basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY P1

FEBRUARY/MARCH 2012

MARKS: 200

TIME: 3 hours

This question paper consists of 18 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 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_Vraag1**

and files called:

- 1Answer_Antwoord   Word processing file

- 2Hike_Staptoer   Image file

- 2Newsletter_Nuusbrief   Word processing file

- 3Award_Toekenning   Spreadsheet file

- 3Certificate_Sertifikaat Word processing file

- 4Learner_Leerder   Spreadsheet file

- 5Distribution_Versprei   Spreadsheet file

- 6Bkpic_Bkprent   Image file

- 6Publication_Publikasie   Database file

- 7Circular_Omsend   Word processing file

- 7Donors_Skenkers   Database file

- 7Existing_Bestaande   Spreadsheet file

SCENARIO

Some of the CAT learners are part of the School Publications Committee.

All the data and information are computerised and these CAT learners will assist with the following:
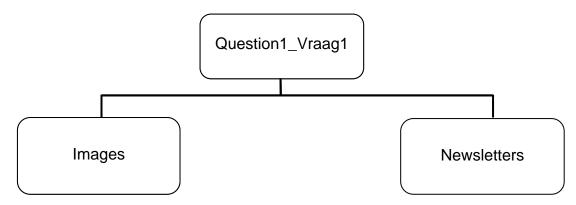
- Creating a form, a school newspaper and any other documents needed
- Setting up spreadsheets
- Maintaining a database
- Communicating with the community

The computers have been loaded with all the relevant software, namely an operating system and an office application suite.

QUESTION 1

The folder structure below has been created.

```
                    ┌─────────────────────┐
                    │   Question1_Vraag1  │
                    └─────────────────────┘
                    ┌───────────┴───────────┐
          ┌──────────────────┐      ┌──────────────────┐
          │      Images      │      │   Newsletters    │
          └──────────────────┘      └──────────────────┘
```

Work in the **Question1_Vraag1** folder to answer all the questions below, unless otherwise specified.

1.1   Rename the **Newsletters** folder found in the **Question1_Vraag1** folder as **Data**.   (1)

1.2   Delete all the PDF files from the **Question1_Vraag1** folder.   (1)

1.3   Save the file called **Pets** as a template document in the **Question1_Vraag1** folder.   (1)

1.4   Add the password 'N' to the spreadsheet called **Valid** in the **Question1_Vraag1** folder.   (1)

Open the **1Answer_Antwoord** file in the **Question1_Vraag1** folder.

Type your examination number in the space provided in the **1Answer_Antwoord** file.

1.5   Enter the name of the music file found in the **Question1_Vraag1** folder in the space provided in the **1Answer_Antwoord** file.   (1)

1.6   Use your word processor to determine the number of characters without spaces in the document called **Proposal**. Type your answer in the space provided in the **1Answer_1Antwoord** file.   (1)

1.7   Sort the files in the **Question1_Vraag1** folder according to *Type*. Show only the *Name* and *Authors* fields. Paste a screenshot of the contents of the **Question1_Vraag1** folder structure in the space provided in the **1Answer_Antwoord** file.   (4)

                                                                                         [10]
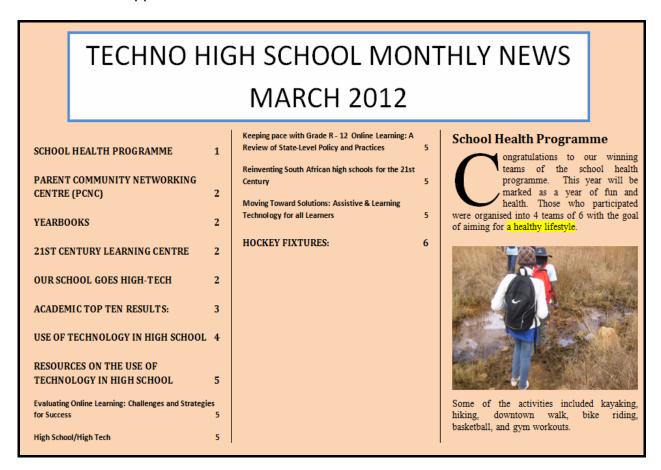
QUESTION 2

Techno High School sends out a monthly newsletter. The newsletter has been drafted and needs to be formatted and edited before it is published.

