

GCSE

Information & Communication Technology B

General Certificate of Secondary Education GCSE 1995

General Certificate of Secondary Education (Short Course) GCSE 1095

Mark Scheme for the Units

January 2009

1995/1095/MS/R/09J

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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

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GCSE Information and Communication Technology B (Short Course) 1095)

MARK SCHEMES FOR THE UNITS

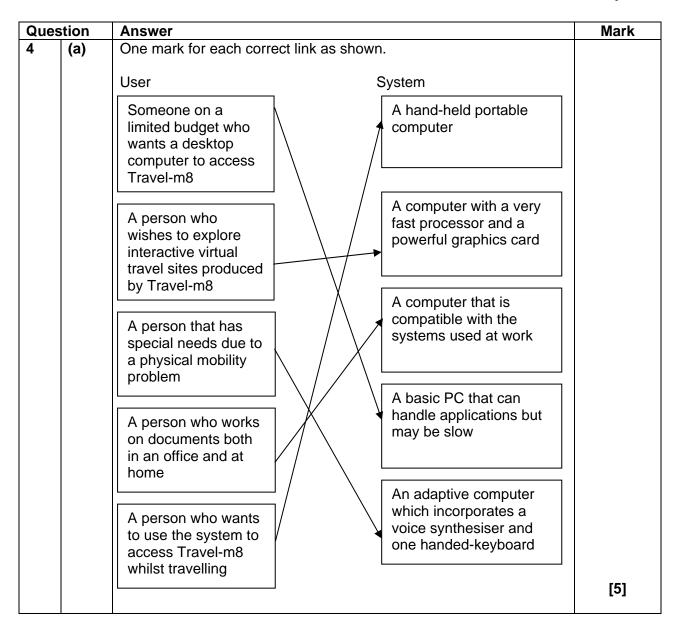
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2380/01 Paper 3 (Foundation)

Ques	stion	Answer				Mark
1	(a)		CD ROM Monitor Keyboar Mouse			
		One mark for each cor	rect label.			[4]
	(b)	Device	Input	Output	Storage	
		Digital camera	✓			
		DVD writer			✓	
		Keyboard	✓			
		Memory stick	-		✓	
		Monitor		✓		
		Plotter		✓		
		Printer		✓		
		Scanner	√	,		
		Touch pad	✓	✓		
		One mark will be awar number of ticks is 9, do				[9]

Quest	ion	Answer	Mark
2		One mark for each correct label.	
	ther	important to ensure te is a good backrest void backache Arms at 90 degrees No trailing wires to prevent someone falling over them	
		The seat height should be adjustable	
		The chair must have a firm base A footrest helps to prevent backache	
			[6]

Que	stion	Answer	Mark		
3	(a)	One mark for a valid use.			
		Address bar – you can type in/enter the (internet) address			
	Sizing buttons – can be used to minimise/maximise/change the size of the window/screen				
	Tabs – allows you to have more than one webpage open at a time/move between pages				
		Favourites/Bookmarks – allows you to store/access/organise your favourite websites			
		Scroll bar – can be used to scroll through/move up and down a document/page			
	Viewing pane – the area where web pages/documents are displayed		[6]		
	(b) One mark for stating: data or data.pdf		[1]		
	(c) One mark for stating: www.travel-M8		[1]		

