basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SENIOR CERTIFICATE EXAMINATIONS

COMPUTER APPLICATIONS TECHNOLOGY P2

2018

MARKING GUIDELINES

MARKS: 150

These marking guidelines consist of 14 pages.

SUGGESTIONS AND RECOMMENDATIONS TO MARKERS

- Revisit the questions and the marking guidelines 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 marking guidelines. Ask yourself or your senior marker if the response could ˈfitˈ into the marking guidelines before allocating the correct marks to the candidate. For example, the marking guidelines state '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	D	✔	(1)
1.3	B	✔	(1)
1.4	A	✔	(1)
1.5	C	✔	(1)
1.6	A/B	✔	(1)
1.7	C	✔	(1)
1.8	D	✔	(1)
1.9	B	✔	(1)
1.10	C	✔	(1)
		Total: [10]	

QUESTION 2: MATCHING ITEMS

2.1	L	✔	(1)
2.2	O	✔	(1)
2.3	S	✔	(1)
2.4	M	✔	(1)
2.5	K	✔	(1)
2.6	R	✔	(1)
2.7	T	✔	(1)
2.8	F	✔	(1)
2.9	H	✔	(1)
2.10	A	✔	(1)
		Total: [10]	

QUESTION 3: TRUE OR FALSE ITEMS

(Note to marker: In Question 3.1, 3.2, 3.4 and 3.5, accept the correct term even if false is not stated. Do not award a mark if only 'FALSE' is written down.)		
3.1	FALSE, Bugs	(1)
3.2	FALSE, Fingerprint/Voice /Iris/Face recognition/Pattern Lock/Trusted places	(1)
3.3	TRUE	(1)
3.4	FALSE, zombie/bot	(1)
3.5	FALSE, The ROUND/ROUNDUP/ROUNDDOWN function	(1)
		[5]

TOTAL SECTION A: **[25]**

SECTION B

QUESTION 4: SYSTEMS TECHNOLOGIES

4.1	• Text editors such as WordPad, Notepad, etc. • Word processing programs such as MS Word, etc. ✓(Any one)		(1)
4.2	• Dropdown/Combo box • Check box • Radio buttons • List box ✓✓(Any two) (*Note to marker: Accept slider and date picker.*)		(2)
4.3	• Run an antivirus scan • Toolkit • Delete the infected file ✓✓(Any two) (*Note to marker: Accept format.*)		(2)
4.4	• Free-up some space on the drive, e.g. Delete unwanted data/Move/Disk Cleanup/Archive unused data to another drive/Compress data • Increase storage space e.g. Connect to an external HDD or storage media/Add an additional HDD or SSD • Do a custom install with fewer features ✓✓(Any two) (*Note to marker: Accept more than one option per bullet.*)		(2)
4.5	• Certain devices/components are not working anymore • Problems after installing new hardware/software • Used as a precautionary measure before installing new software/hardware • The system does not start up after the update • Prefer previous system settings ✓✓(Any two)		(2)

4.6	• Changes made on the interactive whiteboard are automatically effected on the computer • It is large enough for many people to view • Can be used for visually impaired people • Allows for collaboration • Drawing sketches • Conversion of natural handwriting to text-based characters • Lesson can be stored for later playback ✓✓(Any two)		(2)
4.7	• Filtered in Explorer✓ • Search results by time range/Date modified✓ (*Note to marker: Accept hide the older files*)		(2)
4.8	• Change some uppercase letters to lowercase letters/A mix of uppercase and lowercase letters • Use special characters • Increase the length of the password • Do not repeat letters and/or digits/Do not use patterns • Use a variety of letters, characters and objects ✓✓(Any two) (*Note to marker: Accept examples of passwords that display two of the above criteria.*)		(2)
4.9	• RAM is more expensive per GB/SSD is cheaper per GB • RAM is temporary(volatile)/SSD is permanent • CPU communicates with RAM directly/CPU does not communicate with SSD directly/RAM is faster than SSD • RAM is primary storage/SSD is secondary storage ✓✓(Any two)		(2)
4.10	• Clients request a service • Server provides a service ✓✓(Any two) (*Note to marker: Accept actual services provided by the server, e.g. security, software updates, etc.*)		(2)
4.11	• The driver is not working properly • New software was loaded (incompatible with driver) • Settings/Scrolling features may have been changed ✓(Any one) (*Note to marker: Do not accept hardware failure.*)		(1)

4.12	• Print a model of a product that does not yet exist • Customers can inspect a physical model before it is manufactured • Ordinary users can easily create 3D objects • Can be used in the manufacture process • Companies may find it cost effective ✓✓(Any two) *(Note to marker: Accept suitable examples, e.g. reference to medical applications.)*		(2)
4.13	A computer-generated (3D)/simulated world✓ that can be interacted✓ with using special devices**.**		(2)
			[24]

