



# basic education

Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 12**

**COMPUTER APPLICATIONS TECHNOLOGY P1**

**FEBRUARY/MARCH 2017**

**MARKS: 180**

**TIME: 3 hours**

**This question paper consists of 17 pages, an HTML tag sheet,  
an input mask character sheet and a separate information sheet.**

**INSTRUCTIONS AND INFORMATION**

1. Owing to the nature of this practical examination, it is important to note that, even if you complete the examination early, you will NOT be permitted to leave the examination room until all the administrative functions associated with the examination have been finalised. During the examination normal rules regarding leaving the examination room apply.
2. Enter your examination number in the header or footer of EVERY document that you create or save, where applicable.
3. The invigilator will give you a CD/DVD/flash 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 CD/DVD has been issued to you, you must write your examination number and centre number on the CD/DVD. If you are working on the network, you must follow the instructions provided by the invigilator/educator.
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 CD/DVD/flash disk given to you by the invigilator with ALL your answer files saved onto it, 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 the 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, 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. **NOTE:** All formulae and/or functions should be inserted in such a manner that the correct results will still be obtained even if the data changes.
14. If data is obtained from a previous question that you could not answer, you should still proceed with the questions that follow.
15. 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.
16. Use centimetres as the unit of measurement when answering this question paper.
17. Generally, one mark is allocated per action; therefore, a 2-mark question would usually require TWO actions, et cetera.
18. The examination folder/CD/DVD/flash disk that you receive with this question paper contains the files listed below. Ensure that you have all the files before you begin with this examination.

|                   |                      |
|-------------------|----------------------|
| • 1Areas          | Word processing file |
| • 2Det_Bes        | Spreadsheet file     |
| • 2Drops          | Image file           |
| • 2Water          | Word processing file |
| • 3Rain_Reën      | Spreadsheet file     |
| • 4Game_Speel     | Spreadsheet file     |
| • 5AlbertFalls    | Image file           |
| • 5Dam            | Database file        |
| • 6House          | Image file           |
| • 6Life           | Image file           |
| • 6Out            | Image file           |
| • 6Wise_Wys       | HTML file            |
| • 7Answ_Antw      | Word processing file |
| • 7River_Rivier   | Database file        |
| • 7Rivers_Riviere | Spreadsheet file     |
| • 7Water          | Word processing file |

**SCENARIO**

Water is very important for life. We need water to drink, to wash our hands, to cook and to do many other things.

Your community leader has decided to contact your school to gather some facts about water as a natural resource.

**QUESTION 1: WORD PROCESSING**

A document about South Africa's water sources was created.

Open the **1Areas** word processing document and insert your examination number in the header or footer.

- 1.1 Find the text ('The availability of ... floods and droughts.') in the Abstract control on the first page and make the following changes:
- 1.1.1 Set the proofing language of all the text to English (South Africa). (1)
  - 1.1.2 Justify the text. (1)
- 1.2 Find the image on the first page.
- Crop the image to any shape of your choice AND sharpen the image to 50%. (2)
- 1.3 Find the 'Subtitle' text control on the first page and remove this control WITHOUT deleting the text contained in the control. (1)
- 1.4 Insert an automatically generated table of contents below the heading 'Contents' on the second page as follows:
- Apply the 'Classic' table of contents format.
  - Use the 'Water' style for the first level and the 'Heading 1' style for the second level of headings.
  - Set the tab leader for the page numbers to solid.
- NOTE:** Accept any warning messages that may appear. (4)
- 1.5 Insert automatic page numbers in the footer of the document as follows:
- Page numbering should start on the 'Contents' page as page 1.
  - The page numbering should appear in the format 'Page 1'.
  - The page numbers on odd-numbered pages should be left-aligned.
  - The page numbers on even-numbered pages should be right-aligned. (5)

