

EXAMINATION
JUNE 2016



COMPUTER APPLICATIONS TECHNOLOGY

GRADE 11

PAPER 1 - MEMO

Time: 2 ½ Hours

125 marks

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SECTION A

QUESTION 1

- 1.1. A. It is electronic data and works very fast. ✓
- 1.2. B. Pharming. ✓
- 1.3. D. Install a larger hard drive, a good video card and much more RAM. ✓
- 1.4. B. Webcam. ✓
- 1.5. C. Licensing. ✓
- 1.6. D. Filter. ✓
- 1.7. D. Mozilla Firefox. ✓
- 1.8. A. Autofill. ✓
- 1.9. A. 4 800 dpi. ✓
- 1.10. B Accelerometers in smartphones. ✓

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QUESTION 2

- 2.1. F ✓
- 2.2. O ✓
- 2.3. I ✓
- 2.4. A ✓
- 2.5. M ✓
- 2.6. C ✓
- 2.7. H ✓
- 2.8. K ✓
- 2.9. D ✓
- 2.10. G ✓

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QUESTION 3 SYSTEM TECHNOLOGIES

- 3.1.1. 2.3 GHz ✓ (1)
- 3.1.2. Inches ✓ (1)
- 3.1.3. The use of unique physical characteristics of human beings, such as their fingerprints, to identify the person. ✓

The flash disk would have a fingerprint scanner, so that only the owner of the flash disk would be able to get access to files on the flash disk by scanning his or her fingerprint. ✓ (2)
- 3.1.4. The fact that it has a touchpad ✓

(Do not accept answers relating to lower specifications such as Celeron and the size of the hard drive as these could be applicable to a desktop computer as well.) (1)
- 3.2.1. Cloud storage refers to storing data ✓ (on servers) on the Internet ✓ (2)
- 3.2.2. Any TWO of: ✓✓

You can access your data from any location/device that has Internet access.
Saves storage space on your local machine or device as the data is stored online.
It is easier to share data.
Files can be synchronised to other computers and devices so that they all have the same 'versions' of the files.
Backup and storage are managed by service provider.
Data remains accessible if your computer is stolen, etc. (2)
- 3.2.3. Any THREE of: ✓✓✓

You need to have Internet access to access your files.
File access can be slow if you have a slow Internet connection.
There are usually limits in terms of the (free) space provided.
Costs involved/implication in terms of cap while uploading/downloading.
You have no control over backup and security.
If company goes bankrupt you may lose all your data. (3)

- 3.3.1. Program / software ✓ that allows computer (actually the O/S) to communicate with hardware or devices ✓ (2)
- 3.3.2. Allows a device to be attached to a computer and have the operating system identify and configure the device (install drivers etc.) ✓ automatically ✓ (2)
- 3.4.1. Defragmentation software tries to put pieces (fragments) of files back together in single pieces, i.e. one 'piece/fragment' per file. ✓ [*Mark the concept, not the wording*] (1)
- 3.4.2. Main benefit = speed (faster reading / writing of files from / to disk) ✓ (1)
- 3.5. To obtain the latest 'fixes' for bugs or problems in the current version of the software ✓
To obtain new / changed features of the software ✓ (2)
- 3.6. Any TWO of: ✓✓
File name
File type (extension)
Date created / modified
File size
Author (2)

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SECTION B

QUESTION 4 INTERNET AND NETWORK TECHNOLOGIES

- 4.1.1. Any THREE measures that banks take to ensure on-line banking transactions: ✓✓✓
Use of passwords and PIN's (do not accept account numbers)
SMS notification of online banking activity
Automatic time-out of a banking session after a period of inactivity.
Use of a 'sure-phrase' (e.g. a nickname) to identify client once logged on
Use of 'per-session' passwords sent via SMS / e-mail; etc.
A secure site is indicated by the URL beginning with HTTPS and a small closed lock will be visible on the task bar.
Prominent warnings of current scams, and tips for clients (places not to use Internet banking) (3)
- 4.1.2. Any TWO advantages of using Internet banking: ✓✓
24/7/365 availability
No need to stand in queues
Lower costs
Can be accessed from anywhere in the world where you have access to Internet. (2)
- 4.2.1. The virus definitions ✓ need to be updated regularly in order to cope with newer viruses and threats. ✓ (2)
- 4.2.2.1. Spyware is software that installs itself without your knowledge and monitors activities on your computer (and often reports these to a third party). ✓ (1)
- 4.2.2.2. Phishing refers to attempts to con the user into giving out personal, confidential details such as PIN numbers and passwords, etc. via an e-mail message ✓ (1)
- 4.2.2.3. Spam is unsolicited e-mail or electronic junk-mail. ✓ (1)
- 4.2.3. No, ✓ viruses need not only come from the Internet ✓ but could be introduced via portable media such as on flash drives. ✓ (3)

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QUESTION 5 INFORMATION MANAGEMENT

- 5.1. Any two reasonable answers: ✓✓
Name and surname
Contact details
Emergency contact details for friends/family
Address
Medical Aid details
Allergens
Ailments (2)
- 5.2. They will have to categorise the alerts according to location and type of emergency. (2)
- 5.3.1. Any four reasonable answers: ✓✓✓✓
Location of emergency
Type of emergency
Male or female callers

