# **GCSE**

# **Business and Communication Systems**

General Certificate of Secondary Education A265/01

Businesses and their Communication Systems

# Mark Scheme for June 2010

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of pupils 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 2010

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

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
1 (a)	5	This question tests the ability to carry out basic proof-reading on a document containing text errors.	Errors are:  • "allways"  • "expeirences"  • "discus"  • "arrrange"  • "conveenient".  NB Do <b>not</b> award a mark for "youre" as this error is circled in the question. If a candidate has marked more than five errors, mark the first five unambiguous circles, stop marking after their fifth circle.	1 mark for each correctly circled error to a maximum of five marks.
(b) (i)	1	This question tests knowledge of the term 'input device' and understanding of which devices are appropriate for a stated purpose.	Valid input devices to enter text into an existing document:  • keyboard  • mouse  • microphone.  Most candidates are likely to offer "keyboard", however, other devices can be used (eg a microphone if speech recognition software is being used or a mouse if an on-screen keyboard is being used). We will <b>not</b> reward candidates who confuse input (eg microphone) with process (eg speech recognition software) or output.	1 mark for a valid input device.
(b) (ii)	1	This question tests knowledge of the terms 'output device' and 'editing' and understanding of which devices are appropriate for a stated purpose.	Correct answer:  • monitor/VDU/(computer) screen.  Accept variant answers that clearly indicate this hardware type.	1 mark for a correct answer.

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
(b) (iii)	1	This question tests knowledge of the terms 'output device' and 'hard copy' and understanding of which devices are appropriate for a stated purpose.	Valid output devices create a hard copy of a document:  • printer.  nb "printer" is the minimum requirement, so accept "dot matrix printer" but DO NOT ACCEPT "dot matrix".	1 mark for a valid output device.
(c) (i)	1		Possible benefits:  back-up copy created  data can be moved between computers (not connected in a network)  work can be completed at home.  Benefits must relate to the business (eg "I could sell the memory stick to a competitor" is not a benefit to the business). DNA features 'small/portable/can hold a lot of data' etc.	1 mark for a valid benefit to the business.
(c) (ii)	2		<ul> <li>Possible drawbacks to the business include:</li> <li>potential loss of data, eg stick could get lost</li> <li>potential for data to fall into wrong hands eg could be stolen</li> <li>potential breach of data protection legislation eg data is not stored in a secure manner.</li> <li>DNA features 'small/portable/fragile etc.Example answer:</li> <li>"The memory stick could get mislaid (1) meaning that the documents would be lost (E)".</li> </ul>	1 mark for a valid drawback to the business plus 1 mark for development.

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
(d)	4	Most answers will discuss the benefits and drawbacks of checking letters; however, it is possible that some candidates will discuss the merits of having the policy <i>per se</i> , this is acceptable and should be credited.	<ul> <li>Fossible benefits of the policy:</li> <li>fewer errors</li> <li>improved communications</li> <li>improved customer image of the business (corporate image)</li> <li>less chance of costly mistakes resulting from miscommunication.</li> <li>Possible drawbacks of the policy:</li> <li>cost (in terms of time and staffing)</li> <li>need – how many documents contain errors?</li> <li>make staff feel untrusted.</li> <li>Possible improvements:</li> <li>train staff in order to reduce the chances that they make errors.</li> <li>Example answers:</li> <li>I think that it is a good idea (by itself does not trigger any marks) because the documents will contain fewer errors (L1 – benefit identified) because the person checking them will know how to spell (L1 development). On the other hand it will be expensive to implement (L1 drawback identified) because they'll have to employ someone to do the checking (L2 development as the answer is now a balance of + and -). 3/4 – limited judgement based on balanced discussion.</li> </ul>	Level 1 (1-2 marks): Partial or one-sided analysis, e.g. by identifying/analysing only benefits or drawbacks.  Level 2 (3-4 marks): Judgement based on a consideration of both benefits and drawbacks.  Award 3 marks if candidate has made a judgement from valid reasoning of benefits and drawbacks but with no justification.  Award 4 marks if candidate has made a judgement from valid reasoning of benefits and drawbacks with clear justification.

