

Mark Scheme for June 2012

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of candidates of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, OCR Nationals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support, which keep pace with the changing needs of today's society.

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.

© OCR 2012

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

Annotations

Annotation	Meaning
^	Omission mark
Cross	Cross
NAQ	Not answered question
REP	Repeat
Tick	Tick
TV	Too vague

Question		Answer	Mark	Guidance
1	(a)	2 from: No structure (1) No context (1) No meaning (1) Made up of alphanumeric characters (1) Raw facts and figures (1)	2	
	(b)	2 from, 2 marks each eg: Data is shortened (1) allows more to be stored in same space (1) Quicker to enter data (1) less data to enter (1) Allows validation (1) data entered is reasonable/sensible/follows rules /less change of error (1) Limited codes (1) allows validation to be used (1) Security (1) key needs to be known (1)	4	Allow use of examples related to hotel business as expansion for second mark. For validation – less chance of error NOT no errors.
	(c)	2 from: Legal reasons (1) Speed up computer (1) Free up storage space (1)	2	
	(d)	2 from, examples: Anti virus (1) Backup (1) Scheduling (1) Anti spam (1) Software updater (1)	2	Do not accept brand names of software. Do not accept Archive software
2	(a)	2 from: Collection of related images (1) Add on to a software package with specific images (1) Produced by a company depicting their range of products (1)	2	Do not accept answers related to clipart libraries

Question		Answer	Mark	Guidance
	(b)	<p>2 from, 2 marks each: All images in the library accurately depict products/symbols (1) making them recognisable (1) Integrates with software package (1) making it easier to select/use appropriate image (1) Reflects up to date product range from company (1) do not have to draw them themselves (1)</p>	4	
3	(a)	<p>3 marks per feature, 2 for description and 1 for example: Animation Movement of an object on a slide (1) type of movement defined (such as fade/blind) (1) Transition between sides (1) entire slide changes to new slide (1) Example: introduction of text on slide/moving from one slide to the next (1)</p> <p>Button Object on the slide (1) can be pressed/toggle (1) linked to an action/hyperlink (1) Example: move to next slide/close presentation/print (1)</p>	6	For animation, allow either slide transition or object animation
	(b)	<p>2 from, 2 marks each eg: Not original (1) other companies may have used the same image (1) Low quality images (1) lessens company image (1) May not be exactly what you want (1) may not convey the meaning exactly (1)</p>	4	

Question		Answer	Mark	Guidance
	(c)	<p>2 from, 2 marks each eg: Can edit the presentation on the fly (1) without anyone knowing (1) Do not have to be at the front (1) can change the slide from anywhere (1) Can use effects/animation/sounds/video (1) to demonstrate/increase attention (1) No human intervention required (1) can be set to show automatically (1)</p>	4	
	(d)	<p>2 from, 2 marks each eg: Addition of buttons/hotspots (1) to allow the viewer to control the navigation (1) eg. return to main menu (1) Removal of any timings from the slides (1) viewer to change to next slide when finished (1) Code to return to start (1) after pre determined time (1)</p>	4	These are actions performed by the developer to add features needed by the user and remove features no longer required.
	(e)	<p>2 from, 2 marks each: Viewer can give spoken commands to the presentation (1) to change slides (1). Text entry into presentation (1) can be done without use of keyboard or mouse (1). Microphone used (1) to accept voice entry (1)</p>	4	

