



# basic education

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

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 12**

**COMPUTER APPLICATIONS TECHNOLOGY P1**

**NOVEMBER 2014**

**MARKS: 180**

**TIME: 3 hours**

**This question paper consists of 18 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.

• 1Africa_Afrika	Word processing file
• 1Visitors_Besoekers	Spreadsheet file
• 2Questionnaire_Vraelys	Word processing file
• 2Temp	Word processing file
• 3Airplane_Vliegtuig	Image file
• 3Clients_Kliënte	Spreadsheet file
• 3Draw_Trekking	Text file
• 4Book_Bespreek	Spreadsheet file
• 5Ace	Database file
• 6Info_Inlig	Word processing file
• 6Serengeti	HTML file
• 6SerengetiPark	Image file
• 7Attract_Besiens	Word processing file
• 7Convert_Verander	Word processing file
• 7GraphSA_GrafiekSA	Spreadsheet file
• 7Merge_Saamvoeg	Word processing file
• 7Top10	Word processing file
• 7TouristsSA_ToeristeSA	Spreadsheet file

**SCENARIO**

The African continent offers many beautiful places to visit. Your school is planning a tour on the African continent for the Grade 12 learners.

The school principal has asked you to contact the travel agency, Ace Travel, for information regarding possible destinations.

**QUESTION 1: WORD PROCESSING**

Ace Travel was requested to develop a document on the beautiful places to tour on the African continent.

Open the **1Africa\_Afrika** word processing document and insert your examination number in the header.


- 1.1 Set the left margin of the document to 2 cm. (1)
- 1.2 This document requires a cover page. Do the following:
- 1.2.1 Insert any cover page/title page at the beginning of the document. (1)
- 1.2.2 Add the following title to the cover page:  
'Beautiful Africa' (1)
- 1.3 Locate the text 'Table of Contents' and apply a WordArt/Fontwork of your choice to this text. (1)
- 1.4 Locate the 'Summary of Facts' table on the page after the table of contents and format the table as follows:

Summary of Facts	
Country	Zambia/Zimbabwe
Coordinates	17.9233°S, 25.856°E
Height	108 m
Watercourse	Zambezi River
UNESCO World Heritage Site	1989

- Merge the cells in the first row of the table.
- Move the text 'Summary of Facts' to row 1 and align the text to the right.
- Make the necessary changes so that a degree symbol is shown just before the letter 'S' and the letter 'E' in the coordinates as shown below:  
17.9233°S, 25.856°E
- Centre the table horizontally on the page.
- Format the inner gridlines to 1½ pt. (6)

- 1.5 Locate the text 'Visiting the falls in Zambia has some advantages:' after the 'Summary of Facts' table.

Format the bullets under the text as follows:

- Change the bullets to the Wingdings symbol :

Microsoft Office: character code 39

LibreOffice: character code U+F027

- Align the bullet position at 3 cm from the left margin.

(2)

- 1.6 Add automatic page numbering as follows:

- Place the page numbers in the page footer.
- Start the page numbering on the page starting with '1. Victoria Falls, Zambia', numbering them from page 1 onwards.
- Ensure that even page numbers appear right-aligned in the footer and that odd page numbers appear left-aligned in the footer.
- No page numbers should appear on the cover page and the page containing the table of contents.

(6)

- 1.7 Locate the bulleted text 'Trekking Precautions' under the heading '2. Mount Kilimanjaro, Tanzania'.

Add a hyperlink to the text 'Trekking Precautions' to the *Precautions* bookmark in the same document.

(2)

- 1.8 Locate the paragraph that starts with 'Mount Kilimanjaro' and ends with '... World Heritage site.' that appears below the image under the heading '2. Mount Kilimanjaro, Tanzania'.

Apply widow/orphan control to this paragraph only.

(1)

- 1.9 Remove the bookmark called 'Summit'.

(1)

- 1.10 The heading '5. Mount Kenya, Kenya' is currently not displayed in the table of contents.

- Make the necessary changes so that the heading '5. Mount Kenya, Kenya' appears in the table of contents.
- Update the table of contents.

**NOTE:** Do NOT make any other modifications to the table of contents.

(2)

- 1.11 Locate the heading '9. Sossusvlei, Namibia'.

Insert the spreadsheet **1Visitors\_Besoekers** under the heading '9. Sossusvlei, Namibia' so that it appears as an icon/button.

(2)

- 1.12 Locate the image under the heading '10. Serengeti National Park, Tanzania'.  
Insert a caption which reads:
- Microsoft Office: 'Figure 6: Serengeti'  
LibreOffice: 'Illustration 6: Serengeti'
- The caption must be placed above the image. (2)
- 1.13 Insert the following object below the heading 'Table of Figures/Illustration  
Index' on the last page using the default settings:
- Microsoft Office: Table of Figures  
LibreOffice: Illustration Index (1)
- 1.14 Insert a text watermark with the text 'Ace Travel' in this document. (1)
- Save and close the **1Africa\_Afrika** document. **[30]**

**QUESTION 2: WORD PROCESSING**

Ace Travel has prepared a questionnaire for all Grade 12 learners who will be going on the African continent tour.

Open the **2Questionnaire\_Vraelys** word processing document and insert your examination number in the header.

2.1 Delete the comment from the document. (1)

2.2 Format the heading 'Ace Travel' as follows:

- Expand the character spacing by 4 pt.
- Scale the character spacing to 120%. (2)

2.3 Review the document as follows:

- Accept the change suggested by the author.
- Reject the change suggested by the assistant.

**NOTE:** Do NOT activate track changes. (2)

2.4 Edit the text form field control next to the 'Date of Birth' label as follows:

- Format the date type to 'yyyy-MM-dd' or 'YYYY-MM-DD'.
- Display the following help message on the status bar:  
'yyyy-MM-dd' or 'YYYY-MM-DD' (3)

2.5 Insert a combo box next to the text 'Meal preference' with the following options:

- Vegetarian
- White meat
- Red meat (2)

- 2.6 Locate the text 'Choose 2 places that you would like to visit'. Change the options under the heading to resemble the example below:

A screenshot of a form with a ruler at the top. The ruler shows centimeters from 1 to 8. Below the ruler, there are three lines of text, each followed by a dotted leader line and a checkbox. The first line is 'Victoria Falls, Zambia .....'. The second line is 'Mount Kilimanjaro, Tanzania .....'. The third line is 'Sahara Desert, North Africa .....'. The checkboxes are positioned to the right of the dotted lines.

**NOTE:**

- Set AND apply an 8 cm dotted leader tab, as shown above.
- Insert a check box form field next to the option 'Victoria Falls, Zambia'.
- Set the default value for the check box as checked. (5)

- 2.7 Locate the set of images at the bottom of the first page. Each image has been placed in an autoshape.

Complete the set of images as follows:

- Determine the size of the other images in the set and resize the image of Table Mountain on page 2 of the document to exactly the same size.
- Move the Table Mountain image to fit exactly over the empty text box without cropping the picture.
- Ensure the four images act as one object after the image has been placed in the correct position. (4)

Save and close the **2Questionnaire\_Vraelys** document.

- 2.8 Open the **2Temp** document and save the document as a template with the same name. (1)

Save and close the **2Temp** document. [20]



**QUESTION 3: SPREADSHEET**

Ace Travel has stored a list of their clients in a spreadsheet.

Open the **3Clients\_Kliënte** spreadsheet and work in the **Clients\_Kliënte** worksheet. Insert your examination number in the header of the document.

3.1 Format the worksheet as follows:

3.1.1 Centre the text in **row 1**. (1)

3.1.2 Wrap the contents of **cell A3**. (1)

3.2 Insert a function/formula in **cell B5** to determine and display the current age of the second client in completed years. This function/formula must give the correct age even if the current date changes. (4)

3.3 The client's identity (ID) in **column C** is made up of:

- The first two letters of the client's name (**column E**) followed by
- The number of characters of the client's surname (**column D**)

Example: Otto Moss would have a client ID of Ot4.

Insert a function/formula in **cell C4** to determine the client ID for the client April Bennett. (4)

3.4 Use an appropriate spreadsheet feature to apply a 2-colour scale format style on all the values in **column I**.

Change the colours of the minimum and maximum values to any other colours besides the default. (3)

3.5 Clients are allocated a traveller status based on their age (**column B**) as follows:

Age	Traveller Status
Younger than 12 years	Child
12 to 60 years	Adult
Older than 60 years	Pensioner

Add a suitable function in **cell J20** to display the traveller status of the client Jarvis Hanae. (4)

3.6 Insert a function in **cell M8** to determine the total number of trips made by clients. (2)

3.7 Insert a function in cell **M9** to determine how many clients are NOT international travellers. (3)

- 3.8 Create an appropriate graph/chart to display the percentage breakdown of each category of traveller status. Use the data in **cells L11:M13** to create the graph as follows:
- Add an appropriate graph/chart title above the graph/chart that refers to the function/purpose of the graph/chart.
  - Display the percentage for each category of traveller status.
  - Fill the category that has the highest percentage with the **3Airplane\_Vliegtuig** image.
  - Display the graph/chart in the **Travellers\_Reisigers** worksheet. (6)

- 3.9 Work in the **Draw\_Trekking** worksheet.

The **Draw\_Trekking** worksheet contains the names, surnames and gender of all the clients.

The points for each client, which will be used for the lucky draw, appear in the **3Draw\_Trekking** text file. The order of the details in this file is the same as the order of the names in the **Draw\_Trekking** worksheet, in other words Bennett has 266 points and Jarvis has 267 points.

Use any appropriate method to display the number of male clients who have 200 or more points in **cell G1** in the **Draw\_Trekking** worksheet.

**NOTE: Show ALL the steps used to determine the number.** (3)

Save and close the **3Clients\_Kliente** document. [31]

**QUESTION 4: SPREADSHEET**

A list of all Ace Travel's bookings is stored in a spreadsheet.

Open the **4Book\_Bespreek** spreadsheet and work in the **Bookings\_Besprekings** worksheet. Insert your examination number in the header of the document.

4.1 Insert a formula in **cell F4** that uses the data in **column D** and **column E** to determine the number of days for which the first client (Amena Contreras) is booked for. (2)

4.2 The rate per day is stored in **column L**.

Insert a formula in **cell G5** to determine the total accommodation cost for the duration of the stay for Bertha Hood. (2)

4.3 Clients have to pay an additional compulsory tourism levy.

The levy to be paid by clients for a particular hotel or lodge depends on whether it is Peak Season or Off-peak Season.

**Column M** displays a 1 for Peak Season and a 2 for Off-peak Season. The table below indicates the codes for the seasons.

Season code	Season
1	Peak
2	Off-peak

Use a VLOOKUP function in cell **H6** to display the tourism levy that will be paid by the particular client for that hotel or lodge.

Use the Hotel/Lodge data in **cell J6**, the Peak Season data in **cell M6** and the data provided in the **Levy\_Heffing** worksheet.

Ensure that the function will work correctly if it is copied to the rest of the cells in **column H**.

**HINT:** You may use the VLOOKUP function in combination with another function to determine the answer. (4)

4.4 A booking reference in **column A** that starts with an 'X' indicates an international hotel or lodge. A booking reference that starts with a 'D' indicates a domestic hotel or lodge.

Insert a function in **cell I10** to return the value 'TRUE' if the hotel or lodge in **row 10** is international and the value 'FALSE' if the hotel or lodge in **row 10** is domestic. (5)

4.5 Insert a function in **cell O7** to determine the third lowest rate per day. (2)

4.6 Insert a function in **cell O10** to determine the total number of days (**column F**) that clients will spend at hotels or lodges in Kenya. (4)

Save and close the **4Book\_Bespreek** document. [19]

**QUESTION 5: DATABASE**

A database with clients and bookings has been created.

Open the **5\_Ace** database.

5.1 The details of all Ace Travel's clients are stored in the **Clients\_Kliënte** table.

Open in the **Clients\_Kliënte** table. The Design view of the table is shown below.

Field Name	Data Type	Description
Surname_Van	Text	Surname of client
Name_Naam	Text	First name of client
ID_ID	AutoNumber	Client ID
Birthdate_Geboortedatum	Date/Time	Date of birth of client
CellNumber_Selnommer	Text	Client cell phone number
International_Internasionaal	Text	Is the client an international traveller?
Notes_Notas	Text	One page of notes on the client's travelling habits
Photo_Foto	Text	Client photograph
Grading_Gradering	Text	Client rated on a scale from 1 to 10

**NOTE:** Data type for text:

- MSO 2007/2010 – text
- MSO 2013 – short text
- LibreOffice – Text (VARCHAR)

5.1.1 Change the field size of the *Name\_Naam* field to 40. (1)

5.1.2 Set the current primary key on a more appropriate field. (1)

5.1.3 Change the data type of the following fields to more appropriate data types:

- *International\_Internasionaal*
- *Notes\_Notas*
- *Grading\_Gradering*

(3)

- 5.1.4 Change the field properties of the *Birthdate\_Geboortedatum* field so that:
- The *Birthdate\_Geboortedatum* field is a required field
  - Data is displayed in the medium date (e.g. dd-MM-yy) format
  - A validation rule is added to the *Birthdate\_Geboortedatum* field to prevent the user from entering a date later than the current date on which the data is captured
  - Appropriate validation text is entered
- (5)

- 5.1.5 Create an input mask for the *CellNumber\_Selnommer* field to accept data such as 080 101 0101 or 075 555 5555. Note the two spaces that appear between the figures.
- (3)

Save and close the **Clients\_Kliënte** table.

