



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SENIOR CERTIFICATE EXAMINATIONS/ NATIONAL SENIOR CERTIFICATE EXAMINATIONS

COMPUTER APPLICATIONS TECHNOLOGY P1

2023

MARKS: 150

TIME: 3 hours

**This question paper consists of 18 pages,
an HTML tag sheet, an input mask character sheet, two pages for planning and
a separate information sheet.**

INSTRUCTIONS AND INFORMATION

1. Owing to the nature of this practical examination, it is important to note that, even if you complete the examination early, you will NOT be permitted to leave the examination room until all the administrative tasks associated with the examination have been finalised. During the examination, the standard examination rules regarding leaving the examination room apply.
2. If you are working on the network, or the data files have been preloaded on your system, you must follow the instructions provided by the invigilator/educator.
3. At the end of the examination, you must make sure that ALL your answer files are saved on the network/computer as explained to you by the invigilator/educator.
4. Make absolutely sure that all files can be read. Do NOT save unnecessary files/folders and **do NOT hand in duplicate answer files/folders. Do NOT delete any original files that you did not work on.**
5. The information sheet that has been provided with the question paper **MUST BE COMPLETED AFTER THE THREE-HOUR EXAMINATION SESSION.** Hand it to the invigilator at the end of the examination.
6. A copy of the master files will be available from the invigilator. Should there be any problems with a file, you may request another copy from the invigilator.
7. This question paper consists of SEVEN questions. Answer ALL the questions.
8. Read through each question before answering or solving the problem. Do NOT do more than is required by the question.
9. Ensure that you save each document using the file name given in the question paper. Save your work regularly as a precaution against possible power failures.
10. You may NOT use any resource material.
11. Accuracy will be taken into account.
12. Ensure that the regional settings are set to South Africa and date and time settings, number settings and currency settings are correctly set.
13. In all questions involving word processing, you should set the language to English (South Africa). The paper size is assumed to be A4 Portrait, unless instructed otherwise. Use centimetres as the unit of measurement.

14. Ensure that the Developer tab and Ruler are activated.
15. Ensure that the decimal symbol is set as a full stop ('.') and the list separator is set as a comma (',').
16. Formulae and/or functions must be used for ALL calculations in questions involving spreadsheets. Use absolute cell references only where necessary to ensure that formulae are correct when you copy them to other cells in a spreadsheet.
- NOTE:** All formulae and/or functions should be inserted in such a manner that the correct results will still be obtained even if changes are made to the existing data.
17. You may NOT use a word processing program such as Word to answer the HTML question.
18. Borders around images or screenshots in this question paper are intended for clarity. Do NOT insert borders unless you are instructed to do so.
19. The examination data folder that you receive with this question paper contains the files listed below. Ensure that you have all the files before you begin with this examination.

• 1CapePoint	Word processing document
• 2Dates	Zipped file
• 2Mountain	Word processing document
• 2Table	Image
• 3Marathon	Spreadsheet
• 4Accommodation	Spreadsheet
• 5Tours	Database
• 6_1Banner	Image
• 6_1Fearless	Image
• 6_1Interactive	HTML file
• 6_1Nature	Image
• 6_1Urban	Image
• 6_2Arrows	Image
• 6_2Big6	HTML file
• 7CapeTown	Word processing document
• 7Tourists	Spreadsheet

SCENARIO

The Table Mountain National Park (TMNP) stretches from the north of Cape Town, down the Cape Peninsula to Africa's most southern point, the Cape of Good Hope. This extensive park makes Cape Town a spectacular tourist destination.

QUESTION 1: WORD PROCESSING

A document was prepared giving five reasons to visit the beautiful Cape Point.

Open the **1CapePoint** word processing document and insert your examination number in the footer.

