

**NATIONAL
SENIOR CERTIFICATE**

GRADE 11

NOVEMBER 2019

COMPUTER APPLICATIONS TECHNOLOGY P2

MARKS: 150

TIME: 3 hours



This question paper consists of 15 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. Do NOT write in the right-hand margin.
6. Leave a line after EACH sub question.
7. In general, one mark is allocated per fact. A 2-mark question would therefore require TWO facts, etc.
8. All answers MUST be related to Computer Applications Technology.
9. Answers such as 'cheaper', 'slower'/'faster' and 'easier' will ONLY be accepted if it is used together with a reason or an explanation.
10. Write neatly and legibly.

SECTION A**QUESTION 1: MULTIPLE-CHOICE QUESTIONS**

Various options are provided 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 Which ONE of the following units refers to processor speed?

- A GHz
 - B dpi
 - C mbps
 - D ppm
- (1)

1.2 Which ONE of the following acronyms has to do with software licensing?

- A GUI
 - B WWW
 - C WLAN
 - D EULA
- (1)

1.3 How do solid-state drives store data as compared to traditional hard drives?

- A Optical
 - B Magnetic
 - C Disk
 - D Electronic
- (1)

1.4 Which ONE of the following criteria will retrieve records based on a field value that ends with 'ad'?

- A ad*
 - B ad
 - C a*d
 - D *ad
- (1)

1.5 The main task of the Disk Cleanup utility is to ...

- A check a drive for errors.
 - B removes temporary or unnecessary files.
 - C format the hard disk when it is full.
 - D reorganize files and keep related files together.
- (1)

- 1.6 Which ONE of the following acronyms is NOT associated with hardware?
- A HDD
 - B NIC
 - C OSS
 - D BYOD
- (1)
- 1.7 Which ONE of the following specifications is an indication of Wi-Fi capabilities on a device or computer?
- A Ethernet
 - B 802.11 ac
 - C FireWire
 - D i7
- (1)
- 1.8 An ISO rating is a specification of ...
- A digital cameras.
 - B printers.
 - C monitors.
 - D projectors.
- (1)
- 1.9 The quickest or most efficient way to get information from a large group of people is by making use of a(n) ...
- A search engine.
 - B wiki.
 - C interview.
 - D survey.
- (1)
- 1.10 Which ONE of the following is the best example of a 'good' or 'strong' password?
- A 0841288744
 - B Qwertyuiop
 - C MyPasword
 - D T2Lu\$K006
- (1)

[10]

QUESTION 2: MATCHING ITEMS

Choose a term/concept from COLUMN B that matches the description in COLUMN A. Write only the letter (A–Q) next to the question number (2.1–2.10) in the ANSWER BOOK, for example 2.11 R.

COLUMN A		COLUMN B	
2.1	A hardware device used to protect a computer against power surges and spikes	A	design view
2.2	They form part of the system software and are used to assist the user to perform maintenance tasks	B	fragmentation
2.3	A set of rules about how a peripheral communicates with the computer when connected to it	C	absolute cell referencing
2.4	The different parts of the files can become scattered across the disk, causing the computer to become slower	D	bibliography
2.5	The placing and formatting of text on paper and web pages	E	typography
2.6	A formal document that is used to give focus to a meeting by indicating the points to be discussed	F	memo
2.7	A reference to the source used in a specific instance and is found in the text immediately after the piece of information being referred to	G	field
2.8	A cell reference format that prevents the column letter and/or the row number in a function from changing when the function is copied to another cell	H	relative cell referencing
2.9	A single fact or the smallest unit of data in a database	I	datasheet view
2.10	The view in Access that displays the content of a table in rows and columns	J	UPS
		K	defragmentation
		L	agenda
		M	template
		N	citation
		O	utility programs
		P	plug and play
		Q	record

(10 x 1) **[10]**

QUESTION 3: TRUE/FALSE ITEM

Indicate whether the following statements are TRUE or FALSE. Write 'true' or 'false' next to the question number (3.1–3.5) in the ANSWER BOOK. Correct the statement if it is FALSE. Change the underlined word(s) to make the statement TRUE. (You may not simply use the word 'NOT' to change the statement. NO mark will be awarded if only FALSE is written down.)