- 5.2 Open the **frm5\_2** form.

Modify the form as follows:

- Change the text in the form header to an orange font colour.
- Format the *Rate\_Tarief* field to currency.
- Add a combo box in the details section of the form for the *Country\_Land* field. It must allow the user to choose a value for the field from the following options:

Kenya, Namibia, South Africa, Tanzania and Zambia

- Add a suitable label for the combo box.

Save and close the **frm5\_2** form.

(6)

- 5.3 Open the **qry5\_3** query.

Modify the query to display the names of hotels and lodges that start with the letter 'S' AND have a grading of 9.

Save and close the **qry5\_3** query.

(3)

- 5.4 Open the **qry5\_4** query to display the charges for October 2014.

- Display only the *ClientName\_KliëntNaam*, *HotelsLodges\_HotelleLodges*, *DateIn\_DatumIn* and *DateOut\_DatumUit* fields in the query.
- Create and display a calculated field with the caption *Tot* to determine the total charges that the client must pay, by adding the *Charges\_Koste* and the *Levy\_Heffing*.
- Display only bookings when the whole stay occurs in October.

Save and close the **qry5\_4** query.

(6)

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

Modify the query to display a list of hotels and lodges by making the following changes:

- Sort the records alphabetically according to the *HotelsLodges\_HotelleLodges* field.
- Display only those hotels and lodges where the *Rate\_Tarief* amount is in the range of R5 000 to R7 000 AND the hotels and lodges are NOT in Tanzania.
- Display only the *HotelsLodges\_HotelleLodges*, *Country\_Land* and *Rate\_Tarief* fields.

Save and close the **qry5\_5** query.

(6)

5.6 Create a report called **rpt5\_6** based on the **Bookings\_Besprekings** table.

- Display only the *ClientSurname\_KliëntVan*, *HotelsLodges\_HotelleLodges*, *Country\_Land* and *Days\_Dae* fields.
- Group the records first by the *Country\_Land* field and then by the *HotelsLodges\_HotelleLodges* field.
- Display the report in landscape format.
- Use a function to display the total number of days booked for each of the hotels and lodges.

Save and close the **rpt5\_6** report.

(6)

Save and close the **5\_Ace** database.

[40]

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


You need to assist Ace Travel to complete the web page.

Open the incomplete **6Serengeti** web page in a browser and also in a text editor.

**NOTE:**

- Question numbers are inserted as comments in the coding as guidelines 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.

<h2>Serengeti National Park</h2>	
<b>Tanzania</b>	
<b>A moment back in time</b>	
	
<ul style="list-style-type: none"> <li>• About the Serengeti</li> <li>• Serengeti Facts</li> </ul>	
<a href="#">Contact us</a>	
<b>About Serengeti</b>	
<p>The Serengeti National Park is a beautiful area in Tanzania, famous for its annual wildebeest migration.</p> <p>The Serengeti region encompasses the Serengeti National Park itself, the Ngorongoro Conservation Area, Maswa Game Reserve, the Loliondo, Grumeti and Ikorongo Controlled Areas and the Maasai Mara National Reserve in Kenya.</p> <p>The Serengeti ecosystem is one of the oldest on earth. The essential features of climate, vegetation and fauna have barely changed in the past million years. Early man himself made an appearance in Olduvai Gorge about two million years ago. Some patterns of life, death, adaptation and migration are as old as the hills themselves. So strong is the ancient instinct to move that no drought, gorge or crocodile infested river can hold them back.</p>	
<b>Serengeti Facts</b>	Country Tanzania Coordinates 17.9233S, 25.856E Plain 5 km Watercourse Olduvai Unesco World Heritage Site 1989
<b>Contact Details</b>	Tel: 997 521 3518 Fax: 998 521 8547 Email: serengeti@africa.com

- 6.1 Add HTML code to display the text 'Serengeti Information' in the browser tab. (2)
- 6.2 Adjust the heading 'Serengeti National Park' as follows:
- Change the alignment of the heading 'Serengeti National Park' so that it appears in the centre.
  - Change the font colour to red. (2)
- 6.3 The image tag is supposed to display the **6SerengetiPark** picture stored in your data folder.
- 6.3.1 Correct the code for the image to display correctly. (2)
- 6.3.2 Change the width of the image to 200 and the height to 180. (2)
- 6.4 Display the two lines of text 'About the Serengeti, Serengeti Facts' as bullets. (2)
- 6.5 Insert a link on the words 'Contact us', found below the bulleted list, to link to the text 'Contact details' in the table at the end of the page. (3)
- 6.6 Copy the text from the **6Info\_Inlig** document to appear as the third paragraph.
- NOTE:** Use the example on the previous page to guide you with this question. (2)
- 6.7 Edit the table as follows:
- Change the table to consist of two rows and two columns.
  - Place the headings in the first column.
  - Place the data/information in the second column.
  - Change the thickness of the border to 2.
- NOTE:** Use the example on the previous page to guide you with this question. (4)
- 6.8 Insert your examination number below the table as a comment. (1)
- Save and close the **6Serengeti** document. **[20]**



**QUESTION 7: GENERAL**

Ace Travel wants to promote their business in the South African market.

7.1 Change the author property of the **7Top10** document to your examination number. (1)

7.2 Open and save the **7Convert\_Verander** word processing document as a single web page file with the same name. (1)

Close the **7Convert\_Verander** document.

7.3 Open the **7GraphSA\_GrafiekSA** spreadsheet.

A graph/chart for the year 2013 has been created in the **Graph\_Grafiek** worksheet.

- Extend the data range of the graph/chart to include the data for 2014.
- Change the graph/chart type to:

Microsoft Office: 3-D Line

LibreOffice: 3D-Lines

(2)

Save the **7GraphSA\_GrafiekSA** document, but keep the document open.

7.4 The marketing manager has created a draft version of a document that he wishes to send out.



Open the **7Attract\_Besiens** document.

7.4.1 Insert a footnote on the text 'How many people visit South Africa?' to read 'Refer to [www.attractions.com](http://www.attractions.com)'. (2)

7.4.2 Paste the graph from the **7GraphSA\_GrafiekSA** spreadsheet into the **7Attract\_Besiens** document under the text 'Insert graph' so that any future changes to the graph in the spreadsheet will automatically be displayed in the word processing document. (2)

7.4.3 Replace all occurrences of the WHOLE word 'tour' with the word 'trip' in a blue font colour. (2)

- 7.4.4 Format the shaded text under the headings 'Oudtshoorn' and 'Robben Island' into two columns to look like the example below.

<p>▪ Oudtshoorn</p> <p>Oudtshoorn is a hive of activity throughout the year. Oudtshoorn is a town in the Karoo, a wonderful and exciting stopover in between Cape Town and Port Elizabeth, with the coastal town of George about 56 km away. Cango Caves, Ostrich show farms, Cango wildlife ranch, Rust-en-Vrede Waterfall and old sandstone buildings are the most amazing attractions of Oudtshoorn.</p> 	<p>▪ Robben Island</p> <p>Robben Island is an island in Table Bay, next to the coast of Bloubergstrand, Cape Town, South Africa. It is flat, oval shaped and a few metres above the sea level. Daily tours to the island include the ferry trip to the island and back, an island tour and a tour of the prison. A trip to the island will be an unforgettable experience for you. Do not leave Cape Town without visiting Robben Island as it must be the highlight of your trip.</p> 
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**NOTE:**

- Use a word processing function so that the heading 'Robben Island' always appears at the top of the second column.
- Justify the text.
- You may leave the shaded text as is.

(3)

Save and close all the documents.

- 7.5 Open the **7Merge\_Saamvoeg** document.

Prepare a mail merge as follows:

- Use the **Details\_Besonderhede** worksheet of the **7TouristsSA\_ToeristeSA** spreadsheet as the data source.
- Select only clients who are international travellers **AND** who have made more than 20 trips.
- Sort the client names in ascending order.
- Add the merge fields *Name\_Naam* and *Trips\_Reise* in the spaces provided in the document.
- Save the document **7Merge\_Saamvoeg** before completing the merge.
- Complete the mail merge and save the new merged document as **7MData**.

(7)

Save and close all the documents.

[20]

**TOTAL: 180**

## 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
<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
<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"
 	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 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
<hr/>	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 cellspacing="1">	Sets the space between the table cells
<table cellpadding="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

**COMPUTER APPLICATIONS TECHNOLOGY P1 – NOVEMBER 2014****INFORMATION SHEET** (to be completed by the candidate AFTER the 3-hour session)**180**

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

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

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

SUITE USED

(Mark appropriate box with a cross (X))

LibreOffice 4.2 or higher	Microsoft Office 2007	Microsoft Office 2010	Microsoft Office 2013
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FOLDER NAME \_\_\_\_\_

*Candidate to enter the file name(s) used for each answer. Tick if saved and done.*

Question Number	File name	Saved (✓)	Done (✓)	Maximum Mark	Mark Achieved	Marker Initial/Code
1				30		
2				20		
3				31		
4				19		
5				40		
6				20		
7				20		
<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 NOVEMBER 2014 MEMORANDUM/MARKING GUIDELINE

MARKS: 180

CENTRE NUMBER									
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FINAL MARK	
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EXAMINATION NUMBER														
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QUESTION	1	2	3	4	5	6	7	TOTAL
POSSIBLE MARK	30	20	31	19	40	20	20	180
CANDIDATE MARK								
MARKER CODE/ SIGNATURE								
MODERATED MARK								

This memorandum/marking guideline consists of 16 pages.

EXAMINATION NUMBER																			
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**IGNORE SPELLING IN ALL CASES.****QUESTION 1**

File name: 1Africa\_Afrika

Total Q1: 30

No	Criteria	Maximum Mark			Candidate Mark
1.1	<b>Margins</b> <ul style="list-style-type: none"> <li>Left margin set to 2 cm ✓</li> </ul>	1		1	
1.2.1	<b>Cover Page/Title Page</b> <ul style="list-style-type: none"> <li>Cover page/title page added to beginning of document ✓</li> </ul> <i>(Note to marker: Accept a blank cover/title page.)</i>	1		1	
1.2.2	<b>Cover Page/Title Page</b> <ul style="list-style-type: none"> <li>Correct text added as title Beautiful Africa ✓</li> </ul> <i>(Notes to marker:</i> <ul style="list-style-type: none"> <li>Accept title in any position.</li> <li>Do not penalise if other controls appear on the page.)</li> </ul>	1		1	
1.3	<b>WordArt/Fontwork</b> <ul style="list-style-type: none"> <li>WordArt (MSO)/Fontwork (LO) applied to 'Table of Contents' ✓</li> </ul>	1		1	
1.4	<b>Table</b> <ul style="list-style-type: none"> <li>Cells of row 1 merged ✓</li> <li>Contents 'Summary of Facts' added in row 1, right aligned ✓</li> <li>Degree symbol added just before 'S' and 'E' ✓</li> <li>Table centred horizontally on page ✓</li> <li>All inner gridlines changed ✓ to 1½ pt ✓</li> </ul> <i>(Notes to marker:</i> <ul style="list-style-type: none"> <li>Text must appear and right aligned to award the mark.</li> <li>Accept symbol or superscript, but not the hard space.</li> <li>Accept if only one symbol or superscript is added.</li> <li>Accept if only some inner gridlines are changed to 1 ½ pt.)</li> </ul>	1		6	
1.5	<b>Bullets</b> <ul style="list-style-type: none"> <li>Wingdings character number 39 (®) (MSO)/Wingdings character number U+F027 (LO) applied ✓</li> <li>Bullet position aligned at 3 cm from the left margin ✓</li> </ul> <i>(Notes to marker:</i> <ul style="list-style-type: none"> <li>Ignore if the text is not indented.</li> <li>Accept if the indenting appears on the ruler.)</li> </ul>	1		2	
1.6	<b>Page numbers</b> <ul style="list-style-type: none"> <li>Automatic page numbering inserted in the footer ✓</li> <li>Section break is inserted before the page containing '1. Victoria Falls, Zambia' ✓</li> <li>Previous pages (cover page, TOC page) not numbered ✓</li> <li>Numbering starts as page 1 after the Table of Contents page ✓</li> <li>Even page numbers aligned on the right ✓</li> <li>Odd page numbers aligned on the left ✓</li> </ul> <i>(Notes to marker:</i> <ul style="list-style-type: none"> <li>Alignment must be used as opposed to being 'placed' on the left or right. Accept if odd and even was swapped.</li> <li>If cover page was not added, accept 'Different first page'.</li> <li>Do not award the third mark if no page numbers were added.</li> <li>Award one mark if 'Different odd and even' was checked'.)</li> </ul>	1		6	

