education

Department:
Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY P2

FEBRUARY/MARCH 2010

MEMORANDUM

MARKS: 150

This memorandum consists of 13 pages.

SECTION A

QUESTION 1

1.1	P	✓		(1)
1.2	L	✓		(1)
1.3	O	✓		(1)
1.4	J	✓		(1)
1.5	Q	✓		(1)
1.6	C	✓		(1)
1.7	R	✓		(1)
1.8	H	✓		(1)
1.9	G	✓		(1)
1.10	I	✓		(1)
				[10]

QUESTION 2

2.1	B	✓		(1)
2.2	D	✓		(1)
2.3	D	✓		(1)
2.4	B	✓		(1)
2.5	A	✓		(1)
2.6	C	✓		(1)
2.7	A	✓		(1)
2.8	C	✓		(1)
2.9	C	✓		(1)
2.10	A	✓		(1)
				[10]

TOTAL SECTION A: 20

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SECTION B

QUESTION 3

3.1	Easy to perform queries OR easy to find books/media on particular topics / author / stock Can search for media/books by subject/topic Can check which books are borrowed against their name Can reserve books Can use Internet for research Easy to print lists/results of queries Can easily generate statistics, catalogues, indexes of library books Data/Information can be accessed by multiple users simultaneously Quicker to issue a book, etc. *(Any 3 valid responses)* ✓✓✓			(3)
3.2	Basic/low level word processing or spreadsheet work Internet workstation (for browsing) Backups, etc *(Any valid response)* ✓			(1)
3.3	3.3.1	1.73 GHz ✓		(1)
	3.3.2	Laptop 1 ✓ More primary memory/has more memory or RAM ✓		(2)
	3.3.3	The lightscribe does NOT affect the reading of CDs ✓ Lightscribe burns labels onto CDs/DVDs ✓ OR DVD drives are backward compatible ✓ and can read CDs ✓ OR DVD drives read & play CDs ✓✓		(2)
	3.3.4	Internal modem ✓ Wireless ✓		(2)
	3.3.5	Wireless ✓		(1)
	3.3.6	Size of screen ✓ Measured diagonally in inches ✓ From bottom left corner to top right corner – vice versa From top left corner to bottom right corner – vice versa		(2)

	3.3.7	The dealer will send a technician to where the laptop is situated ✓ To solve the problem or repair the computer ✓		(2)
	3.3.8	Provides more ports ✓ (to connect many USB devices, e.g. printer, mouse, memory stick, etc.) to the laptop at the same time Easier to connect than having to plug in back of PC *(Any 1)* ✓		(1)
3.4	3.4.1	Printer 2 ✓ 'borderless printer' ✓		(2)
	3.4.2	4800 dpi ✓		(1)
	3.4.3	Card slots ✓		(1)
	3.4.4	Printer 2 has software with drivers ✓ or It indicates that the printer will work with all the listed operating systems ✓✓		(2)
	3.4.5	Printer 1 can do more than just print, i.e. scan and copy and print ✓ *(must state at least one function other than to print)*		(1)
	3.4.6	Printer 3/Laserjet printer ✓		(1)
3.5	3.5.1	Contributes towards green computing ✓ Cheaper ✓		(2)
	3.5.2	Guarantee falls away Quality of copies – may not be very good Potential for damage to printer *(Any 1)* ✓		(1)
3.6		***Print to file*** box has been checked ✓		(1)
				[29]

QUESTION 4

4.1	Teachers can load resources onto the network for learners All users have access to what is available Librarian can update news, school announcements, etc. on the library system on a daily basis Users can share software Users can share hardware All users can access the library administration system, etc *(Any 3)* ✓✓✓			(3)
4.2	Length of the password should not be less than 5 characters Use a combination of alphabetical characters and numbers and other characters Do not use personal or easily identifiable information such as ID number, name of pets, etc Use a mixture of upper and lower case characters *(Any 2)* ✓✓			(2)
4.3	Load on shared drive or folder on the network Install it on all the computers *(Any 1)* ✓			(1)
4.4	4.4.1 Make sure auto-protect option is installed Perform regular scans Only run one anti-virus program on the system Install anti-virus program on all machines Set to send reports of virus activity to librarian/administrator *(Any 3)* ✓✓✓			(3)
	4.4.2 Anti-virus software detects virus activity by matching it to a list or database of virus definitions. ✓ These definitions need to be regularly updated to detect new viruses. ✓			(2)
	4.4.3 Malicious purposes Out of boredom For ego-trips/To show how well they can program For economic gain, others will then have to purchase an anti-virus program To create/exploit security loopholes *NOTE TO MARKER: Answer must refer to human activity – do not accept a definition for a virus or a description of how viruses spread* *(Any 1)* ✓			(1)

