



Province of the  
**EASTERN CAPE**  
EDUCATION

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 11**

**NOVEMBER 2019**

**COMPUTER APPLICATIONS TECHNOLOGY P2**

**MARKS: 150**

**TIME: 3 hours**



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This question paper consists of 15 pages.

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**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 MyPassword
  - 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 <u>NIC</u> 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.

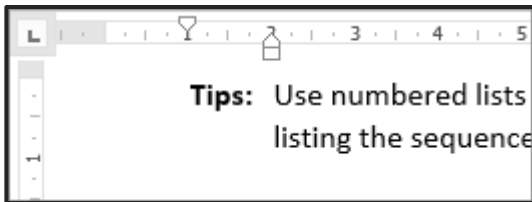
Distinguish clearly between the advantage and the disadvantage in your answer. (2)

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:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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]

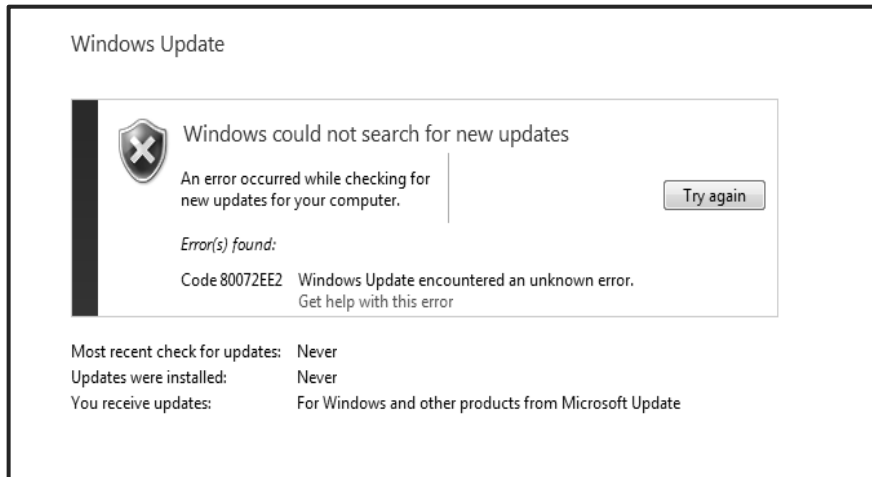
**TOTAL SECTION B: 75**

**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><b><u><i>Eastern Cape Athletics Meeting</i></u></b></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**

