



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SENIOR CERTIFICATE EXAMINATIONS

COMPUTER APPLICATIONS TECHNOLOGY P1

2018 (2)

MARKS: 180

TIME: 3 hours

**This question paper consists of 16 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 drive 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/flash drive has been issued to you, you must write your examination number and centre number on the CD/DVD/flash drive. 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 drive given to you by the invigilator with ALL your answer files saved onto it, OR you should make sure that ALL your 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 consult the offline help functions of the programs that you are using. You may NOT use any other resource material.

12. Unless instructed otherwise, use formulae and/or functions for ALL calculations in spreadsheet questions. 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 derived 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 instructed otherwise.
16. Ensure that the regional settings are set to South Africa and date and time settings, number settings and currency settings are set correctly.
17. The examination folder/CD/DVD/flash drive 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.

• 1Day	Word processing file
• 1EveryDay	Image file
• 2Minutes	Word processing file
• 3SA	Spreadsheet file
• 4Visitors	Spreadsheet file
• 5Back	Image file
• 5Tourist	Database file
• 6Face	Image file
• 6Quotes	HTML file
• 6SAFlag	Image file
• 7Answ	Word processing file
• 7Bookings	Spreadsheet file
• 7Guests	Database file
• 7Merge	Word processing file
• 7Places	Word processing file

SCENARIO

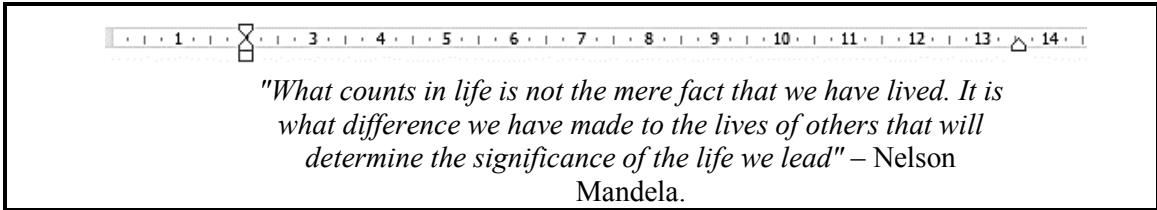
South Africa has a very rich heritage and tourists from all over the world visit South Africa to experience the variety of cultures.

Documents regarding tourism, Mandela Day and South African heritage have been created to be distributed to the Tourism learners in your school.

QUESTION 1: WORD PROCESSING

Background information regarding the purpose of Mandela Day has been entered in a document.

Open the **1Day** word processing document.

- 1.1 Change the following on the cover page:
- 1.1.1 Insert your examination number as the manager in the content control below the heading 'Mandela Day'. (1)
- 1.1.2 Insert a yellow 3 pt border around the 'INTERNATIONAL NELSON MANDELA DAY' picture. (3)
- 1.2 Change the layout of the document as follows:
- Set the paper size of the document to A4.
 - Change the gutter position to 'Top' and set it to 1 cm. (3)
- 1.3 Find the WordArt 'WHAT IS MANDELA DAY?' on the second page.
- Fix the position of the WordArt on the page.
 - Add any reflection effect of your choice to the WordArt. (2)
- 1.4 Find the quote below the heading 'What is Mandela Day?'. Change the indentation AND the alignment of the text to appear as follows:
- 
- (3)
- 1.5 Find the text 'Robben Island' below the heading 'What Do People Do?'.
- Add a footnote that uses ** as the custom symbol.
 - Insert the text 'Prison' as the footnote text. (3)

- 1.6 Find the text 'The Message' on the second page of the document. Add a hyperlink to this text to link to the website 'www.message.com'. (2)
- 1.7 Find the numbered list below the heading 'The Message'.
Change the list to a bulleted list using the '✎' symbol (Wingdings font, character code 73). (2)
- 1.8 Find the word 'transition' under the heading 'Background' on the third page.
Add a comment to this word with the text 'change'. (2)
- 1.9 Insert the **1EveryDay** picture found in the examination folder as a watermark with a washout effect in any part of the document. (2)
- 1.10 Add automatic page numbering to the **footer** of this document.
 - The pages must be numbered starting as 1 from the second page onwards.
 - Use the 'Page 1' format.
 - The page numbers should be right-aligned. (5)
- Save and close the **1Day** document. [28]

QUESTION 2: WORD PROCESSING

A document that explains the 67 minutes of Mandela Day has been created.

