



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY P2

(THEORY)

NOVEMBER 2011

MEMORANDUM

MARKS: 150

This memorandum consists of 12 pages.

SUGGESTIONS AND RECOMMENDATIONS TO MARKERS

- Revisit the questions and memorandum frequently during the first half hour of marking.
- It is advisable to read the question frequently (and re-read) together with the candidate's response to check if they correlate. Do not get misled by candidates' statements.
- On the second day it is suggested that the markers re-read the questions and answers before commencing the day's marking.
- Be careful not to focus on keywords or general statements, but rather read the entire answer. If in doubt, read the entire answer and then go back to the question paper and memorandum. Ask yourself or your chief marker if the new response could 'fit' into the memorandum to allocate the correct marks to the candidate.

SECTION A**QUESTION 1: MATCHING**

1.1	K	✓	(1)
1.2	B	✓	(1)
1.3	R	✓	(1)
1.4	J	✓	(1)
1.5	I	✓	(1)
1.6	D	✓	(1)
1.7	A	✓	(1)
1.8	P	✓	(1)
1.9	C	✓ Allocate mark automatically	(1)
1.10	F	✓	(1)
Total: 10			

QUESTION 2: MULTIPLE-CHOICE QUESTIONS

2.1	D	✓	(1)
2.2	B	✓	(1)
2.3	C	✓	(1)
2.4	B	✓	(1)
2.5	A	✓	(1)
2.6	A	✓	(1)
2.7	D	✓	(1)
2.8	C or D	✓	(1)
2.9	A	✓	(1)
2.10	B	✓	(1)
Total: 10			

TOTAL SECTION A: 20

SECTION B**QUESTION 3**

3.1	<ul style="list-style-type: none"> • Some hardware components are damaged • Operating system error (accept changes to CMOS/BIOS settings) • Software faulty (<i>do not accept if only the word 'software' is given - reason must be included e.g. corruption or new installation</i>) • Power surge/fluctuation • Problems caused by malware (e.g. viruses) etc. • Hard drive/CPU and RAM failure, etc. <p><i>(Note to marker: Should be different reasons under each bullet point. Do not accept the failure of non-critical components, e.g. 'fan does not work', 'changed software settings', etc)</i></p> <p style="text-align: right;">✓✓ (Any two)</p>			2
3.2	<ul style="list-style-type: none"> • Processor/CPU (<i>accept processor names and/or specifications</i>) • Hard drive • RAM/Memory <p style="text-align: right;">✓✓ (Any two)</p>			2
3.3	<ul style="list-style-type: none"> • Allows owner to do some work at home/mobility/no cables • Takes up less space/smaller – does not need a big office for administration • Can use battery power for limited period of time, etc. • Contributes to green computing/uses less electricity • Mobile Internet connectivity <p style="text-align: right;">✓✓ (Any two)</p>			2
3.4	<p>Processor type/speed ✓</p> <p>Video editing requires lots of calculations and processing ✓</p> <p>AND/OR</p> <p>Hard drive size ✓</p> <p>Video files are large, requiring lots of hard drive space ✓</p> <p>AND/OR</p> <p>Accept RAM</p> <p>Video editing requires a lot of memory</p>	1	1	1
3.5	<p>The device can be plugged in and used automatically/immediately ✓</p> <p>without the user having to configure or install anything themselves (such as the driver) ✓</p>	1	1	2
3.6	A dual-layer DVD drive can store more data on DVD discs ✓			1
3.7	<p>A card reader has various slots which allows for different types of portable storage media/cards to be inserted ✓</p> <p>so that data can be read/transferred to the computer ✓</p>	1	1	2

3.8	3.8.1	Integrated in this case means that it is built into the computer/screen ✓		1
	3.8.2	<ul style="list-style-type: none"> No need to buy another device Do not need an additional USB port Mobility – can be used wherever laptop is taken Facial recognition Would not be easily lost or stolen <p style="text-align: right;">✓ (Any one)</p>		1
	3.8.3	<p>Cap refers to the amount of data ✓ that can be transferred/ used ✓ in a given period of time (usually a month) (depending on the package used)</p> <p>Video transfer/Skype requires large amounts of data to be used ✓✓ OR</p> <p>Use of webcam causes the cap to become rapidly depleted</p>	1 1 2	4
	3.8.4	<p>Invasion of privacy ✓</p> <p><i>(Accept specific examples related to privacy)</i></p>		1
3.9		<p>The computer supplier will come to the business ✓ and repair the machine on site. ✓</p> <p>OR</p> <p>It is not necessary to take the computer to the supplier to be repaired as they will come to your office.</p>	1 1	2
3.10		<ul style="list-style-type: none"> Easy to use (usually plugs into USB port) Easy to transfer data/Mobility of data Storage of large amounts of data Enables you to move backups off-site/security, etc. <p style="text-align: right;">✓✓ (Any two)</p>		2
3.11	3.11.1	<p>Software ✓ that enables devices to work and communicate with your computer ✓</p> <p><i>(Also accept: Used to allow communication between the operating system and the device)</i></p>	1 1	2
	3.11.2	<ul style="list-style-type: none"> On the disk that came with printer Supplied as part of driver database in the operating system Download driver from the Internet, etc. <p style="text-align: right;">✓✓ (Any two)</p>		2
	3.11.3	<ul style="list-style-type: none"> Wrong printer was selected/print to file/pdf selected Printer was switched off/ off-line Printer queue (spooling) paused No ink in printer Printer not connected to computer Faulty printer cable No paper in printer/paper jam, etc. <p style="text-align: right;">✓✓ (Any two)</p>		2