Open the file **2Newsletter_Nuusbrief**.

Type your examination number in the header of the document.

2.1   Change the left margin of the document to 1 cm/0.39 inches.   (1)

Study the example below to help you answer the questions that follow. Note that your answer should appear similar to this screenshot:

2.2   Fully justify the text in the document.   (1)

2.3   Place the title 'TECHNO HIGH SCHOOL MONTHLY NEWS MARCH 2012' in a text box at the beginning of the document, as shown above.

- The text box has a 3 pt blue border.
- The text is centred in the text box.   (4)

2.4   Place the text from 'SCHOOL HEALTH PROGRAMME ...' to the end of the document in columns as follows:

- 3 columns

- Vertical line between the columns

- 1 cm/0.39 inches spacing between the columns   (3)

2.5   Create a table of contents to appear in the first two columns, as shown in the example.

- Page numbers are right-aligned with no tab leader – do not show them as hyperlinks. (**NOTE:** Page numbers in the table of contents may differ from the screenshot.)

- Only level 1 and level 2 headings (styles heading 1 and heading 2) are displayed.   (4)

2.6   Ensure that the first paragraph, starting with the heading 'School Health Programme', starts at the top of the third column on the first page.   (1)

2.7   Format the 'C' of 'Congratulations ...' in the first paragraph to be a dropped capital letter 5 lines deep.   (2)

2.8   Insert the photo **2Hike_Staptoer** after the text '... a healthy lifestyle' in the first paragraph, as shown in the example. Wrap the text with a 0.3 cm/0.12 inch distance from the top and bottom of the picture.   (3)

2.9   Apply a first-line paragraph indentation of 0.5 cm/0.2 inches to the paragraph that starts with 'We welcome any parents ...' on page 2.   (2)

2.10   Remove the comment found in the document.   (1)

2.11   Find all occurrences of the text 'Virtual School Network' and replace it with 'VSN' in bold with a red font style, <u>except</u> for the first occurrence of the text 'Virtual School Network'.

     Highlight the first occurrence of the text 'Virtual School Network' in red.   (5)

2.12   Modify the style heading 3 so that it has the following properties:

- Use Comic Sans MS, 16 pt and with a bluish colour.

- The text must have a shadowed border around it.

- The style must update automatically.

- Rename the style as 'TopTen'.   (7)

2.13   Change the bulleted list to a numbered list for the Grade 12 academic top ten results. (1)

2.14   Find the word 'oversight' towards the end of the document. Use the proofing tools of the word processor to insert a synonym for 'oversight' in place of the word 'oversight'. (1)

2.15   Locate the text on the last page of the document that reads 'HOCKEY FIXTURES ...' to '... position in the pool.' Convert the text to a table. (1)

2.16   Insert automatic page numbering to appear in the bottom right-hand corner of every page. (1)

2.17   Insert the words 'Hockey Fixtures' in the footer of the document to appear only on the last page of the document. (2)

Save **2Newsletter_Nuusbrief** and close the document. **[40]**

QUESTION 3

Open the file **3Certificate_Sertifikaat**.

Type your examination number in the header of the document.

The school wishes to issue certificates of appreciation to all the learners who worked long hours on the School Publications Committee.

Study the image below and then follow the instructions to complete the certificate.

3.1   Insert a solid rectangular vertical shape on the left of the page, as shown in the image. Ensure that the shape:

- Is filled with a solid purplish colour
- Has a style 2 shadow effect (⬜) applied to the shape   (3)

3.2   Use the tab feature of your word processor to draw a line above the word 'Principal' on the certificate. The tabs should be placed as follows:

- A right tab with a solid leader
- At 10 cm/4 inches   (3)

3.3   Replace the text **<< *Place the date here>>*** with a date field containing the current date so that it updates automatically.   (3)

3.4   The name of the school 'Techno High School' appears as WordArt/Fontwork in the bottom centre and the logo appears in the bottom right-hand corner of the original certificate.

Make the following changes to the WordArt/Fontwork 'Techno High School':

- Resize the WordArt/Fontwork 'Techno High School' to 2 cm/0.79 inches high by 14 cm/5.51 inches wide.

