Province of the
EASTERN CAPE
EDUCATION

GRADE 11

NOVEMBER 2016

**COMPUTER APPLICATIONS TECHNOLOGY P2
MEMORANDUM**

MARKS: 150

This memorandum consists of 12 pages.

SECTION A: SHORT QUESTIONS

```
QUESTION 1:  MATCHING ITEMS

1.1    F ✓                        (1)
1.2    I ✓                        (1)
1.3    K ✓                        (1)
1.4    A ✓                        (1)
1.5    N ✓                        (1)
1.6    J ✓                        (1)
1.7    B ✓                        (1)
1.8    G ✓                        (1)
1.9    C ✓                        (1)
1.10   L ✓                        (1)
                                  [10]
```

```
QUESTION 2:  MULTIPLE-CHOICE

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

QUESTION 3: MODIFIED TRUE/FALSE

3.1   True   (1)

3.2   True   (1)

3.3   False – Metadata   (1)

3.4   True   (1)

3.5   False – Cyber-stalking   (1)
                                                                        [5]

TOTAL SECTION A: 25

SECTION B

QUESTION 4: SYSTEMS TECHNOLOGIES

4.1	4.1.1	An operating system is system software ✓ which controls all activities that take place in a computer. ✓	2	
	4.1.2	• Android ✓	1	
	4.1.3	• Providing the user interface ✓ • Managing programs ✓ • Managing hardware • Providing basic security ✓✓(Any 2)	2	5
4.2	4.2.1	• Each core can process separate programs ✓ at the same time. ✓ **OR** • Each core acts like a separate CPU making it possible to execute multiple tasks simultaneously.	2	
	4.2.2	3Tb HDD ✓ Hard disk size could be reduced.	1	
	4.2.3	• Memory is faster than storage. ✓ • Memory is volatile (it only keeps its contents whilst it is supplied with power) and storage is not. ✓ • Memory is more expensive per GB than storage. • Memory is electronic whereas storage can be optical (uses laser light like CDs and DVDs), magnetic (like hard drives) or electronic (flash disks). ✓✓(Any 2)	2	5
4.3	4.3.1	• Try to write at a lower speed. ✓ • Ensure there is enough storage space on the hard drive to create image for disc. ✓ • Try not to use computer for other tasks while writing the disc. *NOTE: Do not accept answers related to using a different drive or disc.* ✓✓(Any 2)	2	
	4.3.2	• Use UPS. ✓ • Prevent water damage or spilling of liquids on equipment. ✓ • Ensure proper cooling. • Not forcing connectors into the wrong slots. • Keep in safe places to prevent being knocked over, etc. ✓✓(Any 2)	2	4

Please turn over

4.4	4.4.1	• It can be used in access control ✓ to prevent unauthorised access to laptop/security. **OR** • A similar description e.g.– used for biometric access control.	1	
	4.4.2	• Retinal scanner ✓ • Face recognition scanner • Voice recognition ✓(Any 1)	1	2
4.5	4.5.1	• Free software. ✓ • Can be edited and redistributed. ✓ • No licensing cost. ✓✓(Any 2)	2	
	4.5.2	• Very little after sales support. ✓ • Amount of textbooks and training available is much less. ✓ • Not always sure of the quality and if it works correctly. • Many different versions of the same product. ✓✓(Any 2)	2	4
4.6	4.6.1	• The reflection on the mirror surface will make the optical mouse almost unusable. ✓ • Use a mouse pad or any other non-reflective surface. ✓	2	
	4.6.2	• The mouse is designed in such a way as to not impact negatively on the health of the user and to reduce the risk of Carpal Tunnel Syndrome. ✓	1	
	4.6.3	• Use devices such as cable locks, which prevent you from disconnecting the cable from a computer. ✓ • Chain equipment to a fairly solid object, such as a bracket on the wall. ✓ • Use lockable cabinets in which to place the system units of a desktop computer or server. • Make use of motion sensors with an alarm which detect when a computer has been moved. ✓✓(Any 2)	2	5
				[25]

QUESTION 5: INTERNET AND NETWORK TECHNOLOGIES

5.1	5.1.1	• A file server is used to store all the users' files instead of each user saving their work on the hard drive of their own computers. ✓ • A proxy server allows users to connect to the Internet so security control for viruses can also be implemented at one central point. ✓	2	
	5.1.2	Mobility ✓ **OR** Easier to set up – especially in a place where it is difficult to lay a cable. ✓ (Any 1)	1	
	5.1.3	• Wi-Fi range is limited. ✓ • Buildings / obstructions might require a distributed layout. ✓ • Multiple computers sharing one access point will drastically decrease the speed. • An access point can only support a limited number of connections. ✓✓(Any 2)	2	
	5.1.4	Intranet is an organisation's private network. ✓	1	6
5.2	5.2.1	• It is cheaper than normal phone calls. ✓ • The software is generally free. ✓ • It allows one to transfer files, as well as make video conference calls. ✓✓(Any 2)	2	