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

- 2.1 Change the page colour of the document to any colour of your choice. (1)
- 2.2 Find the title 'IDEAS FOR MANDELA DAY' at the top of the document and do the following:
- 2.2.1 Create a new style called 'Nelson' based on the 'Heading 1' style with the following specifications:
- Font effect: Small caps
 - Border: Set around the entire paragraph
 - Paragraph spacing: 3 pt after
- (5)
- 2.2.2 Apply the new style 'Nelson' to the title 'IDEAS FOR MANDELA DAY'. (1)
- 2.3 Insert an automatic table of contents below the 'TABLE OF CONTENTS' heading on the first page to display only the headings formatted with the 'Heading 2' style. (2)
- 2.4 Find the dropped cap effect applied to the letter 'B' on the second page.
- Change the dropped cap so that it does NOT appear in the margin.
 - The dropped cap should appear across 7 lines.
 - Change the font to 'Tempus Sans ITC'.
- (3)
- 2.5 Find the bookmark called 'Bookmark1' and change the name of this bookmark (NOT the text it references) to 'Ubuntu'. (1)
- 2.6 Find the picture below the heading 'Help Raise Funds for the Animal Rescue Organisation'.
- Add an automatic caption to the picture that reads 'Figure 1: Adopt a dog'. (2)
- 2.7 Find the picture below the heading that starts with 'Collect Food ...' and change the picture size to exactly 6 cm x 10 cm. (3)
- 2.8 Find the text that begins with 'Buy a Christmas ...' and ends with 'Figure 3: Collect a can'.
- Place ONLY this text in landscape orientation. All other pages should remain in portrait orientation. (2)
- 2.9 Insert an automatically generated bibliography below the heading 'Bibliography' using the APA style. (2)
- Save and close the **2Minutes** document. [22]

QUESTION 3: SPREADSHEET

Tourism is a national priority and contributes significantly to the economic development of the country.

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 **3SA** spreadsheet.

3.1 Hide **Sheet1**. (1)

Work in the **Tour_Toer** worksheet.

3.2 Centre the merged **cell A1** vertically. (1)

3.3 Format **cells A2:J2** as follows:

3.3.1 Wrap the text in **cells A2:J2**. (1)

3.3.2 Add a dashed border around **cells A2:J2**. (2)

3.4 Unfreeze the panes that were set on the worksheet. (1)

3.5 Apply a spreadsheet feature to automatically highlight the ten lowest numbers of visitors to KwaZulu-Natal (in **column E**).

These cells must be filled automatically using any colour of your choice. (3)

3.6 The number of tourists visiting South Africa appears in **cells B4:J45** and their origin (where they come from) appear in **column A**.

Use a function in **cell L3** to calculate how many travellers from **Africa** visited South Africa from **2000–2010**. (2)

3.7 Use a function in **cell L4** to display the lowest number of visitors from **Africa** (from **2000–2017**). (2)

3.8 Use a function in **cell L5** to determine the total number of visitors from **Malawi** that visited **Gauteng**.

NOTE: Ensure that the correct results will be obtained even if the existing data changes. (4)

