OCR
Oxford Cambridge and RSA

Cambridge National

ICT

Unit **R001/01:** Understanding Computer Systems

Cambridge National Level 1 Certificate

Mark Scheme for January 2014

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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.

1.   These are the annotations, (including abbreviations), including those used in scoris, which are used when marking

1		1091	+	Good response/positive
2		1181	+	Positive
3		1171	-	Negative
4		281	?	Unclear
5	BOD	31	BOD	Benefit of doubt
6		21	Cross	Cross
7	FA	991	FA	First answer
8	FT	41	FT	Follow through
9	FTX	1811	FTX	Follow through wrong
10	NAQ	501	NAQ	Not answered question
11	NBOD	191	NBOD	Benefit of doubt not given
12	NGE	521	NGE	Not good enough
13	TV	201	TV	Too vague
14		11	Tick	Tick

Question			Answer/Indicative content	Mark	Guidance
1	a		<table><tr><td>**Feature**</td><td>**Desktop computer**</td><td>**Laptop computer**</td></tr><tr><td>Easily portable</td><td></td><td>✔</td></tr><tr><td>Light weight</td><td></td><td>✔</td></tr><tr><td>Needs to be plugged in an electricity supply</td><td>✔</td><td></td></tr><tr><td>Separate keyboard</td><td>✔</td><td></td></tr></table>	4	
1	b		ONE mark for a suitable answer eg: • (Wireless) Network card (1) • Router (1) • Cable (1) • Switch (1) • Hub (1) • Wi-fi dongle (1)	1	Not Wi-fi on its own.
1	c	(i)	Up to TWO marks eg: • The user name recognises the user (1) as it can be checked against recognised list (1) • The user is identified (1) and resources/privileges/storage areas are allocated (1) • Use of the network is linked to the user name (1) so misuse/level of use can be tracked (1)	2	User names are not part of the security system.
1	c	(ii)	ONE mark for a suitable answer: Eg • For security purposes (or equivalent) (1) • To protect data/the network/access to resources (1)	1	

Question			Answer/Indicative content	Mark	Guidance
1	c	(iii)	ONE mark for a suitable answer: Eg • To <u>increase</u> security (1) • In case someone finds out the password (1) • To <u>reduce</u> the chance of it being known (1) • To <u>reduce</u> the risk of unauthorised access (or example thereof) (1) • Because it is good practice (1)	1	
2	a		ONE mark for a suitable answer: Eg • Take regular breaks (1) • Adjust posture (1) • Adjust angle of laptop screen (1) • Angle the laptop so that the keyboard is slanted (1) • Work at a higher desk/adjust height of laptop (1) • Use an external monitor/docking station (1) • Adjust the seat height (1) • Put it on a desk (1)	1	Answers must be relevant to the use of a laptop. Do not accept eg: Place screen at eye level. Answers must be the action of the employee. Do not accept eg: Provide an adjustable chair.

Question			Answer/Indicative content	Mark	Guidance
2	b		Up to TWO marks: Eg - Employers need to check that the equipment they provide is safe/does not cause harm/injury (1). If an issue is identified, action needs to be taken to reduce the risk/equipment needs to be replaced with suitable equipment (1). - Allow employees to have regular breaks (1) and so plan the day to allow for these to be taken/(Candidate may give examples of regular breaks) (1) - Arrange for eye tests (1) and pay for eye tests (1) - Set up health and safety training for staff/display correct use posters (1) so that they know how to use computer equipment safely (1)	2	Answers must be the actions of the employers.

Question	Answer/Indicative Content	Marks	Guidance	
			Content	**Levels of response**
3	Candidates may include eg: Cost: • Cost of purchase compared to cost of not buying the system. • Not buying the product may result in a greater cost to the organisation than not buying it. • Cost of the product may differ from other products • Cost may be justified by the benefits to be gained/extra features included • Cost is important within a fixed budget • Cost of training User needs: • The convergence of user needs and the features of the system • The ease of use for a range of different users • Method of control Data security: • Provision of security within the system must meet requirements of the school/DPA	7 – 9 4 – 6	Candidates may give examples, rather than concentrate on theoretical answers. For example, the candidate may talk about new staff being trained in the use of the system and their need to be able to become advanced users quickly within a school/high pressure situation.	**LEVEL Three (7–9 marks)** Candidates will provide detailed well developed explanations **which answer the question**. All three factors will be included in a balanced explanation. *(Eg Candidates will provide detailed and well developed explanations **of the impact of cost, user needs and data security on the decision to purchase the DRIMS system).*** Specialist terms will be used correctly and appropriately. **Level 2 (4–6 marks)** Candidates will explain one or more factors (cost, user needs, data security) in detail. **or** Give a basic explanation/description of the impact of all three factors. In most cases, mentioning the factor and correctly identifying why it was a factor/ what the school would do in order to take account of it, is sufficient.

Question			Answer/Indicative Content	Marks	Guidance	
					Content	**Levels of response**
				1 – 3		*(Eg Candidates will give a fairly basic description of the impact of all three factors)* Specialist terms will be used appropriately and for the most part correctly. **Level 1 (1–3 marks)** The answer may be a point(s) or a weak explanation/description. These may just be undeveloped points. *(Eg the candidate has made one point about one of the features.)* There may be no use of specialist terms.
				0		**Zero marks** Answers with no valid content.

