



**education**

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Department:  
Education  
**REPUBLIC OF SOUTH AFRICA**

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 10**

**COMPUTER APPLICATIONS TECHNOLOGY P2 (Theory)**

**EXEMPLAR PAPER**

**MARKS: 100**

**TIME: 2 hours**

**This question paper consists of 10 pages.**

## **INSTRUCTIONS AND INFORMATION**

1. This question paper consists of SECTION A and SECTION B.
2. Answer ALL the questions.
3. Start each question on a NEW page.
4. Number the answers correctly according to the numbering system used in this question paper.
5. Note that the questions in SECTION B are based on a scenario sketched at the beginning of SECTION B.

**SECTION A****QUESTION 1**

- 1.1 Choose an item from COLUMN B that best matches an item in COLUMN A. Write only the letter (A - N) next to the question number (1.1.1 - 1.1.10) in the answer book.

COLUMN A		COLUMN B	
1.1.1	A file extension for a graphic file	A	AVI
1.1.2	An example of a volatile memory	B	DVD
1.1.3	The primary method or protocol used to transfer web pages on the world wide web	C	GB
		D	GHz
1.1.4	The unit of capacity of storage associated with a floppy disk	E	GIF
1.1.5	The memory that retains its contents, even if the power is off	F	HTTP
		G	ISP
1.1.6	The specification associated with a laser printer	H	MB
1.1.7	An optical storage media	I	MP3
1.1.8	A file extension associated with digital music	J	OCR
1.1.9	The unit of capacity of storage associated with a hard disk	K	PPM
		L	RAM
1.1.10	A specification typically associated with a processor	M	ROM
		N	URL

(10 x 1) (10)

- 1.2 Various possible options are provided as answers to the following questions. Choose the correct answer and write only the letter (A - D) next to the question number (1.2.1 - 1.2.5) in the answer book, for example 1.2.6 B.
- 1.2.1 Arrange the following computing devices in DECREASING order of their computing capabilities (from most to least powerful):
- A Mainframe, personal computer, server, PDA
  - B Server, personal computer, mainframe, PDA
  - C PDA, personal computer, server, mainframe
  - D Mainframe, server, personal computer, PDA
- (1)
- 1.2.2 Which ONE of the following is NOT an example of a hardware device?
- A Scanner
  - B Modem
  - C Search engine
  - D Flash disk
- (1)
- 1.2.3 Which ONE of the following statements concerning secondary memory or storage is TRUE?
- A Secondary memory is volatile.
  - B All secondary memory stores its data electronically.
  - C The typical access time to secondary memory is slower than that of RAM.
  - D Secondary memory is more expensive than primary memory in terms of unit costs.
- (1)
- 1.2.4 Which ONE of the following statements concerning the internet is TRUE?
- A The 'world wide web' is another term for the internet.
  - B A unique location on the internet is known as a URL.
  - C The top-level domain name, MIL, typically refers to a non-profit organisation.
  - D Access to all websites and their content is free on the internet.
- (1)
- 1.2.5 One of the common health risks associated with prolonged use of a computer is that of RSI. Which ONE of the following is the best way to avoid RSI?
- A Ensure that your monitor is positioned at the correct height.
  - B Ensure that your computer is in a well-lit area, avoiding glare from sunlight.
  - C Always check that the room is well-ventilated.
  - D Make sure that you work with your wrists level with the keyboard.
- (1)

**TOTAL SECTION A: 15**

**SECTION B**

Scenario:

Your father has worked as a typesetter at the local newspaper for 20 years. The newspaper, however, has computerised their operation and your father has been retrenched and offered a severance package. He feels that he will not be able to get a job at his age, so he has decided to become his own boss and has qualified as an estate agent. He wants to set up a small office so that he can work from home. He will have to use his severance package to purchase some necessary office equipment. His immediate needs are:

- To purchase a computer and become more computer literate
- To be able to copy and fax documents
- To establish a simple electronic accounting system
- To be able to produce his own business cards, letterheads and promotional flyers and any other relevant business documentation