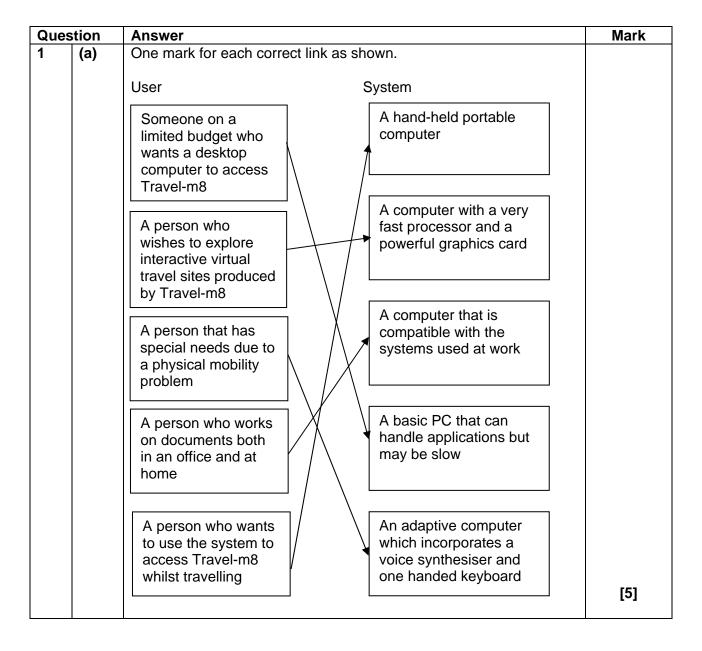


Question	Answer						Mark
(b)		each TWO coucted for each					
		Play an audio CD	Play a DVD movie	Create a music CD	Overwrite data on a DVD disk	Store data on a DVD disk	
	CD-RW Drive	✓		✓			
	DVD/CD- RW Drive	✓	✓	✓			
	DVD R/RW/CD- RW drive	√	✓	✓	✓	√	[5]
		l					
(c)	One mark for copy of the Candidate in and perman	maps (1) nust indicate lent) and a n (T.	point relat	ed to the co	ontext eg to g (one each eg f where this is	temporary	
	to explo	use eg nstant feedb ore effects o Travel-m8 o	f modelling	currency c			
		a hard copy o out a custor					[4]

Que	stion	Answer	Mark
5	(a)	One mark for any of the following points: • first page visitor will see/welcome/main page • links to other pages • basic information.	[1]
	(b)	One mark for each valid point up to 2. Eg download page order form contact detail inquiry technical help	[2]
	(c)	One mark for each valid keyword up to two eg software travel travel-m8 holiday	[2]
	(d)	Marks will be awarded for: Not too much information for homepage 1 Use of hyperlink(s) 1 Essential elements max 2 – one mark for each eg pictures/logo/maps, shop details, contact details, name of company, products Labels 1 mark for inclusion of at least three labels.	[5]

Que	stion	Answer	Mark
6	(a)	A program (1)	
		Plus one additional mark for a valid point. replicates itself destroys data corrupts data can be transferred by email can be transferred by network can be transferred by disk/storage medium can be transferred from websites	[2]
	(b)	One mark for each correct way up to 2 use/install a virus checker make sure virus checker is up to date set to scan every disk when inserted set up a schedule/regular anti-virus checks	[2]

2380/02 Paper 3 (Higher)



Questi	on	Answer						Mark
	(b)		each TWO coucted for each					
			Play an audio CD	Play a DVD movie	Create a music CD	Overwrite data on a DVD disk	Store data on a DVD disk	
		CD-RW Drive	✓		✓			
		DVD/CD- RW Drive	✓	✓	✓			
		DVD R/RW/CD- RW drive	✓	✓	✓	✓	✓	[5]
	(c)	Four marks	are availabl	e, one for e	each point.			
		copy of the (one each e doing and	maps (1)Ca eg temporar	ndidate mu y/ being de / hard cop	st indicate eveloped/s y) and a m	ontext eg to g a reason for see what you ark for explar	1 mark are	
		to explo	use eg nstant feedb ore effects o Travel-m8 o	f modelling	currency o			
		_	a hard copy o out a custor					[4]

Question	Answer	Mark
2	Eight marks are available, one for each point. One mark is given for any correct link between comment on image and a health and safety problem. The second mark is awarded for an expansion.	
	1 Top one third of screen at or slightly below eye level Example answer: To avoid neck strain , (head movements) (1) position your monitor, within your 60° viewing field (1). You shouldn't need to tilt your head/neck in order to see it easily. (1)	[2]
	2 Monitor about 50 cm from body (arms length) Example answer: To avoid eyestrain , (1) position your monitor within a comfortable viewing distance (1). This also allows for the keyboard and other input devices, such as a mouse or trackball, positioned within comfortable distance (1) of each other.	[2]
	3 Feet flat on floor or on footrest, Example answer: (Use a footrest) to support your feet (1). A footrest helps to maintain proper posture, (1) supports the lower back (1) and increases circulation to the legs and thighs. (1)	[2]
	4 Back supported from pelvis to shoulder blades Example answer Back and leg pain or discomfort is usually attributed to posture (1) and the chair used. Seat position is important as it helps to prevent back pain (1). The picture shows the user leaning back slightly (1) with a well supported pelvis. (1) This distributes the body weight evenly(1)	[2]