1.1 Make the following changes in the header:

- Remove the double strikethrough from the text 'CAPE TOWN, SOUTH AFRICA'.
- Change the position of the header to 1 cm from the top of the first page. (2)

1.2 Set the hyphenation so that words in capital letters are NOT hyphenated. (1)

1.3 Insert a custom mark footnote on the word 'Reasons', found in the main heading, to display as:

_____ (3)
@ Elements of life

1.4 Find the text that starts with 'The Cape Peninsula ...' and ends with '... 5 reasons why.' and modify it to display as shown below.

NOTE: The spacing between the columns is 1 cm. (3)

- 1.5 Find the text 'Question/Vraag 1.5' and replace this text with a citation referencing the source Matthew Sterne. Do NOT display the year. (2)
- 1.6 Find the comment and reply to the comment with the text 'sometimes'. (1)
- 1.7 Edit the watermark as follows:
- Change the font type to Arial Narrow.
 - Format the shape of the WordArt to an 'Arch Down (Curve)' shape. (2)
- 1.8 Find the text below the heading 'Funicular Tickets' that starts with 'Description' and ends with 'R35'.

Change the layout of this text to appear as shown below.

Funicular Tickets			
Description	Adults	Children	*Pensioners
Return Ticket.....	R85	R45	R50
One-way Ticket.....	R70	R35	

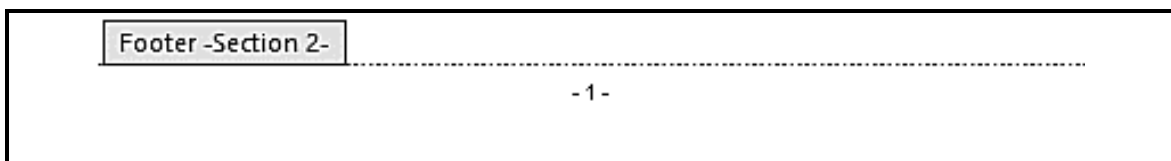
- 1.9 Apply a 3 pt page border to the document and set the top margin to appear 12 pt from the text. (4)
- 1.9 Apply a 3 pt page border to the document and set the top margin to appear 12 pt from the text. (3)
- Save and close the **1CapePoint** word processing document. [21]

QUESTION 2: WORD PROCESSING

A document was created with information about Table Mountain.

Open the **2Mountain** word processing document and insert your examination number in the header.

- 2.1 Add the text 'Mountain' as the subject to the file properties of the document. (1)
- 2.2 Replace the picture on the cover page with the **2Table** picture. Apply any half reflection effect to this picture. (2)
- 2.3 Insert automatic page numbers to display as shown below.

**NOTE:**

- Page numbers should NOT appear in Section 1. (3)

- 2.4 Insert a Table of Contents using the Distinctive format below the heading 'Question/Vraag 2.4' to appear as follows:

Question/Vraag 2.4	
<i>Table Mountain</i> _____	- 1 -
<i>History</i> _____	- 2 -
<i>Hiking</i> _____	- 2 -
Free Walking Guides _____	- 3 -
<i>Facts</i> _____	- 4 -
<i>Access</i> _____	- 5 -
Cableway _____	- 5 -
<i>Cableway Ticket Sales</i> _____	- 6 -
Cable Car Tickets and Hours _____	- 6 -

- NOTE:** Ignore the format of the page numbering if it is different. (4)

- 2.5 Find the text 'Question/Vraag 2.5' below the heading 'Table Mountain' and replace this text with a cross-reference to the bookmark 'cableway'. Display the page number only. (2)

2.6 Find the heading 'Hiking' and the text below it that ends with '... with a group.'

Apply paragraph formatting to this heading and the text so that it will always remain together. (1)

2.7 Find the numbered list below the heading 'Facts'. In the Multilevel list dialog, a style TableList appears below the option List Styles.

In the TableList style, change the number style of the second level to a Webdings bullet symbol: 🗑️ (character code: 77).

