





GCSE 1494

# **Mark Schemes on the Unit**

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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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### MARK SCHEME FOR THE UNIT

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## 4872 ICT Knowledge and Understanding

Question	Expected Answer	Max Mark	Notes
1 (a)	<ul><li>keyboard</li><li>mouse.</li></ul>	2	No other answer accepted but do not penalise spelling errors.
(b)	<ul><li>screen</li><li>speaker(s).</li></ul>	2	
(c)	<ul><li>DVD rewriter</li><li>hard disk drive.</li></ul>	2	Accept 'DVD drive', 'DVD', 'hard drive', 'HDD', 'hard disk' (clear references to the devices listed)
(d) (i)	• RAM	1	Accept 'Random Access Memory', regardless of any errors in spelling.
			Do NOT accept any incorrect expansion of RAM.
(d) (ii)	to store programs and data currently in use.	1	Candidates are most likely to say something like 'to store the work you're doing' or 'to hold what you're working on'. These are fine for a mark.
			Need more than just 'temporary storage' – must give a <i>purpose</i> . However, it may only be one purpose, eg temporary storage for the operating system is OK for the mark.
			If (i) incorrect then no mark can be awarded here.
(e)	<ul> <li>Two marks from:</li> <li>identifying that it is the processor, or any idea of processing or 'doing all the work'</li> <li>carrying out calculations</li> <li>making decisions</li> <li>following instructions in</li> </ul>	2	DO NOT award a mark for 'the brain of the computer' although this response does not prevent marks being gained for other points.
	<ul> <li>processing or 'doing all the work'</li> <li>carrying out calculations</li> <li>making decisions</li> </ul>		

Question	Expected Answer	Max Mark	Notes
2 (a)	One mark for: • computers linked/connected together	4	Do NOT accept answers about software being cheaper because you only have to buy one copy.
	<ul> <li>Plus three from:</li> <li>can save work centrally</li> <li>can access work from any computer</li> <li>can share peripherals/examples eg printers</li> </ul>		Answers relating to installation/updating of software being easier because you only have to install it on one computer can be awarded a mark under the 'management of computer systems easier' mark point.
	<ul> <li>can backup centrally</li> <li>can keep log of uses/monitor use</li> <li>can share Internet access</li> <li>can share data/have intranet</li> <li>management of computer systems easier/can be done centrally</li> <li>can send internal messages/email (must at least strongly imply internal). Must be more than communicate.</li> </ul>		Weak candidates often confuse a network with the Internet. Beware of being too generous with BoD if it seems likely that this is the case.
(b)	<ul> <li>Three from:</li> <li>wireless/network interface/card/NIC</li> <li>(file) server</li> <li>printer server</li> <li>hub/switch/router</li> <li>network (operating system) software</li> <li>cables (unless wireless indicated)</li> <li>transmitter/receiver (if wireless can at least be assumed).</li> </ul>	3	The first mark point is for a 'wireless card' or 'network card' or 'wireless interface'. The question asks for an item, so 'wireless', 'wifi' on their own are not enough. <i>NOT</i> modem, ISP etc – the question is about a network, not the internet.

Question	Expected Answer	Max Mark	Notes
(c)	<ul> <li>Two from:</li> <li>unique</li> <li>identifies the user (to the network)</li> <li>allows the user to have own user area/access to user area</li> <li>allows the user to set/access personalised computer settings/own environment/desktop/profile</li> <li>allows (network OS/software) to track/audit what the user has done/when they have logged on</li> <li>allows (network manager) to set (access) rights/permissions.</li> </ul>	2	Nothing to do with security – that is the role of the password.
(d) (i)	<ul> <li>Three from:</li> <li>need to be able to remember it</li> <li>keep it secret/don't tell it to other people</li> <li>don't choose something obvious/suitable example</li> <li>don't write it down/learn it/write it in a hidden way (example OK for this, eg 'write it so that it looks like part of someone's address')</li> <li>use a mixture of text and numbers and/or special characters</li> <li>don't use a real/dictionary word</li> <li>use a mixture of lower and upper case letters/put an upper case letter in the middle or at the end</li> <li>don't have the same password for everything</li> <li>use a sensible length/not too short/not too long/at least 6 characters.</li> </ul>	3	The length mark point may look contradictory. However, it is true that passwords should not be so short that they are easily broken, also that they should not be too long to be unmanageable.

