



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY P1

SEPTEMBER 2015

MARKS: 180

TIME: 3 hours

This question paper consists of 17 pages, an HTML tag sheet 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. Type 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 the 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 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. 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.

13. If data is derived from a previous question that you could not answer, you should still proceed with the questions that follow.
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 stated otherwise.
15. Use centimetres as the unit of measurement when answering this question paper.
16. **Alternative instructions for candidates using LibreOffice are given in cases where they differ from the instructions for candidates using Microsoft Office.**
17. Generally, one mark is allocated per action; therefore a two-mark question would usually require TWO actions, et cetera.
18. The examination folder/data disk that you receive with this question paper will contain the folders and files listed below. Ensure that you have all the files before you begin with this examination.

• 1_Premier	Image file
• 1_Welcome_Welkom	Word processing file
• 2_Half_Marathon_Maraton	Image file
• 2_Entry_Inskrywing	Word processing file
• 2_Info	Adobe Acrobat file
• 3_Macufe	Image file
• 3_Macufe	Spreadsheet file
• 4_Calculation_Berekening	Spreadsheet file
• 5_Mangaung	Image file
• 5_Volunteers_Vrywilligers	Database file
• 6_Website_Webblad	HTML file
• 6_Feast_Fees	Image file
• 6_Sponsors_Borge	Image file
• 7_Accommodation_Verblyf	Word processing file
• 7_Highlights_Hoogtepunte	Word processing file
• 7_Macufe_Info	Presentation file
• 7_Novice_Nuut	Word processing file
• 7_Pamphlet_Pamflet	Adobe Acrobat file
• 7_Runners_Hardlopers	Spreadsheet file

SCENARIO

The Mangaung African Cultural Festival (MACUFE) celebrates its 17th year of existence from 5 to 14 October 2015 and it promises to be the best and biggest ever.

Launched in 1997 by the Free State Provincial Government to celebrate the best local and international African artists in various disciplines, it is a scintillating cultural fest that has grown from strength to strength.

You are part of the organising committee, and you are expected to communicate with artists and media regarding accommodation for the 2015 MACUFE extravaganza.

QUESTION 1: WORD PROCESSING

Open the **1_Welcome_Welkom** word processing document and edit the document according to the instructions below.

- 1.1 Locate the text 'Welcome to MACUFE 2015'.

Format this text so that it appears in title style. This text should also be formatted to a white, bolded font and a red colour background, as shown in the example below:

Welcome to MACUFE 2015

(4)

- 1.2 Locate the image file saved as **1_Premier** in your data folder and follow the instructions below:

- 1.2.1 Insert the **1_Premier** image as shown below and format it as follows:

- apply a square or through layout;
- change the size to 4 cm high and 3.5 cm wide.

(5)

Premier's Message

This year's Mangaung African Cultural Festival (MACUFE) will be one of the most important events of national and international magnitude to be held by the Free State Province.

The preparations for hosting this dazzling event started 17 years ago and I make a bold statement to say, we have passed with flying colours since its inception in 1997 - and this year we will continue to raise the bar.

It is evident that the Free State Province is capable of hosting

1.2.2 Locate the image at the top of the document, below the 'Table of Content', and insert a caption which reads:

- 'Figure 1: Macufe 2015'
- The caption must be above the image.

Figure 1 Macufe 2015



(2)

1.3 Make the following changes to the header of the document:

1.3.1 Format the horizontal line as follows:

- set the thickness at 4 pt;
- use a solid line colour, except black.

(3)

2015

MACUFE

1.4 Format all paragraphs in the document to 3 pt before and 3 pt after paragraphs and 1.5 line spacing.

(2)

1.5 Create a new style for all paragraph headings in the document. Name the style 'Macufe' and format the style as follows:

- Arial font.
- The text must have a shadowed border around it.
- The style must update automatically.

(4)

1.6 Create an automatic table of content in the Classic Style below the words 'Table of Content' on page 1.

- The table of contents must be based on the 'Macufe' style.
- Only 'Macufe' headings should appear in the table of content.

