basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY P1

NOVEMBER 2012 (1)

MARKS: 200

TIME: 3 hours

This question paper consists of 20 pages and a separate information sheet.

INSTRUCTIONS AND INFORMATION

1.   Owing to the nature of this three-hour examination, it is important to note that you will NOT be permitted to leave the examination room before the end of the examination period.

2.   Insert your examination number in the header of EVERY document that you create or save.

3.   The invigilator will give you a disk containing all the files needed for the examination OR you will be told where the files can be found on the network or computer. If a disk has been issued to you, you must write your examination number and centre number on the disk. If you are working on the network, you must follow the instructions provided by the invigilator.

4.   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.

5.   This question paper consists of SEVEN questions.

6.   Answer ALL the questions.

7.   Ensure that you save each document using the file name given in the question paper. Save your work at regular intervals as a precaution against possible power failures.

8.   Read through each question before answering or solving the problem. Do NOT do more than is required by the question.

9.   At the end of the examination, you must hand in the disk given to you by the invigilator with ALL your answer files saved onto the disk, OR you should make sure that ALL your answer files are saved on the network/computer as explained to you by the invigilator/educator. Make absolutely sure that all files can be read. Do NOT save unnecessary files/folders and do NOT hand in duplicate answer files/folders.

10.   The separate 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.

11.   During the examination you may use the help functions of the programs which you are using. You may NOT use any other resource material.

12.   If data is derived from a previous question that you cannot answer, you should still proceed with the questions that follow.

13.   Unless instructed otherwise, formulae and/or functions must be used for ALL calculations in questions involving spreadsheets. Absolute cell references must be used only where necessary to ensure that formulae are correct when they are copied to other cells in a spreadsheet.

14. In all questions involving word processing, the language should be set to English (South Africa). The paper size is assumed to be A4 Portrait, unless instructed otherwise.

15. Use centimetres as the unit of measurement when answering this question paper.

16. In general, 1 mark is allocated per action, so a 2-mark question would usually require TWO actions, et cetera.

17. The examination folder/data disk that you receive with this question paper will contain the folder and files listed below. Ensure that you have the folder and all the files before you begin this examination.

A folder called **Data** that contains the following files:	
• 1Bullet_Kolpunt	Image file
• 1Facts_Feite	Word processing file
• 1Mark_Merk	Image file
• 2BlackRhino_SwartRenoster	Image file
• 2Reserves_Reservate	Word processing file
• 3Statistics_Statistiek	Spreadsheet file
• 4Trip_Uitstappie	Spreadsheet file
• 5Rhino_Renoster	Database file
• 5View_Besigtig	Spreadsheet file
• 6Months_Maande	Spreadsheet file
• 6Postcard_Poskaart	Word processing file
• 6Spotted_Gesien	Database file
• 7Answers_Antwoorde	Word processing file
• 7Outline_Buitelyn	Word processing file
• 7Web_Web	Word processing file
• 7Workbook_Werkboek	Spreadsheet file

SCENARIO

Many people are concerned about the decrease in the rhino population. The CAT learners have been asked to assist with the following:

• Creating awareness of saving the rhino population

• Setting up spreadsheets and charts

• Updating statistics and providing support to the 'Save the Rhino' trust

QUESTION 1

Open the file **1Facts_Feite**.

A document has been set up with a list of frequently asked questions (FAQs) and some facts about rhinos. Carry out the instructions below to edit and format the document so that it appears more professional.

1.1   Format the text box so that it resembles the one below.

<div align="center">

**FREQUENTLY
ASKED
QUESTIONS**

RHINO

</div>

1.1.1   Ensure that the text box has a 3 pt line border.   (1)

1.1.2   Change the background colour of the text box to any colour other than the given colour.   (1)

1.1.3   The word 'RHINO' must appear in a 23.5 pt font size.   (1)

1.1.4   Position the text box at the bottom left of the page.   (1)

1.2   Resize the image of the baby rhino on the first page of the document so that it fills the whole page.

   HINT: Ignore the watermark.   (2)

1.3   Modify the style called 'Rhino' to appear as follows:
   - In a shadowed box border
   - With a 15% grey background shading
   - Paragraph spacing of 18 pt after/0.64 cm below   (3)

1.4   Display the highlighted text starting with 'The white rhino's ...' and ending with '... White rhinos are grazers.' in two columns as shown below.

- The left-hand column is 10 cm wide.

- The right-hand column is 5 cm wide.

- The image must appear in the left-hand column as shown.