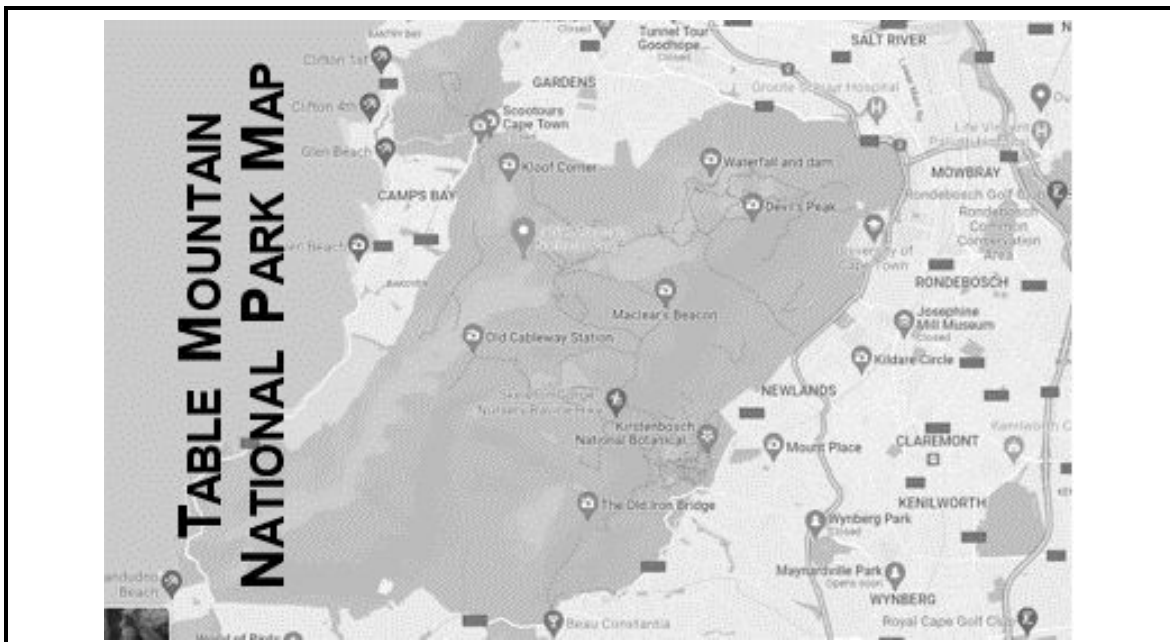
HINT: Hover over the list below the List Styles option to view the names of the styles. (3)

2.8 Find the picture below the heading 'Access' and make the following changes:

- Format the Picture Layout to that of the 'Bending Picture Blocks' SmartArt graphic.
- Insert the text 'View' in the shape that is part of the SmartArt graphic.
- Format the size of the SmartArt graphic to exactly 7 cm high and 10 cm wide. (3)

2.9 Find the text box above the map that contains the subheading 'Table Mountain National Park Map'.

Adjust the text and the text box so that it appears on the map image as follows:



(2)

Save and close the **2Mountain** word processing document.

2.10 Locate the **2Dates** zipped file and do the following:

- Extract the **2Dates** file by using the password: **#d/m**
- Sort the table according to the dates on which the places were opened, starting with the most recent opening date.

(3)

Save and close the **2Dates** word processing document.

[24]

QUESTION 3: SPREADSHEET**NOTE:**

- Use formulae and/or functions for ALL calculations in the spreadsheet.
- Use absolute cell references ONLY where necessary to ensure that formulae are correct when you copy it to other cells in a spreadsheet.
- Insert formulae and/or functions in such a manner that the correct results will still be obtained even if values are changed in the existing data.
- Should you need to use building blocks, use the space allocated for this in the spreadsheet data file.

Open the **3Marathon** spreadsheet which contains details about the top 50 qualifying athletes for the 2023 Oceans Meet Marathon.

3.1 Delete **Sheet3** from the workbook. (1)

Work in the **Participants** worksheet.

