basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

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GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY P1

NOVEMBER 2022

MARKS: 150

TIME: 3 hours

This question paper consists of 17 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.

|	
• 1Poster	Zipped file
• 1Tourism	Word processing file
• 2Competition	Word processing file
• 3Tourists	Spreadsheet
• 4Sightings	Spreadsheet
• 5Bookings	Database
• 5Logo	Image
• 6_1Beach	Image
• 6_1Dolphin	HTML file
• 6_2Flamingo	Image
• 6_2Heritage	HTML file
• 7BigFive	Spreadsheet
• 7Map	Word processing file
• 7Travellers	Spreadsheet
• 7TravelMode	Database

SCENARIO

KwaZulu-Natal offers many tourist attractions, such as beautiful beaches, mountains, world heritage sites and numerous game reserves.

QUESTION 1: WORD PROCESSING

Open the **1Tourism** word processing document which is an extract of a tourism report from KwaZulu-Natal.

1.1   Change the font of the text 'Extract from Report' to small caps.   (1)

1.2   Apply a text fill effect to the WordArt <u>text</u> 'KWAZULU-NATAL TOURISM' as follows:

   - Rectangular type gradient fill
   - First gradient stop at the 60% position   (3)

1.3   Modify the style named Showcasting so that all the subheadings will display as shown below.


(3)
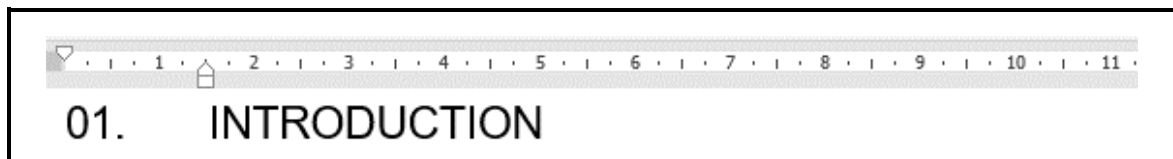
1.4   Find the citation in the third paragraph that refers to the '(Department of Statistics South Africa)'.

        Convert the citation to static text.   (1)

1.5   Find the text 'Question/Vraag 1.5' and replace it with a Circle Relationship SmartArt graphic as shown below.

        Format the font size of the text 'Tourism' to 14 pt.

(4)
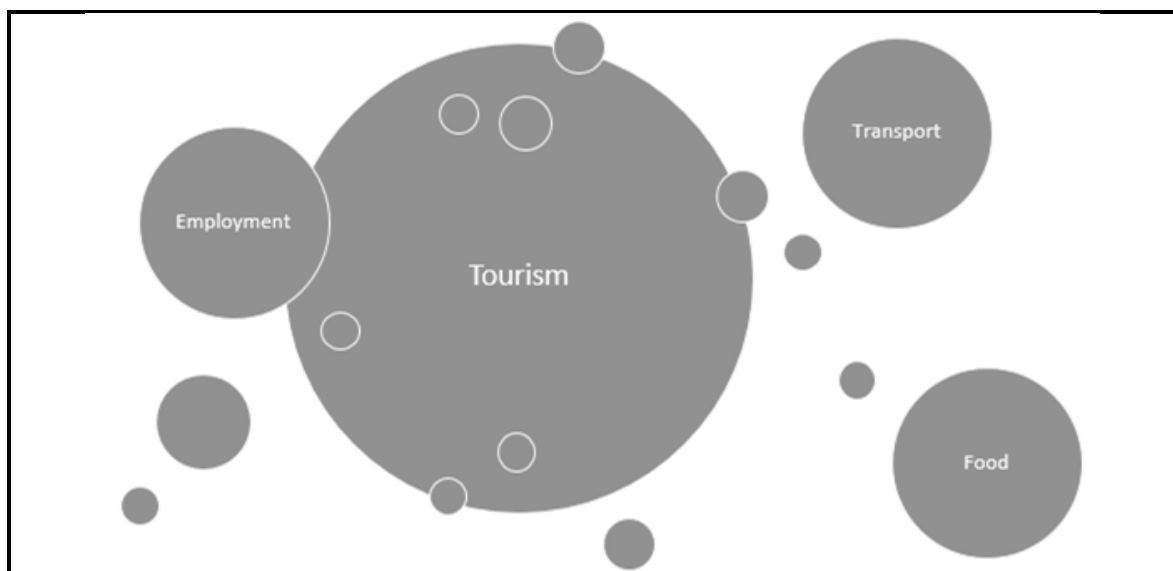
1.6   Find and replace all occurrences of the exact word 'tourism' with a highlighted word 'tourism'.   (2)