Question	Expected Answer	Max Mark	Notes
(ii)	<ul> <li>Two from:</li> <li>to detect/prevent errors/setting the wrong password</li> <li>if a mistake is made you wouldn't know/can't see what you are typing</li> <li>if an error is made you might not be able to log on again.</li> </ul>	2	
3 (a)	One from: • DTP • desktop publishing • desktop publisher	1	Publications is accepted, even though it is not a recognised term for DTP software, because unfortunately it appears in the 4872 specification.
	• publication(s).		All answers must be exact, apart from the case of letters.
	No other answer is acceptable.		Candidates may well include a trade name, such as Microsoft Publisher'. Any such reference should be ignored, then the rest of the answer (if any) marked. So 'Microsoft Publisher' = 0 marks but 'Microsoft Publisher – DTP' = 1 mark.

Question	Expected Answer	Max Mark	Notes
(b)	<ul> <li>Two from:</li> <li>templates for catalogues/leaflets/with layouts set <i>OR</i> ready-made layouts</li> <li>can set master page(s)/templates to make pages consistent/add house style</li> <li>wizards to help design/lead you through step by step</li> <li>easier to move/put (text and) graphics (where you want)</li> <li>design check feature checks for common problems</li> <li>layout guides help you position items</li> <li>can save files in a format ready for sending to commercial printers</li> <li>can print pages in correct order for folding</li> <li>advanced formatting features, eg kerning, dropped capitals (1 mark each)</li> <li>text wrapping around images (easier) <i>NOT</i> just 'text wrapping'</li> <li>text can flow from one text box to another</li> <li>more control over column widths etc</li> <li>easy to add lines/boxes to columns/blocks of text</li> <li>use of layers for more complex arrangements of text/graphics/example.</li> </ul>	2	This question is about features available on DTP that are not available or perhaps not so easy to use in a WP package. Therefore standard features, eg edit, add graphics, spellcheck, tables, bullets, basic formatting etc do not gain marks. This question is targeted at D grade and the key word here is 'describe'. One/two word answers that simply identify a feature such as 'templates', 'wizards', 'layout guides' are not sufficient, although for 1 mark we would not expect very much more.

Question	Expected Answer	Max Mark	Notes
(c)	<ul> <li>Up to two marks for each device:</li> <li>scanner <ul> <li>can transfer an existing photograph</li> <li>don't have to have the actual item</li> <li>don't have to go to the country</li> </ul> </li> <li>(digital) <ul> <li>camera/webcam/video</li> <li>camera/mobile phone</li> <li>don't have to have/might not have a photograph already</li> <li>can take the exact photo/angle you want.</li> </ul> </li> </ul>	4	One mark for the device, one for an advantage. If 0 marks for device, you cannot mark the advantage. Beware – candidates often give two answers from the same section, eg digital camera and mobile phone. These are considered repeated answers and should only be credited once. Therefore, for full marks, candidates MUST give both scanner and one of the camera options.
(d)	<ul> <li>Three from, eg:</li> <li>edit/change/enhance colour (of pixels)</li> <li>red-eye removal</li> <li>crop to a shape</li> <li>add lines/shapes/detail</li> <li>fill areas with a (new) colour/gradient/pattern</li> <li>make an area/colour transparent</li> <li>brush tool (to remove unwanted detail)</li> <li>lighten/darken</li> <li>change contrast</li> <li>change to monochrome/greyscale</li> <li>shadow</li> <li>fade</li> <li>distortion</li> <li>blur/sharpen image</li> <li>remove dust/scratch</li> <li>change the edge (pattern/shape)</li> <li>optimise/change resolution/export to different file types.</li> </ul>	3	Although there may be other answers, do not accept answers that are not editing the image, that can be done easily in WP/DTP software, eg resize/flip/rotate/simple crop. However, if candidates specifically suggest resize/flip/rotate/crop <i>part</i> of an image then this can be awarded. Some candidates will give answers that are too vague to understand. Eg 'colour', 'warp', 'invert'. If you are not sure what it means, it is TV or simply wrong.

