

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	Mks	Additional Guidance						
1	(a)	<p>One for identification, 2nd for advantage: Graphics/pictures/drawing (1) can see lots of information instantly (1) Video (1) detail of sound and vision/allows both deaf and blind to interact (1) Sound (1) Attracts attention/no need to be in sight line (1) Graphs (1) Can be seen at a glance without having to read tables of figures (1) Table (1) Lots of information conveyed (1).</p>	[4]	Do not accept text.						
	(b)	<p>Mark according to grid below:</p> <table border="1" data-bbox="495 600 1252 707"> <tr> <td>3</td> <td>Two complete comparisons</td> </tr> <tr> <td>2</td> <td>One complete comparison</td> </tr> <tr> <td>0-1</td> <td>One individual point about either side.</td> </tr> </table> <p>Comparison to include, for example: Website can be updated and is dynamic whereas the printed leaflet cannot be changed without reprinting Website can contain moving images and sound whereas the leaflet is text and pictures Website requires an internet connection whereas the leaflet can be read anywhere Technical ability is required to connect and surf the web whereas most people can read</p>	3	Two complete comparisons	2	One complete comparison	0-1	One individual point about either side.	[3]	Must be a complete comparison – both sides for a single mark. Second half of comparison must be detailed, cannot award the mark for “and does not”.
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Question		Expected Answer	Mks	Additional Guidance
2	(a)	One mark for type of software, 2 nd for its use, eg: Operating system (1) to run the computer/ connect to scanner/printer/digital camera (1) Utility Software (1) to provide additional functionality to the OS/to run anti virus checks (1) User Interface (1) e.g load applications (1)	[4]	Do not allow proprietary names. Do not give marks for spreadsheet, database word processor or desktop publisher. Must identify type of software before marks can be awarded for its use.
	(b)	2 from, eg: Create a picture of the village hall (1) Edit a photo of the village hall (1) Create a border for the poster (1).	[2]	Any relevant example relating/relevant to the village hall and creating/editing of picture.
	(c)	Max 2 for each. One mark for description, 2 nd for example. Completeness: making sure all information is present (1) giving the phone number but not the code (1) Presentation: layout/accessibility of information (1) map of the hall rather than written description (1) Relevance: all information is related to the topic (1) information on the hall opening times (1).	[6]	The example must be related/relevant to the village hall and the leaflet. The first mark is for exemplification of the key term, the second is for an example. Allow negative examples – for relevance, what happens if it is or it is not relevant.
	(d)	Max 2 for each. One mark for description, 2 nd for example. Headers: Appears at top of every page (1) contains phone number for committee (1) Sections: Different areas of formatting (1) landscape and portrait on different pages (1) Frames: Breaks information into areas (1) pictures and text in different locations (1).	[6]	The example must be related/relevant to the village hall and the leaflet. The first mark is for exemplification of the key term, the second can be for an example or expansion.
	(e) (i)	Portable HDD/DVD/Memory stick/USB Stick (1).	[1]	Must be portable HDD. Allow alternative names for memory/USB stick.
	(ii)	1 from: Justification relating to: Size/portability/capacity/durability eg Memory stick: small enough to put in pocket to transport (1) Portable HDD: enough storage capacity to hold the 900MB (1).	[1]	If (i) not completed/0 marks awarded then 0 for this. Not single words.

Question			Expected Answer	Mks	Additional Guidance
3	(a)	(i)	One for exemplification, one for example: Referential Integrity For every foreign key must be a related primary key value (1) for a customer ID in hire table, must be the same customer in customer table (1).	[2]	Use of diagrams is acceptable, make sure the example is relevant – allow some scope, eg customer name. The two parts are separate.
		(ii)	One for exemplification, one for example: Attributes Field name/identifies field (1) date of hire/customer ID (1).	[2]	
	(b)	(i)	Two from: Primary key (1) Atomic data (1) No repeating groups (1) Unique Table name (1).	[2]	
		(ii)	In 2nd normal form (1) All non primary key fields are dependent on the primary key/ No functional dependency between non-key items / There are no non key dependencies (1)	[2]	