Question Number	Maximum Marks	Rationale	Marking guidance	Mark allocation
			2 I think that it is a good idea (by itself does not trigger any marks) because the documents will contain fewer errors (L1 – benefit identified) because the person checking them will know how to spell (L1 development). On the other hand it will be expensive to implement (L1 drawback identified) because they'll have to employ someone to do the checking (L2 development as the answer is now a balance of + and -). So, I think it should be implemented as, despite the cost, it will be of benefit to the business. 4/4 – sound judgement based on balanced discussion.	
				[Total: 15]

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
2 (a) (i)	1	The password is hard to guess, but difficult to remember without writing it down, which compromises security.	Possible benefits:  hard to guess  makes it harder for hackers to gain access to network.  DNA features eg "mixture of letters and numbers"	1 mark for a valid benefit.
(a) (ii)	1	The password is hard to guess, but difficult to remember without writing it down, which compromises security.	<ul> <li>Possible drawbacks:</li> <li>difficult to remember</li> <li>may need to write it down (which makes it easier for a hacker to steal).</li> </ul>	1 mark for a valid drawback.
(b) (i)	2	This tests understanding of physical access restrictions, as opposed to software based methods such as firewalls, usernames, passwords and access rights.  Physical access restrictions are listed in the specification; this mark scheme includes all the examples given there.	Possible methods:  Iocked rooms  alarm systems  no computers on ground floor  restricted access to head office building.  Weaker candidates are likely to list methods that can be used to lock the room in which the machine is located, eg retina scan, finger print scan etc. This should gain one mark maximum, regardless of how many existing or future locking technologies are listed.  DO NOT ACCEPT CCTV as this merely records unauthorised physical access.	1 mark for each of <b>two</b> valid physical access restrictions.

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
(b) (ii)	3	Access rights are permissions given by the network manager that allow users to access restricted parts of the network.	<ul> <li>Possible answers include:</li> <li>access rights are permissions</li> <li>assigned by the network manager</li> <li>that give access to restricted areas of the network</li> <li>without access rights</li> <li>the user is unable to perform certain actions</li> <li>eg delete files or run programs</li> <li>or is unable to view restricted parts of the network</li> <li>eg hidden files or network drives.</li> </ul> DNA answers that are vague or do not demonstrate an understanding of access rights e.g DNA "the head office manager can prevent access to anyone they don't recognise" as this implies a physical barrier such as an entrance gate (as in a restricted access library or office building).	1 mark for each of <b>three</b> valid points. (2+1 or 1+2).
(c)	4		<ul> <li>Spam-email is:</li> <li>unsolicited (do not expect this term) email</li> <li>usually with the aim of getting the receiver to buy something</li> <li>or click on a web-link</li> <li>can be used to distribute malware (do not expect this term) such as viruses.</li> <li>Spyware is:</li> <li>software that is installed on a user's computer</li> <li>usually without their consent</li> <li>that monitors computer activity</li> <li>eg websites visited or keystrokes made.</li> </ul>	Award up to <b>two</b> marks for the explanation of each.

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
(d)	4	This tests the ability to critically evaluate the data back-up and storage methods described in the scenario.	Possible benefits:      back up is made     regular weekly back-up     DVDs allow a reasonable amount of data to be stored     storage location makes it easy to restore data using back-up.  Possible drawbacks:     back-up only once a week     data may be stolen from box on desk.  Possible improvements:     data encryption     use more secure storage, eg lockable room or remote storage.  DNA generalised answers that discuss backups in general and not the specific system described in the question.	Level 1 (1-2 marks): Partial or one-sided analysis, e.g. by identifying/analysing only benefits or drawbacks.  Level 2 (3-4 marks): Judgement based on a consideration of both benefits and drawbacks.  Award 3 marks if candidate has made a judgement from valid reasoning of benefits and drawbacks but with no justification.  Award 4 marks if candidate has made a judgement from valid reasoning of benefits and drawbacks with clear justification.
				[Total: 15]

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
3 (a)	3		Answers (in correct order): A Data Protection Act B Copyright, Designs and Patents Act C Computer Misuse Act  DNA if not copied correctly and completely (allow misspellings)	1 mark for each of <b>three</b> correctly identified Acts.
(b) (i)	3		Possible health problems:  • headache  • backache  • dehydration  • back pain  • repetitive strain injury (RSI)  • eyestrain.  Award other valid health problems associated with extended periods of computer use.	1 mark for each of <b>three</b> valid health problems.
(b) (ii)	2		Do not award: arthritis.  Possible actions:	1 mark for each of <b>two</b> valid actions that could be taken by <b>a</b> user.

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
(b) (iii)	1		Correct answer: 3 <sup>rd</sup> option.	1 mark for the correct answer. Only award mark for an unambiguous response.
(c)*	6	Weaker responses are likely to list actions the business must take. Better responses will analyse the impact in terms of costs/profitability, etc.	<ul> <li>Possible impact:</li> <li>need for compliance actions, eg</li> <li>keeping an accident book</li> <li>providing safe equipment</li> <li>providing healthy working practices</li> <li>make staff aware of rights/responsibilities.</li> <li>fines/imprisonment/bad publicity if laws broken</li> <li>overall business impact:</li> <li>may need to employ staff to implement the legislation</li> <li>may increase costs/reduce profits.</li> <li>Answers must relate to valid impacts on the business.</li> <li>DNA vague responses such as those which imply that complying with legislation results in happier employees = more productive = more competitive = higher profit.</li> <li>Example response:</li> <li>"Businesses such as Creative Cards Limited are required to provide a safe working environment for their employees and customers (L1) and keep an accident book (L1) because otherwise they can be investigated by the Health and Safety Executive and face large fines (L2) or even imprisonment for their Directors (L2).</li> </ul>	0 marks – no response or no response worthy of credit.  Level 1 (1-2 marks): Relevant knowledge is applied with basic written communication.  Level 2 (3-4 marks): Relevant analysis, eg by describing the positive and negative impact, with adequate written communication.  Level 3 (5-6 marks): Relevant analysis is evaluated, eg by an assessment of the overall business impact, with effective written communication.

