



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY P2

FEBRUARY/MARCH 2014

MEMORANDUM

MARKS: 150

This memorandum consists of 13 pages.

SUGGESTIONS AND RECOMMENDATIONS TO MARKERS

- Revisit the questions and the marking memorandum frequently during the marking session.
- It is advisable to read the question frequently (and re-read) together with the candidate's response to check that it correlates, so that you are not misled by the candidate's statements/answers.
- Be careful not to focus on keywords or general statements, but rather read the entire answer. If in doubt, read the entire answer and thereafter the question in the question paper and then the marking memorandum. Ask yourself or your senior marker if the response could 'fit' into the marking memorandum to allocate the correct marks to the candidate, for example, the memo states 'cheap' and the learner responds 'less expensive'.
- Beware of overlapping answers to a specific question. In general, one mark is awarded per fact.

SECTION A**QUESTION 1:
MATCHING ITEMS**

1.1	N	✓	(1)
1.2	P	✓	(1)
1.3	G	✓	(1)
1.4	R	✓	(1)
1.5	S	✓	(1)
1.6	E	✓	(1)
1.7	B	✓	(1)
1.8	H	✓	(1)
1.9	M	✓	(1)
1.10	C	✓	(1)
TOTAL : [10]			

**QUESTION 2:
MULTIPLE-CHOICE QUESTIONS**

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

TOTAL SECTION A: 20

SECTION B**QUESTION 3**

3.1	<ul style="list-style-type: none"> An agreement that any repairs to the computer ✓ will be done on the premises/at school/in the media centre ✓ 	1 1	2
3.2	<ul style="list-style-type: none"> CPU RAM Graphics card Hard Drive <p style="text-align: right;">✓✓ (Any two)</p>		2
3.3.1	<ul style="list-style-type: none"> Monitor ✓ or screen 	1	3
3.3.2	<ul style="list-style-type: none"> A touch screen with multiple points of contact ✓ 	1	
3.3.3	<ul style="list-style-type: none"> Measured diagonally ✓ <p><i>(Note to marker: Accept measured from bottom left corner to top right corner or top left to bottom right or any other correct combination.)</i></p>	1	
3.4	<ul style="list-style-type: none"> Uses less power ✓ 		1
3.5	<ul style="list-style-type: none"> External hard drive Flash drive with large storage capacity, e.g. 16 GB or larger Blu-ray DVD Cloud storage, e.g. SkyDrive, Dropbox, Google Drive, etc. <p><i>(Note to marker: Only allocate the mark for the flash drive if reference has been made to a size that can store 10 GB or more data.)</i></p> <p style="text-align: right;">✓✓ (Any two)</p>		2
3.6	<ul style="list-style-type: none"> Displays an image on the screen ✓ 		1
3.7	<ul style="list-style-type: none"> Captures images/videos Allows VoIP (Skype)/video telephone calls Broadcast live images over the Internet Facial recognition – security feature, etc. <p style="text-align: right;">✓✓✓ (Any three)</p>		3

3.8.1	<ul style="list-style-type: none"> • A DVD stores more data than a CD ✓ 	1	
3.8.2	<ul style="list-style-type: none"> • You can read, write ✓ and erase data ✓ on a DVD RW <p><i>(Note to marker: Accept DVD ROM – read only, cannot write and cannot erase.)</i></p>	2	
3.8.3	<ul style="list-style-type: none"> • Movies • Music • Music videos • Complex software, e.g. application packages • Manufacturer's instructions • Operating system/Windows • Developer's notes such as 'Read me' text files, etc. <p style="text-align: right;">✓✓ (Any two)</p>	2	
3.8.4	<ul style="list-style-type: none"> • LightScribe ✓ /LabelFlash/LabelTag 	1	6
3.9.1	<ul style="list-style-type: none"> • A LAN is a network in a local or limited area ✓ that connects computers and devices ✓ 	1 1	
3.9.2	<ul style="list-style-type: none"> • School media centre/within a school • Within a home, etc. <p><i>(Note to marker: Accept any correct example of an appropriate location for a LAN.)</i></p> <p style="text-align: right;">✓ (Any one)</p>	1	3
3.10	<ul style="list-style-type: none"> • Operating system ✓ or system software 		1
3.11	<ul style="list-style-type: none"> • Use an ergonomic/comfort keyboard • Use palm/wrist rests • Maintain good posture/take regular breaks, etc. <p><i>(Note to marker: Accept only ONE reference to posture, for example: hands, feet, back, etc.)</i></p> <p style="text-align: right;">✓✓ (Any two)</p>		2
			[26]