(3)

1.7 Locate the green highlighted text 'Premier' at the beginning of the document on the first page and add an endnote to reference this text as follows:

- Use the Wingdings symbol number 232 as a custom mark to indicate the endnote.
- Add the text 'FS Premier: Ace Magashule' as text for the endnote.

(3)

- 1.8 Insert automatic page numbering in the centre of the footer of the document. The page number must be displayed as Page X of Y. The 'Table of Content' page should not be numbered. Page numbering must start on page two as Page 1 of Y.

(4)

Save and close the **1_Welcome** document.

[30]

QUESTION 2: WORD PROCESSING

Open the **2_Entry_Inskrywing** word processing document and edit the document according to the instructions below.

- 2.1 Locate the text 'Surname' and apply a solid leader tab at 15 cm so that lines are created to fill in the details, as shown in the example below.

(2)

ENTRY FORM
PRINT CLEARLY USING BLOCK LETTERS

Name: _____ Surname: _____

- 2.2 Apply a 3 pt page border to the document and format the colour of the border to Orange, Accent 2, and Darker 25%. (3)

- 2.3 Edit the 'ID NO.' form field so that it will display a maximum of 13 characters. (1)

- 2.4 Edit the property of the ' ☐ ' check box form field so that the check box will appear as checked every time the document is opened. (1)

- 2.5 Add a drop-down list to the 'RACE' field. The values in this list should be 'Black', 'Coloured', 'White' and 'Indian'. (2)

- 2.6 Format the text form field next to the 'AGE:' label to number.

- Display the following help message on the status bar: 'How old are you?'
- Set the default age at 16. (3)

- 2.7 Insert the Adobe Acrobat file **2_Info** below the field *Athletics Club*, inside the text box that is filled with a blue colour, so that it appears as an icon/button. (2)

- 2.8 Format the text from 'Half marathon - 2.1.1' to 'Rocklands BFN' (highlighted in a yellow colour) to two columns.

Ensure that the text 'Big Walk - 7.2 km ...' starts at the top of the second column.

There must be a vertical line between the two columns. (3)

- 2.9 Locate the rectangular auto shape at the end of the page and fill the auto shape with the image saved as **2_Half_Marathon_Maraton**. (2)

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

QUESTION 3: SPREADSHEET

A spreadsheet was set up by the MACUFE organisers of the marathon.

Open the **3_Macufe** spreadsheet and work in the **MARATHON** worksheet.

3.1 3.1.1 Merge cells A1 to H1. (1)

3.1.2 Wrap the text in cell A2 and change the orientation of the headings in the range A2:H2 as shown in the example below: (2)

	A	B	C	D	E	F	G	H
1	MACUFE MARATHON							
2	Runner number	Runner Surname	Name	Marathon_ID	Team Member	Level	Fee	Amount due

3.1.3 Use a function in cell K3 to calculate the total fees in column G. (2)

3.1.4 Apply conditional formatting to column F so that the word 'Master' is displayed in a red font colour. (3)

3.1.5 Add a function in cell D3 to determine the Marathon_ID of the runners. The code is a string (text) obtained by combining the following: (6)

- the last two letters of the surname, followed by
- the initial (first letter of the name), followed by
- the number of the runner in column A.

3.2 Work in the **SUMMARY** worksheet.

3.2.1 Use a function in cell B4 to count the number of participants who want to be part of a team in the competition. These participants are indicated with a 'Y' in column E of the **MARATHON** worksheet. (3)

3.2.2 Use a formula in cell B5 to determine the number of complete teams (with 15 members) that can be entered in the competition. Your answer must be a whole number. (Refer to 3.2.1.) (3)