- 1.6 Find the word 'Our' on the 'INTRODUCTION' page.
- Apply a dropped cap effect on the whole word.
  - Set the spacing to 0.5 cm from the text. (2)
- 1.7 Find the text 'table 1' in the fourth paragraph on the page after the map.
- Add a cross reference on this text that links to the 'Water Source Area' table on the next page. (2)
- 1.8 Adjust the 'Water Source Area' table on the next page as follows:
- 1.8.1 Apply any predefined table style to this table. (1)
- 1.8.2 Use a table property to ensure that the headings are repeated if the table flows over to the next page. (1)
- 1.8.3 Find the text 'Grootwinterhoek' and add a footnote to this text as follows:
- The footnote text must contain 'Strategic water sources'.
  - Use the '\*' as the custom symbol for the footnote. (3)
- 1.9 Find the image below the heading 'WESTERN CAPE WATER SOURCE AREAS'.
- Add 'Image 1' as an automatic caption to the image. (2)
- 1.10 Find the bulleted list below the 'BOLAND MOUNTAINS' heading.
- Change the bullet characters to the '@' symbol (Wingdings, code 165). (1)
- 1.11 Find the text 'Did you know?' below the heading 'TSITSIKAMMA'.
- Apply any WordArt of your choice to this text.
  - Change the text wrapping to top and bottom. (2)
- 1.12 Find the chart/graph below the heading 'MPUMALANGA DRAKENSBERG'.
- Change the data of the chart/graph as follows:
- Cultivated – 2%  
Natural – 48%
- NOTE:** Do not simply change the labels of the chart/graph. (2)

- 1.13 Find the text '... the journey it has taken to reach us.' below the heading 'PROTECTING SOUTH AFRICA'S WATER SOURCE AREAS'. Create a new source AND insert the citation for this source next to this text. The source must contain the following information:

Type of source: Report  
Title: The effects of water  
Year: 2015

**NOTE:** Ensure that the APA style has been selected. (3)

- 1.14 Find the table of figures on the second-last page. The table of figures only displays the tables. Add an additional automatic table of figures that will also display the images. (2)

- 1.15 Change the orientation of only the last page to portrait. The rest should remain in landscape. (2)

Save and close the **1Areas** document. [37]

**QUESTION 2: WORD PROCESSING**

A survey form has been created for distribution.

Open the **2Water** word processing document and insert your examination number in the header or footer.

- 2.1 Add a date field next to the word 'DATE'.  
Ensure that it will always display the current date. (2)
- 2.2 Fill the second text box with the **2Drops** image found in the examination folder AND bold the text in the text box. (2)
- 2.3 Correct the spelling of 'Female' in the drop-down form field control next to the text 'Gender'. (1)
- 2.4 Add a check box form field control to the left of the text 'Older than 60'. (1)
- 2.5 Find the text form field control next to the text 'Number of adults in the household'.  
Change the properties so that the user can only enter numerical values. (1)
- 2.6 Edit the format of the control next to 'How much do you pay a month?' so that it will always display an 'R' in front of the amount(s) displayed. (1)
- 2.7 Apply leader tabs at the bottom of the form so that it displays as below. (4)

- 2.8 You want to send the survey to some people for completion.  
Prepare a mail merge as follows: (5)
- Use the **Details** worksheet of the **2Det\_Bes** spreadsheet as the data source.
  - Sort the surnames in ascending order.
  - Add the merge fields, *Name* and *Surname*, in the spaces provided at the top of the document.
  - Save the **2Water** document before completing the merge.
  - Complete the mail merge and save the new merged document as **2Done**.

Save and close the **2Water** document. [17]

**QUESTION 3: SPREADSHEET**

Rainfall was measured every month in four cities from 2005 to 2015. The data was captured in a spreadsheet.

**NOTE:**

- Use formulae and/or functions for ALL calculations in the spreadsheet.
- Use absolute cell references ONLY where it is required by the question to ensure that formulae are correct when you copy it to other cells in the spreadsheet.
- All formulae and/or functions should be inserted in such a manner that the correct results will still be obtained, even if the existing data changes.

Open the **3Rain\_Reën** spreadsheet. Work in the **Rain\_Reën** worksheet.