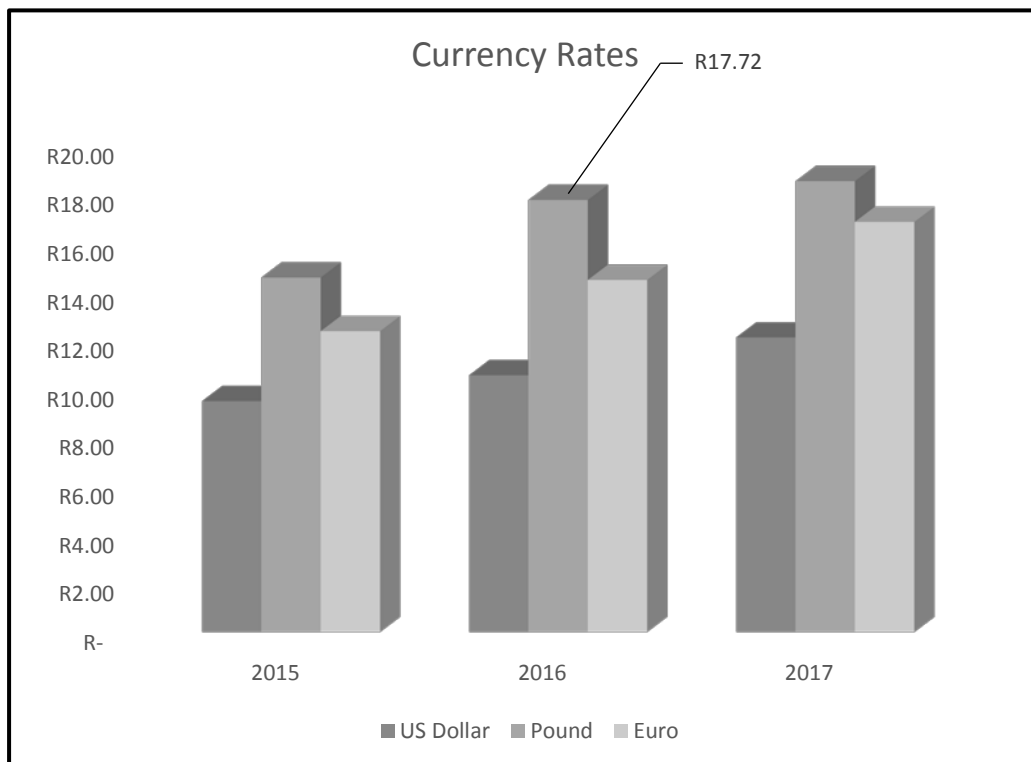
- 3.9 The number of European tourists that visit South Africa appears in **cells B33:J45**. Use a function in **cell L6** to determine the percentage of these European tourists that visit the Free State.

Format the answer to display as a percentage with three decimal places.

(5)

Work in the **Curr_Geld** worksheet.

- 3.10 Create a chart/graph similar to the chart/graph below, comparing the currency rates from 2015 to 2017.



- 3.10.1 Choose the correct type of chart/graph. (1)
- 3.10.2 Display the chart/graph title as shown in the example above. (1)
- 3.10.3 Display the single data label as shown in the example above. (2)
- 3.10.4 Remove the gridlines from the chart area.

NOTE:

- Ignore the position of the legend.
- Do NOT change the axis units.

(1)

Save and close the **3SA** spreadsheet.

[27]

QUESTION 4: SPREADSHEET

A spreadsheet containing data about the countries from which visitors come has been created.

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 **4Visitors** spreadsheet and work in the **Country_Land** worksheet.

4.1 Change the tab colour of the **Country_Land** worksheet to red. (1)

4.2 Add an HLOOKUP function in **cell B3** to display the capital of 'Russia'.

The names of the countries appear in **column C** and the lookup data is provided in the **Capital_Hoofstad** worksheet. (4)

4.3 Insert a function in **cell E3** to determine the position of the space located between the continent ('Asia', 'Europe', etc.) and the geographical position ('South', 'Eastern', etc.) of the country in **column D**. (2)

4.4 Generate a visitor code in **cell F4** by using a combination of functions as follows:

- The continent in which the country is situated is found in **column D**. Display only the continent by using the position of the space in **cell E4**, followed by
- The first three digits of the population of the country (**column H**).

EXAMPLE: Asia133 will be displayed for China in **row 6**.

NOTE: You may use building blocks to answer this question. (6)

4.5 Add an IF function in **cell I3** which will display the name of the country only if it is the country with the 5th largest population (**column H**), otherwise nothing should be displayed.