3.12	<ul style="list-style-type: none"> • Magnifier/magnifier utility/large font/zoom • Text-to-speech (narrator output)/audio prompts • Contrast (colour scheme choices) • Cursor options • On screen keyboard • Voice recognition, etc. 	✓✓ (Any two)	2
Total			[34]

QUESTION 4

4.1	4.1.1	<ul style="list-style-type: none"> • Provides a user interface • Controls/allocates hardware resources • Provides basic security • Coordinates activities in the computer • Access and communication with input and output devices, etc. 	✓✓✓ (Any three)	3
	4.1.2	<ul style="list-style-type: none"> • Interface is the same for all the packages/same look and feel • User can easily move from one application program to the other • Data can be transferred between applications/integration, etc. • Widely used/promoted <p><i>(Note to marker: Do not accept answers related to cost.)</i></p>	✓✓ (Any two)	2
4.2		<ul style="list-style-type: none"> • Open-source software is not supported in all geographical areas • Some people may not understand the technical help offered on the Internet • No one to hold responsible • Various versions of the same software • Resistance to change/comfortable with what they know • Not as widely used, etc. <p><i>(Note to marker: Do not accept generalised answers such as 'not as good' or 'has bugs', etc.)</i></p>	✓ (Any one)	1
4.3		<ul style="list-style-type: none"> • Hidden files which form part of the program may remain on the hard disk and take up space • May delete files which are used by other programs • Entries may not be removed from registry, etc. 	✓✓ (Any two)	2

4.4	<ul style="list-style-type: none"> • Spyware • Viruses/malware • Not using updated drivers • Too many programs running at the same time (including updates and virus scanning) • Utilising software that requires higher hardware specifications/Using software that requires extensive resources, etc. <p style="text-align: right;">✓✓ (Any two)</p>		2
4.5	<p>4.5.1</p> <ul style="list-style-type: none"> • Users may bring in storage devices (e.g. flash drives, iPods, etc.) with viruses on them • Viruses can enter the system via Internet activity • Users may download and install software without permission • Users ignore warnings from anti-virus-program • Viruses are attached to e-mails of the users, etc. <p><i>(Note to marker: Do not accept 'if the anti-virus software is not updated')</i></p> <p style="text-align: right;">✓✓ (Any two)</p>		2
	<p>4.5.2</p> <ul style="list-style-type: none"> • Anti-virus software reports virus/suspicious activity • File(s) become corrupt • Unknown program(s) or file(s) suddenly appears • Settings of security software changed/switched off • Additional programs start to run when the computer is started • Size of a file changes without explanation • Strange/unexpected message/image/error messages displayed on the computer screen • Computer suddenly begins to start or run slowly • Unauthorised changes made to the registry • The available memory is less than it should be • Program(s) or file(s) are suddenly missing • Program/file changes without explanation/stop operating properly • System properties change • Free hard drive space suddenly gets reduced • Computer no longer boots, etc. <p><i>(Note to marker: Do not accept any answer referring to hardware being damaged)</i></p> <p style="text-align: right;">✓✓✓ (Any three)</p>		3

	4.5.3	<ul style="list-style-type: none"> • A lot of 'damage' could have been caused by the virus if only detected a month after infection, etc. • Anti-virus definitions and programs should be updated frequently as new viruses are being developed every day • Multiple users can be affected <p style="text-align: right;">✓✓ (Any two)</p>	2	7
4.6		<ul style="list-style-type: none"> • Regular virus/spyware/adware scans • Operating system/software updates • Disk defragmentation • Backup on a weekly basis • Empty the Recycle bin regularly • Run Scandisk to check for file system errors/bad sectors • Run disk cleanup/Delete unnecessary data files, etc. <p style="text-align: right;">✓✓ (Any two)</p>		2
4.7		<p>A site license allows software to be installed on all the computers in the company/organisation ✓</p> <p>A multi-user license allows software to be installed on a fixed number of computers (usually quite a small number) ✓</p>	1 1	2
		Total		[21]