EXAMINATION NUMBER																			
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1.7	<b>Bookmark</b> <ul style="list-style-type: none"> <li>• Hyperlink created ✓</li> <li>• Link to the 'Precautions' bookmark ✓</li> </ul> <p><i>(Note to marker: Accept the hyperlink on any one of the two 'Trekking Precautions' text.)</i></p>	1 1		2	
1.8	<b>Widow/Orphan control</b> <ul style="list-style-type: none"> <li>• Widow/Orphan control applied to paragraph ✓</li> </ul>	1		1	
1.9	<b>Bookmark</b> <ul style="list-style-type: none"> <li>• 'Summit' bookmark deleted ✓</li> </ul>	1		1	
1.10	<b>Headings and Table of Contents</b> <ul style="list-style-type: none"> <li>• 'FormatHeading' or Heading 1 style applied to the heading '5. Mount Kenya, Kenya' ✓</li> <li>• Table of Contents has been updated ✓</li> </ul> <p><i>(Notes to marker:</i>  <ul style="list-style-type: none"> <li>• <i>Heading must appear in the Table of Contents for the second mark.</i></li> <li>• <i>Note also that the page numbers will have changed. )</i></li> </ul> </p>	1 1		2	
1.11	<b>Integration</b> <ul style="list-style-type: none"> <li>• Spreadsheet '1Visitors_Besoekers' ✓</li> <li>• Displayed as an icon (MSO)/button (LO) ✓</li> </ul> <p><i>(Notes to marker:</i>  <ul style="list-style-type: none"> <li>• <i>Award the mark for the icon/button even if it appears in a different location.</i></li> <li>• <i>Do not accept an AutoShape.)</i></li> </ul> </p>	1 1		2	
1.12	<b>Caption</b> <ul style="list-style-type: none"> <li>• Caption field inserted ✓</li> <li>• Caption position: above the image ✓</li> </ul> <p><i>(Note to marker: Award the second mark only if a caption has been used.)</i></p>	1 1		2	
1.13	<b>Table of Figures/Illustration index</b> <ul style="list-style-type: none"> <li>• Automatic Table of Figures (MSO)/Illustration Index (LO) has been inserted ✓</li> </ul>	1		1	
1.14	<b>Watermark</b> <ul style="list-style-type: none"> <li>• Watermark text: 'Ace Travel' added on any page ✓</li> </ul>	1		1	
	<b>Total for QUESTION 1</b>			<b>[30]</b>	

EXAMINATION NUMBER																			
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**QUESTION 2****File names: 2Questionnaire\_Vraelys, 2Temp****Total Q2: 20**

No	Criteria	Maximum Mark			Candidate Mark
2.1	<b>Comment</b> <ul style="list-style-type: none"> <li>Comment deleted ✓</li> </ul>	1		1	
2.2	<b>Character spacing</b> <ul style="list-style-type: none"> <li>Character spacing of heading 'Ace Travel' expanded by 4 pt ✓</li> <li>Scale for character spacing of heading 'Ace Travel' set to 120% ✓</li> </ul>	1		2	
2.3	<b>Track changes</b> <ul style="list-style-type: none"> <li>Track change of Author accepted ✓ ('r' inserted in Tour)</li> <li>Text change of Assistant rejected ✓ ('/s' rejected in Full Name/s)</li> </ul>	1		2	
2.4	<b>Text form field: Date of Birth</b> <ul style="list-style-type: none"> <li>Text form field set to Date format ✓</li> <li>Date format set to yyyy-MM-dd or YYYY-MM-DD ✓</li> <li>Help message displayed 'yyyy-MM-dd' or 'YYYY-MM-DD' on status bar ✓</li> </ul> <p><i>(Notes to marker:</i></p> <ul style="list-style-type: none"> <li>Accept either yyyy-MM-dd or YYYY-MM-DD.</li> <li>Do not accept yyyy/MM/dd or yyyy MM dd.</li> <li>Accept any help message.)</li> </ul>	1		3	
2.5	<b>Combo box</b> <ul style="list-style-type: none"> <li>Any combo box inserted ✓</li> <li>Items inserted: Vegetarian, White meat, Red meat ✓</li> </ul> <p><i>(Notes to marker:</i></p> <ul style="list-style-type: none"> <li>Accept if only one option is inserted.</li> <li>Ignore any default text.</li> <li>Accept a drop-down form field.)</li> </ul>	1		2	
2.6	<b>Check box and Tabs</b> <ul style="list-style-type: none"> <li>Left or right tab set at 8 cm ✓ dotted leader tab ✓</li> <li>Tabs applied correctly to at least one option ✓</li> <li>Check box form field inserted next to 'Victoria Falls, Zambia' ✓</li> <li>Default value of first check box set to checked ✓</li> </ul>	2		5	
2.7	<b>Image</b> <ul style="list-style-type: none"> <li>Wrapping set to any format except in line with text ✓</li> <li>Image resized to height and width at 4 cm ✓</li> <li>Image moved not copied ✓</li> <li>All four images grouped as 1 image ✓</li> </ul>	1		4	
2.8	<b>Template</b> <ul style="list-style-type: none"> <li>Document saved as template .dotx/.ott/.dot etc. ✓</li> </ul>	1		1	
	<b>Total for QUESTION 2</b>			<b>[20]</b>	



EXAMINATION NUMBER														
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**QUESTION 3**            **File names: 3Clients\_Kliënte, 3Draw\_Trekking**            **Total Q3: 31**

- 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.

No	Criteria	Maximum Mark			Candidate Mark
<b>Clients_Kliënte worksheet</b>					
3.1.1	<b>Row 1:</b> • Text in row 1 text is centred ✓	1		1	
3.1.2	<b>Cell A3:</b> • Contents of cell A3 wrapped ✓	1		1	
3.2	<p><b>Cell B5:</b> = YEAR(TODAY()) – YEAR(A5) • YEAR ✓ (TODAY()) ✓ • -YEAR(A5) ✓ • Format set to General or Number ✓</p> <p><b>OR</b> B5:= ROUNDDOWN((TODAY()-A5)/365,0) • ROUNDDOWN( ,0) ✓ • TODAY() -A5) ✓ • /365 or 365.25 ✓ • Format set to General or Number ✓</p> <p><b>OR</b> B5:= ROUNDDOWN((NOW()-A5)/365,0) • ROUNDDOWN( ,0) ✓ • NOW() -A5) ✓ • /365 or 365.25 ✓ • Format set to General or Number ✓</p> <p><i>(Notes to marker:</i> • Accept TRUNC and INT instead of ROUNDDOWN. • Accept =ROUNDDOWN(YEARFRAC(TODAY(),A5,3),0).)</p>	2 1 1		4	
3.3	<p><b>Cell C4:</b> =CONCATENATE(LEFT(E4,2),LEN(D4)) • CONCATENATE function ✓ • LEFT ✓ (E4, 2) ✓ • LEN(D4) ✓</p> <p><b>OR</b> =LEFT(E4,2)&amp;LEN(D4) • LEFT ✓ (E4,2) ✓ &amp; ✓ LEN(D4) ✓</p> <p><b>OR</b> =MID(E4,1,2)&amp;LEN(D4) • MID ✓ (E4,1,2) ✓ &amp; ✓ LEN(D4) ✓</p>	1 2 1		4	

<b>EXAMINATION NUMBER</b>																				
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3.4	<p><b>Conditional formatting in Column I:</b></p> <ul style="list-style-type: none"> <li>Conditional formatting has been applied to column I ✓</li> <li>2-colour scale applied ✓</li> <li>Minimum and maximum value colours have been changed ✓</li> </ul> <p><i>(Notes to marker:</i></p> <ul style="list-style-type: none"> <li>Default setting in MSO is orange and yellow.</li> <li>Default setting in LO is red and blue.</li> <li>No marks awarded if conditional formatting has not been applied.)</li> </ul>	1 1 1	3	
3.5	<p><b>Cell J20:</b>  <b>=IF(B20&gt;60,"Pensioner",IF(B20&gt;=12,"Adult","Child"))</b></p> <p><b>OR</b>  <b>=IF(B20&gt;=61,"Pensioner",IF(B20&gt;11,"Adult","Child"))</b></p> <p><b>OR</b>  <b>=IF(B20&gt;60,"Pensioner",IF(AND(B20&gt;=12,B20&lt;=60),"Adult","Child"))</b></p> <p><b>OR</b>  <b>=IF(B20&gt;=61,"Pensioner",IF(AND(B20&gt;11,B20&lt;61),"Adult","Child"))</b></p> <p><b>OR</b>  <b>=IF(B20&lt;12,"Child",IF(B20&lt;=60,"Adult","Pensioner"))</b></p> <p><b>OR</b>  <b>=IF(B20&lt;=11,"Child",IF(B20&lt;=60,"Adult","Pensioner"))</b></p> <p><b>OR</b>  <b>=IF(B20&gt;60,"Pensioner",IF(B20&lt;12,"Child","Adult"))</b></p> <ul style="list-style-type: none"> <li>Nested IF-syntax is correctly used ✓</li> <li>Condition &lt;=11 OR &lt;12 and value "Child" ✓</li> <li>Condition &gt;=12 and &lt;=60 OR &gt;11 AND &lt;=60 and value "Adult" ✓</li> <li>Condition &gt;60 OR &gt;=61 and value "Pensioner" ✓</li> </ul> <p><i>(Note to marker: There are many alternative answers, one of which could be a VLOOKUP. Evaluate the candidates answer against the bulleted options.)</i></p>	1 1 1 1	4	
3.6	<p><b>Cell M8:</b>  <b>=SUM(G4:G53)</b></p> <ul style="list-style-type: none"> <li>SUM function ✓</li> <li>Range: G4:G53 ✓</li> </ul>	1 1	2	

<b>EXAMINATION NUMBER</b>																				
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3.7	<p><b>Cell M9:</b>  <b>=COUNTIF(H4:H53,"False")</b></p> <ul style="list-style-type: none"> <li>• COUNTIF function ✓</li> <li>• Range: (H4:H53) ✓</li> <li>• Criteria: "False" ✓</li> </ul> <p><b>OR</b>  <b>=COUNTIF(H4:H53,"&lt;&gt;True") OR</b>  <b>=COUNTIF(H4:H55,"&lt;True")</b></p> <ul style="list-style-type: none"> <li>• COUNTIF function ✓</li> <li>• Range : (H4:H53) ✓</li> <li>• Criteria: "&lt;&gt;True" ✓</li> </ul> <p><i>(Note to marker: Accept True or False with or without quotation marks.)</i></p>	1 1 1		3	
<b>Travellers_Reisigers worksheet</b>					
3.8	<p><b>Graph</b></p> <ul style="list-style-type: none"> <li>• Pie chart/graph inserted ✓</li> <li>• Correct data series selected: =Clients!L11:M13 ✓</li> <li>• Chart title inserted besides the default ✓</li> <li>• Correct percentages displayed for each category ✓</li> <li>• Category (Adults/Volwassenes) with the highest percentage filled with 3Airplane_Vliegtuig image ✓</li> <li>• The chart appears in the sheet named 'Travellers_Reisigers' ✓</li> </ul> <p><i>(Note to marker: Also accept if the chart/graph has been copied to sheet named 'Travellers_Reisigers'.)</i></p>	1 1 1 1 1 1		6	
<b>Draw_Trekking worksheet</b>					
3.9	<p><b>Cell G1:</b></p> <ul style="list-style-type: none"> <li>• Data from text file 3Draw_Trekking combined with the worksheet Draw_Trekking ✓</li> <li>• Only Male clients extracted ✓</li> <li>• Clients that have &gt;= 200 extracted ✓</li> </ul> <p><i>(Notes to marker:</i></p> <ul style="list-style-type: none"> <li>• <i>19 records expected if both criteria are met – award all three marks.</i></li> <li>• <i>If 26 records only male extracted – award the first two marks.</i></li> <li>• <i>If 40 records only &gt;=200 extracted – award the first and last marks.</i></li> <li>• <i>Candidates may first sort by gender and delete all female records and then sort by lucky draw points and delete all records less than 200.</i></li> <li>• <i>OR Candidates may sort according to two rules, first gender and then points.</i></li> <li>• <i>OR Candidates may use filter to obtain the answer.</i></li> <li>• <i>Accept any suitable method to obtain the answer.)</i></li> </ul>	1 1 1		3	
<b>Total for QUESTION 3</b>				<b>[31]</b>	

EXAMINATION NUMBER																			
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**QUESTION 4**

**File name: 4Book\_Bespreek**

**Total Q4: 19**

- 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 answers.
- Named ranges can be used instead of cell references.