- Ensure that the text starting with 'Weight: over 2 ...' and ending with '... White rhinos are grazers.' will always appear in the right-hand column.

The White Rhino

The white rhino's name is derived from the Dutch "weit," meaning wide, a reference to its wide, square muzzle adapted for grazing. The white rhino, which is actually grey, has a pronounced hump on the neck and a long face.

Weight: over 2 tons.

The white rhino's habitat: Grassland and open savannah. White rhinos live in savannah with water holes, mud wallows and shade trees. White rhinos are grazers.

(6)

1.5   Create a bulleted list of the current population estimates starting with 'White rhino ...' and ending with '... <44' to appear as follows:

- White rhino: 20 150

- Black rhino: 4 860

- Greater one-horned rhino: 2 850

- Sumatran rhino: 200

- Javan rhino: <44

1.5.1   Use the file **1Bullet_Kolpunt.jpg** to apply rhino-shaped bullets to the list.   (2)

1.5.2   Set a 10 cm tab to align the numbers, as shown above.   (3)

1.6   Change the text '25 things you might not know about rhinos' found towards the end of the 4ᵗʰ page as follows:

       1.6.1   Capitalise the first letter of each word of the text.   (1)

       1.6.2   Apply the predefined style called Title to the text '25 things you might not know about rhinos'.   (1)

1.7   Locate the table towards the end of the document:

       1.7.1   Set the column width of the table to 8 cm and the height of all the rows to exactly 6 cm.   (3)

       1.7.2   Centre all the text vertically and align it to the left-hand side of the cells.   (1)

       1.7.3   Insert a column to the right so that there are two columns in the table.   (1)

       1.7.4   Ensure that the text in the left-hand column appears as a numbered list where the numbers are followed by a bracket, for example 1), as shown below.

Is your family obsessed with trivia night? Do you keep running out of small talk at summer braais? Try out some of these interesting rhino facts!

1) A group of rhinos is called a "crash".	
2) White rhinos aren't white. (And black rhinos aren't black.) The white rhino's name is taken from the Dutch word describing its mouth: "weit", meaning "wide". Early English settlers in South Africa misinterpreted the "weit" for "white".	

     (2)

       Please turn over

1.7.5   The table will be used for fact cards where the text appears on one side with a matching image on the other side.

Move the image of the woolly rhino, found at the end of the document, to the blank cell next to the yellow highlighted description of the prehistoric woolly rhino. (Do NOT insert images into any of the other cells.)   (2)

1.8   Insert the text 'Save the Rhino' in the right-hand side of the footer of the document. Use any feature of the word processing application to draw attention to this text.   (2)

1.9   Insert automatic page numbering in any format to appear on the left-hand side of every page, starting on the second page.

The numbering must be formatted as Roman numerals in upper case, for example I, II, III.   (3)

1.10   Go to the end of the document and generate an automatic table of contents from any template.

The table of contents should appear in capital letters as shown below.

    (3)

1.11   Replace the current watermark image (image of two black rhinos) with the image found in the file **1Mark_Merk**.   (2)
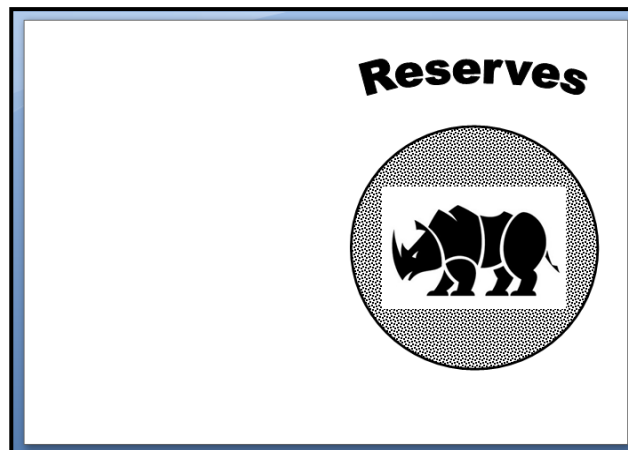
Save **1Facts_Feite** and close the document**.**   **[41]**

QUESTION 2

Open the file **2Reserves_Reservate**.

A brochure has been created to promote the reserves where rhinos are found. The brochure appears in A4 landscape, divided into two columns.

2.1   Use the image together with Autoshapes and WordArt/Fontworks to recreate the first page of the brochure as shown below.