	5.2.2	• People often subscribe to too many RSS feeds, get overloaded and end up not reading anything at all. ✓ • Not all sites support RSS. • Sometimes graphics and photos are not included in RSS feeds to keep them concise. • RSS feeds can create a lot of traffic in a network environment slowing down Internet access. ✓(Any 1)	1	
	5.2.3	• Technology used in the website is not compatible/available on the mobile device, e.g. Flash player. ✓ • The website has not been designed for a smaller screen size/has been designed for larger computer screens. ✓ • Mobile websites usually cram content into a single vertical column, making it easier to scan and scroll on a tiny screen. • Mobile websites are watered-down versions of their desktop counterparts. ✓✓(Any 2)	2	
	5.2.4	Cables ✓ Radio waves (Wireless) ✓	2	7

5.3	He can sort or filter e-mail messages. ✓		1	1
5.4	To manage messages you want to keep permanently or for future reference, by using a folder system similar to the one in Windows Explorer. ✓		1	1
				[15]

QUESTION 6: INFORMATION MANAGEMENT

6.1	6.1.1	Question 1 = closed ✓ Question 2 = open-ended ✓	2	
	6.1.2	• Closed questions require a single answer. ✓ • Closed questions can be answered directly by facts and can be easy manipulated in a spreadsheet. • Open-ended questions offer answers as explanations so that will make it difficult to manipulate in a spreadsheet. ✓ • Requires further investigation/brainstorming/judgement/ includes higher level recommendations. • Open ended questions cannot be answered directly by facts and will make you examine an issue. • *[Do not accept simply the negation of what a 'closed' question is, e.g. 'Cannot be answered directly by facts'. Must expand / explain.]*	2	4
6.2	6.2.1	• Accept any answer that relates to the <u>broadness / width</u> of the groupings, i.e. that it will not be possible to draw finer distinctions <u>within</u> the separate groupings. ✓	1	1
6.3		• Requires Internet access. ✓ • May skew sample as it may be difficult to reach target group (those without Internet access automatically excluded). ✓ • Less 'personal' (cannot motivate / explain / clarify / reassure, etc.). • More likely to get invalid data (pranks, gender / age misrepresentation, etc.). ✓✓(Any 2)	2	2
6.4		• Delimiters are used to indicate the contents/bounds of cells. ✓ • Used to separate bits of information such as fields in a line in a text file. • A delimiter is one or more characters that separates text strings and are usually commas, semi-colons, quotes, braces or slashes. ✓(Any 1)	1	1
6.5		• To avoid plagiarism. ✓ • To enable people to check your references and quotations, to confirm whether you have understood or interpreted the information correctly. ✓(Any 1)	1	1
6.6		• You can Google the author listed to try to check their credentials. ✓	1	1
				[10]

QUESTION 7: SOCIAL IMPLICATIONS

7.1	7.1.1	• Eye tracking devices ✓ • Head movement devices ✓ • Large key keyboards • (Large) trackballs • Joysticks • Foot pedal control devices • Sip and puff devices, etc. *Note: Do not accept answers not related to poor motor control.* ✓✓(Any 2)	2	
	7.1.2	• It is designed for people who have difficulty holding down two or more keys simultaneously and enables the user to enter key combinations by pressing keys in sequence rather than simultaneously. ✓	1	3
7.2	7.2.1	Social engineering is manipulating people to get access to their secrets, their data or their physical computers or premises. ✓	1	
	7.2.2	• Identity theft ✓ • Malware ✓ (Any 1)	1	2
7.3		• Specifying that the computer should conserve power by starting to sleep or hibernate. ✓ • Setting the brightness of the screen to reduce the power consumption. ✓ • Choosing a balance between power consumption and performance. ✓✓(Any 2)	2	2
7.4		• Formation of interest groups. ✓ • Posting of multimedia photos and videos. ✓ • Many add-on/plug-in features such as games. • Facility to find old friends/acquaintances. • Status updates etc. ✓✓(Any 2)	2	2
7.5		Software that tries to monitor and track the way you use your computer. ✓	1	1
				[10]

QUESTION 8: SOLUTION DEVELOPMENT

8.1	8.1.1	• Gender field: ="M" Or "F" ✓ • Age field: Between 16 And 19 OR >=16 AND <=19 ✓ • Team field: "Blue" OR "Red" ✓✓(Any 2)	2	
	8.1.2	Create a Combo box / List box. ✓	1	
	8.1.3	In Format ✓ > ✓	2	5
8.2	8.2.1	=Countif ✓ (A2:A9,"R*") ✓	2	
	8.2.2	=Today() ✓	1	
	8.2.3	D = Date ✓ E = Currency ✓	2	5
8.3		• Designed to work with structured records. ✓ • Excellent reporting facilities. ✓ • Powerful querying facilities. ✓ • Better data validation tools. • Can design appropriate data capture forms. • Can export data to various forms. ✓ ✓ ✓ (Any 3)	3	3
8.4		Absolute cell reference ✓	1	1
8.5		 ✓	1	1
				[15]
		TOTAL SECTION B:		**75**

SECTION C

QUESTION 9: INTEGRATED SCENARIO