1.7   Find the text that starts with 'PUBLIC RELATIONS AND …' and ends with '… effects of the pandemic.' and do the following:

- Place the text in two columns.
- Change the page orientation of ONLY this text to landscape.   (2)

1.8   Find the heading 'Pandemic' and mark it as an index entry AND add a subentry called 'Covid' to this main index entry.   (1)

1.9   Insert a bibliography in the Harvard – Anglia bibliography style below the text 'Question/Vraag 1.9'.   (2)

1.10   Insert an index below the text 'Question/Vraag 1.10' so that the page numbers will be right-aligned with a solid line tab leader.   (3)

Save and DO NOT CLOSE the **1Tourism** document.

1.11   Do the following:

- Open the file **1Poster** using the **P1*** password.
- Paste the group of five images from the **1Poster** document into the **1Tourism** document below the text 'Question/Vraag 1.11'.
- Edit the group of five images to appear as shown in the screenshot below.

    (4)
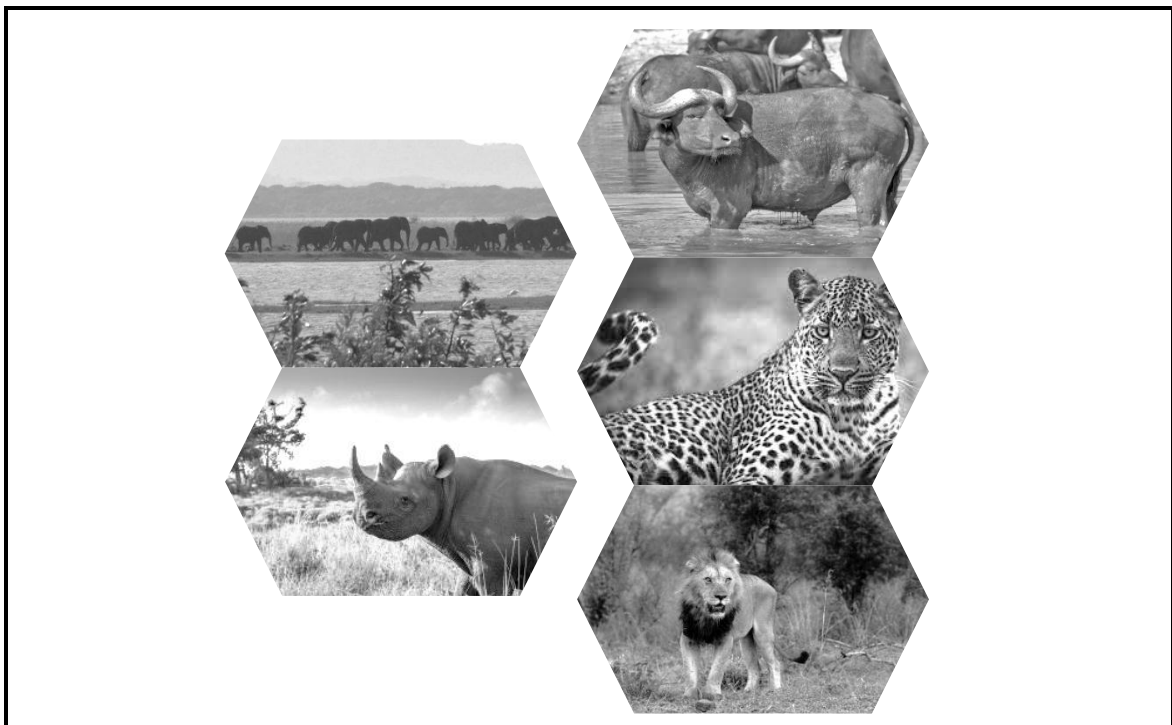
Save and close the **1Tourism** document and the **1Poster** document.   **[26]**

QUESTION 2: WORD PROCESSING

Open the **2Competition** word processing document which gives information about a competition to win a holiday in KwaZulu-Natal.