EXAMPLES:

QUESTION	ANSWER
Google is the world's most popular search engine.	True
A NIC has slots for hardware components such as the CPU.	False - motherboard

- 3.1 The central processing unit is the most important program which controls all activities that take place in a computer. (1)
- 3.2 A tooltip is a hint that pops up when resting the cursor on an icon or object. (1)
- 3.3 Freeware usually stops working when the trial period has expired. (1)
- 3.4 A check box allows the user to choose only one from a given set of options. (1)
- 3.5 The interface is the way the different functions of a program are arranged and provides a way in which users can use programs to communicate with the computer. (1)
- [5]**

TOTAL SECTION A: 25

SECTION B**QUESTION 4: SYSTEM TECHNOLOGIES**

- 4.1 The following specifications are listed in an advertisement that you studied regarding the memory and storage capacity of a computer.

1 GB DDR2-667 184 pin RAM
160 GB SATA II 7200 rpm Hard Drive

Copy the following table in your ANSWER BOOK and complete it by supplying the capacity of the storage and memory and by distinguishing between the two. (4)

	MEMORY	STORAGE
Capacity		
Difference		

- 4.2 In an advertisement, mention is made of a wireless keyboard and mouse.
- 4.2.1 Name TWO commonly used methods of connecting devices wirelessly. (2)
- 4.2.2 Compare these two methods with regard to:
- (a) Range of pick-up
 - (b) Line of sight (4)
- 4.3 Most new software that is written will usually have bugs in it. Two common ways of fixing software related bugs are by using patches and service packs.
- 4.3.1 What is meant by a *software bug*? (1)
- 4.3.2 Briefly explain the difference between a *patch* and a *service pack*, by describing the essential feature of each one. (2)
- 4.4 Backup utilities enable users to make copies of certain files or the entire hard disk to 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 You bought a new laptop with free online storage facility.

4.5.1 Explain what *online storage* is. (1)

4.5.2 Name TWO advantages of online storage. (2)

4.5.3 Name TWO disadvantages of online storage. (2)

4.5.4 Explain the term *on-site warranty* offered with the laptop. (1)

4.6 Operating systems contain special settings and utilities that help make the computer easier for disabled people to use.

Name TWO examples of these settings and utilities. (2)

[25]

QUESTION 5: INTERNET AND NETWORK TECHNOLOGIES

- 5.1 Give THREE potential disadvantages of a wireless LAN as compared to a cabled LAN. (3)
- 5.2 Most organisations make use of servers.
- 5.2.1 What is the general function of any server on a network? (1)
- 5.2.2 Give TWO reasons why an organisation would use a proxy server. Do not include any answer that you mentioned in QUESTION 5.2.1. (2)
- 5.2.3 Name TWO types of servers, often found in larger organisations, besides a proxy server. (2)
- 5.2.4 What general term is given to any computing device that uses network resources? (1)
- 5.3 Explain the purpose of a switch in a network. (1)
- 5.4 Why do computers today seldom need to have a separate NIC (network interface card) to connect the computers to a network? (1)
- 5.5 Give the name of the type of network cable most commonly used to connect computers in a LAN. (1)
- 5.6 Briefly describe what a keylogger does once it is installed on a computer and explain why key loggers are classed as malware (malicious software). (2)
- 5.7 How would an RSS feed on a blog benefit its users? (1)

[15]

QUESTION 6: INFORMATION MANAGEMENT

- 6.1 A questionnaire is a method used to collect the opinions of people in a survey.
- 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. (2)
- 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, excluding a questionnaire, when doing research on a specific topic. (1)
- 6.3 What is meant by the term *plagiarism*? (1)
- 6.4 Explain the difference between *data* and *information*. (2)
- 6.5 How can one prevent the input of duplicate records when capturing data in a database table? (1)
- 6.6 Explain why many academic institutions do not allow their students to quote a Wikipedia as a source. (1)
- [10]**

QUESTION 7: SOCIAL IMPLICATIONS

- 7.1 Name TWO alternatives to a mouse that can be used by physically challenged people. (2)
- 7.2 Name ONE way you could secure your laptop to the desk. (1)
- 7.3 Electricity is an expensive resource.
- Name THREE ways in which you can save electricity when making use of electronic devices like laptops or computers. (3)
- 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. (2)
- 7.5 Spyware is becoming a huge problem for computer users.
- What is the aim of spyware? (1)
- [10]**

QUESTION 8: SOLUTION DEVELOPMENT

8.1 Give ONE advantage of printing a document in *draft* mode. (1)

8.2 Give ONE advantage and ONE disadvantage of saving a *Word* document as a file with an extension of .TXT before distributing it.

