Province of the
EASTERN CAPE
EDUCATION

**NATIONAL
SENIOR CERTIFICATE**

GRADE 11

NOVEMBER 2012

**COMPUTER APPLICATIONS TECHNOLOGY P2
MEMORANDUM**

MARKS: 150

This memorandum consists of 9 pages.

SECTION A

QUESTION 1   Multiple-choice

1.1	A ✓	(1)
1.2	C ✓	(1)
1.3	C ✓	(1)
1.4	D ✓	(1)
1.5	B ✓	(1)
1.6	A ✓	(1)
1.7	B ✓	(1)
1.8	C ✓	(1)
1.9	D ✓	(1)
1.10	B ✓	(1)
		[10]

QUESTION 2   Matching columns

2.1	G ✓	(1)
2.2	M ✓	(1)
2.3	K ✓	(1)
2.4	D ✓	(1)
2.5	A ✓	(1)
2.6	N ✓	(1)
2.7	H ✓	(1)
2.8	F ✓	(1)
2.9	I ✓	(1)
2.10	C ✓	(1)
		[10]

TOTAL SECTION A: 20

SECTION B

3.1
- 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
- Etc.   (Any 2) ✓✓   (2)

3.2
- More expensive than a desktop of the same specifications
- Can be easily damaged by being dropped as it is a portable device.
- Expensive to repair and upgrade
- Upgrades and repairs may take longer and be more difficult to do
- Etc.   (Any 2) ✓✓   (2)

3.3
- A dual core processor is one physical CPU chip with two separate cores. ✓ Each core handles data separately and in this way works as if there are two separate CPUs. ✓   (2)

3.4
- Size of the screen in inches. ✓
- He can measure it diagonally. ✓   (2)

3.5   • The Linux based system is open source and the Windows OS is proprietary. ✓   (1)

3.6   3.6.1   • Measured in ppm or Pages Per minute. ✓   (1)

       3.6.2   • Measured in dpi (dot per inch). The amount of ink droplets in a straight line of 2.54cm (1 inch). Smaller dots will mean more can be fit in one inch. More dots per inch equal a higher quality image. ✓   (1)

3.7   3.7.1   • The guarantee on the printer may be made invalid.
                • Quality of copies may be less than desirable.
                • Possibility of damage to the printing heads in some printers.
                • Most refilled cartridges may have a smaller page yield.
                (Any 2) ✓✓   (2)

       3.7.2   • Green computing – cartridges are being reused.
                • Cheaper than buying new cartridges.
                • You may struggle to find new cartridges for older printers – refilled cartridges can allow you to still use the printer.
                                                                    (Any 2) ✓✓   (2)

3.8   • The CPU doesn't handle the graphics, but rather sends all the data to the graphics card, which does all the processing for the graphics. This allows the CPU to be free to handle other processing. This results in higher speeds with applications such as games.✓   (1)

3.9   • Can read up to 8 different memory cards.
       • Do not need a cable to download images from camera or other storage devices.   (Any 1) ✓   (1)

3.10   3.10.1   Defragmentation consolidates parts of a file✓ that are stored in non-continuous areas of the disk. ✓ It does <u>not</u> free up disk space. ✓   (3)

       3.10.2   No. ✓ Data on CDs and DVDs are permanently written to the disc and cannot be changed or rearranged. This means that the data cannot become fragmented.✓   (2)

       3.10.3   • Delete cookies
                • Empty recycle bin
                • Delete temporary files
                • Run disk clean up
                • Uninstall programs you aren't using
                • Use compression utility to compress files you don't use very often.
                • Only backup file altered since previous backup.   (Any 3) ✓✓✓   (3)

3.11   3.11.1   • Bluetooth has a longer range than infrared. ✓
                  • Bluetooth does not have the limitation of infrared's line of sight. ✓   (2)

        3.11.2   • The ability to send and receive e-mails
                  • Using scaled down software
                  • Installation of applications or 3rd party software
                  • Programmability
                  • Etc.   (Any 2) ✓✓   (2)

        3.11.3   • Android
                  • Windows Phone / Windows Mobile
                  • Symbian
                  • Apple iOS   (Any 1) ✓   (1)

        3.11.4   • Cellular phone✓ and a PDA✓   (2)

3.12   • Any computer hardware users have scrapped or thrown away✓ that
          is non-biodegradable. ✓   (2)
                                                                         [34]

QUESTION 4

4.1   4.1.1   • A WLAN is a network set up without cables using wireless
                  technology✓   (1)

