

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

SEPTEMBER 2016

**COMPUTER APPLICATIONS TECHNOLOGY P2
MEMORANDUM**

MARKS: 150

This memorandum consists of 10 pages.

SECTION A

QUESTION 1: MATCHING ITEMS

1.1	D ✓	(1)
1.2	I ✓	(1)
1.3	K ✓	(1)
1.4	G ✓	(1)
1.5	A ✓	(1)
1.6	N ✓	(1)
1.7	B ✓	(1)
1.8	P ✓	(1)
1.9	E ✓	(1)
1.10	C ✓	(1)

[10]

QUESTION 2: MULTIPLE-CHOICE QUESTIONS

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

[10]

QUESTION 3: MODIFIED TRUE OR FALSE

3.1	The MOTHERBOARD is a large circuit board inside the computer containing slots and connections for all the components of a computer. ✓	(1)
3.2	MICR is a technology that enables a machine to read characters such as bank numbers on a cheque. ✓	(1)
3.3	BID OR BUY is the largest Internet auction web site in South Africa. ✓	(1)
3.4	PHARMING redirects users to false web sites without them even knowing it. ✓	(1)
3.5	A CAPTION is a numbered label that you can add to a table, figure or item. ✓	(1)

[5]

TOTAL SECTION A: 25

SECTION B

QUESTION 4: SYSTEMS TECHNOLOGIES

4.1	4.1.1	Paint ✓	(1)
	4.1.2	<ul style="list-style-type: none"> • Her needs are relatively simple and can be accomplished with Paint, which is a free program installed with Windows operating system. ✓ • Photoshop is quite expensive and has to be purchased and installed before it can be used, which makes it unsuitable for her needs. ✓ 	(2)
4.2	4.2.1	<ul style="list-style-type: none"> • Disk Cleanup: <ul style="list-style-type: none"> ○ Removing temporary files downloaded from the Internet. ○ Removing temporary files created by Windows. ○ Empty the Recycle Bin. • Removing installed programs that you no longer or seldom use. • Compressing of files. ✓✓ (Any 2) 	(2)
	4.2.2	<ul style="list-style-type: none"> • Large capacity • Portability • Ease of use • High speed • Reliability ✓✓ (Any 2) 	(2)
	4.2.3	<ul style="list-style-type: none"> • Files can be accidentally overwritten or deleted. • Hardware failures – a disk drive crashes. • Hardware can be stolen. • Disasters – fires, earthquakes and floods can destroy hardware. • Files can be corrupted by power fluctuations. • Files can be deleted or corrupted by viruses. ✓✓ (Any 2) 	(2)
4.3	4.3.1	Ctrl + Alt + Delete ✓	(1)
	4.3.2	<ul style="list-style-type: none"> • Right click on the program. ✓ • Click on end program or on the end task button. ✓ 	(2)
4.4	4.4.1	Inkjet printer ✓	(1)
	4.4.2	<ul style="list-style-type: none"> • No paper in printer. • Cables not properly connected. • Date and time settings. • Hardware settings. • Running out of ink or ink levels too low. ✓✓ (Any 2) 	(2)
4.5		<ul style="list-style-type: none"> • Damaged speakers. • Bad connections. ✓ (Any 1) 	(1)

4.6	4.6.1	<ul style="list-style-type: none"> Start, Control panel and turn automatic updates off. ✓ 	(1)
	4.6.2	<ul style="list-style-type: none"> Updates take up space. Can cause compatibility issues. Danger of restabilising a system. Can be disturbing when concentrating. It uses a lot of data – can exceed your limit. ✓✓ (Any 2) 	(2)
4.7	4.7.1	<ul style="list-style-type: none"> Web-based ✓ Yahoo in the e-mail address refers to a web browser. ✓ 	(2)
	4.7.2	<ul style="list-style-type: none"> You cannot work with the software if you do not have an internet connection. The software might not have all the features or capabilities of traditional desktop versions of the software. Web-based applications can be slow to load. The user will not be able to work if the server fails. ✓ (Any 1) 	(1)
4.8	The better the quality the larger the file will be that stores the image. ✓		(1)
4.9	4.9.1	<ul style="list-style-type: none"> It fits into your hand in a way that keeps your hand more relaxed and naturally positioned. It helps reduce the likelihood of Carpal Tunnel Syndrome. ✓ (Any 1) 	(1)
	4.9.2	<ul style="list-style-type: none"> Less clutter on the desk or work surface. Mobility. ✓ (Any 1) 	(1)

