## basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

## NATIONAL SENIOR CERTIFICATE

## GRADE 12

MARKS: 200
TIME: 3 hours

This question paper consists of 18 pages, an addendum 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 centre number and examination number on the label. 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 the files saved on the disk, OR you should make sure that ALL the files are saved on the network/computer as explained to you by the invigilator/teacher. Make absolutely sure that all files can be read.
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 make use of 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, you must use formulae and/or functions 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.
14. 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.
15. 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 Question1_ and files called: |  |
| :---: | :---: |
| - 1Answer_Antwoord | Word processing file |
| - 2Cat_Kat | Image file |
| - 2Shelter_Herberg | Word processing file |
| - 3Pamphlet_Pamflet | Word processing file |
| - 4Volunteer_Vrywilliger | Spreadsheet file |
| - 5AnimalData_Dierdata | Spreadsheet file |
| - 6Helpers | Database file |
| - 6Tiger_Tier | Image file |
| - 7Cat_Kat | Image file |
| - 7Data | Spreadsheet file |
| - 7Form_Vorm | Word processing file |
| - 7Label_Etiket | Word processing file |

## SCENARIO

The local animal shelter uses volunteers from the community to help them care for abandoned and mistreated animals. They have asked the CAT learners to assist them with the following computer-related tasks:

- File and folder management
- Creating information materials
- Perform various calculations based on volunteers and animals
- Maintenance of a database of volunteers


## QUESTION 1

The folder structure below has been created.


Work in the Question1_Vraag1 folder to answer all the questions, unless otherwise specified.
1.1 Delete the folder Memo in the Docs folder in the Question1_Vraag1 folder.
1.2 Convert only the first page of the file called Kelly in the Question1_Vraag1 folder to a template file with the same name.
1.3 Copy all the database files in the Question1_Vraag1 folder to the Docs folder.
1.4 Remove the password ' $Z$ ' from the document APPS in the Question1_Vraag1 folder.
1.5 Type the last THREE digits of your examination number in the 'Author' property of the Players image in the Question1_Vraag1 folder.

Open the file 1Answer_Antwoord.
Type your examination number in the space provided in the 1Answer_Antwoord file.
Type your answers to QUESTIONS 1.6 and 1.7 in the spaces provided in this document.
1.6 Enter the amount of space the UPE folder takes up on the disk in the space provided in the 1Answer_Antwoord document.
1.7 A screenshot of the UPE folder is required.

- Sort the files in the UPE folder by size from the largest to the smallest.
- Paste a screenshot showing only the file size and name fields (in that order) into the 1Answer_Antwoord document.

Save 1Answer_Antwoord and close the document.

## QUESTION 2

Open the file 2Shelter_Herberg.
Type your examination number in the header of the document.
2.1 Locate the WordArt/Fontwork on the first page. It must be changed to resemble the example shown below.

## Wild Animals <br> choose freedom

## NOTE:

This WordArt/Fontwork text must appear as follows:

- The text must run across two lines, as shown in the example
- Be filled in a blue colour
- Be centred horizontally and vertically on the first page
2.2 Insert centred, automatic page numbering starting on page 2 of the document in the page footer. The first page will therefore NOT be numbered. The second page must be numbered as 1, etc.
2.3 Use the find and replace function to underline all occurrences of the exact phrase 'Animal Shelter', using double red underlining.
2.4 Use a special symbol of your choice to insert and indicate a footnote anchored to the highlighted occurrence of the word 'ANIMAL' towards the end of the first paragraph on page 3.

The footnote must read 'e.g. lions'.
2.5 Insert a hyperlink on the heading 'LOOKING FOR A MEDIA MONITORING SERVICE' on page 3 to link to the file named 2Cat_Kat.
2.6 Locate the image of a lion on page 3 of the document.
2.6.1 Change the colour setting of the picture so that the picture appears in colour.
2.6.2 Crop the picture so that the vertical bar on the extreme right of the picture does not appear, as shown below.

2.6.3 Insert a caption below the picture to read 'Lion'. The label of the caption must be set to 'Picture'.

The caption should read 'Picture 1: Lion'.
2.7 Insert customised bullets to the list that appears on page 3, starting with 'Dogs' and ending with 'Cattle'.

