

## **2009 Computing Studies**

## Standard Grade - General

## **Finalised Marking Instructions**

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1.

			KU	PS
DC 1	Electro	nics is developing robots for use in the new UK space program.		
The	secreta	ary is about to send out a letter to all of the workers.		
(a)		poking over the letter the secretary notices that "spice" has been used instead of ce" throughout.		
	(i)	State the feature of a word processing package, which can be used to make this change in one operation.		
		Search and Replace or Find and Replace or Find and Change		1
	(ii)	Describe how you would use this feature to correct the spelling of "spice".		
		Search/find for spice (1) and replace/change with space (1). Notion of spice first then space second (1)		2
(b)		re printing, the secretary did a <i>spelling check</i> of the letter. It highlighted botRanger" each time as wrongly spelled.		
	(i)	Explain how a spelling check feature works.		
		Compares the words against its dictionary (1) <u>or</u> highlights those words not in dictionary <u>or</u> gives a replacement word (1).	2	
	(ii)	State how you would stop this happening again.		
		By adding the word to the user dictionary, ignore all or add to list.		1
(c)	After	correcting the spelling, there are still some mistakes.		
	State	the feature that would pick up the error shown below.		
	"The	first trial of the RobotRanger are the 12th of June".		
	Grai	mmar check.		1
( <i>d</i> )	Whe	n writing the letter, the secretary makes use of standard paragraphs.		
	State	what a standard paragraph is.		
	As lo	ction of text that is saved (1) and can be used again and again (1). ong as saved and re-used is implied, accept for 2 marks. It template, paragraph/letter with spaces.	2	

			KU	PS
(e)		company decides to alter the letter and produce a newsletter using a <i>desk top</i> shing package instead.		
	Desc	ribe how they can do this <b>without</b> re-typing the text of the letter.		
		ort the text into the dtp $(1)$ or copy/cut and paste the text $(1)$ . It text file but not just insert text. $(1)$ .		1
(f)		cture of the robot designers is to be put into the newsletter. The photograph is arge to fit.		
		RobotRanger		
	State	what must be done to make it fit.		
	Resi	ze the picture, make smaller, scale or rescale NOT crop (1).		1
(g)	The	secretary has used tables before but has forgotten how to use them.		
	She o	could use on-line help or an on-line tutorial for assistance.		
	(i)	State which one would be more suitable.		
		On-line help (1)		1
	(ii)	Explain your choice for the above answer.		
		A quick reminder of the task/of a single task/of the task she has already undertaken. (1) NOT step-by-step.		1
		NOTE: if part (i) is incorrect but part (ii) is correct based on the incorrect answer, then award the mark.		

		KU	PS
	ar Animations is a firm that writes games programs using a range of different outers such as <i>palmtops</i> and <i>laptops</i> .		
(a)	State one disadvantage of using palmtop computers for writing programs.		
	Limited memory/no backing storage/no suitable software/screen size/limited input methods. (1)	1	
(b)	Palmtop computers use a special type of screen for input.		
	Name this type of screen.		
	Touch screen or touch sensitive screen. (1)	1	
(c)	When programs are edited, the code is stored in <i>main memory</i> .		
	State the type of main memory used.		
	RAM <u>or</u> Random Access Memory. (1)	1	
(d)	One of the files created when writing the program needs to be used on another computer. The file size is 850 megabytes.		
	What type of backing storage is required to allow them to move it to another computer?		
	DVD-R <u>or</u> DVD-RW <u>or</u> USB memory stick <u>or</u> pen drive <u>or</u> flash drive <u>or</u> flash memory <u>or</u> memory card <u>or</u> portable hard disk.(1) <u>NOT</u> CD of any kind, USB on its own, hard disk drive or DVD-ROM.	1	
(e)	The program is written in a <i>high level language</i> but the computer only understands <i>machine code</i> .		
	What needs to happen to the program to allow it to be used on a computer?		
	Translated/compiled/interpreted/changed to machine code or binary (1) NOT changed on its own.	1	
(f)	Anwar Animations keeps details of its workers on computer.		
	State <b>two</b> rights the workers have to this information.		
	To see their own data held on them (1) Changed if <u>incorrect</u> (1)		
	NOT compensation on its own.	2	
(g)	The company uses a wireless network.		
	State <b>two</b> reasons for using wireless networks.		
	Any 2 from: No <u>trailing</u> cables/use anywhere <u>within (signal) range</u> /ease of adding equipment.	2	