Note the following:

- A curved WordArt/Fontworks is used for 'Reserves'
- The circle or round shape
- The placement of the rhino image
- The rotation of the rhino image
- A patterned fill effect has been used to fill the circle or round shape
- A border is not required   (5)

2.2   Set a hanging indent of 0.5 cm to all paragraphs in the document.   (3)

2.3   Modify the dropped cap 'S' found on the second page so that it runs over THREE lines.   (1)

2.4   Insert a hyperlink on the words 'black rhino' (highlighted in yellow), found in the first paragraph of the brochure, to link to the file **2BlackRhino_Swart Renoster** in your examination folder.   (2)

2.5   Locate the word 'Nkomazi' in the heading 'Nkomazi Game Reserve, Mpumalanga'.

       Add a footnote to the word 'Nkomazi' that reads 'Place of water'.

       Use an asterisk (*) as the custom mark for the footnote.   (3)

2.6　　　Replace all the occurrences of the word 'donate' as follows:

- The whole word 'donate' must be replaced with 'donate ☺'.

- Add a blue highlight to all the replacements 'donate ☺'.　　　(4)

2.7　　　Insert a page border on all the pages, except on the first page.　　　(2)

2.8　　　Update the table of figures found at the end of the document so that it includes Figure 3 Rhino.　　　(1)

Save **2Reserves_Reservate** and close the document.　　　**[21]**

QUESTION 3

The statistics of rhino poaching since 2009 reflect the seriousness of the issue. The Kruger National Park is included in the statistics because of the significant role it plays. The Eco Club wishes to use these statistics to raise awareness.

Open the **3Statistics_Statistiek** spreadsheet.

Work in the **Poach_Stroop** worksheet.

3.1 **Cells B2:F4** have been merged.

Make the following changes to the heading in the merged cell:

3.1.1 Change the background of the merged cell to another colour. (1)

3.1.2 Insert a border around the merged cell. (1)

3.1.3 Make sure that the text fits into the merged cell, without changing the font size, font style or type of text. (1)

3.2 Insert a function in **cell F5** to display the text from **cell B16** in upper case. (2)

3.3 Change the alignment of the headings in **cells B5:F5** to display at a 75 degree angle. (1)

3.4 Use a function in **cell D16** to determine the total number of rhino that were killed in 2010. (2)

3.5 Use a function in **cell J6** to determine how many provinces did NOT provide statistics in 2009. (2)

3.6 Use a function in **cell K6** to find the number of provinces where more than 20 rhinos were killed in 2011. (3)

3.7 The provinces where rhinos were killed during 2009–2011 are classified as follows:

- High Risk: 50 or more rhinos were killed
- Low Risk: less than 50 rhinos were killed

The words 'High Risk' or 'Low Risk' appear in **column H**.

Use a function in **cell H9** to display the words 'High Risk' or 'Low Risk' to indicate ONLY Limpopo's level of risk. (4)

3.8   Make the following changes to the chart/graph found in the **Poach_Stroop** worksheet so that it looks like the example below:
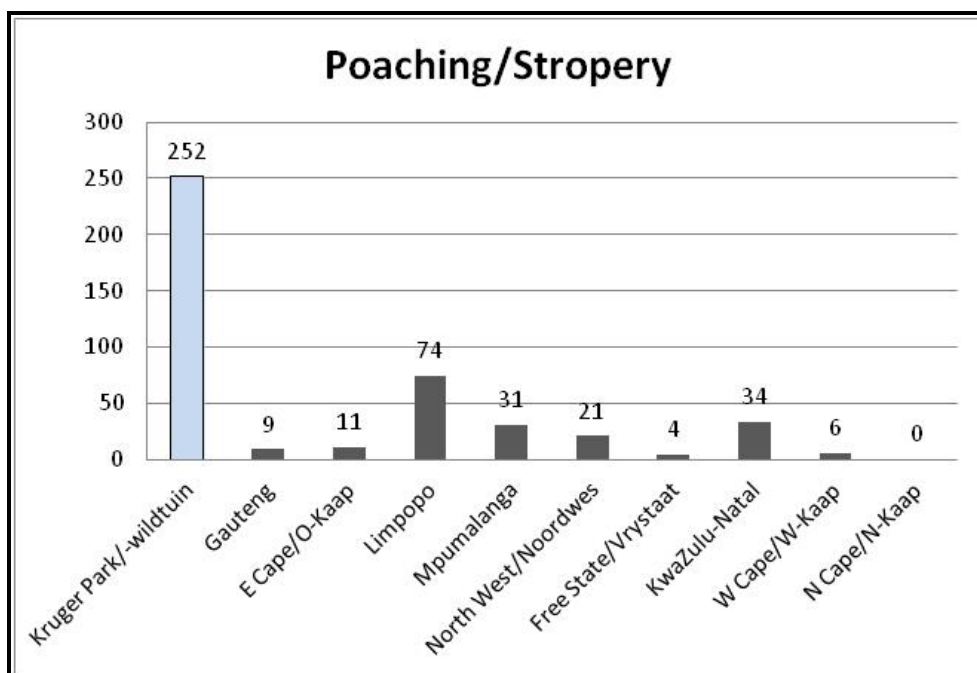
Note the following:
- The title appears above the graph/chart.
- Values are shown as data labels above the columns.
- No legend appears.
- The longest column has a different colour to the other columns.