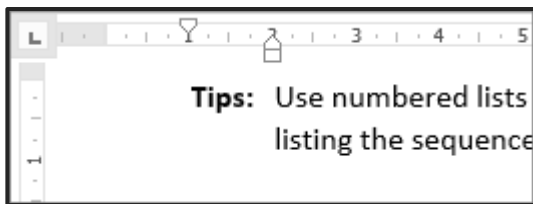
Distinguish clearly between the advantage and the disadvantage in your answer. (2)

8.3 Explain why it is sometimes necessary to use the 'Find whole words only' option when performing a Find and Replace operation in *Word*. (You may use an example to illustrate your answer.) (1)

8.4 The current date was added as a field to a *Word* document, with the date format: MMM DD

How will the date be displayed if the document is opened on Friday 18 August 2019? (1)

8.5 Name the type of indent that was used to position the word 'Tips', in the following screenshot of a *Word* document, one centimeter to the left of the main body of the paragraph.



(1)

8.6 The operator ^ can be used in *Excel* to return the result of the expression $2 \times 2 \times 2$ (i.e. $=2^3$)

Give the name of an *Excel* function that can be used, instead of the ^ operator, to return the same result. (1)

8.7 Study the following function that was entered in cell H25 of a spreadsheet, and answer the questions that follow.

=IF(G1>=90,distinction," ")

8.7.1 Suppose the value 80 is entered in cell G1. What will be displayed in cell H25? (1)

8.7.2 Explain why the function will give an error message, if the value 90 is entered in cell G1. (1)

- 8.8 Give ONE feature of a database table that can be used to display just certain records, besides using a query. (1)
- 8.9 The following Access query is supposed to show the names and the number of cans collected by learners in classes 11A and 11B, who collected at least 50 cans each in a recycling project.

Field:	Name	Class	Cans
Table:	Recycling	Recycling	Recycling
Sort:			
Show:	☒	☐	☐
Criteria:		"11A" And "11B"	at least 50
or:			

- Give THREE reasons why this query will NOT produce the desired (correct) results. Indicate in each case how the design of the query must be changed in order to obtain the correct results. (3)
- 8.10 Give ONE reason why setting a field as a primary key in a database can help to improve the quality of data in a database. (1)
- 8.11 Give ONE suitable example to show that, however a database is designed to ensure that the data is always *valid*, it can never ensure that the data is always *correct*. (1)

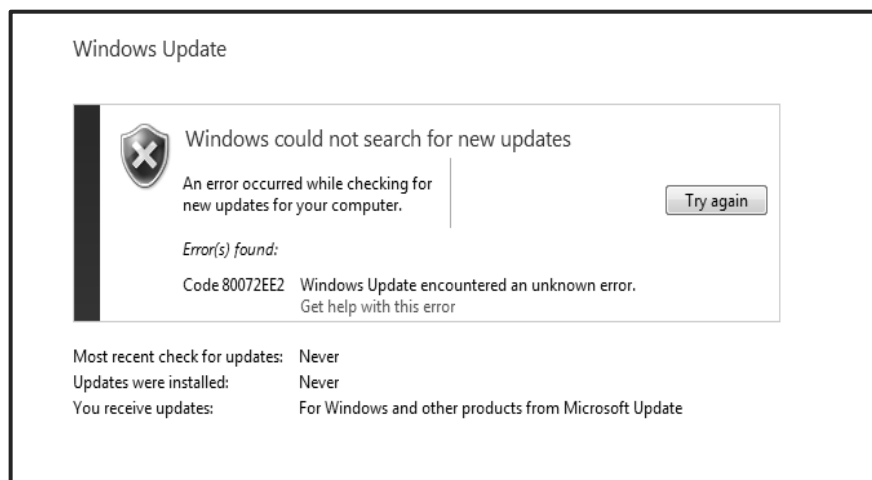
[15]

TOTAL SECTION B: 75

SECTION C**QUESTION 9: INTEGRATED SCENARIO**

Your school principal asked you to use your CAT skills to give advice on establishing an online school newspaper. Computer equipment will have to be purchased for this purpose.