- Change the transparency of the fill colour of the WordArt/Fontwork so that it becomes very light, that is above 80%.

- Move the logo to the left of the WordArt/Fontwork so that the word 'Principal' is clearly visible, as shown in the image on page 9.   (4)

3.5   The certificate needs to be personalised for the different learners. Use the spreadsheet **3Award_Toekenning** as a data source to prepare a mail merge.

3.5.1   Use only the names and surnames of those learners who spent 60 hours or more on the project for the mail merge.   (1)

3.5.2   Add the merge fields *Name_Naam* and *Surname_Van* to the certificate in the position indicated by the text ***<<Place the Name and Surname fields here>>***.   (1)

Save **3Certificate_Sertifikaat** before performing the mail merge in the next question.

3.5.3   Perform the mail merge, as required in QUESTION 3.5.1 and QUESTION 3.5.2.

Save the new document as **3Finished_Klaar**.   (2)

Save and close the documents.   **[17]**

QUESTION 4

The Grade 12 learners were asked to sell magazines to the community.

Open the spreadsheet **4Learner_Leerder**.

Work in the **Data** worksheet.

4.1	Merge the cells B1 to E3 and place a border around the merged cells.	(2)

4.2   Insert the words 'Magazines' and 'Tydskrifte' as WordArt/Fontwork, as follows:

- Over the cells B1 to E3

- In a blue colour

- Over two lines   (4)

4.3   Use a function to change the text in cell F2 to capital letters.

   NOTE: You can use another cell to get the correct result in cell F2, if necessary.   (2)

4.4   Apply the following changes to row 4:

- Centre the column headings vertically.

- Change the background colour of the cells that contain headings to any colour.   (2)

4.5   The number of magazines that were printed can be found in cell C36.

   Use a formula in cell C35 to determine the total number of magazines that are in stock after deducting the number of magazines sold by the learners.   (3)

4.6   Insert a function in cell G6 to combine the surname (in column B) with a comma and the first letter of the name (in column A).

   For example: The name Lawrence Mofokeng will appear as Mofokeng,L in cell G6.   (5)

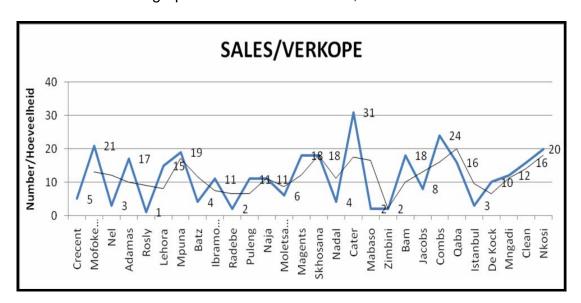4.7   The number of magazines sold by each learner is found in column C.

   Add a function in cell H12 to display the word 'Prize' if a learner has sold more than 18 magazines, otherwise the text 'No Prize' must be displayed.   (3)

4.8   The following discounts are given:

- 10% discount for selling more than 20 magazines

- 7,5% discount for selling more than 15 magazines

- 5% discount for selling more than 10 magazines

Use nested IF statements in cells D9 to D12 to determine the <u>percentage</u> discount that each person will receive. **NOTE:** No discount is given if 10 or fewer magazines are sold.   (5)

4.9   Create a line chart/graph in the **Data** worksheet, as shown below.

NOTE:

- <u>All</u> the surnames of the learners are displayed.

- The graph is provided with a title.

- The Y-axis is labelled.

- The major units are scaled to 10.

- Data labels are displayed.

- A trendline is displayed.   (8)

Work in the **Sort_Sortering** worksheet.

4.10   Arrange the given data so that the classes appear in <u>ascending</u> order with the names of the female learners appearing above the names of the male learners. Make sure that the row headings remain above the data.   (3)

4.11   Study the chart/graph that appears in this worksheet.

Change the chart/graph type to make it easy to see the comparison of those learners who won prizes with those who did not.   (1)

Save and close the **4Learner_Leerder** spreadsheet.   **[38]**

QUESTION 5

The school needs to sell advertisements to cover the cost of printing the magazine.