Question		Expected Answer	Mks	Additional Guidance	
	(c)	1 for data type, 2 nd for reason: House Number Text/String/Alphanumeric (1) House numbers can be a number or text eg 2c (1).	[2]	If no data type has been given then marks cannot be awarded for the reason. However – read the reason to see if it identifies a data type.	
		1 for data type, 2 nd for reason: Price Per Hour Currency/Real (1) Price contains decimal places/allow calculations (1).	[2]		
		1 for data type, 2 nd for reason: HireID Autonumber/number/text/string/alphanumeric (1) Dependent on data type given – unique (1).	[2]		
	(d)	(i)	1 from: To ensure source and object are the same (1) To ensure the data has been copied correctly (1).	[1]	Do not allow to ensure data is correct.
		(ii)	1 st for identification, 2 nd for description/example 2 from: Presence (1) makes sure a phone number has been entered (1) Length (1) makes sure enough numbers entered (1) Picture/format (1) only numbers can be entered (1).	[4]	Do not accept type check. For second marking point, if candidate has made it clear telephone number is a text variant – e.g 0800 HIREME then allow text based answers for picture.

Question	Expected Answer	Mks	Additional Guidance
(e)	1 st mark for description, 2 nd for example of use: Command Based: Use of typed commands/prompts (1) Example: Backup/compress (1) 1 st mark for description, 2 nd for example of use: Menus List of common commands/related into groups/can be accessed by first letter/drop down from top bar/pop up next to mouse click (1) Example: Help commands (1).	[4]	Allow relevant and suitable examples
(f)	Three from, two marks for each. 1 st for identification, 2 nd for description, eg: Space (1) white space around the text to be able to read it (1) Error messages (1) informative for all types of users/message that tells you if you have done something wrong/how to correct mistake (1) Sound (1) for partially sighted/to inform of error (1) Font style (1) to be able to read/shaping of the text (1) Font size (1) large enough to see/point size of the characters (1).	[6]	These are examples. There are many other things that can be given. Do not accept colour Allow description of consideration or reason for consideration.
4	Must have at least two characteristics. 1 for identification to max 3, additional marks for each identification to max 4 Use of Video/sound (1) to demonstrate skills (1) Find user account (1) based on username (1) Store progress of user (1) setup training to continue from where left off (1) Tests for user (1) to monitor and review progress (1) Redo training (1) if confused (1) Questions (1) at a suitable level for the user (1) Input name of user (1) so training can be personalised (1) Available 24 hours a day (1) through the internet (1).	[6]	These are relating to two elements – training systems and on line training systems. Allow any reasonable characteristics – not advantages. Allow more than two marks for each characteristic.

Question		Expected Answer	Mks	Additional Guidance
5	(a)	<p>3 from, 1st for feature, 2nd for advantage:</p> <p>Recalculation (1) allows values to be changed without recreating the entire spreadsheet (1)</p> <p>What if /prediction(1) can look at different scenarios without building new models/can see without it occurring in real life (1)</p> <p>Worksheets (1) can use different worksheets to separate values making it easier to read (1)</p> <p>Graphs(1) can be created to easily understand data (1)</p> <p>Protection (1) can be applied to worksheet/workbooks - business confidentiality (1).</p>	[6]	The second mark should be a positive reason for doing it and not a description of the feature.
	(b)	<p>Two marks for each. 1st for how can be used, 2nd for example:</p> <p>Function</p> <p>Built in commands/complex formulae (1) eg max amount hired per month (1)</p> <p>Formulae</p> <p>Calculations/typed in by the user (1) eg multiple hours by hourly cost (1).</p>	[4]	Allow suitable example.