	4.4.4	Avast Kaspersky Panda AVG Nod32 PC-cillin Bit Defender McAfee Symantec (Norton) F Secure *NOTE TO MARKER: Must be one of these commonly listed programs here* *(Any 1)* ✓		(1)
4.5		Do not store offensive material Do not give out passwords Use the allocated amount of disk space only Do not save personal files on network Do not allow others to use your account, etc *NOTE TO MARKER: This question refers to a network and NOT the use of the computer centre* *(Any 3 valid responses)* ✓✓✓		(3)
4.6	4.6.1	Hyperlinks The word document should contain an indexed/organised list The word document should contain hyperlinks to the websites *(Any 2)* ✓✓		(2)

	4.6.2	Advantage: Instant
		                         Cheaper than SMS
		                         Group communication
		(Any 1) ✓
		Disadvantage: Not all cell phones have IM facilities
		(Any 1) ✓
				(2)

4.7		Save in JPEG/compressed format Reduce the number of colours Reduce the resolution Reduce physical size of the image Save in grayscale/black and white Crop any unnecessary elements from the photo *(Any 2)* ✓✓		(2)
4.8	4.8.1	Would have been edited Could have been approved by a publisher Are portable, etc *(Any 2 valid responses)* ✓✓		(2)

	4.8.2	Can easily compare information between sites Up-to-date information also available Zoom of the screen can be changed for visually impaired Contributes towards green computing Selected pages can be printed Digital format allows content to be edited Can more easily be shared/communicated to others, etc. *(Any 2 valid responses)* ✓✓		(2)
4.9	It is free Wikipedia allows content to be added/edited by the on-line community of (hopefully) knowledgeable people While the content of other on-line encyclopaedias is determined by the editor or publisher of that encyclopaedia It is created by the public/net users *(Any 2)* ✓✓			(2)
				[28]

QUESTION 5

5.1	5.1.1	Attach an Uninterrupted Power Supply Unit (UPS)/ Use a lightning protector *(Any 1)* ✓		(1)
	5.1.2	Damages power supply Damages UPS Damages motherboards Damages RAM *(Any 1)* ✓		(1)
5.2	Barcodes identify the book(s) Barcodes on the book(s) may be used to identify the person who has borrowed the book The book(s) can be tracked at any time in the main database/*know where the books are at all times*) Speed – fast checking in and issuing of books and doing stocktaking Accuracy – keeping accurate details of issues and returns of books and stocktaking *(Any 3)* ✓✓✓			(3)
5.3	Read-only Password to modify Convert to PDF format	*(Any 1)* ✓		(1)
5.4	<table><tr><th>Health Risk</th><th>Solution</th></tr><tr><td>RSI/CTS Repetitive strain injury/Carpal tunnel syndrome</td><td>Ergonomically designed keyboard/mouse Seat at correct height Take regular breaks *(Any 1)*</td></tr><tr><td>Eye strain</td><td>Correct lighting Take regular breaks Monitor set to correct brightness Monitor at correct height Change to LCD screen *(Any 1)*</td></tr><tr><td>Back strain</td><td>Ergonomically designed chair Chair and keyboard at right height Regular breaks *(Any 1)*</td></tr><tr><td>Blood circulation problems</td><td>Regular breaks Chair at the right height *(Any 1)*</td></tr><tr><td>*(Any 2 risks)* ✓✓</td><td>*(Any 2 solutions associated to the risks)* ✓✓</td></tr></table>		(4)

5.5	Does not have the program required to open the document on the computer Does not have the correct version of program on the computer The file is corrupt The file may be infected by a virus *(Any 2)* ✓✓		(2)
5.6	5.6.1 Can be received/sent anywhere there is Internet access Transferred/Sent immediately Cheap communication over distance Able to send to many people at the same time Able to send electronic attachments Able to keep track of written conversation Receipts/ Confirmation of reading / receiving e-mails Asynchronous communication *(Any 2)* ✓✓		(2)
	5.6.2 Have to have an e-mail address to receive it May not receive it immediately Need Internet access (be on-line/have cell phone/computer to receive) Can get a virus from the e-mail Susceptible to spamming E-mail hoaxes Can take a long time to download attachments, depending on speed of connection, etc. *(Any 2 valid responses)* ✓✓		(2)

5.7	**Rule**	**Reason**		
	Meaningless subject in subject line	Proper subject in subject line to scan message to see if it should be opened and read		
	Large attachment	Uses up cap/takes too long to download Inconvenience/cost to receiver		
	Written in caps	Electronic form of shouting		
	Compromising content	E-mail can be forwarded/traced, breach of privacy		
	Non-standard abbreviation	Others may not understand what it means		
	(Any 2 rules) ✓✓	*(Any 2 reasons associated with rules)* ✓✓		
	NOTE TO MARKER: *Do not accept that content refers to illegal actions (criminal, not netiquette breach)*			(4)
				[20]

