

NATIONAL SENIOR CERTIFICATE

GRADE 11

NOVEMBER 2015

COMPUTER APPLICATIONS TECHNOLOGY P2

MARKS: 150

TIME: 3 hours



This question paper consists of 16 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of:

SECTION A (25 marks) SECTION B (75 marks) SECTION C (50 marks)

- 2. Answer ALL the questions.
- 3. Number the answers correctly according to the numbering system used in this question paper.
- 4. Start EACH question on a NEW page.
- 5. Leave a line between each question.
- 6. In general, a mark is allocated per fact. A 2-mark question would therefore require TWO facts, et cetera.
- 7. Write neatly and legibly.

SECTION A

QUESTION 1: MULTIPLE CHOICE QUESTIONS

Various options are given as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question number (1.1–1.10) in the ANSWER BOOK, for example 1.11 D.

1.1	The action used on an image or picture to remove unwanted parts is called			
	A B C D	Crop. Cut. Resize. Undo.	(1)	
1.2	Which	one is another name for web address?		
	A B C D	http URL html www	(1)	
1.3		one of the following restricts unauthorised access to and from a ter network?		
	A B C D	Firewall Modem UPS 3G Card	(1)	
1.4		nail message that promises the school principal that he will receive large its of money if he forwards this e-mail to at least 10 people is called a		
	A B C D	driver. hoax. trojan. firewall.	(1)	
1.5	A finge device	erprint reader and voice verification systems are examples of s.		
	A B C D	animation multimedia biometric geographic	(1)	

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[10]

4

QUESTION 2: MATCHING ITEMS

Choose a term/concept from COLUMN B that best matches the description in COLUMN A. Write only the letter (A–O) next to the question number (2.1–2.7) in the ANSWER BOOK, for example 2.8 P.

	COLUMN B		
2.1	Policy which defines users' rights and responsibilities within a network.	Α	Contrast ratio
2.2	A fast type of port typically used for video input.	В	UPS
2.3	A device that can be used to protect a computer against power spikes, surges and outages.	С	USB
2.4	A small text file saved automatically on your computer by a website.	D	Drivers
2.5	Database feature used to ensure the correct format of data is input by the user.	Е	Primary memory
2.6	The relationship between the width and the height of a display device.	F	Data Validation
2.7	A flash disk is classified as memory.	G	Aspect ratio
		Н	Skype
		I	cookie
		J	AUP
		K	WYSIWYG
		L	Input mask
		М	FireWire
		N	IDSL
		Ο	Secondary memory

 (7×1) [7]

TOTAL SECTION A:

25

QUESTION 3: MODIFIED TRUE/FALSE

Indicate whether the following statements are TRUE or FALSE. Where the statement is false, rewrite ONLY the underlined section to make it true. (You may not simply use the word 'NOT' to change the statement when you rewrite it.)

3.1	A <u>switch</u> is a network device used to connect two or more networks to each other.	(2)
3.2	The <u>SUMIF</u> function adds figures in a range of cells if specific criteria are met.	(1)
3.3	A word processor is the best application to display an HTML page.	(2)
3.4	A <u>legend</u> is a key that identifies the colours used for each category in a chart.	(1)
3.5	DOCX is the file extension for a Microsoft Word Template.	(2) [8]

SECTION B

QUESTION 4: SYSTEMS TECHNOLOGIES

4.1	One of the local computer shops is advertising a tablet computer, as well as other laptops.						
	4.1.1	Name TWO differences between a laptop and a tablet computer.	(2)				
	4.1.2	Name TWO disadvantages of a laptop.	(2)				
	4.1.3	Name ONE advantage of a tablet PC.	(1)				
4.2		new software that is written will usually have <i>bugs</i> in it. Two common of fixing software related bugs are by using <i>patches</i> and <i>service packs</i> .					
	4.2.1	What is meant by a software bug?	(1)				
	4.2.2	Briefly explain the difference between a patch and a service pack, by describing the essential feature of each one.	(2)				
4.3	South	Africa is plagued by power outages and load shedding in recent times.					
	4.3.1	Name ONE potential danger that this can pose for a computer system.	(1)				
	4.3.2	Name ONE hardware measure that one could use to help counteract these problems.	(1)				
4.4		p utilities enable users to make copies of certain files or the entire hard other storage media.					
	4.4.1	What is a backup used for?	(1)				
	4.4.2	What storage medium would you suggest to backup large volumes of files for a long term?	(1)				
	4.4.3	You can also archive your files. Explain the term archive in this context.	(2)				
4.5	The re	The resolution at which a digital photo is taken is quite important.					
	4.5.1	Name ONE advantage of taking digital photos at the maximum resolution	(1)				
	4.5.2	Name ONE disadvantage of taking digital photos at the maximum resolution.	(1)				

