Province of the
EASTERN CAPE
EDUCATION

Iphondo leMpuma Kapa: Isebe leMfundo
Provinsie van die Oos Kaap: Department van Onderwys
Porafensie Ya Kapa Botjahabela: Lefapha la Thuto

NATIONAL SENIOR CERTIFICATE

GRADE 12

SEPTEMBER 2026

COMPUTER APPLICATIONS TECHNOLOGY P2

MARKS: **150**

TIME: **3 hours**

This question paper consists of 17 pages.

Thank you for choosing www.ecexams.co.za to download examination documents.

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 of the ANSWER BOOK.

6. Leave a line after EACH sub-question.

7. Generally, one mark is allocated per fact; therefore, a 2-mark question would require TWO facts, etc.

8. Read the questions carefully. DO NOT give more than the question requires as this will NOT be marked.

9. All answers MUST be related to Computer Applications Technology.

10. Unless otherwise specified, answers such as 'cheaper', 'slower/faster', etc. will NOT be accepted.

11. Do NOT use brand names in your answers, unless specifically required.

12. Write neatly and legibly.

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.

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 numbers (1.1 to 1.10) in the ANSWER BOOK, for example 1.11 D.

1.1 Which ONE of the following utility programs is primarily used to detect and repair file system errors on the HDD?

A Disk Cleanup
B Disk Scanning
C Disk Defragmenter
D Backup (1)

1.2 A patch released by a developer is mainly intended to …

A upgrade hardware.
B install drivers.
C fix bugs and vulnerabilities.
D compress files. (1)

1.3 When a file is sent to a printer, it is normally placed in a queue; this process is called …

A waiting.
B buffering.
C multitasking.
D spooling. (1)

1.4 The speed of the … is commonly measured in GHz.

A RAM
B HDD
C SSD
D CPU (1)

1.5 C:\\Users\DanielS\Documents\SchoolWork\English.docx is an example of a …

A file path.
B file property.
C folder.
D file extension. (1)

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.

1.6 Which ONE of the following specifications refers to the number of colours that a pixel can represent?

A DPI
B Colour depth
C ISO rating
D Resolution (1)

1.7 Which ONE of the following file types will retain the original formatting, fonts, images, and layout, regardless of the software, operating system, or device used?

A .DOCX
B .PPTX
C .JPG
D .PDF (1)

1.8 A … is a reference, or comment placed at the bottom of a page in a document, corresponding to a superscript number or symbol in the main text.

A citation
B heading
C caption
D footnote (1)

1.9 Which ONE of the following spreadsheet functions does not use text data?

A UPPER
B COUNT
C LEN
D FIND (1)

1.10 Which database property would restrict the user from entering values greater than 50?

A Required
B Validation rule
C Indexed
D Field size (1)
[10]

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.

QUESTION 2: MATCHING COLUMNS

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

COLUMN A		COLUMN B	
2.1	A cyber-attack that floods a server	A	EULA
		B	Encryption
2.2	Specifically designed equipment to prevent computers, especially laptops, from being stolen from the workplace.	C	ROM
		D	Developer
2.3	A private, secure computer network restricted to an organisation, such as a school, used for internal communication, collaboration, and data sharing	E	Resolution
		F	AUP
2.4	A legally binding contract between a software provider and the user that defines the rules for installing, accessing, and using the program	G	Cache
		H	Bookmark
2.5	The component that stores the booting up instructions for the computer	I	
		J	DDoS
2.6	Free software where the source code is available to inspect and modify	K	Internet
		L	Hyperlink
2.7	Special high-speed memory that stores frequently or recently accessed data and programs	M	OSS
		N	Mail merge
2.8	A word processing feature that allows letters to be personalised by using data from an external source	O	Cable Lock
		P	Intranet
2.9	An electronic placeholder on a specific text or image for ease of navigation within long document	Q	SDD
		R	Flash
2.10	An HTML tag used to apply numbering to a list of items	S	Windows
		T	

(10 x 1) (10)

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.

