachments, and be any length so more information about the company can be sent</li> <li>• You can write to more than a person at a time, this is ideal for an organisation sharing data</li> <li>• You can set up a list of other members and send one message to everyone on the list.</li> </ul> <p>One mark for each point up to two. Points MUST relate to Our Future needs.</p> <ul style="list-style-type: none"> <li>• Available to most members even if they don't have email / internet</li> <li>• Members can arrange meetings at the last minute</li> <li>• It is hard for others to intercept SMS messages so they are secure.</li> </ul> <p>One mark for each point up to two. Points MUST relate to Our Future needs.</p> <ul style="list-style-type: none"> <li>• They can upload to websites</li> <li>• They can use internet research / use on-line translators etc</li> <li>• They can access blogs and reports on companies they are investigating</li> <li>• They can remotely access their computers</li> <li>• Members can search for other members nearby.</li> </ul>	<p>[3]</p> <p>[3]</p> <p>[2]</p> <p>[2]</p>	<p>Do not award marks for general answers. The candidate must relate the functionality to the needs of the organisation.</p>

Question	Expected Answer	Mark	Rationale
4 (b)	One mark for each correct technology: <ul style="list-style-type: none"><li>• GPS / SatNav</li><li>• Satellite phone</li><li>• Solar charger /panel</li><li>• Sensors</li><li>• Satellite tracking</li><li>• Pedometer</li><li>• Tracker.</li></ul>	<b>[4]</b>	

Question	Expected Answer	Mark	Rationale
5	<div style="text-align: center;"> </div> <p><b>A clear structure for the website</b></p> <p>A tree structure clearly showing three levels of the website <b>1 mark</b>  Links between home page and pages at level 2 <b>1 mark</b>  Clear links between pages at levels 2 and 3 <b>1 mark</b>  Links <b>with arrows</b> from <b>all</b> pages back to the home page <b>1 mark</b></p> <p><b>Inclusion of all the pages listed</b></p> <p>One mark for having a welcome page at the top level <b>1 mark</b>  One mark for showing <b>ALL</b> the pages in level 2 <b>1 mark</b>  One mark for clearly showing <b>ALL</b> pages at level 3 <b>1 mark</b></p> <p><b>TWO</b> further useful pages at any level <b>1 mark</b></p>	<p>[8]</p>	<p>Do not accept a mesh. Must be a tree structure.</p> <p><b>Put a tick or cross for each of the eight mark point in order, in a vertical line, to aid checking.</b></p>

Question	Expected Answer	Mark	Rationale
6		[6]	



Question	Expected Answer	Mark	Rationale
7 (a)	One mark MUST be noting it is a picture format A second mark for any of these points <ul style="list-style-type: none"> <li>• The numbers/letters are random</li> <li>• This prevents automated or robotic access to the site</li> <li>• It needs a human to interpret it</li> </ul>	[2]	<b>Must</b> indicate <b>picture</b> format for <b>more than</b> one mark.
(b)	One mark for D or Hjk897-e  Up to <b>two</b> marks for points in description <ul style="list-style-type: none"> <li>• The password included upper and lower case letters</li> <li>• A dash/special characters</li> <li>• Not a recognisable word / random characters</li> <li>• Mixture of letters and numbers.</li> <li>• Words can be found on a dictionary program</li> <li>• Hard for automatic trial (only 25 letters)</li> <li>• Length.</li> </ul>	[3]	
(c) (i)	One mark for stating that a pass phrase needs to be at least 16 characters to be secure. Up to two further marks for giving reasons for a pass phrase: <ul style="list-style-type: none"> <li>• The reason for a pass phrase it is much longer than a password.</li> <li>• It is easy to remember</li> <li>• It has lots of characters.</li> <li>• It is difficult for spy software to calculate what it is.</li> </ul>	[3]	
(ii)	The pass phrase is entered twice to verify the data. To make sure you know exactly what you entered.	[2]	
(iii)	One mark for a statement that says: This indicates the security level of the passphrase.	[1]	

