



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY P1

NOVEMBER 2011

MARKS: 200

TIME: 3 hours

This question paper consists of 21 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
- 2MediaW Word processing file
- 3Doc_Dok Word processing file
- 4MediaS Spreadsheet file
- 5Users_Gebruikers Spreadsheet file
- 6BkPic_BkPrent Image file
- 6Club_Klub Database file
- 6Don_Sken Text file
- 7Data Database file
- 7Donations_Skenkings Spreadsheet file
- 7Fax_Faks Word processing file

SCENARIO

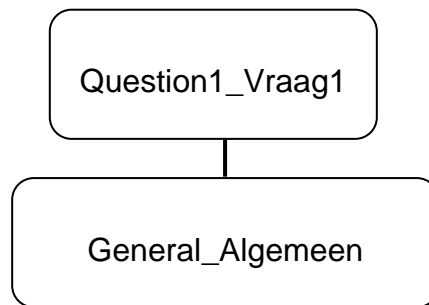
Your school has a media exchange centre which allows people to borrow books, CDs and DVDs. The CAT learners have been requested to assist the media exchange centre. Part of your responsibility will be to request donations to purchase more media resources.

The CAT learners will assist with the following:

- Advertising and supplying the centre with information
- Keeping records of resources and donations
- Maintaining a database of all the resources

QUESTION 1

The questions that follow are contained in the folder structure below.



- 1.1 Create a subfolder called **Data** in the **General_Algemeen** folder. (1)
- 1.2 Create a shortcut in the **Question1_Vraag1** folder which links to the file called **Practice_Oefen** in the **General_Algemeen** folder. (2)
- 1.3 Move ALL the spreadsheet files from the **General_Algemeen** folder to the **Question1_Vraag1** folder. (2)
- 1.4 Save the bitmap image called **Head_Kop** found in the **Question1_Vraag1** folder as a JPEG image in the same folder. (1)

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

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

Add your answers to the following questions in the spaces provided in this file:

- 1.5 Enter the name of the compressed file found in the **General_Algemeen** folder in the space provided in the **1Answer_Antwoord** file. (1)
- 1.6 How many times does the lower-case letter 'e' appear in the file called **Material_Materiaal** in the **Question1_Vraag1** folder? Enter your answer in the space provided in the **1Answer_Antwoord** file. (1)
- 1.7 Sort the files in the **General_Algemeen** folder in descending order of their name. Display only the size and name fields in the **General_Algemeen** folder.

Paste a screenshot of the folder structure of the **General_Algemeen** folder in the space provided in the **1Answer_Antwoord** file. (3)

Save **1Answer_Antwoord** and close the document. [11]