Question	Expected Answer	Max Mark	Notes
(e) (i)	<ul> <li>Two from:</li> <li>he must not use/copy other people's photographs (1) unless he has the permission of the owner (1)</li> <li>he must not alter other people's photographs</li> <li>he must acknowledge the owner of photographs used</li> <li>some images are copyright free</li> <li>there is no restriction on using photographs he has taken himself.</li> </ul>	2	Do not accept answers about the limitations of copyright on educational uses – Deepak is creating a commercial catalogue. There will be times when the first mark point is not explicitly made but clearly implied. Eg 'You must get permission before you can use it'. This is worth two marks.
(ii)	<ul> <li>Two from:</li> <li>text/books/documents</li> <li>other pictures/images that are not photographs (eg logo)</li> <li>software</li> <li>music/songs</li> <li>video/film/animations</li> <li>brand/company names/trademarks</li> <li>slogans.</li> </ul>	2	There is a lot of scope here, but some answers might be TV, eg 'names of things'.
4 (a)	<ul> <li>Health and Safety ((display screen equipment) Regulations) (1992).</li> </ul>	1	The formal mark scheme has to give the correct name, but it is unlikely any candidate will give this. The minimum acceptable answer = 'Health and Safety'. The word 'law' is in the question so can be implied in the answer. Accept any answer that suggests a health and safety, eg 'health and safety at work act'

Question	Expected Answer	Max Mark	Notes
(b)	<ul> <li>One mark for each problem, one for a related prevention:</li> <li>Back/neck problems/strain <ul> <li>adjustable/correct height chair (<i>NOT</i> just 'comfy')</li> <li>have desks the correct height (top of screen level with eyes)</li> <li>sit with correct posture/upright</li> <li>use chair with backrest/arm support</li> <li>take regular breaks*</li> <li>employer should provide health and safety training</li> </ul> </li> <li>Eye/vision problems/strain/headaches <ul> <li>screen filter</li> <li>blinds</li> <li>diffused lighting (not just 'good')</li> <li>other anti-glare solutions</li> <li>focus on a distant object/look away</li> <li>monitor at correct distance (NOT height)</li> <li>high resolution/TFT/LCD screens</li> <li>regular eye checks</li> <li>take regular breaks*</li> </ul> </li> <li>employer should provide health and safety training*</li> <li>blink more often</li> <li>adjust brightness/contrast of the screen</li> <li>wear glasses if prescribed</li> </ul> <li>RSI/wrist/hand/finger strain</li> <ul> <li>Titled/ergonomic keyboard</li> <li>wrist rest/support</li> <li>take regular breaks*</li> <li>employer should provide health and safety training*</li> <li>blink more often</li> <li>adjust</li> <li>brightness/contrast of the screen</li> <li>wear glasses if prescribed</li> </ul> <li>RSI/wrist/hand/finger strain</li> <ul> <li>Titled/ergonomic keyboard, eg voice recognition, trackball</li> <li>take regular breaks*</li> <li>employer should provide health and safety training*</li> </ul>	Mark 6	Prevention methods must be reasonably precise, eg adjustable chair, not comfortable. Screen filter not screen cover etc. Health problems may be described in various ways. If the meaning is clear and matches an acceptable answer then award the mark. Eg 'hand cramp' is medically incorrect but the meaning is clear and is worth 1 mark. However, it must relate to one of back, eye or wrist problems. Do <i>NOT</i> accept safety problems, eg falling, tripping, fire etc. 5 castor chairs are for prevention of falls, not to prevent a health problem. Prevention methods must match the health problem. If 0 for health problem then 0 for prevention method. Do not accept stress as a health problem. You may have your own views on this but it is controversial and this mark scheme is based on information from the H&SE website. Mark what is written – if candidate says, for example 'RSA' you cannot interpret this as meaning something completely different, unless there is some expansion clarifying.