QUESTION 4

4.1	<ul style="list-style-type: none"> Bluetooth ✓ 		1
4.2.1	<ul style="list-style-type: none"> All basic capabilities/specifications needed for a SOHO user A relatively cheap computer Can upgrade some components at a later stage, etc. <p style="text-align: right;">✓✓ (Any two)</p>	2	3
4.2.2	<ul style="list-style-type: none"> Smaller RAM Smaller hard drive Slower processor/not state-of-the-art processor Has only onboard graphics and sound Probably has fewer USB ports/no HDMI ports, etc. No webcam/multi-card reader/video card, etc. <p style="text-align: right;">✓ (Any one)</p>	1	
4.3.1	<ul style="list-style-type: none"> Code assigned to software ✓ which users need to enter to install and use the software ✓ 	1 1	
4.3.2	<ul style="list-style-type: none"> Prevents (software) piracy ✓ or ensures that users pay for the program 	1	3
4.4.1	<ul style="list-style-type: none"> Slows down the performance of the computer Slows down hard disk access <p style="text-align: right;">✓ (Any one)</p>	1	2
4.4.2	<ul style="list-style-type: none"> Disk defragmenter/Defragmentation tool/Disk Defragger ✓ <p><i>(Note to marker: Accept any acceptable utility, for example, Defraggler.)</i></p>	1	
4.5.1	<ul style="list-style-type: none"> An icon on a desktop or in a folder ✓ that provides a user with a direct link to a resource such as a program, file, printer, disk drive, etc. ✓ 	1 1	3
4.5.2	<ul style="list-style-type: none"> Access/Navigate through/Display web pages ✓ 	1	

4.6	<ul style="list-style-type: none"> • Problem: The hard disk does not contain the files needed for the booting process • Solution: Reload/Repair the operating system and reboot/ Restart the operating system • Problem: A non-bootable CD is present in the drive • Solution: Remove CD and reboot/Restart the operating system • Problem: Result of a corrupt operating system • Solution: Reload/Repair the operating system and reboot/ Restart the operating system <p style="text-align: right;">Problem ✓ together with a matching solution ✓</p>		2
4.7.1	<ul style="list-style-type: none"> • Open source software provides access to the source code which can be used and modified • Open source software can be freely redistributed (but not sold) • Free • Has limited copyright restrictions (<i>Most Free and Open Source software (FOSS) has a general licence such as the General Public Licence (GNU GPL) which does have some restrictions, such as acknowledging the original source, etc.</i>) <p style="text-align: right;">✓✓ (Any two)</p>	2	
4.7.2	<ul style="list-style-type: none"> • There may be very little/no technical support/no support offered by the developer • There may be fewer training opportunities/manuals or tutorials available than for proprietary software • Software may not be as widely used as proprietary software • Software may not be compatible with other proprietary software • May contain fewer functions than other proprietary software, etc. <p style="text-align: right;">✓✓ (Any two)</p>	2	4
4.8.1	<ul style="list-style-type: none"> • Installs software improvements • Fixes software problems ('bugs')/prevents errors from occurring on your computer • Ensures security safeguards are put in place <p style="text-align: right;">✓✓ (Any two)</p>	2	
4.8.2	<ul style="list-style-type: none"> • The download or install process will be interrupted ✓ causing errors or corruptions in the software ✓ 	1 1	4

4.9	<ul style="list-style-type: none"> • Operating system • Utility programs <p><i>(Note to marker: Accept any specific utility programs, for example driver programs, anti-virus program, etc. as utility programs. Do not accept any brand names.)</i></p> <p style="text-align: right;">✓✓ (Any two)</p>		2
4.10.1	<ul style="list-style-type: none"> • A copy/duplicate file ✓ or program 	1	
4.10.2	<ul style="list-style-type: none"> • Backup regularly • Store on a separate storage medium • Keep off-site/in a different place/fireproof safe/in the cloud <p style="text-align: right;">✓✓ (Any two)</p>	2	3
			[27]