			KU	PS
	nern Oil stores the parts and suppliers it mation is shown below.	needs to build oil lines. Part of the		
	Company Name	Jones Electrics		
	Address 1	12 High Street		
	Address 2	Cardonald		
	Town	Glasgow		
	Invoice Number	5149542		
	Order Value	£34,234		
	Date of Order	25th April 2009		
(a)	Complete the following paragraph using the	words below.		
	file record field			
	The example shown above is a <b>record</b> .			
	"Invoice Number" is a <b>field</b> .			
	When you save the <u>file</u> you are saving all suppliers.	of the information about the parts and		3
(b)	The manager wants a paper copy of all order	rs from Glasgow.		
	Explain how they could do this.			
	Search/query/filter (1) Town = or is Glasg	gow (1) then print (1).		3
(c)	Northern Oil wants to put its list of parts an largest number first.	nd suppliers in order of invoice number,		
	Explain how this is done.			
	Sort (1) Invoice Number (1) descending (1 or click in field (1) Invoice Number (1) the NOT A-Z or biggest to smallest or largest	en click on <b>Z-A</b> or <b>10-1</b> (1)		3
( <i>d</i> )	The company wants to store the details of wh	hen the order was delivered.		
		. d.:		
	Explain what alterations are needed to allow	tms.		

2

State two running costs the company may have when using computers and working

 $Any\ 2\ from:\ Printer\ paper/electricity/toner/ink/software\ updates/training\ for\ software\ updates/repair\ or\ maintenance/Internet\ charges\ not\ Internet\ on\ it$ 

(*e*)

with the database.

own.

(a)	On a	web page you can click on hyperlinks.	
(0.)	(i)	State the purpose of hyperlinks.	
	(1)		1
	<b></b> \	To move to another page/section of website. Notion of movement.	1
	(ii)	State <b>one</b> way of identifying hyperlinks on a web page.	
		Colour change/pointer changes to hand/underline/highlighted if explained.	
(b)	Look	Web and its customers keep in contact by using electronic mail.	
	(i)	State <b>one</b> advantage, other than cost, of communicating using electronic mail instead of normal post.	
		Fast delivery, acknowledgement of arrival, don't need to leave house, sending to many people at once. NOT faster on its own.	1
	(ii)	Look Web has sent an e-mail with 12 separate attachments. The e-mail was 18 megabytes in size and used capitals throughout.	
		This e-mail has broken <b>two</b> rules of <i>netiquette</i> .	
		What are they?	
		Too many attachments at once/file size too large/use of ALL CAPITALS.	
(c)		Web uses a <i>search engine</i> to help in finding information when designing their pages.	
	One	of their searches was for Glasgow Cross in 1920.	
	Put a	a tick $(\checkmark)$ in the box that will give the <b>best</b> results.	
	Glas	gow Cross in 1920	
	Glas	gow Cross and 1920	
	"Gla	sgow Cross" + 1920 ✓	
( <i>d</i> )	The	designer used HTML to make the website.	

When designing the webpages, Look Web can also add video clips to the pages.  State <b>one</b> advantage of adding video clips to a web page.			KU	PS
State <b>one</b> advantage of adding video clips to a web page.  Realism/interest/notion of more informative.				10
Realism/interest/notion of more informative.	)	When designing the webpages, Look Web can also add video clips to the pages.		
Realism/interest/notion of more informative. NOT looks better.		State <b>one</b> advantage of adding video clips to a web page.		
		Realism/interest/notion of more informative. NOT looks better.		1
I I				

