

# education

Department: Education **REPUBLIC OF SOUTH AFRICA** 

NATIONAL SENIOR CERTIFICATE

**GRADE 12** 

**Computer Applications Technology** 

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PAPER 2 : Written Paper MEMORANDUM

**MARKS: 150** 

TIME: 3 hours

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# **QUESTION ONE**

- 1.1 А
- 1.2 С 1.3 D
- 1.4 D
- С 1.5
- 1.6 В
- С 1.7
- 1.8 D
- В 1.9
- 1.10 B

Total : [10]

# **QUESTION TWO**

- 2.1 Μ
- 2.2 С
- 2.3 I
- Ν 2.4
- 2.5 Κ
- 2.6 J
- Е 2.7
- 2.8 0
- 2.9 F 2.10 H

Total : [10]

# **QUESTION THREE**

	Any TWO of: $\checkmark \checkmark$	2	
3.1.1	Faster processing		
	More accurate processing		
	Electronic data can be distributed quickly		
	Allows for more complex information to be extracted from		
	the data		
	Can use software features to validate data		
	Information can be manipulated and presented in a variety		
	of formats etc.		
3.1.2	Any TWO of: ✓✓	2	4
	May need to train organisers to use software/technology		
	Resistance from technophobia		
	Cost implications in terms of purchasing software or		
	hardware		
	GIGO principle		
	Availability of power		
	Potential loss of data due to power dips or failures etc.		
3.2.1	Desktop ✓	1	
0	2.1 GHz ✓	1	
3.2.2	512 MB ✓	1	
3.2.3	(Novell Suse 9.0) <i>Linux</i> ✓	1	
3.2.4	Any TWO of: 🗸 🗸	2	
	Do not need a fixed phone line		
	Mobile		
	Can easily share access with other devices such as PDAs		
	etc.		
3.2.5	Yes, because the technology is backward-compatible ✓i.e.	1	7
	DVD writers can read and write CDs but not the other way		
	around		
3.3	Any TWO of: ✓✓		2
	Resolution (megapixels)		
	Memory		
	Optical/Digital Zoom		
	Interface/types of connection		
	Type/capacity of storage used etc.		
3.4	Any TWO of: $\checkmark \checkmark$		2
	Bluetooth		
	USB		
	Memory Card		
3.5	Ink-jet ✓		1
			•

3.6	Any ONE advantage of: ✓	1	
	Less cumbersome/easier to use		
	No wire to clutter up workspace etc.		
	Any ONE disadvantage of: ✓	1	2
	Relies/needs batteries		
	Slightly heavier		
	Can be stolen		
	Can have interference from other radio sources		
3.7	Any ONE advantage of: ✓	1	
	Portable		
	Takes up less space		
	Does not need power source etc.		
	Any ONE disadvantage of: ✓	1	2
	Smaller screen		
	Limited battery life		
	Can get stolen easily etc.		
	Total		[20]

pefragment your hard drive etc.		[20]
, , ,		
erminate all other memory resident programs		
Vrite at a slower speed		
ry different make/quality CD		
ny TWO of: ✓✓	2	4
D or DVD writer ✓	1	
o add or copy data to a CD ✓	1	
he software to read PDF files is free and widely installed $\checkmark$		
oftware to open/edit the documents you send them		
Other computer users will not always have the appropriate		
dependent of the application it was created in $\checkmark$		
DF format is a type of document format which is	2	6
exe files etc.		
ttachment might contain potentially dangerous files such as		
irewall might have blacklisted the site		
ttachment might have exceeded maximum allowed size		
ttachment could contain a virus or other malware	-	
ny TWO of:√√	2	
ccess to or from a network $\sqrt{4}$	<u> </u>	
firewall is a system designed to prevent unauthorised	2	7
dd to Favourites/bookmark ✓	1	4
earch History of visited sites ✓	1	
temove quotation marks etc.		
dd the word athletics to search string		
nclude the word current		
pecify South African in full imit search to South African sites		
ny TWO of: $\checkmark \checkmark$	2	
oice entry/recognition	0	
ar-coding/Bar code readers		
canning/OCR		
ny TWO of: 🗸 🗸	2	6
Vrist rests etc.		
ngled keys		
Curved/split keyboard		
Vrist supports		
alm pads		
ny ONE feature of an ergonomically designed keyboard:✓	1	
omfort and health of the operator $\checkmark \checkmark$	2	
is the science of the design of the workplace to benefit the		
epetitive motions such as keyboarding $\checkmark$	1	
epetitive is the se	cience of the design of the workplace to benefit the	motions such as keyboarding ✓1cience of the design of the workplace to benefit the