QUESTION 5

5.1	5.1.1	<p>To share✓ Internet connectivity✓ (from all networked computers)</p> <p>To provide Internet connectivity to all networked computers as the ore function of a cyber café is to provide Internet access</p> <p><i>(Note to marker: Accept answers referring to the function with a valid reason, e.g. Internet gaming, etc.)</i></p> <p style="text-align: right;">✓✓ (Any two)</p>	2	
	5.1.2	<p>LAN ✓as the computers are all located within a relatively limited location/area ✓</p>	1 1	

	5.1.3	<ul style="list-style-type: none"> • Costs of setting up • Cost of maintaining network • Need to backup data frequently • Many people have access to data (security issues) • Access to Internet increases risk of viruses • If server is down, the whole network will be down, etc. <p><i>(Note to marker: Accept only answers relating to establishing and running a network and not answers relating to running a cyber café)</i></p> <p style="text-align: right;">✓✓ (Any two)</p>		2	6
5.2	Provides Internet access ✓ via a wireless network connection ✓				2
5.3	<ul style="list-style-type: none"> • Offer lessons it on how to use the Internet/computer literacy to people who need • Make obsolete computers available to people who need it • Make the computer facilities more accessible • Provide Internet access free of charge etc. <p><i>(Note to marker: Accept any other valid response. The answers must relate to usage of equipment for training purposes, access to Internet at preferable rates, and disposal of used equipment.)</i></p> <p style="text-align: right;">✓✓ (Any two)</p>				2
5.4	5.4.1	e-commerce/e-business ✓		1	
	5.4.2	Yellow padlock icon, somewhere on the screen <i>(accept lock)</i> OR <i>https</i> which appears in URL ✓		1	
		<i>(Note to marker: Accept SMS notification)</i>			
	5.4.3	<ul style="list-style-type: none"> • Do not have to stand in queues/saves time • Do not have to carry large amounts of money around • Have access whenever you are on-line/24/7 • Safer as you do not have to go to the bank • Can keep track of your accounts • Cuts down on travelling/transport costs • Usually cheaper bank charges, etc. <p style="text-align: right;">✓ ✓ ✓ (Any three)</p>		3	5
5.5	<ul style="list-style-type: none"> • Upload to a website that the person (in Cape Town) will have access to • Accept: web-based file-hosting service using cloud computing/online facility to share and synchronise files • Accept 'DropBox/Skydrive/in the cloud' type answers • Accept: Make use of a file transfer service (ftp) which allows sharing of files, etc. <p style="text-align: right;">✓ (Any one)</p>				1

5.6	Automatically 'downloads' ✓ latest/updated information from websites ✓		2	2
5.7	5.7.1	(Short) message post ✓ using Twitter ✓	2	
	5.7.2	<ul style="list-style-type: none"> • Open to predators/paedophiles/cyberstalkers • Places strain on network resources e.g. 'cap'/Uses up bandwidth/Use up school's 'cap' • Get addicted to these websites/spend lots of time on these websites/Learners spend too much time on Internet • Workers waste company time/unproductive • Replaces social contact • Employees may bring the company into disrepute by writing insulting comments on the Facebook wall/Lack of privacy as information is made public, etc. <p><i>(Note to marker: Accept any other reasonable answer not repeated in other words)</i></p> <p style="text-align: right;">✓✓ (Any two)</p>	2	4
Total				[22]

QUESTION 6

6.1	<ul style="list-style-type: none"> • Zip large files/do not send large files • Keep the number of attachments to an e-mail to a minimum • Make sure attachments are virus free • Do not send .exe attachments • Do not send spam, etc. <p style="text-align: right;">✓ ✓ ✓ (Any three)</p>			3
6.2	6.2.1	Abcgenius ✓	1	
	6.2.2	(Non-profit) organisation ✓ Website located in South Africa /Geographical location ✓	1 1	3
6.3	Web browser – application software ✓ that allows you to access/view web pages ✓ Search engine – program/website ✓ that matches user queries to find websites/web pages/images/videos/news information ✓		1 1 1 1	4

