

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/Additional Guidance																		
1	<p style="text-align: center;"> CD R DVD Fixed hard disc Graph plotter MICR Microphone </p>	[2]	Correct answer only Subtract one mark for every extra circle down to a minimum of 0																		
2	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">True (✓)</th> <th style="width: 10%; text-align: center;">False (✓)</th> </tr> </thead> <tbody> <tr> <td>A control program is used in a microwave oven</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td>A database is used to store patient records in a hospital</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td>A spreadsheet is used to manage personal finance</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td>A word processor is used to produce letters</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td>An internet browser is used to create a slide show</td> <td></td> <td style="text-align: center;">✓</td> </tr> </tbody> </table>		True (✓)	False (✓)	A control program is used in a microwave oven	✓		A database is used to store patient records in a hospital	✓		A spreadsheet is used to manage personal finance	✓		A word processor is used to produce letters	✓		An internet browser is used to create a slide show		✓	[5]	Correct answer only Subtract one mark for every extra tick down to a minimum of 0
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3	<p>Voice input is used to help people who have no use of their hands to enter data into a computer.</p> <p>A graphics tablet is used to enter free hand drawings into a computer.</p> <p>A barcode reader is used in libraries to input data from books.</p> <p>A touch screen is used by waiters in restaurants to select options at a till.</p>	[4]	Correct answer only																		

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4	<table border="1"> <tr> <td></td> <td>(✓)</td> </tr> <tr> <td>A company's payroll system</td> <td></td> </tr> <tr> <td>A computerised theatre booking system</td> <td>✓</td> </tr> <tr> <td>Entering the details of a new consignment of books in a library</td> <td></td> </tr> <tr> <td>Paying a bill using home banking</td> <td>✓</td> </tr> <tr> <td>Printing examination certificates</td> <td></td> </tr> <tr> <td>Withdrawing money at an ATM</td> <td>✓</td> </tr> </table>		(✓)	A company's payroll system		A computerised theatre booking system	✓	Entering the details of a new consignment of books in a library		Paying a bill using home banking	✓	Printing examination certificates		Withdrawing money at an ATM	✓	[3]	Correct answer only Subtract one mark for every extra tick down to a minimum of 0	
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8	<p>Four from:</p> <ul style="list-style-type: none"> Video Animation Charts Sound Voice over Hyperlinks/links Hot spots Buttons Slide shows 	[4]	Mark first four answers only															

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10	<p>Two matched pairs from:</p> <p>Window – a temporary area opened on a screen used to display the activity of a program/more than one piece of software can be displayed at a time</p> <p>Icon – small picture or symbol or shortcut/used to represent a program or directory/clicking on it opens program/can be a button used in navigation</p> <p>Menu – used to display a list of options/activities</p> <p>Pointer – is an icon/arrow which moves in response to movement of the mouse/used to identify position of cursor/often changes its shape depending on its position on the screen</p>	[4]	<p>One mark for name, one for related description If not named can still gain a mark for a clear description. Mark first two answers only</p> <p>Accept application instead of program. Accept image for picture</p>															

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11	<p>Two from:</p> <p>Teleworking Flexible working hours Need for re-training Part time working Increase in employment opportunities for IT staff/call centre operators Jobsharing</p>	[2]	<p>Accept training for retraining</p> <p>Allow clear descriptions instead of names</p>
12	<p>Four from:</p> <ul style="list-style-type: none"> • They must register with the DPA • The information must be obtained fairly • The information must be obtained/processed lawfully • The data will be held only for one or more specified and lawful purpose • The data will not be used for anything other than that [specified] purpose • The data will not be disclosed for anything other than that purpose • The data held for any purpose must be adequate in relation to that purpose • The data held for any purpose must be relevant in relation to that purpose • The data held for any purpose must not be excessive in relation to that purpose • The data must be accurate • The data must not be transferred to countries without any adequate DPA • The data must be kept up to date • That data must not be kept for longer than necessary • That an individual whose data is held is entitled to be informed, upon request by them of any data that is held 		<p>Emboldened words are essential parts of the answer</p> <p>(accept outside EU)</p>

Question	Expected Answer	Mark	Rationale/Additional Guidance
	<ul style="list-style-type: none">• An individual has the right to have access to such data held about them• Where appropriate, to have such data corrected or erased• Data must be secure• Personal data shall be processed in accordance with the rights of data subject.	[4]	

Question	Expected Answer	Mark	Rationale/Additional Guidance
13	<p>Three matched pairs from:</p> <p>Parallel running The old and new system are run together (until the new system is working satisfactorily).</p> <p>Pilot running One department/branch uses the new system (until the new system is working satisfactorily).</p> <p>Phased implementation One aspect/part of the system is implemented (and when successful other aspects are introduced one by one).</p> <p>Direct changeover New system is introduced overnight (and old system discarded).</p>	[6]	<p>Mark first three answers only</p> <p>One mark for name One mark for description</p> <p>Accept big bang for direct changeover</p>
14	<p>Four from:</p> <ul style="list-style-type: none"> • Mechanics interviewed for requirements • Data is collected from experts/mechanics • Knowledge base is designed/created • Rule base is designed/created • Inference engine is designed/created • Input screen is designed/created • Output format is designed/created • Test the system. 	[4]	<p>Order is not important</p> <p>Don't accept names of components must have designed or created</p>

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15	(a)	<p>Three from:</p> <p>Saves time rather than queuing in shops Don't have to waste time travelling to shops etc. <u>Disabled/housebound</u> people don't have to travel/leave home Don't have to spend money on travelling expenses (travelling long distances to shops) Greater choice of goods Can shop when shops are closed/can shop 24/7 Less traffic pollution Less danger of mugging Items can be delivered Can save your shopping list/order Easier to search for/find goods/make price comparisons Don't have to leave the house in bad weather Can access product reviews to help making choices.</p>	[3]	
	(b)	<p>Three from:</p> <p>Fewer staff needed so less spent on wages Fewer shops needed so less spent on rates/rent Less actual cash handled so fewer robberies Less money spent on security staff/staff to handle money Wider customer base – (increased sales/profits) More accurate stock control/less stock goes missing Less shoplifting People will buy even when the shop is closed increasing profits.</p>	[3]	
		Total	[60]	

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