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
			It is very important to follow the legislation (L3) because, ultimately, a business that does not follow health and safety legislation can be shut down (L3)."	
				[Total: 15]

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
4 (a)	2		Possible reasons:     profit/income motive     desire to 'be one's own boss'     redundancy     desire to create a product/service     unable to find suitable employment     to overcome boredom.	1 mark for each of <b>two</b> valid reasons.
(b)	2	This questions tests understanding of the drawbacks of being a sole trader.	Reward other valid reasons.  Possible drawbacks:  unlimited liability  lack of support from co-owners/directors  difficult to raise funds.  Reward other valid drawbacks.	1 mark for each of <b>two</b> valid drawbacks.
(c)	2	There is effectively one mark available for explaining <i>liability</i> and one mark for explaining (in this context) the significance of the term <i>limited</i> .	Possible answers:  Shareholders responsibility for the debt of the business (1) is limited to the amount of money they have invested (1).  If the business becomes bankrupt the only money that the owners lose (1) is the amount they have put into the business (1).	Up to 2 marks for quality of explanation.
(d)	3		Correct answers (in order) A Finance B Production C Marketing.	1 mark for each of <b>three</b> correctly identified departments.

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
*		This tests the ability to assess the impact of uncertainty on business organisations.	Possible impact of changing fuel prices: If cards are transported by vehicle then this could increase transport costs and so costs in total. Unless prices can be raised, profits will fall. This could have a major impact on the business. This change will affect all competitors who transport products by vehicle, but not sellers of e-cards.  Possible impact of home-made cards. This will result in a fall in the number of cards sold. However, this is unlikely to have a large impact as the numbers doing this is still quite small. In any case, the business could respond to this trend by selling card kits.  Example answers: Level 2: I think that fuel costs will have the biggest impact because the business needs to transport its cards by lorry and an increase in fuel prices will increase business costs. The market is very competitive so it won't be able to raise prices. This means that profits	O marks – no response or no response worthy of credit.  Level 1 (1-2 marks): Uses knowledge that is relevant to one or both issues.  Level 2 (3-4 marks): Uses relevant analysis of one topic to reach a one-sided judgement (ie that only considers one of the two issues).  Level 3 (5-6 marks): Uses relevant analysis of both topics to reach a balanced judgement (ie that considers both of the two issues).  To achieve L3 the judgement must be based on valid analysis of both issues. L2 should be awarded if the judgement is
			will fall.	based on valid analysis of one issue and invalid analysis or lack of analysis of the other issue.

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
			Level 3: I think that fuel prices are the biggest issue. This is because an increase in fuel prices will raise costs and so lower profits, whereas hardly anyone makes cards at home, so an increase won't have much impact on the business.	
				[Total: 15]

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
5 (a)	3		Correct answers (in order):  A Web browser  B ISP  C Modem.	1 mark for each of <b>three</b> correctly identified items.
(b)	2		Possible benefits include:  can order 24/7  no need to visit a card shop  save travel costs  delivery by post/business delivers it for you  could produce customised cards  wider choice of cards  it could remember you and set reminders (eg upcoming birthdays)  DO NOT ACCEPT benefits to the business.  DNA easier, cheaper, quicker unless	1 mark for each of <b>two</b> valid benefits to the customer.
(c) (i)	1		qualified.  Benefits:  more secure  less chance of data being captured by unauthorised user.  DNA "data is scrambled" as this per se is not a benefit (increased security is the benefit resulting from scrambling data)  DO NOT ACCEPT benefits to the	1 mark for a valid benefit to the customer.
			business.  DNA makes the whole payment system completely safe as there are still risks.	

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
(c) (ii)	3	Encryption is a two stage process of data being scrambled and then unscrambled, for which encryption/decryption keys are used.	Answers:      data is scrambled    into unintelligible code     using an encryption key     then decrypted back into recognisable data     using a decryption key.  Candidates are likely to mention scrambling/unscrambling data (or any equivalent term such as 'jumbling up' – accept these so long as the reference to changing the form of data is clear.  DNA a mark for the "data is transmitted" stage.	1 mark for each of <b>three</b> valid points describing the process of encryption/decryption.