No	Criteria	Maximum Mark		Candidate Mark
<b>Bookings_Besprekings worksheet</b>				
4.1	<p><b>Cell F4:</b></p> <ul style="list-style-type: none"> <li>• =E4 ✓ - D4 ✓</li> </ul> <p><b>OR</b></p> <p>=E4 - D4 +1</p> <ul style="list-style-type: none"> <li>• E4 ✓</li> <li>• - D4 + 1 ✓</li> </ul> <p><b>OR</b></p> <p>=DAYS360(D4,E4)</p>	2	2	
4.2	<p><b>Cell G5:</b></p> <ul style="list-style-type: none"> <li>• =F5 ✓ * L5 ✓ OR =PRODUCT(F5,L5)</li> </ul>	2	2	
4.3	<p><b>Cell H6:</b></p> <p>=VLOOKUP(J6,'Levy_Heffing'!\$A\$2:\$C\$28,M6+1)</p> <ul style="list-style-type: none"> <li>• LOOKUP Value: J6 ✓</li> <li>• Table array: 'Levy_Heffing'!\$A\$2:\$C\$28 ✓ OR Table array: 'Levy_Heffing'!\$A\$1:\$C\$28)</li> <li>• Absolute cell reference ✓</li> <li>• Column index number: M6 +1 ✓</li> </ul> <p><b>OR</b></p> <p>=IF(M6=1,(VLOOKUP(J6,Levy_Heffing!\$A\$2:\$C\$28,2)),(VLOOKUP(J6,Levy_Heffing!\$A\$2:\$C\$28,3)))</p> <ul style="list-style-type: none"> <li>• IF (M6=1 ✓,</li> <li>• (VLOOKUP(J6 ✓,Levy_Heffing!\$A\$2:\$C\$28,2)),</li> <li>• (VLOOKUP(J6,Levy_Heffing!\$A\$2:\$C\$28,3) ✓))</li> <li>• Absolute cell reference ✓</li> </ul> <p><b>OR</b></p> <p>=VLOOKUP(J6,Levy_heffing!\$A\$2:\$C\$28,IF(M6=1,2,3))</p> <p><i>(Note to marker: Absolute cell referencing must be used.)</i></p>	1 1 1 1	4	

EXAMINATION NUMBER																			
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4.4	<p><b>Cell I10: =IF(LEFT(A10,1)="X",TRUE,FALSE)</b></p> <ul style="list-style-type: none"> <li>• IF function ✓</li> <li>• LEFT function ✓</li> <li>• Correct range and parameters (A10,1)="X" ✓</li> <li>• TRUE displayed if international hotel/lodge ✓</li> <li>• FALSE displayed if domestic hotel/lodge ✓</li> </ul> <p><b>OR</b></p> <p><b>=IF(MID(A10,1,1)="X",TRUE,FALSE)</b></p> <ul style="list-style-type: none"> <li>• IF function ✓</li> <li>• MID function ✓</li> <li>• Correct range and parameters (A10,1,1)="X" ✓</li> <li>• TRUE displayed if international hotel/lodge ✓</li> <li>• FALSE displayed if domestic hotel/lodge ✓</li> </ul> <p><b>OR</b></p> <p><b>=IF(MID(A10,1,1)="D",FALSE,TRUE)</b></p> <ul style="list-style-type: none"> <li>• IF function ✓</li> <li>• MID function ✓</li> <li>• Correct range and parameters (A10,1,1)="D" ✓</li> <li>• TRUE displayed if international hotel/lodge ✓</li> <li>• FALSE displayed if domestic hotel/lodge ✓</li> </ul> <p><b>OR</b></p> <p><b>=IF(LEFT(A10,1)="D",FALSE,TRUE)</b></p> <ul style="list-style-type: none"> <li>• IF function ✓</li> <li>• LEFT function ✓</li> <li>• Correct range and parameters (A10,1)="D" ✓</li> <li>• TRUE displayed if international hotel/lodge ✓</li> <li>• FALSE displayed if domestic hotel/lodge ✓</li> </ul> <p><b>OR</b></p> <p><b>=IF(A10&gt;"X","TRUE","FALSE")</b></p> <p><b>OR</b></p> <p><b>=IF(A10="X*","TRUE","FALSE")</b></p> <p><i>(Notes to marker:</i></p> <ul style="list-style-type: none"> <li>• Accept if column K was used i.e. K10="South Africa".</li> <li>• Accept any other suitable method to obtain the answer.</li> <li>• Accept True or False with or without quotation marks</li> <li>• Accept any nested if function that yields the correct result when copied down.)</li> </ul>	1 1 1 1 1		5	
4.5	<p><b>Cell O7: =SMALL(L4:L54,3)</b></p> <ul style="list-style-type: none"> <li>• SMALL function ✓</li> <li>• Correct range and parameters (L4:L54,3) ✓</li> </ul>	1 1		2	
4.6	<p><b>Cell O10: =SUMIF(K4:K54,"Kenya",F4:F54)</b></p> <ul style="list-style-type: none"> <li>• SUMIF function ✓</li> <li>• Criteria range: (K4:K54) ✓</li> <li>• Criteria: Kenya ✓</li> <li>• Sum range: (F4:F54) ✓</li> </ul> <p><b>OR</b></p> <p><b>=SUMIFS(F4:F54,K4:K54,"Kenya")</b></p>	1 1 1 1		4	
	<b>Total for QUESTION 4</b>			<b>[19]</b>	

EXAMINATION  
NUMBER

## QUESTION 5

File name: 5Ace

Total Q5: 40

No	Criteria	Maximum Mark			Candidate Mark
<b>Table: Clients_Kliënte</b>					
5.1.1	<b>Field: Name_Naam</b> • Field size 40 ✓	1		1	
5.1.2	<b>Field: ID_ID</b> • Set as primary key ✓  (Note to marker: Accept CellNumber_Selnommer field.)	1		1	
5.1.3	<b>Field: International_Internasionaal</b> • Data type changed to Yes/No ✓  <b>Field: Notes_Notas</b> • Data type changed to Memo/Attachment/Long Text/OLE Object ✓  <b>Field: Grading_Gradering</b> • Data type changed to Number ✓	1		3	
		1			
		1			
5.1.4	<b>Field: Birthdate_Geboortedatum</b> • <b>Required property</b> Set to Yes ✓ • <b>Format</b> Set to Medium Date ✓ • <b>Validation Rule</b> <= ✓ Now() ✓ <b>OR</b> <= Today() <b>OR</b> <=Date() • <b>Validation text</b> 'Do not enter a date later than today' ✓  (Notes to marker: • Accept date format of dd-MM-yy • Accept any appropriate message referring to the current date that should be used. • Accept if candidates used <=#2014/10/20#.)	1		5	
		1			
		2			
		1			
		1			
5.1.5	<b>Field: CellNumber_Selnommer</b> Input Mask: 000 000 0000 will appear as 000\ 000\ 0000 or 000" "000" "0000 • Correct character 0 ✓ • One or two spaces correctly placed ✓ • Ten valid placeholders ✓	1		3	
		1			
		1			

<b>EXAMINATION NUMBER</b>																				
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<b>Form: frm5_2</b>				
5.2	<ul style="list-style-type: none"> <li>• Font colour of the text in the form header is a shade of orange ✓</li> <li>• Format of <i>Rate_Tarief</i> field changed to currency ✓</li> <li>• Combo box added in details section ✓</li> <li>• Control source: Country ✓</li> <li>• Row Source: 'Kenya', 'Namibia', 'South Africa', 'Tanzania' and 'Zambia' ✓</li> <li>• Suitable label added ✓</li> </ul> <p>(Notes to marker:</p> <ul style="list-style-type: none"> <li>• Accept any currency.</li> <li>• Ignore duplicates in values of combo box.</li> <li>• Accept list box.)</li> </ul>	1 1 1 1  1 1		6
<b>Query: qry5_3</b>				
5.3	<ul style="list-style-type: none"> <li>• <i>HotelGrading_HotelGradering</i> criteria: 9 ✓</li> <li>• <i>HotelsLodges_HotelleLodges</i> criteria: Like "S ✓ * ✓"</li> </ul> <p>(Notes to marker:</p> <ul style="list-style-type: none"> <li>• 2 records expected.</li> <li>• Accept Between "S" and "T".)</li> </ul>	1 2		3
<b>Query: qry5_4</b>				
5.4	<ul style="list-style-type: none"> <li>• <i>DateIn_DatumIn</i> criteria: &gt;=#2014/10/01# or Between #2014/10/01# and #2014/10/31# <b>OR</b> Month([DateIn_DatumIn])=10 <b>OR</b> &gt;=#2014/10/01# And &lt;=#2014/10/31# ✓</li> <li>• <i>DateOut_DatumUit</i> criteria: &lt;=#2014/10/31# <b>OR</b> Between #2014/10/01# and #2014/10/31# <b>OR</b> Month([DateOut_DatumUit])=10 <b>OR</b> &gt;=#2014/10/01# And &lt;=#2014/10/31# ✓</li> <li>• Calculated field is Tot: [Charges_Koste] + [Levy_Heffing] Calculated field name: Tot ✓ Two fields used correctly ✓ Addition ✓</li> <li>• Only <i>ClientName_KliëntNaam</i>, <i>HotelsLodges_HotelleLodges</i>, <i>DateIn_DatumIn</i>, <i>DateOut_DatumUit</i> fields are displayed ✓</li> </ul> <p>(Notes to marker:</p> <ul style="list-style-type: none"> <li>• 12 records expected.</li> <li>• Date format could differ due to Regional settings.</li> <li>• Accept any date range that incorporates the month of October. E.g. Like "* /10 / *".</li> <li>• Accept the use of the month function as an additional field or as criteria.</li> </ul>	1   1  1 1 1  1		6

<b>EXAMINATION NUMBER</b>																			
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Query: qry5_5					
5.5	<ul style="list-style-type: none"> <li>• <i>HotelsLodges_HotelleLodges</i> field: Sorted ascending ✓</li> <li>• <i>Country_Land</i> field criteria: NOT "Tanzania" OR &lt;&gt;"Tanzania" ✓</li> <li>• <i>Rate_Tarief</i> field criteria : &gt;=5000 ✓ and ✓ &lt;=7000 ✓</li> </ul> <p style="margin-left: 20px;"><b>OR</b> Between 5000 and 7000</p> <p style="margin-left: 20px;"><b>OR</b> &gt;4999 and &lt;7001</p> <ul style="list-style-type: none"> <li>• Only <i>HotelsLodges_HotelleLodges</i>, <i>Country_Land</i> and <i>Rate_Tarief</i> fields displayed ✓</li> </ul> <p>(Note to marker: 6 records expected.)</p>	1		6	
		1			
		3			
		1			
<b>Report: rpt5_6</b>					
5.6	<ul style="list-style-type: none"> <li>• Landscape orientation ✓</li> <li>• Report shows only <i>ClientSurname_KliëntVan</i>, <i>HotelsLodges_HotelleLodges</i>, <i>Country_Land</i> and <i>Days_Dae</i> fields ✓</li> <li>• Report firstly grouped according to <i>Country_Land</i> ✓</li> <li>• Report secondly grouped by <i>HotelsLodges_HotelleLodges</i> ✓</li> <li>• Function in <i>HotelsLodges_HotelleLodges</i> group footer/group header ✓ =sum([Days_Dae]) ✓</li> </ul>	1		6	
		1			
		1			
		1			
		1			
		1			
		1			
	<b>Total for QUESTION 5</b>			<b>[40]</b>	



EXAMINATION NUMBER																			
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**QUESTION 6****File name: 6Serengeti****Total Q6: 20**

- This question should be marked from the browser as far as possible, unless otherwise indicated or if it cannot be seen on the browser.
- A maximum of 1 mark will be deducted if one or more closing tags are omitted.
- The code of the candidates who use a word processor will contain additional unnecessary tags. Markers will need to work through the code to check for the answers provided below.

No	Criteria	Maximum Mark			Candidate Mark
6.1	<b>Title</b> <b>&lt;title&gt;Serengeti Information&lt;/title&gt;</b>  <ul style="list-style-type: none"> <li>• Title tags ✓</li> <li>• Applied to the correct text 'Serengeti Information' ✓</li> </ul>			2	
		1			
6.2	<b>Alignment and Font Colour</b> <b>&lt;h1 Align="Center"&gt;&lt;Font color="red"&gt;Serengeti National Park&lt;/font&gt;&lt;/h1&gt;</b>  <ul style="list-style-type: none"> <li>• 'Serengeti National Park' centred ✓ <i>align="center"</i></li> <li>• 'Serengeti National Park' font colour changed to red ✓ <i>font color="red"</i></li> </ul>			2	
		1			
6.3.1	<b>Image</b> <ul style="list-style-type: none"> <li>• <b>&lt;img src="6SerengetiPark ✓</b></li> <li>• <b>.jpg" ✓&gt;</b></li> </ul> <p>(Note to marker: Mark this from the HTML code.)</p>			2	
		1			
6.3.2	<b>Height and Width</b> <ul style="list-style-type: none"> <li>• <b>width="200" ✓ height="180" ✓</b></li> </ul> <p>(Notes to marker:  <ul style="list-style-type: none"> <li>• Mark this from the HTML code.</li> <li>• Ignore if the values are swapped.)</li> </ul> )</p>			2	
		2			
6.4	<b>Bulleted list</b> <b>&lt;ul&gt;</b> <b>&lt;li&gt;About the Serengeti&lt;/li&gt;</b> <b>&lt;li&gt;Serengeti Facts&lt;/li&gt;</b> <b>&lt;/ul&gt;</b>  <ul style="list-style-type: none"> <li>• The text 'About the Serengeti, Serengeti Facts' appears in a bulleted list ✓</li> <li>• Two list tags/items ✓</li> </ul> <p>(Note to marker: Allocate mark if at least one item appears in the list.)</p>			2	
		1			

