



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SENIOR CERTIFICATE EXAMINATIONS

COMPUTER APPLICATIONS TECHNOLOGY P2

2017

MARKING GUIDELINES

MARKS: 150

TIME: 3 hours

These marking guidelines consist of 15 pages.

SUGGESTIONS AND RECOMMENDATIONS TO MARKERS

- Revisit the questions and the memorandum/marketing guideline 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 then the question paper and memorandum. Ask yourself or your senior marker if the response could 'fit' into the memorandum before allocating the correct marks to the candidate. For example, the memorandum states 'cheap' and the learner responds with 'less expensive'.
- Beware of overlapping answers to a specific question. In general, one mark is awarded per fact.

SECTION A**QUESTION 1: MULTIPLE-CHOICE**

1.1	B	✓	1
1.2	A	✓	1
1.3	D	✓	1
1.4	C	✓	1
1.5	B/A	✓	1
1.6	D	✓	1
1.7	A	✓	1
1.8	C	✓	1
1.9	B	✓	1
1.10	C	✓	1
Total: [10]			

QUESTION 2: MATCHING ITEMS

2.1	M	✓	1
2.2	J	✓	1
2.3	B	✓	1
2.4	S	✓	1
2.5	C	✓	1
2.6	Q	✓	1
2.7	T	✓	1
2.8	P	✓	1
2.9	K	✓	1
2.10	O	✓	1
Total: [10]			

QUESTION 3: TRUE OR FALSE

(Note to marker: In QUESTIONS 3.1, 3.2, 3.3 and 3.4, accept the correct term even if FALSE is not stated. Do not award a mark if only 'FALSE' is written down.)

3.1	FALSE, Wikipedia	1
3.2	FALSE, patches/service packs	1
3.3	FALSE, VLOOKUP/HLOOKUP/LOOKUP	1
3.4	FALSE, netiquette	1
3.5	TRUE	1
		[5]

TOTAL SECTION A: 25

SECTION B**QUESTION 4: SYSTEMS TECHNOLOGIES**

4.1	<ul style="list-style-type: none"> • Ctrl-X deletes/cuts the selected text • Ctrl-C does not delete the selected text/Makes a copy of the selected text <p style="text-align: right;">✓ (Any one)</p>		(1)
4.2	Stores deleted files/Restore deleted files✓		(1)
4.3	<ul style="list-style-type: none"> • Better performance than a single system • Combines the processing power of many machines • Can increment processing power when needed <p style="text-align: right;">✓ (Any one)</p>		(1)
4.4	<ul style="list-style-type: none"> • Change the default application that opens the file type in question/Open With • Reinstall the browser <p style="text-align: right;">✓ (Any one)</p>		(1)
4.5	<ul style="list-style-type: none"> • Router • Modem • Wi-Fi card/NIC • 3G/4G dongle • Bluetooth dongle <p style="text-align: right;">✓✓ (Any two)</p>		(2)
4.6	<p>Add the folder to an archive✓</p> <p><i>(Note to marker: Accept valid examples of archive file extensions such as ZIP, RAR, etc.)</i></p>		(1)
4.7	<p>Example: Giwe2b\$</p> <p><i>(Note to marker: Use the points below to mark the password given by candidate)</i></p> <ul style="list-style-type: none"> • Upper case • Lower case • Number • Special character • Length of at least 7 characters <p style="text-align: right;">✓✓✓✓ (Any four)</p>		(4)

4.8.1	Graphics/Video card✓ <i>(Note to marker: Accept motherboard and any component that refers to display.)</i>	(1)	
4.8.2	HDMI✓ <i>(Note to marker: Accept USB.)</i>	(1)	
4.8.3	<ul style="list-style-type: none"> • It is on its way out/Obsolete • Does not support audio • Does not support high resolution video • Does not support higher refresh rates • The analogue signal is more prone to interference • Pins on connector can bend easily <p style="text-align: right;">✓✓ (Any two)</p>	(2)	(4)
4.9	Stylus/Graphics tablet/Digital tablet/Digital pens/Smart pens/Touch screen✓ <i>(Note to marker: Accept scanner or scanning device, e.g. Fax to Email)</i>		(1)
4.10	App store/Playstore✓ <i>(Note to marker: Accept any example of an app store)</i>		(1)
4.11	<ul style="list-style-type: none"> • Security/Privacy issues • Battery consumption • Data usage <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Accept any one example for each of the above points)</i></p>		(2)
4.12	<ul style="list-style-type: none"> • All-in-one PC • Integrated touchpad on the keyboard • Compact keyboard • Wireless peripherals • Touchscreen monitors <p style="text-align: right;">✓✓ (Any two)</p>		(2)
4.13	<ul style="list-style-type: none"> • Date • Size • Type/extension • Location • Content • Author <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Accept any two examples of metadata)</i></p>		(2)

