



Province of the
EASTERN CAPE
EDUCATION

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

SEPTEMBER 2010

**COMPUTER APPLICATIONS TECHNOLOGY – SECOND PAPER
MEMORANDUM**

MARKS: 150

TIME: 3 hours

This memorandum consists of 9 pages.

SECTION A**QUESTION 1**

1.1 C ✓

1.2 C ✓

1.3 B ✓

1.4 B ✓

1.5 A ✓

1.6 B ✓

1.7 D ✓

1.8 C ✓

1.9 B ✓

1.10 B ✓

[10]**QUESTION 2**

2.1 L ✓

2.2 R ✓

2.3 P ✓

2.4 I ✓

2.5 N ✓

2.6 J ✓

2.7 K ✓

2.8 Q ✓

2.9 A ✓

2.10 H ✓

[10]

QUESTION 3

| | | | |
|-------|---|---|----|
| 3.1.1 | A dual core processor is one CPU chip with two different cores. ✓ Each core handles incoming data separately and in this way improves efficiency. ✓ | 2 | 12 |
| 3.1.2 | It is built into the motherboard. Not separate expansion cards that need to be plugged in. ✓ | 1 | |
| 3.1.3 | Connecting the computer to a network. ✓ | 1 | |
| 3.1.4 | Any TWO of: ✓✓ <ul style="list-style-type: none"> • Uses less electricity/power • No lead in the LCD screen • Takes up less desk space • Less strain on eyes/No flicker • Highly adjustable • Less glare | 2 | |
| 3.1.5 | Can write on both sides of the DVD. ✓ | 1 | |
| 3.1.6 | 320 GB ✓ | 1 | |
| 3.1.7 | Optical mouse uses a LED ✓ and A mechanical mouse uses a ball ✓ | 2 | |
| 3.1.8 | Any ONE of: ✓ Scan Photocopy (Fax can also be accepted) | 1 | |
| 3.1.9 | Application software ✓ | 1 | |
| 3.2.1 | Upgrade means you: <ul style="list-style-type: none"> • Add new hardware/software OR replace hardware/software with better ones ✓ • Make your computer system faster, or get bigger storage or better functionality ✓ | 2 | 6 |
| 3.2.2 | RAM: ✓ More RAM can manage more programs and data while working with them and there will be no need to use slower virtual memory. ✓ HARD DRIVE: ✓ More storage space will enable you to store more sophisticated new programs as well as more data. ✓ | 4 | |
| 3.3.1 | Any TWO of: ✓✓ <ul style="list-style-type: none"> • Laptops can easily be stolen. • Laptops are more expensive. • Can only be used for 2 – 8 hours without needing power. • Laptops are more expensive to repair. • Laptops are difficult to upgrade. • Laptops are more delicate and get damaged easier. • Takes longer to repair laptops as they often need to be sent to the manufacturer for repairs. | 2 | |
| 3.3.2 | Using a flash drive (USB-Hard drive or CDRW) to transfer files or e-mail the documents back and forth. ✓ | 1 | 3 |

| | | | |
|-------|--|---|-------------|
| 3.4.1 | Any TWO of: ✓✓ Upgrade and do not replace if not necessary. Buy LCD screen instead of CRT – less lead, uses less electricity Buy hardware with Energy Star logo. Get rid of unwanted hardware components in responsible way. | 2 | |
| 3.4.2 | Any TWO of: ✓✓ <ul style="list-style-type: none"> • Print in draft mode to save ink if you do not need good quality • Recycle toner/cartridges • Use recycled paper • Print on both sides of the paper • Only print when really necessary – use electronic documents • Use Print Preview to make sure layout is correct • Proofread work for typing errors before printing | 2 | 4 |
| 3.5.1 | The resolution of the photo's ✓ Higher megapixels will result in better quality photos ✓ | 2 | |
| 3.5.2 | USB ✓ | 1 | |
| 3.5.3 | Because it has a card reader which means the memory card of the camera can just be inserted into the card reader. ✓ | 1 | 4 |
| 3.6.1 | Any TWO of: ✓✓ <ul style="list-style-type: none"> • Use ergonomically designed hardware and office equipment • Make sure enough light and fresh air in office • Take regular breaks • Use LCD screen to prevent eye strain. | 2 | |
| 3.6.2 | Ergonomic Keyboard ✓ | 1 | 3 |
| | | | [32] |