Question		Answer	Mark	Guidance
4		<p>2 marks each:</p> <p>Age: How long ago was the information produced (1) dates and times from last year and not this (1)</p> <p>Level of Detail: Too much/too little information given (1) eg. names of everyone involved in a film – too much (1) name of the film and nothing else – too little (1)</p> <p>Accuracy: The correctness of the information given (1) eg the dates of the festival must be right (1)</p>	6	Allow examples for the second mark as long as they are related to the film festival poster.
5	(a)	<p>2 from, 2 marks each eg:</p> <p>menu bar (1) drop down/right click menu can have options added/removed (1)</p> <p>Icons (1) small images at the top of the screen (1) specific ones linked to commands/macros can be added (1)</p> <p>Buttons (1) press or toggle and run commands (1)</p> <p>Error messages (1) specific to the spreadsheet being used can be created (1) tells you what you have done wrong and what to do to solve it (1) may have a unique reference number (1)</p>	4	
	(b)	<p>2 from, 2 marks each eg:</p> <p>Novice users can use the new system (1) minimal training required saving costs (1)</p> <p>Required features displayed (1) quicker for users to find what the need – more productive (1)</p> <p>System can be locked down (1) less support required (1)</p>	4	

Question	Answer	Mark	Guidance
(c)	3 from, 2 marks each: graphs/charts (1) representation of data in graphical form (1)/used to show trend lines to predict sales based on existing data (1) formulae/functions (1) built in mathematical calculations (1) used to add/subtract/count/total (1) auto recalculation (1) one variable changes and all functions/formulae based on it will be updated (1) goal seeking (1) a target is given and the value of the variables required to achieve that target are given (1) variables (1) cells /values that can be changed to different figures (1) absolute/relative referencing (1) individuals cells retained when copying function/formulae (1)	6	
(d)	4 from eg: Not all the variables may be correct (1) or all known variables included (1) which leads to results that cannot be trusted (1) The model is only as good as the rules (1) and correct implementation of the functions/formulae (1) a mistake in the creation can lead to incorrect figures (1)	4	

Question		Answer	Marks	Guidance
				Content
6		<p>High [5 – 6 marks]: Candidate has given reasons why a plotter should be used.</p> <p>Medium [3 – 4 marks]: Candidate has described advantages of using a plotter for given situation.</p> <p>Low [0 – 2 marks]: Candidate has identified advantages of using a plotter for given situation.</p> <p>Answers may include: Can print in large sizes as required for architectural drawings which can be larger than A1 Need to draw straight lines for building designs. Limited range of colours required can also print basic documents which reduces need for separate printer.</p>		This is not a description of a plotter but the features of a plotter that make it suitable in this situation.

Question		Answer	Marks	Guidance
7		<p>3 marks from:</p> <p>List of consistent features in documents (1)</p> <p>Represents company/corporate identification (1) allows it to be recognised (1)</p> <p>List of things to be included in documents/content to be included (1) and how they should be presented/format of included items (1)</p>	3	No marks for listing contents of the house style
8	(a)	<p>All fields must be fully dependent on the primary key (1)</p> <p>Phone is dependent on surgeon (so not in 3NF) (1)</p>	2	
	(b)	<p>2 marks for relationships</p> <p>2 marks for primary keys</p> <p>1 mark for foreign keys:</p> <p>Patient – Details_of_Visit – 1:M</p> <p>Details_of_Visit - X-ray: 1:M</p> <p>Identification of Primary Key for Patient, Visit/Details_of_Visit and X-ray: All 3 – 2 marks, 2 – 1 mark</p> <p>Identification of 2 Foreign Keys in Visit/Details_of_Visit – 1 mark.</p>	5	If the candidate uses relevant different entity names or adds relevant additional tables, as long as it is correct, award full marks.
	(c)	<p>2 marks each:</p> <p>Telephone number: Text/alphanumeric/string (1) starts with a zero/can contain letters/has spaces (1)</p> <p>Gender: Boolean/True False/YN (1) one of two choices (1)</p> <p>Number of previous operations: integer (1) can only have whole numbers of operations (1)</p>	6	Without correct data type they cannot get reason mark.