He has studied all the advertisements for computers he can get his hands on and has narrowed down his choice to ONE of the following two computers:

Computer A  
Computer B

Intel Pentium 4 2.8 GHz  
180 GB HDD  
128 MB RAM  
21" SVGA colour monitor  
DVD/CD-writer combo drive  
MS Windows XP Home  
Optical mouse  
Free Zeon ink-jet printer  
Ergonomically designed QWERTY keyboard  
Free digital camera  
AMD 3.02 GHz  
80 GB HDD  
1 GB RAM  
17" SVGA colour monitor  
CD writer  
MS-Office 2003  
Infra-red mouse  
56 K fax modem  
Bluetooth keyboard  
Free 512 MB flash disk

He will need to lean heavily on you for advice as his computer knowledge is quite poor at present and he cannot afford to make any mistakes with so much at stake with his business venture.

**QUESTION 2**

- 2.1 Your father is concerned that the specification for the monitor of Computer B might be inferior to that of Computer A.  
Explain to your father what this specification is and how it might affect him. (2)
- 2.2 What essential software needs to be purchased additionally if Computer B is bought? (1)
- 2.3 Will the fact that the one computer has much more RAM than the other affect the speed of the computer? Briefly explain your answer. (2)
- 2.4 The advert for Computer B makes reference to a 56 K modem.  
2.4.1 Briefly explain why and where one would need to use a modem. (2)  
2.4.2 Explain clearly what 56 K means. (1)
- 2.5 Your father needs to buy a printer.  
List TWO factors or specifications (besides the cost) that he needs to take into account when deciding on what type of printer to buy. (2)
- 2.6 Give THREE typical types of applications (not the actual names of the programs) one would find in such a package. (3)
- 2.7 The computer at home has MS Office '97 installed. Will it be possible to swop files between the computer at home and the new one with MS Office 2003 installed? Briefly explain your answer. (2)
- 2.8 A crucial file containing the contact details of clients has accidentally been deleted.  
Is there any way of recovering this file? Briefly substantiate your answer. (2)
- 2.9 Consideration needs to be given whether to communicate with clients via e-mail or by fax.  
Give FOUR reasons why it is preferable to use e-mail as opposed to a fax as a communication tool. (4)
- 2.10 Your father wants to see how many other estate agents currently operate in the same area as he does. He enters the search phrase 'estate agents' into a search engine and receives over 129 million hits.  
Give TWO strategies that your father can employ to make this search more efficient and reduce the number of hits he receives. (2)

- 2.11 Not all websites are authentic and provide accurate information. Give THREE criteria or methods you could use to judge the authenticity of a website.

(3)  
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### QUESTION 3

Consider the following screenshot and answer the questions that follow:

Name	Size	Type	Modified
Text	232 KB	JPEG Image	31/05/200
Photo	8,852 KB	Bitmap Image	31/05/200
IMAGE	17 KB	Microsoft Word Doc...	31/05/200
JOB01	17 KB	Microsoft Word Doc...	31/05/200
Spider2	252 KB	JPEG Image	31/05/200
Spider	493 KB	JPEG Image	31/05/200
Prac files 2004	213 KB	WinZip File	31/05/200
images	4 KB	JPEG Image	27/05/200
tt	258 KB	Bitmap Image	27/05/200
examples	17 KB	Microsoft Excel Wor...	19/05/200
Olympic Flame	16 KB	JPEG Image	17/05/200
Scrap	2,049 KB	Scrap object	17/05/200
Pic1	1,283 KB	JPEG Image	17/05/200
DanceSport2	114 KB	JPEG Image	12/05/200
DanceSport	158 KB	JPEG Image	12/05/200

- 3.1 A graphics artist friend scanned an image of the logo for your father's business and saved it as a bitmap file called *photo.bmp*.

3.1.1 What kind of program should he use to open this file? (1)

3.1.2 Will he be able to save this file onto a stiffy or the 512 MB flash disk he received when he bought his PC?

Briefly explain your answer for both devices. (2)

3.1.3 Your father wants to e-mail this file as an attachment to the printers, but it takes a long time to send.

List TWO ways in which he can speed up the process of sending this file, using e-mail without any hardware changes. (2)

- 3.2 Your father says that he has heard that it can be helpful to create shortcuts to files.