       4.1.2   • More mobility✓
                • No cable clutter✓
                • Devices can be moved and stay connected without moving
                  any cables✓   (Any 1) ✓   (1)

       4.1.3   • The adapter is built into the laptop. No need to buy and install
                  a WLAN adapter. ✓   (1)

4.2   • Sharing of expensive hardware
       • Sharing of data
       • Transferring of data and information between computers.
       • More control and security
       • Communication
       • Games – making use of LAN   (Any 2) ✓✓   (2)

4.3   4.3.1   • A program written to disrupt the normal working of your
                  computer (malicious program)✓. The virus reproduces and
                  spreads without any input from the user. ✓   (2)

       4.3.2   • Through the use of infected discs on your computer. ✓
                • Though the internet. ✓
                • Within the network. ✓
                • Through the user of illegally copied software. ✓   (Any 2) ✓✓   (2)

4.3.3   • Virus definitions are used to identify a virus✓ and an update is the process of downloading and installing the newest virus definitions. ✓   (2)

4.4   4.4.1   ***Data theft***   refers to the unauthorised copying or removal of data or information. ✓

Identity theft refers to the impersonation of an individual by stealing their personal details such as an ID number, etc. ✓   (2)

4.4.2   **Data theft:**
   • Complex passwords
   • Passwords changed regularly
   • Setting access rights
   • Encryption
   • Etc.   (Any 1) ✓
Identity theft:
   • Using security software
   • Not giving out personal details
   • Not responding to e-mails from unknown sources
   • Etc.   (Any 1) ✓   (2)

4.5   4.5.1   ***Plagiarism***   take or copy another person's work and pass it off as own. ✓
Copyright infringement   using material owned by someone else and passing it of as your own. ✓   (2)

4.5.2   • Copyright provides creators with rights to control the modes of reproduction and adaptation of their work
   • Creators have the right to payments for use of their materials under the involuntary licences imposed.   (Any 1) ✓   (1)

4.5.3   • Obtain permission from the copyright owner (for which he might have to pay)✓ and acknowledge the owner by using quotations and citing the reference, authors, date, etc. ✓
OR
   • Use material that is NOT copyrighted✓ such as pictures in the public domain✓.   (Any 1) ✓✓   (2)

4.6   4.6.1   **RSI** is an injury caused by repetitive motion✓ such as keyboard use. ✓   (2)

4.6.2   • Use palm pads or wrist supports
   • Use a curved/split keyboard or angled keys
   • Take frequent breaks
   • Stretch regularly
   • Get enough rest   (Any 2) ✓✓   (2)

[24]

QUESTION 5

5.1   5.1.1   Advantages:
- Available 24 hours a day, 7 days a week.
- No queues.
- Access to a wide range of facilities at home.
- Potentially cheaper.   (Any 2) ✓✓   (2)

        5.1.2
- Password and usernames
- SMS notification of activity on account
- Terminating banking sessions after a fixed time
- Use of on-screen keypads
- Use of one-time passwords per session delivered to user's cell phone
- Encryption of communication   (Any 2) ✓✓   (2)

5.2   5.2.1
- Criminals pretending to be someone else (such as a banking institution) ✓ and in so doing try and trick you into giving away personal information such as pin codes, etc.✓   (2)

        5.2.2
- Do not react to e-mails pertaining to be from your bank
- Do not send personal e-mails via e-mail to your bank
- Check the URL of the website before adding personal information or passwords
- Don't give away personal details or confidential information. ✓
- Use a form of anti-phishing software   (Any 2) ✓✓   (2)

5.3
- E-mail
- SMS
- Social networks
- Etc.   (Any 2) ✓✓   (2)

5.4   5.4.1
- Typed in capital letters
- Spelling errors
- No subject line
- Very large attachment   (Any 2) ✓✓   (2)

        5.4.2
- The recipients in the "to" field would no longer see✓ that e-mail had also been sent to the recipient specified in the "Bcc" field. ✓   (2)

5.5   5.5.1
- Attachment option✓   (1)

        5.5.2
- Urgent / high priority option✓   (1)

5.6   5.6.1   • 3G works with cellular signals✓, whereas with Wi-Fi you need
                  to be near a hotspot. ✓   (2)

       5.6.2   • Expensive equipment
                • Expensive per GB
                • Need extra equipment such as 3G dongles
                • Signal strength limits your speed of access   (Any 2) ✓✓   (2)

5.7   • A firewall stops any unauthorised access to your network or computer
         from outside✓ as well as preventing any programs on your computer
         from connecting to the Internet without permission✓   (2)