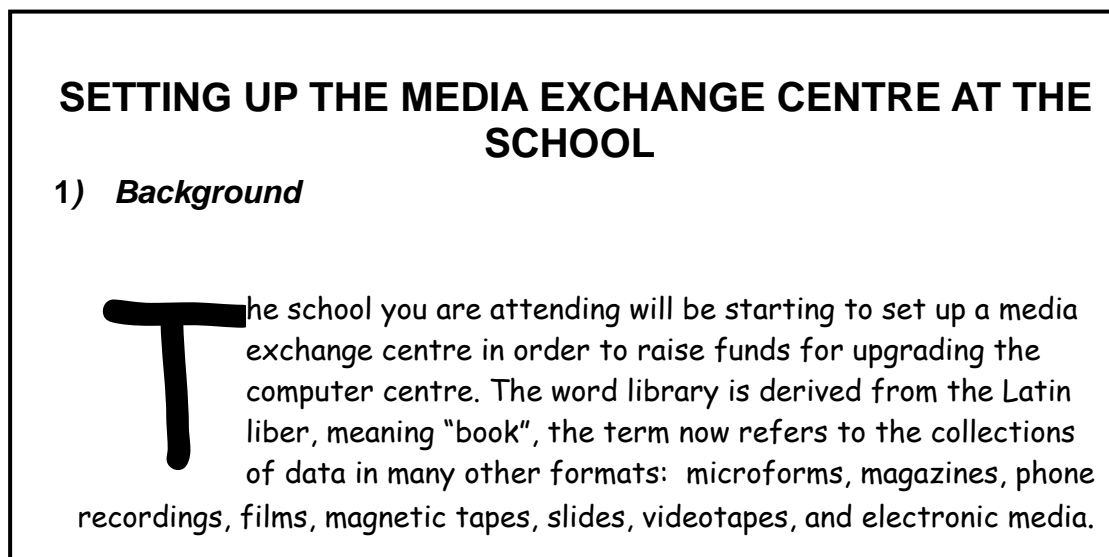
QUESTION 2

Open the document called **2MediaW**.

Type your examination number in the header of the document.

- 2.1 Apply the style '*Title*' to the main heading at the top of page 2 of the document. (1)
- 2.2 Correct the main heading 'SETTING uP tHE ...' on page 2 so that all the text appears in upper case. (1)
- 2.3 Add a dropped-cap effect, that drops over 5 lines, to the first paragraph under the heading '**Background**' starting with the text: 'The School you ...'.

Your answer should be similar to the screenshot shown below. Note the positioning of the dropped cap in the screenshot.



- (2)
- 2.4 Change the paragraph spacing to *12 pt after* to only the paragraph in QUESTION 2.3. (1)
- 2.5 Insert right-aligned automatic page numbering in the footer of the document. Use the format i, ii, iii ... (4)
- 2.6 Insert an 80 pt horizontal-text watermark to read 'DRAFT'. (3)
- 2.7 Change the indentation of the second heading '**2) Organising a book club**' to match that of the first heading '**1) Background**' exactly. (2)

- 2.8 Create a table of contents on page 1 under the heading '**TABLE OF CONTENTS**'.

The table of contents should have a format similar to the one shown in the screenshot below.

1) Background.....	ii
2) Organising a book club	ii
3) Advertise your book club -	iii
4) The first meeting	iii
5) Book reading.....	v
6) Choosing a book	v
7) Outcomes in the USA	vi
8) List of material in the media exchange centre	vii

NOTE:

- Only headings formatted with the style Heading 2 must appear in the table of contents.
- The heading '**TABLE OF CONTENTS**' does NOT appear in the table of contents.
- Page numbers may differ from that shown.

(3)

2.9 Apply a two-column format to the highlighted text on page 4 of the document.

Refer to the example below and note the following:

- A 1 cm/0.39 inches space must appear between the columns.
- A border appears around each of the columns.
- Ensure that paragraph 'c) Example Ground Rules:' will always start at the beginning of the second column.

a) Regular meeting times
Set a regular meeting time - An ideal size for a book club is 8 - 11 people. As you can imagine, it is often difficult to coordinate that many schedules. Go ahead and set a regular meeting time and date for your book club with your core group. By setting the time before advertising the book club, you avoid playing favourites when working around schedules and are up front about what commitment is required.

b) Establish ground rules
Get together with your potential book club members and set the group's ground rules. If you did not set the meeting time with your core group, do that now.

c) Example Ground Rules:
My book club decided that a different person would host each month. The hostess is responsible for picking the book, leading the discussion and providing the meal. If we meet at a restaurant, the hostess buys appetizers and wine. We place no restrictions on what books the hostess chooses--fiction, non-fiction, self-help--everything's fair game. We always take December off from reading and plan a fun event out.

d) Hosting Ideas:
Food is not required, but it helps the discussion roll and makes the book club meetings more fun. Some book clubs meet at a different restaurant each month. Sometimes meetings are held in people's homes. Be sure to check out our ready to go discussion questions on best sellers. Just print out the questions and you're ready to lead.