3.2 Set the print area to **cells A12:E62**. (1)

3.3 Add the text 'Marathon Logo' as the Alt Text of the image in **cell A3**. (1)

3.4 Insert a function in **cell F5** to determine the average qualifying time. (1)

3.5 The distance of the race is stored in **cell F3**. For every complete 5 km from the starting point of the race, a medical station will be placed on the route. The start and finish points will also have a medical station.

Insert a formula in **cell F8** to calculate how many stations will be placed on the route. (4)

3.6 Each of the 50 athletes will receive a special entry number.

Generate an entry number in **cell B20** for the athlete, Kuda, as follows:

- A number between 1 and 50; followed by
- The first two letters of the athlete's name; followed by
- The registration number of the athlete (6)

3.7 During the race, athletes will wear wristbands in different colours according to their age group.

Insert a VLOOKUP function in **cell J17** to display the colour of the wristband that Lucky will wear. Use the data in the **Band** worksheet.

Copy the function down to the rest of the cells in **column J**. (4)






Save and close the **3Marathon** spreadsheet. [18]

QUESTION 4: SPREADSHEET**NOTE:**

- Use formulae and/or functions for ALL calculations in the spreadsheet.
- Use absolute cell references ONLY where necessary to ensure that formulae are correct when you copy it to other cells in a spreadsheet.
- Insert formulae and/or functions in such a manner that the correct results will still be obtained even if values are changed in the existing data.
- Should you need to use building blocks, use the space allocated for this in the spreadsheet data file.

Open the **4Accommodation** spreadsheet that contains information about the price and grading of accommodation in Cape Town.

The spreadsheet contains the following symbols to indicate facilities:

	Pets allowed		Spa available
	Gym available		Wi-Fi available
	Swimming pool available		

Work in the **Accom** worksheet.

4.1 Change **cells A2:M2** and its contents to display as follows:

<p>-----</p> <p>Cape Town - Accommodation</p> <p>Kaapstad - Verblyf</p> <p>-----</p>	(3)
--	-----

4.2 Insert a function in **cell C4** to determine how many of the places do NOT allow pets. (1)

4.3 Distance from the airport to a place of accommodation is displayed as follows:

- The six shortest distances: Short
- Distances between the six shortest distances and 100 km: Medium
- Distances greater than 100 km: Long

Insert a nested IF function in **cell F10** to display the distance for the Boutique Hotel and Guest House. (7)

4.4 Use an AND function in **cell G10** to return 'TRUE' if the price per room is less than R1 000 and the place has a pool. (2)