Clearly explain what shortcuts are and why they can be useful. (2)

- 3.3 One day, when your father closed his word processing program, he was confronted with the following message:
- A large amount of information is stored on the clipboard. Do you want to save it for later use?*
- Briefly explain what a clipboard is and why this message occurs. (2)
- 3.4 Your father has drafted an Income and Expenditure Statement using tables in a word processing document.
- Give THREE reasons why he should rather use a spreadsheet for this purpose. (3)
- 3.5 Since your father's retrenchment, your mother is of the opinion that technology has evolved too quickly and is causing people to lose their jobs.
- Debate the role of technology by providing a counter-argument to her viewpoint. Give THREE well-founded, relevant comments in your answer. (3)
- 3.6 The printer in the office has stopped working. Your mother is convinced that a virus has damaged the printer.
- 3.6.1 Briefly explain what a *virus* is and how it functions. (3)
- 3.6.2 Do you think it is likely that it is a virus? Briefly substantiate your answer. (2)
- 3.7 Give TWO uses of computer technology in each of the following sectors (do NOT specify any application programs in your answer):
- 3.7.1 Education (2)
- 3.7.2 Medical field (2)
- [24]**

**QUESTION 4**

- 4.1 Your father has heard about ROM but has noted that it is not listed in any of the advertisements.
- 4.1.1 What is the main difference between RAM and ROM? (1)
- 4.1.2 Why is ROM needed in a computer? (1)



- 4.2 Neither of the advertisements given in the scenario has a stiffy drive.
- 4.2.1 Give TWO reasons why stiffy disks have declined so in popularity. (2)
- 4.2.2 The contents of approximately how many stiffy disks would fit onto a 512 MB flash drive?  
Show ALL your calculations. (2)
- 4.2.3 Many flash drives plug into a USB port.  
State TWO advantages of a USB port. (2)
- 4.2.4 Name ONE other device that will typically connect to a USB port. (1)
- 4.3 4.3.1 In general, what are the THREE most important hardware components to look at in an advertisement for a computer? (3)
- 4.3.2 Briefly describe the function of each of the THREE hardware components you chose for your answer to QUESTION 4.3.1. (3)
- 4.4 Computer B includes a free digital camera, but your father already has a sophisticated conventional (non-digital) camera.  
State TWO advantages that a digital camera has over a conventional camera. (2)
- 4.5 Computer A refers to an ergonomically designed QWERTY keyboard and Computer B refers to a Bluetooth keyboard.
- 4.5.1 Explain the significance or meaning of the term *QWERTY* and *Bluetooth* in terms of the key specifications of the keyboards. (2)
- 4.5.2 Briefly explain what *ergonomically designed* means by referring to ONE typical feature of an ergonomically designed keyboard. (2)
- 4.6 The advertisements refer to an optical and an infra-red mouse.
- 4.6.1 Are these both examples of a cordless mouse? Briefly explain your answer. (2)
- 4.6.2 Give TWO advantages of an optical mouse over a normal mechanical mouse. (2)
- 4.7 Why is the size of the hard drive listed in the advert, but not the size of the CD or DVD drives? (2)

**[27]**

**QUESTION 5**

Your father wants to buy an accounting package to keep the accounts of the company. He needs to consider the minimum recommended hardware and software requirements of the package, before making a purchase.

- 5.1 Name ONE popular accounting package. (1)
- 5.2 Give TWO typical hardware requirements. (2)
- 5.3 Give ONE typical software requirement. (1)
- 5.4 What is the difference between *minimum* and *recommended* requirements? (2)
- 5.5 When your father tries to uninstall the program, it asks if he wants a *custom* or a *full* install.  
Explain the difference between these TWO options. (2)
- [8]**

**TOTAL SECTION B: 85**

**GRAND TOTAL: 100**