- 9.1 Suggest TWO examples of application software that may need to be installed to facilitate the publishing of the school newspaper. (2)
- 9.2 State TWO advantages of using cables to connect the computers in the LAN network. (2)
- 9.3 Links to the newspaper articles will be posted on social media.
State TWO advantages of using Facebook to share the newspaper. (2)
- 9.4 Give TWO reasons why FOSS instead of proprietary software should be used at the newspaper office. (2)
- 9.5 The error message below appeared on one of the computers in the newspaper office, preventing it from getting updates.



- 9.5.1 Discuss TWO possible reasons for the error. (2)
- 9.5.2 State ONE implication of the error message. (1)
- 9.6 The computers suddenly slow down. State TWO other ways, except from being slow, how the school will know whether the computers have viruses or not. (2)

- 9.7 A database table with author and article names as fields will be used to store the information about learners who contribute towards content in the newspaper.
- 9.7.1 Discuss TWO reasons why it would be better in this instance to use a form for capturing data. (2)
- 9.7.2 Name TWO database tools that can be used to determine who contributed the most articles towards the newspaper. (2)
- 9.8 Give TWO reasons why it would be a good policy to have USB ports disabled by default on the LAN used by the newspaper office. (2)
- 9.9 It is important that the school has an Acceptable Use Policy (AUP).
- 9.9.1 Briefly explain what an *AUP* is. (1)
- 9.9.2 Discuss TWO reasons for having an AUP. (2)
- 9.9.3 Discuss THREE items that should be included or covered in the school's AUP. (3)
- [25]**

QUESTION 10

Your school has been selected to host the provincial athletics meeting. The administration of the meeting will be done on computers. Your CAT class has been asked to assist the school with any computer related queries they might have.

- 10.1 You decided to set up a blog or a website in order to answer any ICT-related questions.
- 10.1.1 What is a *blog*? (1)
- 10.1.2 Name TWO reasons for using a blog instead of a website. (2)
- 10.1.3 One of the principals prefers using a mailing list.
- Briefly explain what a *mailing list* is. (1)
- 10.2 The principals will be storing a great amount of pictures and videos on their computers.
- Explain to them THREE ways how they could free up storage space without using an external hard drive. (3)
- 10.3 In order for the administrators to make sure that only specific trainers are allowed on the field, you suggest the use of biometric security.
- List TWO limitations of fingerprint recognition. (2)
- 10.4 Athletes competing in the long distance events have been issued with RFID tags.

- 10.4.1 Briefly explain what an *RFID tag* is. (2)
- 10.4.2 What benefit would the fact that the athletes have RFID tags provide for the organisers of the race? (2)
- 10.5 The committee members would like to each receive a report at the end of the athletics meeting via e-mail. You realise that you cannot remember where you saved the document or what the filename is.
- 10.5.1 List TWO search criteria or parameters that you could include when searching for the document. (2)
- 10.5.2 What is the difference between using the 'Cc' and the 'Bcc' fields when sending an e-mail? (2)
- 10.6 One of the principals would like to manage the meeting as you did by using a database.
- Explain to him what the difference between a *validation rule* and *validation text* is. (2)
- 10.7 One of the webpages is not displaying the heading on the Eastern Cape Athletics website. The heading Eastern Cape Athletics Meeting should be centered, bold, underlined and in italics as shown below:
- Eastern Cape Athletics Meeting***
- Rewrite and correct the HTML tags below in order to display correctly.
- </body>
- <body>
- </centre><u><i>Eastern Cape Athletics Meeting</i></u></centre> (4)
- 10.8 As they type, the word processing program automatically changes South African spelling to the US spelling, for example colour to color.
- Name the feature of the word processing program that allows this to happen and explain how to prevent this from happening again. (2)

[25]

TOTAL SECTION C: 50
GRAND TOTAL: 150

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GRADE 11

NOVEMBER 2019

**COMPUTER APPLICATIONS TECHNOLOGY P2
MARKING GUIDELINE**

MARKS: 150

This marking guideline consists of 11 pages.