- 3.1 Format the cells in **row 1** as follows:
- 3.1.1 Change the merged cell to only include **cells A1:O1**. (1)
- 3.1.2 Apply a 'Thin Diagonal Stripe' pattern style fill effect to the merged cell. (2)
- 3.2 Freeze the panes so that all the headings in **row 2** and the city and year columns display when you scroll down. (2)
- 3.3 Insert a function in **cell D3** to convert the text that appears in **cell C3** to a number. (1)
- 3.4 Insert a function in **cell G48** to determine the most commonly occurring rainfall value in April. (2)
- 3.5 Insert a function in **cell H49** to determine the average rainfall for May for all the cities throughout all the years. Display the average rounded to the next highest whole number.
- EXAMPLE: If the average is 6.4, then 7 should be displayed. If the average is 6.6, then 7 should also be displayed. (3)
- 3.6 Insert a function in **cell K50** to determine the third highest rainfall in August. (2)
- 3.7 Insert a function in **cell M51** to determine the total rainfall that fell in the four cities during October 2015.
- NOTE:** Ensure that the correct results will be obtained even if the existing data changes. (4)

3.8 Apply conditional formatting to **cells D3:O46** to automatically apply a 3-colour scale to the numbers in the three different categories shown below.

- The lowest point of 0
- A midpoint of 100
- The highest point of 630

Choose any colours of your choice.

(5)

3.9 The rainfall in a city is categorised by comparing the total rainfall of the city for a specific year to an expected rainfall of 650.

It is categorised as follows:

- More than the expected rainfall of 650: High
- Less than or equal to the expected rainfall of 650: Low

Insert a function in **cell R4** to determine the category for the rainfall in Cape Town in 2015.

(6)

3.10 Sort the data in **cells A3:O46** according to the year from 2005 to 2015 and then according to the city alphabetically.

(2)

Work in the **Durban** worksheet.

3.11 The cell range used in the function in **cell C6** is incorrect.

Correct the cell range of the function by including the data for January from the data table.

Ensure that the function in **cell C6** will work correctly if it is copied to the other months in the summary table.

(2)

3.12 Filter the data so that only the rainfall data for Durban is displayed.

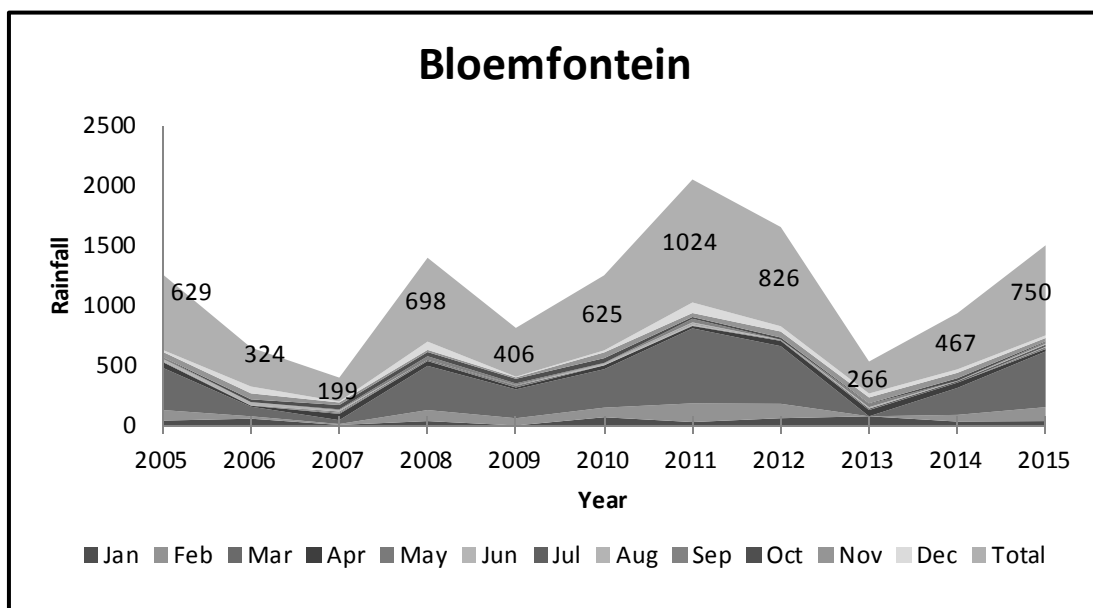
(1)

Work in the **Bloemfontein** worksheet.

3.13 A chart/graph displaying the total rainfall per year for Bloemfontein has been created.

Change the chart/graph in the worksheet to appear as shown below.