- Customise the bullets using the 2Cat_Kat image for the bullets.
- Insert a 9 pt paragraph space after each bulleted line.

| Cogs |
| :--- |
| Cats |
| Horses |
| Cattle |

2.8 Apply the Heading 1 style to the heading 'CONCLUSION' on the last page of the document.
2.9 Insert an automatically generated table of contents on page 2 as follows:

- Show only two levels in the table of contents.
- Use headings formatted with the style Heading 1 for the first-level entries.
- Show the captions of the images for the second-level entries.

Save 2Shelter_Herberg and close the document.

## QUESTION 3

A pamphlet to raise funds for the animal shelter has been created.
Open the file 3Pamphlet_Pamflet.
Type your examination number in the header of the document.
The pamphlet will be sent out to get support for the animal shelter. The finished pamphlet appears in ANNEXURE A of this question paper.
3.1 Change the paper size of the document from Letter to A4.
3.2 Locate the image which was placed at the top of the document.

Change the image so that it has the following appearance:

3.3 Insert a family symbol (Webdings character code 148) to the left of the heading 'Helping in the charity shop'.
3.4 Insert a comment with the word 'Confirm', anchored on the name 'Nico' in the first paragraph under the heading 'Helping in the charity shop'.
3.5 Place all the text on page 1 from 'Helping in the charity shop' to '... Jones on 082147 8965' in TWO columns as follows:

- Place a vertical line between the two columns.
- Ensure that the heading ' Cats and other animals' will always appear at the top of the second column.
3.6 Locate the paragraph starting with the heading 'xSpecialised skills'.
- Apply a shading of your own colour choice to the paragraph.
- Remove the paragraph border.
3.7 Change the formatting of the table so that it appears as follows:

| Activities Available at the Fun Day |  |
| :--- | :--- |
|  | Organiser |
| Animal Look-alike Competition | Serumula S |
| Bingo | Louw M |
| Dog Show | Van Rooyen J |
| Dog Tricks | Hill J |
| Horse Riding | Pillay N |
| Tombola | Malatji K |

## QUESTION 4

The animal shelter has created a spreadsheet to keep track of the times and shifts worked by the volunteers.

Open the spreadsheet called 4Volunteer_Vrywilliger.
4.1 Merge cells A1:D1 and centre the contents of the cell vertically.
4.2 Change the alignment of the headings in cell A2 to be the same as the other cells in the same row.
4.3 An identification code for each of the volunteers has been generated in column A.

The code is formed by taking the second and third letters of the surname and combining this with the age (column E) of the volunteer.

For example: Liena MARX, age 19, will have an identification code of AR19. Similarly, Linda MSIMEKI, age 20, will have an identification code of SI20.

Use suitable functions to create an identification code in cell A3 for Mpho Podile.
4.4 Use the conditional formatting feature to apply a fill colour of your choice to the cells in column E for those volunteers who are 18 years or younger.
4.5 An attempt has been made in cell J 3 to create a formula to calculate the number of years that Mpho Podile has worked at the animal shelter.

The formula uses the current date in cell G1 and the date that Mpho Podile started working at the animal shelter (column I).

Correct the formula in the cell, rounding off your answer to display ONE decimal place.
4.6 Each volunteer is presented with a certificate of service for the work done at the animal shelter.
4.6.1 Volunteers qualify to receive a certificate if they have worked at the animal shelter for two years or more.

Use functions in cells $\mathrm{K} 4: \mathrm{K} 6$ to determine if these three volunteers qualify to receive a certificate or not.

The text ' $Y$ ' should appear in the cell if they qualify for a certificate, otherwise the text ' N ' should appear.
4.6.2 Nested IF functions were used in cells L4:L6 to indicate if the volunteer qualified for a certificate and what type of certificate he/she obtained, based on the number of years he/she has worked at the animal shelter (column J) as follows:

| Years worked | Certificate |
| :--- | :--- |
| Less than 2 | None (indicated by a '--') |
| Less than 3 | Silver |
| 3 or more years | Gold |

Correct the nested IF functions used in cell L4 and copy the corrected functions to cells L5 and L6.
4.7 Use a function in cell N3 to determine the number of volunteers who received certificates.
4.8 Enter a formula in cell N5 to determine the percentage of volunteers that received certificates. Use the data in cells N3 and N4 to help you determine this answer. You do not need to set the number of decimal places used.
4.9 Enter a function in cell N6 to determine how many of the volunteers do not have a cellphone number listed in column G.
4.10 Locate the graph showing the number of male volunteers versus female volunteers.

Make the necessary changes to the graph so that it appears like the one shown below.