Copy the function down to the rest of the cells in **column I**. (5)

- 4.6 The living conditions of a country's population are determined by the number of people living per square kilometre. This is determined by dividing the size of the population (**column H**) by the area in km² of the country (**column G**). The living conditions of the country is then determined as follows:

Number of people living per km ²	Conditions
Less than 10	Acceptable
From 10 to 30	Low risk
More than 30	High risk

Add a function in **cell J3** to determine the living conditions for people living in 'Russia'.

(5)

Save and close the **4Visitors** spreadsheet.

[23]

QUESTION 5: DATABASE

A database has been created with data about the hotels that tourists visit.

Open the **5Tourist** database.

5.1 Open the **tbBooking** table.

5.1.1 Remove the *ID* field. (1)

5.1.2 Add a new field named *Image* as follows:

- It must appear as the last field in the table.
- This field will store a picture of the hotel.
- Provide the field with an appropriate data type. (3)

5.1.3 Create an input mask for the *BookingRef* field to accept data in the following format:

- ONE compulsory uppercase (capital) letter, followed by
- At least TWO, but possibly THREE, digits

EXAMPLE: D16, X179 (5)

5.1.4 Change the *Rate* field so that:

- The user is forced to enter a value
- The user can only enter values greater than 500 or less than 8 000
- An appropriate validation message appears to assist the user if an incorrect value is entered (5)

Save and close the **tbBooking** table.

5.2 Open the **frm5_2** form. Modify the form as follows:

5.2.1 Make the following changes to the form header:

- Add your examination number in the form header.
- Display the date and time in the form header.
- Ensure that the date and time will automatically update. (3)

5.2.2 Edit the *Country* field so that it displays a list of the countries in a combo box.

Link the combo box to the **tbCountry** table. (3)

5.2.3 Insert the **5Back** picture found in the examination folder in the footer of the form. (2)

5.2.4 Insert a calculation in the form footer to determine the total number of days for ALL the clients. (3)

Save and close the **frm5_2** form.

- 5.3 Create a query called **qry5_3** based on the **tbBooking** table to display the number of tourists who have no names listed.

Save and close the **qry5_3** query. (3)

- 5.4 Open the **qry5_4** query.

Modify the query to display a list of tourists that will stay for 10 or more days.

Save and close the **qry5_4** query. (2)

- 5.5 Open the **qry5_5** query.

Display a list of tourists that will visit the Krakensberg Sun Hotel and are from South Africa or Namibia.

Save and close the **qry5_5** query. (5)

- 5.6 Open the **rpt5_6** report and modify the report as follows:

- Insert a function in the **Detail** section of the report to calculate the amount to be paid by a client using the *Rate* and *Days* fields.
- Set the format to currency.
- Add an appropriate label.

Save and close the **rpt5_6** report. (5)

Save and close the **5Tourist** database. [40]

QUESTION 6: WEB DESIGN (HTML)