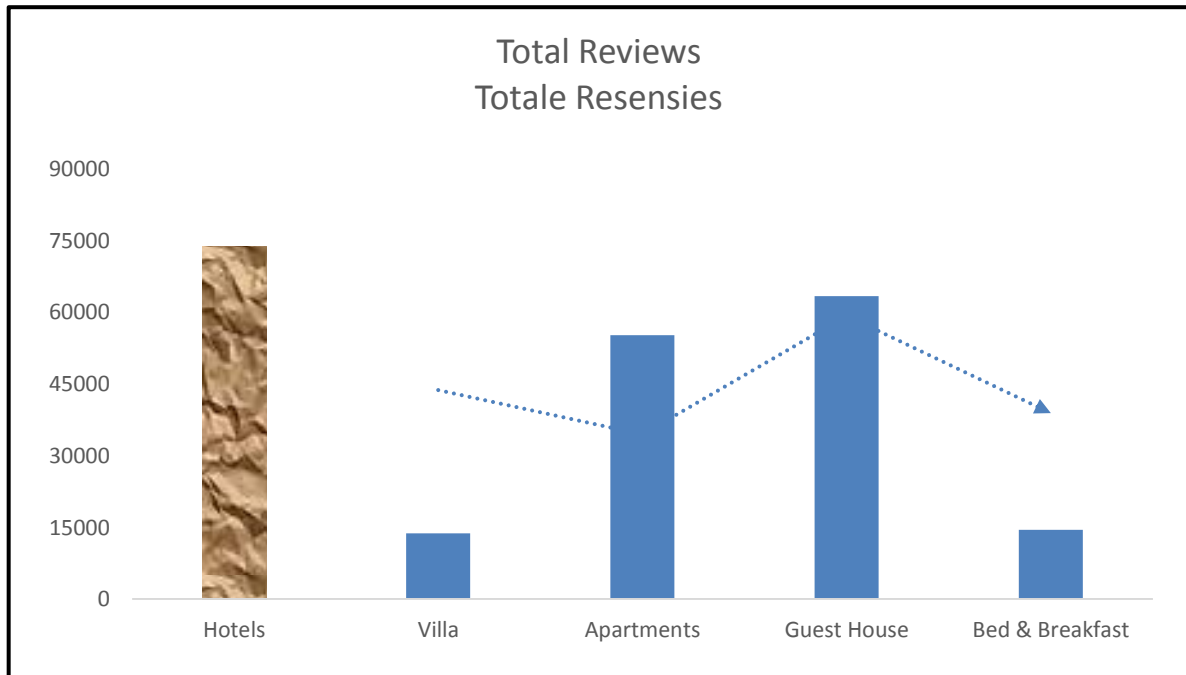
4.5 During the off-peak season, places of accommodation give a 12.5% discount on the price per room.

Insert a formula in **cell M13** to calculate the price of accommodation during the off-peak season, after the discount has been given.

Format the amount to display in the same format as the rest of the values in the column. (3)

Work in the **Q4_6** worksheet that contains the number of reviews for each of the accommodation types.

4.6 Create a column chart using the data series **A1:B6** to display the total number of reviews for each of the accommodation types as follows:



NOTE: The 'Hotels' bar has a Paper bag texture fill. (6)

Save and close the **4Accommodation** spreadsheet. [22]

QUESTION 5: DATABASE

The **5Tours** database stores information regarding bookings for tours and activities in and around Cape Town.

NOTE: Accept/Approve any messages if they appear.

Open the **5Tours** database.

5.1 Open the **tbl5_1** table in Design View.

5.1.1 Modify the properties of the *IDNo* field as follows:

- Set an appropriate field size.
- Set the field properties so that records are uniquely identified. (2)

5.1.2 Add 'Safari' as a value list option to the *Experience* field.

Change the lookup properties so that tourists can choose more than one option as an experience type. (2)

5.1.3 Change the properties of the *Date* field to only accept dates from the beginning of July 2023 to the end of August 2024. Display an appropriate message if the date entered is incorrect. (4)

5.1.4 Change the *Picture* field as follows:

- Set an appropriate data type so that a tourist can upload their ID photo.
- Move the field to appear below the *IDNo* field.
- Change the properties so that the heading 'IDPhoto' will display in Datasheet View, instead of the heading 'Picture'.

NOTE: Do not rename the *Picture* field. (3)

Switch to Datasheet View.

5.1.5 Change the colour of the gridlines to black AND set the option to display only the horizontal gridlines. (2)

Save and close the **tbl5_1** table.

5.2 Open the **frm5_2** form, based on the **tblActivities** table, in Design View, and modify the form as follows:

- Change the 'Display when' property of the image so that the image will only display on the screen.
- Apply conditional formatting to the *Duration* field to compare records in a yellow bar colour. Display the bar only.

Save and close the **frm5_2** form.

(4)

5.3 Open the **qry5_3** query, based on the **tblActivities** table, in Design View.

Display all the tours where morning activities include game drives with transport OR shark cage diving.

Save and close the **qry5_3** query.