QUESTION 5

5.1	<ul style="list-style-type: none"> • The Internet is a worldwide connection of networks ✓ and computers • The World Wide Web is an Internet service which consists of a collection of linked electronic pages ✓/often referred to as the multimedia portion of the Internet 	1	2
5.2	<ul style="list-style-type: none"> • Search engine ✓ <p><i>(Note to marker: Do not accept any search engine names, i.e. Google, etc.)</i></p>	1	1
5.3	<ul style="list-style-type: none"> • Share hardware/peripherals • Share data and information • Share software • Share an Internet access point • Centralise data • The software is easier to maintain • Improve communications, e.g. Intranet, etc. <p style="text-align: right;">✓✓ (Any two)</p>		2
5.4	<ul style="list-style-type: none"> • E-mail • Instant messaging services • Chat rooms • Blogs • Wikis • Online social networks • Video telephone calls/VoIP • Online meetings • Video conferencing • Wireless messaging services • Groupware, etc. <p><i>(Note to marker: Do not accept any brand names or examples.)</i></p> <p style="text-align: right;">✓✓ (Any two)</p>		2
5.5	<ul style="list-style-type: none"> • Site license/multi-user license ✓ 		1
5.6	<ul style="list-style-type: none"> • Network Interface Card ✓ <p><i>(Note to marker: Accept network card or NIC.)</i></p>		1

5.7	<ul style="list-style-type: none"> Interference - walls, ceilings, other electrical appliances in the house can disrupt network communications Lack of security/Unauthorised users (e.g. war drivers) may use Internet connection Range may be limited Data transfer speeds can sometimes be slow, etc. <p style="text-align: right;">✓ (Any one)</p>			1
5.8.1	<ul style="list-style-type: none"> Quarantine is a separate area of the hard disk ✓ that holds the infected file until that virus/malware can be removed ✓ 	1		1
5.8.2	<ul style="list-style-type: none"> Format/Reformat hard disk ✓ and reinstall applications 	1		3
5.9	<ul style="list-style-type: none"> Hardware and/or software (utility program) ✓ that protects a computer against harmful/unauthorised access ✓ between networks or a computer and a network ✓ 	1		3
5.10	<ul style="list-style-type: none"> Restrict access to the network – issue usernames and passwords Maintain user rights, e.g. read/write/edit Passwords/encryption on files, etc. <p style="text-align: right;">✓✓ (Any two)</p>			2
5.11.1	<ul style="list-style-type: none"> An e-mail message/SMS ✓ that supposedly comes from a legitimate institution such as a bank, ✓ that attempts to obtain personal and/or financial information ✓ 	1		1
5.11.2	<ul style="list-style-type: none"> Change any passwords that could have been compromised ✓ Inform the bank/financial institution involved ✓ 	1		5
5.12.1	<ul style="list-style-type: none"> Notification message in a pop-up ✓ 	1		
5.12.2	<ul style="list-style-type: none"> Speech-to-text program ✓ 	1		
5.12.3	<ul style="list-style-type: none"> Adding captions/sub-titles ✓ 	1		3
				[26]

QUESTION 6

6.1	<ul style="list-style-type: none"> • Database ✓ 		1
6.2	<ul style="list-style-type: none"> • Smartphone • E-book reader, etc. <p><i>(Note to marker: Accept brand names such as Kindle or iPad or tablet/tablet computer.)</i></p> <p style="text-align: right;">✓ (Any one)</p>		1
6.3	<ul style="list-style-type: none"> • Information on the web must be evaluated (against other websites) • Check if the website is affiliated to a reputable institution such as a well-known university • Check the authority/author and their credentials • Check the currency of the information (that it is not outdated) <p style="text-align: right;">✓✓ (Any two)</p>		2
6.4.1	<ul style="list-style-type: none"> • Exclusive legal rights/ownership ✓ held by people such as authors/artists/musicians/developers/organisations to duplicate/publish/distribute/perform/broadcast/sell ✓ their books/artwork/music/material/computer programs/intellectual property ✓ <p><i>(Note to marker: Accept permission is required to copy/use the original work or part thereof in place of any one of the options above.)</i></p>	3	
6.4.2	<ul style="list-style-type: none"> • Add a bibliography • Use referencing such as endnotes/footnotes/cross-references, etc. • Use citation tool of the word processing application, etc. • Add hyperlinks to websites <p style="text-align: right;">✓✓ (Any two)</p>	2	5
6.5.1	<ul style="list-style-type: none"> • Forms ✓ /Electronic forms 	1	
6.5.2	<ul style="list-style-type: none"> • Closed questions/Questions with only one possible answer • Non-ambiguous questions • Questions must relate to the topic/research • Questions where the respondent chooses the answer from a list/ radio buttons/combo boxes, etc. • Questions should be short and to the point, etc. <p style="text-align: right;">✓✓ (Any two)</p>	2	3