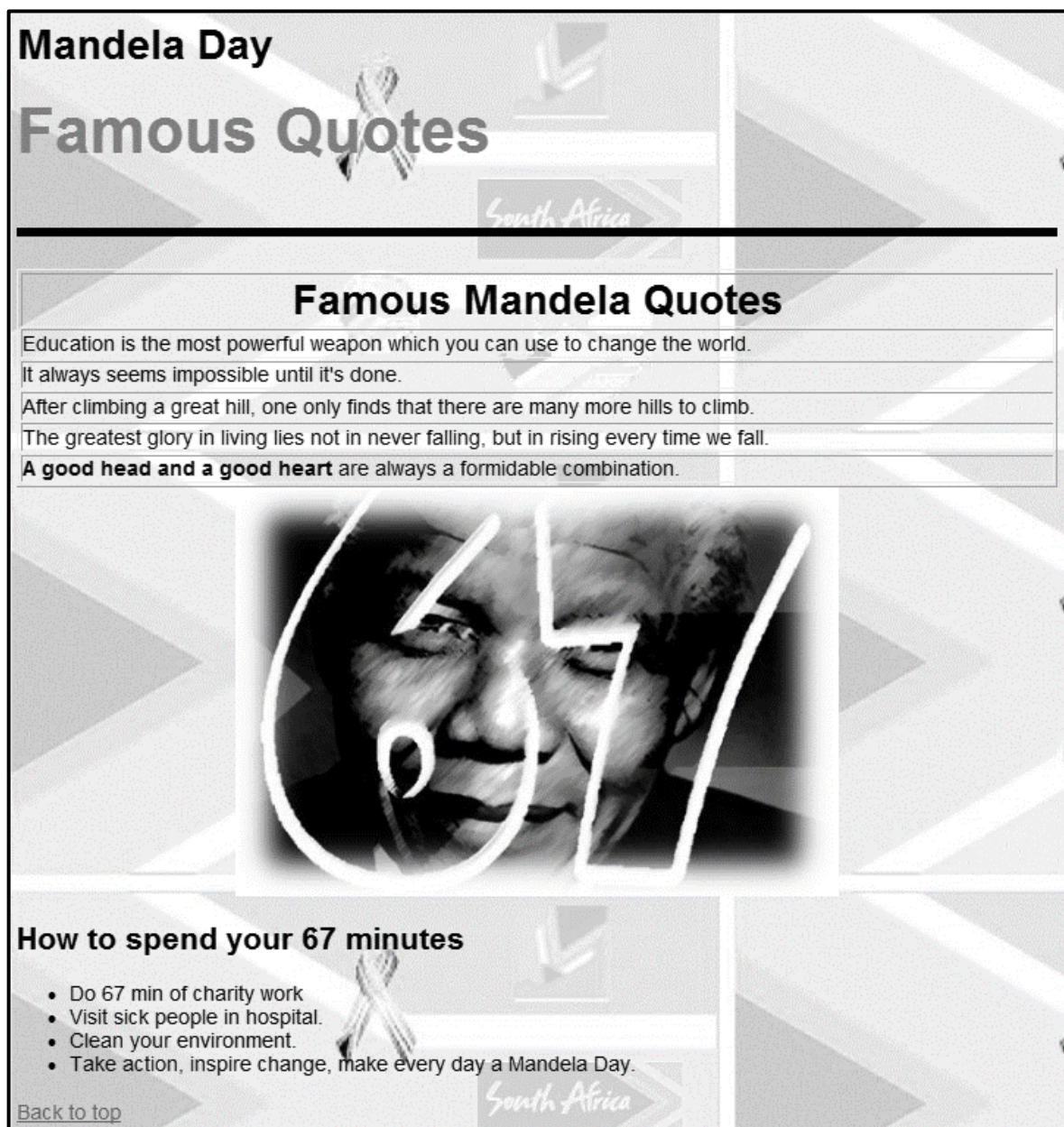
You are required to assist in designing a web page to encourage fellow South Africans to celebrate Mandela Day.

Open the incomplete **6Quotes** web page in a web browser and also in a text 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.
- Your web page may display differently depending on the browser used.
- An HTML tag sheet has been attached for reference.

Your final web page should look like the example below.



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

6.1 Add your examination number to display as the title in the browser tab. (2)

6.2 Display the image **6SAFlag.jpg** as the background in the body of the web page.

HINT: Use the 'background' attribute.

EXAMPLE: background="file name".

(2)

6.3 Add the text 'Famous Quotes' below the heading 'Mandela Day' to display as follows:

- Apply a Heading 2 style to the text you added.
- The text must appear in a grey font colour.
- The font size of the text must be set to 14.
- An open line must appear after this text.

(5)

6.4 Change the colour of the horizontal line to black.

(1)

6.5 Edit the table to appear as follows:

Famous Mandela Quotes
Education is the most powerful weapon which you can use to change the world.
It always seems impossible until it's done.
After climbing a great hill, one only finds that there are many more hills to climb.
The greatest glory in living lies not in never falling, but in rising every time we fall.
A good head and a good heart are always a formidable combination.