QUESTION 3: TRUE/FALSE ITEM

Indicate whether the following statements are TRUE or FALSE. Write 'true' or 'false' next to the question numbers (3.1 to 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
A monitor is an output device.	True
Green computing refers to old computing devices that people throw away and that end up in landfill sites.	False – E-waste

3.1 A driver is software that allows the operating system to control a hardware device. (1)

3.2 Cloud computing is when a group of networked computers work together as a virtual supercomputer to perform large tasks, such as analysing huge sets of data or weather modelling. (1)

3.3 A WAN is a type of network connection between a smartwatch and a smartphone. (1)

3.4 The shortcut Alt + A is commonly used to select all the text in a document. (1)

3.5 A report in a database allows the records to be grouped and sorted by different fields in the table. (1)
[5]

TOTAL SECTION A: 25

Thank you for choosing www.ecexams.co.za to download examination documents.

SECTION B

QUESTION 4: SYSTEM TECHNOLOGIES

4.1 Study the advertisement of a smartphone and smartwatch below.

Samsung Galaxy S25 256GB Plus and Samsung Galaxy Watch7

6.2" FHD (1080 x 2340) 120 Hz
Octa-core (4.47 GHz Oryon)
512 GB storage and 12 GB RAM
Camera rear 50 MP + 12 MP + 10 MP
Camera front 12 MP
Galaxy AI
Dual SIM (2x SIM) or (1x SIM, 1x eSIM)
Android 15
NFC



The following questions are based on the Samsung Galaxy S25.

4.1.1 Give the name of the operating system found on this device. (1)

4.1.2 What type of storage would this type of device most likely have? Give TWO reasons for your answer. (3)

4.1.3 Explain why a device generally needs less memory than storage by referring to their function. (2)

4.1.4 Write down the specification that refers to the CPU. (1)

4.1.5 The front camera has a lower resolution than the rear cameras. Explain why this may be beneficial by referring to a practical example of how the front camera is typically used. (2)

4.1.6 Give the *refresh rate* of the screen display. (1)

4.1.7 Explain what the NFC specification would allow the device to do. (2)

The following questions are based on the Galaxy Watch7.

4.1.8 Name the technology that is used to connect the smartwatch to the smartphone. (1)

4.1.9 Give TWO practical advantages of wearing a smartwatch. (2)

4.2 Explain the importance of checking system requirements before installing software. (2)

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.

4.3 A friend has heard that the operating system can start using virtual memory when needed.

4.3.1 Define the term *virtual memory*. (1)

4.3.2 Why would the operating system need to start using virtual memory? (1)

4.4 Your aunt runs a small baking business from home, and she needs a printer for invoices and general admin tasks.

4.4.1 What type of printer would be suitable for her? Justify your answer. (2)

4.4.2 Give TWO reasons why a printer would not respond when a document is sent from a laptop. (2)

4.4.3 What type of user would your aunt be classified as? (1)

4.5 Briefly explain the purpose of compressing files. (1)

[25]

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.