5.1.1	Any TWO of ✓✓	2	
	Widen margins of section	_	
	Reduce (auto fit) width of columns		
	Change page orientation of section from portrait to		
	landscape		
5.1.2	Adjust wrapping options ✓	1	
	The picture is set behind text instead of in front of text ✓	1	
5.1.3	Make the entries are formatted in the same 'heading' style as the other entries $\checkmark \checkmark$	2	
	Also accept: Making sure the table is updated for 1 mark only		
5.1.4	Default means the setting that is reverted to every time a new document is created✓	2	8
	Use a template or change the global template settings $\checkmark$		
5.2.1	1.44 MB ✓	1	
5.2.2	Any TWO of ✓✓	2	3
	Change to lower resolution		
	Save in more compressed format such as JPEG		
	Save in black and white		
	Zip/compress the file		
5.3.1	Phising refers to tricking users into releasing confidential		
	data by posing as a legitimate entity ✓	1	
	Usually done by luring users to fake website or sending out	1	
5.3.2	a 'legitimate' looking e-mail asking for details ✓ (any one) Any TWO of: ✓✓	2	4
5.3.Z	Use of one-time or per session passwords	2	4
	On-screen numeric keypad for PIN numbers		
	Sending SMS alerts when Internet banking is accessed		
	Time-outs of session after a period of time		
	Passwords/PIN numbers		
	Using secure encryption/protocols such as SSL or HTTPS		
	etc.		
5.4	Any TWO of ✓✓		2
	Using conditional formatting		
	Formatting negative numbers to show in red		
	Use of IF-statements to flag overspending		
	Total		[17]

6.1.1	Any TWO advantages of using a spreadsheet: ✓ ✓ Easy to perform simple arithmetic A number of built-in formulas to perform mathematical/statistical calculations available Cells can accept any type of data Easy to produce results graphically Some data validation options are available	2	
	Easy to use etc. <u>Any TWO advantages of using a database</u> :√√ Designed to work with structured records Excellent reporting facilities Powerful querying facilities Better data validation tools Can design appropriate data capture forms Can export data to various formats etc.	2	
6.1.2	Any TWO of: ✓✓ Use of an auto number type of field Use of a primary key Use of an index with no duplicates allowed etc.	2	
6.1.3	Reasonably open-ended: ✓✓✓ (three different types) Suggested fields required: Name/Surname/School: Text Date of birth/date entry received: Date Male/Registered/Fees paid: Boolean (Yes/No) Amount paid/owing: Currency Entrant number: Number	3	
6.1.4	Any TWO of: $\checkmark$ Can add labels and instructions for data capturer Can mimic layout of hardcopy from which details are being captured Can control which fields the data capturer has access to Can facilitate input by adding controls such as list boxes Helps to minimise input errors Easier to use etc.	2	11
6.2	Any TWO of: $\checkmark$ Add calculated field in query Export to spreadsheet and perform calculations there Add calculated field on a form Add calculated field in report etc.		2

6.3	Any TWO of: 🗸 🗸		2
	Validation rules		
	Default values		
	Input masks		
	Use of forms to capture data		
	Use of controls such as list boxes and lookup controls etc.		
6.4.1	The 3 (or 4) letter part of the filename after the full stop in the file name $\checkmark$	1	
6.4.2	Attempt was made to change the file extension $\checkmark$	1	3
	File will no longer be associated with the default	4	
6.5	application/program ✓	1	
0.0	Set up a form letter $\checkmark$	1	
	Link to the data source e.g. the database or query etc.✓ Insert merge fields and perform mail merge ✓	1	3
6.6.1	Any TWO of: $\checkmark$	2	U
0.0.1	Details of competitors in a database of athletes provides a	-	
	specific target market for sports retailer		
	Company can use e-mail addresses to send (junk) mail		
	Company may sell database to other parties		
	Company can use details to set up profiles for marketing etc.		
6.6.2	Any TWO of:✓✓	2	4
	Entrants' permission should be sought before divulging their		
	data		
	Entrants need to know which data is being given out		
	May lead to spamming of e-mail addressees		
	Data may be passed on to other parties		
	Entrants have right to expect confidentiality etc.		
	Total		[25]