4.14	Performs general maintenance tasks✓ AND <ul style="list-style-type: none">• Defrag/Optimise• Error checking• Disk cleanup• System restore• Task scheduler, etc. <p style="text-align: right;">✓ (Any one)</p>		(2)
			[25]

QUESTION 5: INTERNET AND NETWORK TECHNOLOGIES

5.1	Router (3G or LTE Dongle)/Modem✓		(1)
5.2	<ul style="list-style-type: none"> • Centralisation of data/Sharing of files • Accessible from anywhere on the network • Saving storage space on work stations 	✓✓ (Any two)	(2)
5.3	Wired/cabled✓ and Wi-Fi/wireless✓		(2)
5.4	Connecting the switches✓ (together will use one port each) Connect the computers to the remaining ports/Three ports available on each switch for six computers✓		(2)
5.5	The upload ✓ bandwidth is always lower✓ than download bandwidth in an ADSL line OR Download and upload bandwidth/speed are not the same✓ (on an ADSL line) Upload bandwidth is lower than download/Download bandwidth is higher than upload✓		(2)
5.6	To indicate that it is an important e-mail/To get back to the flagged/starred e-mail later✓		(1)
5.7.1	<ul style="list-style-type: none"> • Navigation through webpages • Downloading of resources 	✓(Any one)	(1)
5.7.2	<ul style="list-style-type: none"> • Error in code • Resource on the remote computer is not available • Incorrect resource is referenced/Incorrect spelling of resource name 	✓✓ (Any two)	(2) (3)
5.8	Two ✓		(1)
5.9	<ul style="list-style-type: none"> • Internet is a global computer network which makes WWW possible/accessible • WWW is a collection of websites accessible on the Internet 	✓(Any one)	(1)
			[15]

QUESTION 6: INFORMATION MANAGEMENT

6.1	<ul style="list-style-type: none"> To verify the source of the information To check the accuracy of the information To check if the information was updated <p style="text-align: right;">✓ (Any one)</p>		(1)
6.2	<ul style="list-style-type: none"> The average in the Grade column does not make sense More than maximum marks for Zodwa Cele Average for Task 1 is not reliable as a result of GIGO/incorrect input Name and surname in the same cell (Cannot be sorted according to just one) <p style="text-align: right;">✓✓ (Any two)</p>		(2)
6.3	<ul style="list-style-type: none"> Database is faster than spreadsheet for larger data sets Able to run queries on multiple data types Reports allow for a more readable/user friendly presentation of information Database is more scalable/Has the ability to easily grow in size because of a well-defined structure, e.g. data types, etc. <p style="text-align: right;">✓✓ (Any two)</p>		(2)
6.4.1	2013✓		(1)
6.4.2	<ul style="list-style-type: none"> Bachelor passes declining Pass rate increasing Gap between the two is increasing <p style="text-align: right;">✓✓ (Any two)</p>		(2)
6.4.3	The quality of results is not good✓ in spite of the rising pass rate		(1)
6.4.4	Find a way to improve bachelor passes✓ <i>(Note to marker: Accept any particular suggestion of a strategy to improve bachelor passes, e.g. train teachers, extra classes, etc.)</i>		(1)
			[10]

