

# **Mark Scheme for June 2011**

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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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Any enquiries about publications should be addressed to:

OCR Publications  
PO Box 5050  
Annesley  
NOTTINGHAM  
NG15 0DL

Telephone: 0870 770 6622  
Facsimile: 01223 552610  
E-mail: [publications@ocr.org.uk](mailto:publications@ocr.org.uk)

CBT	Question	Answer	Mark	Rationale																								
1	1	<p>The Debunk Art Gallery uses a wide range of communication methods. Look at the table below and decide which Web 2.0 technologies the gallery would be likely to use.</p> <table border="1"> <thead> <tr> <th>Item</th> <th>Would use</th> <th>Would not use</th> </tr> </thead> <tbody> <tr> <td>Facebook<sup>©</sup></td> <td>✓</td> <td></td> </tr> <tr> <td>Wikis<sup>©</sup></td> <td></td> <td>✓</td> </tr> <tr> <td>Flickr<sup>©</sup></td> <td>✓</td> <td></td> </tr> <tr> <td>Napster<sup>©</sup></td> <td></td> <td>✓</td> </tr> <tr> <td>News feeds</td> <td>✓</td> <td></td> </tr> <tr> <td>Blogging<sup>©</sup></td> <td>✓</td> <td></td> </tr> <tr> <td>AdSense<sup>©</sup></td> <td></td> <td>✓</td> </tr> </tbody> </table>	Item	Would use	Would not use	Facebook <sup>©</sup>	✓		Wikis <sup>©</sup>		✓	Flickr <sup>©</sup>	✓		Napster <sup>©</sup>		✓	News feeds	✓		Blogging <sup>©</sup>	✓		AdSense <sup>©</sup>		✓	[7]	Deduct 1 mark for each tick over 7.
Item	Would use	Would not use																										
Facebook <sup>©</sup>	✓																											
Wikis <sup>©</sup>		✓																										
Flickr <sup>©</sup>	✓																											
Napster <sup>©</sup>		✓																										
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AdSense <sup>©</sup>		✓																										

CBT	Question	Answer	Mark	Rationale
2	2	<p>State <b>two</b> advantages and <b>one</b> disadvantage of using a social networking site for the Debunk Art Gallery.</p> <p>One mark for each valid point.</p> <p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>• Easy to inform upcoming events / update members</li> <li>• Looks modern</li> <li>• Reaches a younger clientele</li> <li>• Inexpensive</li> <li>• Worldwide / wider audience</li> <li>• More publicity / promote the gallery</li> <li>• Market research / feedback from members</li> </ul> <p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>• can be time wasting / distracting</li> <li>• customers need computer access</li> <li>• needs to be managed / updated</li> <li>• customers may not have/want to share their details</li> </ul>	<b>[3]</b>	Accept any sensible answer. Do not accept repeat answers.

CBT	Question	Answer	Mark	Rationale
3	3	<p>Explain <b>three</b> hardware requirements.</p> <p>Answers – two marks available for each correct reason: 1 mark for each valid point, 1 additional mark for each explanation but the statements must relate to a web server not a normal computer.</p> <p><b>Processing issues</b>            The system will need a large amount of RAM (1) to process the large amount of data used by a server (1).            The system will need a high specification processor (1) to deal with the large amount of processing associated with server capabilities (1).            The system will require a large hard drive (1) to cope with storage of all the files and software needed for the computers connecting to it. (1)</p>	[6]	Max 2 marks for a list.

CBT	Question		Answer	Mark	Rationale
4	4	(a)	<p>State <b>four</b> other elements needed on the home page.</p> <p>One mark for each valid point</p> <ul style="list-style-type: none"> <li>• Links to other pages / buttons / tabs</li> <li>• Address/contact details</li> <li>• Location</li> <li>• Logo</li> <li>• Images / pictures</li> <li>• Opening hours</li> <li>• Menu (bar) / navigation bar</li> <li>• Sign in / login / register</li> <li>• News feed / RSS</li> <li>• Banner / Adverts</li> <li>• Special event / promotion</li> </ul>	[4]	<p>Accept any sensible answer.</p> <p>Do not accept repeats.</p> <p>Do not accept items that should have their own pages e.g. about us, calendar, stock lists</p>
5		(b)	<p>State <b>three</b> other pieces of Information Jim will need to know about the people who will use the new website.</p> <p>Any three things from:</p> <ul style="list-style-type: none"> <li>• gender</li> <li>• budget (how much they are prepared to spend)</li> <li>• preferences</li> <li>• preferred method of accessing the internet</li> <li>• IT skills</li> <li>• Where they buy most of their art</li> <li>• Connection speed</li> <li>• Locality / country</li> <li>• Purpose of visit e.g. education, artist selling work, potential buyer</li> </ul>	[3]	