Question	Answer				
3	One mark for each valid question up to max 7. Content Does the site cover the topic comprehensively? Can you understand what is being said?				
	What is unique about this site? Does it offer something others do not? Are the links well-chosen? Sufficient? Can you tell: the date the information was created? The publication date? The date the material was last revised? Are these dates meaningful in terms of the subject matter? Would you get better information in a book? An encyclopaedia? Who is responsible for this site? Who sponsors it? What are his/her credentials? Have the authors of the site cited their own sources? Are the sources documented appropriately? What is the domain name? Does it end in .com, .gov, .edu, .org, .net? Is it a personal page? Who else links to the site? Is it linked to by reliable sites? What do other sites say about this one? Speed of download.				
	Bias/Purpose:				
	Why was this site created? (To persuade, inform, explain, sell, parody, promote, other?) Is it a personal, commercial, government or organisation site? Is there any bias? Is only one side of the argument presented? Is there a hidden message? Is it trying to persuade you or change your opinion? Does it appear that any information is purposely omitted? Is the bias useful to you in some way? Can you distinguish facts from opinion?				
	Usability/design specialist				
	Is the site easy to navigate (user-friendly)? Is there a well-labelled contents area? DO all the design elements (graphics, art, buttons, etc) enhance the message of this site? Is there consistency in the				
	basic formats of each page?	[7]			

Que	stion	Answer	Mark
4	(a)	One mark for each problem identified. Up to max 2: An email spam is an unrequested mass mail out (1), usually sent to millions of users. Whilst many spam messages contain legitimate information many advertise illegal products. (1) Wastes user time (1) May contain a virus (1)	[2]
	(b)	One mark for each problem identified. Up to max 2: An email scam is an email sent by criminals (1) designed to collect money OR confidential information (1) from unsuspecting victims (1). May contain a virus (1)	[2]
	(c)	One mark for a valid point and one for expansion. Up to max 2: Phishing is a scam email or web site that looks official from a bank or legitimate company. (1) It is designed to get the user to divulge confidential information. (1)	[2]
	(d)	One mark for each valid point: Example answer: They could use a dictionary attack (1) - password dictionaries search for the most commonly used passwords in a password dictionary. (1) They could also use brute force attack (1) by using password cracking software (1) to try all possible keys for each password character (1). Sniffing is another way (1), it uses tracking software to record network traffic and thus capture passwords (1). Keystroke logging (1) to capture typed passwords(1). Accessing cookies from hard drive/network (1)	[4]

Question	Answer	Mark
5	One mark for integration in some way. One mark for each expansion point.	
	The term refers to the integration (1) of different devices into a single handheld device (1) eg a mobile phone has a camera and mp3 player, camera etc built in (1). OR phones that now have facilities previously only had in separate devices (1) (as referring to integration) digital cameras, pdas, GPS and MP3 players all in one phone . (1 for examples and 1 for fact these are all in one	
	device called a mobile phone). Mobile internet access from handheld device(1)	[4]
6	One mark for each valid point. Up to max 4: As intellectual property refers to the ownership of certain types of information, ideas or representations, (1) the use of these on the internet enables unscrupulous users to steal music, photos, software, written material or films (1). Before the use of digital technology, it was difficult and expensive for people to copy these materials. (1)	
	materials. (1)	[4]

Question	Answer							
Question 7	 Answer Up to six marks should be given, this needs to be balanced. There must be at least one how, one why and one issue: How Sell it to a second-hand-computer shop. Use it to play old games or upgrade it to use as a backup device or personal Web server. Gift. If it's still breathing, donate it to a good cause or give it to a friend or relative. Decoration. Chips and circuit boards can be made into earrings and clipboards. Many 60's units used a fair amount of gold. 	Mark						
	 Why Computers are a main contributor to electronic waste (e-waste). They are made up of various components that are toxic to the environment. With continued innovations in technology, there is an increasing opportunity to recycle computers, Limiting the number that end up in landfills. Computers tended to lose 80 percent of their market value in the first year after purchase. 							
	 Issues Problems with security of old data. Cost involved in recycling Repair often more expensive than replacing Improvements / upgrades drives people to purchase new Requirements of WEEE directive SPECIFIC reference to materials that can or cannot be recovered 	[6]						

Question		Answer						
8	(a)	(i) One mark for each valid point. Is a short range connection (1) up to 91 metres (1) designed to make its own connection between electronic devices (e.g. phone to phone) (1). It is unlicensed so anyone can set up a Bluetooth network. (1) Bluetooth is quite slow (up to 3 mb) (1) radio waves (1).	[2]					
		(ii) One mark for each valid point. Transmits data as radio waves. (1) It is capable of very fast speed but is limited to about 45 metres. (1) It is used to connect to the internet via hot spots / access points / distribution box (1).	[2]					
	(b)	One mark for each valid point. It is the way in which the company can make telephone calls using the internet (1) Providing both the person making the call and receiving the call have the same system on their computers (1) The telephone calls are cheap / free (1) VoIP uses a computer connected to the internet (1) to send voice messages over the internet (1) using a microphone and speakers or headphones (1) or special telephone (1)						