Open the spreadsheet **5Distribution_Versprei** which contains the records of some of the advertisers.

Work in the **Advertisements_Advertensies** worksheet.

Key in your examination number in cell B1 on the **Advertisements_Advertensies** worksheet.

5.1	Change the orientation of all the text in row 2 to vertical.	(1)
5.2	Add a formula in cell J3 to calculate the income from the advertiser for the number of repeats of their advertisement (column H).	(2)
5.3	Use a feature of spreadsheets to format the background colour of all the cells in column H to green with a black border, if the advertiser has sponsored four (4) or more advertisements.	(4)
5.4	Use a function in cell L3 to determine how many parents in the school have agreed to place advertisements in the school magazine.	(3)
5.5	The **Lookup_Opsoek** worksheet has been created to list the size and the cost of an advertisement in various media types. In cell F4 in the **Advertisements_Advertensies** worksheet, use the code in column E and the data in the **Lookup_Opsoek** worksheet to determine the cost of that specific advertisement.	(4)

Work in the **Summary_Opsomming** worksheet.

5.6	Insert a function in cell B8 on the **Summary_Opsomming** worksheet to determine the total amount of money brought in by R Makgoba, using the information on the **Advertisements_Advertensies** worksheet.	(4)
5.7	A chart/graph displaying the three (3) types of advertising media is given. Make the following changes to the chart/graph: • Change the chart/graph to an exploded pie chart. • Each segment of the chart/graph must be displayed as a percentage. • Place the chart/graph in a new worksheet called **Graph_Grafika**.	(4)

Save and close **5Distribution_Versprei**.   **[22]**

QUESTION 6

The school needs to keep track of the donors and the particulars of the articles they are publishing.

6.1   Open the database called **6Publication_Publikasie** and go to the **TblOne_TblEen** table.

Make the following changes to the **TblOne_TblEen** table:

6.1.1   Set a primary key on a suitable field.   (2)

6.1.2   Set the field size of the *Name_Naam* field to 20.   (1)

6.1.3   Delete the field *List_Lys* from the table.   (1)

6.1.4   The school will give each donor an identity code for the database. Ensure that this code can be entered into the *DonorID_SkenkerID* field, only in the following format:

Three capital letters followed by only two or three digits, for example PUB45 or PUB654.   (5)

6.1.5   Set a validation rule to allow the user to enter only values between 20 and 80 (excluding upper and lower bound) for the *Age_Ouderdom* field. Use suitable validation text.   (4)

Close the **TblOne_TblEen** table.

The table **Details_Data** has the following fields:

- *IDArticle_IDArtikel* identifies the specific items.
- *Article_Artikel* holds the name of the item.
- *Media* identifies the type of media, W for Website, N for Newspaper and M for Magazine.
- *Page_Bladsy* holds the size of the pages.
- *Words_Woorde* holds the number of words per item.
- *Month_Maand* holds the month of the publication.
- *Type_Tipe* holds the type of item, A for Article, P for Photograph, AP for both.
- *Colour_Kleur* identifies colour or black-and-white photographs.

6.2   Open the form called **FrmDetails_FrmData**, which is based on the **Details_Data** table. Make the following changes to the form:

6.2.1   The data for the *Media* field is displayed in a text box. Change the text box to a combo box so that a list of possible media is displayed from which the user must choose. Only the letters W, N and M must be displayed.   (3)

6.2.2   Use appropriate settings so that the contents of the *Words_Woorde* field automatically display in a red colour if the value is more than 150.   (3)

6.2.3   Insert a function in the footer of the form to display the current date.   (2)

        Save and close the form **FrmDetails_FrmData**.

6.3   Create a query based on the **Details_Data** table to display all the articles published in January. Display the *Article_Artikel* and *Month_Maand* fields only. Save your query as **New**.   (3)

6.4   The query **Q1** was created but needs to be changed to display as follows:

Article_Artikel	Media	Words_Woorde	Month_Maand	Type_Tipe	Colour_Kleur
Softball	W	100	July	A	
Sports News	W	250	Oct	AP	Colour
Sports News	W	250	July	A	
Sports News	W	250	May	A	
Sports News	W	250	Jan	A	

6.4.1   The *Page_Bladsy* field is not relevant for websites and should not be displayed. The remaining fields should remain unchanged.   (1)

6.4.2   Display only the records that:

        • Are articles

        • Come from websites

        • Have titles starting with 'S'   (5)

6.5   The number of words per article determines the basic price of placing a <u>magazine</u> article. The school has decided to charge 50 cents per word.