QUESTION 5: INTERNET AND NETWORK TECHNOLOGIES

5.1	VOIP✓		(1)
5.2.1	Place the devices very close to each other/Let the devices touch each other✓	(1)	
5.2.2	• Transfer files/media • Making payments • Identification/Security • Initiate an action/Launch an app ✓✓ (Any two)	(2)	(3)
5.3	• The recipient's mailbox is full • The e-mail address is incorrect/does not exist • Problems with the e-mail server • Attachment is too large/Service provider restrictions • Too many recipients on the distribution list • Data CAP is depleted/No internet access ✓✓(Any two)		(2)
5.4	Allows the user to store/add/remove products/items✓ before a transaction is completed✓		(2)
5.5	• Battery life is depleted quicker • Overall internet experience is slower • Data CAP may deplete quicker/Data costs may increase ✓✓(Any two)		(2)
5.6	• Use a suitable online web development/hosting service, e.g. Wordpress • Use an ISP to put it on a server • Obtain a fixed IP address for your local server ✓(Any one)		(1)

5.7	- Access to network can be limited to only their customers - Reduce the possibility of network bottleneck/Users do not congest the network/All users get a fair share of use - To limit internet access costs for the business		
	✓✓ (Any two)		(2)
5.8	- Preventing access to certain files/folders - Preventing access to certain programs - Blocking access to certain websites - Prevent users from changing system settings		
	✓✓(Any two)		(2)
			[15]

QUESTION 6: INFORMATION MANAGEMENT

6.1	• Question should give options/Closed question • Not too many/few options for closed questions • Question should be concise and unambiguous • Question must deal with the topic of the survey • Question should not require irrelevant personal information • You should not be able to get the answer from any other resource ✓✓(Any two)		(2)
6.2	Export/Copy to csv/text file/another application✓ Import/Paste into new application✓		(2)
6.3	Changes to original data will be updated automatically wherever it is referenced✓		(1)
6.4.1	2✓	(1)	
6.4.2	They spent too much of their budget/They overspent✓	(1)	
6.4.3	Research✓	(1)	
6.4.4	• Add currency symbols to the numbers/amounts • Add data labels • Add axis titles • Move the legend to the left/right/bottom • Use a more meaningful chart title • Use gradient/textured/colours fill for the bars/columns • Remove the decimal portion of the numbers • Decrease the units of the y-axis ✓✓✓(Any three)	(3)	(6)
			[11]

QUESTION 7: SOCIAL IMPLICATIONS

7.1	• Used to explain abstract/difficult concepts/Connects reality with digital content, e.g. flight training, medical training, etc. • Supports learning materials/less expensive learning materials, i.e. educational purposes • Entertainment purposes, e.g. gaming • Provides additional information, e.g. to promote tourism, marketing purposes, construction industry, etc. ✓✓ (Any two)		(2)
7.2	• Phishing/fake e-mails to obtain personal information • Use of social media to obtain personal information • Pharming/fake websites that pretend to be real • Making telephone calls/Send SMS pretending to be real companies • Sifting through company dumpsters looking for private information ✓✓(Any two)		(2)
7.3	• No banking charges/Low transaction fees • No taxation/government regulation • Money available/accepted anywhere in the world • Many retailers are starting to accept Bitcoin • Can be viewed as an investment • Transactions cannot be easily traced ✓✓(Any two)		(2)
7.4	• VPN can be used to pirate software/torrenting • Cybercriminals hide behind VPN/To perform (anonymous) crimes • Difficult for governments to regulate VPN service providers • Control/Security ✓✓(Any two)		(2)
7.5	• Do not share personal information/photographs of others without permission • Do not harass others e.g. cyber-bullying, cyber-stalking • Do not post offensive content • Be aware of cultural and religious differences • Do not share the location details of other people without their permission ✓✓(Any two)		(2)
			[10]

QUESTION 8: SOLUTION DEVELOPMENT

8.1	The field is a primary key✓		(1)
8.2.1	Used the spacebar/Spaces were used✓	(1)	
8.2.2	• Tabs • Tables • Columns ✓✓(Any two)	(2)	(3)
8.3	• To move to another point in a document • To open a new document • To navigate between web pages ✓(Any one)		(1)
8.4	Sort✓ using the left to right setting/horizontally✓ OR Transpose the list to a vertical list✓ Sort✓ transposed list (and transpose back)		(2)
8.5	Combine the LEFT/MID✓ functions with the FIND/SEARCH✓ functions to find the space		(2)
8.6	• Thick✓ table border/grid present • 2 rows✓ • 2 columns✓ • Row 2 merged horizontally✓ by 2 cells✓ • Correct letters in each cell✓ 	A	B | 	C			(6)
			[15]