- Ensure that the chart/graph displays the rainfall per month and also the total for the year.
- Add a suitable title to the chart/graph.
- Insert a legend as shown in the example below.
- Display the horizontal axis labels.
- Display data labels only for the 'Total' series.



(5)

Save and close the **3Rain\_Reën** spreadsheet.

[38]

**QUESTION 4: SPREADSHEET**

The school hosted a water games event to raise funds.

**NOTE:**

- Use formulae and/or functions for ALL calculations in the spreadsheet.
- Use absolute cell references ONLY where it is required by the question to ensure that formulae are correct when you copy it to other cells in the spreadsheet.
- All formulae and/or functions should be inserted in such a manner that the correct results will still be obtained, even if the existing data changes.

Open the **4Game\_Speel** spreadsheet and work in the **Scores\_Punte** worksheet.

4.1 Remove the hyperlink set on the heading 'Water Games'. (1)

4.2 Insert a formula in **cell E3** to determine the number of weeks that have passed between the date in **column D** and the current date. (3)

4.3 Data validation has been applied to **column G**.

Remove the value 'Black' as an option in the validation list for the whole column. (2)

4.4 A participant ID should be created for each participant. Create the participant ID in **cell I3** as follows:

- The first two letters of the surname in **column C**
- Followed by a space
- Followed by a random number in the range 0 and 99
- Followed by the gender in **column F** in lower case

You may use any of the blank columns, such as **column K** and **column L**, to calculate any interim results.

EXAMPLE: Ga 23f or Ga 4f (7)

4.5 Use an appropriate LOOKUP function in **cell J3** to display the award that Jemima Garrison will receive based on her score in **cell H3**.

Use the data in the **Awards\_Toekennings** worksheet. (4)

Save and close the **4Game\_Speel** document. [17]

**QUESTION 5: DATABASE**

A database that contains a list of dams and their locations was created.

Open the **5Dam** database.

5.1 Open the **Dam** table.

5.1.1 Insert a primary key on the most appropriate field. (1)

5.1.2 Ensure that any data currently stored in the *Town* field will appear in capital letters. (1)

5.1.3 Add a combo box to the *Province* field.

The values for the *Province* field are stored in the **Province** table.

Accept any warning or error messages that may appear. (2)

5.1.4 Create an input mask for the *Completed* field to accept dates in the format dd/MMM/yyyy.

EXAMPLE: 01/JAN/2001 or 31/DEC/2010 (5)

5.1.5 Change the field properties of the *Capacity* field so that no value smaller than zero will be accepted. (1)

5.1.6 Change the data type of the *Illustration* field so that you can add an image to the field.

Add the **5AlbertFalls** image found in the examination folder in the *Illustration* field to the **Albert Falls Dam** record. (2)

Save and close the **Dam** table.

5.2 Open the **qry5\_2** query.

- Insert the *Town* field.
- Add criteria to display the names, provinces and towns of all the dams in Limpopo.

Save and close the **qry5\_2** query. (2)

5.3 Create a query called **qry5\_3** based on the **Dam** table to appear as shown below.

**NOTE:**

- The *Avg Of Capacity* field uses the *Capacity* field.
- Only the data for the Free State and North West must appear.

| Province   | Avg Of Capacity |
|------------|-----------------|
| Free State | 826914          |
| North West | 109436          |

Save and close the **qry5\_3** query. (5)

5.4 Open the **qry5\_4** query.

Display only the names and towns of the dams that have data entered for the surface of the dam and that were completed from 1 January 1990 to 31 December 2000 (inclusive).

Save and close the **qry5\_4** query. (4)

5.5 Open the **qry5\_5** query.

- Create and display a calculated field called *Volume* to calculate the volume of water currently in each dam.
- The calculation for the volume of the dam is  $Surface * Height * 0.3$ .
- Format this field to display ONE decimal place.

Save and close the **qry5\_5** query. (4)

5.6 Open the **frm5\_6** form.

- Add the **5AlbertFalls** image found in the examination folder as a background image to the form.
- Insert a hyperlink as follows:
  - Place the hyperlink next to the *Province* label on the form.
  - The hyperlink links to the *Province* table in this database.

**HINT:** The hyperlink is one of the controls in the Design tab.

- Insert your examination number in the form footer.