6.6.1	<ul style="list-style-type: none"> • Need a suitable driver (program) for the operating system • Paper jam • No cartridge • No paper • Not connected properly/not switched on • Print job stuck in printer queue, etc. <p style="text-align: right;">✓✓ (Any two)</p>	2	
6.6.2	<ul style="list-style-type: none"> • Ink cartridges contain toxic materials ✓/damage the environment • Ink cartridges can be recycled/refilled ✓ 	1 1	4
6.7	<ul style="list-style-type: none"> • RSS feeds ✓ 		1
6.8.1	<ul style="list-style-type: none"> • Software that extends the capabilities of a web browser/allows special multimedia content to be displayed ✓ 	1	
6.8.2	<ul style="list-style-type: none"> • PDF ✓ 	1	2
6.9.1	<ul style="list-style-type: none"> • Blogs can be accessed by people beyond the interest group ✓ • The e-mail message may not reach all the intended community members ✓ /She may not have all their e-mail addresses 	1 1	
6.9.2	<ul style="list-style-type: none"> • A short messaging service ✓/allows users to publish short text (100 – 200 characters) 	1	
6.9.3	<ul style="list-style-type: none"> • Collaboration ✓ with learners or other teachers 	1	
6.9.4	<ul style="list-style-type: none"> • Twitter ✓ 	1	5
6.10	<ul style="list-style-type: none"> • It is possible to reach a far wider target audience/more clients/a global market • Easier to interact/communicate with clients/get feedback, etc. • Builds business-client relationships through social media • Marketing costs are relatively cheaper than using print media <p style="text-align: right;">✓✓ (Any two)</p>		2
			[26]

QUESTION 7

7.1.1	• User number ✓	1	6
7.1.2	• Lookup wizard ✓	1	
7.1.3	• 10 OR 11 ✓ <i>(Note to marker: Accept only full criteria.)</i>	1	
7.1.4	• Feature of the report: Grouping ✓	1	
7.1.5	• Section of the report: Report footer ✓	1	
7.1.6	• Import ✓	1	
7.2	• Use the protection feature ✓		1
7.3	• Use the online help • Use the offline help ✓ (Any one)		1
7.4	• Start the Task Manager ✓/Press Ctrl+Alt+Delete(Del) • End the task ✓	1 1	2
7.5.1	• It is a malicious message ✓ warning of a non-existent virus ✓	2	5
7.5.2	• By visiting a specialised website ✓ (such as Snopes)	1	
7.5.3	• The operating system might no longer work ✓	1	
7.5.4	• Spam/junk e-mail ✓	1	
7.6.1	• Malware downloads and sends data in the background • Automatic updates running • Browsing on the Internet uses cap as it is downloading • The family's Wi-Fi signal may be hijacked/used by another user, etc. ✓✓ (Any two)	2	3
7.6.2	• Use tracking/monitoring software ✓ available from the ISP	1	

7.7.1	<ul style="list-style-type: none"> • Playing a computer game against other people/a computer ✓ • Have to be connected to the Internet ✓ in real-time 	1 1	
7.7.2	<ul style="list-style-type: none"> • The media centre is not used for educational purposes on a Saturday • The demand made on bandwidth by gaming will slow down the Internet access for other learners during the week • Gamers using the computers during the week may prevent other learners from doing their school work <p style="text-align: right;">✓✓ (Any two)</p>	2	
7.7.3	<ul style="list-style-type: none"> • Health issues: no physical activity/weight gain/eye strain/RSI/CTS/backache, etc. • Social issues: poor people skills/poor human relations/poor communication skills • Work/school work suffers/neglect school work/academic performance may decline <p style="text-align: right;">✓✓ (Any two)</p>	2	
7.7.4	<ul style="list-style-type: none"> • GPS ✓ 	1	7
			[25]

TOTAL SECTION B: 130
GRAND TOTAL: 150