EXAMINATION NUMBER																			
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6.5	<b>Link</b> <ul style="list-style-type: none"> <li>• <code>&lt;a href=✓</code></li> <li>• <code>"#Contact" ✓ &gt;</code></li> <li>• <code>Contact us ✓ &lt;/a&gt;</code></li> </ul>	1 1 1	3	
6.6	<b>Paragraph from Info_Inligting document</b> <ul style="list-style-type: none"> <li>• Text copied from document ✓</li> <li>• Placed as third paragraph ✓</li> </ul>	1 1	2	
6.7	<b>Table</b> <pre> &lt;table border="2" width="500"&gt;   &lt;tr&gt;     &lt;td&gt;       &lt;h2&gt;Serengeti Facts&lt;/h2&gt;     &lt;/td&gt;     &lt;td&gt;       Country Tanzania&lt;/br&gt;       Coordinates 17.9233S, 25.856E&lt;/br&gt;       Plain 5 km&lt;/br&gt;       Water Course Olduvai&lt;/br&gt;       UNESCO World Heritage Site1989&lt;/br&gt;     &lt;/td&gt;   &lt;/tr&gt;   &lt;tr&gt;     &lt;td&gt;       &lt;h2&gt;&lt;a name="Contact"&gt;Contact Details&lt;/a&gt;&lt;/h2&gt;     &lt;/td&gt;     &lt;td&gt;       Tel: 997 521 8547&lt;/br&gt;       Fax: 998 521 8547&lt;/br&gt;       Email: serengeti@africa.com&lt;/br&gt;     &lt;/td&gt;   &lt;/tr&gt; &lt;/table&gt; </pre> <ul style="list-style-type: none"> <li>• The table consists of two rows and two columns ✓</li> <li>• Only headings appear in column 1 ✓</li> <li>• Data/information appears in column 2 ✓</li> <li>• Border thickness set to 2 ✓</li> </ul> <p><i>(Note to marker: Mark this question from HTML code.)</i></p>	1 1 1 1	4	
6.8	<b>Comment</b> <code>&lt;!-- Examination Number--&gt;</code> <ul style="list-style-type: none"> <li>• Examination number appears as a comment ✓</li> </ul> <p><i>(Notes to marker:</i></p> <ul style="list-style-type: none"> <li>• <i>Mark this question from HTML code.</i></li> <li>• <i>Accept any text in the comment.</i></li> </ul>	1	1	
	<b>Closing tag(s) omitted</b>	-1		
	<b>Total for QUESTION 6</b>		<b>[20]</b>	

EXAMINATION NUMBER																			
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**QUESTION 7****Total Q7: 20**

**File names: 7Top10, 7Convert\_Verander, 7TouristsSA\_ToeristeSA,  
7Attract\_Besiens, 7Merge\_Saamvoeg, and 7MData\_MData**

No	Criteria	Maximum Mark			Candidate Mark
<b>7Top10</b>					
7.1	<b>Author property</b> <ul style="list-style-type: none"> <li>Author property changed to examination number ✓</li> </ul> <i>(Note to marker: Accept the word 'examination number'.)</i>	1		1	
<b>7Convert_Verander</b>					
7.2	<b>Convert to web page</b> <ul style="list-style-type: none"> <li>7Convert_Verander saved as a single web page ✓</li> </ul> <i>(Note to marker: Accept any of .mhtml, .mht, .html, .xhtml extensions.)</i>	1		1	
<b>7GraphSA_GrafiekSA</b>					
7.3	<b>Edit graph/chart</b> <ul style="list-style-type: none"> <li>Data range extended to A2:C13 ✓</li> <li>Graph/chart changed to 3-D Line/3D-Lines ✓</li> </ul>	1 1		2	
<b>7Attract_Besiens</b>					
7.4.1	<b>Footnote</b> <ul style="list-style-type: none"> <li>Footnote added to the text 'How many people visit South Africa?' ✓</li> <li>Footnote reads: 'Refer to the website www.attractions.com' ✓</li> </ul>	1 1		2	
7.4.2	<b>Linked graph/chart</b> <ul style="list-style-type: none"> <li>Graph pasted in 7Attract_Besiens ✓</li> <li>Graph pasted as a link ✓</li> </ul> <i>(Note to marker: Click on File, Edit links to determine if a link to the original document was created, even if the spreadsheet does not open.)</i>	1 1		2	
7.4.3	<b>Find and Replace</b> <ul style="list-style-type: none"> <li>All occurrences of the whole word 'tour' have been replaced with the word 'trip' ✓</li> <li>In a bluish font colour ✓</li> </ul> <i>(Notes to marker:</i> <ul style="list-style-type: none"> <li>The word 'trip' appears 5 times, two should appear in blue.</li> <li>Do not allocate the first mark if the word 'tours' or 'tourism' has been changed.)</li> </ul>	1 1		2	

<b>EXAMINATION NUMBER</b>																			
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7.4.4	<p><b>Columns</b></p> <ul style="list-style-type: none"> <li>The last two paragraphs (Oudtshoorn, Robben Island) appear as two columns ✓</li> <li>Column break inserted in correct position (before Robben Island) ✓</li> <li>Text has been justified ✓</li> </ul> <p><i>(Notes to marker:</i></p> <ul style="list-style-type: none"> <li>Ignore if line is added between columns.</li> <li>Check the properties for columns even if the text appears in one column.)</li> </ul>	1 1 1		3																							
<b>7Merge_Saamvoeg, 7MData</b>																											
7.5	<p><b>Merge</b></p> <ul style="list-style-type: none"> <li><i>Trips_Reise</i> greater than 20 (&gt;20) ✓ (Steel Brown should not be displayed)</li> <li><i>International Traveller</i> is equal to TRUE (=TRUE) ✓</li> <li>Sorted according to <i>Name_Naam</i> ✓ in ascending order ✓</li> <li><i>Name_Naam</i> ✓ and <i>IntTraveller_IntReisiger</i> fields appear ✓</li> <li>Merge completed ✓ (<b>7MData</b>)</li> </ul> <p><i>(Notes to marker:</i></p> <ul style="list-style-type: none"> <li>Expected records: 10.</li> <li>If <i>International Travellers</i> have not been selected expect 16 records )</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Client Name</th> <th style="width: 30%;">Number of Trips</th> </tr> </thead> <tbody> <tr><td>Ashely Gilbert</td><td style="text-align: center;">39</td></tr> <tr><td>Bertha Hood</td><td style="text-align: center;">66</td></tr> <tr><td>Hayley Walsh</td><td style="text-align: center;">38</td></tr> <tr><td>Illana Molina</td><td style="text-align: center;">24</td></tr> <tr><td>Ima Lloyd</td><td style="text-align: center;">50</td></tr> <tr><td>Kylan Maldonado</td><td style="text-align: center;">45</td></tr> <tr><td>Linda Rich</td><td style="text-align: center;">27</td></tr> <tr><td>Michelle Stokes</td><td style="text-align: center;">30</td></tr> <tr><td>Otto Moss</td><td style="text-align: center;">53</td></tr> <tr><td>Zoe Newman</td><td style="text-align: center;">21</td></tr> </tbody> </table>	Client Name	Number of Trips	Ashely Gilbert	39	Bertha Hood	66	Hayley Walsh	38	Illana Molina	24	Ima Lloyd	50	Kylan Maldonado	45	Linda Rich	27	Michelle Stokes	30	Otto Moss	53	Zoe Newman	21	1 1 1 1 1 1 1	7		
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	<b>Total for QUESTION 7</b>			<b>[20]</b>																							
	<b>TOTAL</b>			<b>180</b>																							



# basic education

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

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 12**

**COMPUTER APPLICATIONS TECHNOLOGY P2**

**NOVEMBER 2014**

**MARKS: 150**

**TIME: 3 hours**

**This question paper consists of 15 pages.**

**INSTRUCTIONS AND INFORMATION**

1. This question paper consists of:  
  
SECTION A (25 marks)  
SECTION B (75 marks)  
SECTION C (50 marks)
2. Answer ALL the questions.
3. Number the answers correctly according to the numbering system used in this question paper.
4. Start EACH question on a NEW page.
5. Do NOT write in the right-hand margin of the ANSWER BOOK.
6. Leave a line after EACH subquestion.
7. In general, a mark is allocated per fact. A 2-mark question would therefore require TWO facts, et cetera.
8. Write neatly and legibly.

**SECTION A****QUESTION 1: MATCHING ITEMS**

Choose a term/concept from COLUMN B that matches a description in COLUMN A. Write only the letter (A–S) next to the question number (1.1–1.10) in the ANSWER BOOK, for example 1.11 T.

COLUMN A		COLUMN B	
1.1	Software used to convert scanned documents to a format where the text can be edited	A	service pack
		B	RSS
1.2	A computer that provides resources and/or services to other computers on a network	C	AUP
		D	ROUND
1.3	A high-performance electronic storage device, often used to replace traditional hard drives	E	plug-in
		F	server
1.4	A spreadsheet function that specifies the accuracy of a calculation in terms of the number of decimal places used	G	byte
		H	PDF
1.5	An object in a database that can be used to perform searches based on specified criteria	I	mode
		J	client
1.6	The manipulation of data into meaningful information	K	SSD
		L	query
1.7	A field of study aimed at reducing the effects of RSI for the user	M	GHz
1.8	A unit used for measuring the storage capacity of a device	N	report
		O	OCR
1.9	The technology used to receive automatic content updates from websites without having to visit each website separately	P	ergonomics
		Q	processing
1.10	A small piece of software that adds specific functionality to software, such as a web browser	R	output
		S	IF

(10 x 1)

**[10]**

**QUESTION 2: MULTIPLE-CHOICE QUESTIONS**

Various options are given as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question number (2.1–2.10) in the ANSWER BOOK, for example 2.11 D.

- 2.1 Which ONE of the following is a spreadsheet function that is used to find the total for cell values in a range only if a specific condition is met?
- A IF
  - B COUNTIF
  - C SUMIF
  - D SUM
- (1)
- 2.2 Which ONE of the following printers works by constructing objects from materials such as plastic?
- A Dot matrix printer
  - B 3D printer
  - C Inkjet printer
  - D Colour laser printer
- (1)
- 2.3 Which ONE of the following is an example of an e-commerce website?
- A [www.google.co.za](http://www.google.co.za)
  - B [www.kalahari.com](http://www.kalahari.com)
  - C [www.news24.co.za](http://www.news24.co.za)
  - D [www.gmail.com](http://www.gmail.com)
- (1)
- 2.4 Which ONE of the following refers to cellular technology used for data transfer?
- A WiMAX
  - B Bluetooth
  - C Wi-Fi
  - D LTE
- (1)
- 2.5 Which ONE of the following devices is the best example of convergence?
- A Smartphone
  - B USB modem
  - C MP3 player
  - D Webcam
- (1)
- 2.6 Which ONE of the following refers to a situation where a web user is tricked into selecting a hidden link?
- A Double clicking
  - B Keylogging
  - C Click-jacking
  - D Hyperlinking
- (1)



- 2.7 Which ONE of the following refers to a concept where employees can connect their own devices to the company network and do their official work on these devices?
- A RSI
  - B DoS
  - C BIOS
  - D BYOD
- (1)
- 2.8 Which file format is used to save text without containing any formatting such as colours and font sizes?
- A PDF
  - B RTF
  - C TXT
  - D HTML
- (1)
- 2.9 Which ONE of the following refers to a technology where the processing power of multiple networked computers is combined to perform a specific task?
- A Grid computing
  - B Green computing
  - C File sharing
  - D Mobile computing
- (1)
- 2.10 Which ONE of the following is the changing of an e-mail header so that it appears as if the e-mail was sent from an address other than the one from which it was actually sent?
- A Bcc
  - B Cracking
  - C Spoofing
  - D Hacking
- (1)

**[10]**

**QUESTION 3: TRUE/FALSE ITEMS**

Indicate whether the following statements are TRUE or FALSE. Choose the answer and write 'true' or 'false' next to the question number (3.1–3.5) in the ANSWER BOOK. Correct the statement if it is FALSE. Change the underlined word(s) to make the statements TRUE. (You may not simply use the word 'NOT' to change the statement.)