QUESTION 7: SOCIAL IMPLICATIONS

7.1	Pretending to be someone else✓ when posting online		(1)
7.2	Accept any example where the right to information is more important that the right to privacy, such as: <ul style="list-style-type: none"> • Child predators on the Internet cannot count on their privacy being protected • Terrorists who use ICTs to devise plans to harm people/property • Companies evading tax • Merchants on the dark web, etc. <p style="text-align: right;">✓✓ (Any two)</p>		(2)
7.3	<ul style="list-style-type: none"> • Dangerous objects can easily be replicated • Copyright issues • Disruption of formal manufacturing sector/Loss of jobs <p style="text-align: right;">✓✓ (Any two)</p>		(2)
7.4	<ul style="list-style-type: none"> • Mass surveillance • Transparency in sharing information by government departments • Block/Stop/Intercept fake news • Blocking of Internet access by authorities, etc. <p style="text-align: right;">✓✓ (Any two)</p>		(2)
7.5.1	<ul style="list-style-type: none"> • It has a benefit for the safety of consumers • Consumers will receive better quality products • Manufacturers take responsibility for poor quality of products <p style="text-align: right;">✓ (Any one)</p>	(1)	
7.5.2	<ul style="list-style-type: none"> • Less competition/Less choice • Higher prices • Rollout of innovation/New features may be slower, etc. <p style="text-align: right;">✓ (Any one)</p>	(1)	
7.5.3	<ul style="list-style-type: none"> • Improve future quality control • Improve technology to avoid future problems • May re-organise human resources • Tarnish brand reputation • Loss of income/Loss of customers <p style="text-align: right;">✓ (Any one)</p>	(1)	
			[10]

QUESTION 8: SOLUTION DEVELOPMENT

8.1	Data validation✓ Data format/Data type✓		(2)
8.2	<ul style="list-style-type: none"> • The column headings and rows get a pretty format • Column headings are made if the range had no headers • A named range is created from the selected cell range 	✓✓ (Any two)	(2)
8.3	<ul style="list-style-type: none"> • TRUNC • INT • ROUNDDOWN 	✓ (Any one)	(1)
8.4	Column headings are treated as a record.✓ Text fields such as ID and telephone numbers are automatically assigned a number data type.✓		(2)
8.5	Citations✓ Bibliography✓		(2)
8.6	<ul style="list-style-type: none"> • Apply suitable style to the heading • Adjust Table of Contents (ToC) properties to include another style • Update the Table of Contents 	✓✓ (Any two)	(2)
8.7	<ul style="list-style-type: none"> • Resize the browser • Change the display resolution • Change the dimensions of the original image • Set width and height attributes 	✓✓ (Any two)	(2)
8.8.1	One✓	(1)	
8.8.2	<ul style="list-style-type: none"> • There is no text within the table data tag • Border attribute is not set 	✓ (Any one) (1)	
			[15]

TOTAL SECTION B: 75

SECTION C**QUESTION 9: INTEGRATED SCENARIO**

9.1.1	<ul style="list-style-type: none"> • Upgrade CPU • Add more RAM • Replace HDD with an SSD • Defragment the HDD • Overclocking • Install patches/service packs/Update operating system • Close unnecessary programs • Remove viruses, etc. 	✓✓ (Any two)	(2)	
9.1.2	<ul style="list-style-type: none"> • Check if the cord is not torn/frayed • Check if the mouse is connected/plugged in/Bluetooth is on • Check if the battery is flat • Check if something is blocking the light sensor underneath the mouse • Use another mouse to test whether the mouse is faulty • (Restart) to check if the driver is working properly, etc. 	✓ (Any one)	(1)	
9.1.3	<ul style="list-style-type: none"> • Wi-Fi NIC/Wi-Fi card/Wi-Fi dongle • Bluetooth dongle • 3G dongle, etc. 	✓✓ (Any two)	(2)	
9.1.4	<ul style="list-style-type: none"> • Low (clock) speed of the CPU/Intel dual core is old technology • Low amount of RAM • Small HDD • Low resolution monitor • Older operating system <p><i>(Note to marker: Do not accept just the name of the specification without saying what is wrong with it, e.g. CPU, RAM, etc.)</i></p>	✓✓ (Any two)	(2)	(7)
9.2.1	Video footage takes huge amounts of storage space✓		(1)	
9.2.2	<ul style="list-style-type: none"> • Delete old videos to make space for the new ones • Adjust/check the settings which enable to auto-delete the oldest recordings • Move data to external storage/cloud storage 	✓ (Any one)	(1)	