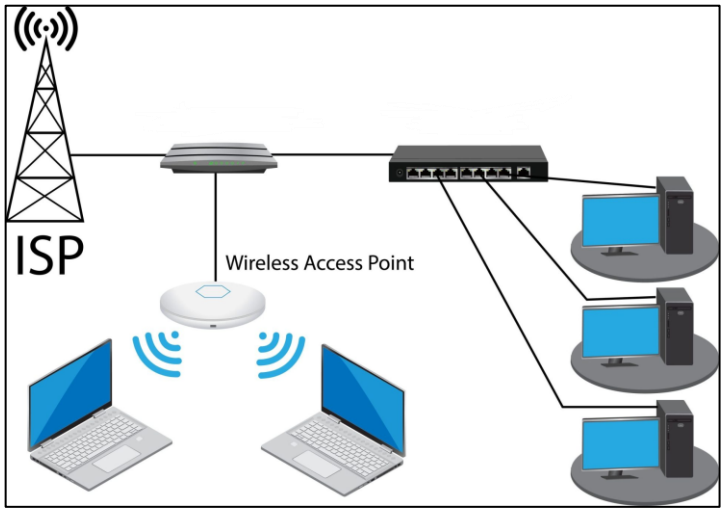
QUESTION 5: INTERNET AND NETWORK TECHNOLOGIES

5.1 A server plays a crucial role in any network.

5.1.1 Explain the role of a server in a network. (1)

5.1.2 Give an example of a type of server. (1)

5.2 Consider the diagram below and answer the questions that follow.



[From *https://techbldrs.com/blog/wireless-access-point-vs-a-wireless-repeater whats-the-better-solution/*]

5.2.1 Give the name for the device used to connect computers together in a network via a cable. (1)

5.2.2 Give TWO advantages of using a fibre cable compared to an UTP cable in a network. (2)

5.2.3 What is the purpose of the ISP? (1)

5.2.4 Explain what it means when your internet line is being *throttled* and also state why this happens. (2)

5.2.5 Explain what a *hotspot* in the above context is. (1)

5.3 Give TWO differences between *web-based* and *locally installed* applications, other than differences relating to cost. (2)

5.4 Most companies use e-mail as their main form of communication.

5.4.1 Give TWO netiquette rules to follow when typing an e-mail. (2)

5.4.2 Why would you use Bcc instead of Cc in an e-mail? (1)

5.4.3 Give an example of a popular web-based email service. (1)

[15]

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.

QUESTION 6: INFORMATION MANAGEMENT

6.1 A questionnaire is one of the sources used to gather information during the PAT.

6.1.1 Explain why open-ended questions in a questionnaire are more difficult to analyse statistically. (2)

6.1.2 Recommend a type of software application and explain how it can be used to analyse the questionnaire results. (2)

6.1.3 Name another type of source that can be used in the PAT. (1)

6.2 The author and date accessed are two items required when adding a source to a bibliography.

6.2.1 Explain why it is important to include the date on which a website was accessed. (1)

6.2.2 Give TWO other pieces of information that are generally needed when sourcing a website. (2)

6.3 Explain what the *objectivity* criteria means when evaluating the quality of information in a source. (1)

6.4 Give the purpose of the task definition in the PAT. (1)

[10]

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.

QUESTION 7: SOCIAL IMPLICATIONS

7.1 A friend clicked on a button to download a past examination question paper from a free online website, but then she no longer had control over her computer.

7.1.1 What is the general name given for when a user is tricked into clicking on a hidden or disguised button or link, causing an unintended action to take place? (1)

7.1.2 Explain what has most likely happened on their computer after the button was clicked. (1)

7.1.3 What is a computer called that is being controlled by an outside party? (1)

7.2 Give TWO ways in which you can protect yourself from becoming a victim of a ransomware attack. (2)

7.3 Describe a situation that would qualify as online harassment. (1)

7.4 Explain how information overload can negatively affect productivity. (2)

7.5 Give TWO ways in which large businesses can contribute to green computing. (2)

[10]

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.

QUESTION 8: SOLUTION DEVELOPMENT

8.1 Describe the tab stop settings applied to the following text:



Item Name..... Cost

Blink Dagger 2250

Black King Bar 3975

(2)