5.8   • Attachment could contain a virus or other malware
       • Firewall might have blacklisted the sender
       • Attachment might contain potentially dangerous files such as executable
         files   (Any 2) ✓✓   (2)

5.9   • Can be opened independently of the application it was created in.
       • Can't be edited.
       • Depending on the settings when creating the file, it could have a smaller
         size.   (Any 2) ✓✓   (2)

                                                                                   [26]

QUESTION 6

6.1   6.1.1   • Software piracy ✓   (1)

       6.1.2   • Can be downloaded from the Internet
                • Free software
                • Can be copied and distributed without license infringements
                • Source code can be downloaded and edited
                • Edited source code can be compiled and redistributed
                                                                       (Any 2) ✓✓   (2)

       6.1.3   • <u>Site licence</u> ✓can be installed on as many computers as the
                  company owns. ✓
                • <u>Multi-user license</u> ✓ the amount of computers it can be
                  installed on is specified in the license agreement. ✓   (4)

6.2   6.2.1   • An office suite is a selection of separate programs✓ that are
                  bundled and distributed in one package. ✓   (2)

       6.2.2   • Basic user interface is the same.
                • Much cheaper than buying the applications one by one.
                • Much easier and faster to install the package than separate
                  applications.
                • Data can be exchanged between applications. ✓ (Any 2) ✓✓   (2)

6.3   •   Computer crime is difficult to trace.
         •   No physical evidence necessarily available.
         •   Lack of legislation
         •   Lack of hardware
         •   Lack of training or knowledge
         •   Etc.   (Any 2) ✓✓   (2)

6.4   •   OCR software can be used on a scanned document✓ to convert the image to edible text. ✓   (2)

6.5   6.5.1   **Shareware**   Software is free, but only intended as a demonstration model of the full version. Should only have certain functions, or will only work for a short time. To continue using it you need to purchase the full program. ✓✓   (2)

        6.5.2   **Malware**   Name that includes all software intended to do your computers system harm✓ such as a virus or spyware. ✓   (2)

        6.5.3   **Adware**   Software that is free✓ but companies pay for advertisements that are shown on the program during use. ✓   (2)

                                                      [21]

QUESTION 7

7.1   7.1.1   •   All headings and sub headings✓ to be displayed in the contents page have been formatted using styles. ✓   (2)

        7.1.2   •   When a line or cell of text is full the text automatically continues or wraps onto the next line within the same cell. ✓   (1)

        7.1.3   •   To save paper and ink (if you make mistakes and have to reprint) ✓
                   •   Save time to have an electronic preview of how the document will look. ✓   (2)

        7.1.4   •   Bookmarks ✓
                   •   Hyperlinks ✓   (2)

        7.1.5   •   Save it with password
                   •   Place it in a location where only you have access
                   •   File encryption
                   •   PDF file can be used   (Any 1) ✓   (1)

7.2   7.2.1   **Spreadsheet:**
                   •   Easy to perform simple calculations
                   •   A number of built-in functions for calculations
                   •   Mathematical/statistical calculations available
                   •   Cell can accept any type of data
                   •   Easy to reproduce results graphically
                   •   Easier to enter data   (Any 2) ✓✓   (2)

7.2.2
- **Table**✓ All data is stored in one or many tables✓

  OR

- **Query**✓ Can manipulate data compare and extract data for information✓

  OR

- **Report**✓ Create reports ✓

  OR

- **Form**✓ Used to enter data into a table easily✓ (Any 2) ✓✓✓✓ (4)

7.3   7.3.1   **######**   The column is not wide enough to show the contents✓   (1)

      7.3.2   **#REF!**   The cell reference is no longer valid. ✓   (1)

      7.3.3   **#VALUE**   The cell used contains data that cannot be used in the formula. ✓   (1)

      7.3.4   **#NAME?**   The function name in the formula or the cell reference is not recognised by Excel. ✓   (1)

7.4   7.4.1
- Data type is number, and a 0 in front of a number has no meaning. ✓   (1)

      7.4.2
- Change data type to text. ✓

  OR

- Add a ' to the beginning of the number✓   (1)

      7.4.3
- Difficult to search accurately.
- Difficult to add information accurately.
- Cannot do effective data validation.   (Any 2) ✓✓   (2)

      7.4.4
- You may not want a user to have access to all fields

  OR

- More user-friendly interface can be created, etc.   (Any 1) ✓   (1)

      7.4.5
- **Field:** refers to the smallest unit of data. Each fact is stored as a field. ✓
- **Record:** A collection of fields that includes particulars of a specific entity. ✓.   (2)

[25]

TOTAL SECTION B: **130**

GRAND TOTAL: **150**