TOTAL SECTION B:　75

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SECTION C

QUESTION 9: INTEGRATED SCENARIO

9.1.1	3G/LTE/4G/Cellular/Satellite✓ AND Motivation: Traffic officers will be at different points and therefore will need mobile internet communications✓	(2)	
9.1.2	• Easier/Quicker to capture information • Additional information from a database may be available • There will be a record of barcodes scanned for later reference • Information/Data will be more accurate ✓✓(Any two)	(2)	
9.1.3	Smart device e.g. smartphone, tablet, phablet✓	(1)	
9.1.4	Biometric data✓	(1)	(6)
9.2.1	• Geo-tagging • Drop a pin on a map • Record/Share GPS coordinates, e.g. WhatsApp and Waze ✓✓(Any two)	(2)	
9.2.2	• Use an application that automatically restricts who can view posts • Use features/privacy controls in the relevant app • Post information under a nickname/pseudonym ✓✓(Any two)	(2)	
9.2.3	• Offender could intimidate or assault your friend • Should not be handling phone/camera while driving • Friend could cause an accident by driving and taking pictures at the same time ✓(Any one)	(1)	(5)
9.3.1	A dedicated device has only one function✓	(1)	
9.3.2	Some printers have multi-function features/Convergence of features in one device/Printer may be a multi-function device✓	(1)	

9.3.3	• Save on paper/printer consumables • Protects the environment/Encourage green computing • Easier to search for electronic documents • Backups can easily be done • Save on physical storage space ✓✓(Any two)	(2)	
9.3.4	Use cloud storage✓ Use external storage media e.g. hard drives/DVD's/flash drives, etc.✓	(2)	
9.3.5	• Various types of data can be stored in a database • Data is easily processed into information • Queries make it easy to extract data • Results of queries can be presented in reports • Capturing of data is relatively easy/Easy management of data ✓✓(Any two)	(2)	(8)
9.4.1	Mail merge✓	(1)	
9.4.2	• SMS • E-mail • Traffic apps • Fax ✓✓(Any two)	(2)	(3)
9.5.1	• Memory card • Hard drive • SSD ✓✓(Any two)	(2)	
9.5.2	• Resolution/Megapixel • ISO • Shutter speed • Aperture size ✓(Any one)	(1)	(3)
			[25]

QUESTION 10: INTEGRATED SCENARIO

10.1.1	• Excessive use of data/High data costs • Constant streaming may bottleneck the network for other users/slow down the network ✓ (Any one)	(1)	
10.1.2	Download/Save the video✓	(1)	
10.1.3	• Marketing/Possible remuneration • Determining the unemployment rate • Low viewership may mean that the video title does not attract views ✓✓(Any two)	(2)	
10.1.4	Less data will be used✓ Line speed may not be fast enough/Less chance of buffering✓	(2)	
10.1.5	• Selfie stick • Tripod ✓ (Any one)	(1)	
10.1.6	• Slow GPU/CPU • No dedicated graphics card/adapter • Insufficient/Inefficient (graphics) memory • Hard drive is full ✓✓(Any two)	(2)	(9)
10.2.1	• Do not use capital letters • Attachments should not be too large/Compress large files • Do not make spelling mistakes or grammatical errors • Ensure that your e-mails are free of viruses • Add a meaningful subject line • Only send work related e-mails/No spam ✓✓(Any two)	(2)	
10.2.2	• A plug-in is required • Pop-up blocker is enabled • Version of browser is too old/Browser not supported • Anti-malware may have blocked content • User may need to login first • Restrictions on content set by system administrator ✓✓(Any two)	(2)	

10.2.3	Subscribe to the website/RSS-feeds✔	(1)	
10.2.4	• Pop-up blocker • Ad-blocker/Anti-spyware • Only visit recommended sites • Register and pay a subscription 　　　　　　　　　　　　　　　　　✔✔(Any two)	(2)	
10.2.5	• Using the snipping tool • Inserting a screen clipping • Press Print Screen on the keyboard/Shift + Print Screen and paste it into a document/Print to PDF • Save the web page • Take a picture with a smartphone • Print a hardcopy 　　　　　　　　　　　　　　　　　✔✔(Any two)	(2)	
10.2.6	• Zooming tool in the web browser • Switch to mobile view • Rotate device to landscape view • Change the resolution of the screen 　　　　　　　　　　　　　　　　　✔✔(Any two)	(2)	(11)
10.3.1	QR code✔	(1)	
10.3.2	QR codes are used as a link to a URL/webpage/text/file✔	(1)	
10.3.3	• Wi-Fi • E-mail to printer/Cloud print • Bluetooth • NFC 　　　　　　　　　　　　　　　　　✔ (Any one)	(1)	(3)
10.4	• Microphone • Braille keyboard • Braille printer • Speakers • Larger screen 　　　　　　　　　　　　　　　　　✔✔(Any two)		(2)
			[25]

TOTAL SECTION C:　50

GRAND TOTAL:　150