2.1   Modify the Drop Cap 'W' found in the first paragraph as follows:

- Position the Drop Cap so that it does not appear in the margin.
- Format the Drop Cap to drop over three lines and set the distance between the Drop Cap and the text to 0.5 cm.   (3)

2.2   Insert a 3 pt paragraph border around the text that starts with 'Please share via …' and that ends with '… the number of shares.'.   (2)

2.3   Create a link on the text 'Win! Win! Win!' to navigate to the following website:

https://gosafari.co.za   (1)

2.4   Edit the form below the heading 'Competition form' as follows:

2.4.1   Replace the text 'Question/Vraag 2.4.1' with an appropriate form control with the following options:

- <35
- 35 – 55
- >55   (2)

2.4.2   Format the *Cell Number* field to an appropriate data type and length.   (2)

2.4.3   The number of extra entries will be twice the number of times a person shared the form via WhatsApp.

Modify the *Extra entries* field to calculate how many extra entries a person will get.

HINT: Use the bookmark name inside the *Number shared* field.   (3)

2.5   Find the text that starts with 'Backpackers …' and ends with '… friends and family' and apply a word processing feature to display the text as shown below.

☐ Backpackers	☐ Self-Catering	☐ B&B/Guesthouse
☐ Hotel	☐ Lodge	☐ Resort
☐ Timeshare	☐ Stay with friends and family	

(2)

2.6   Add a signature line below the text 'Question/Vraag 2.6' AND allow the signer to add comments.   (2)

2.7 Find the heading 'Competition Terms and Conditions' and do the following:

- Change the character spacing of this text to condensed.
- Change the paragraph spacing of the text below this heading to 15 pt after. (2)

Save and close the **2Competition** document. **[19]**

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 **3Tourists** spreadsheet which contains data about the total spending by South African tourists during trips to eThekwini and its surrounding areas in 2020 and 2021.

Work in the **Data** worksheet.

3.1   Format **cell A3** to appear exactly the same as **cell A19**. (1)

3.2   Format **cells A4:G4** to display as shown below.

Month Maand	Accommodation Verblyf	Food and beverages Kos en drank	Domestic transport Binnelandse vervoer	Recreation and culture Ontspanning en kultuur	Shopping Inkopies	Question 3.4 Vraag 3.4

(2)

3.3   Eight job opportunities were created for every R100 000 that tourists spent on accommodation.

Insert a formula in **cell B18** to determine the number of jobs that were created in 2020.

Round off your answer to the next whole number. (4)

3.4   The monthly total in **column G** is calculated by adding the amounts in each column (**columns B to F**). If a cell in one of the columns is empty, the cell in **column G** must also be empty.

Insert a combination of functions in **cell G5** to display the total spending for the month (January) and which will leave the cell empty if any data is missing in that row.

Copy the function down to **cells G6:G16**. (5)