Question	Expected Answer	Max Mark	Notes
5 (a)	• 8	1	These are the only possible answers.
(b)	• 5	1	Accept answers in word or digit form.
(c)	<ul> <li>Two from:</li> <li>key field/primary key</li> <li>to identify/find/search for the record/supplier</li> <li>to use as a link to another table</li> <li>in case two organisations</li> </ul>	2	Many candidates think that the key field is used to search for an item. In one respect this is true, in that it is used to identify the item. However, beware of being too generous to an answer that is technically incorrect. The question asks for the purpose, so
	have the same name/to make sure organisations are not mixed up.		simply saying it is unique is not enough. However, saying it is a 'unique identifier' is sufficient, as it is clearly saying it is used to identify the record.
(d)	Up to four marks from: • search/query/filter/find • goods type is equal to/= crafts • sort/order • on country.	4	A completely correct answer gains 4 marks, therefore up to 3 marks are available to candidates who give answers that, whilst they would not achieve the required purpose, contain one or more valid actions/points from the mark scheme.
			Sort and search can be any way around.
			The criteria must be as given here and not simply restating the question, ie 'search for all the suppliers who do crafts' = 1 mark for search, 0 for criteria.
			Accept an obvious description, eg 'click the A-Z button' clearly is a command to sort. Similarly 'write crafts in the goods column' is clearly a description of entering the search criterion '. Whilst we cannot give credit for specific techniques that may or may not be available in particular pieces of commercial software (as this would advantage candidates who have used more common applications) we should be prepared to accept clear descriptions of general features that are likely to be found in different software types.
			A complete answer, giving all four mark points correctly, is required for 4 marks.

Question	Expected Answer	Max Mark	Notes
(e)	<ul> <li>One mark for describing a report, eg:</li> <li>a list of records table/results of a query/search which has been formatted/for printing/customised</li> <li>Two for reasons why it might be useful to Mark from:</li> <li>he can choose a title</li> <li>he can control the layout/where items go on the page</li> <li>he can control the formatting/specific example, eg choose fonts</li> <li>better presentation/clearer to understand</li> <li>he might need to give the report to someone else/other specific use that needs well-formatted output</li> </ul>	3	<ul> <li>There are many possible variations for the first mark point, but essentially this is for an answer that shows an understanding that a report is used to lay out data from a query, table etc, for a purpose, ie as a printed document.</li> <li>Examples of acceptable answers for this one mark include:</li> <li>it's where you choose a layout for your results</li> <li>it's for displaying the information in a table etc</li> <li>it's what you use when you want to print out a query neatly</li> </ul>
(f) (i)	<ul> <li>Two from:</li> <li>because it is a one to many relationship/not one to one</li> <li>because it would mean repeating a lot of details (1) eg repeating supplier details for every item (1)</li> <li>repetition can cause errors/wastes time/duplicates work</li> <li>having items in different fields (1) you don't know how many extra fields to have (1) would make searching for items difficult if they were in different fields (1).</li> <li>because the fields in supplier table should be about suppliers (1).</li> </ul>	2	<ul> <li>This is an A* question and it is likely that few candidates will show a great deal of understanding.</li> <li>Eg, 'it would make the table too complicated/confusing' is not enough.</li> <li>It is possible to gain two marks from two different bulleted mark points, or from one point and an expansion, as shown by the (1)s.</li> </ul>

Question	Expected Answer	Max Mark	Notes
(ii)	<ul> <li>customer table</li> <li>table of goods/items/products</li> <li>orders/purchases table/table to link goods to customers</li> <li>table to link goods to suppliers.</li> </ul>	2	Marks to be awarded for correct table content, names may vary, or they may simply be described. NB: table needs to be relevant to the purpose – to keep records of the products FFA buys from each supplier, and of customers and the items they buy. So no marks for, eg employees.
(iii)	<ul> <li>needs to link/join/connect/create relationships between the tables</li> <li>goods/link table to supplier/link table using supplier ID</li> <li>goods/link table to customer/link table using customer ID.</li> </ul>	3	One mark for an idea of linking tables. The word 'tables' might be clearly implied. Remaining two marks for specifying the tables to be linked AND the field to use. Simply saying 'primary keys' is not enough. Other specified links may be correct, according to the tables given in previous section.
(g)	<ul> <li>Three from:</li> <li>they show just one record at a time/don't get mixed up between records</li> <li>they show the whole record on screen at once/no need to scroll across columns</li> <li>fields are in the same place on each form/in the same place as on a paper form (1) making it easier/quicker to fill in (1)</li> <li>he can enter data into different tables (1) without knowing the structure/knowing that they are in different tables (1) by using subforms (1)</li> <li>he can easily filter by forms (1) to quickly find individual records (1)</li> <li>you can have more help/information/longer field names.</li> </ul>	3	It is possible to gain three marks from three different bulleted mark points, or from one or two points and expansions, as shown by the (1)s. Nothing to do with validation, drop downs, input masks etc that are also present/available on tables. Easier/quicker to fill in only awarded as an explanation of a benefit not as a mark on its own