(6)

2.10 Apply the following changes to the image that appears under the heading '**6) Choosing a book**'.

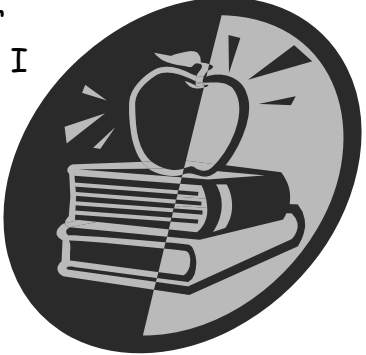
2.10.1 Flip the image horizontally. (1)

2.10.2 Change the colour of the image to greyscale. (1)

2.10.3 Move the whole image to the right-hand margin with the text flowing to the left of the image, as shown in the diagram below.

6) Choosing a book

We're talking about books that you can choose for your book group. When I organised my book group, I wanted to have a variety of books available to discuss. I didn't want to just discuss novels; I wanted to discuss non-fiction as well. So we set up categories that we chose from every year. And my book group chooses their books as a whole. We vote on the books that we're going to



(2)

2.11 Locate the highlighted text '**Oprah's Book Club**' on the second last page and add an endnote to reference this text as follows:

- Use the Wingdings symbol number 38 as a custom mark to indicate the endnote.
- Add the text 'Launched 17 September 1996' as text for the endnote. (4)

2.12 A list appears at the end of the document under the heading '**8) List of material in the media exchange centre**'.

The outline numbering has been applied incorrectly as the numbers of the headings are **1.8.1 Books**, **1.8.2 Video Materials** and **1.8.3 Journals**.

Change the outline numbering so that it appears as **8.1 Books**, **8.2 Video Materials** and **8.3 Journals**. (3)

Save **2MediaW** and close the document.

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QUESTION 3

A working document was created for the media exchange centre called **3Doc_Dok**.

A draft electronic form appears on the first page of the document. This form was created to obtain information from learners who wish to belong to the centre. You are required to adapt the form. The adapted form should appear similar to the example below.

MEDIA EXCHANGE CENTRE/MEDIA-UITRUISENTRUM INFORMATION/INLIGTING	
Today's date/Vandag se datum	2011-Aug-17
Borrower Name/Lenernaam	<input type="text"/>
ID Number/ID-nommer	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Language/Taal	<input checked="" type="checkbox"/> English/Engels <input type="checkbox"/> Afrikaans
..... Signature/Handtekening	

Open the document called **3Doc_Dok**.

Type your examination number in the header of the document.

3.1 Insert a date field in line with the heading 'Today's date/Vandag se datum'.

The date must:

- Be in the format YYYY-MMM-DD, for example 2011-Oct-17
- Update automatically
- Be positioned at 7 cm/2.75 inches

(4)

3.2 Change the properties of the text field for the 'Borrower Name/Lenernaam' so that the name will automatically appear in Title Case when the user enters a name in the field.

(1)

3.3 Insert a table for the ID Number in line with the heading 'ID number/ID-nommer'.

The table must:

- Have 13 columns and 1 row (13 x 1)
- Have columns of 0.5 cm/0.2 inches wide (4)

3.4 Remove the cross from the check box for the Afrikaans option. (1)

3.5 Use a dotted leader to allow space for a signature below the text 'Signature/Handtekening' to end at 8 cm/3.15 inches from the left margin. (2)

3.6 Make the following changes to the 'face' image on the form:

- Change the mouth from a sad mouth (downward curve) to a smile (upward curve), as shown in the example on the previous page.
- Add a shadow effect to the image of the 'face', as shown in the example on the previous page.
- Add a callout to the 'face' image, as shown in the example on the previous page. The text in the callout must read 'Thank you/Dankie!'.
- Combine the callout and the 'face' so that it can be moved as one object. (4)

3.7 A table, in draft form, showing the details of some donors, appears on page 2 of the document **3Doc_Dok**.

Study the example below before carrying out the instructions that follow.