Place the graph in its own new worksheet and name the worksheet **Graph_Grafiek**.   (6)

3.9   Generally, poachers work in groups of three people.

The number of people who have been arrested for rhino poaching is displayed in the **Arrests_Arrestasies** worksheet.

Work in the **Arrests_Arrestasies** worksheet.

3.9.1   Assume that a group of three people were arrested for each rhino killed.

Add a formula in **cell C8** to calculate the number of rhino deaths for which people have been arrested. The answer must be rounded off to the nearest smaller whole number.   (4)

3.9.2   Arrange the data so that the province with the highest number of arrests for poaching in 2011 will appear first and the province with the least number of arrests last.   (3)

Save **3Statistics_Statistiek** and close the document.   **[30]**

QUESTION 4

The Eco Club members have arranged for families to go rhino spotting in the Meetzi National Park over a long weekend. Bookings for the trip are made by the club. Families have the option to share meals or to take their own.

Open the **4Trip_Uitstappie** spreadsheet.

Work in the **Bookings_Besprekings** worksheet.

4.1   Display the values in **column I** as South African rand.   (1)

4.2   To simplify the administration, each family has been given a code, for example Mop5agah.

        Insert functions in **cell B3** to determine the family code.

        The family code is compiled as follows:

        • The first three letters of the name of the rest camp in **column E**, followed by
        • The number of persons in the family in **column F**, followed by
        • The last four characters of the name in **column C**   (6)

4.3   The Eco Club has decided to hold a lucky draw.

        Assume that the people (in **column C**) who have booked are numbered from 1 onwards.

        In **cell P4**, add a function and/or formula to find a random winning number.   (4)

4.4   Add a formula in **cell I3** to determine the cost of all the meals ordered by the family of H Smith. The price of each meal is stored in **cell P1**, and the number of meals ordered is stored in **column H**. Make sure that the formula can be copied correctly to all the other cells in **column I**.   (4)

4.5   Add a function in **cell J3** to determine the cost of accommodation per night for the Smith family who stayed in a <u>chalet</u> at the rest camp indicated in **cell E3**. The costs are found in the **Costs_Koste** worksheet.   (4)

4.6   The discount given by the Eco Club depends on the number of meals (**column H**) the family will have ordered.

        In **cell L4**, use an IF-function to determine the percentage discount given as follows:

        - No discount for fewer than 10 meals
        - 3% discount for 10 to 20 meals
        - 10% discount for more than 20 meals

        In other words, 0%, 3% or 10% will be displayed.   (7)

4.7   Add a function in **cell P3** to show the number of people booked at Lower Sabie.   (4)

4.8   A table of the number of people staying at each camp is given in **cells O8:P18** in the **Bookings_Besprekings** worksheet.

        - Create a graph/chart in the same worksheet to display the percentage of people at each camp as a portion of the total number of people staying at all the camps.
        - Display data labels, including names, values and percentages, on the graph/chart. For example, the data label for the Orpen camp will display as Orpen; 95; 13% on the graph/chart.   (4)

Save **4Trip_Uitstappie** and close the spreadsheet.   **[34]**

QUESTION 5

The CAT learners have been asked to interpret data from the database **5Rhino_Renoster** to supply information to the Eco Club.

Open the **5Rhino_Renoster** database.

5.1 Create a table named **New_Nuut** to include the following fields:

- Place
- Photo

Assign an appropriate data type and field size/format to each field. (4)

Save and close the table **New_Nuut**.

5.2 Import the data from the **Spotted_Opgemerk** worksheet in the **5View_Besigtig** spreadsheet into a new database table. Name the database table **Latest_Nuutste**. (2)

5.3 Open the table **Rhino_Renoster**.

5.3.1 Set a validation rule on the *Age_Ouderdom* field so that the user can only enter a value of 'A' or 'J'.

Add appropriate validation text for this field. (2)

5.3.2 Insert a new field named *EcoMember_EkoLid* after the *Seen_Gesien* field*. (2)

Save and close the table **Rhino_Renoster**.