8.2 Give ONE difference between a *hyperlink* and a *cross-reference* in MS Word. (1)

8.3 Study the spreadsheet below and answer the questions that follow:
NOTE: Only the first few rows are displayed

	A	B	C	D	E	F	G	H	I	J	K
1	Learner	Code	Grade	Tickets Issued		Tickets Sold per Category			Total Value	Stars	Ticket Money Due
2				Number	Date	Stage	Crafts	Food			15-May
3	Dubeni, Lerato	ATO35	10	35	29-Apr	8	14	11	R198	#N/A	13-May
4	Richardson, Kayla	YLA15	9	15	29-Apr	4	6	3	R78	#N/A	13-May
5	Akhona, Bulelwa	LWA40	11	40	30-Apr	12	17	9	R228	#N/A	14-May
6	Hill, Samantha	THA10	12	10	06-May	3	2	4	R54	#N/A	15-May
7	Healey, Richard	ARD20	8	20	02-Mar	5	3	10	R108	#N/A	16-Mar
8	Rule, Susan	SAN35	11	35	21-Feb	7	12	13	R192	#N/A	06-Mar
9	Sidabane, Crystal	TAL20	10	20	18-Mar	6	5	8	R114	#N/A	01-Apr

8.3.1 Column B represents a code that has been created using part of the learner name (Column A) and the number of tickets (Column D) issued.

Write down the names of the functions that have been used in order to display the code. (2)

8.3.2 Write the custom format used to display the dates in Column E and K. (2)

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.

8.3.3 The number of stars that need to be displayed in **COLUMN J** is calculated based on the **Total Value (COLUMN I)** and the following table in the **Stars** worksheet.

	A	B	C
1	R0	0-10 tickets	*
2	R66	11-20 tickets	**
3	R126	21-30 tickets	***
4	R186	31-40 tickets	****

The following function was entered in **cell J3**:
=VLOOKUP(I3,Stars!A1:C4,2,true)

Give TWO corrections that need to be made to the function so that the correct number of stars will be shown, even when copied down to the other cells. (2)

8.3.4 Explain how Freeze Panes can benefit the user when using the spreadsheet. (1)

8.4 Study the extract of an HTML web page below and answer the questions that follow.

```
<font type="Broadway" colour="Red">
</font>
<h2> Gaming conventions </h2>

<a href="https://www.thegamer.com/upcoming-video-game-conventions/">Click here</a>
    to see video game conventions for 2026.

<!--Add table-->
```

8.4.1 Give THREE reasons why the heading Gaming conventions will not be displayed in a red Broadway font. (3)

8.4.2 Which part of the text will be displayed as a blue, underlined hyperlink? (1)

8.4.3 What type of tag is *<!-- Add table -->* ? (1)
[15]

TOTAL SECTION B: 75

Thank you for choosing www.ecexams.co.za to download examination documents.

SECTION C

QUESTION 9: INTEGRATED SCENARIO

Smart campuses in South Africa are rapidly emerging, focusing on integrating AI, advanced network infrastructure, and automation for sustainability. Smart campuses, such as UNISA and the University of Pretoria, leverage full-coverage Wi-Fi 6, IoT sensors, cloud computing, and AI-driven analytics to create sustainable, efficient, and interactive environments.

9.1 Define the term *Internet of Things (IoT).* (1)

9.2 Give TWO examples of how IoT can be used on campus. (2)

9.3 Explain ONE possible disadvantage of using IoT devices in the campus. (1)

9.4 Universities are including an AI and BYOD policies in their AUP for learners.

9.4.1 What is an AUP? (Do not simply expand the acronym) (1)

9.4.2 What is a BYOD policy? (1)

9.4.3 Give TWO disadvantages of having a BYOD policy for the university. (2)

9.4.4 Explain what AI is and how it can be used by learners. (2)

9.4.5 Discuss ONE ethical concern regarding the use of AI. (2)

9.5 Cloud computing has become a foundational element of modern education, transforming how institutions operate and how students engage with learning materials.

9.5.1 Define the term *cloud computing*. (1)

9.5.2 Describe ONE benefit of cloud computing for students. (1)

9.6 Universities are considering making use of Artificial Reality (AR) and Virtual Reality (VR).

9.6.1 Give TWO differences between *AR* and *VR*. (2)

9.6.2 Which technology between AR and VR would be best suited in education? Give TWO reasons to justify your answer. (3)

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.