Note the following:

- The type of graph used
- The data labels used
- The formatting of the Y-axis
- Each column must appear in a different colour

Save and close 4Volunteer_Vrywilliger.

## QUESTION 5

Open the spreadsheet 5AnimalData_Dierdata. This spreadsheet contains data about the animals in the animal shelter.
5.1 Rename the worksheet Sheet1 as Data.

Work in the Animals_Diere worksheet.
5.2 The animal shelter orders the animal feed specifically for the different age groups of the animals.

Use a function in cell G2 to display the age group of each animal for feeding purposes.

Use the approximate age in column D and the data in the Lookup_Opsoek worksheet for this function.
5.3 The approximate age of the animals is indicated in column $D$.

Use the data in this column to add a function in cell J 2 to calculate the average age of the animals in the animal shelter.
5.4 Add a function in cell J 3 to calculate the number of juvenile animals in the animal shelter.
5.5 It costs R12,50 per day to feed each dog. Column E contains the number of days the animals have been in the animal shelter.

Use this information to add a function in cell 34 to calculate how much it has cost to feed the dogs so far.

Work in the Summary_Opsomming worksheet.
5.6 Use the data in the Summary_Opsomming worksheet to create a graph like the one shown below.


Note the following:

- The same layout and options must be used.
- The graph must be saved in the Data (Sheet1) worksheet.

Save and close 5AnimalData_Dierdata.

## QUESTION 6

The CAT learners have been asked to interpret data from the database 6Helpers.
6.1 Open the table New_Nuwe and make the following changes:

| $\boldsymbol{\Delta}$ | Field Name | Data Type | Description |
| :--- | :--- | :--- | :--- |
|  | Surname_Van | Text | Surname/Van |
|  | Name_Naam | Text | Name/Naam |
|  | DOB_Geb | Text | Date of Birth/Geboortedatum |
|  | Age_Ouderdom | Number | Age/Ouderdom |
|  | Contactno_Kontaknr | Text | Contact Number/Kontaknommer |
|  | Start_Begin | Text | Start Date/Begindatum |
|  | Cert_Sert | Text | Qualifies for Certificate/Kwalifiseer vir Sertifikaat |
|  | Type_Tipe | Text | Certificate Type/Tipe Sertifikaat |
|  | VolunteerID_VrywilligerID | AutoNumber | ID of Volunteer/ID van Vrywilliger |
|  | F1 | Text |  |

6.1.1 Delete the field F1 from the table as it is no longer needed.
6.1.2 Change the data type for the Start_Begin field to a more suitable data type.
6.1.3 Set a primary key on an appropriate field.
6.1.4 Volunteers may not be younger than 14 years of age.

- Set a validation rule to prevent users from entering an invalid age.
- Add a suitable validation text.
6.1.5 Make it compulsory for a user to enter a value for any new records for the Surname_Van field.
6.1.6 Change the properties of the Cert_Sert field so that the value of the field is automatically set to No for all new records.
6.1.7 Create a new field called Pic between the Name_Naam field and the $D O B-G e b$ field to store a photograph of the volunteer.

Choose an appropriate data type for the field.
6.1.8 Set the properties of the Contactno_Kontaknr field so that ten digits have to be entered in that field.

Save and close the table.
6.2 Export the data from the table called Export_Uitvoer to a spreadsheet called MyData.
6.3 Create a form called frmData, based on the table Volun_Vrywil, as follows:
6.3.1 Add only the Surname_Van, Name_Naam and Age_Ouderdom fields to the form.
6.3.2 Type your examination number in a label in the form header and place a 5-point, blue border around the label.
6.3.3 Create a drop-down list for the Cert_Sert field with the options 'Yes' and 'No'.
6.3.4 Place the image 6Tiger_Tier in the header of the form so that it does not obscure any of the data.

Save and close the form.
6.4 Create a query called q64 which will display an alphabetical list. Use the Surname_Van and Name_Naam fields of all the records from the Volun_Vrywil table to sort the data.

Display only the Name_Naam, Surname_Van and DOB_Geb fields.
Save and close the query.
6.5 Open the query qry1Silver.

Modify the query to display only the names and surnames of those volunteers who are older than 18 years and who will receive a silver certificate.

Save and close the query.
6.6 Open the qry2Old_Oud query.
6.6.1 Insert a calculated field called $N Y$ which will take the value of the Years_Jare field and round it to the nearest number of years.