CBT	Question		Answer	Mark	Rationale
6	(c)	(i)	<p>Describe the purpose of this code.</p> <p>Either: one mark for each correct reason, up to 2 marks Or: one mark for each valid point and one additional mark for an expansion.</p> <p>Marks are awarded for saying:</p> <ul style="list-style-type: none"><li>○ it is to stop automatic entry</li><li>○ from a robot or automated system</li><li>○ that an automated system cannot link to a mobile phone</li><li>○ also to check that there is a working contact.</li><li>○ code allows them to activate the account</li></ul>	[2]	

CBT	Question	Answer	Mark	Rationale								
6	(ii)	<p><b>Describe one other method that Jim could use.</b></p> <p>One mark for a valid point and one additional mark for an expansion</p> <ul style="list-style-type: none"> <li>• email activation</li> <li>• phone them</li> <li>• scrambled image or letters (a CAPTCHA image)</li> </ul>	[2]									
7	5	<p>Identify the data types that Jim could use for the following fields.</p> <p>1 mark for each correct field type</p> <table border="1"> <thead> <tr> <th>Name of field</th> <th>Data type</th> </tr> </thead> <tbody> <tr> <td>Date of exhibition</td> <td>date</td> </tr> <tr> <td>Name of artwork exhibited</td> <td>Text or Alphanumeric</td> </tr> <tr> <td>Sold</td> <td>Y/N (Boolean)/ lookup OR currency</td> </tr> </tbody> </table>	Name of field	Data type	Date of exhibition	date	Name of artwork exhibited	Text or Alphanumeric	Sold	Y/N (Boolean)/ lookup OR currency	[3]	Only accept stated answers.
Name of field	Data type											
Date of exhibition	date											
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8	6	<p><b>Explain <u>three</u> reasons why it is important for the gallery to have its own domain name.</b></p> <p>One mark for valid reason with a second mark for expansion:</p> <ul style="list-style-type: none"> <li>• to give the gallery an image of credibility as all company's have there own (unique) domain</li> <li>• to give an email address with the galleries name so that customers can easily remember it and know that it is someone from the gallery</li> <li>• to avoid being associated with spammers and scammers</li> <li>• to be more in control of content of the website as domain names often come with hosting</li> <li>• to select something easy to remember</li> </ul> <p>Eg:</p> <ul style="list-style-type: none"> <li>• having their own domain name projects a professional image of the gallery</li> <li>• normally associated with large companies</li> <li>• it tends to say to others that the gallery staff are a genuine person, operating an established business</li> <li>• by doing business under the galleries own domain name, they can use multiple email "aliases"</li> <li>• if you ever have to change their service provider, or even move the physical business address of the gallery, it can be an incredible hassle to notify everyone</li> <li>• without their own domain name, their internet address would be tied to that of your service provider</li> <li>• thus, if they changed providers they would also have to change their web address and probably email address as well.</li> </ul>	[6]	

CBT	Question	Answer	Mark	Rationale
9	7	<p><b>Discuss how customers of the Debunk Art Gallery could use a computer based 'Expert' System.</b></p> <p>This question is marked using the banded mark scheme. The points below are simply indicative of the type of points candidates could make they are not mark points in their own right.</p> <p><b>Points may include:</b></p> <ul style="list-style-type: none"> <li>• they could have art experts make comments for the system</li> <li>• customers could be sent art based upon the profile they enter</li> <li>• it could choose the best art for a customer based upon their preferences</li> <li>• it is hard to produce an expert system for art</li> <li>• art tastes can vary even with customers who have always purchased the same type of art</li> <li>• customers may like new art and have no predictable taste</li> <li>• art tastes can change over time due to fashion trends</li> <li>• prices of art fluctuate rapidly</li> </ul> <p><b>Level 1 (0–3 marks)</b> Candidates may only address some aspects of the question, and give basic descriptions of how an expert system could be used. Answers may be simplistic with little or no relevance to the case study only a basic knowledge of an expert system itself. There will be little or no use of specialist terms. Errors of grammar, punctuation and spelling may be intrusive.</p> <p><b>Level 2 (4–6 marks)</b> Candidates will address all aspects of the question and discuss/consider different aspects positive and negative aspects of an expert system applied to the context although development of some of the points/implications/advantages/disadvantages/benefits/drawbacks of using these techniques may be one sided or limited. There will be an attempt at a conclusion. Candidates will reference the case study. For the most part the information will be relevant and presented in a structured and coherent format.</p>	[8]	<p><b>Maximum of 4 marks if the answer is not a discussion.</b></p> <p>Markers must first look for the most appropriate band. Then award marks for the degree to which the answer fits within the band.</p>

CBT	Question	Answer	Mark	Rationale
		<p>Specialist terms will be used appropriately and for the most part correctly. There may be occasional errors in grammar, punctuation and spelling.</p> <p><b>Level 3 (7–8 marks)</b>  Candidates will address all aspects of the question and discuss different points/implications/advantages/disadvantages/benefits/drawbacks of expert systems applied to an art gallery where things are not fixed and can change. The issues raised will be justified. There will be a reasoned conclusion. Candidates will reference the case study. The information will be relevant, clear, organised and presented in a structured and coherent format.  Specialist terms will be used correctly and appropriately. There will be few, if any, errors in grammar, punctuation and spelling. Only responses that are clearly linked to this concept should be considered.</p>		