Save and close the **frm5\_6** form. (5)

5.7 Open the **rpt5\_7** report based on the **Dam** table.

- Remove the *Illustration* label AND the field.
- Group the report by the *Province* field and sort it by the *Town* field.
- Use a function to determine the largest *Capacity* of all the dams in the report.

Save and close the **rpt5\_7** report.

(5)

Save and close the **5Dam** database.

**[37]**

**QUESTION 6: WEB DESIGN (HTML)**

A webpage has been created on how to be water wise.


Open the incomplete **6Wise\_Wys** web page in a web browser and also in a text/HTML editor (NOT a word processing program such as Word).

**NOTE:**

- Question numbers are inserted as comments in the coding to show approximately where the answer(s) should be inserted.
- An HTML tag sheet has been attached for reference.

Your final web page should look like the example below.



**our  
water  
is  
a  
scarce  
resource**



---

### Are you water wise?

*The kitchen, bathroom, and laundry are three areas in the home where huge amounts of water are used. Water consumption in these areas can be reduced using a few simple steps. In the summer months, outdoor water use causes overall water demand to increase. By using water wisely, you can help to reduce this. Here are some suggestions:*



|  <b>Inside the house</b>  |  <b>Outside the house</b>  |
|--|---|
| <ul style="list-style-type: none"> <li>○ Avoid running the tap continuously when rinsing dishes, cleaning fruits and vegetables, brushing teeth, shaving, or washing your face.</li> <li>○ Run dishwashers with only full loads.</li> <li>○ Keep a container of water in the fridge to avoid running water for a cold drink.</li> <li>○ Check your toilet for leaks by placing food colouring in the water tank. If colouring appears in the bowl without flushing, there is a leak.</li> <li>○ Install low-flow toilet and shower fixtures.</li> <li>○ Take shorter showers.</li> <li>○ When buying a new washing machine, consider a water and energy efficient model.</li> <li>○ Turn taps off tightly after each use.</li> </ul> | <p>Do not over-water your lawn. To stay healthy, most lawns need 2.5 cm of water per week, equal to about 1 hour of sprinkling per week.</p> <p>Avoid watering during the hottest time of day, when water is lost to evaporation.</p> <p>Let grass grow tall, as it will shade new growth and reduce evaporation.</p> <p>Leave organic materials like grass clippings on your lawn to build up the soil, reduce evaporation, and encourage healthy growth.</p> <p>Aerate your lawn at least once a year to ensure that nutrients, oxygen, and water can penetrate the soil.</p> <p>In your garden, use a watering can instead of the hose.</p> <p>Follow xeriscape principles, using creative landscaping and slow-growing, drought tolerant plants to reduce the need for grass and to conserve water.</p> |

For further information, please send an e-mail to:

[waterwise.co.za](mailto:waterwise.co.za)

**NOTE:** Use the example on the previous page to guide you with this question.

- 6.1 Add your examination number to display in the browser tab. (1)
- 6.2 Add an additional cell to the first table and insert the **6Life** image found in the examination folder inside this cell. (3)
- 6.3 Add a horizontal line below the first table with a size/thickness of 5. (2)
- 6.4 Centre the heading 'Are you water wise?' AND set the font to 'Arial'. (2)
- 6.5 Find the second table.  
Set the border size to 1 and the cell padding to 12. (2)
- 6.6 Change the first row of the second table to appear as shown below.

|   |  |
|---|--|
| <i>The kitchen, bathroom, and laundry are three areas in the home where huge amounts of water are used. Water consumption in these areas can be reduced using a few simple steps. In the summer months, outdoor water use causes overall water demand to increase. By using water wisely, you can help to reduce this. Here are some suggestions:</i> |  |
|  <b>Inside the house</b>   |  <b>Outside the house</b> |

- 6.7 Find the HTML code that displays the image **6House**.  
Change the code so that the word 'Inside' will display if the image cannot be displayed. (1)
- 6.8 Set the bullet style of the unordered list to a circle AND ensure that all the bullets appear correctly. (2)
- 6.9 Insert the text 'waterwise.co.za' AND create a link from the text to the e-mail address 'waterwise@water.co.za' that already appears in the web page. (3)

Save and close the **6Wise\_Wys** document.

**[19]**

**QUESTION 7: GENERAL**

A spreadsheet was created that contains data on the longest rivers in the world.