**Examples:**

<b>QUESTION:</b>	<b>ANSWER:</b>
A <u>stylus</u> can be used for more accurate input on some touch screens.	True
The <u>World Wide Web</u> is characterised by unequal access to ICT by different groups of people.	False <u>Digital divide</u>

- 3.1 A document with a PDF file extension can be used to prevent users from changing its contents. (1)
- 3.2 A blog is a website that allows users to work together on changing its content using a web browser. (1)
- 3.3 An audio file, such as a news programme or an interview that can be downloaded from the Internet, is called a patch. (1)
- 3.4 A QR-code is used to visually represent text such as a URL. (1)
- 3.5 A query can be used in a spreadsheet to extract specific information from a large set of data. (1)

**[5]****TOTAL SECTION A: 25**

**SECTION B****QUESTION 4: SYSTEMS TECHNOLOGIES**

- 4.1 Most modern web browsers have a feature called tabbed web browsing.  
State TWO advantages of tabbed web browsing. (2)
- 4.2 Give TWO reasons why biometric input can be more secure than using traditional measures such as passwords. (2)
- 4.3 Buying a computer can sometimes be very difficult because there are so many hardware options to consider.
- 4.3.1 Name TWO of the main components on a computer that have a significant effect on the overall processing performance of the system. (2)
- 4.3.2 Explain what a *trackpad/touch pad* is and state ONE disadvantage of using a trackpad/touch pad instead of a normal mouse. (2)
- 4.3.3 LED monitors have replaced CRT monitors.  
State TWO advantages of LED monitors. (2)
- 4.3.4 State ONE possible disadvantage of having a built-in monitor on a computer such as a notebook computer. (1)
- 4.4 A business has to decide which printer they should purchase to print pamphlets in large volumes.
- 4.4.1 Recommend a type of printer for their needs AND give a reason to support your recommendation. (2)
- 4.4.2 Name TWO new technologies or additional features that appear in modern printers. (2)
- 4.5 The opening of programs on a computer sometimes becomes slower over a period of time.
- 4.5.1 A support technician suggests that the hard drive might be fragmented. He recommends defragmenting the hard drive.  
Briefly describe what occurs during the defragmentation process. (2)
- 4.5.2 Identify TWO other software-related problems that could reduce the speed of a computer, besides fragmentation. Write down a potential solution for EACH of the problems you identify (it could be done in the form of a table). (4)
- 4.6 Explain what a *zombie* is in an ICT context. (2)
- 4.7 What is the function of a firewall? (2)

**[25]**

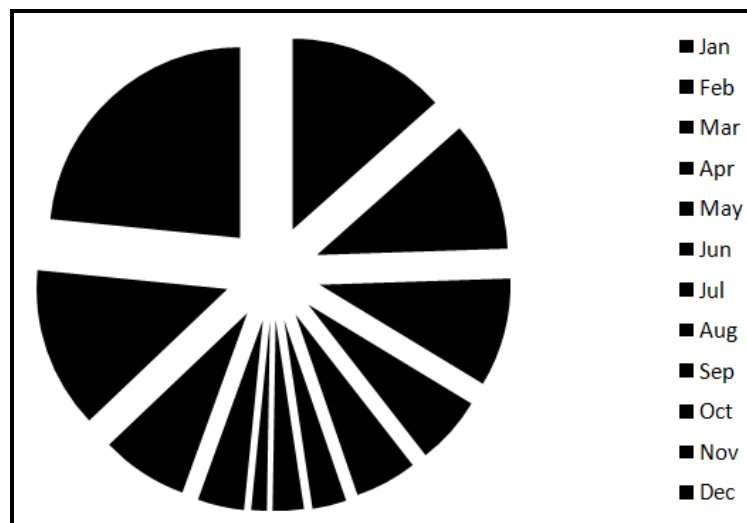
**QUESTION 5: INTERNET AND NETWORK TECHNOLOGIES**

- 5.1 Why would the Internet be classified as a WAN? (1)
- 5.2 State TWO advantages of using a network. (2)
- 5.3 Compare the functionality of a switch and a router in a network. (2)
- 5.4 State an advantage of using fibre-optic cables instead of copper wires as a communication medium. (1)
- 5.5 A number of hardware issues, such as the type of equipment, affect the performance and stability of a Wi-Fi signal.
- State THREE factors, besides hardware issues, that can have an influence on a Wi-Fi signal. (3)
- 5.6 Give an example of what NFC (near field communication) can be used for. (1)
- 5.7 Explain the function of a hyperlink. (1)
- 5.8 Name ONE type of connection to the Internet, besides a landline. (1)
- 5.9 More and more people choose to use online, web-based e-mail systems.
- 5.9.1 Give ONE example of a popular web-based e-mail service. (1)
- 5.9.2 State ONE possible advantage of using a web-based e-mail system compared to using a local e-mail system such as Microsoft Outlook. (1)
- 5.9.3 Which e-mail field will be used to hide the address of a recipient who gets a copy of the same e-mail? (1)

**[15]**

**QUESTION 6: INFORMATION MANAGEMENT**

- 6.1 Name TWO possible types of sources used to collect personal opinions without the use of the Internet when doing research. (2)
- 6.2 State TWO advantages of using questions that have a fixed set of possible answers (closed questions) when using an electronic form. (2)
- 6.3 State TWO ways in which to check the reliability or accuracy of information from an Internet source. (2)
- 6.4 The graph/chart below represents a comparison of the average temperatures per month from January (Jan) to December (Dec).



- 6.4.1 Name a more suitable type of graph/chart to represent this information. (1)
- 6.4.2 Recommend THREE improvements to the above graph/chart other than changing the type of graph. (3)
- [10]**

**QUESTION 7: SOCIAL IMPLICATIONS**

- 7.1 Green computing is becoming an increasingly important issue in ICT.
- 7.1.1 State ONE way in which one can responsibly dispose of an old laptop battery. (1)
- 7.1.2 State TWO ways in which computer technology can be used to protect the environment. (2)
- 7.1.3 Give ONE example of the use of computer technology that has a negative effect on the environment, other than the disposal of batteries. (1)
- 7.2 Give the term for the practice when somebody, for example, opens a Facebook account using another person's details. (1)
- 7.3 Phishing is a world-wide problem.
- 7.3.1 State TWO ways of identifying a possible phishing attack. (2)
- 7.3.2 Suggest TWO possible ways in which to prevent or combat phishing on receipt of such an e-mail. (2)
- 7.4 Give ONE example of how downloading copyrighted material without permission could affect the owners or creators of the material. (1)
- [10]**

**QUESTION 8: SOLUTION DEVELOPMENT**

- 8.1 You have studied web page development in your CAT course.
- 8.1.1 What is the name of the language that uses tags and attributes to create web pages? (1)
- 8.1.2 What is the difference in function between the <ul> and <ol> tags used in the code for a web page? (2)
- 8.1.3 Give TWO possible reasons why an image you added on an HTML web page does not display when viewed in a web browser. (2)
- 8.2 Businesses regularly use databases.
- 8.2.1 The names of various schools are listed in a field in a database table.  
  
Which criteria would you enter in a query to extract the names of all the schools that have the word 'business' anywhere in their name? (2)
- 8.2.2 State TWO advantages of/reasons for using codes instead of the 'full text' in a database, for example 0847 instead of the text 'Business Studies'. (2)
- 8.3 Spreadsheets are commonly used to analyse data.
- 8.3.1 Name a feature of a spreadsheet program that can be used to automatically highlight cells if they contain specific values. (1)
- 8.3.2 The function below was used in a spreadsheet to count the number of cells in the range A1:A10 that contain values of 50 or higher.  
  
=COUNTIF(A1:A10,<50)  
  
Give TWO reasons why this function will NOT work correctly. (2)
- 8.3.3 Which feature within a spreadsheet program can be used to display words underneath one other within the same cell? (1)
- 8.4 State TWO advantages of using the 'Track Changes' feature of a word processing program. (2)

**[15]****TOTAL SECTION B: 75**

**SECTION C****QUESTION 9: INTEGRATED SCENARIO****SCENARIO**

Your school recently started a photography club. As the technical assistant you will be helping club members with any computer-related problems. Members are encouraged to bring along any device capable of taking photographs, such as digital cameras, smartphones and tablets.

- 9.1 The school principal would like to invest in a new digital camera.
- 9.1.1 Name any TWO camera specifications that will have an impact on the quality of a photograph. (2)
- 9.1.2 The software on the digital camera has a bug.
- How would you fix a software bug without replacing the device or taking it back to the shop? (1)
- 9.1.3 Study the specifications below and answer the questions that follow.
- 20 MP
  - 4" LED touch screen
  - 26x optical zoom
  - Micro HDMI and USB port
  - 4 GB SD card included
- (a) The specifications indicate an HDMI port.
- Name ONE output device that would be typically connected to the HDMI port of the camera. (1)
- (b) What is the size of the camera's display (screen)? (1)



- 9.2 The most common way to transfer photographs from a digital camera to a computer would be to use a USB cable.
- 9.2.1 When connecting the camera to a USB port on the computer, you notice that a device driver is being automatically installed.
- What is the function of a device driver? (1)
- 9.2.2 The device driver was installed without inserting a storage medium such as a CD.
- From which location could the device driver have been installed? (1)
- 9.2.3 Name TWO other ways, besides using a USB cable, in which photographs can be transferred from a digital camera to a computer. (2)
- 9.3 The secretary has been trying to send a picture as an e-mail attachment to the local newspaper. The e-mail was rejected as the attachment exceeded the maximum size limit of 15 MB.
- Name TWO possible ways in which to reduce the size of the picture. (2)
- 9.4 One of the members received a laptop with a built-in webcam.
- Name TWO functions of a webcam if it is used with the Internet. (2)
- 9.5 A major concern for the members of the photography club is losing the photographs they have downloaded onto their computers.
- You recommend that they have an effective backup policy to prevent the loss of data if their computers are stolen or damaged.
- 9.5.1 Name TWO practical guidelines or strategies they can include in their backup policy. (2)
- 9.5.2 The school principal stated that he uses cloud storage to store the photographs he takes with his smartphone.
- (a) State TWO possible disadvantages of using cloud storage for this purpose. (2)
- (b) The school principal made sure that the synchronisation ('synching') option on his smartphone has been enabled.
- What advantage does 'synchronisation' ('synching') offer in this context? (1)

- 9.6 One of the members has a camera with the option of saving GPS information to a photograph.
- 9.6.1 How does GPS technology work? (2)
- 9.6.2 Discuss ONE reason for adding GPS information to a photograph. (1)
- 9.7 State TWO advantages of using touch screens on mobile devices such as a digital camera or smartphone. (2)
- 9.8 The club needs broadband Internet access.
- 9.8.1 Explain what the term *broadband* means. (1)
- 9.8.2 Name THREE technical criteria or issues, besides the cost, that should be considered when choosing the type of broadband Internet connection. (3)
- 9.8.3 Access to the Internet means that the club members can use VoIP technology such as Skype.
- What is the main advantage of using VoIP to make calls instead of normal telephone calls? (1)
- 9.9 The club members will need Internet access on all the computers. This means a network will have to be installed.
- 9.9.1 State TWO advantages of installing a wireless LAN (WLAN) instead of a cabled LAN. (2)
- 9.9.2 What would the function of a NIC (network interface card) be on a network? (1)
- 9.10 The club would like to upload their photographs to social networking websites on the Internet for their parents to see.
- 9.10.1 State TWO advantages of posting the photographs on a social networking website. (2)
- 9.10.2 State TWO ethical guidelines for the club members to consider when posting pictures on the Internet. (2)

9.11 The photography club wishes to buy a new computer that will be used for photo editing.

Consider the specifications of a possible new computer as shown below.

- Core i5 2.4 GHz
- 4 GB RAM
- 1 TB HDD
- 2 GB dedicated graphics card
- Bluetooth keyboard and mouse
- Windows 8 Pro

9.11.1 Which essential output device does NOT appear in the specifications above? (1)

9.11.2 State TWO advantages of installing or adding a memory card reader to the computer. (2)

9.11.3 The specifications include a Bluetooth keyboard and mouse.  
State TWO potential disadvantages of using Bluetooth devices. (2)

9.11.4 4 GB RAM is specified.  
What is the main function of RAM in a computer? (1)

9.11.5 Why would increasing the amount of RAM increase the performance of a computer? (1)

9.12 The club members need software to edit their photographs. They want to use free and open-source software (FOSS).  
What is the main advantage of using FOSS in this situation, besides the fact that it is free? (1)

9.13 State TWO ways in which the photography club can practise green computing in terms of EACH of the following issues:

9.13.1 Paper usage (2)

9.13.2 Electricity consumption (2)

9.14 The club will use a database to keep track of member details.  
Name THREE database field properties that can be used to ensure that valid and accurate data is entered into the database. (3)

**TOTAL SECTION C: 50**  
**GRAND TOTAL: 150**



# basic education

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

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 12**

**COMPUTER APPLICATIONS TECHNOLOGY P2**

**NOVEMBER 2014**

**MEMORANDUM**

**MARKS: 150**

**This memorandum consists of 20 pages.**

**SUGGESTIONS AND RECOMMENDATIONS TO MARKERS**

- Revisit the questions and this memorandum frequently during the marking session.
- It is advisable to read (and to re-read) the question frequently together with the candidate's response to check that it correlates. Do not be misled by the candidate's statements/answers.
- Be careful not to focus on keywords or general statements, but rather read the entire answer. When in doubt, read the entire answer, then the question in the question paper and the answer in the memorandum. Ask yourself or your senior marker if the response is in line with the memorandum before awarding the correct marks. For example, the memorandum states 'cheap' and the candidate responds with 'not expensive'.
- Beware of overlapping answers to a specific question. In general, ONE mark is awarded per fact.