[25]**QUESTION 5: INTERNET AND NETWORK TECHNOLOGIES**

5.1	5.1.1	<ul style="list-style-type: none"> It is a high speed, high bandwidth connection. She wants to be able to watch videos and just wants to be connected. ✓ (Any 1) 	(1)
	5.1.2	<ul style="list-style-type: none"> Unshaped means that all the Internet services are given the same priority. ✓ 	(1)
	5.1.3	<ul style="list-style-type: none"> Movies and music files are huge and data bundles provide different limitations in the amounts of data that can be downloaded and uploaded in a month. The amount of data that can be downloaded can become exhausted. ✓ (Any 1) 	(1)
	5.1.4	Maximum download speed and maximum upload speed. ✓	(1)
5.2	5.2.1	Real time messaging is a communication method in which users communicate directly with each other without any delay ✓ whereas e-mail messaging is communication method where communication is delayed. ✓	(2)
	5.2.2	<ul style="list-style-type: none"> VoIP calls are cheaper than normal phone calls. The software is generally free. VoIP allows you to transfer files, as well as make video conference calls. ✓✓ (Any 2) 	(2)

5.3	5.3.1	An extranet differs from an intranet in that it is accessible to select, external partners such as important customers, suppliers and business partners for exchanging information, integrate operations and sharing data and applications. ✓	(1)
	5.3.2	<ul style="list-style-type: none"> Improved collaboration between company and customers. Security – you can control who accesses your site. ✓ (Any 1) 	(1)
5.4	5.4.1	Spyware has changed her home page settings and is redirecting her to different pages. ✓	(1)
	5.4.2	<ul style="list-style-type: none"> A secure site's URL often begins with https. ✓ Also, a small closed lock appears next to the URL, indicating that the site is secure. ✓ 	(2)
5.5	She can sort or filter e-mail messages. ✓		(1)
5.6	To manage messages you want to keep permanently or for future reference, you can make use of a folder system similar to the folders you can see in Windows Explorer. ✓		(1)

[15]**QUESTION 6: INFORMATION MANAGEMENT**

6.1	6.1.1	A search engine is a program that searches the Web for web pages relevant to the keywords or phrases entered by the person looking for information. The search results are usually presented in a list and are commonly referred to as hits. ✓	(1)
	6.1.2	<ul style="list-style-type: none"> Use a more precise search phrase or use synonyms. Exclude certain words from the search by using Boolean operators. Use the search engine operators. Specify date ranges, file types, etc. Use quotations marks. Use more than 1 word but not more than 10 words in a phrase. ✓✓ (Any 2) 	(2)
6.2	Information overload is what happens when people can't cope with the amount of information that they are exposed to every day. ✓		(1)
6.3	<ul style="list-style-type: none"> Check credentials/affiliation of the author/organization running the website/published the site. What is the motivation behind the web page? Is there a reference list? Does it show the date of the last update of the web page? Does it seem as if the web page is permanent or is it part of a permanent organisation? Are the facts correct? Are there any links to other trusted resources? Is the topic well covered? Look at the general presentation, e.g. spelling errors. ✓✓ (Any 2) 		(2)
6.4	<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. ✓✓ (Any 2) 		(2)

6.5	6.5.1	She cannot open a Word document created in a later version, such as 2007 in an earlier Word version such as Word 2003. ✓	(1)
	6.5.2	<ul style="list-style-type: none"> • She must install a file converter that will enable Word 2003 to open later versions. She must install the compatibility Pack for Word. • Her friend must save the file as a Word 2003 file so that your mother can access it. ✓ (Any 1)	(1)