3.2.3 Format cells C8 to C11 to display the amounts in South African Rand with two decimal places. (1)

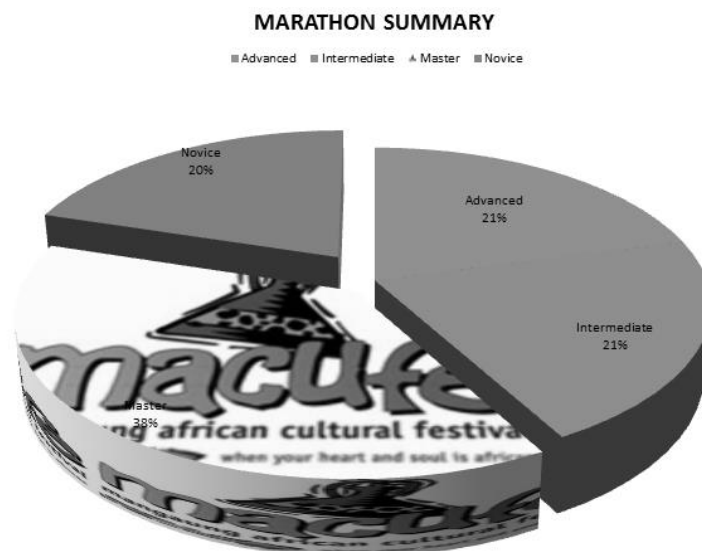
- 3.3 Use a function and the data in the **SUMMARY** worksheet to calculate the 'Amount due' for the different levels (in **column F**) in cell **H3** in the **MARATHON** worksheet.

Ensure that the function can be copied to cell **H252**. (7)

- 3.4 Create a 3D pie chart/graph to show the proportion of funds raised by each of the four groups (cells C8 to C11 in the **SUMMARY** worksheet).

- Fill the biggest slice of the chart with the **3_Macufe** image.
- Position the graph in a new worksheet and rename the worksheet as **MACUFE**.
- Use the formatting and layout options shown in the example below:

(11)



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

[39]

QUESTION 4: SPREADSHEET

Open the **4_Calculation_Berekening** spreadsheet and work in the **RACE CALCULATION** worksheet.

- 4.1 In cell E3, calculate the number of minutes that Kim Adam took to finish her task, using the start and end times in columns C and D respectively. (3)
- 4.2 In cell J5, use a function to calculate the score obtained by most of the participants. (2)
- 4.3 Enter a function in cell J7 to determine the second highest score (percentage in column G) obtained in the competition. (3)
- 4.4 Runners receive medals if they finish the race in a certain time. The criteria for receiving a medal appears in the cell range I12:J15.
- Use a function in cell H23 to find out if Duncan Douglas will receive a medal or not, and what medal he will receive if he deserves it. (5)
- Save and close the **4_Calculation_Berekening** spreadsheet. [13]

QUESTION 5: DATABASE

A database with tables has been created to keep record of the details of participants.

Open the **5_Volunteers_Vrywilligers** database.

5.1 Open the table saved as **New** and make the following changes:

New		
Field Name	Data Type	Description
Surname	Text	Surname
Name	Text	Name
DOB	Text	Date of Birth
Age	Number	Age
ContactNo	Text	Contact number
Start	Text	Start Date
Certificate	Text	Qualifies for certificate
Type	Text	Certificate type
VolunteerID	AutoNumber	ID of volunteer
F1	Text	

5.1.1 Delete field *F1* from the table as it is no longer needed. (1)

5.1.2 Change the data type of the *Start* field to a more suitable data type. (1)

5.1.3 Set the most appropriate field as the primary key field. (1)

5.1.4 Volunteers may not be younger than 14 years of age.

- Set a validation rule in the *Age* field to prevent users from entering an invalid age. (2)
- Add a suitable validation text. (1)

5.1.5 Ensure that it is compulsory for the user to enter a value for any new records in the *Surname* field. (1)

5.1.6 Format the properties of the *Certificate* field so that the value of the field is automatically set to *No* for all new records. (1)

5.1.7 Create a new field called *Pic* between the *Name* field and the *DOB* field to store a photograph of the volunteer.

(Choose an appropriate data type for the field). (2)

5.1.8 Set the properties of the *ContactNo* field so that ten digits can be entered in that field. (3)

Save and close the table.