5.4   The Eco Club members asked you to change the form in the database so that they can use it to enter data into the database.

Open the form called **frmRhino_Renoster** which is based on the **Rhino_Renoster** table.

5.4.1   Type your examination number in a label in the form footer.   (2)

5.4.2   Modify the *BW_SW* field to a drop-down list that gives the user the option to choose 'B' or 'W'.   (2)

5.4.3   Modify the settings of the image in the form header to show the whole picture. Set the height and width of the picture to exactly 2 cm.   (2)

5.4.4   Change the background of the *Province_Provinsie* textbox to display in a green colour when 'KZN' is displayed.   (2)

Save and close the form **frmRhino_Renoster**.

Help the Eco Club extract information from the database by doing the following queries:

5.5   Create a query named ***MyQuery*** to display all the fields of the **Rhino_Renoster** table.   (2)

Save and close the query **MyQuery**.

5.6   Open and modify the query **qryYoung_Jonk**.

- Display the places where juvenile rhino were spotted in Limpopo ('LP') or Mpumalanga ('MP').
- Display only the fields *Place_Plek* and *Seen_Gesien*.
- Sort the query according to the province.   (6)

Save and close the query **qryYoung_Jonk**.

5.7   Open and modify the query **qryDays_Dae**.

- Use a new field named *Days_Dae* to display the number of days between today and the last time rhinos were seen.
- Display the days as a whole number.   (5)

Save and close the query **qryDays_Dae**.

5.8   The Eco Club wishes to report on the rhino spotting project. The report **repRhino_Renoster** has been created, but needs to be changed.

Open the report **repRhino_Renoster**.

5.8.1   Change the width of the *Place_Plek* field to 3 cm.

The text must also be centred in this field.   (2)

5.8.2   Remove the *Spotno_Merkno* field from the report so that there is no reference to this field in the report.   (2)

5.8.3   Add grouping to the *Province_Provinsie* field.

Add a group heading so that the name of each province appears to the left above that province's details when the report is viewed in Report View.   (3)

5.8.4   Change the report so that the different game reserves appear in alphabetical order.   (1)

5.8.5   Add a function and a suitable label to the report to display the total number of rhino that were spotted.   (5)

Save and close the report **repRhino_Renoster**.

Save and close the **5Rhino_Renoster** database.   **[44]**

QUESTION 6

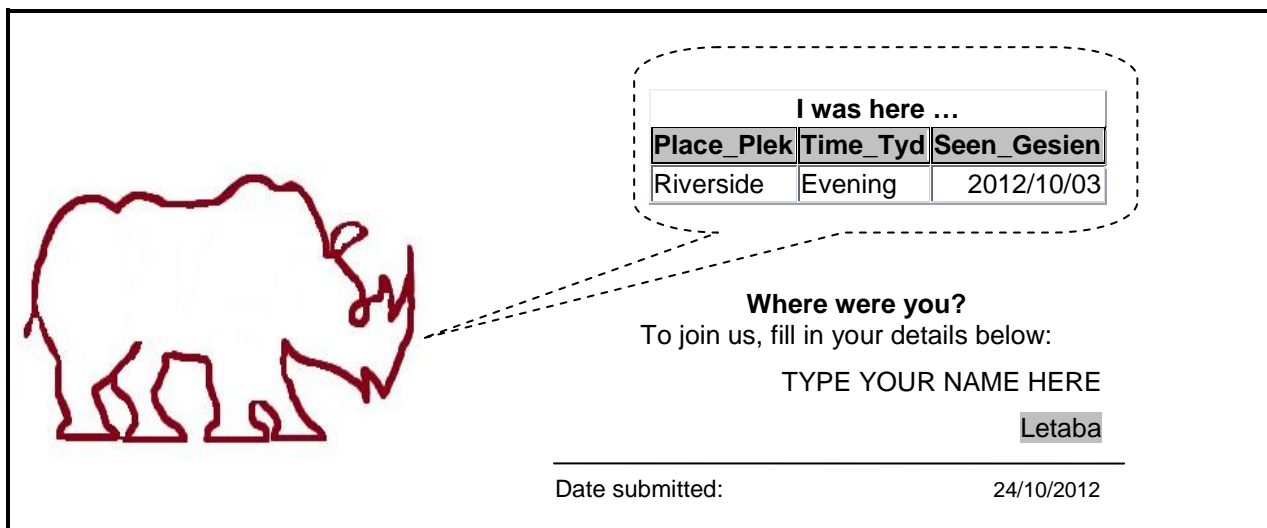Use the following files to complete this question:

- **6Postcard_Poskaart** (word processing file)
- **6Spotted_Gesien** (database)
- **6Months_Maande** (spreadsheet file)

The Eco Club wishes to host more camps for its members and their friends as a way to raise awareness to save the rhino.

