GCSE

Applied ICT

General Certificate of Secondary Education

Unit **4872:** ICT Knowledge and Understanding

Mark Scheme for January 2012

Question			Answer	Marks	Guidance
1			One mark each correctly labelled item: B. any or all of the name Paul Reynard but must not include any text that is not bold C. only the ^{a} of 5^a D. any or all of the address E. any or all of the word 'Email' and the email address	4	
2	(a)	(i)	Computer aided/assisted design (1) Computer aided/assisted manufacturing (1)	2	
	(b)		CAD At least two from : eg • Both two and three dimensional drawings can be produced • Less likely to lose work as it can be backed up and stored away from the computer • Can be easily altered • Can be done anywhere • All of the tools needed are supplied by the program • Drawings are stored on disk rather than in a bulky folder • Designs can be sent to customers • Dimensioning / scaling is almost automatic • Library of drawings • Parts of drawings can be saved and used in other drawings CAM At least two from : eg • Allows tighter tolerances for machine work • More efficient qualified works without breaks / doesn't get tired / doesn't make human errors	8	

Question			Answer	Marks	Guidance
			• Consistent results /every one is the same • Less waste • Fewer people to pay • Process of manufacture requires less skilled staff		
3	(a)	(i)	(=) B6/1000*B5*B7 (in any order) 1 mark for B6/1000, 1 mark for *B5 or B5* and 1 mark for *B7 or B7*	3	
		(ii)	(=) (SUM) B4+C8 (in any order) (=) B4+ (B6/1000*B5*B7)	1	
		(iii)	(=) <u>IF(C9>500</u>,<u>C9/50</u>,<u>0</u>) 1 mark for each of the underlined sections being correct ignore the need for the correct usage of brackets or commas	4	There may be other solutions eg (=) IF(C9>500,C9*2%,0)

		(iv)	(=) C12*B14 or (=) C9*B14	1	or (=) C9 * 20 %
					   (=) C12*20%
					   (=) C12*0.2
					There are other solutions

		(v)	(=) (SUM) C12+C14	1	
		(vi)	• Set to currency • Set to two decimal places	2	
	(b)	(i)	• Lock / read only all the cells (1) except those that he wants data to be added to (1) /unlock the cells (1) where data needs to be changed (1) • Protect (password) the worksheet	3	

Question			Answer	Marks	Guidance
		(ii)	• Use a password (1) which only he knows/does not write down/is not obvious/strong (1) • Encrypt	2	
	(c)	(i)	• It does not indicate what is in the file / forget what is in it / harder to find • There may be more than one company beginning 'Pen'	2	
		(ii)	• Date file saved (1), so that he knows when the work was carried out (1) • Name of garment (1), so that he can find the work more easily/indicate its contents (1)	2	Must have the method to get the reason mark
4	(a)		• Set to transparent • The graphic has been copied • The graphic has been rotated (1) $36^o/108^o/180^o/252^o$ (1)/flipped (1) vertically (1) • Moved to the correct position • The graphic has then been pasted / inserted • Group the images	5	There may be other ways of obtaining image 2 in other types of software. Use your professional judgement when awarding marks for such answers. The graphic is most likely to be a vector graphic nevertheless award a mark for set to transparent
	(b)		• Selected sections of the logo (1) have been filled (1) • Added the text (Pentachord Clothing have been placed within a text box) • The font has been changed from the default/select the appropriate font • resize to fit	4	There may be other ways of obtaining image 4 in other types of software. Use your professional judgement when awarding marks for such answers
5	(a)	(i)	• The attachment might carry a virus	1	

Question			Answer	Marks	Guidance
		(ii)	• Do not open/delete/quarantine attachments (1) from unknown/suspicious senders (1) / filter (1) and send to junk mail (1) • Use up to date (1) antivirus software (1) to scan attachments before opening (1)	4	Accept anti-malware or other anti-malware
	(b)		Advantages eg • The designs are received by Paul quicker • Paul can communicate his ideas to the customer quicker • If small changes are made then, whilst the work is current, these can be made • Paul does not have to be in the office to receive the work • The customer does not need to be in the office to receive the draft designs • The email does not get 'lost in the post' • Memory sticks can get damaged Disadvantages eg • There may be a greater restriction on the size of the file • Internet connection is required for data to be available	5	Do not accept faster, cheaper etc. Maximum of 4 advantages

