



Province of the
EASTERN CAPE
EDUCATION

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

SEPTEMBER 2012

**COMPUTER APPLICATIONS TECHNOLOGY P2
MEMORANDUM**

MARKS: 150

This memorandum consists of 9 pages.

SECTION A**QUESTION 1: MATCHING COLUMNS**

- 1.1 E ✓
- 1.2 G ✓
- 1.3 K ✓
- 1.4 C ✓
- 1.5 J ✓
- 1.6 A ✓
- 1.7 B ✓
- 1.8 M ✓
- 1.9 L ✓
- 1.10 D ✓

(10 x 1) [10]

QUESTION 2: MULTIPLE-CHOICE QUESTIONS

- 2.1 D ✓
- 2.2 C ✓
- 2.3 C ✓
- 2.4 C ✓
- 2.5 D ✓
- 2.6 D ✓
- 2.7 A ✓
- 2.8 A ✓
- 2.9 B ✓
- 2.10 A ✓

(10 x 1) [10]

TOTAL SECTION A: 20

SECTION B**QUESTION 3**

- 3.1 3.1.1 Desktop ✓
2.7 GHz ✓ (2)
- 3.1.2 2GB ✓ (1)
- 3.1.3 Ubuntu OS ✓ (1)
- 3.1.4
- Can be downloaded from the Internet. ✓
 - Source code can be downloaded and edited. ✓
 - No licensing costs. ✓
 - Programs can be redistributed. ✓ (Any 1) (1)
- 3.1.5
- No after sales support. ✓
 - Very few textbooks/manuals available. ✓
 - Very little training available. ✓ (Any 2) (2)
- 3.1.6 Laptop ✓ (1)
- 3.2 3.2.1
- Uses less space. ✓
 - Can be used in the event of power failure. ✓
 - Portable/mobile ✓
 - Can be used for Internet connectivity at hotspots. ✓ (Any 2) (2)
- 3.2.2
- Might easily be stolen. ✓
 - Can easily be damaged by being dropped as it is a portable device. ✓
 - More expensive to buy. ✓
 - Expensive to repair and upgrade, etc. ✓ (Any 2) (2)
- 3.2.3 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)
- 3.2.4 It is a device that can read up to 8 different memory cards. ✓ (1)
- 3.2.5 The size of the screen in inches, ✓ measure it diagonally from top left to right bottom. ✓ (2)
- 3.3 Bluetooth has a longer range than infrared. ✓
Bluetooth does not have the limitation of infrared with regards to line of sight. ✓ (2)
- 3.4 3.4.1 Yes, ✓ backward compatibility because all DVD writers can read and write CD's or DVD's, but not the other way round. ✓ (2)

- 3.4.2 Utilising two recordable dye layers, each capable of storing nearly the 4.7 GB of a single layer disc (doubling the total disc capacity). √√ (2)
- 3.4.3 HD Video requires lots of space which a Blu-ray has. √√ (2)
- 3.5 3.5.1 Laser printer √ (1)
- 3.5.2 Inkjet printer √ (1)
- 3.6 The seller will send a technician to the location of the desktop √ to solve the problem or fix the desktop. √ (2)
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QUESTION 4

- 4.1 4.1.1
- Network Interface Card √
 - Modem or cellular phone attached via Bluetooth or USB cable √
 - ISP √
 - 3G/4G/HSDPA modem such as USB modem √ (Any 2) (2)
- 4.1.2 The line is connected to the Internet permanently. √ (1)
- 4.1.3
- Is a digital line. √
 - Much faster. √
 - A telephone call can be made while on the Internet. √
 - Fixed costs (per megabyte) √
(Do not accept permanently connected to the Internet/dedicated line, as it is mentioned in the question.) (Any 2) (2)
- 4.1.4 Any high speed, √ high bandwidth √ Internet connection (2)
- 4.2 4.2.1 A cap is a limit on the size or amount of data you can download. √√ (2)
- 4.2.2 The cost associated with dial-up connections is related to the telephone connection cost/duration of the Internet session, √ not how much you download. √ (2)
- 4.3 4.3.1 Voice is converted into data before being sent as packets across the telephone lines. √ (1)
- 4.3.2 Much cheaper than a normal phone call. √ (1)
- 4.4 4.4.1 Phishing refers to a situation where a user is lured into giving away personal information such as pin numbers, passwords/financial/ personal information √ by using authentic-looking e-mails. √ (2)