SECTION A**QUESTION 1: MULTIPLE-CHOICE**

- 1.1 A
- 1.2 D
- 1.3 D
- 1.4 D
- 1.5 B
- 1.6 C
- 1.7 B
- 1.8 A
- 1.9 D
- 1.10 D

[10]**QUESTION 2: MATCHING ITEMS**

- 2.1 J
- 2.2 O
- 2.3 P
- 2.4 B
- 2.5 E
- 2.6 L
- 2.7 N
- 2.8 C
- 2.9 G
- 2.10 I

[10]**QUESTION 3: TRUE/FALSE ITEMS**

(Note to marker: In Question 3.1, 3.3 and 3.4, accept the correct term even if false is not stated. Do NOT award a mark if only FALSE is written down.)

- 3.1 False – Operating system (1)
 - 3.2 True (1)
 - 3.3 False – Shareware (1)
 - 3.4 False – Radio button (1)
 - 3.5 True (1)
- [5]**

TOTAL SECTION A: 25

SECTION B

QUESTION 4: SYSTEM TECHNOLOGIES

4.1			MEMORY	STORAGE	4	4
	Capacity	1 GB ✓		160 GB ✓		
	Difference	Temporary ✓ Needs electricity Electronic and fast (Any ONE)		Permanent ✓ No electricity needed Mechanical and slow (Any ONE)		
4.2	4.2.1	Bluetooth ✓ and Infrared ✓			2	6
	4.2.2			BLUETOOTH	INFRARED	
		(a) Range of pick-up	Longer ✓	Shorter ✓	4	
		(b) Line of sight	No line of sight necessary ✓	Must be in line of sight ✓		
4.3	4.3.1	A software ‘bug’ is a programming error in the code or logic of a computer program which happens when the software is being created. ✓			1	3
	4.3.2	<u>Patch</u> : An update to fix a specific ‘bug’ in software (usually security related). ✓ <u>Service pack</u> : Is a release of all ‘bug’ fixes AND new features since release of the original software; usually released by companies at fixed intervals, and larger than patches. ✓			2	
4.4	4.4.1	To prevent data loss OR To have a copy or duplicate of files in case something goes wrong ✓			1	4
	4.4.2	External hard drive ✓ / Cloud storage			1	
	4.4.3	Storing files that are static onto a secondary system or onto a DVD ✓ in case you need to restore data if the original data is lost, damaged or destroyed. ✓			2	
4.5	4.5.1	Online storage refers to disk space on a server on the Internet that is allocated to you. ✓			1	
	4.5.2	• Accessible from anywhere on any device with Internet access. • Changes are all in one place so all devices always have the latest version of data. • Backup and security are managed by the storage provider. • Easy to share files with other people. • Data is still accessible even if your computer is stolen, your house burns down etc. (Any TWO: ✓✓)			2	

	4.5.3	- Only accessible when you have an Internet connection. - Some data may be unusable over slow connections. - You pay for the data storage and the bandwidth used to upload and download data. - If the company goes bankrupt you may lose all your data. - You have no control over backup and security. (Any TWO: ✓✓)	2	
	4.5.4	An agreement that any repairs to the computer will be done on the premises where the laptop is located. ✓	1	
4.6		- Magnifying an area of the screen - Text to speech - Making the mouse cursor larger - Increased contrast display settings - Displaying visual notices when computer makes a sound - Sticky keys and slow keys - Speech recognition - Using touch screens and on-screen keyboards (Any TWO: ✓✓)	2	2
				[25]