CBT	Question	Answer	Mark	Rationale
10	8	<p><b>Describe the term <u>embedded media</u> giving examples of how it could be used on the gallery website.</b></p> <p>One mark for saying it is about embedding animation, video, movies or animation.</p> <p>One mark for saying that they run in the web browser and don't need a separate application.</p> <p>Up to two marks for examples relevant to the gallery.</p> <ul style="list-style-type: none"> <li>• Embedded media is where a website has movies or animations (1) that are display within a portion of a Web page rather than in a separate application. (1)</li> <li>• embedding code in web pages (1) to play media files from elsewhere (1)</li> </ul> <p>The Debunk art gallery could use animations of:</p> <ul style="list-style-type: none"> <li>• Sculptures</li> <li>• audio explaining the artwork</li> <li>• video files of the artist talking about their work</li> <li>• flash games</li> <li>• animated banners</li> <li>• virtual tours</li> <li>• embedding media from other websites e.g. YouTube</li> </ul>	[4]	

CBT	Question	Answer	Mark	Rationale
11	9	<p><b>Describe <u>one</u> advantage and <u>one</u> disadvantage of cloud computing for the art gallery.</b></p> <p>One mark for a valid point the second for an expansion which must relate to the art gallery. Eg:</p> <p><b>Advantages</b></p> <p>The pictures are hosted externally (1) so will be backed up by the provider so that they are never lost (1).*</p> <p>Jim does not need a large server (1) as the images are stored on the cloud server remotely. (1)</p> <p>It will be easier for artists to upload the files (1) as they only need to link to the cloud server. (1)</p> <p><b>Disadvantages</b></p> <p>Jim has no copy of the images (1) if they are deleted from the cloud server (1)*</p> <p>Because images are large it could take a long time to upload them to the cloud (1) so you need very good internet access. (1)</p> <p>There could be security issues with artists' images (1) as Jim has no control over the remote server, (1)</p> <p>It could be more expensive to use the cloud (1) as images are large and Jim will need to pay for a large server capacity. (1)</p>	[4]	*Can allow either one of these but not BOTH.

CBT	Question	Answer	Mark	Rationale
12	10	<p><b>Discuss the impact of using e-commerce to buy and sell artwork.</b></p> <p>This question is marked using the banded mark scheme. The points below are simply indicative of the type of points candidates could make they are not mark points in their own right.</p> <p><b>Points may include:</b></p> <ul style="list-style-type: none"> <li>• access to a global audience as makes it easier for people far away to buy without having to travel long distances</li> <li>• the gallery is open 24/7</li> <li>• good for niche art works which may be difficult to find</li> <li>• delivery time can be long and uncertain over distance</li> <li>• returning goods to the gallery is not easy</li> <li>• possibility of payment fraud</li> <li>• people cannot physically look at the artwork and need to just look at web based images</li> <li>• the gallery owner can order when he has a buyer</li> <li>• the gallery owner need less physical space to store the artwork.</li> </ul> <p><b>Level 1 (0–3 marks)</b>  Candidates may only address some aspects of the question, and give basic descriptions of how e-commerce could be used to either BUY or SELL artwork. Answers may be simplistic with little or no relevance to the case study only a basic knowledge of an expert system itself. There will be little or no use of specialist terms.  Errors of grammar, punctuation and spelling may be intrusive.</p>	[8]	

CBT	Question	Answer	Mark	Rationale
		<p><b>Level 2 (4–6 marks)</b>  Candidates will address all aspects of the question and discuss/consider different aspects positive and negative aspects of BUYING and SELLING over the internet although development of some of the points/implications/advantages/disadvantages/benefits/drawbacks of using these techniques may be one sided or limited.  There will be an attempt at a conclusion. Candidates will reference the case study. For the most part the information will be relevant and presented in a structured and coherent format.  Specialist terms will be used appropriately and for the most part correctly. There may be occasional errors in grammar, punctuation and spelling.</p> <p><b>Level 3 (7–8 marks)</b>  Candidates will address all aspects of the question and discuss different points/implications/advantages/disadvantages/benefits/drawbacks of to an art gallery of both buying and selling artwork over the internet.  The issues raised will be justified. There will be a reasoned conclusion Candidates will reference the case study. The information will be relevant, clear, organised and presented in a structured and coherent format.  Specialist terms will be used correctly and appropriately. There will be few, if any, errors in grammar, punctuation and spelling. Only responses that are clearly linked to this concept should be considered.</p>		
<b>TOTAL</b>			<b>[60]</b>	

**OCR (Oxford Cambridge and RSA Examinations)**  
**1 Hills Road**  
**Cambridge**  
**CB1 2EU**

**OCR Customer Contact Centre**

**14 – 19 Qualifications (General)**

Telephone: 01223 553998

Facsimile: 01223 552627

Email: [general.qualifications@ocr.org.uk](mailto:general.qualifications@ocr.org.uk)

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**Head office**  
**Telephone: 01223 552552**  
**Facsimile: 01223 552553**

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