- 4.4.2
- Password/PIN numbers controls ✓
 - SMS notification of activity on account. ✓
 - Terminating banking sessions after a period of time. ✓
 - Use of on-screen numeric keypad for PIN numbers. ✓
 - Use of secure encryption/protocols such as HTTPS. ✓
 - Use of one-time passwords per session delivered to a user's cellular phone. ✓
- (Any 2) (2)
- 4.5 4.5.1 Spyware is software that installs itself without the user's consent ✓ and secretly monitors and reports on the user's activities on the computer. ✓ (2)
- 4.5.2 A firewall is software used to control access to and from a network. ✓✓ (2)
- 4.5.3
- Data uses space on a server and not your computer. ✓
 - Data can be accessed via the Internet from any computer around the world. ✓
- (2)
- 4.5.4 A program that was created deliberately in order to copy itself without the user's intention or knowledge ✓ and perform actions that is unwanted and unexpected. ✓ (2)
- 4.6 4.6.1 A website that can be edited using a normal web browser. No web authoring software needed. ✓ (1)
- 4.6.2 Pre-recorded sound and/or video that can be downloaded and listened to. ✓ (1)
- 4.6.3 Website that has news, a search engine, weather etc. ✓ (1)
- 4.7
- Can be downloaded and then listened to or viewed without having to go on-line. ✓
 - Can be run on any computer system. ✓
 - Will run without having the software in which it was created. ✓
 - Can be viewed on a small portable device. ✓
- (Any 2) (2)

QUESTION 5

- 5.1 5.1.1
- Sharing of expensive hardware ✓
 - Sharing of data ✓
 - Transferring of data and information between computers. ✓
 - Increased control and security ✓
 - Communication ✓ (Any 3) (3)
- 5.1.2
- Easy to add extra equipment/computers to the network. ✓
 - No “messy” wires/cables. ✓
 - They are more flexible. ✓
 - Connections can be made in places where it would be difficult to install a cable. ✓ (Any 2) (2)
- 5.1.3
- Person logging in, needs to be validated (using usernames and passwords). ✓
 - Access to the network is regulated. ✓
 - Access to the network resources and services is controlled. ✓ (Any 2) (2)
- 5.2 5.2.1
- Resolution ✓
 - Optical/Digital Zoom ✓
 - Interface/types of connection ✓
 - Type of memory used to store photos etc. ✓ (Any 2) (2)
- 5.2.2
- Bluetooth ✓
 - Memory Card ✓ (2)
- 5.2.3
- Cellular phone with a built-in camera ✓
 - Smart phone ✓
 - PDA ✓
 - Webcam ✓ (Any 1) (1)
- 5.2.4
- bmp ✓
 - bcx ✓
 - pcx ✓
 - pcix ✓
 - gif ✓
 - tiff ✓
 - jpg ✓
 - jpeg ✓ (Any 2) (2)
- 5.3 5.3.1
- A live conversation between two or more users using video and audio. Like sitting next to each other in the same room. ✓✓ (2)
- 5.3.2
- Video camera ✓
 - Microphone ✓
 - Speakers ✓ (Any 2) (2)

- 5.4 5.4.1 (Unshielded Twisted Pair) A popular type of cable used to connect computers in a network. ✓ (1)
- 5.4.2 (Internet Protocol Address) A unique identifying address given to each computer on a network. ✓ (1)
- 5.4.3 (Uninterruptible Power Supply) Provides a computer or network with power from a battery when the power is out. ✓ (1)
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QUESTION 6