Question			Answer	Marks	Guidance
6	(a)	(i)	<table><tr><td>Field Name</td><td>Field Type</td><td>Length eg</td></tr><tr><td>ID</td><td>Integer</td><td>(5)</td></tr><tr><td>Company</td><td>Text/Alphanumeric/String</td><td>50</td></tr><tr><td>Date</td><td>Date</td><td></td></tr><tr><td>1st line</td><td>Text/Alphanumeric/String</td><td>20</td></tr><tr><td>Town</td><td>Text/Alphanumeric/String</td><td>20</td></tr><tr><td>Postcode</td><td>Text/Alphanumeric/String</td><td>8</td></tr><tr><td>Email</td><td>Text/Alphanumeric/String</td><td>50</td></tr><tr><td>Tel</td><td>Text/Alphanumeric/String</td><td>12</td></tr></table> **Level 3 (8-10 marks)** At this level candidates will have understood the need for a key field. Have all the required fields and have the field types correct. The field lengths are all reasonable. The quality and completeness of the answer will determine the mark awarded. **Level 2 (4-7 marks)** At this level candidates may not have understood the need for a key field but should have all the other fields. They may have used incorrect field types eg a numeric field for the telephone number. Some of the field lengths may be incorrect. The quality and completeness of the answer will determine the mark awarded. **Level 1 (1-3 marks)** At this level candidates may not have all the other fields. Field types, field lengths may be incorrect. The quality and completeness of the answer will determine the mark awarded within this level	10	This is a differentiator for the highest marks. Accept any reasonable length for field.

Question			Answer	Marks	Guidance
		(ii)	>=1/10/1998 AND <=Today 1 mark for: • >= • 1/10/1998 • AND • <=Today	4	There will be other ways of achieving the same result Only penalise equal sign once
	(b)		• Searching / Sorting data can be quicker / easier • More files in less space • Cards can become damaged / lost • Not a problem with hand writing • Amending records does not involve writing the card out again • More than one person can use the database at one time • More secure by use of encryption / passwords • Database can be backed up quickly / easily • Database can be transferred quickly via the internet etc	4	Do not accept quicker

Question			Answer	Marks	Guidance

7	(a)		Two from:
			• Image / picture
			  Logo
			  To add business identity
			• Animation / Movie / Video
			  A movie clip of the inside of the factory
			  So customers can see what the factory looks like
			• Sound / Music
			  Background music
			  To make the presentation more interesting
			
			1 mark for correct name of the multimedia element, 1 mark for the example and 1 mark for a different reason for using it
				6	Allow once vague reasons such as:
					Interesting;
					Catches the eye;
					More professional.
					
					They must have the element correct to get the other marks

	(b)	(i)	• To move to the next slide • To move to the preceding slide 1 mark awarded for an understanding of navigation.	2	Condone page
		(ii)	• To (hyper)link/shortcut (1) to a spreadsheet or appropriate page(1)	2	To gain the second mark this must infer the ability to carry out the calculations
		(iii)	• It <u>indicates</u> there is a possible/there could be a spelling error • Word is not in the computer's dictionary	2	Do not award marks for 'It shows a spelling error'. After all D-zines is spelt correctly.

Question			Answer	Marks	Guidance
	(c)		eg • The slides can automatically move from one to the next • When it gets to the end it starts again from the beginning / loop(1) automatically start from the beginning(1) • They can be timed so that they change after 2 minutes • Transitions from one slide to the next can be used • eg When slides change from one to the next the first slide can be made to slowly fades away whilst the next slide fades in • Sounds can be incorporated into transitions • Animations can be incorporated into the presentation • eg Words move in from the left • Hyperlinks / hot spots / buttons can be created(1) to take to other slides within the presentation(1)	8	

Question			Answer	Marks	Guidance
	(d)		Advantages At least one from - The presentation catches the eye (1) by having sound/animation etc (1) - It is cheaper to produce the slideshow - May run out of printouts to hand out Disadvantages At least one from - It cannot be taken home by the viewers/they have to watch it at the Fair - They cannot pass it on to friends etc - Details such as the company's phone number and web address would need to be remembered or written down - The equipment is expensive to initially buy	6	Not more professional
	(e)		The notes appear under/linked to each slide do not need to switch windows(1) avoiding the need to cut and paste text/slides (1)	2	Different types of software may have different methods of doing this

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