Donations/Skenkings					
Media donated/geskenk					
Surname/ Van	Name/ Voornaam	Media	Value/ Waarde	Items	Total/ Totaal
					2
WIESEMAN	Owen	CD	50	3	150
MANTSINA	Jannie	Book_Boek	80	4	320
ESTERHUIZEN	Jan	DVD	50	1	50
MSIMEKI	Linda	CD	40	4	160

3.7.1 Merge ALL the cells in the first row of the table 'Media donated/geskenk' of the document. (1)

3.7.2 Use a table option to automatically adjust the width of all the columns to fit the data in the table. (1)

3.7.3 Use diagonal lines in the third row of the table to form a cross in the first cell, as shown in the other cells in that row (see diagram above). (1)

3.7.4 A drop-down form-field control has been added in the fourth row in the third column (under the heading 'Media'), as shown in the example).

Amend the properties of this control so that the only options that the user can choose are the following (*in the same order*):

- Book_Boek
- DVD
- CD

(3)

3.8 An incorrect formula has been added in the shaded cell in the third row of the last column ('Total/Totaal') to total all the values in the cells below it.

Correct the formula so that the correct value is given.

(2)

3.9 Use the table on page 2 to create another table on the last page of the document which shows an alphabetical list of those people who donated at least two books (see 'Media' and 'Items' columns).

Note the following:

- The table must show all the columns used in the original table.
- The headings from the original table must be used, as shown in the following extract of some of the records that should appear in the table:

Donations/Skenkings					
Surname/ Van	Name/ Voornaam	Media	Value/ Waarde	Items	Total/ Totaal
BARNARD	Samantha	Book_Boek	80	3	240
CROWTHER	Jake	Book_Boek	80	4	320
JONKER	William	Book_Boek	80	3	240
KGATLE	Alan	Book_Boek	80	4	320
KRIEK	Kevin	Book_Boek	80	2	160
MALATJI	Andrew	Book_Boek	50	3	150

(6)

Save **3Doc_Dok** and close the document.

[30]

QUESTION 4

The manager of the media exchange centre has created a spreadsheet to help with various calculations.

Open the spreadsheet **4MediaS** and work in the **Resources_Bronne** worksheet.

4.1 Make the worksheet **Resources_Bronne** easier to read by completing the following formatting changes:

- Merge and centre the contents of the cells in the range A1:H1.
- Apply word wrapping to row headings in row 2.
- Add cell borders to the headings in row 2.

(You may use any colour or formatting of your choice for the cell borders.) (4)

4.2 Some of the books in the centre are very old.

Use a feature of spreadsheets to format the contents of the cells in column E ('Year Published/Jaar uitgegee') which have a value before 1995 in a different font colour to the rest of the cells in that column. (3)

4.3 Display all the values in column F as the South African currency with NO (zero) decimal places. (2)

4.4 Add a function in cell L6 to calculate the average price of all the media given in column F.

Round off your answer to TWO decimal places. (4)

4.5 The different media available in the spreadsheet are indicated by a letter in column I:

- B – Books
- C – CDs
- D – DVDs

Add a function in cell L8 to determine the number of books that are listed in the spreadsheet. (3)

4.6 Use a VLOOKUP function in cell C3 to display the name of the Publisher based on the code provided in cell D3 and the data provided in the **Data** worksheet.

Ensure that the function will work correctly if it were to be copied down to the rest of the cells in the column. (4)

4.7 The publisher, Bookworld, has increased its prices by 10%.

Add IF functions in column G to calculate the new prices of all the media. In the case of media published by Bookworld, add 10% to the price shown in column F.