- 7.1 Open the **7Rivers\_Riviere** spreadsheet.
- 7.1.1 Add the worksheet name as a field in the left section of the header. (3)
- 7.1.2 The names of the rivers have been defined as a named range.  
Change the named range to 'Name\_River'. (1)
- 7.1.3 Protect **column A** to **column C** so that users cannot enter text.  
Add 123 as the password. (2)

Do NOT close the **7Rivers\_Riviere** spreadsheet.

- 7.2 Open the **7River\_Rivier** database and import the data from the **7Rivers\_Riviere** spreadsheet into a new table into the database.  
Use the worksheet name as the table name. (2)
- Save and close the **7Rivers\_Riviere** spreadsheet and **7River\_Rivier** database.

Open the **7Antw\_Answ** word processing document and use the **7Water** document to enter the answers for the following questions:

- 7.3 7.3.1 What is the gutter position setting of the document? (1)
- 7.3.2 How many paragraphs appear in the document? (1)
- 7.3.3 How many occurrences of the letter 'm' (upper case and lower case) appear in the document? (1)
- 7.3.4 What is the first word that appears on line 100 in the document? (1)
- 7.3.5 What is the line weight/width of the 'Intense Quote' style? (1)
- 7.3.6 Which word is marked as an item to appear in an index? (1)
- 7.3.7 What is the title of the single-source citation that appears in the document? (1)

Save and close the **7Antw\_Answ** document. [15]

**TOTAL: 180**

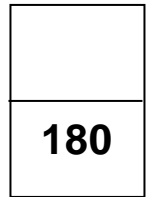
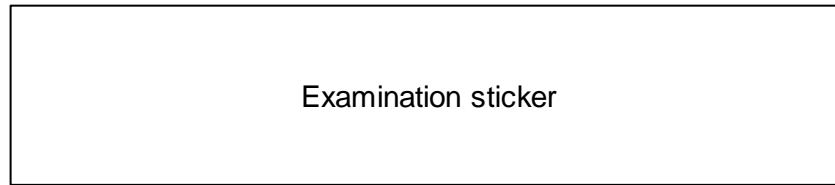
## HTML TAG SHEET

| Basic Tags                              |   |
|---|---|
| Tag                                     | Description   |
| <body></body>                           | Defines the body of the web page  |
| <body bgcolor="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 web page                                     |
| <html></html>                           | Creates an HTML document – starts and ends a web page                       |
| <title></title>                         | Defines a title for the web page  |
| <br/>                                   | Inserts a line break  |
| <!-- -->                                | Comment   |
| Text Tags                               |   |
| Tag                                     | Description   |
| <h1></h1>                               | Creates the largest heading   |
| <h6></h6>                               | Creates the smallest heading  |
| <b></b>                                 | Creates bold text   |
| <i></i>                                 | Creates italic text   |
| <font size="3"></font>                  | Sets size of font, from "1" to "7"  |
| <font color="green"> </font>            | Sets font colour  |
| <font face="Times New Roman"></font>    | Sets font type  |
| Links Tags                              |   |
| Tag                                     | Description   |
| <a href="URL"></a>                      | Creates a hyperlink   |
| <a href="URL"></a>      | Creates an image link   |
| <a name="NAME"></a>                     | Creates a target location in the document                                   |
| <a href="#NAME"></a>                    | Links to a target location created somewhere else in the document           |
| Formatting Tags                         |   |
| Tag                                     | Description   |
| <p></p>                                 | Creates a new paragraph   |
| <p align="left">                        | Aligns a paragraph to the "left" (default), can also be "right" or "center" |
| <br/>                                   | Inserts a line break  |
| <ol></ol>                               | Creates a numbered list   |
| <ol type="A","a","I","i","1"></ol>      | Defines the type of numbering used  |
| <ul></ul>                               | Creates a bulleted list   |
| <ul type="disc","square","circle"></ul> | Defines the type of bullets used  |

| Formatting Tags continued                 |  |
|---|--|
| Tag                                       | Description  |
| <li></li>                                 | Inserted before each list item, and adds a number or symbol depending on the type of list selected |
|                           | Adds an image  |
|              | Aligns an image: can be "left", "right", "bottom", "top"   |
| <p align="center"></p>    | Aligns an image in the "center", can also be "middle"  |
|                | Sets the size of the 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      |
| <hr/>                                     | Inserts a horizontal line  |
| <hr size="3"/>                            | Sets size (height) of a line   |
| <hr width="80%"/>                         | Sets the width of a 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) ("left", can also be "center" or "right")                           |
| <tr valign="top">                         | Sets the vertical alignment for cell(s) ("top", 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   |