9.1	9.1.1	• Takes up less space. ✓ • Can be used in places where electricity is not immediately available. ✓ • Designed to be portable/mobile. • Can be used for Internet connectivity at hotspots. ✓✓ (Any 2)	2	
	9.1.2	Windows 8.1 ✓	1	
	9.1.3	A card reader allows different portable storage or memory cards to be plugged in ✓ to be read and written to. ✓	2	
	9.1.4	It is where any running program and its data ✓ is temporarily ✓ stored. **OR** It is where the CPU ✓ goes to fetch the instructions and data that it needs to work on. ✓	2	7
9.2	9.2.1	Defragmentation consolidates parts of a file ✓ that are stored in non-continuous areas of the disk. ✓ It **does not** free up disk space. ✓	3	3
9.3	9.3.1	UTP (Unshielded Twisted Pair) ✓ Relatively cheap. ✓ Will only be used over short distances. ✓	3	
	9.3.2	• LAN can be expensive to install and maintain. ✓ • A network administrator is often necessary to manage the network. ✓ • Network security must be maintained to ensure that the data on the network is kept secure. • If the file server is faulty, nobody can access their files. • A faulty network may cause the user to loose data. • An increase in network traffic may influence the working of the network if not properly designed. • The greater the network, the more difficult it is to control. ✓✓(Any 2)	2	5
9.4	9.4.1	To outline the rights and responsibilities of users especially in network environments. ✓	1	
	9.4.2	• Save paper. ✓ • Save ink/cartridges. ✓ • Easier to distribute/can send via e-mail or drop box. • Cheaper to send to many people. • Easier to store/backup/save. ✓✓(Any 2)	2	
	9.4.3	• Recycle. ✓ • Use for spare parts. ✓ • Make use of companies that dispose of e-waste. • Donate old computers. ✓✓(Any 2)	2	5

Please turn over

9.5	9.5.1	It is a small text file that is stored on your computer when you visit a website ✓ that records your use and preferences for the specific site. ✓	2	
	9.5.2	• Cookies are not stored. ✓ • Personal details not accessible. • No record of browser history/browser history not saved. • Makes tracking of browsing patterns more difficult. ✓ (Any 1)	1	
	9.5.3	Adware programs use up a lot of data and battery power.	1	4
9.6	9.6.1	A wiki is a collaborative ✓ reference resource where any user can make contributions. ✓	2	
	9.6.2	• He can moderate content before it is published. ✓ • Published content can be cross checked with other sources on web. • Request knowledgeable people to assist in moderating content. • Remove content that is not accurate. • Provide for professional peer comment on content placed on site. ✓ (Any 1)	1	3
9.7	9.7.1	Speech-to-text program ✓	1	
	9.7.2	Google Voice Search allows people to search using Google ✓ by speaking to a smartphone or computer. ✓	2	3
9.8	9.8.1	Office automation refers to centralising and automating or 'computerising' all tasks and systems in the office. ✓	1	
	9.8.2	Office automation allows employees to: • Work more efficiently by, for example, coordinating schedules and meetings via electronic diaries ✓ • Work as a team ✓ • Improve communications and the flow of the data so that good decisions can be made, based on reliable, shared information. ✓✓ (Any 2)	2	3

9.9	9.9.1	• Theft of data. ✓ • Theft of hardware. • Accidental damage / deleting while working. ✓ (Any 1)	1	
	9.9.2	• Control access to physical data ✓ • Control access to computers ✓ • Limit and restrict use of portable storage • RAID • Backup • Anti-malware software • Firewall • Training of personnel • Hide data • Disk encryption and the use of encryption programs to protect data. • Keep anti-virus software up to date. ✓✓ (Any 2)	2	
	9.9.3	The cost of purchasing software to prevent infection and the cost to renew licences. ✓ Pay for experts. ✓ (Any 1)	1	4
9.10	9.10.1	Software that allows electronic communication such as e-mail, web browsing, instant messaging and VOIP. ✓	1	
	9.10.2	• Provide cheaper, more affordable Internet access. ✓ • Use schools with ICT facilities as community centres 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	3
9.11	9.11.1	• If the drive gets damaged or the computer gets stolen, both the original and the backup copies are lost. ✓ • The backup file can be accidentally deleted. ✓	2	
	9.11.2	Archiving refers to storing files that are static, ✓ usually onto a secondary system such as a DVD, etc. ✓	2	4

9.12	9.12.1	HTML ✓ **OR** Java ✓(Any 1)	1	
	9.12.2	User friendly. ✓ Access speed. ✓ Regular updating the webpage. No dead links. ✓✓(Any 2)	2	
	9.12.3	Add comments to your HTML document such as reminders of code you still need to complete or dates you created a certain part of a website. ✓	1	
	9.12.4	• HTML element ✓ • Head element ✓ • Title element • Body element ✓✓(Any 2)	2	6
		TOTAL SECTION C:		**50**
		GRAND TOTAL:		**150**