In all other cases, prices for the media remain the same as in column F. (4)

4.8 The purpose of the chart/graph shown in the worksheet **Resources_Bronne** is not clear. Make the following changes to the chart/graph:

4.8.1 Change the chart/graph type to a column graph. (1)

4.8.2 The chart/graph was designed to display the different number of titles per type of media.

Give the chart/graph a suitable title and display it below the chart/graph. (2)

4.8.3 Remove the legend 'Series 1' from the chart/graph. (1)

4.8.4 Insert a title on the Y-axis to read 'Units'. (1)

4.8.5 Change the graph so that the values on the Y-axis are shown in intervals of 10 and not of 5, as is currently the case. (1)

Save **4MediaS** and close the document. [30]

QUESTION 5

The manager of the media exchange centre has created a spreadsheet to show the details of the learners who are using the centre.

Open the spreadsheet **5Users_Gebruikers** and work in the **Helpers** worksheet.

5.1 Apply any fill colour (other than the current one) to cell A1 (the merged cell). (1)

5.2 Add a function in cell L3 to determine the second highest number of hours worked, as indicated in column G. (3)

5.3 Each learner has to be given a user name in order to use a computer. The user names in column D are formed by combining the learner's surname and initial and converting this to upper case.

For example: John Smith becomes SMITHJ and Miriam Somlata becomes SOMLATAM.

Add a suitable formula in cell D3 to determine the user name for the learner Vanessa Adam. (5)

5.4 Correct the formula in cell F3 which is trying to calculate the age of the learner (in years) using today's date and the learner's date of birth in cell E3. (3)

5.5 The management of the media exchange centre has decided to divide the users into various categories, according to the hours they worked (column G).

A	Learners who worked more than 9 hours
B	Learners who worked between 5 and 9 hours (inclusive)
C	Learners who worked less than 5 hours

Use nested IF statements in cells H3:H5 to determine the categories of the first three learners. (5)

5.6 Add a function in cell L4 to determine the total number of hours worked by the learners in category A (as indicated in column H). (4)

5.7 Use the LEN function to determine the length of the longest surname. Enter your answer in cell L5. (2)

The names and times worked by the helpers at the media exchange centre are recorded in the worksheet **Time_Tyd**.

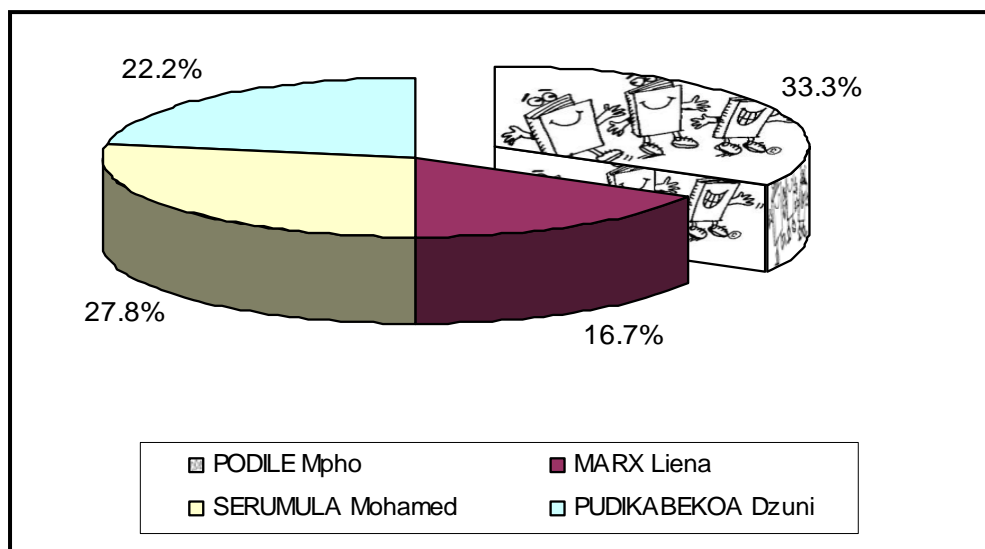
Work in the worksheet **Time_Tyd**.

- 5.8 A formula was entered in cell D4 to determine the number of hours that Mpho Podile worked during the first shift. The formula is correct but does not produce the correct result.