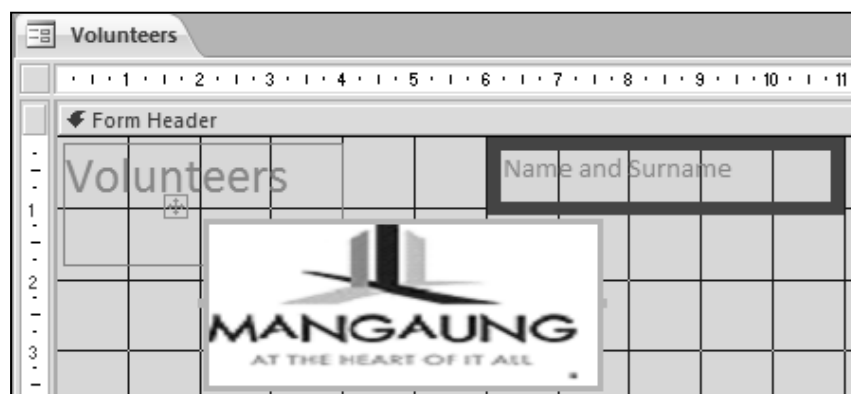
5.2 Create a form called **frmData**, based on the table **Volunteers**. (2)

5.2.1 Add only the *Surname*, *Name*, *Age* and *Certificate* fields to the form. (1)

5.2.2 Type your surname and initials in a label in the form header and place a 5-point, blue border around the label. (4)

5.2.3 Add a list box to the *Certificate* field with the options 'Yes' and 'No'. (3)

5.2.4 Place the image **5_Mangaung** in the header of the form. When selected in Design View, the image should be displayed as shown in the screenshot below.



Save and close the form.

5.3 Open the query called **qry3Time**.

- Add the *Started* field to the table.
- Sort the query in ascending order according to the *Surname* field.
- Display all members born on or before 1 January 1993.

Display only the *Name*, *Surname* and *DOB* fields. (4)

Save and close the query.

5.4 Open the query **qry1Silver**.

Modify the query to display only the names and surnames of volunteers who are older than 18 years and who will receive a silver certificate. (4)

Save and close the query.

5.5 Open the **qry2Old** query.

- Insert a calculated field called *NY* which will take the value of the *Years* field and round it to the nearest number of years. For example: 1,2 should be displayed as 1 in the new field and 0,7 should be displayed as 1 in the new field. (3)
- Amend the query so that the only records displayed are those of the volunteers who do NOT have a contact number listed. (1)

Save and close the **qry2Old** query.

5.6 Open the **Volunteers** report and make the following changes:

5.6.1 Change the background of the report header to a colour of your choice. (1)

5.6.2 Swop the order of the *Surname* and *Name* fields, as well as the headings for these two fields.

Ensure that no data is deleted in the process. (2)

5.6.3 A function was used to calculate the average age of the volunteers, but this function shows an error. Correct this error so that the correct answer is displayed. Two decimal places must be displayed. (4)

Save and close the **5_Volunteers** database. [45]

QUESTION 6: WEB DESIGN (HTML)

You are required to finalise the web page created to provide information about the 2015 MACUFE festival.

Open the incomplete **6_Website_Webblad** web page, in the web editor that you are using.

- Refer to Annexure A that appears at the end of this question paper to view the HTML tag list.

- 6.1 Insert a horizontal line below the heading '**Mangaung Cultural Festival**'. Apply a width of 1500 and an orange colour to the line. (3)
- 6.2 Change the background colour of the web page to sky blue. (2)
- 6.3 Create a new paragraph from the sentence starting with 'The preparations for ...' to '... raise the bar.' (2)
- 6.4 List the 2015 musical genres as shown below: (2)

2015 MUSICAL GENRES
• DIVAS • INDOOR JAZZ • GOSPELS • MAIN FESTIVAL

- 6.5 Edit the width of the table to 600 and the border to 5. (3)
- 6.6 Insert the following web page link <http://www.macufe.co.za> below the table. The web page must link to 'Mangaung Cultural Festival'. (4)
- 6.7 Insert a centred image 'Sponsors_Borge' at the end of the document, between the centering tags. Format the width of the image to 500 and the height to 50. (4)



Save and close the **6_Website_Webblad** document.

[20]

QUESTION 7: INTEGRATION

You used different documents when keeping record of the Macufe Festival.