**SECTION A****QUESTION 1: MATCHING ITEMS**

1.1	O	✓	1
1.2	F	✓	1
1.3	K	✓	1
1.4	D	✓	1
1.5	L	✓	1
1.6	Q/L	✓	1
1.7	P	✓	1
1.8	G	✓	1
1.9	B	✓	1
1.10	E	✓	1
			<b>[10]</b>

**QUESTION 2: MULTIPLE-CHOICE**

2.1	C	✓	1
2.2	B	✓	1
2.3	B	✓	1
2.4	B/C/D	✓	1
2.5	A	✓	1
2.6	C	✓	1
2.7	D	✓	1
2.8	C	✓	1
2.9	A	✓	1
2.10	C	✓	1
			<b>[10]</b>

**QUESTION 3: TRUE/FALSE ITEMS**

(Note to marker: In QUESTIONS 3.2, 3.3 and 3.5 candidates need to provide both the word 'False' and the correct term, e.g. False, wiki, in order to get the mark.)

3.1	True ✓  <b>OR</b>  False, <u>drmz</u>	1
3.2	False, <u>wiki/wikipedia</u> ✓	1
3.3	False, <u>podcast/MP3</u> ✓	1
3.4	True ✓	1
3.5	False, <u>database</u> ✓	1
		<b>[5]</b>

**TOTAL SECTION A: 25**

**SECTION B****QUESTION 4: SYSTEMS TECHNOLOGIES**

4.1	<ul style="list-style-type: none"> <li>• More than one website/pages can be opened/closed in a single window</li> <li>• Ease of navigation between open websites/greater browsing efficiency</li> <li>• Allows for normal as well as private browsing in the same window</li> <li>• Taskbar is less cluttered</li> <li>• Allows multiple home pages that all open automatically</li> <li>• Organise tabs in a group to save as a favourite</li> <li>• Less resource-intensive than running a separate instances/copies for each page of the same browser, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Do NOT accept general answers that apply to all browsers. Accept open many pages at the same time.)</i></p>		2
4.2	<ul style="list-style-type: none"> <li>• A person's physical characteristics are unique</li> <li>• The person concerned has to be present for the input</li> <li>• Physical characteristics cannot be easily falsified</li> <li>• Passwords are often left around/guessed/hacked, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Do not accept any reference to cost.)</i></p>		2
4.3.1	<ul style="list-style-type: none"> <li>• RAM/Memory</li> <li>• CPU</li> <li>• CPU related e.g. heat sink, cache.</li> <li>• GPU/graphics card</li> <li>• Hard drive/SSD</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Do not accept only the word storage.)</i></p>	2	

4.3.2	<p>A trackpad/touchpad is a touch sensitive area✓ where the user can move the pointer on the screen by touching the trackpad/touch surface instead of using a mouse</p> <p><b>AND</b></p> <ul style="list-style-type: none"> <li>• Usually built into devices such as a laptop/cannot be removed</li> <li>• Less intuitive to use/Takes more time to position cursor accurately</li> <li>• Operations where multiple clicks are involved may be more difficult</li> <li>• Drag and drop operations could be more difficult</li> <li>• Can accidentally be touched thereby moving the cursor to an unintended place on the screen</li> <li>• Cannot be used for gaming/Less responsive</li> <li>• Sweaty, dirty and moist fingers/Wearing gloves/Anything that causes a barrier can disrupt the movement of the pointer, etc.</li> </ul> <p style="text-align: right;">✓ (Any one)</p>	2	
4.3.3	<ul style="list-style-type: none"> <li>• High contrast ratios</li> <li>• Low power consumption/Generates less heat</li> <li>• Occupies less physical space/Slimmer</li> <li>• High resolution/Good image quality/Less eye-strain/Less glare</li> <li>• Less radiation/health hazards</li> <li>• Available in larger sizes</li> <li>• Additional ports, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Reference to green computing must be motivated. Do not accept references to smart TV's.)</i></p>	2	
4.3.4	<ul style="list-style-type: none"> <li>• Impossible/Difficult to upgrade</li> <li>• Costly to repair</li> <li>• Whole machine needs to go in if a repair is needed, etc.</li> </ul> <p style="text-align: right;">✓ (Any one)</p> <p><i>(Note to marker: Do not accept reference to damage due to dropping. Accept references to monitor size being restricted.)</i></p>	1	7



4.4.1	<p>Laser printer/(Networked) office copier ✓</p> <p><b>AND</b></p> <ul style="list-style-type: none"> <li>• High speed</li> <li>• Cost effective on high volume <del>black and white</del> prints</li> </ul> <p style="text-align: right;">✓ (Any one)</p> <p><i>(Note to marker: If the first mark is wrong (e.g. inkjet), only award the second mark if the motivation for the incorrectly recommended printer is correct e.g. high quality printouts for inkjet printers.)</i></p>	2	
4.4.2	<ul style="list-style-type: none"> <li>• Connectivity via network/wireless e.g. Wi-Fi, Bluetooth, etc.</li> <li>• Integrated software features, e.g. remote printing</li> <li>• 3D printing</li> <li>• Memory card reader/Direct printing from flash drive</li> <li>• Erasable toner/Unprinting</li> <li>• Touch screen/pad interface, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Accept one reference to multifunction can fax/copy/scan/collating/binding/etc.)</i></p>	2	4
4.5.1	<p>Scattered parts of files ✓ re-organised ✓ into an adjacent/ contiguous area/together</p> <p><i>(Note to marker: Do not accept scattered files.)</i></p>	2	6

4.5.2	<p><i>Problem:</i> Malware/Virus infection ✓ <i>Solution:</i> Remove the infection with an antivirus program/removal tool ✓</p> <p><b>AND/OR</b></p> <p><i>Problem:</i> Too many programs open at the same time for the amount of RAM available/memory full/Programs running in the background ✓ <i>Solution:</i> Close unused programs/Find and close any unnecessary programs running in the background ✓</p> <p><b>AND/OR</b></p> <p><i>Problem:</i> Software updates being automatically downloaded <i>Solution:</i> Switch off automatic updates</p> <p><b>AND/OR</b></p> <p><i>Problem:</i> Defective application/bug <i>Solution:</i> Update/Replace defective applications</p> <p><b>AND/OR</b></p> <p><i>Problem:</i> Too many unnecessary files/temporary files on the hard drive <i>Solution:</i> Use Disk Cleanup/Remove unnecessary files or programs</p> <p><i>(Note to marker: Do not accept any reference to defragmentation or upgrade issues.)</i></p>	4	
4.6	Computer on a network ✓ that has been compromised/taken over/hacked ✓ to perform malicious tasks		2
4.7	<p>Software/Hardware that prevents unauthorised access ✓ to or from a computer over a network/Internet ✓</p> <p><i>(Note to marker: Do not accept answers that confuse an anti-virus with a firewall.)</i></p>		2
			<b>[25]</b>

**QUESTION 5: INTERNET AND NETWORK TECHNOLOGIES**

5.1	<p>The Internet is a global connection of networks/It is not linked in a small area/It spans over a wide, global area ✓</p> <p><i>(Note to marker: Do not accept only expanding the acronym.)</i></p>		1
5.2	<ul style="list-style-type: none"> <li>• Sharing software, e.g. local services, files, centralisation/sharing of data/centralised backup</li> <li>• Sharing hardware, e.g. printers, scanners, grid computing</li> <li>• Facilitating communications, e.g. connections between devices/users/sharing of an Internet connection, etc.</li> <li>• Gaming</li> <li>• Improved security</li> <li>• Teaching/Broadcasting tool</li> <li>• Centralised management of computers/workstations, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Accept suitable examples of the options above.)</i></p>		2
5.3	<ul style="list-style-type: none"> <li>• Switch is a device used to connect computers✓/regulate data flow between computers on a network</li> <li>• Router is used to connect to external networks✓ e.g. Internet</li> </ul>		2
5.4	<p>Fibre-optic cables allow for:</p> <ul style="list-style-type: none"> <li>• higher data transmission speed compared to copper wires</li> <li>• lower attenuation/less interference</li> <li>• less susceptible to lightning strikes, etc.</li> </ul> <p style="text-align: right;">✓(Any one)</p> <p><i>(Note to marker: Accept less likely to be stolen.)</i></p>		1
5.5	<ul style="list-style-type: none"> <li>• Physical obstacles/walls</li> <li>• Closeness/Proximity/Distance to the access point/router</li> <li>• Electrical/Magnetic interference/Signal overlapping</li> <li>• Network load/Too many computers on the network/Contention ratio</li> <li>• Weather conditions</li> <li>• Poor quality/Low speed connection devices used</li> <li>• Availability of electricity, etc.</li> </ul> <p style="text-align: right;">✓✓✓(Any three)</p>		3

5.6	<ul style="list-style-type: none"> <li>• Sharing/Transferring files</li> <li>• Identity verification/Authentication purposes</li> <li>• Location-based profile automation</li> <li>• Can be used in payment systems</li> <li>• Switch devices on or off, etc.</li> </ul> <p style="text-align: right;">✓(Any one)</p> <p><i>(Note to marker: Accept a specific example.)</i></p>		1
5.7	<ul style="list-style-type: none"> <li>• Directs the browser/application to a webpage/document/resource</li> <li>• Provides a connection/link/shortcut to another web page/document/file</li> <li>• Provides a link to another place/bookmark in the same document</li> </ul> <p style="text-align: right;">✓(Any one)</p> <p><i>(Note to marker: Do not accept shortcut without acceptable explanation.)</i></p>		1
5.8	<ul style="list-style-type: none"> <li>• Satellite</li> <li>• Cellular/3G/LTE/GPRS/HSDPA/EDGE/4G</li> <li>• Wireless/Wi-Fi/WiMax/iBurst/Radio technology</li> </ul> <p style="text-align: right;">✓(Any one)</p> <p><i>(Note to marker: Accept explanation of any of the above concepts.)</i></p>		1
5.9.1	<ul style="list-style-type: none"> <li>• mail.yahoo/yahoomail</li> <li>• Gmail</li> <li>• Hotmail</li> <li>• Ymail</li> <li>• Webmail</li> <li>• iCloud, etc.</li> </ul> <p style="text-align: right;">✓(Any one)</p> <p><i>(Note to marker: Accept any valid web-based e-mail service.)</i></p>	1	3

5.9.2	<ul style="list-style-type: none"> <li>• E-mail can be accessed at any location with Internet access</li> <li>• Access to your e-mail from all your devices</li> <li>• E-mails are not lost in case of computer crash</li> <li>• No need to upgrade software/no need to purchase or install software</li> <li>• May have better e-mail management options, e.g. with regard to spam and phishing reporting</li> <li>• Tighter integration with other web-services, e.g. Google Drive for attachments</li> </ul> <p style="text-align: right;">✓(Any one)</p>	1	
5.9.3	<p>Bcc ✓</p> <p><i>(Note to marker: Also accept BCC or blind copy field.)</i></p>	1	
			<b>[15]</b>

**QUESTION 6: INFORMATION MANAGEMENT**

6.1	<ul style="list-style-type: none"> <li>• Questionnaires</li> <li>• Surveys</li> <li>• Interviews</li> <li>• Voting</li> </ul> <p style="text-align: right;">✓✓(Any two)</p>		2
6.2	<ul style="list-style-type: none"> <li>• Quicker/Easier to complete by respondents/Less susceptible to misinterpretation</li> <li>• Less chance of data capture errors</li> <li>• Easier to perform data validation</li> <li>• Easier to store/process/analyse information/Limits possible responses/Less susceptible to misinterpretation, etc.</li> </ul> <p style="text-align: right;">✓✓(Any two)</p>		2
6.3	<ul style="list-style-type: none"> <li>• Check credentials/affiliation of the author/organisation running the website</li> <li>• Establish how recent/current the information is/Check when it was last updated</li> <li>• Cross-reference with other sources</li> <li>• Check objectivity/bias with other sources</li> <li>• Look at the general presentation, e.g. spelling errors</li> <li>• Frequency which the source has been cited</li> </ul> <p style="text-align: right;">✓✓(Any two)</p> <p><i>(Note to marker: Do not accept 'spell check'.)</i></p>		2
6.4.1	<ul style="list-style-type: none"> <li>• Bar graph</li> <li>• Column graph/Histogram</li> <li>• Line graph</li> <li>• Scatter graph</li> <li>• Area graph</li> </ul> <p style="text-align: right;">✓(Any one)</p>	1	
6.4.2	<ul style="list-style-type: none"> <li>• Add a suitable chart title/heading</li> <li>• Make use of data labels/values/percentages</li> <li>• Add meaningful/descriptive axis titles</li> <li>• Use of colour/shading, etc.</li> </ul> <p style="text-align: right;">✓✓✓(Any three)</p> <p><i>(Note to marker: Do not accept key/legend. Accept 'axis labels' for the third bullet.)</i></p>	3	4
			<b>[10]</b>