Question		Expected Answer	Mks	Additional Guidance
6	(a)	Two from: Static Hard coded/entered at design (1) Dynamic Can be changed by end user/entered at run time (1).	[2]	Allow examples. Do not allow static does not change/dynamic does.
	(b)	(i) Eg. Progressville (1)	[1]	This is a web query from a search engine therefore it is not necessary to give a field name. If field name given, do not penalise
		(ii) 1 from: e.g Progressville and village hall (1) Progressville ,Village hall hire (1).	[1]	Query has at least 2 criteria. Use of AND or + or , not necessary but do not penalise if there

Question		Expected Answer	Mks	Additional Guidance
7	(a)	Two from, 2 marks each, 1 st for identification, 2 nd for description of advantage eg: Allows inexperienced users to create mail merge (1) saves money on training costs (1) All information entered (1) no data has been missed requiring it to be redone (1) Saves time (1) can be done quickly allowing time for other work (1).	[4]	
	(b)	4 from Create/select data source (1) Create/select template letter (1) Insert merge/word fields (1) Preview merge/complete/print (1).	[4]	First three are required, one from the last bullet point. Must be in order = first or second can be alternated Then third And one form last

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8	(a)	<p>Mark according to grid below:</p> <table border="1"> <tr> <td>3</td> <td>Two complete comparisons</td> </tr> <tr> <td>2</td> <td>One complete comparison</td> </tr> <tr> <td>0-1</td> <td>One individual point about either side.</td> </tr> </table> <p>Comparison to include, for example: Computer and projector can include multimedia such as sound and video whereas acetate can only have static pictures and text With acetate it is possible to skip slides without the audience knowing but with a computer they will see the presenter skip them With acetate it is necessary for the presented to stand next to the OHP whereas with a computer and projector the presenter can use a remote mouse and be anywhere in the room Acetate only requires a bulb in the OHP whereas with a computer and projector there is a lot of equipment that can go wrong.</p>	3	Two complete comparisons	2	One complete comparison	0-1	One individual point about either side.	[3]	Must be a complete comparison – both sides for a single mark. Second half of comparison must be detailed, cannot award the mark for “and does not”.
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Question		Expected Answer	Mks	Additional Guidance
	(b)	(i)		A labelled diagram can be given full marks
			[2]	
		(ii)		
			[2]	
	(c)			
			[4]	

Question		Expected Answer	Mks	Additional Guidance
9	(a)	<p>Two marks per aspect, 2 marks each, 1st for identification, 2nd for example of crime:</p> <p>Unauthorised access to computer material (1) hacking into a computer (1)</p> <p>Unauthorised access to a computer system with intent to commit or facilitate the commission of further offences (1) hacking into a computer and finding information to blackmail the owner (1)</p> <p>Unauthorised acts with intent to impair operation of a computer (1)</p> <p>Denial of service attacks (1)</p> <p>Making, supplying or obtaining articles for use in computer misuse offences (1) making a virus (1)</p>	[6]	<p>The example needs to be related to the provision. Provision must be given first – if no provision then example cannot be awarded marks.</p> <p>Allow paraphrasing – important element is that it is related to a computer and it is unauthorised. Not just hacking/stealing/misusing</p>
	(b)	<p>Two from, 1st for identification, 2nd for description:</p> <p>Passwords/biometric [to system](1) alphanumeric characters/prevent access to the data (1)</p> <p>Firewall (1) stops unauthorised user from internet/hacking (1)</p> <p>Security Guard (1) patrols and physically prevents (1)</p> <p>Locks on doors (1) cannot get in without the key (1)</p> <p>Software updates/patches (1) prevents misuse of programming holes (1)</p> <p>Anti virus (1) stops virus on computer (1).</p>	[4]	<p>Must prevent data from being stolen.</p> <p>Not encryption Not CCTV</p> <p>Some of the descriptions may be similar.</p>