- 7.1 Open the **5_Volunteers_Vrywilligers** database file and export the data from the table called *Export* to a spreadsheet called **MyData**. (2)

Close the **5_Volunteers_Vrywilligers** database file. Save and close the **Mydata** spreadsheet file.

- 7.2 Use the password mACUFE to open the file **7_Highlights_Hoogtepunte**. Save and close the file without any password. (1)

- 7.3 Save the image found in the word processing file **7_Accommodation_Verblyf** in your data folder. Name the image file **7_Image_Prentjie**. (You may save the image in any image format.)



- 7.4 Continue working in the **7_Accommodation_Akkommodasie** file.

Use the mail merge feature of your word processor to send letters to all volunteers who are 18 years and older to advise them about possible accommodation during the Macufe Festival.

- Use the **Volunteers** table in the **5_Volunteers_Vrywilligers** database as a data source for a mail merge as follows:
- Add fields to the letter. The fields are shown in <<>> as shown below:

Dear <<NAME>> <<SURNAME>>

- Prepare the merged letters and save as **7Final_Finaal**. (4)

- 7.5 Open the presentation file **7_Macufe_Info**. Locate slide 2 of the presentation.

Add a hyperlink to the picture as follows:

- The hyperlink must link to the **6_Feast_Fees** image in your data folder.
- The text 'Do not miss out!' must display when the mouse is moved over the hyperlink. (3)

Save and close the **7_Macufe_info** presentation file.

- 7.6 Open the **7_Runners_Hardlopers** file. Apply any skill and copy the details of all 'Novice' runners and paste it in the **7_Novice_Nuut** document.

(2)

Save and close all files.

[14]

ANNEXURE A: HTML TAG SHEET

Basic Tags	
Tag	Description
<body></body>	Defines the body of the web page
<body bg color="pink">	Sets the background colour of the web page
<body text="black">	Sets the colour of the body text
<head></head>	Contains information about the document
<html></html>	Creates an HTML document – starts and ends a web page
<title></title>	Defines a title for the document
<!-- -->	Comment
Text Tags	
Tag	Description
	Creates the largest heading
	Creates the smallest heading
	Creates bold text
<i></i>	Creates italic text
	Sets size of font, from "1" to "7"
	Sets font colour
	Sets font type
Links Tags	
Tag	Description
	Creates a hyperlink
	Creates an image link
	Creates a target location
	Links to a target location created somewhere else in the document
Formatting Tags	
Tag	Description
	Creates a new paragraph
<p align="left">	Aligns a paragraph to the "left" (default), can also be "right", or "center"
 	Inserts a line break
	Creates a numbered list
<ol type="A", "a", "I", "i", "1">	Defines the type of numbering used
	Creates a bulleted list
<ul type="disc", "square", "circle">	Defines the type of bullets used

Formatting Tags continued	
Tag	Description
	Inserted before each list item, and adds a number or symbol depending upon the type of list selected
	Adds an image
	Aligns an image: can also be "right", "center", "bottom", "top", "middle"
	Sets size of border around an image
	Sets the height and width of an image
	Displays alternative text when the mouse hovers over the image or when the image is not found
	Inserts a horizontal line
<hr size="3"/>	Sets size (height) of line
<hr width="80%"/>	Sets width of line, in percentage or absolute value
<hr color="ff0000"/>	Sets the colour of the line
Table Tags	
Tag	Description
<table></table>	Creates a table
<tr></tr>	Creates a row in a table
<td></td>	Creates a cell in a table
<th></th>	Creates a table header (a cell with bold, centred text)
<table width="50">	Sets the width of the table
<table border="1">	Sets the width of the border around the table cells
<table cellpadding="1">	Sets the space between the table cells
<table cellspacing="1">	Sets the space between a cell border and its contents
<tr align="left">	Sets the alignment for cell(s) (can also be "center" or "right")
<tr valign="top">	Sets the vertical alignment for cell(s) (can also be "middle" or "bottom")
<td colspan="2">	Sets the number of columns a cell should span
<td rowspan="4">	Sets the number of rows a cell should span