They need your help to complete a postcard.

Open the **6Postcard_Poskaart** word processing file.

6.1   Carry out the instructions in QUESTION 6.1.1 to QUESTION 6.1.6 to complete the postcard as shown below.

I was here …		
Place_Plek	**Time_Tyd**	**Seen_Gesien**
Riverside	Evening	2012/10/03

Where were you?
To join us, fill in your details below:

TYPE YOUR NAME HERE

Letaba

Date submitted: 24/10/2012

6.1.1   Change the paper size to 15 cm wide and 8 cm high.   (2)

6.1.2   Insert any one of the records from the **6Riverside** query in the **6Spotted_Gesien** database into the postcard to appear as a table as shown above.   (2)

6.1.3   Change the table to resemble the example above:

Note the following:
- The text 'I was here ...' appears in the first row.
- The text 'I was here ...' is formatted to the same style as the text 'Where were you?'
- The fill of the first row has been changed.   (3)

6.1.4   Place the table in a callout shape that has a dashed outline, as shown above.   (3)

6.1.5 Locate the text form field control that appears in **6Postcard_Poskaart**.

The text 'TYPE YOUR NAME HERE' in the screenshot on the previous page, represents the text form field control.

Change the text form field control as follows to resemble the example shown:

- The maximum length is 25.
- The words 'Type your name here' appear as default.
- Text in the text form field control appears in upper case. (3)

6.1.6 Insert a drop-down form field control, as shown in the example, to contain the items 'Letaba', 'Amanzi', 'Meetse'. (2)

6.2 The Eco Club needs assistance to create mailing labels to send the postcards to their members.

Use the data from the **Members_Lede** table in the **6Spotted_Gesien** database to carry out the instructions below to perform the mail merge.

6.2.1 Open a new blank word processing document.

Use the label option on the mail merge feature to select mailing labels with the following specifications:

- Multiple labels must appear.
- The paper size must be A4 portrait or 21 cm x 29.7 cm.

HINT: Preloaded label templates from label vendors such as Tower W100 Mailing Label; Avery 8460-Address; Microsoft 30 Per Page; Ace Labels 373 or 374 (30-up sheet) may be used. (2)

6.2.2 Select all the records from the **Members_Lede** table in the **6Spotted_Gesien** database for the mail merge. (1)

6.2.3 Merge the data from the database with the word processing document from QUESTION 6.2.1.

Note the following:
- The name, surname and address fields must be inserted as merge fields into the labels.
- Use a feature of the word processor to apply the insertion of the merge fields to all the labels.

Save the document as **6Ready_Gereed**. (3)

6.2.4   Complete the mail merge by creating a new merged document.

Save the merged document as **6Merged_Saam** and close the document.   (1)

6.3   Open the **6Months_Maande** spreadsheet and work in the **Animals_Diere** worksheet.

Mr Tlou wishes to go rhino spotting between October and December.

Use any method to predict the month during which he has the best chance to spot a rhino. Type the answer in **cell F1**.

Base your answer on the data contained in the worksheet **Animals_Diere**.

On the worksheet **Animals_Diere**, show and highlight the calculations/ workings that you used to obtain the answer.   (3)

Save and close all the documents.   **[25]**

QUESTION 7

Open the word processing file **7Answers_Antwoorde**. Enter your examination number in the space provided.

7.1   Find the horizontal resolution of the picture in the file **1Bullet_Kolpunt** as found in the file properties. Type your answer in the space provided in the **7Answers_Antwoorde** document.   (1)

7.2   Change the author property of the **7Outline_Buitelyn** file to your examination number.   (1)

7.3   Open **7Workbook_Werkboek**.

        Protect the **Secrets_Geheime** worksheet by placing the password 'R' on the worksheet to protect the content of the locked cells.   (2)

7.4   Convert the word processing document **7Web_Web** to a web page.   (1)

Save **7Answers_Antwoorde** and close the document.   **[5]**

Save and close all files.

                                                                        TOTAL: 200