Question	Answer								
(c)	One mark for each valid point. At least one mark must be for the purpose. An internet cookie is a small chunk of data (1) generated by a web server (1) and stored in a text file (1) in a computer's hard disk / system (1) It helps monitor your path through a website. (1) It is particularly useful when you are purchasing something on the internet. (1) It can also be used to remember the personal information you type into a website (1) and to remember it for the next time you visit the website (1) A cookie can also be used to target banners. (1) Cookies can be programmed to stay on a computer for any length of time. (1)	[4]							

Question		Answer						
9	(a)	(i)	One mark for each valid point					
			 How to switch on application How to connect to the internet How to browse/find pages How to load the software Limitations of mobile internet. 	[2]				
		(ii)	One mark for each valid element as shown:					
			One mark is issued for including their own stated elements Must include both elements in (a) (i) (1 mark)					
			Additional marks for:					
			 Structure 1 mark for additional design elements that show the structure Folds Borders 					
			 Formatting 2 marks for additional design elements (one each) that show the formatting – may be found in the annotation Relevant graphics Use of more than one font size 					
			 Annotation 2 marks for relevant annotation which explain key points (one each) Ease of use Flow of instructions Speed of download 					
			 Items to be included 2 marks for relevant additional items on leaflet (one each) – may be found in annotation o Company logo o Company name o Leaflet title/name o Company contact details eg address, email address, 					
			phone	[8]				

Question	Answer								
(b)	One mark for each valid point. Maximum of four marks if both vector and bitmap images are not explained. A bitmap graphic is composed of a grid of dots / pixels. (1) The colour of each dot / pixel is stored as a binary number (1) Used in digital photography or scanning images (1)								
	Takes up a larger file size compared to vector (1) A vector graphic is a set of instructions for recreating a picture. (1) These instructions state the shape, size, position and colour of each object. (1) A vector graphic can be scaled without losing definition. (1) Used for posters and logos and animations and web files. (1) Smaller colour palette (1)	[6]							

Grade Thresholds

General Certificate of Secondary Education ICT B (1095/1995)
January 2009 Examination Session

Unit Threshold Marks

Unit		Maximum Mark	a*	а	b	С	d	е	f	g	u
2377F	Raw	40				37	32	27	23	19	0
	UMS	55				48	40	32	24	16	0
2377H	Raw	40	39	35	30	26	23	21			0
	UMS	80	72	64	56	48	40	32			0
2378	Raw	64	63	55	47	39	33	28	23	18	0
	UMS	120	108	96	84	72	60	48	36	24	0
2379	Raw	64	63	55	47	39	33	28	23	18	0
	UMS	120	108	96	84	72	60	48	36	24	0
2380F	Raw	55				40	35	31	27	23	0
	UMS	55				48	40	32	24	16	0
2380H	Raw	80	57	50	43	36	28	24			0
	UMS	80	72	64	56	48	40	32			0

Specification Aggregation Results

Overall threshold marks in UMS (i.e. after conversion of raw marks to uniform marks)

	Maximum Mark	A *	Α	В	С	D	E	F	G	U
1095	200	180	160	140	120	100	80	60	40	0
	Maximum	Λ*	Δ	D	•	n	F	Е	G	- 11

	Maximum Mark	A *	Α	В	С	D	Е	F	G	U
1995	400	360	320	280	240	200	160	120	80	0

The cumulative percentage of candidates awarded each grade was as follows:

	A *	Α	В	С	D	Ш	F	G	U	Total No. of Cands
1095	3.7	21.1	40.8	61.3	74.4	83.4	90.9	97.2	100	1218
1995	1.8	8.5	30.8	65.2	87.5	95.5	97.8	100	100	243

For a description of how UMS marks are calculated see; http://www.ocr.org.uk/exam_system/understand_ums.html

Statistics are correct at the time of publication

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

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Telephone: 01223 553998 Facsimile: 01223 552627 Email: helpdesk@ocr.org.uk

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Head office

Telephone: 01223 552552 Facsimile: 01223 552553