        Change query **Q2** by making the following changes:

        • Add a calculated field called *Cost*, to calculate the cost for each magazine article based on the number of words as shown in the *Words_Woorde* field at a charge of 50 cents per word.

        • Display only the name of the article, the number of words and the cost (in rand).   (5)

6.6   Edit the query **Q3** to display the average number of words used in newspaper articles ('N'), showing no decimals.

       NOTE: The field *Media* has already been set up to display only newspaper articles.   (3)

6.7   Create a report called **MyReport**. It must:

- Be based on the existing query called **qryReport**
- Show only the *Words_Woorde* and *Article_Artikel* fields (in that order)
- Be sorted according to the *Article_Artikel* field
- Appear in landscape format   (5)

6.8   Open the existing report called **RepDetails_Data**.

      6.8.1   Change the heading of the report to 'School Publications' with a font size of 16 pt.   (2)

      6.8.2   Insert the image **6Bkpic_Bkprent.jpeg** into the report to appear once only, at the top of the report.   (2)

      6.8.3   Group the data according to the *Page_Bladsy* field and sort it according to the *Month_Maand* field.   (2)

      6.8.4   A function has been used to determine the total number of articles. Amend this formula to display the number of articles per page size.   (1)

      6.8.5   Remove the text box with the number of pages and insert a label containing your examination number in the page footer.   (2)

Save **RepDetails_Data** and close the database.   **[52]**

QUESTION 7

You will need the following files to answer this question:

- **7Circular_Omsend**   Word processing file
- **7Donors_Skenkers**   Database file
- **7Existing_Bestaande**   Spreadsheet file

The school wishes to send out a circular letter to thank those learners who contributed to the project and also to urge parents to contribute.

7.1   Open the **7Existing_Bestaande** spreadsheet and the **7Donors_Skenkers** database.

       All the data in the **Donors_Skenkers** worksheet must be imported into a separate table called **Existing_Bestaande** in the **7Donors_Skenkers** database.   (2)

       Close the spreadsheet **7Existing_Bestaande**. Continue working in the database **7Donors_Skenkers**.

Open the word processing document called **7Circular_Omsend**.

7.2   Place the table **New_Nuut** from the database **7Donors_Skenkers** into the document **7Circular_Omsend** at the end of the first paragraph.   (1)

7.3   Apply a hyperlink to the words 'Click here', highlighted in green in the document. This link should link to the **7Existing_Bestaande** spreadsheet.   (3)

7.4   Apply outline numbering to the following text, highlighted in blue in the document. It should appear as shown in the example below.

> 1.   Financial – contributions of money
>
> 2.   Time
>
>   2.1. General tasks at the school
>
>   2.2. Computerised tasks done at home
>
> 3.   Sales – Selling the advertising spots in the magazine and website

(3)

7.5   Study the extract below and then follow the instructions.

7.5.1   Place a double-headed arrow (◄──►) right across the page, directly above the words 'Tear off slip ...', as shown in the example above.   (3)

7.5.2   Insert a symbol of a pair of scissors to the left of the text 'Tear off slip ...', as shown below.

✂Tear off slip: Involvement with School Publications Project   (1)

7.5.3   Merge the top row of the table containing the text 'Publications Project Involvement' to form one cell at the top of the table.   (1)

7.5.4   Change only the inside lines of the table to dotted lines.   (2)

7.5.5   The bottom row of the table should be larger so that one can write in it.

Set the bottom row of the table to exactly 1.2 cm/0.47 inches high.   (2)

7.5.6   Insert an endnote anchored to the words '... amounts contributed', highlighted in yellow.

- The endnote is marked by a custom mark like this: Ω (Ohm symbol).
- The text at the end of the document should read 'Includes all'.   (3)

Save and close any files that are open.   **[21]**

TOTAL: 200