Quest	tion	Expected Answer	Max Mark	Notes		
6 (	(a)	<ul> <li>B At least two items of the bulleted list, with or without the bullets. NOT just the bullets without the text.</li> <li>C The signature</li> <li>D Any or all of SPECIAL OFFERS</li> <li>E The whole of the text of the footer, with or without the line. No mark for the line on its own, or if the whole footer is not clearly indicated.</li> </ul>	<ul> <li>Mark</li> <li>The bulleted list and footer MUST be circled for the mark to be awarded. However, the signature and bold text can be awarded without a circle, providing there is absolutely <i>no</i> ambiguity about the element identified. If a failure to follow the instruction to circle the feature leads to any ambiguity over what is indicated benefit of the doubt should <i>NOT</i> be given.</li> <li>For the bulleted list, although the bullets on their own are not sufficient the bullet itself does not have to be included – the list is technically the text.</li> <li>A description of proof reading, eg 'give it to someone else to read' or 'r read'/'read it through' is sufficient. 'give it to someone else to check' is about the minimum required for the mark 'check it through carefully' is not enough – this is little more than a restatement of the question.</li> <li>NOT crashing, power cut, not saving properly. This must be about losing stored data permanently, not just losing what you're working on now. Remember that where two possible answers are on the same line, they</li> </ul>			
				bullets on their own are not sufficient, the bullet itself does not have to be included – the list is technically the		
(	(b)	Two from: • spell check • grammar check	2	'give it to someone else to read' or 're-		
		<ul> <li>proof reading (self or other person).</li> <li>print out/print preview to check layout</li> </ul>		about the minimum required for the mark 'check it through carefully' is not enough – this is little more than a		
7 (	(a)	<ul> <li>Two from:</li> <li>deliberately deleted/changed</li> <li>virus</li> <li>hardware failure/example eg</li> </ul>	2	stored data permanently, not just		
		<ul> <li>hard disk failure</li> <li>human error/example eg deleting/overwriting by mistake</li> <li>physical damage to computer/example eg fire,</li> </ul>		answers are on the same line, they are the same mark point, so 'fire' and		
		flood, theft.		Hackers will appear frequently. On their own this is not worth a mark, but if they delete data then this is awarded from the first mark point.		

Question	Expected Answer	Max Mark	Notes
(b)	<ul> <li>Up to two marks for each way – one for the method and one for an additional description eg:</li> <li>keep backups (1) regularly/in a different place/on a different medium (1) so that if data is lost it can be recovered (1)</li> <li>use anti-virus (software) (1) and update it regularly (1) and check all incoming files (1) and run a complete check regularly (1)</li> <li>use a firewall (1) to prevent other people/hackers getting access to files (1)</li> <li>use passwords (1) to prevent other people getting access to files (1)</li> <li>ban the use of portable storage media (1) from outside the company (1) to prevent viruses (1)</li> <li>regular hardware replacement (policy) (1) suitable time, eg every 2-3 years (1) using well- known/reputable suppliers (1) to reduce the chance of hardware failure (1)</li> <li>air-conditioning (1) to maintain temperature/environment/prev ent over-heating (1) to prevent hardware failure (1)</li> <li>security measures/locks/other specific anti-theft device (1) to prevent theft (1).</li> </ul>	4	Nothing for anti-spyware – this is about protecting your files from damage/loss. Although in previous sessions we have not allowed simply 'anti-virus', in the interest of consistency we are awarding this for this session. The additional description may be an expansion of the method or a reason for it. However, 'to use anti-virus software to protect from viruses' is 1 mark not 2 because the reason is implied so clearly in the name. Any of these mark points are available to any candidate – you do not have to match a method with a possible loss from (a). However, this is still about preventing permanent loss of stored data.