3.5   Apply conditional formatting to **cells F20:F31** to format the cells with a blue fill colour when the amount for shopping in a particular month in 2021 is greater than the amount for shopping in the same month in 2020. (4)
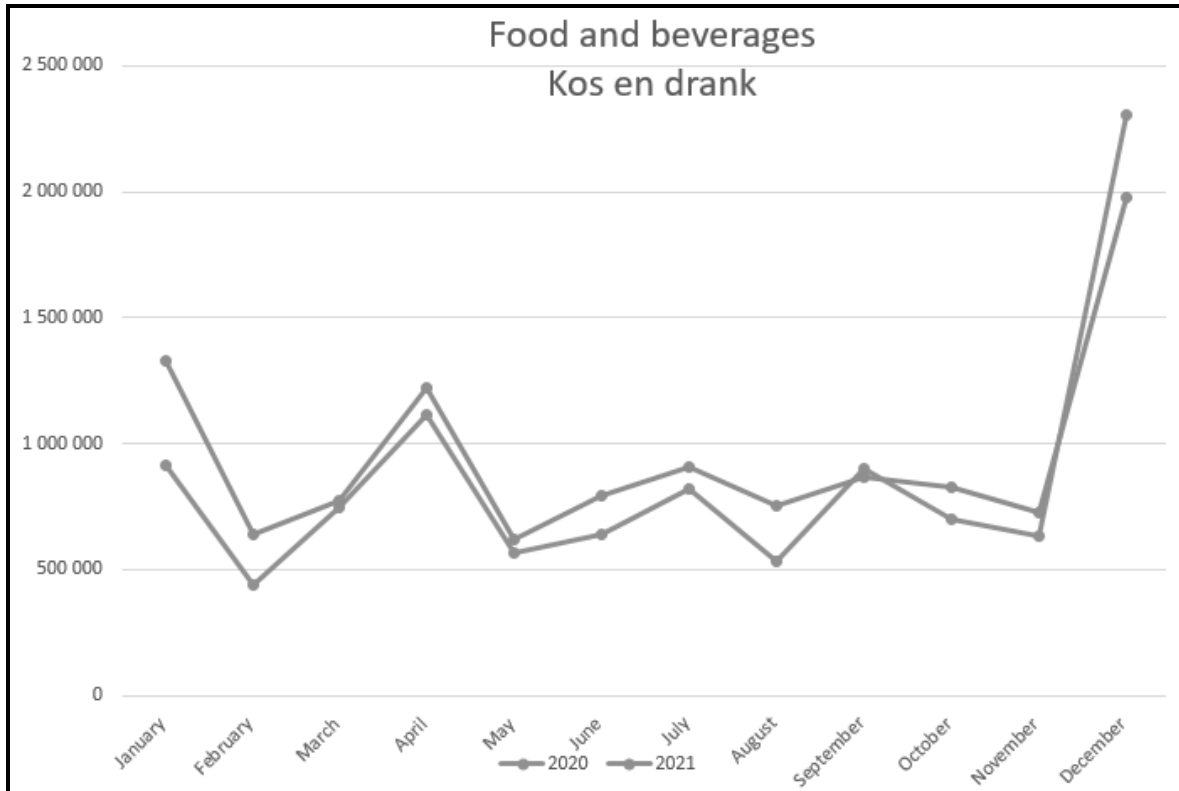
Work in the **Chart** worksheet.

3.6   The graph/chart shows a comparison of the spending on food and beverages for every month of 2020 and 2021.

        Modify the graph/chart to appear as shown below.

        NOTE: The series values were incorrectly applied for 2021.   (5)

Save and close the **3Tourists** spreadsheet.   **[21]**

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 **4Sightings** spreadsheet which contains information about lions seen on game drives at the Hluhluwe-iMfolozi Park.

Work in the **Lions** worksheet.

4.1	Insert a function in **cell D3** to determine the most lions seen on any game drive.	(1)

4.2	Insert a SUMIFS function in **cell D4** to determine the total number of lions seen at the Mpila Camp (**column C**) where the sightings included cubs.	(5)

4.3	Insert a VLOOKUP function in **cell A7** to display the surname of the ranger based on the ID of the ranger and the list in the **Rangers** worksheet.	(3)

4.4   Game drives are classified as follows:

Part of day	Time of day
Morning	Start before 12:00
Afternoon	Start from 12:00 and end before 17:30
Night	Start from 17:30

	Insert a nested IF function in **cell D7** to classify the game drive time using the time in **cell E7** and the time of day in **cells J1:O3**.	(6)

4.5   Each game drive lasts 2 hours and 45 minutes.

	Insert a TIME function in **cell F7** to display the time the game drive will end.	(4)

Save and close the **4Sightings** spreadsheet.   **[19]**

QUESTION 5: DATABASE

The KZN Travel Agency keeps a database of all travellers to KwaZulu-Natal who book accommodation through a booking agent.

Open the **5Bookings** database.

5.1   Open the **tbl5_1** table in Design View and edit it as follows:

5.1.1   Change the field properties of the *Surname* field so that the field may not be left blank.   (1)

5.1.2   Each traveller has a unique code that automatically links his/her details to the agency, e.g. h020530@tvl, a990522@tvl, etc.