9.7 Explain how M-Learning could benefit a student, other than being able to learn on-the-go. (1)

9.8 A database is used to store the details of the students who register every year.

The following query was created in order to extract the students who registered in 2026 for any medical courses, i.e. the word medical appears in the course name.

Field:	Surname	IDNo	CourseName	RegistrationYear
Table:	Details	Details	Details	Details
Sort:				
Show:	☑	☑	☑	☑
Criteria:				2026
or:			Like “Medical*”	

9.8.1 Give TWO reasons as to why the query would not give the desired result. (2)

9.8.2 Which field above would be suitable to be used as a primary key in the table? (1)

9.8.3 Which field would make logical sense to not display when the query is run? Give a reason for your answer. (2)

[25]

Thank you for choosing www.ecexams.co.za to download examination documents.

QUESTION 10: INTEGRATED SCENARIO

Read the extract below and answer the questions that follow.

BUSINESSTECH

BANKING BUSINESS FINANCE ENERGY MOTORING INDUSTRY NEWS PROPERTY TRE

GOVERNMENT

Staff Writer

6 Dec 2025

The end of driving licences as you know it in South Africa is coming



The Department of Communications and Digital Technologies (DCDT) has demonstrated the use of a new digital licence and renewal system at the Global Digital Public Infrastructure Summit.

DCDT Minister Solly Malatsi showcased a digital driving licence renewal process on the MyMzansi app during his opening speech at the summit.

[*From https://businesstech.co.za/news/government/845254/the-end-of-driving-licences-as-you-know-it-in-south-africa-is-coming/*]

10.1 The internet has allowed the government to streamline their services and the delivery of these services to the public.

10.1.1 Give TWO advantages of using government internet services. (2)

10.1.2 Give ONE example of a government internet service in South Africa, other than the one mentioned in the extract above. (1)

10.1.3 Define the term *digital divide* and evaluate whether these services increase or reduce the digital divide in South Africa. (2)

10.2 People would have to supply their personal information after creating an account in the app.

10.2.1 If you have an Android smartphone, where can you download the app from? (1)

10.2.2 Explain why biometric security would be a more secure method of logging into the app than using a password. (2)

10.2.3 Explain why a user might want to add multi-factor authentication for this particular app. (2)

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.

10.3 People would need to make an online payment for their driver's licence.

10.3.1 Give TWO methods of indicating that a website address is secure. (2)

10.3.2 Give TWO ways in which banks try to protect their clients with regard to online payments. (2)

10.3.3 What is the general name given for an online payment through a banking website/app? (1)

10.4 Videos will be uploaded onto their website on how to download, register and make use of the app.

10.4.1 Explain the difference between *uploading* and *downloading*. (2)

10.4.2 Explain the concept of *streaming* a video. (1)

10.5 In some cases, a video call would need to be made to you in order to ensure that they are dealing with an actual human.

10.5.1 Give an example of a software application that can be used for the video call. (1)

10.5.2 Give the name of the protocol that makes it possible for voice to be transmitted over a video call. (1)

10.5.3 Describe TWO video conferencing etiquette practices. (2)

10.6 Consider the spreadsheet extract of the government employees working hours below and answer the question that follows.

	A	B	C
1	**Start time**	**End time**	**Hours**
2	14:00	16:00	0

The formula **=B2–A2** was entered in **cell C2** to calculate the number of hours between the Start time and the End time. The formula is partially correct, but it currently returns an answer of 0.

Write down the (full) formula that must be used, that will return the correct answer of 2. (The correct formatting has already been applied.) (2)

10.7 The average amount of hours worked by all employees in a week was calculated in a spreadsheet using the following formula:

=ROUNDDOWN(36.59,1)

Write down the result of the formula. (1)

[25]

TOTAL SECTION C: 50
GRAND TOTAL: 150

Copyright reserved

Thank you for choosing www.ecexams.co.za to download examination documents.