QUESTION 4

| 4.1 | | ADVANTAGE | DISADVANTAGE | |
|-----|---|---|--|---|
| | DIAL-UP | Any ONE of: <ul style="list-style-type: none"> • Cheaper | Any ONE of: <ul style="list-style-type: none"> • Connection speed slow • Unable to take telephone calls while on Internet | |
| | PERMANENT | Any ONE of: <ul style="list-style-type: none"> • Permanent connection to Internet • Can take phone calls while surfing | Any ONE of: <ul style="list-style-type: none"> • Expensive • Check availability in area • Capped bandwidth (limit on down- and uploading) – depending on contract. | 4 |
| 4.2 | Broadband: Any high speed, ✓ high bandwidth permanent connection to the Internet. ✓ | | | 2 |

| | | | |
|-------|---|---|---|
| 4.3.1 | ISP is a company that has a permanent, fast connection to the Internet ✓ And hires his bandwidth out to subscribers at a monthly subscription. ✓ | 2 | 3 |
| 4.3.2 | The data that can be downloaded is unlimited. ✓ | 1 | |
| 4.4.1 | VoIP is a way in which voice can be transmitted in a network in the same way as data. ✓ It is a technology that allows telephone calls to be made to and from any computer with broadband connection to the Internet ✓ | 2 | 4 |
| 4.4.2 | Skype ✓, MSN Messenger, Windows Messenger | 1 | |
| 4.4.3 | You can make use of Video conferencing ✓ | 1 | |
| 4.5 | Any TWO of: ✓✓ <ul style="list-style-type: none"> • Must be user friendly • Must be updated regularly • No dead links • Access speed, Attractive Graphics or Multimedia | | 2 |
| 4.6.1 | A blog is a shared on-line journal where people can post diary entries about their personal experiences and hobbies ✓ | 1 | 4 |
| 4.6.2 | Podcasting allows users to publish audio or video files to Internet. ✓ They could make short video clips i.e. on pet care, responsibilities of pet owners, animals they have for adoption, etc. ✓✓ | 3 | |
| | | | |
| 4.7.1 | Spyware is software ✓ that tries to monitor and track the way you use your computer. ✓ | 2 | 7 |
| 4.7.2 | Gathering information as market research for their own products. ✓ OR They can also construct large databases of information that they gathered and sell it for large amounts of money. ✓ | 1 | |
| 4.7.3 | A firewall is software ✓ that stops any unauthorised access to or from your computer or network. ✓ | 2 | |
| 4.7.4 | To update the list of spyware signatures so that spyware programs can be detected, ✓ A list of websites known to spread spyware can be kept current to prevent infections from new versions of spyware. ✓ | 2 | |

| | | | |
|-------|---|---|-------------|
| 4.8 | Any TWO of: ✓✓ <ul style="list-style-type: none"> • Making illegal copies of CD's or DVD's on the SPCA computers. • Using SPCA's computers to do private work. • Sending and receiving private e-mails at work • Playing computer games • Installing software not licensed to the SPCA • Installing software of the SPCA on private computers • Vandalism and theft of equipment • Size of file downloads and e-mail attachments. • Unproductivity by spending too much time on Facebook or in chatrooms during working hours. • Viewing inappropriate websites. • Misuse of Internet facilities. | | 2 |
| 4.9.1 | People are fooled into giving away personal information like bank account numbers, pins and passwords ✓ by people impersonating banks OR people telling them that they have won a prize. ✓ | 2 | 4 |
| 4.9.2 | Any TWO of: ✓✓ <ul style="list-style-type: none"> • Giving customers: an access code, PIN numbers and password in order to access their account. • SMS notifications of online transactions • Sending regular letters and notifications to customers, warning them about being careful with personal information and about latest traps. • Using a digital keyboard and keypad displayed on the desktop to enter codes/numbers. | 2 | |
| | | | [32] |

QUESTION 5

| | | | |
|-------|---|---|---|
| 5.1 | A graphical user interface ✓ is an interface based on graphics (icons) instead of text. ✓ | | 2 |
| 5.2.1 | Software programs that are sold as one integrated unit. ✓ All programs are separate programs but have similar user interfaces. ✓ | 2 | 4 |
| 5.2.2 | Any TWO of: ✓✓ <ul style="list-style-type: none"> • Cheaper than buying them separately • Basic user interface is the same • Data can be imported and exported between programs • All programs installed at once, etc. | 2 | |
| 5.3 | The document was created in Office 2007. He must use the "Save As" ✓ option to save the file as an Office 2003 document ✓ | | 2 |
| 5.4 | Minimum system requirements is the absolute minimum hardware needed for the program to run. ✓ Recommended system requirements is the hardware needed to run the program as smoothly as possible. ✓ | | 2 |
| 5.5 | Not many courses available ✓ Few people who can give on-site support. ✓ | | 2 |

| | | | |
|-------|---|---|-------------|
| 5.6.1 | Any TWO of: ✓✓ <ul style="list-style-type: none"> • Sharing of expensive hardware e.g. printer • Sharing of data • Transferring of information and data • Increased control and security • Communication | 2 | 9 |
| 5.6.2 | Peer-to-peer LAN. ✓ Because there is no server. All computers share the hardware and data. ✓ | 2 | |
| 5.6.3 | A server is a computer which shares network resources. ✓ It is usually a powerful computer with a large hard drive and is not used as a user PC. ✓ It can have special network software installed on it like Windows server 2003 | 2 | |
| 5.6.4 | Any ONE of: ✓ <ul style="list-style-type: none"> • Cheaper to add equipment as no cables have to be installed. • No cables lying around. • Easy to add extra equipment to the network | 1 | |
| 5.6.5 | Username and passwords can be set up to prohibit access. <ul style="list-style-type: none"> • A firewall can be installed to restrict access from unwanted sources • The server/network manager can program the server to give restricted access to users in the company | 2 | |
| 5.7 | Multi-user licence: The amount of computers on which the program can be installed is fixed. ✓ Site license: Program can be installed on any amount of computers owned by the business ✓ | | 2 |
| | | | [23] |