9.2.3	<ul style="list-style-type: none"> • Range might be limited • Network configuration issues • Possibility of crosstalk on the same radio frequency • May be easier to hack into • Requires batteries/alternate power source • Easy to steal 	✓✓ (Any two)	(2)	(4)
9.3.1	<ul style="list-style-type: none"> • Privacy of victims needs to be respected • Social media leaks/discussions may compromise the ongoing legal processes • Victims of crime can be subjected to unfair further victimisation by a judgemental crowd 	✓✓ (Any two)	(2)	
9.3.2	<ul style="list-style-type: none"> • The instant nature of communication/quick messages/IM • Closed groups are convenient and have enhanced security/privacy • WhatsApp is a very popular/ubiquitous app installed on almost anybody's device • Can handle a range of multimedia well, e.g. for taking videos of crimes • Can track whether messages were read 	✓✓ (Any two)	(2)	
9.3.3	Text-to-speech/screen readers✓		(1)	(5)
9.4	<ul style="list-style-type: none"> • Backup kept in a different location/Remote backup • Accessible from anywhere/anytime where there is internet access • No extra hardware required/Cheaper than buying extra storage <p>(Note to marker: Do not accept automatic backup/syncing)</p>	✓✓ (Any two)		(2)
9.5.1	<ul style="list-style-type: none"> • Queries • Filters • Reports 	✓✓ (Any two)	(2)	
9.5.2	<ul style="list-style-type: none"> • Better layout/view of the record • Viewing one record at a time • User friendly interface for input • Limits the number of fields displayed 	✓ (Any one)	(1)	(3)

9.6.1	<ul style="list-style-type: none">• Add a title• Add vertical axis labels• Add data labels / show numbers on bars• Add minor gridlines• Add data table• Add axis titles• Show clear difference in colour/texture of bars <p style="text-align: right;">✓✓✓ (Any three)</p>	(3)	
9.6.2	A pie graph will not be able to correctly display BOTH data ranges✓	(1)	(4)
			[25]

QUESTION 10: INTEGRATED SCENARIO

10.1.1	A web browser✓ <i>(Note to marker: Accept any suitable name of a web browser)</i>	(1)	
10.1.2	Use an app✓ <i>(Note to marker: Accept any suitable name of an app or contact them)</i>	(1)	
10.1.3	<ul style="list-style-type: none"> • Record GPS coordinates • Drop a pin on the location in the map app • Take pictures with geo-tagging/Take a photo and do a photo search <p style="text-align: right;">✓✓ (Any two)</p>	(2)	
10.1.4	Use online translators/Google translate/Show taxi driver destination on a mapping app, etc.✓	(1)	(5)
10.2.1	Too few reviews to make a generalisation✓ Reviews made by business owner/Reviews may be biased/innacurate✓	(2)	
10.2.2	<ul style="list-style-type: none"> • Your bank is offline/Bank experiencing technical problems • Mobile data/NFC/Wi-Fi is off • Entered incorrect OTP/one time PIN • There is no internet access/Data allocation is depleted • Hardware failure on the phone <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Do not accept “Technical problems” alone without referring to the bank)</i></p>	(2)	
10.2.3	<ul style="list-style-type: none"> • Ensure nobody is watching you as you type in your PIN • Ensure no extra fittings on the card swiping device/Be wary of card cloning devices • Ensure card is used in front of you/Use tap to pay • Use payment service apps/devices, e.g. Zapper • Do not accept assistance from anybody/Do not get distracted while busy entering your PIN <p style="text-align: right;">✓✓ (Any two)</p>	(2)	(6)
10.3.1	<ul style="list-style-type: none"> • Has a smaller sensor • Smaller lens • Flash is not as effective • Limited optical zoom • Fewer manual control options <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Do not accept poor/lower quality pictures or reference to resolution)</i></p>	(2)	

10.3.2	<ul style="list-style-type: none"> No GPS/Internet connectivity Caves were not mapped 	✓ (Any one)	(1)	
10.3.3	Use the snipping tool/Crop the picture✓ Erase a part in a picture editing program/app, e.g. Paint✓ (Note to marker: Accept overlapping/grouping pictures, etc. Do not accept to just edit or photoshop)		(2)	(5)
10.4.1	<ul style="list-style-type: none"> Save on data costs May provide a better/more stable connection Less lag during call/Lower latency 	✓✓ (Any two)	(2)	
10.4.2	Your computer/device can be hacked on a public network✓ A 'rogue' Wi-Fi hotspot may be set up to steal your private information✓		(2)	
10.4.3	<ul style="list-style-type: none"> Satellite broadband is normally a fixed connection/Not a mobile connection Too expensive compared to other connectivity options Line of sight is a limitation/Weather conditions may affect signal quality 	✓✓ (Any two)	(2)	
10.4.4	<ul style="list-style-type: none"> Low resolution webcam/camera Low resolution monitor 	✓ (Any one)	(1)	
10.4.5	Share folder with the photographs to family members✓ Give them your password for the cloud account✓		(2)	(9)
				[25]

TOTAL SECTION C: 50**GRAND TOTAL: 150**