NOTE:

- The size of the table is 100% of the screen size.
- The first row contains the heading.
- The text 'A good head and a good heart' appears in bold.

(4)

6.6 Display the image **6Face.jpg** found in the examination folder below the table.

Centre the image.

(3)

6.7 Change the numbered list under the heading 'How to spend your 67 minutes' to bullets.

(1)

6.8 A target location named 'Top' has been created at the top of the web page.

Insert the text 'Back to top' at the bottom of the web page and create a link on this text to move to the target location.

(3)

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

[21]

QUESTION 7: GENERAL

You are helping to organise an event to celebrate South Africans who have made a significant contribution to our heritage.

- 7.1 Open the **7Merge** document which will be used in a mail merge. Insert your examination number in the header or the footer.

Do the following:

- 7.1.1 Find the three images and shapes in the top right-hand corner of the document and group them to appear as one. (1)

- 7.1.2 Insert the current date in the position indicated (towards the middle of the page). Ensure that the date automatically updates. (2)

- 7.1.3 Prepare a mail merge document for each guest as follows:

- Use the **7Guests** database that contains the details of the guests as the data source.
- Sort the list alphabetically according to the *Surname* field.
- Insert the *PostCode* merge field from the **7Guests** database below the *Town* merge field.
- Complete the merge and save the document as **7EMerge**. (4)

- 7.2 The **7Places** document contains information about places that you can visit in South Africa. You need to make some changes to the document.

Open the **7Places** word processing document and insert your examination number in the header or the footer.

- 7.2.1 The document is formatted with the 'Shaded' style set. Change the style set to any other style of your choice. (1)

- 7.2.2 Find the text starting with 'Table Mountain' and ending with '... longing to return!' and do the following:

- Place this text in two columns.
- Set the spacing between the columns to 3 cm. (2)

Save and close the **7Places** document.

- 7.3 You were asked to assist with the analysis of the data in the **7Bookings** spreadsheet.

Open the **7Answ** document and insert your examination number.

This question requires you to enter the answer and briefly explain the specific method/formula/function you used to obtain the answer.

EXAMPLE:

QUESTION	ANSWER	BRIEF EXPLANATION
How many boys are in the Grade 12A class?	24	Filter to extract the boys of 12A and then use the Count function.

Use the **Bookings** worksheet in the **7Bookings** spreadsheet to answer the questions below.

- 7.3.1 How many bookings appear in the spreadsheet?

NOTE: No explanation is required. (1)

- 7.3.2 How many people will visit Zambia? (2)

- 7.3.3 How many lodges appear in the spreadsheet? (2)

- 7.3.4 Peak season is indicated as a value of 1 and off-peak season is indicated as a value of 2.

What is the average **rating** of the hotels and lodges that will be visited during peak season? (2)

- 7.3.5 How many people will be touring only in August? (2)

Save and close the **7Answ** and **7Bookings** documents. [19]

TOTAL: 180

SCE
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
 	Inserts a line break
<!-- -->	Comment
Text Tags	
Tag	Description
<h1></h1>	Creates the largest heading
<h6></h6>	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 in the document
	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"
 	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 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 Regional Settings Properties 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)

Examination sticker

180**COMPUTER APPLICATIONS TECHNOLOGY P1 – 2018 (2)****INFORMATION SHEET** (to be completed by the candidate AFTER the 3-hour session)

CENTRE NUMBER _____

EXAMINATION NUMBER _____

WORK STATION NUMBER _____

SUITE USED (Mark appropriate box with a cross (X))	Microsoft Office 2010	Microsoft Office 2013	Microsoft Office 2016	Office 365
WEB BROWSER USED (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	1Day			28				
2	2Minutes			22				
3	3SA			27				
4	4Visitors			23				
5	5Tourist			40				
6	6Quotes			21				
7	7Merge			19				
	7EMerge							
	7Places							
	7Answ							
TOTAL				180				

Comment (for office/marker use only)