Question	Expected Answer	Mark	Rationale
(d)	One mark for each valid point up to two: <ul style="list-style-type: none"> <li>• If the users loses / forgets his password or pass phrase,</li> <li>• a secret question can be used to recover the password or pass phrase.</li> <li>• Can also be used as additional security</li> <li>• Secret questions are often delivered at random.</li> </ul>	[2]	
(e)	This checks that it is a correct email address (not fake) To make sure it is really you	[1]	
(f)	Up to three marks for the following points <ul style="list-style-type: none"> <li>• Checks it is the correct telephone number</li> <li>• Gives two points of contact to check the validity of the person</li> <li>• Gives the company the users phone number</li> <li>• Can be used to send a code to reset a password.</li> </ul>	[3]	
8	One mark for stating poor / no internet access or low bandwidth. No microphone/speaker/sound card.	[1]	
9	Marks are awarded for a <b>discussion</b> on the impact on an individual of limited access to digital technology  <b>The impact on individual might include:</b>  <b>Educational</b> poorer access to information/many educational resources are freely available on line unable to access on-line courses no access community resources limited opportunity for development of skills – ICT and other functional skills can't research information on-line.  <b>Economic</b> limited skills development and understanding of the use of technology limited of how awareness and skills can impact on jobs more difficult to access banking		Do NOT use ticks.  Where a candidate makes a valid point in their response, put a <b>P</b> . The number of Ps is NOT the number of marks.  Skim read first to see if it is a discussion. Work <b>DOWN</b> from band 3 towards band 1, then decide on the mark.

Question	Expected Answer	Mark	Rationale
	<p>no access to on-line shops and auction sites less choice – wider range of options re goods/services if can access easily on line.</p> <p><b>Social</b> digital exclusion poorer online communication less immediate access to email/other comms exclusion – opportunity to link into social networking/developing friendship/common interest groups limited access to society.</p> <p><b>Cultural</b> Limited access to resources such as: Music – MP3/4 players/downloads /streaming Video on demand TV BBC iPlayer and similar.</p> <p><b>Level 1, 1-2 marks</b></p> <p>The candidate will identify a number of examples of impact on individual. The discussion involves a limited number of simple statements. The statements may have limited reference to the impact. Little knowledge of the digital divide.</p> <p><b>Level 2, 3-4 marks</b></p> <p>The candidate's response will provide the description of a number of examples of impact. They will show some knowledge and understanding of the impact on the individual of the digital divide.</p> <p><b>Level 3, 5-6 marks</b></p> <p>A well balanced discussion. Context is clear. Sound knowledge and understanding of the impact of the digital divide. A good range of examples are provided.</p>	[6]	

Question	Expected Answer	Mark	Rationale
10	<p>Marks are awarded for a discussion according to the degree that the candidate meets the description in the bands. First the best fit band is determined. The key points indicate marking points but are not used to add up the points made in order to achieve a mark.</p> <p>Keys points are:</p> <ul style="list-style-type: none"> <li>• It is much easier to communicate electronically</li> <li>• It is difficult to censor or control information</li> <li>• Anyone can send information to large number of people even if inaccurate</li> <li>• People often fear open discussion</li> <li>• It is easier to share information across countries</li> <li>• Printed data goes through more checks than electronic data</li> <li>• Some people are frightened by new technology.</li> <li>• Talking loudly on mobile phones whilst in public places.</li> <li>• Using mobile handsets in company whilst ignoring those around you</li> </ul> <p><b>Level 1, 1-3 marks</b></p> <p>The candidate as identified at least one example and has stated how this has brought about the viewpoint that it promotes anti-social behaviour. There will be a lack of the use of specialist ICT terms.</p> <p><b>Level 2, 4-7 marks</b></p> <p>The candidate's response will provide more than one example and link these to how this has brought about the viewpoint that it promotes anti-social behaviour. Specialist terms will be used appropriately and for the most part correctly.</p> <p><b>Level 3, 8-10 marks</b></p> <p>The candidate's response will show a well-balance coherent discussion. The context will be clear and based upon how the points made lead to a viewpoint that it promotes anti-social behaviour. Specialist terms will be used appropriately throughout the well argued discussion.</p>	<b>[10]</b>	
	<b>Paper Total</b>	<b>[80]</b>	

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