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
			Example responses:  Data is jumbled up (1) and then put back into the correct data (1).  Data is scrambled (1) into a secret code (1) before being unscrambled (1).	
(d)	6		<ul> <li>Possible benefits:</li> <li>data transferred more quickly</li> <li>less chance of files going missing in the post</li> <li>files could be used by the printer's computer system to print the cards.</li> <li>Possible drawbacks:</li> <li>possibility of data capture by unauthorised users</li> <li>need for data security</li> <li>large file sizes being sent</li> <li>harder to keep the contents confidential (due to unauthorised viewing and copying)</li> <li>receiver could make unauthorised edits to the file contents.</li> <li>Example response:</li> <li>A possible benefit is that it will be quicker to send the files by email than by post (L1).</li> <li>This is because</li> </ul>	O marks – no response or no response worthy of credit.  Level 1 (1-2 marks): Uses knowledge that is relevant to one or both issues.  Level 2 (3-4 marks): Uses relevant analysis of one topic to reach a one-sided judgement (ie that only considers one of the two issues).  Level 3 (5-6 marks): Uses relevant analysis of both topics to reach a balanced judgement (ie that considers both of the two issues).  To achieve L3 the judgement must be based on valid analysis of both issues. L2 should be awarded if the judgement is based on valid analysis of one issue and invalid analysis or lack of analysis of the other issue.

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
			letters abroad can take a few days to arrive, whereas an email will arrive in seconds (L2). A drawback is that the email's contents could get intercepted by a hacker; (L1) however, this could be solved by password-protecting or encrypting the file (L2). On the whole I think this is a good idea as it speeds up communication between the business and its supplier (L3) resulting in a more efficient business (L3).	
				[Total: 15]

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
6 (a)	4	The WEEE regulations require suppliers of electronic and electrical equipment to take responsibility for its safe disposal and recycling at the end of its useful life. They are required to pay for disposal and this encourages using a product for as long as possible before recycling.  Valid responses are those which demonstrate an understanding of the WEEE regulations.	<ul> <li>Compliance actions:</li> <li>required to ensure product is safely disposed of at the end of its useful life</li> <li>either by collecting it from the customer</li> <li>or ensuring it is taken to a recycling facility</li> <li>(partly) funded by the supplier.</li> <li>Impact on a supplier of electrical and electronic equipment:</li> <li>increases business costs</li> <li>as is required to pay for its disposal/recycling</li> <li>impact can be reduced by designing products with a longer design life</li> <li>or with more recycled materials.</li> </ul> DNA answers discussing the marketing implications (e.g. DNA customers are more likely to buy from them if they see it is helping to protect the environment)	1 mark per valid point to a maximum of <b>four</b> marks (2+2 or 3+1).  Award a maximum of two marks for compliance actions where the impact on the business is not discussed.
(b)	4	There are many different possible ways of reducing environmental impact. Judgement should be used when rewarding answers. Development marks should be given for descriptions of how the impact is reduced.	Possible actions (with development in parenthesis):  reduce the amount of packaging on cards (eg by using less cellophane. This will reduce the amount of litter/landfill)  encourage staff not to print emails (this will save paper/reduce the amount of waste paper)  encourage staff to cycle to work (less carbon burnt)  use video-conferencing instead of staff travelling to meetings (less traffic pollution).	1 mark for each of <b>two</b> valid actions plus up to two marks for development (could be awarded for the development of a single point).

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
(c)	1		Actions include:	1 mark for a valid action the business could take.
(d)	6		Possible benefits:  improved reputation/corporate image  less chance of negative publicity  customers may be more likely to do business with them resulting in improved sales/profitability.  Possible drawbacks:  may limit the choice of suppliers  suppliers will need to be monitored  may raise costs/lower profitability.  Example response: An ethical trading policy will limit the number of businesses it can use as suppliers (L1). This is because not all suppliers will be able to meet the new standards (L2). Creative Cards Limited might also find the prices it pays to suppliers increases; (L1) for example, if they have to provide a minimum level of safety equipment	0 marks – no response or no response worthy of credit.  Level 1 (1-2 marks): Relevant knowledge identified/described.  Level 2 (3-4 marks): Relevant knowledge analysed, eg by explaining the benefits/drawbacks.  Level 3 (5-6 marks): Relevant and valid judgement based on a balanced discussion of benefits and drawbacks, eg by summarising the overall business impact.

Question number	Maximum marks	Rationale	Marking guidance	Mark allocation
			or training (L2). All this will increase the costs for Creative Cards Limited (L1). On the other hand an ethical trading policy might make customers buy from it (L1) because they can trust the company more (L2). On the whole I think it is a good idea as the increased costs will be more than covered by the increase in sales that results (L3).	
				[Total: 15]
				[Paper total: 90]

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

#### 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