Question			Answer/Indicative content	Mark	Guidance
4	a		Up to TWO marks: eg • This may contravene the Data Protection Act (1) because data is being sent that is not required/permission has not been given (1) • Not all students would come to Austin School (1) so they have data they have no need for (1) so it breaks the Data Protection Act (1) (max 2)	2	Candidates do not have to include reference to the DPA.
4	b		TWO from eg: • Keyboard (1) • Microphone (1) • Sip and puff device (1) • Head pointer (1) • Touchscreen (1) • Mouse (1) • Touchpad (1) • Scanner (1)	2	
5	a		Up to TWO marks: eg • Data can be deleted/corrupted/damaged/lost (1) and so a copy is kept to replace it (1) • So that the school can carry on operating (1) if the data is deleted/corrupted/damaged (1) • If the data is deleted (1) the school still has the information it needs (1) • To protect against accidental loss/destruction (1) as required by the DPA (1)	2	

Question			Answer/Indicative content	Mark	Guidance
5	b		Up to TWO marks: Eg • Specialist software/hardware may be needed to organise back-up (1) and this may be expensive/require special training(1) • As it is done automatically, there could be a problem (candidate **must specifically** identify) (1) and no one would know until it was checked (1) • Staff may be required to react to problems at inconvenient times (1) and so may need better/extra pay (1) • Automated backups may not be scheduled to suit all users (1) so work could be lost before the backup occurs (1)	2	Do not accept back-up the wrong files. Back-up at the incorrect time is too vague. 'Might go wrong'/'might not always work', is too vague.

SECTION B

Question			Answer/Indicative Content	Marks	Guidance	
					Content	**Levels of response**
6	a		Printer/plotter	1		
6	b		Candidates may include eg: • Ability to edit means that Maria can make changes directly to the work. • Ability to track changes means that Stephen can quickly find the changes that Maria has made and decide to agree and keep these changes, or dismiss them totally or edit as sees fit. • Efficiency is increased because time taken to do the task is reduced. • Efficiency is increased because greater chance of creating a suitable document.	5 - 6 3 - 4 1 - 2	Collaborative tools: • Comment boxes • Track changes	**LEVEL 3 (5 – 6 marks)** Candidates will provide detailed explanations **which answer the question**. Answer must deal with the use of collaborative tool(s) AND their effect on efficiency. Specialist terms will be used correctly and appropriately. **Level 2 (3 - 4 marks)** At the top end, candidates will provide a good explanation of one side and a description of the other. At the bottom end, candidates will provide a good explanation of one side only, or description of both. Specialist terms will be used appropriately and for the most part correctly. **Level 1 (1 – 2 marks)** The answer will provide either a description of one, or a poor description of both.

Question			Answer/Indicative Content	Marks	Guidance	
					Content	Levels of response
				0		These may just be undeveloped points. There may be no use of specialist terms. **Zero marks** Answers with no valid content.

Question			Answer/Indicative content	Mark	Guidance
7	a		Copyright (Designs and Patents) (Act)	1	
7	b		THREE from: Eg • Check whether copyright applies to the image (1) • Identify the owner (of the copyright) (1) • Seek permission (from the owner of the copyright) (1) • Make any payment/comply with any requests that the owner of the copyright asks in order to use the image (1) • Acknowledge ownership/not claim authorship as own (1)	3	Do not accept 'give source'
7	c		FOUR marks available for TWO answers: eg • The graphics tablet uses a stylus/pen shaped tool (or equivalent) (1) and so is more like a real drawing experience (1) • Because a graphics tablet is more accurate/precise (than a mouse) (1) and so offers greater control (1) • Because a graphics tablet includes specialist software (1) with extra features (1) • Because graphics tablets are more responsive/ pressure sensitive (1), therefore increased pressure can be used to increase line thickness (or other example of flexibility) (1) • A more ergonomic tool (1) therefore less chance of injury (1) • Device is specific for the purpose (1) so will have more suitable features (or examples) than a mouse (1)	4	Converse answers which deal with why a mouse would not be used are acceptable. Easier to **use** (than a mouse) is too vague. Easier to **draw** with is just enough for one mark. eg: Uses a pen which is easier to **use** is worth one mark. Uses a pen which is easier to **draw** with is worth two marks. The above refers to bullet point 2. Some graphics tablets use touch screen.

Question			Answer/Indicative content	Mark	Guidance
8	a		Mailmerge	1	Correct answer only.
8	b		Up to TWO marks for a description: eg • If the ticket is lost (1) it can be returned (1) • The school can use a seating plan (1) and check that everyone has the correct seating (1) • The name can be checked at the door (1) so that they are sure the correct person is getting in/prevent resale (1)	2	
8	c		ONE mark available: e.g. • They can be contacted (in an emergency) (1) • They can be traced (1)	1	If something happens, they can contact them. Acceptable.
8	d		**Time:** Accept any time period with a maximum of 11 months (January to December) unless explanation justifies answer. (1) Candidate may describe the time period (after the plays are over) or "no longer than necessary." **Explanation:** Eg • (By keeping the data for up to two days after the event), the school has enough time to check the hall (1) and can still find out who was present (1)	3	For full marks, candidate must include the period of time. Candidates may not necessarily write the answer in the correct area, but may still be awarded the marks.

Question			Answer/Indicative content	Mark	Guidance
			• Once the information has been deleted, it would be impossible to find out who was present (1). This gives enough time for any issues to arise (1) • This is the length of time for which that the data is needed (1) and they cannot legally hold it for longer (1)		
9			A MAXIMUM of 9 marks available: **Items to be included (Max 2)** More than one relevant item (1) or All relevant items included (2) • Night or performance • No of tickets required • Name • Phone number **Online form items (Max 2)** Submit (1) Any other form control (1) eg Drop-down box Radio button Text box **Use of space (1 mark)** Well laid out form (1) **Fitness for purpose (Max 2)** No marks available for fitness for purpose, if clearly not an online form Could be used as an online form (1) Title or other instructions (1)	9	

Question			Answer/Indicative content	Mark	Guidance
			Annotation (Max 2) Explanation of one item (1) or Explanation of more than one item (2)		

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