Insert an input mask on the *MemberNo* field in the following lowercase format:

- First letter of the traveller's surname, followed by
- The date of birth as it appears in the ID number, followed by
- @tvl   (4)

5.1.3   Change the field properties of the *TravelDate* field as follows:

- Apply the medium date format.
- Set the Date Picker so that it will not display.   (2)

5.1.4   The *Accommodation* field should display options for accommodation types from the **tblAccommodation** table.

Edit the field properties of the *Accommodation* field to display the types of accommodation where tourists can stay.   (1)
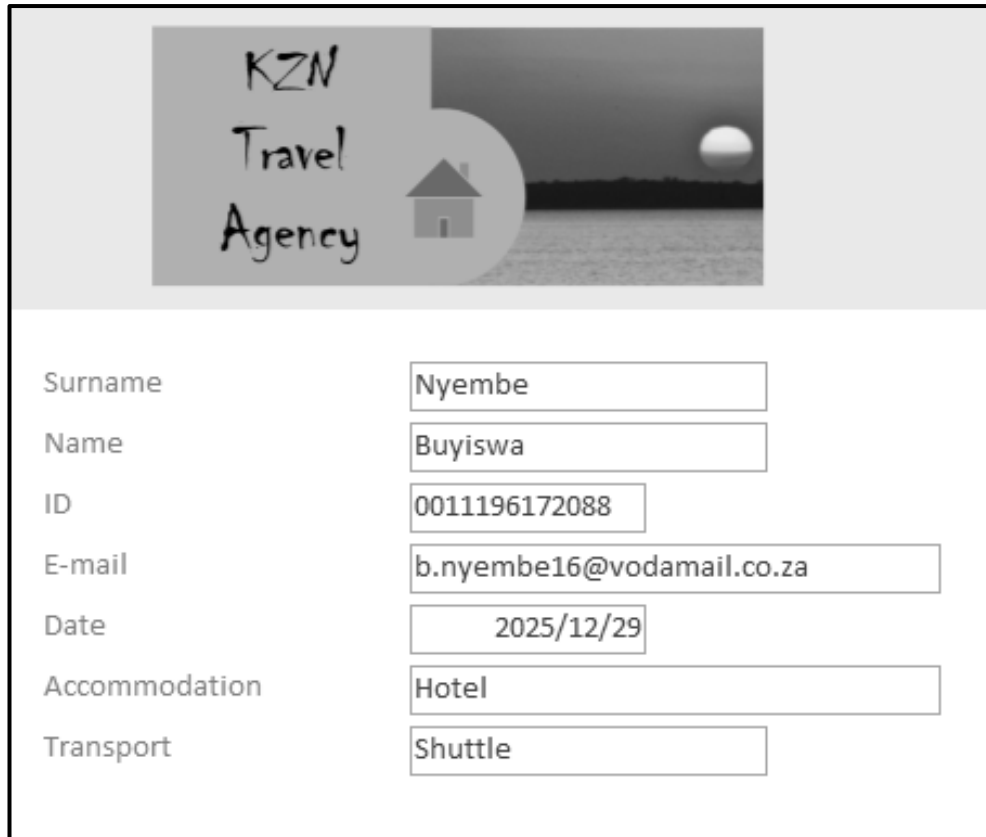
5.1.5   Insert a field named *IDCopy* below the *Surname* field that will link to a certified copy of an identity document.   (3)

Save and close the **tbl5_1** table.

5.2   Open the **frm5_2** form, based on the **tblInfo** table, in Design View.

Modify the form to display as shown in the example below.

NOTE:

- Insert the **5Logo** image to be 9 cm wide and 4 cm high.
- Add a validation rule property to the *Date* field to only accept dates in the years 2023 to 2025.
- Save the changes to the form BEFORE testing your answer.

Save and close the **frm5_2** form.   (5)

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

Display the records of all the travellers who booked in a group size of more than three people through the EasyStay booking agent and will be using a taxi or private option for transport.

Save and close the **qry5_3** query.   (5)

5.4   Open the **qry5_4** query, based on the **tblInfo** table, in Design View.

Display the total cost per booking agent.

Save and close the **qry5_4** query.   (2)

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

The calculated field *Year* determines whether a traveller was born in the year 19.. or the year 20.. . DO NOT modify the *Year* field.