Question	Expected Answer	Max Mark	Notes
8	One mark for each valid development/device with a purpose, and a possible additional mark if this is explained (giving a reason, advantage or	8	In this open response question you must 'hunt' through the answer looking for mark points. This is an 'eg' list, as it is not possible to create an exhaustive list of valid
	<ul> <li>consequence), eg:</li> <li>portable/laptop computers allow work to be continued</li> </ul>		points. However, if in any doubt, consult your Team Leader.
	whilst travelling (1) useful because they may be going where there is no (easy)		An alternative format for the examples is provided at the end of this markscheme.
	<ul> <li>access to computers/might be travelling long distances (1)</li> <li>PDAs can be used for diary/address book/notes (1) because they are very small/easily portable (1)</li> <li>flights/trains can be booked over the Internet (1) which is more convenient/cheaper than going to a travel agent (1)</li> <li>email can be used to keep in touch with family/receive information from the office/send documents (1) convenient with different time zones/suitable for long documents/attachments (1)</li> <li>mobile phones can be used to contact family/suppliers (1) even if there is no landline/more convenient</li> </ul>		Remember that the context is people who <i>do</i> spend a lot of time travelling to visit suppliers all over the world. 'Advantages' suggesting that they won't need to travel <b>at all</b> cannot be credited. However, uses of developments might still gain marks – it's just the advantage that is incorrect.
			It is strongly recommended that you use $\checkmark$ s even after you have been approved, as this will help you count the number of mark points that have been awarded.
			No marks for a device/development on its own, though more than one point can refer to the same device/development – eg mobile phones for messaging (1) allow messages to be sent quickly (1) and for WAP (1) allowing access to websites on the move (1).
	<ul> <li>when travelling (1)</li> <li>SMS a quick way of sending messages (1) convenient if in</li> </ul>		Maximum 4 marks if only one device/development considered.
	<ul> <li>different time zones/if just want to confirm arrival etc (1)</li> <li>mobile phone/Internet cafe/can allow email to be used (1) from anywhere (with</li> </ul>		Telephones are not considered developments. Nor are fax machines – these staff are travelling. However, they could send faxes from laptops/internet cafes.
	<ul> <li>a signal)/convenient when in different time zones (1)</li> <li>GPS systems can be used for directions (1) more accurate/convenient than a</li> </ul>		Also be aware that a device/development could also be a purpose, depending on the context. For example:
	<ul> <li>map (1)</li> <li>company web pages can be shown to suppliers/customers</li> </ul>		<ul> <li>'mobile phones' on its own is insufficient for a mark – it needs a purpose</li> </ul>
	(1) easier/more convenient than carrying large amounts of paper (1)		<ul> <li>'email' on its own is insufficient for a mark – it needs a purpose</li> </ul>
	<ul> <li>multimedia presentations can be shown to groups of suppliers/customers (1) to show information most 14</li> </ul>		<ul> <li>'mobile phones allow access to email' is enough for a mark – email is the purpose provided by the phone.</li> </ul>
	effectively (1).		Some candidates may give more than one device for the same purpose.

Question	Expected Answer	Max Mark	Notes
9 (a)	<ul> <li>computer control uses a sensor to measure the</li> </ul>	1	Correct answers only but do not penalise spelling.
	temperature at various stages of the chocolate-making		Quick reference:
	process.		Sensor
(b)	One mark each correct word  the data from the <b>sensors</b> is	2	Sensor
	<ul> <li>the data from the sensors is constantly input to the</li> </ul>		
	computer.		Computer
(c)		1	
	temperature with a pre-set level.		Computer
(d)	One mark each correct word:	2	Computer
	<ul> <li>if the temperature is too low the computer will switch on</li> </ul>		
	the <b>heater</b> .		Heater
(e)	One mark each correct word:	3	Correct
	<ul> <li>when the temperature is correct the computer will</li> </ul>		Computer
	switch off the <b>heater</b> .		Heater
10 (a)	• C7	1	Correct Answer Only.
(b)	• D2	1	Cell references must be given
(~)		-	correctly, so no marks for 7C or 2D.