6.4	6.4.1	Cc – Copies the e-mail to others and address is visible ✓ Bcc – Copies the e-mail to other users but the addresses are not visible to these users ✓	1 1	
	6.4.2	<ul style="list-style-type: none"> Use the spam filter from ISP Use security software e.g. anti-spam/anti-virus software Use multiple e-mail addresses i.e. a public address and an e-mail address for specific purposes Be careful where you give out your e-mail address/do not confirm your e-mail address, etc. <p style="text-align: right;">✓✓ (Any two)</p>	2	4
6.5	6.5.1	Tag that contains identification data ✓ which can be read/identified wirelessly ✓	1 1	
	6.5.2	<ul style="list-style-type: none"> Stock-taking Security/Keeping track of equipment/limits the amount of theft, etc. Access control to the premises/computers <p style="text-align: right;">✓ (Any one)</p>	1	3
6.6		<ul style="list-style-type: none"> Buy energy saving hardware such as LCD screens Switch off when not in use Use power saving/hibernation Use equipment with energy star specification, etc. <p><i>(Note to marker: Any reasonable answer related to power)</i></p> <p style="text-align: right;">✓✓ (Any two)</p>		2
6.7	6.7.1	Computer parts contain poisonous substances ✓ which are harmful to the environment ✓	1 1	
	6.7.2	e-Waste/e-scrap ✓	1	3
6.8	6.8.1	<ul style="list-style-type: none"> Cost savings Face-to-face communication <p><i>(Note to marker: Do not accept communication only)</i></p> <p style="text-align: right;">✓(Any one)</p>	1	
	6.8.2	<ul style="list-style-type: none"> Both parties have to be online at same time/Cannot leave a message if person is not online Security risk such as identity theft and transferring viruses Cannot send attachments Lower productivity due to disruption, etc. <p style="text-align: right;">✓✓ (Any two)</p>	2	3

6.9	<ul style="list-style-type: none"> • Add more words • Use synonyms • Use Boolean operators (AND/OR/NOT + -) • Use correct spelling • Use quotation marks • Use options under Advanced Search 	✓✓ (Any two)	2
Total			[27]

QUESTION 7

7.1	7.1.1	Save the file in RTF ✓ or TXT format or .doc format <i>(Note to marker: Accept Word 2003/XP format. Exclude references to Office 2007 and 2010)</i>	1	
	7.1.2	<ul style="list-style-type: none"> • Comments giving more detail/explanation • Give reference to a source from which facts are obtained • Gives the name of the person who quoted the statement, etc. 	✓✓ (Any two)	2
	7.1.3	Section breaks ✓	1	
	7.1.4	<ul style="list-style-type: none"> • Do not have to have access to the program the document was created in to read it • Read-only document • So that the PDF document cannot be easily changed or edited (need special software to make the changes) • Security reasons, e.g. legal implications • The documents can be read on a PC with any operating system e.g. Apple or Linux-based 	✓✓ (Any two)	2
		<i>(Note to marker: Do not accept: Use less disk space)</i>		6
7.2	7.2.1	<ul style="list-style-type: none"> • Emphasise headings by using bold or shading • Use currency formatting if you are working with money • Format column C to remove decimal places • Format alternate rows in different colours, etc. • Add cell borders • Correct errors in the formulas/relevant cells, etc. 	✓✓ (Any two)	2
	7.2.2	Hide the column ✓	1	

	7.2.3	<ul style="list-style-type: none"> Using text (e.g. a function name) that does not exist Misspelling a function name Entering text in a formula without using quotation marks Omitting a ':' (colon) in a range reference, etc. Have not used absolute addressing when needed, etc. <p style="text-align: right;">✓✓ (Any two)</p>	2	
	7.2.4	<ul style="list-style-type: none"> Dividing by zero Dividing by an empty/blank cell <p style="text-align: right;">✓ (Any one)</p>	1	
	7.2.5	Mode ✓	1	
	7.2.6	Use absolute cell referencing/use function key F4 ✓ on cell F6 (Also accept =E8*\$F\$6)	1	
	7.2.7	COUNTIF ✓	1	9
7.3	7.3.1	Memo ✓	1	
	7.3.2	OLE ✓ (Note to marker: Do not accept hyperlinks)	1	
	7.3.3	ID ✓	1	
	7.3.4	A – The explanation must start with Internet and then anything else can follow ✓ B – Internet must appear somewhere in the explanation ✓	1 1	5
7.4	7.4.1	'A' or 'B' ✓ correct options used ✓ OR operator used (Note to marker: Do not penalise if quotation marks around 'A' or 'B' not given)	1 1	
	7.4.2	Basset ✓	1	3
7.5	7.5.1	Hours ✓	1	
	7.5.2	Square brackets are used around a field name ✓ Round brackets are used for mathematical calculations/Force correct order of evaluation ✓	1 1	3
		Total		[26]

TOTAL SECTION B: 130
GRAND TOTAL: 150