Insert a new calculated field *DOB* to combine the value in the *Year* field and the date of birth in the *ID* field to display as yyyymmdd, e.g. 19920731, 20051012, etc.

Save and close the **qry5_5** query.   (6)

5.6   Create a report called **rpt5_6**, based on the **tblInfo** table as follows:

- Display the *Surname*, *Name*, *GroupSize*, *Accommodation* and *Transport* fields.
- Display the total number of people per transport type in the group footer.
- Sort the information according to the *Surname* field.

Save and close the **rpt5_6** report.   (6)

Save and close the **5Bookings** 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.

Web pages were created to give more information about the Dolphin Coast and the iSimangaliso Wetland Park.

6.1   Open the incomplete **6_1Dolphin** file in a web browser and also in a text/HTML editor.

Dolphin Coast

The Dolphin Coast offers visitors a combination of modern facilities at its sun-drenched seaside resorts in a lush, subtropical environment. The Dolphin Coast shoreline is an exciting blend of golden beaches and rock pools for safe bathing, surfing and scuba-diving, rock and ski boat fishing, or just relaxing on the beach.

Did you know?

The Dolphin Coast refers to the Northern Coast of KwaZulu-Natal and is so named for the schools of Bottlenose dolphins that leap out of the warm waters of the Indian Ocean, to the delight of spectators. This is a prime holiday hotspot for its undeniable beauty and almost year-round tropical climate.

At Willard Beach, the main swimming beach in Ballito, a 2,4 km boardwalk follows the shoreline southwards providing an opportunity for an easy stroll with spectacular views of bays and coves.

For more information, e-mail: dolphincoast@gmail.com

NOTE:

- Use the example above 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   Add an attribute to the body tag so that the whole web page will display in a blue font colour.   (1)

6.1.2   Add tags to make the text 'Did you know?' display as a level two heading.   (1)

6.1.3   Format the text that starts with 'The Dolphin Coast … ' and that ends with '… year-round tropical climate.', as shown in the screenshot.   (1)

6.1.4   Create a link to the e-mail address, as shown at the bottom of the web page.   (3)

Save and close the **6_1Dolphin** file.

6.2   Open the incomplete **6_2Heritage** web page in a web browser and also in a text/HTML editor.

Complete the web page to look exactly as shown in the example below.

NOTE: The background colour of the table is beige.

Save and close the **6_2Heritage** file.

ONE mark will be allocated for correctly closing tags <u>and</u> correctly nesting in both the files.   (9)

[15]

QUESTION 7: GENERAL

Tourism in KwaZulu-Natal contributes significantly to the economy of the country.

7.1   Open the **7Map** file.

        7.1.1   Insert a calculation in the table to determine the percentage of
                  KwaZulu-Natal's contribution to tourism in South Africa.   (2)