(4)

5.4 Create a query named **qry5_4** based on the **tblActivities** table as follows:

Experience	CountOfTourName
Adventure	14
Biking	11
Culture	4
Hiking	1
Safari	6
Total	36

NOTE:

- The records in the *Experience* field
- The last row total is calculated in Datasheet View

Save and close the **qry5_4** query.

(5)

5.5 Open the **qry5_5** query, based on the **tblActivities** table, in Design View.

Insert a calculated field *Hours* to determine how many hours each tour will take, based on the *Duration* field. Display only the tours that will take a day or longer.

HINT: Refer to field descriptions in the Design View of the table.

Save and close the **qry5_5** query.

(4)

5.6 Open the report called **rpt5_6** based on the **tblActivities** table.

Modify the report as shown below.

Experiences		
Experience	TourName	CostPerPerson
Adventure		R895.00
	GWS Diving (Gansbaai)	R1 750.00
	Tree Top Adventure	R895.00
	Greenland Hike Tour	R2 717.00
	PKL Vintage Sidecar Adventur	R2 985.00
	Old Scenic Helicopter Flights	R1 550.00
	Old Scenic Helicopter Flights	R2 200.00
	Old Scenic Helicopter Flights	R2 300.00
	Old Scenic Helicopter Flights	R2 950.00
	Old Scenic Helicopter Flights	R5 800.00
	Water Action Adventure	R1 995.00
	GWS Diving (Gansbaai)	R2 050.00
	156 J Horse Riding Adventure	R2 195.00
	PKL Vintage Sidecar Adventur	R2 650.00
Biking	GWS Diving (False Bay)	R2 500.00
		R600.00
	CHT Bikes Tour	R870.00
	POT Bike & Hike Tour	R1 200.00
	CHT Bikes Tour	R890.00
	CHT Bikes Tour	R820.00
	QTO Arts & Bikes Tour	R620.00
HGT City Cycle Tour	R600.00	
	CHT Bikes Tour	R720.00

NOTE:

- Grouping does not split over pages.
- Ignore any textbox borders.

(5)

Save and close the **rpt5_6** report.

Save and close the **5Tours** database.

[35]

QUESTION 6: WEB DESIGN (HTML)

NOTE:

- You may NOT use a word processing program such as Word to answer the HTML questions.
- An HTML tag sheet has been attached for reference.
- All files needed to complete this question can be found in the examination folder.

You are required to modify web pages about a new interactive virtual experience for tourists visiting Cape Town.

6.1 Open the incomplete **6_1Interactive** file in a web browser and also in a text/HTML editor (NOT a word processing program such as Word).

Your final web page should look like the example below.

123456789

#FindYourFreedom is a first-of-its-kind experience that uses gaming style graphics to empower global travellers to choose their Mother City adventure, where they are taken on the path of the Fearless Foodie, Urban Adventurer and Nature Warrior. This is a wonderful new way to connect to the Cape Town Dig 6: Cape Point, Kirstenbosch Garden, V&A Waterfront, Robben Island, Table Mountain and Groot Constantia Wine Farm.

The Characters			
Life Motto	<i>"A journey of taste is the path to true happiness"</i>	<i>"Life is art. We're all collaboratively creating"</i>	<i>"Real wealth is experiencing the natural world"</i>
Hobbies	Wine tasting; eating out; recipe testing	City wandering; museum hopping; theatre visits	Surfing; kayaking; hiking; discovering flowers
Powers	<ul style="list-style-type: none"> ▪ finding hidden food spots ▪ crafting cocktails ▪ discovering ethnic food 	<ul style="list-style-type: none"> ▪ setting trends ▪ finding city secret gems ▪ being effortlessly cool 	<ul style="list-style-type: none"> ▪ finding secret beaches ▪ naming birds and flowers ▪ lighting magical campfires

Choose your character

NOTE:

- Use the example on the previous page as a guide when answering this question.
- Question numbers appear as comments in the coding to indicate where you should insert the answer(s). Do NOT delete these comments.

