

Mark Scheme for June 2010

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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.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

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Q	Mark Scheme	Marks	Additional guidance															
1	images numbers <u>sound</u> tables text <u>video</u>	[2]	Correct answer only															
2	bar code reader <u>CD</u> graphics tablet <u>hard disk</u> MICR touch screen	[2]	Correct answer only															
3	<p>An icon is a feature of a graphical user interface.</p> <p>A typed instruction is a feature of a command line interface.</p> <p>A motor is an output device used in computer controlled systems.</p> <p>A touch screen is an input device which allows you to choose options from a menu.</p> <p>Presentation software is used to produce a slide show.</p>	[5]	Correct answer only															
4	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Task</th> <th style="width: 20%;">Validation (✓)</th> <th style="width: 20%;">Verification (✓)</th> </tr> </thead> <tbody> <tr> <td>Typing in data twice and comparing the two versions</td> <td></td> <td style="text-align: center;">✓</td> </tr> <tr> <td>Using a check digit</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td>Using a range check</td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td>Visually checking that data has been entered correctly</td> <td></td> <td style="text-align: center;">✓</td> </tr> </tbody> </table>	Task	Validation (✓)	Verification (✓)	Typing in data twice and comparing the two versions		✓	Using a check digit	✓		Using a range check	✓		Visually checking that data has been entered correctly		✓	[4]	Correct answer only
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8	<p>Four from:</p> <ul style="list-style-type: none"> Central server/computer/main computer/hub Several work stations radiating from central server Cables connected from work stations to server Every work station is connected to server <p>A diagram must show the shape and components of a star network with labels to show server, work stations/computers and cables connecting workstations to the server.</p>	[4]	<p>Marks cannot be given for labels if the network shape is wrong.</p> <p>Accept wireless connection between workstations and server.</p>																		
9	<table border="1"> <thead> <tr> <th data-bbox="241 1080 1077 1137">Activity</th> <th data-bbox="1090 1080 1211 1137">Utility (✓)</th> <th data-bbox="1225 1080 1397 1137">Application (✓)</th> </tr> </thead> <tbody> <tr> <td data-bbox="241 1145 1077 1177">Creating a database</td> <td data-bbox="1090 1145 1211 1177"></td> <td data-bbox="1225 1145 1397 1177" style="text-align: center;">✓</td> </tr> <tr> <td data-bbox="241 1185 1077 1217">Exploring options within a model</td> <td data-bbox="1090 1185 1211 1217"></td> <td data-bbox="1225 1185 1397 1217" style="text-align: center;">✓</td> </tr> <tr> <td data-bbox="241 1225 1077 1257">Making a back up disk</td> <td data-bbox="1090 1225 1211 1257" style="text-align: center;">✓</td> <td data-bbox="1225 1225 1397 1257"></td> </tr> <tr> <td data-bbox="241 1265 1077 1297">Moving a file from one disk directory to another</td> <td data-bbox="1090 1265 1211 1297" style="text-align: center;">✓</td> <td data-bbox="1225 1265 1397 1297"></td> </tr> <tr> <td data-bbox="241 1305 1077 1337">Producing a word-processed document</td> <td data-bbox="1090 1305 1211 1337"></td> <td data-bbox="1225 1305 1397 1337" style="text-align: center;">✓</td> </tr> </tbody> </table>	Activity	Utility (✓)	Application (✓)	Creating a database		✓	Exploring options within a model		✓	Making a back up disk	✓		Moving a file from one disk directory to another	✓		Producing a word-processed document		✓	[5]	Correct answer only
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10	<p>OMR is optical mark reading/reads (pencil) marks user a scanner OMR is used for reading school registers/reading exam question responses from exam papers lottery tickets MICR is the reading of magnetic ink characters/magnetic ink character recognition MICR is used in reading data from bank cheques</p>		[4]	<p>Allow Optical Mark Recognition/Reader</p> <p>Allow Magnetic Ink Character Recognition/Reader</p> <p>Allow any reasonable use.</p>	
11	(a)	(i)	Bar code reader/electronic weighing scales/touch screen	[1]	Allow bar code scanner but don't allow scanner on its own
		(ii)	<p>It is more accurate than keying in data /less chance of errors Data is entered more quickly than keyboard entry</p>	[2]	<p>Must mention data when giving an answer related to speed but not when writing about accuracy Don't allow 'no' errors Allow quicker than typing data/details/products</p>
	(b)	(i)	Magnetic stripe reader/chip and pin reader	[1]	<p>Allow chip and pin/magnetic stripe Don't allow reader on its own Don't allow magnetic card reader</p>
		(ii)	<p>Two from: Account number/card number Expiry date Start date Issue number PIN number Sort code Credit limit</p>	[2]	

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11	<p>(c) Three from:</p> <ul style="list-style-type: none"> Eg Wider range of choice of goods Don't have to pay travelling costs Don't have to spend time travelling to shops/goods are delivered/don't have to leave the house Easier to search for specific goods Can shop when shops are closed 	[3]	<p>Shopping lists are remembered by supermarket Don't allow can compare prices. Don't allow special offers</p>
11	<p>(d) Four from:</p> <ul style="list-style-type: none"> Increased unemployment/changed roles for checkout operators/managers Increased employment for technical staff Some workers will have the opportunity to go part time There will be the opportunity to job share There will be the opportunity for flexible working hours Technical staff can work from home More van drivers will be employed More employees will work antisocial hours 	[4]	<p>Eg checkout operators will become pickers For technical staff accept web designers/web site maintenance staff</p>
12	<p>WAN – two from:</p> <ul style="list-style-type: none"> Wide area network/network over a wide geographical area Needs a router Connects two or more LANs together Internet is a WAN Phone line/satellite/telecommunication link <p>LAN – two from:</p> <ul style="list-style-type: none"> Local area network/network over a small geographical area/network in a single building Only needs a hub/switch Use as basis for an intranet Physical cables/WiFi (short distance) 	[4]	

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13	<p>Four from:</p> <p>Consistency of layout User always finds similar features in the same place/area of screen Harmonious/pleasing colour scheme Easy to follow/clear navigation pathways/hyperlinks Simple/uncluttered/uncomplicated/well-organised screen layout/limited content of each screen Logical order Allows ease of use/easy understanding of screen/easy to read/fields clearly labelled Adequate spacing of entry fields Fixed length text boxes/fixed length prompts/individual character boxes/tick boxes/radio buttons/drop down lists Font/font size/font colour should be easy to read Buttons should be included/icons Instructions should be clearly set out/help facility/examples of how to complete form Designs could include menus/drop down lists</p>	[4]	

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