For example: 1,2 would be displayed as 1 in the new field and 0,7 would be displayed as 1 in the new field.
6.6.2 Amend the query so that the only records displayed are those of the volunteers who do NOT have a contact number listed.
6.7 Open the RepVolun_Vrywil report and make the following changes:
6.7.1 Change the background of the report header to a colour of your choice.
6.7.2 Swop the order of the Surname_Van and Name_Naam fields, as well as the headings for these two fields.

Ensure that no data is deleted in the process.
6.7.3 A function to calculate and display the average age of all the volunteers in the report, correct to TWO decimal places, was added to the report.

However, the function produces an error. Correct this error so that the correct answer (in the correct format) is displayed.
6.7.4 Insert a function in the report, together with an appropriate label, to show the number of volunteers in each category of certificates, that is Gold, Silver, Bronze and None.

Save and close the report.
Save and close the 6Helpers database.

## QUESTION 7

Use the files 7Label_Etiket and 7Data.
The animal shelter needs labels for each of the cages housing the dogs. The finished labels will appear as in the example below.

| Name: | Rocco | Name: | Sammy |
| :--- | :--- | :--- | :--- |
| Gender: | M | Gender: | M |
| Weight: | 3,6 | Weight: | 3,2 |
|  |  |  |  |

### 7.1 Open the file 7Label_Etiket.

7.1.1 Change the dashed border around each label to a double-line border.
7.1.2 Centre the table vertically on the page.
7.1.3 Use the spreadsheet 7Data to prepare the 7Label_Etiket document for a mail merge.

- Labels are only required for dogs weighing less than 5 kilograms.
- Add the merge fields Name_Naam, Gender_Geslag and Weight_Gewig next to the corresponding heading.
- Sort the recipients (the dogs) in descending order of weight.

Save the document as 7MergeReady before performing the mail merge.
7.1.4 Complete the mail merge, saving the results to a new document called 7Dogs. Ensure that no blank labels appear on a page.

Save the merged document as 7Dogs.
Close 7MergeReady and 7Dogs.

Open the 7Form_Vorm document. Enter your examination number in the header.
7.2 A form has been created for people to fill in if they wish to adopt an animal. You are required to edit the form by following the instructions below.
7.2.1 Add a 'Date and Time' field that will automatically update and that is aligned on the right-hand side of the footer. The date and time should appear in the format DD/MM/YY HH:MM.
7.2.2 The maximum number of characters that can be entered into the Name field must be 15 .
7.2.3 Insert a check box for the heading 'Have you owned a pet before?' aligned under the text field for the name. Ensure that the check box is checked or 'ticked' by default.
7.2.4 Insert a drop-down form field for the heading 'How many pets do you currently own?'

- Add the following three options for the drop-down list:

0
1
$>1$

- Add a help text function to the drop-down list on the F1 key option. The help text message should read 'Choose one'.
7.2.5 Insert a leader tab to create a solid line from $8 \mathrm{~cm} / 3,5$ inches to $14 \mathrm{~cm} / 5,5$ inches in line with the text 'Signature'.

Save the 7Form_Vorm document.
Save and close all the documents.


## ADDENDUM A

## flith Helping in the charity shop

This is a valuable source of income for the charity and shop assistants are always needed, whether it be only a morning a month or an afternoon every week, or whatever is convenient to you. There are lots of jobs associated with running the shop which you could volunteer for (sorting the stock, pricing the stock, serving in the shop, etc). Contact Nico on 0834569876 if you can help.

## 知 Dogs

We are happy to train anyone over 18 years old for dog walking.

## Cats and other animals

Do you want to spend time with our cats or other animals we have at the sanctuary? Most enjoy human contact and the ones who are a little timid and shy will benefit from gentle interaction with volunteers.

## Fundraising events

Help is always greatly appreciated on the day, manning stalls, serving refreshments, etc. However, there is always the build-up to the event: collecting bric-a-brac, baking cakes, washing teddies, promotional activities, etc. You may even know someone willing to open our events. If you are interested in helping with fundraising, please ring Jones on 0821478965.

## Specialised skills

Are you a builder, electrician, joiner, plumber, general 'jack of all trades'? If so, your help is always needed on a random basis when the need arises.

| Activities Available at the Fun Day |  |
| :--- | :--- |
|  | Organiser |
| Animal Look-alike Competition | Serumula S |
| Bingo | Louw M |
| Dog Show | Van Rooyen J |
| Dog Tricks | Hill J |
| Horse Riding | Millay N |
| Tombola |  |