					K
Able	Art Printing compa	any use spreads	heets as part of its bu	usiness. A sample is sh	own
pelow	•	any use spreads.	needs as part of its oc	somess. If sample is sin	
	A	В	C	D	
1	Able Art Pri	В	C	D D	
2	Able Alt III				
3		Number		Order	
	Part No.	Ordered	Item Cost	Cost	
4	AB123		50 £1.00	£60.00	
5	CD621	3	32 £10.50	£336.00	
6	HX810		2 £20.05	£40.10	
7	GD657	3	3.20	£121.60	
8			Total	£557.70	
9					
10			Average	£139.43	
11					
			umn to make the name		
	Click and drag th	ne line between ine between A a	A and B <u>or</u> ind B <u>or</u> Change forr		
<i>b</i> )	What cell formatti	ng has be used i	n cell B3 so that both	words appear?	
	Word wrap/wrap	text/text wrap	•		
c)	A formula is used	in cell D8.			
	Complete the form	nula.			
	= Sum (D4:D7) 1	mark for Sum	and 1 mark for D4 a	nd D7	
d)	A formula is also	used in cell D10			
	Complete the form	nula			
	= Average (D4:D' and 1 mark for D		verage or avg or ave		
	The formula for cocolumn.	ells D4 to D7 wa	as entered in D4. It w	was then <i>replicated</i> dowr	the
	State what is mean	<b>nt</b> by replicated.			
	When the conten	ts of a cell are <u>c</u>	opied to another set	of cells/or <u>copied</u> on ow	<b>n.</b> 1
	State how the <i>form</i> C6.	nat of cell C7 sl	nould be changed so t	that it looks the same as	cell

		KU	PS
(g)	The security of the data is very important.		
	State <b>two</b> methods that could be used to protect data.		
	Lock cells/protect cells/lock file/protect sheet/read only file.  Locked doors/passwords/encryption of data/sensible biometrics/swipe cards/ access privileges.		
	Passwords and user names are the same. Don't give 2 marks.	2	
( <i>h</i> )	The company is also worried that its data may be lost.		
	State what can be done to make sure this data is not lost.		
	Make a backup copy of the data/second/extra copy.		1

			KU	PS
6.	Spac	ceRanger robots are designed to work on Mars.		
	(a)	Virtual Reality was used during the design process. Explain what virtual reality is.		
		Real life/seems real even though it is not (1) while running on computer or program. (1).  NOT the word reality on its own. NOT Wii.	2	
	(b)	State <b>two</b> reasons why the space program is using robots instead of humans.		
		Any 2 from: Implications of safety/use in dangerous situations/cope with temperature conditions/work 24 hours/implication of working 24 hrs. Must relate to situation in space. NOT efficiency or accuracy.	2	
	(c)	An engineering firm building the SpaceRanger uses <i>mobile robots</i> to transport parts around the factory.		
		(i) State <b>two</b> safety features that may be required in the factory.		
		Sirens or sounds on robot/bump sensors on robot/lights/clear routes for robot/warning signs.  NOT fenced off or restricted areas or motion sensor.		2
		(ii) Mobile robots use <i>real-time processing</i> when they detect an object in their path.		
		Explain why real-time processing is used.		
		The notion of immediacy.		1
	( <i>d</i> )	The finished robots come with a range of sensors.		
		State <b>two</b> types of sensor.		
		Any 2 from: Pressure/heat/motion/light/magnetic/bump/laser/distance/optical. Any appropriate sensor	2	

			KU	PS
7.	Jenn	ifer is an artist. She has decided to sell her work in her own shop.		
	(a)	People buying goods in her shop can use their credit cards.		
		Payment is made using <i>EFTPOS</i> .		
		What do the letters POS stand for?		
		P <u>oint</u> of S <u>ale</u>	2	
	( <i>b</i> )	(i) The items sold in the shop have <i>bar codes</i> on them.		
		State <b>one</b> advantage of using bar codes.		
		Speed of use/accuracy of input/itemised receipt/no need for price tickets on every item/idea of stock control.	1	
		(ii) Bar codes have check digits.		
		State the purpose of a check digit.		
		Makes sure the bar code is read/entered/scanned <u>correctly</u> .  Answer must refer to reading, entering or scanning correctly.	1	
	(c)	The shop uses <i>interactive processing</i> when items are sold.		
		What is meant by interactive processing?		
		Where the operator's instructions are processed <u>continuously</u> eg like a conversation or system responds to user input.		1
	(d)	The shop uses a database package to store the details of the goods sold in the shop.		
		At the end of the day, a new file of all the items sold is created.		
		Use these words to fill in the blanks.		
		database package database file		
		The database package is the program file.		
		The database file is the complete set of data.	2	
			-	