6.1.1 Insert your examination number between the 'center' tags to display in bold text.

NOTE: The number on the screenshot is only an example. (1)

6.1.2 Insert HTML code so that the image appears next to the text 'Find your Freedom!' as displayed in the screenshot. (1)

6.1.3 Modify the horizontal line to display across 80% of the web page. (1)

6.1.4 Modify the code so that the text colour above the table appears the same as in the table. (1)

6.1.5 Insert the **6_1Urban** image to match the other images as shown in the screenshot. (2)

6.1.6 Modify the code so that the words 'discovering flowers' will display on the next line, with no open line between the text. (1)

6.1.7 Edit the numbered list in the second column to appear the same as the other two lists found in the last row of the table. (1)

6.1.8 Modify the code so that the link will direct the user to the web address given in the data. (1)

Save and close the **6_1Interactive** file.

6.2 Open the incomplete **6_2Big6** file in a web browser and also in a text/HTML editor (NOT a word processing program such as Word).

Modify the HTML code so that your final web page displays like the example below.



NOTE: The size of the spacing between the cells is 50.

(5)

Save and close the **6_2Big6** file.

ONE mark will be allocated for closing tags and correct nesting in both the web pages.

(1)
[15]

QUESTION 7: GENERAL

7.1 Open the **7CapeTown** word processing document.

7.1.1 Change the inside borders of the table to any blue colour. (1)

7.1.2 Modify the heading row of the table to appear as shown below.

Tourist Name	Tourist Surname	2020/2021 Visits	2022/2023 Visits	Points
Refiloe	Masondo	3	1	500
Lisa	Roberts	8	5	1000
Malcolm	Adam	2	2	500

(1)

7.1.3 A tourist receives points that can be used as discount on future travels.

Insert a formula to calculate the points for Allan Nel as follows:

- Determine the total visits from 2020 to 2023, then
- Display 1 000 if the total visits are more than 5, otherwise
- Display 500

(5)

Save and close the **7CapeTown** word processing document.

7.2 Open the **7Tourists** spreadsheet.

Work in the **List** worksheet.

7.2.1 Do the following:

- Apply a spreadsheet feature to **column A** to arrange the text into columns.
- Find and replace all occurrences of the word 'Maybe' with the word 'No' in a red font.

(3)

Work in the **Details** worksheet.

7.2.2 Every year tourists receive a message, one month before their birthday, about a special voucher that they can use when they book a trip.

Use a combination of functions in **cell D2** to determine the date in the current year on which Adriaan Barnard received/will receive a message. The current year must be entered as a function.

(5)

Save and close the **7Tourists** spreadsheet.

[15]**TOTAL: 150**

HTML TAG SHEET

Basic Tags	
Tag	Description
<body></body>	Defines the body of the web page
<body bgcolor="pink">	Sets the background colour of the web page
<body text="black">	Sets the colour of the body text
<head></head>	Contains information about the web page
<html></html>	Creates an HTML document – starts and ends a web page
<title></title>	Defines a title for the web page
 	Inserts a line break
<!-- -->	Comment
Text Tags	
Tag	Description
<h1></h1>	Creates the largest heading
<h6></h6>	Creates the smallest heading
	Creates bold text
<i></i>	Creates italic text
<u></u>	Creates underlined text
	Sets size of font, from "1" to "7"
	Sets font colour
	Sets font type
Links Tags	
Tag	Description
	Creates a hyperlink
	Creates an image link
	Creates a target location in the document
	Links to a target location created somewhere else in the document
	Links to an e-mail address
Formatting Tags	
Tag	Description
<p></p>	Creates a new paragraph
<p align="left">	Aligns a paragraph to the "left" (default), can also be "right" or "center"
<center></center>	Centres a paragraph, image or section
	Creates a numbered list
<ol type="A","a","I","i","1">	Defines the type of numbering used
	Creates a bulleted list
<ul type="disc","square","circle">	Defines the type of bullets used

