

Mark Scheme for January 2012

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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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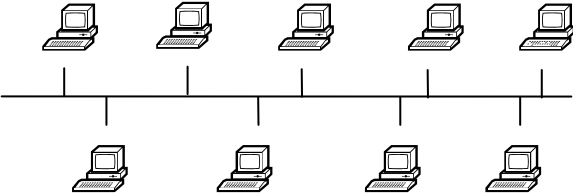
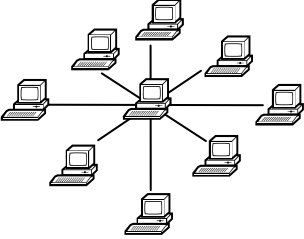
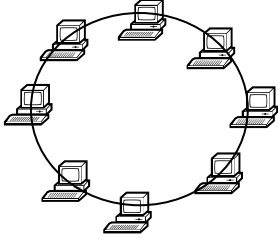
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Question	Answer	Marks	Guidance																		
1	bar code reader CD-R graphics tablet hard disk OMR touch screen	2																			
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4	0 is an example of extreme data 65 is an example of normal data 125 is an example of abnormal data 100 is an example of extreme data	4															
5	<table border="1" data-bbox="367 517 1128 767"> <thead> <tr> <th data-bbox="367 517 1050 557">Application</th> <th data-bbox="1050 517 1128 557"></th> </tr> </thead> <tbody> <tr> <td data-bbox="367 557 1050 592">A computerised theatre booking system</td> <td data-bbox="1050 557 1128 592">✓</td> </tr> <tr> <td data-bbox="367 592 1050 627">Printing payslips</td> <td data-bbox="1050 592 1128 627">✓</td> </tr> <tr> <td data-bbox="367 627 1050 662">Processing cheques by a bank</td> <td data-bbox="1050 627 1128 662">✓</td> </tr> <tr> <td data-bbox="367 662 1050 697">Processing electricity bills</td> <td data-bbox="1050 662 1128 697">✓</td> </tr> <tr> <td data-bbox="367 697 1050 732">Purchasing an item at a POS terminal</td> <td data-bbox="1050 697 1128 732"></td> </tr> <tr> <td data-bbox="367 732 1050 767">Withdrawing money from an ATM</td> <td data-bbox="1050 732 1128 767"></td> </tr> </tbody> </table>	Application		A computerised theatre booking system	✓	Printing payslips	✓	Processing cheques by a bank	✓	Processing electricity bills	✓	Purchasing an item at a POS terminal		Withdrawing money from an ATM		3	
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6	<p>RAM is used to store, temporarily, documents that computer users are currently working on.</p> <p>MICR is used to input data from a bank cheque to a computer</p> <p>A scanner is used to input data from hard copy to a computer</p> <p>OMR is used to read pencil marks from multiple choice exam answer sheets</p> <p>A memory stick is used to store files so that they can be moved from one computer to another</p>	5															

Question	Answer	Marks	Guidance
7	 <p data-bbox="367 451 510 480">Name Bus</p>  <p data-bbox="367 791 510 820">Name Star</p>  <p data-bbox="763 791 913 820">Name Ring</p>	3	
8	(a)	Bar code reader/touch screen	1
	(b)	Magnetic stripe reader / chip (and PIN) reader	1
	(c)	<p>Two from</p> <p>Account number</p> <p>Sort code</p> <p>Expiry date</p> <p>Valid from</p> <p>Issue number</p> <p>PIN</p>	2

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10	(a)	<p>Two from</p> <p>The questions are fixed As the answers are anonymous..... they might not be totally accurate Users may not complete them/cannot be compelled to complete them/may be slow to complete them May not give an accurate overview of whole process Inputs and outputs may be difficult to identify</p>	2																
	(b)	<p>Two from</p> <p>Observation Interviewing users Examining documents of the current system</p>	2																

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13	<p>Two from</p> <p>Less money spent on travel...</p> <p>Less time spent on travel...</p> <p>Less stress due to not having to drive in rush hour</p> <p>More time for leisure activities</p> <p>Can spend more time with family</p> <p>Can work when it suits</p> <p>Can work at own pace</p>	2	Allow 'can work flexible hours' instead of 'can work when it suits'																
14	<table border="1"> <thead> <tr> <th data-bbox="365 555 1050 593">Requirement</th> <th data-bbox="1050 555 1133 593"></th> </tr> </thead> <tbody> <tr> <td data-bbox="365 593 1050 707">Individuals have a right to view the information held about them.</td> <td data-bbox="1050 593 1133 707">✓</td> </tr> <tr> <td data-bbox="365 707 1050 820">Personal data shall be accurate and, where necessary, kept up to date.</td> <td data-bbox="1050 707 1133 820">✓</td> </tr> <tr> <td data-bbox="365 820 1050 933">Personal data shall be adequate, relevant and not excessive in relation to the purpose or purposes for which they are processed.</td> <td data-bbox="1050 820 1133 933">✓</td> </tr> <tr> <td data-bbox="365 933 1050 1046">Personal data shall be kept for 100 years</td> <td data-bbox="1050 933 1133 1046"></td> </tr> <tr> <td data-bbox="365 1046 1050 1160">Personal data shall be obtained for any purpose the data holder feels necessary.</td> <td data-bbox="1050 1046 1133 1160"></td> </tr> <tr> <td data-bbox="365 1160 1050 1273">Personal data shall be processed fairly and lawfully</td> <td data-bbox="1050 1160 1133 1273">✓</td> </tr> <tr> <td data-bbox="365 1273 1050 1386">Personal data shall be processed without considering the rights of data subjects</td> <td data-bbox="1050 1273 1133 1386"></td> </tr> </tbody> </table>	Requirement		Individuals have a right to view the information held about them.	✓	Personal data shall be accurate and, where necessary, kept up to date.	✓	Personal data shall be adequate, relevant and not excessive in relation to the purpose or purposes for which they are processed.	✓	Personal data shall be kept for 100 years		Personal data shall be obtained for any purpose the data holder feels necessary.		Personal data shall be processed fairly and lawfully	✓	Personal data shall be processed without considering the rights of data subjects		4	
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15	<p>Three from:</p> <p>WAN is wide area network and LAN is a local area network Data transmission rates of a WAN tend to be slower than those of a LAN LAN is usually found within a building/a site/a school WAN is spread over a much larger area WAN can communicate via satellite/public communication system LAN uses dedicated cables / short range wireless communication.</p>	3	
16	<p>Three from One for feature, one for example</p> <p>Sound – eg head teacher’s key note speech / voiceovers Music – eg concerts Video – eg films of performances etc. Hyperlinks – eg to move from department to department Animation – eg moving text etc. Search engine – eg to find specific items Slide show – eg carousel of photos of school facilities Interactive games – eg Maths games</p>	6	

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