QUESTION 5: INTERNET AND NETWORK TECHNOLOGIES

5.1	• Security can be a problem if WLAN not configured correctly ('eavesdropping') • Unauthorized users could use your Internet connection, costing you money ('piggybacking') • Drop in performance (as number of computers connected increases) • Signal problems (due to electronic or electrical interference) • Extra hardware (such as wireless access points) required (Do not accept disadvantages that can also be related to a <u>wired</u> LAN, e.g. if file server is faulty, nobody can access their files) (Any THREE disadvantages: ✓✓✓)		3	3
5.2	5.2.1	To provides resources / services ✓ to other (client) computers		
		(Answer must be for the general function of <u>any</u> server)	1	
	5.2.2	• Provides (shared) Internet access • Provides central point for security / firewall • Provides central control point for malware / viruses • Can speed up Internet access (by storing / caching web pages) • Can control Internet access / which sites can be visited (accept specific examples), etc. Any TWO reasons for using a proxy server (besides the answer given to Q 5.2.1): ✓✓	2	
	5.2.3	• File server • E-mail server • Print server • Database server • Web server (Any TWO: ✓✓)	2	
	5.2.4	Client ✓	1	6
5.3	Used to connect computers so that communication can occur ✓		1	1
5.4	The NIC is generally integrated in (part of) the motherboard ✓		1	1
5.5	UTP ✓		1	1
5.6	• A keylogger records keystrokes as you type ✓ • They can intercept sensitive information like passwords and forward this to a third party (for criminal / fraudulent purposes) ✓		2	2
5.7	• Updates are automatically sent to people • No need to continually visit the website to check for new information (Any ONE: ✓)		1	1
				[15]

QUESTION 6: INFORMATION MANAGEMENT

6.1	6.1.1	• Makes it easier for respondents to choose from the options. • Easier to capture. • Easier to process the information using a spreadsheet. • The purpose of the questionnaire can be served according to the research needs. (Any TWO reasons: ✓✓)	2	4
	6.1.2	• Proper introduction for the questionnaire so that the respondents know what is the questionnaire all about. • Questions should be short and precise. • Thank the respondents at the end of the questionnaire. • Include options for collecting the basic details of the respondents like their name, age, etc. (Any TWO guidelines: ✓✓)	2	
6.2	• Publications • Interviews • Electronic media (Any ONE: ✓)		1	1
6.3	Using another person's words and presenting them as yours. ✓		1	1
6.4	• Data is unprocessed facts. ✓ • Information is processed data which conveys a meaning. ✓		2	2
6.5	• Use a primary key • Use indexing (No duplicates) property (Any ONE: ✓)		1	1
6.6	Content cannot be verified easily or attributed to a specific authority. ✓		1	1
				[10]

QUESTION 7: SOCIAL IMPLICATIONS

7.1	- Joystick - Touchpad/Trackpad - Touch screen - Trackball - Head control - Eye control (Any TWO: ✓✓)		2	2
7.2	Making use of Kensington locks✓		1	1
7.3	- Switch devices off when not in use. - Make use of energy star appliances. - Buy LED monitors which consumes less power. - Adjusting the brightness of the screen for less power consumption. - Putting your computer in SLEEP/HIBERNATION mode when not in use for some time. (Any THREE: ✓✓✓)		3	3
7.4	7.4.1	Social engineering is manipulating people to get access to their secrets, their data or their physical computers or premises. ✓ OR Social engineering is using tricks based on the social behavior, emotions and habits of people to get them to give away data or do things that they should not do.	1	3
	7.4.2	- Scan e-mail attachments before opening them. - Do not open e-mail messages if you do not know the sender. - Never click on links in e-mails if you do not trust the source. - Do not believe every e-mail message. THINK before you act. - Do not trust strangers around data. - Be suspicious and sceptical of offers that need something from you before you can access them. (Any TWO ✓✓)	2	
7.5	Software that tries to monitor and tract the way you use your computer and the information is then sent off to third parties without the user's consent. ✓		1	1
				[10]