Formatting Tags continued	
Tag	Description
	Inserted before each list item, and adds a number or symbol depending on the type of list selected
	Adds an image
	Aligns an image: can be "right", "bottom", "top"
<p align="center"></p>	Aligns an image in the "center", can also be "middle"
	Sets the size of the border around an image
	Sets the height and width of an image
	Displays alternative text when the mouse hovers over the image or when the image is not found
<hr/>	Inserts a horizontal line
<hr size="3"/>	Sets size (height) of a line
<hr width="80%"/>	Sets the width of a line, in percentage or absolute value
<hr color="ff0000"/>	Sets the colour of the line
Table Tags	
Tag	Description
<table></table>	Creates a table
<tr></tr>	Creates a row in a table
<td></td>	Creates a cell in a table
<th></th>	Creates a table header (a cell with bold, centred text)
<table width="50">	Sets the width of the table
<table border="1">	Sets the width of the border around the table cells
<table cellspacing="1">	Sets the space between the table cells
<table cellpadding="1">	Sets the space between a cell border and its contents
<tr align="left">	Sets the alignment for cell(s) ("left", can also be "center" or "right")
<tr valign="top">	Sets the vertical alignment for cell(s) ("top", can also be "middle" or "bottom")
<td colspan="2">	Sets the number of columns a cell should span
<td rowspan="4">	Sets the number of rows a cell should span

INPUT MASK CHARACTER SHEET

CHARACTER	DESCRIPTION
0	Digit (0 to 9, entry required, plus [+] and minus [-] signs not allowed)
9	Digit or space (entry not required, plus [+] and minus [-] signs not allowed)
#	Digit or space (entry not required; spaces are displayed as blanks while in Edit mode, but blanks are removed when data is saved; plus [+] and minus [-] signs allowed)
L	Letter (A to Z, entry required)
?	Letter (A to Z, entry optional)
A	Letter or digit (entry required)
a	Letter or digit (entry optional)
&	Any character or a space (entry required)
C	Any character or a space (entry optional)
.,:;- /	Decimal placeholder and thousand, date and time separators (The actual character used depends on the settings in the Regional Settings Properties dialog box in the Windows Control Panel.)
<	Causes all characters to be converted to lower case
>	Causes all characters to be converted to upper case
!	Causes the input mask to display from right to left, rather than from left to right. Characters typed into the mask always fill it from left to right. You can include the exclamation mark anywhere in the input mask.
\	Causes the character that follows to be displayed as the literal character (e.g. \A is displayed as just A)

YOU MAY USE THIS PAGE FOR ANY PLANNING PURPOSES.

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Examination sticker

150**COMPUTER APPLICATIONS TECHNOLOGY P1 – JUNE 2023****INFORMATION SHEET** (to be completed by the candidate AFTER the 3-hour session)

CENTRE NUMBER _____

EXAMINATION NUMBER _____

WORKSTATION NUMBER _____

SUITE USED (Mark appropriate box with a cross (X))	Microsoft Office 2013	Microsoft Office 2016	Microsoft Office 2019	Office 365/ Microsoft Office 2021	
WEB BROWSER USED (Mark appropriate box with a cross (X))	Mozilla Firefox	Google Chrome	Internet Explorer	Microsoft Edge	Other (Specify)

FOLDER NAME _____

Candidate must enter the file name(s) used for each answer. Tick if saved and/or attempted.

Question Number	File name	Saved (✓)	Attempted (✓)	Maximum Mark	Mark Achieved	Marker Initial/Code
1	1CapePoint			21		
2	2Mountain			24		
	2Dates					
3	3Marathon			18		
4	4Accommodation			22		
5	5Tours			35		
6	6_1Interactive			15		
	6_2Big6					
7	7CapeTown			15		
	7Tourists					
TOTAL				150		

Comment: (For office/marker use only)