QUESTION 6

| | | | |
|-------|---|---|---|
| 6.1.1 | The computer cannot boot from the hard drive. The boot sector is damaged. ✓ or It is trying to boot from a CD or Flash drive that was left in the computer during the power failure. | | 2 |
| 6.2.1 | Ctrl + Alt + Del ✓ | 1 | 3 |
| 6.2.2 | Right click on the program, ✓ click on: end program ✓ OR Click on the program and then on the end task button. | 2 | |
| 6.3.1 | The computer is started up with the essential programs to run. ✓ It does not load the drivers for all the hardware. ✓ | 2 | 3 |
| 6.3.2 | Computer is operational and you can now uninstall the software/hardware/drivers that gave the problem. ✓ | 1 | |
| 6.4.1 | Parts of a file that are saved, are split up into non-adjacent areas of the disk. ✓ This slows down the retrieval of the files. ✓ | 2 | 5 |
| 6.4.2 | Use the defrag utility program of MS Windows to defrag the hard drive ✓ | 1 | |
| | | | |

| | | | |
|-------|---|---|-------------|
| 6.4.3 | Any TWO of: ✓✓ <ul style="list-style-type: none"> Do not have too many programs running at start up. Run a Disk Cleanup Delete old obsolete files Uninstalling unwanted software | 2 | |
| 6.5.1 | Printer spooling is a technique whereby documents are placed in a buffer/queue, waiting to be printed. ✓ | 1 | |
| 6.5.2 | Print jobs can be cancelled – when mistakes are made. Print jobs can be paused The buffer provides a waiting station where data can rest while slower devices catch up. | 2 | 3 |
| | | | [16] |

QUESTION 7

| | | | |
|----------|--|---|---|
| 7.1.1 | She used the outside border icon on the formatting/tables and border window. ✓ Solution: Choose the width of the line on the tables and borders toolbar and draw line with pencil ✓ OR Go to the borders window, remove only the outline borders, and replace them with thicker borders in the preview window. | 2 | |
| 7.1.2 | Word was set on overtype mode. ✓ Solution: Set the program on insert mode/press the insert key or click on the overtype button in the status bar ✓ | 2 | 4 |
| | | | |
| 7.2.1 | All headings and subheadings to be displayed in the table of contents ✓ must have been formatted using styles. ✓ | 2 | |
| 7.2.2 | Allocate a style to the heading and then right click on the table of contents and select <i>Update entire table</i> . ✓ | 1 | 3 |
| 7.3.1(a) | Concatenate ✓ | 1 | |
| 7.3.1(b) | Nested If ✓ OR Vlookup | 1 | |
| 7.3.2 | =Countif ✓ (F3:F7,">1000") ✓ | 2 | 4 |
| 7.4 | Absolute cell reference ✓ Used when the value of a cell must stay the same when copying a formula. ✓ | | 2 |
| 7.5 | The cell which contains the formula is also referenced in the formula ✓ and the formula is therefore continuous. ✓ Change the cell address where needed, in the formula. | | 2 |
| 7.6 | Any TWO of: <ul style="list-style-type: none"> Store data in more structured way Capturing of data more accurate because of certain features of Access, i.e. input masks, etc. Data can be manipulated more effectively in Access. Process data into information quickly by means of queries and reports. | | 2 |
| 7.7.1 | It is a unique field ✓ Pet No ✓ (one owner may have 2 pets) | 2 | |
| 7.7.2(a) | Yes/No ✓ | 1 | |
| 7.7.2(b) | Text ✓ | 1 | 4 |

| | | | |
|-----|--|--|------|
| 7.8 | <p>The name of the dog will not show in query as requested – no tick in 'show' block. ✓</p> <p>Criteria "dog" should be in same line as <>. No dog that has not been vaccinated will show in the query. ✓</p> <p>25 is not an appropriate criteria for a telephone number</p> | | 2 |
| 7.9 | <p>Any TWO of: ✓✓ Plus any suitable example of each ✓✓</p> <ul style="list-style-type: none"> • Default values: these are values that are automatically entered in a field when a new record is created, e.g. an opening account balance. • Restricting the field size so that the user cannot type more than the specified number of characters, e.g. 10 characters in cellphone field. • Making a field mandatory: the user cannot leave it out e.g. a surname in a database table. • Validation rules: to restrict the range of values that may be used, e.g. only 8 – 12 for grades in high school. • Input masks to control the type and format of values a user enters e.g. must have 13 digits in an identity number. • Drop lists/lookup fields so that the user can select from a list of options without having to retype the value e.g. country of birth. • Using primary keys so that no duplicate values can be entered for example in a field storing identity numbers. | | 4 |
| | | | [27] |

TOTAL: 150