Question	Expected Answer	Max Mark	Notes
(c)	<ul> <li>One mark for an idea:</li> <li>put a formula into cell E10 (formula may be implied by</li> </ul>	3	Three marks can be awarded for any completely working suggestion, even if it is not the neatest solution.
	giving an actual formula. E10 may be described, eg 'cell for the delivery charge')		Be prepared to work through other ideas that may work.
	OR		= sign not required in formulas.
	<ul> <li>a vague description of the formula required, showing</li> </ul>		Accept 5.50 for 5.5 in formulas/table
	some understanding, eg need for IF statement (no further marks available)		Examples of 2 mark answers (1 for identifying the need/position for a formula and 1 for a largely correct or described formula):
	Two further marks for a		• put = IF(E9<200,5.5,0 into E10
	<pre>completely working formula/description, eg: = IF(E9&lt;200,5.5,0) = IF(E9&lt;200,5.5,IF(E9&gt;=200,0)) =IF(E9&gt;=200,0.5.5) @IF(E9&gt;=200,0.5.5,0) = VLOOKUP(E9,??:?,2,TRU E) or VLOOKUP(E9,??:?,2,TRU E) or VLOOKUP(E9,??:?,2,0,0) with ??:?? referring to a table showing: 0 5.5 200 0 check the value in E9. If it is less than 200 put 5.5, otherwise put 0. One of these marks can be awarded if the formula/algorithm is largely correct but has one small error.</pre>		<ul> <li>E10 needs = IF(E9&lt;200,5.5,IF(E9&gt;200,0))</li> </ul>
			<ul> <li>use the formula = IF(E9&lt;200,5.5) in E10</li> </ul>
			• E10 =IF(E9>200,5.5,0))
			<ul> <li>you need a formula in E10 – IF(E9&lt;£200,£5.5,0)</li> </ul>
			• put a formula in the cell for the delivery charge. This needs to check the value in E9. If it is less than 200 it will put 5.5.
			Where more than one small error is made, 1 mark is the maximum available (under 'vague description')
			Some candidates may write a lot but do little other than reword the question. This is worth 0 marks.
			Identifying the need for a formula is not enough – this is a high level question. Candidates must at a minimum also either identify where this formula is needed or give at least a vague idea of what the formula will look like.

Development	Purpose.	Expansion/Reason/Advantage/consequence No marks for advantages relating to cost
Mobile phones	Telephone calls to company/family/suppliers Allow access to email	even if there is no landline/more convenient when travelling small
Email	used to keep in touch with family/company to send attachments/documents	convenient when in different time zones suitable for long documents etc.
Portable/laptop computers	allow work to be continued whilst travelling send faxes	useful because they may be going where there is no (easy) access to computers/might be travelling long distances can be carried around in a shoulder bag
PDAs	can be used for diary/address book/notes to access emails	because they are very small/easily portable
The Internet (cafes)/WWW	flights/trains can be booked maps/directions found company website accessed information about suppliers found time zones confirmed currency exchange found send faxes can place orders	which is more convenient than going to a travel agent easier/more convenient than carrying large amounts of paper
SMS	a quick way of sending messages	convenient if in different time zones if just want to confirm arrival/short messages etc
GPS	can be used for directions	More accurate/convenient than a map
Multimedia presentations	can be shown to groups of suppliers/customers	to show information most effectively
Instant	to have a (virtual) meeting	To reduce environmental/time
messaging	for quick virtual conversations	consequences of travelling to the meeting
Video conferencing	to have a (virtual) meeting	To reduce environmental/time consequences of travelling to the meeting Makes it easy to share ideas/can see/hear people

Alternative format showing examples of possible responses for q8:

### **Grade Thresholds**

#### General Certificate of Secondary Education Applied ICT (Double Award) 1494 June 2007 Assessment Series

#### **Unit Threshold Marks**

Unit		Maximum Mark	<b>A</b> *	Α	В	С	D	E	F	G	U
4872	Raw	100	80	73	66	59	51	44	37	30	0
	UMS	100	90	80	70	60	50	40	30	20	0
4873	Raw	50	47	42	37	32	27	22	17	12	0
	UMS	100	90	80	70	60	50	40	30	20	0
4874	Raw	50	47	42	37	32	27	22	17	12	0
	UMS	100	90	80	70	60	50	40	30	20	0

#### **Entry Information**

Unit	Total Entry
4872	2536
4873	2613
4874	3137

#### **Specification Aggregation Results**

GRADE	A*A*	AA	BB	CC	DD	EE	FF	GG	UU
UMS	270	240	210	180	150	120	90	60	0
Cum %	0.9	6.5	23.4	48.6	67.7	79.5	88.2	95.2	100

#### 3218 candidates were entered for aggregation this series

For a description of how UMS marks are calculated see; <a href="http://www.ocr.org.uk/exam\_system/understand\_ums.html">http://www.ocr.org.uk/exam\_system/understand\_ums.html</a>

Statistics are correct at the time of publication

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