Question	Answer	Marks	Guidance
(d)	2 marks for difference and 2 marks for examples: Dynamic requires parameter to be given at run time (1) whereas static the parameter is hard coded (1) With static the parameter cannot change (1) with dynamic the parameter can be changed by the end user (1) Examples Static: department / times of appointments (1) Dynamic: patient name / date of appointment (1)	4	Example must be related to hospital appointment database
(e)	2 from, 2 marks each eg: Site can be personalised (1) individual experience for users (1) Changes to hospital can be given immediately (1) patients always have up to date information (1) Different elements of the site can be updated by different people (1) security applied to each person (1)	4	Must be related to hospital website
9	3 from, 2 marks each eg: less risk of virus (1) anti virus can be updated centrally (1) less change of data being lost (1) backup can be centralised (1) work can be shared on different computers (1) allowing team working (1) internet connection can be shared (1) allowing central filtering (1) one cost for internet connection (1) one connection to monitor (1)	6	Must relate to school

Question		Answer	Marks	Guidance Content
10		<p>Level 4 [9 – 11 marks]: The candidate is able to explain in detail a range of harm. Ideas will be expressed clearly and fluently using specific knowledge to support and inform the answer. Subject specific terminology will be used accurately and appropriately.</p> <p>Level 3 [6 – 8 marks]: The candidate is able cover a range of harm, however explanations may lack specific detail or reason for harm. Subject specific terminology will be used accurately and appropriately.</p> <p>Level 2 [3 – 5 marks]: The candidate is able to describe harm but their responses will show a limited understanding and lack depth. Some subject specific terminology will be used.</p> <p>Level 1 [0 – 2 marks] The candidate is able to identify harm that could be caused by the Internet. 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> <p>Lack of social skills cannot socially interact as lack of practice/social skills because of texting/social sites. Bullying across social sites leading to depression anonymous nature of the internet. Credit card fraud - if card used to purchase - no funds for other things. Grooming by adults - use of web cams entice to meet and not tell. kidnapping (1) anonymity of internet (1) do not tell people (1)</p>	11	<p>Level 1 – identify Level 2 – weak description Level 3 – detailed description or weak explanation Level 4- detailed explanation</p>

Question		Answer	Marks	Guidance Content
11		<p>Level 4 [9 – 11 marks]: 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.</p> <p>Level 3 [6 – 8 marks]: 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. OR Candidates will have describe a range of impacts to the transport system and explained how the impact affects/has affected/will affect the transport system. Subject specific terminology will be used accurately and appropriately.</p> <p>Level 2 [3 – 5 marks]: 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. OR Candidates will have described a range of impacts to the transport system and described how the impacts affects/has affected/will affect the transport system.</p>	11	<p>Level 1 – identified Level 2 – Explain impact or consequence OR describe range of impacts Level 3 – Explain impact and consequences of one position (positive or negative) OR explained range of impacts Level 4 – explained impact and consequences from more than one positive (could be positive/negative)</p>

Question			Answer	Marks	Guidance Content
			<p>Level 1 [0 – 2 marks] The candidate is able to identify 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> <p>Impacts and consequences may include:</p> <p>Use of satellite navigation with head up display – less risk of accidents and do not have to look down, improved traffic handling within the application, avoidance of traffic jams or increased traffic on minor roads as all traffic diverted Smartphone systems allowing trains and buses to be tracked, know where it is and if you are going to miss it. Automatic driving system can accelerate and brake automatically causing less accidents, cars can drive close together allowing more traffic and traffic can drive faster, risk of breakdown of system causes large scale crashes, drivers confidence based on system not their ability</p>		

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

OCR Customer Contact Centre

Education and Learning

Telephone: 01223 553998

Facsimile: 01223 552627

Email: general.qualifications@ocr.org.uk

www.ocr.org.uk

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

Oxford Cambridge and RSA Examinations
is a Company Limited by Guarantee
Registered in England
Registered Office; 1 Hills Road, Cambridge, CB1 2EU
Registered Company Number: 3484466
OCR is an exempt Charity

OCR (Oxford Cambridge and RSA Examinations)
Head office
Telephone: 01223 552552
Facsimile: 01223 552553

© OCR 2012