7.1.1	Company that provides Internet access and facilities at a cost to the user $\checkmark \checkmark$	2	
7.1.2	non-profit ✓ organisation ✓	2	
7.1.3	Any TWO arguments for a Web-based mail service: ✓ ✓ Free Easy to access from anywhere Internet access is available Can have an unlimited number of accounts etc.	2	
	OR		
	Any TWO arguments for an Internet-based mail service: Reduced spam and no advertising Less restrictions on mailbox size Users may be more familiar with using an interface associated with a particular e-mail program Already have an ISP subscription etc.		
7.1.4	Any THREE of: $\checkmark \checkmark \checkmark$ Speed of access How often information is updated Ease of navigation User friendliness No dead links etc.	3	
7.1.5	Blog or web log: a diary/journal kept on Internet site ✓ Podcast: audio file published on the Internet ✓	1	
7.1.6	Domain name is the unique address of a computer on the Internet $\checkmark$	1	13
7.2.1	School's domain is: columbushighschool.org.za ✓ Hibernation is a state in which your computer shuts down after saving everything in memory on your hard disk ✓	1	
7.2.2	Laptop is probably running on battery power whereas the PC is running on normal AC power ✓	1	2
7.3.1	Any ONE of: $\checkmark$ RAM is volatile Power could go down during a save process causing corruption or loss of data	1	
7.3.2	UPS or generator ✓	1	2
7.4.1	A program downloaded onto your computer without your knowledge ✓ Subverts the operation of the computer for the benefit of a	1	
	third party $\checkmark$ Also accept: Software that monitors user's actions	1	
7.4.2	A type of dialog box ✓ that pops-up on the screen while you are browsing the Internet ✓	2	

7.4.3	Generally best to disable them as they are normally associated with advertising (& can also carry malware)✓ Certain websites, however, need pop-ups to be enabled in order to function correctly ✓	2	6
7.5.1	Software or 'program' that installs itself with the user's consent ✓ Negatively affects the functioning of the computer ✓ Tries to replicate itself in order to spread ✓	3	
7.5.2	The disabling of the auto protect option will increase speed at which files are opened ✓ Not a good option if portable storage devices such as flash disks are going to be inserted in the computer as they may		_
	contain viruses ✓	2	5
	Total		[28]

8.1	Copy data in table to a spreadsheet OR		3
	Convert data to a fixed width or delimited text file $\downarrow \downarrow \checkmark \checkmark$		
	Import data into database table ✓		
8.2	Insert special symbol/character ✓		1
8.3	A macro is a series of commands (entered via the mouse or keyboard) that can be grouped together as a single command to accomplish a task automatically $\checkmark \checkmark$		4
	Any ONE suitable example: ✓		
	Changing margins of a document		
	Inserting a table of specific dimensions etc.		
	They are regarded as potentially dangerous as they can contain malicious/virus code ✓		
8.4	Defragmentation program re-arranges/consolidates		3
	fragmented files, so that they occupy a single, contiguous		
	space on the volume ✓ ✓		
	Defragmentation does not free up space, just re-arranges its		
	location√		
8.5	Any TWO of: 🗸 🗸		2
	Quicker to capture		
	Easier to validate		
	Easier to perform searches and queries		
	Occupies less space in database etc.		
8.6.1	Absolute cell referencing ✓	1	
8.6.2	Absolute cell referencing is used to indicate those parts of the cell reference that must not change when a formula is copied $\checkmark \checkmark$	3	4
	Any suitable example: ✓		
	e.g. When a range of figured need to be multiplied by a		
	common rate e.g. VAT stored in a specific cell etc. ✓		
8.7	When an object is copied it can either be linked or embedded		3
	Embedded objects have no links to the original source√		
	Linked objects retain a link to the original 'source' and are		
	updated automatically if the original object is changed or		
	updated $\checkmark$		
	Total		[20]