### INPUT MASK CHARACTER SHEET

| CHARACTER | DESCRIPTION  |
|-----------|--|
| 0         | Digit (0 to 9, entry required, plus [+] and minus [-] signs not allowed)   |
| 9         | Digit or space (entry not required, plus [+] and minus [-] signs not allowed)  |
| #         | Digit or space (entry not required; spaces are displayed as blanks while in Edit mode, but blanks are removed when data is saved; plus [+] and minus [-] signs allowed)  |
| L         | Letter (A to Z, entry required)  |
| ?         | Letter (A to Z, entry optional)  |
| A         | Letter or digit (entry required)   |
| a         | Letter or digit (entry optional)   |
| &         | Any character or a space (entry required)  |
| C         | Any character or a space (entry optional)  |
| .,:;- /   | Decimal placeholder and thousand, date and time separators (The actual character used depends on the settings in the <b>Regional Settings Properties</b> dialog box in the Windows Control Panel.)                       |
| <         | Causes all characters to be converted to lower case  |
| >         | Causes all characters to be converted to upper case  |
| !         | Causes the input mask to display from right to left, rather than from left to right. Characters typed into the mask always fill it from left to right. You can include the exclamation point anywhere in the input mask. |
| \         | Causes the character that follows to be displayed as the literal character (for example, \A is displayed as just A)  |



### COMPUTER APPLICATIONS TECHNOLOGY P1 – FEB.–MAR. 2017

**INFORMATION SHEET** (to be completed by the candidate AFTER the 3-hour session)

CENTRE NUMBER \_\_\_\_\_

EXAMINATION NUMBER \_\_\_\_\_

WORK STATION NUMBER \_\_\_\_\_

|   |                       |                       |                       |                 |
|---|-----------------------|-----------------------|-----------------------|-----------------|
| SUITE USED<br>(Mark appropriate box with a cross (X))       | Microsoft Office 2010 | Microsoft Office 2013 | Microsoft Office 2016 | Office 365      |
| WEB BROWSER USED<br>(Mark appropriate box with a cross (X)) | Mozilla Firefox       | Google Chrome         | Internet Explorer     | Other (Specify) |

FOLDER NAME \_\_\_\_\_

*Candidate to tick if saved and/or attempted.*

| Question number | File name       | Saved (✓) | Attempted (✓) | Maximum Mark | Marker | SM | CM | IM/EM |
|-----------------|-----------------|-----------|---------------|--------------|--------|----|----|-------|
| 1               | 1Areas          |           |               | <b>37</b>    |        |    |    |       |
| 2               | 2Water          |           |               | <b>17</b>    |        |    |    |       |
|                 | 2Done           |           |               |              |        |    |    |       |
| 3               | 3Rain_Reën      |           |               | <b>38</b>    |        |    |    |       |
| 4               | 4Game_Speel     |           |               | <b>17</b>    |        |    |    |       |
| 5               | 5Dam            |           |               | <b>37</b>    |        |    |    |       |
| 6               | 6Wise_Wys       |           |               | <b>19</b>    |        |    |    |       |
| 7               | 7Rivers_Riviere |           |               | <b>15</b>    |        |    |    |       |
|                 | 7River_Rivier   |           |               |              |        |    |    |       |
|                 | 7Answ_Antw      |           |               |              |        |    |    |       |
| <b>TOTAL</b>    |                 |           |               | <b>180</b>   |        |    |    |       |

Comment (for office/marker use only)