- 6.1 6.1.1 An office suite is a collection of programs ✓ (software applications), such as word, spreadsheets, database, etc. that integrate with each other. ✓ (2)
- 6.1.2 Software Piracy ✓ (1)
- 6.1.3 If it is open source. ✓ (1)
- 6.1.4 Single user license can only be installed on one computer ✓ and a site license on as many computers as the company owns on its property. ✓ (2)
- 6.1.5 Both are free. Freeware is the whole program, ✓ whereas shareware is only a part of the program meant as a demo. In a game only the first level or only certain functions are available in applications. ✓ (2)
- 6.2 6.2.1 Because parts of a file are split up into non-continuous areas of the disk ✓ the parts must first be collected and combined before a file can be used. ✓ This takes time and thus slows down the computer. (2)
- 6.2.2 Data on CD's are permanently burned in. ✓ (1)
- 6.2.3 Deleted files go to the recycle bin ✓ and they can be restored or permanently deleted. ✓ (2)
- 6.3
- To stop anybody editing the document. ✓
 - Can be opened independent of the program it was created in. ✓
 - Usually takes up less space etc. ✓ (Any 2) (2)
- 6.4 6.4.1 A wizard is an interactive dialogue that helps you to complete a task by asking questions ✓ and using your answers to perform the task. ✓ (2)
- 6.4.2 Communicates instructions from the OS to the hardware device and the other way round. ✓ (1)
- 6.4.3 Internet. ✓
As part of the operating system. ✓ (2)
- 6.5 OCR software can be used on a scanned document ✓ to convert the image to editable text. ✓ (2)

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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 Hyperlinks are shortcuts to specific documents or WebPages. ✓
Hyperlinks can also be pointed towards bookmarks, which are specific places within your document. ✓ (2)
- 7.1.3 Allows you to send personalised letters to all recipients. ✓ (1)
- 7.1.4
- Table in a word processing document ✓
 - Table in a database ✓
 - Query in a database ✓
 - Spreadsheet ✓ (Any 1) (1)
- 7.1.5 A dropdown menu where you can choose an option by clicking on the word. ✓ (1)
- 7.2 7.2.1
- Designed specifically for handling records ✓
 - Better querying/reporting facilities ✓
 - More extensive data validation tools and options ✓
 - Easier to link related data in tables ✓
 - Can design better user interfaces using forms, etc. ✓ (Any 2) (2)
- 7.2.2 No, ✓ he can use the import function. ✓ (2)
- 7.2.3 Text ✓ (1)
- 7.2.4 Yes/No (Boolean) ✓ (1)
- 7.2.5 Yes, a primary key is a field whose value is unique for each record. ✓
The surname field will potentially have duplicate values. ✓ (2)
- 7.2.6
- Form can be designed to mirror a hardcopy form to facilitate data capturing. ✓
 - Form presents only one record at a time. ✓
 - Easier to restrict access to some fields. ✓
 - Can add meaningful labels and instructions in terms of the format of data e.g. dates. ✓ (Any 2) (2)
- 7.2.7
- Input mask ✓ e.g. to force the user to enter 10 digits for the cellular phone number. ✓
 - Validation rule ✓ e.g. to check that the user only enters a value of M or F for the gender. ✓
 - Required fields ✓ e.g. to prevent the user leaving the surname field blank. ✓
 - Field size specifications ✓ e.g. not allowing the user to enter more than 10 digits for the cellular phone number. ✓
 - Drop down lists ✓ e.g. so that can enter the number of books outstanding from a list of values. ✓
 - Primary keys ✓ e.g. to ensure that no duplicate value is entered for the Member Number field, etc. ✓ (Any 2) (4)

- 7.3 7.3.1 Merge cells. ✓ (2)
- 7.3.2 Text wrapping. ✓ (2)
- 7.3.3 D8: Reference was made to cells where data type cannot be used in calculation. ✓ Type the numbers and then use format cells to change it to currency or use upper case R sign. ✓ (2)
- 7.3.4 The width of column D is too narrow. ✓ (1)

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TOTAL: 150