[10]**QUESTION 7: SOCIAL IMPLICATIONS**

7.1	7.1.1	<u>ADVANTAGE</u> <ul style="list-style-type: none"> ✓ It is convenient, online 24/7 from the comfort of your own home. ✓ Can compare prices. ✓ Prices can be cheaper. ✓ The business can reduce its overhead costs (wages, shop rentals and trade world-wide). ✓ The business does not have to carry huge quantities of stock. ✓ Anything from groceries to books to DVDs to cars can be bought online. ✓ No salesperson can pressurize a buyer to buy the products. ✓ (Any 1)	
		<u>DISADVANTAGE</u> <ul style="list-style-type: none"> ✗ Better to physically see the goods. ✗ Danger of the goods getting stolen during delivery. ✗ Delivery costs and import taxes if the article comes from overseas. ✗ Online threats - viruses and phishing, etc. ✗ Impersonal sales. ✗ Return of items difficult especially if you buy goods from another country. ✓ (Any 1)	(2)
	7.1.2	<ul style="list-style-type: none"> • Have organisation's contact information and URL. • Make sure the site is secure. • Look for security guarantees & return policy on site. • Terms and conditions. • Payment and delivery details. • Keep full record. • Goods outside of South Africa - import duties and exchange rate. • Only give your credit card details and never your PIN details or other banking details. ✓✓ (Any 2)	(2)
7.2	7.2.1	Data can be stolen in many ways: it can be stolen physically simply by copying it onto a portable storage device, intercepting it whilst it is being transferred over the network, using social engineering techniques. ✓	(1)
	7.2.2	It refers to attempts from people to con the user into giving out personal and confidential details such as PIN numbers and passwords, etc. by posing as a legitimate organisation, usually via e-mail. ✓	(1)

7.3	7.3.1	Social networking ✓	(1)
	7.3.2	<ul style="list-style-type: none"> • Formation of interest groups. • Posting of multimedia photos and videos. • Many add-on/plugin features such as games. • Facility to find old friends/acquaintances. • Status updates, etc. ✓✓ (Any 2) 	(2)
7.4	Crippleware is a type of shareware program that is distributed free to the user. In crippleware vital features of the program such as printing or the ability to save files are disabled until the user purchases a registration key. While crippleware allows consumers to see the software before they buy, they are unable to test the complete functionality because of the disabled functions.		(1)

[10]

QUESTION 8: SOLUTION DEVELOPMENT

8.1	8.1.1	<ul style="list-style-type: none"> • Accept any answer which refers to the Count function. ✓ • Must be placed in the report footer. ✓ 	(2)
	8.1.2	<ul style="list-style-type: none"> • The field is not wide enough to display the number. ✓ • Widen the telephone field in the details section in the Design View of the Report. ✓ 	(2)
	8.1.3	Input mask ✓	(1)
8.2	8.2.1	<ul style="list-style-type: none"> • Better reporting facilities. • More powerful querying options available. • Easier/more features to validate data. ✓✓ (Any 2) 	(2)
	8.2.2	No. ✓ The data can be exported to a spreadsheet. ✓	(2)
8.3	8.3.1	Absolute cell reference ✓	(1)
	8.3.2	To prevent the cell address from changing when a formula is copied down. ✓	(1)
8.4	Access the printer queue by double clicking on the relevant printer icon and delete the relevant print task or job. ✓		(1)
8.5	8.5.1	<ul style="list-style-type: none"> • Track changes. • Comments. • Using the option to compare documents side by side. • Using the versions option provided by some word processors. • Highlighting changes or comments in different colours manually. ✓✓ (Any 2) 	(2)
	8.5.2	The readability of the document, in other words how the person reading the document, experiences it (is it easy for her/him to read and interpret) e.g. will a blind person be able to 'read' and understand everything in the document. ✓	(1)

[15]

TOTAL SECTION B: 75

SECTION C

9.1	9.1.1	Intel ✓	(1)
	9.1.2	500 GB ✓	(1)
	9.1.3	Windows 8 ✓	(1)
	9.1.4	A card reader allows different portable storage or memory cards to be plugged in ✓ to be read and written to. ✓	(2)
	9.1.5	It is catching double the data than before ✓ which means it can process twice as fast. ✓	(2)
	9.1.6	<ul style="list-style-type: none"> • Providing the user interface • Managing programs • Managing hardware • Providing basic security ✓✓ (Any 2) 	(2)
	9.1.7	<ul style="list-style-type: none"> • A hot swap is the replacement of a hard drive, CD-ROM drive, power supply, or other device with a similar device while the computer system using it remains in operation. • This means that the computer needs not to be switched off when attaching external devices. • Hot swapping is also called hot plugging. ✓✓ (Any 2) 	(2)
9.2	9.2.1	<ul style="list-style-type: none"> • It is faster. • Mobility - it is more convenient because a connection can be made from anywhere in the world where there is access 24/7. • You can use your smartphone or tablet to access the Internet – you don't even need a computer. • You don't have to use cables to connect to the Internet. ✓✓ (Any 2) 	(2)
	9.2.2	<ul style="list-style-type: none"> • Access control. • Firewall. • Security Center – warns you about settings that could make your system insecure. ✓✓ (Any 2) 	(2)
9.3	9.3.1	<ul style="list-style-type: none"> • Dropbox • SkyDrive • DropitTOme • Google drive ✓✓ (Any 2) 	(2)
	9.3.2	<ul style="list-style-type: none"> • Once you have installed the (generally) free software on your computer or device and you have registered with the site, you can then upload your files to the site. • You can then send the recipient a link (and password if necessary) to the relevant folder. • This link can then be used by the recipient to download the file. ✓✓ (Any 2) 	(2)
	9.3.3	Synchronising or 'syncing' means that the changes you make to a file will be updated on all of the computers or devices ✓ that are linked to that system (e.g. Dropbox). ✓	(2)
9.4	9.4.1	<ul style="list-style-type: none"> • You commit plagiarism when you present someone else's work as your own, or if you use someone else's work without their permission. ✓ • You also plagiarize information if you don't acknowledge the source of the information correctly. ✓ 	(2)