QUESTION 6

6.1	6.1.1	Real-time refers to live (synchronous) transmission having no delays ✓		(1)
	6.1.2	Webcam ✓		(1)
6.2	*ALTERNATIVE 1*	*ALTERNATIVE 2*		
	Go to *YouTube* Enter keywords such as name of politician and/or quotes from the speech	Use a search engine ✓ Containing keywords such as name of politician and/or quotes from the speech PLUS the word 'video' or use advanced search for video ✓		(2)
6.3	6.3.1	Plagiarism ✓		(1)
	6.3.2	Use a search engine Use plagiarism-detecting software *(Any 1)* ✓		(1)
6.4	Licence was purchased for home use ✓ School has not purchased the software or paid the licence fee ✓			(2)
6.5	6.5.1	Is a small audio file/video file ✓		(1)
	6.5.2	Will run without having the software in which it was created Can be viewed on a small portable device Can be run on any computer system Can be downloaded and listened to or viewed without having to go on-line. *(Any 1)* ✓		(1)
6.6	Fast/high bandwidth Permanent connection Gives a faster download speed Most cost-effective solution *(Any 2)* ✓✓			(2)

6.7	6.7.1	Amazon (Accept: Amazon.com) Kalahari (Accept: Kalahari.net) Barnes & Noble Exclusive Books BidOrBuy Loot, etc. *(Any 2 valid responses)* ✓✓		(2)
	6.7.2	Do not have to travel to purchase Do not have to waste time in queues Can compare prices at leisure Can view a list of the latest books available Previous purchase 'profile'/Can get books recommended based on your reading Can get reviews by other customers Can sometimes be cheaper Can get books that are not available in your own country, etc. *(Any 3 valid responses)* ✓✓✓		(3)
	6.7.3	Cannot page through the books The book may not always contain what you expected Have to pay electronically Have to pay for delivery Possible security threats/fraud associated with use of credit cards May have to pay import taxes, etc Need Internet access Must wait for it to be delivered *(Any 3)* ✓✓✓		(3)
6.8		Once-off payments require a once-off password to be sent to the user – so that hackers cannot access their accounts Message is received on cell phone when account is activated Some banks require clients to input their password differently each time the account is accessed – per session On-screen keypads Encryption/security protocols such as SSL Automatically terminates session after a period of time, etc. *(Any 2 valid responses)* ✓✓		(2)
				[22]

QUESTION 7

7.1	7.1.1	Use Task Manager/Ctrl + Alt + Delete to call up the Task Manager to terminate the program Switch computer off and start again (reboot) (*Any 1*) ✓		(1)
	7.1.2	Too little RAM Inadequate power supply Faulty memory Too many programs open at the same time Voltage fluctuations, etc (*Any 1*) ✓		(1)
7.2		Make regular backups Schedule backups or allocate responsibility for backups Store backup off-site Check that backups work Create a full backup and incremental backups of files that have been altered. (*Any 2*) ✓✓		(2)
7.3	7.3.1	A relative/normal cell reference ✓ It changes ✓ as the formula is copied down An absolute cell reference ✓ It remains the same ✓ as the formula is copied down		(4)
	7.3.2	Change the regional settings to South African via the control panel OR change settings in the Control Panel ✓ Format as currency ✓		(2)

	7.3.3	Should include:
		    Title/heading ✓
		    Legend ✓
		    Data labels/percentage/value ✓
				(3)

	7.3.4	Use shading/colour Emphasize the headings Use cell borders Larger font for main heading, etc (*Any valid response*) ✓		(1)
	7.3.5	GPS ✓ OR Geographical OR Global Positioning System		(1)

7.4	7.4.1	Barcode ✓ Only one book can have the barcode number/unique ✓ (*also accept ISBN number which is unique*)		(2)
	7.4.2	Yes/No ✓		(1)
	7.4.3	Number/Integer ✓		(1)
	7.4.4	An input mask prevents a user from entering data in an incorrect format. ✓ The input mask would test for 4 digits (e.g. 2007)/2 digits (e.g. 07) that it would be numbers ✓		(2)
	7.4.5	Set a validation rule ✓ whereby you specify a year greater than or equal to 1990 (>=1990) ✓		(2)
	7.4.6	Grouping ✓		(1)
7.5	7.5.1	Query ✓		(1)
	7.5.2	Mail merge ✓		(1)
7.6	7.6.1	Autocorrect ✓ Turn off autocorrect OR change language to South African English ✓		(2)
	7.6.2	Styles ✓ Format painter ✓		(2)
	7.6.3	Find and Replace Write a macro Use Auto-Correct (*Any 1*) ✓		(1)
				[31]

TOTAL SECTION B: 130

GRAND TOTAL: 150