Fix this problem so that the correct result is produced and displayed. (1)

- 5.9 Enter a formula in cell L5 to calculate the total number of hours worked by Liena Marx for all three shifts. (2)

- 5.10 The manager of the media exchange centre tried to create a chart/graph showing the credits (column K) earned by the first FOUR helpers listed in the spreadsheet (rows 4 to 7).



Study the above example of what the final chart/graph should look like. Now change the existing chart/graph using the options and formatting shown in the screenshot above.

Note the following:

- Data (includes the first four helpers in the **Time_Tyd** worksheet)
- Appearance and position of the legend
- Formatting of the data labels
- 3D visual effect of the graph
- The 'pulled out' or 'exploded' segment/slice of the graph (must be filled with the image or picture **6BkPic_Bk**)

The chart/graph must appear in its own worksheet called **Graph**. (9)

Save **5Users_Gebruikers** and close the spreadsheet.

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QUESTION 6

Open the database **6Club_Klub** which needs to be updated and modified.

6.1 Open the table **Donors_Skenkers** in Design View.

The design of the table **Donors_Skenkers** is shown below.

▲	Field Name	Data Type	Description
	DonorID_SkenkerID	Text	ID No./ID nr.
	Name_Naam	Text	Name of donor/Naam van skenker
	Surname_Van	Text	Surname of donor/Skenker se van
	DOB_GebDat	Text	Date of birth/Geboortedatum
	Item	Text	CD, DVD, Book/Boek

6.1.1 Modify the data type of the field *DOB_GebDat* to make it more suitable for the type of data it is going to store. (1)

6.1.2 Change the field size of the *Surname_Van* field to a more suitable length. (1)

6.1.3 Import the data from the file called **6Don_Sken** into the table **Donors_Skenkers**.
Make sure that the original field names are still used in the table. (3)

6.1.4 Design an input mask for the *DonorID_SkenkerID* field if the field must store data such as the examples shown below. (4)

A62
P8
N4
G56

Save and close the table.

6.2 Open the table **ItemList_ItemLys** in Design View.

▲	Field Name	Data Type	Description
	Title_Titel	Text	Name of media/Naam van media
	Author_Skrywer	Text	Names of writers/Skrywers se name
	Pub_Uit	Text	Name of publisher/Naam van uitgewer
	MediaID	Text	Number of the item/Nommer van die item
	Year_Jaar	Number	Year published/Jaar waarin item uitgegee is
	Pages_Bladsye	Number	Number of pages in book/Getal bladsye in boek
	Price_Prys	Currency	Price of item/Prys van item
	Howmany_Hoeveel	Number	Items available/Getal items beskikbaar
	Type_Tipe	Text	B-Book/Boek, C-CD, D-DVD

6.2.1 Set a primary key on the most appropriate (suitable) field in the table. (2)

6.2.2 Set a validation rule for the *Year_Jaar* field so that only items that have been published later than (after) 1960 can be entered into the table.

Also ensure that nobody can enter a date later than 2011.

Use suitable validation message (text). (4)

6.3 Open the form **frmITEMS**.

6.3.1 Type your examination number in the form footer. (1)

6.3.2 Add the graphic/picture **6BkPic_BkPrent.jpg** in the form header. (2)

Save and close the form.

6.4 Create a query called **qry6_4** to display only the *Title_Titel* and *Author_Skrywer* fields from the **ItemList_ItemLys** table.

The records must be sorted in descending order of the *Type_Tipe* field. (2)

Save and close the query.

6.5 Open the query **qry6_5**.

Modify the query to display only those items that cost R250 or more and that are NOT books (B). (2)

Save and close the query.

6.6 Open the query **qry6_6**.

Insert a calculated field called *VAT_BTW* to display the VAT of 14% calculated on the price of any items with the word 'Mathematics' anywhere within the title.

Format the VAT as currency, as shown in the example below.