Response time
Event details
Time of day (4)

- 5.3.2. They could use Microsoft Access ✓ since it allows you to add details *categorised* into different tables. It can build *relationships* and run *queries* in order to compile the statistics needed. The statistics can then be organised into a *report*. ✓ (must have full explanation for a mark) (2)

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QUESTION 6

- 6.1. GPS can be also used in the following scenarios: (any two reasonable benefits) ✓✓
Tracing your running or cycling distance, elevation and positions.
Providing directions to places, distance from places or locations for travellers.
Sharing your business location with the public in ads. (2)
- 6.2.1. Narrator ✓ to read aloud any text on the screen ✓ (2)
- 6.2.2. Speech recognition ✓ to speak into a microphone to control the computer, open programs and dictate text. ✓ (2)
- 6.3. Any 3: ✓✓✓
Do not sit behind your computer for hours on end. Move around.
Learn keyboard shortcuts so that you do not have to move between mouse and keyboard frequently.
Do appropriate exercises to relieve tension in affected joints.
Do not use headphones to drown out surrounding sound.
Change the monitor settings to that it is best for your eyes. (3)
- 6.4. In order to protect the personal information of their clients. ✓
In order to protect their network from viruses and other malware that could compromise the effectiveness of the organisation. ✓ (2)

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QUESTION 7 SOLUTION DEVELOPMENT

- 7.1. =COUNTIF(B3:B19,"Groenkloof") ✓ (3)
- 7.2. =SUMIF(B3:B19,"Waterkloof",D3:D19) ✓ (4)
- 7.3. =IF(COUNTIF(C3:C19,"Mr R Bloem")>5,"Bonus","No Bonus") ✓ (3)

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SECTION C INTEGRATED SCENARIO

QUESTION 8

- 8.1.1. Storage is a permanent record of data and programs, thus if he saves a text file on his tablet it would go into storage. ✓
RAM is where any running program and its data is temporarily stored, so it would hold the data and instructions of the text file that he is busy working on, while he it is open on his tablet. ✓ (2)
- 8.1.2. The central processing unit (CPU) of a computer is a piece of hardware that performs the basic arithmetical, logical, and input/output operations of a computer system. ✓✓ (2)
- 8.1.3. GHz refers to the speed of the CPU ✓ and Quad Core refers to a chip with four independent units called cores that read and execute central processing unit (CPU) instructions. ✓ Both will determine how fast the tablet's processing will be and thus how fast Mr Alec will be able to work on it. ✓ (3)
- 8.1.4. It refers to the version of the Android operating system. ✓ (1)
- 8.1.5. Manages the hardware on the tablet. ✓ Example: It gives the tablet instructions to load a program by sending the instructions from storage to the RAM and CPU. ✓
Maintaining security. ✓ Example: android allows us to create different user profiles and to lock access to those profiles by the use of passwords, pins or patterns. ✓
Providing the user with an interface. ✓ Example: It allows us to interact with the tablet by tapping on icons and commands. ✓ (6)
- 8.1.6. The Samsung Galaxy Tab 3 Lite has the poorest screen quality, ✓ because it has the lowest resolution. ✓ (2)
- 8.1.7. Pixels ✓ (1)
- 8.1.8. A touch screen is a combination of an LCD ✓ and a thin 'touch sensing' film ✓ that imitates a mouse by sensing the coordinates of your finger or stylus when you press down. ✓ (3)
- 8.1.9. Because it gives more details about the Wi-Fi capabilities, which is important to know if you want a fast Wi-Fi connection. ✓
802.11 shows that the Mecer tablet has a wireless NIC. The b/g/n refers to the different standards of the wireless NIC and amongst other things indicate the speed the wireless network is capable of. ✓

All 2 x 2 = (4) (2)

- 8.1.10. Mecer Xpress Smartlife. ✓
Any 3 comparisons: ✓✓✓

(Afrikaans leerders nie die Tabel gehad nie so merk op disresie)

It has a better processor than the Huawei.

It has higher resolution than the Samsung.

It has a more updated version of Android than the Huawei.

It has a better Front camera than both the Samsung and the Huawei.

It has a better rear camera than the Samsung
It has both Wi-Fi and 3G connectivity whereas the others only have Wi-Fi.

Justification: Thus, the Mecer has has the most 'best' qualities compared to the Samsung and Huawei ✓ and it comes at the cheapest price of all 3. ✓ (6)

8.1.11. Any two reasonable answer: ✓✓ (Vraag nie in Afrikaans vraestel nie)

~~Less paper usage~~
~~Less power usage~~ (2)

8.2. He can connect his tablet and wireless printer to a Wi-Fi access point. ✓
Connect the tablet to the printer directly via Wi-Fi direct mode. ✓
He can use NFC to connect to the printer. ✓
He can use an app such as PrinterShare to connect via Wi-Fi or Bluetooth. ✓ (4)

8.3. Closed questions can be answered directly by facts. ✓ Open ended questions require examination, can have more than one answer ✓ and can include judgements or recommendations. ✓ (3)

8.4. Any three netiquette rules pertaining to email. ✓✓✓
Use subject lines appropriately
Be brief and to the point
Be courteous
Do not type in capital letters
Use formal, appropriate language
Check your spelling and grammar (3)

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Total: 125