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# basic education

Department:  
Basic Education  
REPUBLIC OF SOUTH AFRICA

## NATIONAL SENIOR CERTIFICATE

GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY P1

FEBRUARY/MARCH 2017

MEMORANDUM/MARKING GUIDELINES

MARKS: 180

|                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| CENTRE<br>NUMBER |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

|            |  |
|------------|--|
| FINAL MARK |  |
|------------|--|

|                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| EXAMINATION<br>NUMBER |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

| QUESTION      | 1  | 2  | 3  | 4  | 5  | 6  | 7  | TOTAL |
|---------------|----|----|----|----|----|----|----|-------|
| POSSIBLE MARK | 37 | 17 | 38 | 17 | 37 | 19 | 15 | 180   |
| MARKER        |    |    |    |    |    |    |    |       |
| SM            |    |    |    |    |    |    |    |       |
| CM            |    |    |    |    |    |    |    |       |
| IM/EM         |    |    |    |    |    |    |    |       |

This memorandum/marking guideline consists of 14 pages.







|                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| EXAMINATION NUMBER |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

**QUESTION 3**

**File name: 3Rain\_Reën**

**Total Q3: 38**

- Mark the questions from the formulae and not the values/answers in the cell.
- Check against candidate's actual work (Cell references may differ, depending on the candidate's response).
- Candidate may use multiple formulae or cells as 'building blocks' to reach answers.
- Named ranges can be used instead of cell references.
- The answers must still be correct even if changes are made to the existing data.

| No                         | Criteria   | Maximum Mark |  |   | Candidate Mark |
|----------------------------|--|--------------|--|---|----------------|
| <b>Rain_Reën worksheet</b> |  |              |  |   |                |
| 3.1.1                      | <b>Row 1:</b><br>• Merged cell changed to A1:O1 ✓  | 1            |  | 1 |                |
| 3.1.2                      | <b>Row 1 fill:</b><br>• Any fill effect applied ✓<br>• Thin diagonal stripe pattern style fill effect applied ✓<br>(accept any diagonal stripes)   | 1<br>1       |  | 2 |                |
| 3.2                        | <b>Freeze panes:</b><br>• Freeze panes effect applied ✓<br>• Correct columns and rows (rows 1 and 2, columns A and B) ✓  | 1<br>1       |  | 2 |                |
| 3.3                        | <b>Cell D3:</b><br>• =VALUE(C3) ✓<br><br>(Note to marker: After sorting =VALUE(C6).)   | 1            |  | 1 |                |
| 3.4                        | <b>Cell G48:</b><br>• =MODE ✓ (G3:G46) ✓   | 2            |  | 2 |                |
| 3.5                        | <b>Cell H49:</b><br>=ROUNDUP(AVERAGE(H3:H46),0)<br><br>OR<br>=CEILING(AVERAGE(H3:H46),1)<br><br>OR<br>=ROUND(AVERAGE(H3:H46)+0.5,0)<br><br>• AVERAGE(H3:H46) ✓<br>• ROUNDUP/CEILING/INT ✓<br>• ,0 for ROUND/ROUNDUP and ,1 for CEILING ✓ | 1<br>1<br>1  |  | 3 |                |



|                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| EXAMINATION NUMBER |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

| Durban worksheet       |   |   |  |             |  |
|------------------------|---|---|--|-------------|--|
| 3.11                   | <b>Cell C6:</b><br>=SUBTOTAL(\$A\$6,C10:C53)<br><br><b>OR</b><br>=SUBTOTAL(\$A\$6,C9:C53)<br><br>• Cell range C10:C53 ✓<br>• Absolute cell reference ✓  |   |  | 2           |  |
|                        |   | 1 |  |             |  |
|                        |   | 1 |  |             |  |
| 3.12                   | <b>Filter:</b><br>• Filter set on Durban ✓  | 1 |  | 1           |  |
| Bloemfontein worksheet |   |   |  |             |  |
| 3.13                   | <b>Graph</b><br>• Area chart/graph displays rainfall per month per year for Bloemfontein (range B1:O12) ✓<br>• Suitable chart title inserted ✓<br>• Any legend inserted ✓ below<br>• Horizontal axis options display years ✓<br>• Data labels inserted for 'Total' series ✓ | 1 |  | 5           |  |
|                        |   | 1 |  |             |  |
|                        |   | 1 |  |             |  |
|                        |   | 1 |  |             |  |
|                        |   | 1 |  |             |  |
|                        | <b>Total for QUESTION 3</b>   |   |  | <b>[38]</b> |  |