QUESTION 5: INTERNET AND NETWORK TECHNOLOGY

5.1	Briefly explain the difference between LAN and WLAN by describing what each of these terms refers to.	
	(NOTE: Do not just expand the abbreviations.)	(2)
5.2	Name TWO potential disadvantages of a WLAN.	(2)
5.3	Servers play a big role in the network environment.	
	Name ONE way in which a server differs from a client computer other than its function.	(1)
5.4	Briefly describe the function of the following components of a network:	
	5.4.1 NIC (network interface card)	(1)
	5.4.2 Modem	(1)
5.5	What is the purpose or function of a web browser?	(1)
5.6	Online shopping facilities are being used by many people nowadays.	
	State TWO safety measures that you should bear in mind when shopping online.	(2)
5.7	Many people make use of an RSS aggregator.	
	Name ONE advantage of RSS aggregators.	(1)
5.8	Give TWO reasons why business people prefer web based applications over software that is installed in your own computer.	(2)
5.9	What is the function of an ISP?	(1)
5.10	What is the purpose of FTP?	(1) [15]

QUESTION 6: INFORMATION MANAGEMENT

6.1	A ques	tionnaire is a tool/method used to collect the opinions of people in a		
	6.1.1 Give TWO reasons why it is always a better idea to use 'closed questions' in setting up a questionnaire for research purposes.			
	6.1.2	Name TWO guidelines to be used when setting up a questionnaire, other than making use of 'closed' questions.	(2)	
6.2	Name ONE other possible source of information when doing research on a specific topic.		(1)	
6.3	What is meant by the term <i>plagiarism</i> ?		(1)	
6.4	What is the difference between data and information?		(2)	
6.5	One of the options given when records are imported into an Access database is to append the records.			
	Briefly explain the term append.		(1)	
6.6		why many academic institutions do not allow their students to quote dia as a source.	(1) [10]	

QUESTION 7: SOCIAL IMPLICATIONS

7.1	Name ople	ONE alternative to a mouse that can be used by physically challenged	(1)
7.2	Name	ONE way you could secure your laptop to the desk.	(1)
7.3	.3 Electricity is an expensive resource.		
		TWO ways in which you can save electricity when making use of nic devices like laptops or computers.	(2)
7.4	Social	engineering has become a real threat to computer users today.	
	7.4.1	Briefly explain what social engineering is.	(1)
	7.4.2	Give TWO precautions you can take to prevent becoming a victim of a social engineering attack via e-mail.	(1)
7.5	Spywa	re is becoming a huge problem for computer users.	
	7.5.1	What is the aim of spyware?	(1)
	7.5.2	Name TWO signs that could indicate that your computer is infected with spyware.	(2)
7.6	Name	ONE disadvantage of social networking sites.	(1) [10]

QUESTION 8: SOLUTION DEVELOPMENT

- 8.1 What is the difference between a *footnote* and *endnote*? (2)
- 8.2 8.2.1 Which feature of Microsoft Word would you use to apply the landscape option to some of the pages in a portrait document? (1)
 - 8.2.2 Which feature of Microsoft Word would you use to ensure uniform heading formatting throughout a document? (1)
 - 8.2.3 Give ONE advantage of making use of the above feature to format your document. (1)
- 8.3 Briefly explain what the Bcc field indicates on an e-mail. (1)
- 8.4 Study the screenshot below and answer the questions that follow:

	А	В	С	D	Е	F
1	No.	Name:	Age Group: Oud. Groep:		Gender: Geslag:	Qualify: Kwalifiseer:
2	1	Abrahams, Marco	M Elite	10	M	Does not Qualify
3	2	Adams, Jonty	M U23	2	M	Qualify
4	3	Adler, Aaron	M U23	12	M	Qualify
5	4	Aldag, Rolf	M 45-49	7	M	Does not Qualify
6	5	Barrow, Clinton	M Elite	13	M	Does not Qualify
7	6	Bell, Nico	M 30-34	3	M	Does not Qualify
8	7	Bence, Corné	M U23	16	M	Qualify
9	8	Bence, Rico	M U23	14	M	Qualify
10	9	Beneke, Calvin	M Elite	4	M	Does not Qualify
11	10	Benkenstein, Kevin	M Elite	8	М	Does not Qualify
12	11	Bester, Johan	M Elite	17	M	Qualify
13	12	Bester, Shaun-Nick	M Elite	6	M	Does not Qualify
14	13	Boakye Dankwa, Anthony Boafo	M U23	9	M	Qualify
15	14	Bonthuys, Carl	M Junior	5	M	Qualify
16	15	Boonstra, Lieuwe	M 35-39	11	M	Does not Qualify
17	16	Botes, Kobus	M Elite	1	M	Qualify
18	17	Boya, Mthetheleli	M U23	15	M	Qualify
19	18	Boyes, Craig	M Elite	18	M	Does not Qualify

- 8.4.1 Which spreadsheet feature was used to display the text over two lines in the heading in the first row? (1)
- 8.4.2 Which spreadsheet function can be used to determine the 7th lowest position in column D? (1)
- 8.5 Explain the cause of each of the following error messages in a spreadsheet:
 - 8.5.1 ###### (1)
 - 8.5.2 #REF (1)