Title_Titel	Price_Prys	VAT_BTW
Classroom Mathematics Gr. 10	R 110.00	R 15.40
Classroom Mathematics Gr. 11	R 140.50	R 19.67
Classroom Mathematics Gr. 12	R 150.00	R 21.00
Student-friendly Basic Mathematics	R 109.95	R 15.39
Study and Master Mathematics Gr. 11	R 150.00	R 21.00
Study and Master Mathematics Gr. 11	R 124.00	R 17.36
Study and Master Mathematics Gr. 12	R 188.00	R 26.32

(6)

Save and close the query.

6.7 Open the report named **RepITEMS**.

6.7.1 Place the data (not the heading) for the *Title_Titel* field in a different font colour as the data of the other fields. (2)

6.7.2 Insert a field or function for the current date in the text box provided in the header of the report. (2)

6.7.3 Insert a function in the text box provided in the footer of the report to display the total value of all the items listed.

This amount should be displayed as South African rand. (3)

6.7.4 A function to display the total number of items per publisher was created in the report footer. The formula is correct but it displays only one total.

Modify the report so that the totals for each publisher are displayed. (3)

Save and close the report.

6.8 Create a report called **rep6_8** with the following criteria:

- Base the report on the **Itemlist_ItemLys** table.
- Display only the *Title_Titel*, *Type_Tipe* and *Year_Jaar* fields.
- Group the records by the *Type_Tipe* field.
- Sort the records according to the *Year_Jaar* field. (4)

Save the report as **rep6_8** and close the report.

Save and close the document.

[42]

QUESTION 7

Use the files **7Fax_Faks**, **7Donations_Skenkings** and **7Data**.

The media exchange centre has prepared a fax from a template. The final document will be sent to the supporters and donors.

7.1 Open the document **7Fax_Faks**.

Key in your examination number in the header of the document.

This document is going to be used as part of a mail merge. The document needs to be modified and corrected before it is sent.

7.1.1 Remove the extra highlighted table (in pink) towards the top of the document. (1)

7.1.2 Delete the word linked to the bookmark *Del*. (2)

7.1.3 Find all instances where the name 'Media Book Club' was used and replace it with the name 'Media Exchange Centre'. The corrected name should display in italics. (3)

7.1.4 The hyperlink www.mec.org.za in the document currently links to the website www.ccn.com.

Change the properties of the hyperlink so that the hyperlink links to the website www.mec.org.za. (1)

7.2 All the donations received were recorded in a spreadsheet. Information from the spreadsheet must be used in the letter.

Open the **7Donations_Skenkings** spreadsheet. Keep the **7Fax_Faks** document open.

7.2.1 Copy data from the spreadsheet and paste this data as a linked table into the **7Fax_Faks** document in the place indicated in the document. (2)

7.2.2 Change the amount in the **7Donations_Skenkings** spreadsheet, donated by the donor who donated the most, to R5 000. (1)

7.2.3 Update the link in the **7Fax_Faks** document to reflect the change you have made in the spreadsheet in QUESTION 7.2.2. (1)

Save and close the **7Donations_Skenkings** spreadsheet, leaving the **7Fax_Faks** still open.

7.3 A similar letter needs to be sent to many different recipients.

7.3.1 Use the **7Fax_Faks** document as a form letter and the database **7Data** to prepare for a mail merge as follows:

- Use the existing query **qry7_3** in the **7Data** database as the data source for the letters.
- Sort the recipients (letters) in descending order of the amount donated (*Amount_Bedrag*).
- Add the merge fields *Name_Naam* and *Surname_Van* to the shaded cell (opposite To:) at the top of the document.
- Ensure that there is a space between the name and surname.

Save this document as **7MergeReady** before performing the mail merge in the next question. (6)

7.3.2 Complete the mail merge using the **7MergeReady** document as follows:

- Complete the mail merge for only the first three recipients.
- Save the results of the merge for the first three recipients as a document called **7MergeComplete**. (1)

Save and close all the documents. [18]

TOTAL: 200