        7.1.2   Insert the value of the contribution of KwaZulu-Natal in the textbox
                  provided.

                  Format and position the textbox to resemble the screenshot below.   (3)
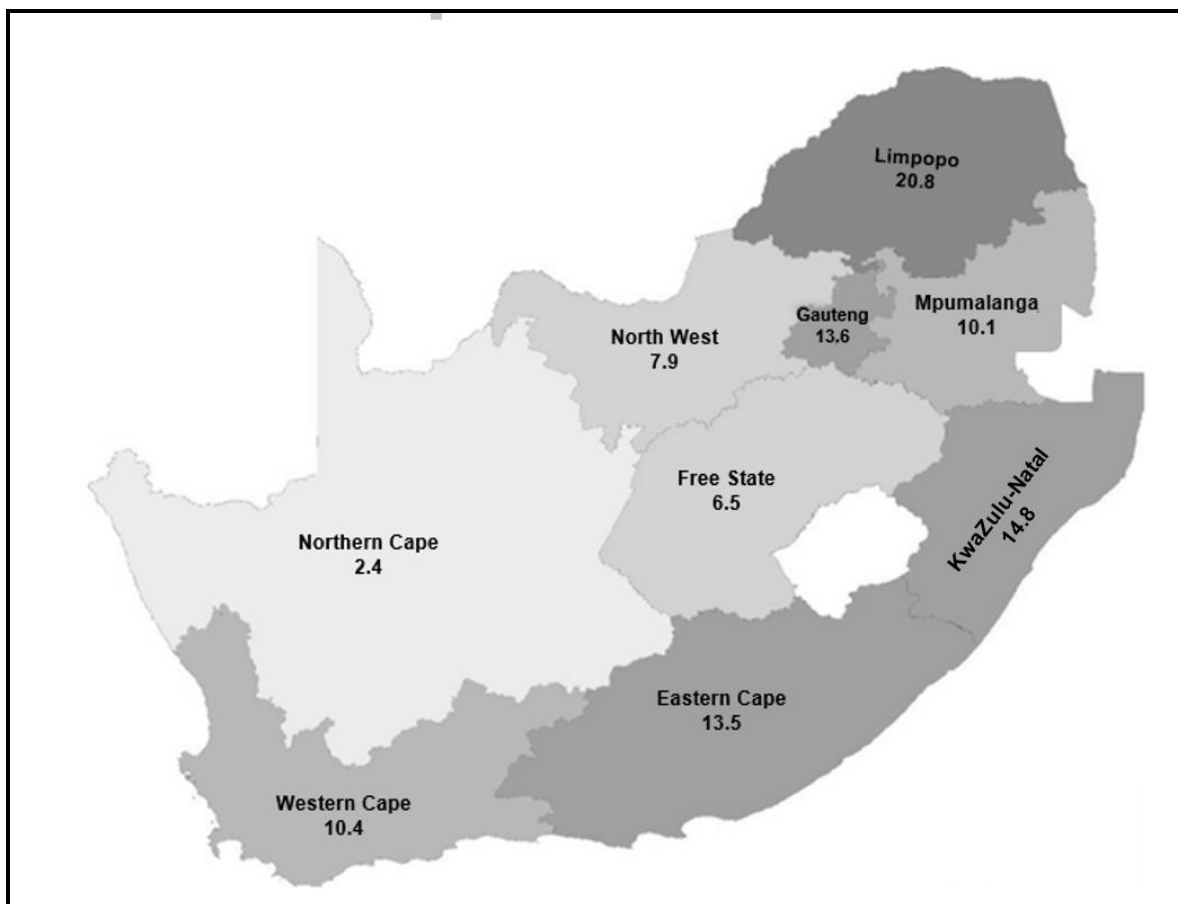
Save and close the **7Map** document.

7.2   Open the **7TravelMode** database.

        Import the **7Travellers** spreadsheet as a <u>linked</u> table named **Info** in the
        7TravelMode database.

        Set the first row to appear as column headings.   (3)

Save and close the **7TravelMode** database.

7.3   Open the **7BigFive** spreadsheet.

The KZN Travel Agency is running a competition to promote awareness of the Big Five animals.

As tourists see the animals within the week, it is recorded in **cells B2:H7**. Each animal seen can be recorded only ONCE during the week.

Determine whether a tourist has seen all the Big Five animals (**B10:B15**) at the end of the week, by using the following steps:

- The data in **cells I2:O7** will indicate whether each animal seen, is part of the Big Five or not.
- Use an **OR** function (*NOT an IF statement*) in **cell M2** to determine whether the animal in **cell F2** is a Big Five animal or not. Copy the function down to the other cells.
- Use a formula in **cell P3** to determine whether Bonakele saw all the Big Five animals.   (7)

Save and close the **7BigFive** 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**
<hl></hl>	Creates the largest heading
	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
<img src="name">	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**
	Creates a new paragraph
<p align="left">	Aligns a paragraph to the "left" (default), can also be "right" or "center"
<center></center>	Horizontally centres text, a section, table or an image
	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
<img src="name">	Adds an image
<img src="name" align="left">	Aligns an image: can be "right", "bottom", "top"
<img src="name">	Aligns an image in the "center", can also be "middle"
<img src="name" border="1">	Sets the size of the border around an image
<img src="name" width="200" height ="200">	Sets the height and width of an image
<img src="name" alt="alternative text">	Displays alternative text when the mouse hovers over an image or when the image is not found
	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)

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