8.6 Details about a national sports academy was captured in a database as shown below:

AcademyID 🔻	Name ▽	Surname ▽	Province ▽	Sport ▽	Year ▽	Accomodation ▽
1	Jan	Jonker	EC	Cricket	2	
2	Gerda	Jansen	GP	Netball	1	✓
3	Vusi	Tebekana	FS	Rugby	3	
4	Sandy	Bruinders	GP	Netball	1	✓
5	Roxy	Venter	FS	Hockey	2	
6	Joe	Hubert	NC	Rugby	2	✓
7	Hein	Daniels	NC	Cricket	2	✓
8	Grant	Bruinders	NW	Rugby	4	✓
9	Hugh	Grant	FS	Cricket	3	✓
10	Andy	Bruinders	EC	Hockey	4	✓
11	Gary	Kruger	FS	Hockey	2	✓
12	Harry	Potter	NC	Rugby	4	
13	Sanjay	Gaviskar	KN	Cricket	4	✓

8.6.1	Which of the fields above can be allocated with a default value?	(1)
8.6.2	Name ONE technique that can be used in the <i>Province</i> field to ensure that the code is entered correctly and accurately.	(1)
8.6.3	Which feature of the database can be used to extract a list of the hockey players that will be attending the national sports academy?	(1)
8.6.4	When will you use the OLE data type in a database?	(1)
8.6.5	What is the use of Required field property in a database?	(1) [15]

TOTAL SECTION B: 75

(2)

SECTION C

QUESTION 9: INTEGRATED SCENARIO

SCENARIO

You were selected as the head prefect of the Student Representative Council of your school and you have been tasked to set up a small office at the school to be used for the administration of the SRC. You received a limited budget from the school's governing body to buy the necessary hardware and software needed.

Although it is more expensive than a desktop, you convinced the governing body that a laptop would be a better option. You presented the following quotation from a leading computer store:

- 19.5" LED 20D300H Monitor
- Intel® Core ™ i3-4150 Processor 3.50 GHz
- 4GB RAM
- 1 TB Hard Drive
- Windows 8.1
- DVD-Super 8X Multi DL drive
- USB 3.0 (1x Rear)
- WiFi
- Bluetooth 4.0
- Front Camera 2.0 MP
- Embedded 3G card slot
- 3-in-1 Card Reader
- Free 2 GB online storage facility exclusive from DELL
- Warranty 1 Year Onsite Warranty

Free M2070W Multifunction Printer Worth R1599 90 with 802.11 B/G/N



- 9.1 The governing body has the following questions with regard to the quotation above:
 - 9.1.1 What is the capacity of the primary memory of the laptop in the quotation above? (1)
 - 9.1.2 The laptop has far more storage space than memory. Briefly explain why computers need more storage space than memory by referring to their functions.
 - 9.1.3 Name ONE difference between memory and storage OTHER than their functions. (1)

9.10	When buying the software, their attention was drawn to the <i>minimum system</i> requirements needed to run the program.		
	9.10.1 Explain the term <i>minimum system requirements</i> .	(1)	
	9.10.2 Name TWO examples of such system requirements.	(2)	
9.11	During the installation of the software, the installation wizard prompted the member installing the software for an activation code.		
	What is the aim of an activation code?	(2)	
9.12	The use of technology can have significant drawbacks to the environment.		
	9.12.1 How can the LED technology for the monitor, listed in the quotation, contribute towards green computing?	(1)	
	9.12.2 Explain TWO ways in which the SRC can practise green computing when using their printer.	(2)	
9.13	There is definitely certain health risks involved in working on computers for long hours. Buying more ergonomically designed hardware is one potential solution to RSI injuries.		
	9.13.1 Briefly explain the term <i>ergonomics</i> .	(1)	
	9.13.2 Name TWO features of an ergonomically designed keyboard.	(2)	
9.14	One of the members saw an advertisement for a cordless keyboard and mouse on special at the local computer shop.		
	9.14.1 How does a cordless keyboard communicate with a computer?	(1)	
	9.14.2 Name TWO possible disadvantages of using a cordless mouse.	(2)	
9.15	One of the members of the SRC suggested that they free up some hard disk space by defragmenting the hard disk.		
	Explain to him why defragmenting the drive will not help you to gain free space on your hard drive by referring to what happens in the defragmentation process.	(2)	
9.16	The SRC decided to create a blog.		
	9.16.1 What is a <i>blog</i> ?	(1)	
	9.16.2 Name THREE good practices that the SRC should use to attract people to read and return to their blog.	(3)	
9.17	Name TWO advantages of using a network to connect all of the computers in the school in a network.	(2)	
9.18	What is an App?	(1)	

TOTAL SECTION C: 50 **GRAND TOTAL: 150**