	9.4.2	The content is not necessarily accurate because it is often the opinion of an individual. ✓	(1)
	9.4.3	<ul style="list-style-type: none"> • Saves on paper (and therefore money). • Parents might prefer the convenience that they can download and listen to it in their own time, say on their way to work. • It is an advantage for parents who are visually impaired, etc. ✓✓ (Any 2) 	(2)
	9.4.4	<ul style="list-style-type: none"> • Creating company intranets. • Creating community websites. • Making checklists and lists of things to do in large projects with a number of people working on them. • Creating educational resources such as glossaries for subjects, study notes and FAQ (frequently asked question) guides, etc. ✓✓ (Any 2) 	(2)
	9.4.5	<ul style="list-style-type: none"> • If you have created an account with a blog provider that supports <i>Word</i>, you can create your blog post by sending a <i>Word</i> document to the blogging site. ✓ • The first time you post to your blog, you will be required to register the blog account linking <i>Word</i> to the blog provider. ✓ 	(2)
	9.4.6	People who earn their living as 'bloggers' do so by getting income from advertising or sponsorships. ✓	(1)
9.5	9.5.1	Skype ✓	(1)
	9.5.2	<ul style="list-style-type: none"> • ICall • Internet Solutions • MWEB Broadband Talk • Verizon • Telkom • Voipplus global connections • VX Telecom 	✓ (Any 1) (1)
	9.5.3	<ul style="list-style-type: none"> • Webcam • Microphone • Speakers 	✓✓ (Any 2) (2)
9.6	9.6.1	<ul style="list-style-type: none"> • Provide cheaper, more affordable Internet access. • Use schools with ICT facilities as community centers after hours. • Promote and extend ICT type subjects at school level and train people to become computer literate. • Communities can be supported by supplying computers to them. • Recycle suitable hardware to communities. • Make use of open source/freeware/shareware software. ✓✓ (Any 2) 	(2)
	9.6.2	<ul style="list-style-type: none"> • Digital communication depend on most people having affordable Internet access. • Expensive equipment (e.g. a smartphone versus a normal cellphone) is required. • Greater skills are needed, etc. ✓✓ (Any 2) 	(2)

9.7	<ul style="list-style-type: none"> • Sell used paper. • Use energy savings monitors. • Print only when necessary. • Extend lifespan of computers by maintaining computers properly. • Paperless office. • Don't throw away old cartridges, take it back to the manufacturer. • Refill ink cartridges. • Proofread documents before printing. • Switch off all devices when not in use. 		✓✓ (Any 2)	(2)
9.8	9.8.1	Bookmarks ✓		(1)
	9.8.2	<ul style="list-style-type: none"> • Add paragraph headings. ✓ • All headings in the document must be set to a style. ✓ 		(2)
	9.8.3	<ul style="list-style-type: none"> • Splitting panes in Excel allows you to view multiple areas of the same spreadsheet at the same time. It is handy when you have a spreadsheet that contains lots of information. ✓ • Freezing panes allows you to select data that remains visible when scrolling in a sheet. Keeping row and column labels visible as you scroll. ✓ 		(2)
9.9	9.9.1	Speech-to-text program ✓		(1)
	9.9.2	Adding captions/sub-titles ✓		(1)
	9.9.3	Google Voice Search allows people to search using Google ✓ by speaking to a smartphone or computer. ✓		(2)

TOTAL SECTION C: 50
GRAND TOTAL: 150