QUESTION 8: SOLUTION DEVELOPMENT

8.1	- uses less ink/toner – therefore cheaper - promotes green computing - prints faster	(Any ONE advantage ✓)	1	1
8.2	Any ONE Advantage: ✓ - smaller file size - can be read by almost any device or app, i.e. portability ONE Disadvantage: ✓ - all formatting is lost		2	2
8.3	So that Word will only replace whole words (matching the letters in the 'Find' box), not parts of words or partial matches ✓ (Accept any suitable example to illustrate the principle)		1	1
8.4	Aug 18 ✓		1	1
8.5	Hanging indent ✓		1	1
8.6	POWER ✓		1	1
8.7	8.7.1 Nothing / 'blank' ✓		1	
	8.7.2 "distinction" (the value_if_false) not in double quote marks ✓		1	2
8.8	Filter ✓		1	1
8.9	- Class criteria must be "11A" or "11B" (or over two rows) ✓ - Cans criteria must be >=50 (or >49) ✓ - Show box for Cans must have a tick mark / be selected ✓		3	3
8.10	- Can be used to ensure that there are no duplicate records - Primary key field cannot be left empty	(Any ONE reason ✓)	1	1
8.11	- A cell phone number contains 10 digits, but the number is incorrect - A surname appears in a field for surnames, but it is the wrong surname	(Accept any ONE suitable example ✓)	1	1
				[15]
TOTAL SECTION B:				75

SECTION C

QUESTION 9: INTEGRATED SCENARIO

9.1	• Word processor: Microsoft Word/Libre Office Writer • Document publisher: Microsoft Publisher • Web development tool: Dreamweaver/Frontpage/Notepad++ • Browser: Internet Explorer/Edge/Chrome/Firefox • Image manipulation software: Photoshop/Gimp, etc. (Note to marker: Accept only one correct example of each type of software application) (Any TWO examples ✓✓)		2	2
9.2	• Better security • Better data transfer rates • Not affected by weather or physical obstructions (Any TWO advantages ✓✓)		2	2
9.3	• Wider audience • People can comment on articles • Automatic notifications to audience about new articles • Analytics on audience is possible (Any TWO advantages ✓✓)		2	2
9.4	• Source code is available in FOSS • FOSS is free • Proprietary source code is not available • Proprietary software may not be free (Any TWO reasons ✓✓)		2	2
9.5	9.5.1	• There is no Internet connection • Computer has a virus • Prevented by firewall settings • Not a licensed copy of Windows (Any TWO reasons ✓✓)	2	3
	9.5.2	• Windows will be vulnerable to security threats • Bugs in the operating system or other applications will not be fixed • Newer features will not be added (Any ONE implication: ✓)	1	
9.6	• Files suddenly start disappearing • Programs stop working properly • Free space on the computer suddenly gets greatly reduced • Error messages that you have not seen before start appearing • The computer no longer boots up • Your anti-virus software reports the threat or presence of a virus (Any TWO ways: ✓✓)		2	2

9.7	9.7.1	- User friendly layout - Allows for single record view - Images can be inserted for visual appeal - It would provide potentially more accurate data if the system is suitably designed - The system can be quickly adapted if there is additional data that needs to be captured, etc. (Any TWO reasons ✓✓)	2	4
	9.7.2	- Query - Filter - Sort (Any TWO ✓✓)	2	
9.8		- May prevent data theft - May prevent malware from external storage devices - May prevent unnecessary data from being loaded onto the computer (Any TWO reasons ✓✓)	2	2
9.9	9.9.1	Policy that outlines the rights and responsibilities of its users, especially in networked environments. ✓	1	3
	9.9.2	- To clearly list what the users are permitted and not permitted to do in order to protect them when they are using computers and when they are online - Include basic netiquette rules and responsible computer usage, as well as any other restrictions the organization might feel is necessary to implement such as restrictions related to Internet usage - Serve as a contract between the organization and the user summarising what they can and can't do as well as possible consequences of not complying with the policy - Place the responsibility of using the network in a responsible and ethical way, on the user (Any TWO reasons ✓✓)	2	
	9.9.3	- A code of conduct educating users and governing their behaviour using the computer network and the Internet with respect to safe use, privacy, etc. - Details on when and where portable storage devices such as flash disks and portable media players may be used - Details of restrictions about installing any hardware or software - Procedures to follow if users find they are victims of identity theft, malware such as viruses, cyber bullying or cyber stalking - Hints to avoid plagiarism and the breaking of copyright law - Clear consequences of violating conditions spelt out in the AUP (Any THREE: ✓✓✓)	3	
				[25]