Question	Expected Answer	Mks	Additional Guidance												
10	4 from, 1 mark for problem, 2 nd for solution: Unstable surfaces (1) no wobbly surfaces (1) Eating/crumbs next to computer (1) no eating (1) Water/drink in proximity (1) no drink (1) Trailing cables (1) cable ties (1) Bare/exposed wiring (1) replace wiring (1) Leaning back on chairs/too few legs (1) five legged chairs (1) Overloading sockets (1) correct power supply (1).	[4]	Must be safety problems, not health. Solution must match problem and be different.												
11	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">9-11</td> <td style="width: 10%; text-align: center;">4</td> <td style="width: 80%;">The candidate is able to discuss clearly the impact and consequences. Candidates will show a detailed level of understanding and be able to explain in detail both the impacts and consequences of more than one position. Logical arguments are produced to demonstrate a clear understanding of the question. Ideas will be expressed clearly and fluently using specific knowledge to support and inform the discussion. There may be a reasoned conclusion. Subject specific terminology will be used accurately and appropriately.</td> </tr> <tr> <td style="text-align: center;">6-8</td> <td style="text-align: center;">3</td> <td>The candidate is able to discuss the impact(s) and consequences(s) Candidates will show a limited understanding and be able to explain, at least one impact and associated consequence of a given position, however explanations may lack specific detail and/or concentrate on either an impact or consequence with a limited explanation of the other. Subject specific terminology will be used accurately and appropriately.</td> </tr> <tr> <td style="text-align: center;">3-5</td> <td style="text-align: center;">2</td> <td>The candidate is able to explain the impact(s) or consequences(s) Candidates will show a limited understanding and be able to explain, at least one impact or consequence of a given position, however explanations may lack specific detail. The explanation, though informed, may stray from the point but specific knowledge will be evident. Some subject specific terminology will be used.</td> </tr> <tr> <td style="text-align: center;">0-2</td> <td style="text-align: center;">1</td> <td>The candidate is able to describe superficially the impact or consequences. The information may be poorly expressed and may be in the form of a list of points. Subject specific terminology may be limited or missing.</td> </tr> </table>	9-11	4	The candidate is able to discuss clearly the impact and consequences. Candidates will show a detailed level of understanding and be able to explain in detail both the impacts and consequences of more than one position. Logical arguments are produced to demonstrate a clear understanding of the question. Ideas will be expressed clearly and fluently using specific knowledge to support and inform the discussion. There may be a reasoned conclusion. Subject specific terminology will be used accurately and appropriately.	6-8	3	The candidate is able to discuss the impact(s) and consequences(s) Candidates will show a limited understanding and be able to explain, at least one impact and associated consequence of a given position, however explanations may lack specific detail and/or concentrate on either an impact or consequence with a limited explanation of the other. Subject specific terminology will be used accurately and appropriately.	3-5	2	The candidate is able to explain the impact(s) or consequences(s) Candidates will show a limited understanding and be able to explain, at least one impact or consequence of a given position, however explanations may lack specific detail. The explanation, though informed, may stray from the point but specific knowledge will be evident. Some subject specific terminology will be used.	0-2	1	The candidate is able to describe superficially the impact or consequences. The information may be poorly expressed and may be in the form of a list of points. Subject specific terminology may be limited or missing.		[11]
9-11	4	The candidate is able to discuss clearly the impact and consequences. Candidates will show a detailed level of understanding and be able to explain in detail both the impacts and consequences of more than one position. Logical arguments are produced to demonstrate a clear understanding of the question. Ideas will be expressed clearly and fluently using specific knowledge to support and inform the discussion. There may be a reasoned conclusion. Subject specific terminology will be used accurately and appropriately.													
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0-2	1	The candidate is able to describe superficially the impact or consequences. The information may be poorly expressed and may be in the form of a list of points. Subject specific terminology may be limited or missing.													
	<p>Areas of discussion may focus on use of sound systems, cinema systems, compatibility with different devices, noise levels, .seat integration, training and cost issues, security issues/vandalism. The point needs to be made for Band 1. For Band 2 the point needs to be expanded and additional information added – this can either be through the use of an explanation or consequence: the hall could be equipped with the latest cinema display equipment – this would give surround sound and 3D images which is going to increase the experience of the customers as it will be better than their televisions. For Band 3 the initial point needs to be explained in depth – advantage of disadvantage and a consequence of that point. For marks in Band 4 there is both a positive and a negative consequence – either of the same point or different points.</p>														

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