**QUESTION 7: SOCIAL IMPLICATIONS**

7.1.1	<ul style="list-style-type: none"> <li>• Send the battery for recycling/e-waste collection</li> <li>• Take it back to the manufacturer/reseller</li> <li>• Trade in for a new one</li> </ul> <p style="text-align: right;">✓(Any one)</p>	1	
7.1.2	<ul style="list-style-type: none"> <li>• Paperless office helps reverse deforestation</li> <li>• Tracking endangered species</li> <li>• Power management</li> <li>• More efficient use of scarce resources</li> <li>• Monitoring issues such as climate change/pollution/carbon emission, etc.</li> </ul> <p style="text-align: right;">✓✓(Any two)</p> <p><i>(Note to marker: Accept specific computer-related examples.)</i></p>	2	
7.1.3	<ul style="list-style-type: none"> <li>• E-waste pollution such as dumping old computer equipment</li> <li>• Energy wastage such as not shutting down workstations when not in use/not using energy efficient equipment</li> <li>• Wasting paper, etc.</li> </ul> <p style="text-align: right;">✓(Any one)</p> <p><i>(Note to marker: Accept any suitable response related to the above.)</i></p>	1	4
7.2	Identity theft/Fraud/Impersonation ✓		1
7.3.1	<ul style="list-style-type: none"> <li>• The e-mail address is suspicious, e.g. such as absa@gmail.com or support@paypal.co/not from your bank</li> <li>• The e-mail writer wants you to follow a link, but does not address you by your name/surname</li> <li>• Inconsistencies e.g. spelling, grammar, incorrect language used, formatting, images instead of text</li> <li>• Requested to give out/verify confidential information</li> <li>• Hover the cursor over the hyperlink to see if it points to the expected website, etc.</li> </ul> <p style="text-align: right;">✓✓(Any two)</p>	2	
7.3.2	<ul style="list-style-type: none"> <li>• Close/Delete the e-mail</li> <li>• Do not follow any links in an e-mail as a general rule/Do not give out personal information</li> <li>• Report the e-mail as phishing</li> <li>• Blacklist/Block the particular e-mail address</li> <li>• Call/Contact company to verify, etc.</li> </ul> <p style="text-align: right;">✓✓(Any two)</p>	2	4

7.4	<ul style="list-style-type: none"><li>• Loss of revenue/income</li><li>• Job losses/Collapse in the relevant industry</li><li>• Poor quality products might damage the owner's reputation</li></ul> <p style="text-align: right;">✓(Any one)</p> <p><i>(Note to marker: Do NOT accept general responses like 'makes them angry' or 'negatively', etc.)</i></p>		1
			<b>[10]</b>



**QUESTION 8: SOLUTION DEVELOPMENT**

8.1.1	Accept any version of HTML (XHTML, XHTML, HTML, etc.) ✓	1	5
8.1.2	<ul style="list-style-type: none"> <li>• &lt;ul&gt; displays bulleted (unordered) list ✓</li> <li>• &lt;ol&gt; displays a numbered (ordered) list ✓</li> </ul>	2	
8.1.3	<ul style="list-style-type: none"> <li>• Image is not in the specified folder</li> <li>• Image extension is different from HTML code</li> <li>• Spelling/Typing error</li> <li>• Web browser cannot display the image type/format</li> <li>• Incorrect tags used</li> <li>• Image reference not present/correct, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p>	2	
8.2.1	<p>*business*</p> <p>Use an asterisk ✓ on both sides ✓ of the word business</p> <p><i>(Note to marker: Ignore if the Like operator has been added. Allocate one mark if the answer refers to wildcards only. Accept variations of the word business.)</i></p>	2	4
8.2.2	<ul style="list-style-type: none"> <li>• Easier for the data capturer/Shorter to type</li> <li>• Fewer mistakes when entering data</li> <li>• Easier to use in queries</li> <li>• Use less storage space, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Do not accept easier/quicker to sort/store.)</i></p>	2	
8.3.1	Conditional formatting ✓	1	4
8.3.2	<ul style="list-style-type: none"> <li>• Incorrect relational operator, e.g. (&gt;50)</li> <li>• Including the value 50, e.g. (&gt;=50) OR (&gt;49)</li> <li>• Criteria must appear in quotes/Inverted commas ("&gt;=50")</li> </ul> <p style="text-align: right;">✓✓(Any two)</p>	2	
8.3.3	<p>Text wrapping ✓</p> <p><i>(Note to marker: Accept explanation of using Alt+Enter to start a new line within a cell.)</i></p>	1	

<p>8.4</p>	<ul style="list-style-type: none"> <li>• Allows/Facilitates editing of one document by multiple users</li> <li>• Allows for original data/changes to be reviewed/viewed before being committed/Changes can be accepted or rejected</li> <li>• It is possible to see which changes were made by which users, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Accept specific examples such as each person's editing appearing in a different colour or that the changes can be accepted or rejected one at a time.)</i></p>		<p>2</p>
			<p><b>[15]</b></p>

**TOTAL SECTION B: 75**

**SECTION C****QUESTION 9: INTEGRATED SCENARIO**

9.1.1	<ul style="list-style-type: none"> <li>• Quality of the lens</li> <li>• Quality/size/type of sensor, e.g. CMOS performs better in low light than CCD, colour depth</li> <li>• On-board software/Software filters</li> <li>• ISO rating</li> <li>• Digital vs. optical zoom</li> <li>• Image stabilisation</li> <li>• Image processor</li> <li>• Megapixel value/Resolution</li> <li>• Shutter speed</li> <li>• Flash, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Do not accept answers not related to specification such as cost, brand name etc.)</i></p>	2	
9.1.2	<ul style="list-style-type: none"> <li>• Update the software/firmware/operating system/drivers/download a patch</li> <li>• Reset to factory default/Reinstall the original software</li> </ul> <p style="text-align: right;">✓ (Any one)</p>	1	
9.1.3(a)	<ul style="list-style-type: none"> <li>• HDTV/Smart TV</li> <li>• Computer monitor</li> <li>• Projector</li> </ul> <p style="text-align: right;">✓ (Any one)</p> <p><i>(Note to marker: Also accept television/TV. Do not accept laptop, tablet, etc.)</i></p>	1	
9.1.3(b)	4" (4 inches) ✓	1	5
9.2.1	<ul style="list-style-type: none"> <li>• A device driver allows for communication between the device/camera and the computer/operating system</li> <li>• The device driver allows the operating system/computer to control the device/camera</li> <li>• It allows the computer to 'see'/use/recognise the device/camera.</li> </ul> <p style="text-align: right;">✓ (Any one)</p>	1	
9.2.2	<ul style="list-style-type: none"> <li>• As part of the operating system already stored on the computer</li> <li>• Stored on-board/on the camera</li> <li>• (Automatically) downloaded from the Internet, etc.</li> </ul> <p style="text-align: right;">✓ (Any one)</p>	1	4

9.2.3	<ul style="list-style-type: none"> <li>• Memory card reader</li> <li>• Bluetooth</li> <li>• 3G/Wi-Fi (such as Eye-Fi)/E-mail</li> <li>• Automatically uploads/synchronises to cloud storage such as Dropbox</li> <li>• Firewire</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p>	2	
9.3	<ul style="list-style-type: none"> <li>• Lower the resolution/DPI value of the photograph</li> <li>• Change to monochrome/grey scale</li> <li>• Crop parts of photo not needed</li> <li>• Compression/Change file format</li> <li>• Reduce the photograph dimensions, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p>		2
9.4	<ul style="list-style-type: none"> <li>• Video chat/conference/call e.g. Skype</li> <li>• Vodcast/vlog</li> <li>• Profile pictures</li> <li>• Security feature to show the user remotely over the Internet what the webcam is seeing</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Security feature must be used with the Internet.)</i></p>		2
9.5.1	<ul style="list-style-type: none"> <li>• Make regular backups</li> <li>• Keep backups off-site</li> <li>• Rotate storage media used for backup (use more than one DVD)</li> <li>• Use more than one storage medium (use DVD, external hard drive in combination, cloud storage)</li> <li>• Checking that backups are viable/can be used to restore data</li> <li>• Incremental backup/only backup new or changed files</li> <li>• Use a clear file structure/labels/meaningful names</li> <li>• Automate the backup process</li> <li>• Exclude certain file types, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p>	2	
9.5.2(a)	<ul style="list-style-type: none"> <li>• Access to the cloud depends on the availability/quality of the Internet connection</li> <li>• Limited free storage available</li> <li>• Uses up data bundle which can be expensive on smartphones</li> <li>• Can't be sure that his photographs will be kept private/safe</li> <li>• Continued viability of cloud storage provider, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p>	2	5

9.5.2(b)	New photographs taken with his smartphone will automatically be uploaded to the cloud/New photographs are synchronised to all devices connected to the service ✓	1	
9.6.1	GPS uses satellites/cellular towers ✓ to find the geographical location ✓ of the GPS device	2	
9.6.2	<ul style="list-style-type: none"> <li>Find the location of where a photo was taken e.g. geotagging</li> <li>Import the GPS coordinates to a computer to record the locations where the photos were taken, e.g. Google Maps.</li> </ul> <p style="text-align: right;">✓ (Any one)</p>	1	3
9.7	<ul style="list-style-type: none"> <li>More space for a larger screen due to fewer physical buttons</li> <li>On-screen menus and buttons can be customised/different layouts</li> <li>Gestures e.g. swiping</li> <li>More intuitive use/Easier to work with, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p>		2
9.8.1	High-speed/High bandwidth (permanent) Internet connection ✓	1	
9.8.2	<ul style="list-style-type: none"> <li>Coverage/Signal strength</li> <li>Need for mobility or not</li> <li>Additional services offered, e.g. web hosting, technical support</li> <li>Speed</li> <li>Cap/Uncapped/Amount of data</li> <li>Shaped and unshaped</li> <li>Fair usage policy, etc.</li> </ul> <p style="text-align: right;">✓✓✓ (Any three)</p> <p><i>(Note to marker: Do not list cost or other non-technical issues. Do not accept 'size'.)</i></p>	3	
9.8.3	<ul style="list-style-type: none"> <li>Cheaper calls</li> <li>Calls cost the same irrespective of distance</li> <li>Can make calls to multiple platforms such as smartphone to a laptop/computer/tablet/Skype device</li> </ul> <p style="text-align: right;">✓ (Any one)</p> <p><i>(Note to marker: Accept see the person you are calling.)</i></p>	1	5
9.9.1	<ul style="list-style-type: none"> <li>Wireless connections can be used in some cases where cables cannot reach or be used</li> <li>Portable devices can be moved around and stay connected/Mobility</li> <li>Less clutter of cables</li> <li>Easier to add/connect additional equipment/nodes, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p>	2	3

9.9.2	To connect the computers to the network ✓/The physical connection between the computing device and the communications medium/allows communication between the networking device and the network	1	
9.10.1	<ul style="list-style-type: none"> <li>No need to distribute manually to all interested parties</li> <li>Parties can be notified automatically of new uploads</li> <li>The photographs might be made available to the general public/Can be accessed from anywhere</li> <li>Photos can be grouped into electronic albums</li> <li>Used as an alternative backup method</li> <li>Showcasing/Attracting comments, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p>	2	
9.10.2	<ul style="list-style-type: none"> <li>Respect privacy of individuals before posting/Sensitive aspects of photographs could lead to embarrassment</li> <li>Photographs should not be offensive</li> <li>Permission must be sought before posting e.g. for under-age subjects, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Do not accept reference to privacy settings.)</i></p>	2	4
9.11.1	Monitor/Display/Screen ✓	1	
9.11.2	<ul style="list-style-type: none"> <li>No need for using/carrying along cables to connect a camera</li> <li>No need to install drivers to access each camera</li> <li>Can read a variety of media types</li> <li>Memory cards can be used to store data other than photographs like a flash drive, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p>	2	
9.11.3	<ul style="list-style-type: none"> <li>Batteries are needed which can go flat</li> <li>Signal interference</li> <li>Devices are more expensive</li> <li>Devices are easier to track/steal, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p> <p><i>(Note to marker: Accept reference to distance limitation.)</i></p>	2	
9.11.4	Temporary storage✓ of data and instructions	1	
9.11.5	<ul style="list-style-type: none"> <li>More programs/data can be loaded</li> <li>Less need for reading/writing to or from the slower hard drive</li> <li>Less need for virtual memory</li> </ul> <p style="text-align: right;">✓(Any one)</p>	1	7

9.12	<ul style="list-style-type: none"> <li>• It can be altered/changes can be made</li> <li>• Source code is available to be edited</li> <li>• Improvements/can be changed to suit your needs/updates are shared with others</li> <li>• Can be installed on multiple computers without legal action, etc.</li> </ul> <p style="text-align: right;">✓ (Any one)</p>		1
9.13.1	<ul style="list-style-type: none"> <li>• Print preview/prevent documents being printed which are obviously not correct/needed</li> <li>• Use both sides of the paper/Buy a printer which can print on both sides of a page</li> <li>• Send documents electronically</li> <li>• Use recycled paper/Unprinting</li> <li>• Print two/multiple pages to a sheet, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p>	2	4
9.13.2	<ul style="list-style-type: none"> <li>• Switch off equipment you are not using</li> <li>• Use power schemes/settings of the computer</li> <li>• Make use of energy efficient equipment, etc.</li> </ul> <p style="text-align: right;">✓✓ (Any two)</p>	2	
9.14	<ul style="list-style-type: none"> <li>• Input masks</li> <li>• Required fields</li> <li>• Default values</li> <li>• Validation rule</li> <li>• Using specific data formats</li> <li>• Field sizes</li> <li>• Lookup wizard</li> <li>• Primary key, etc.</li> </ul> <p style="text-align: right;">✓✓✓ (Any three)</p>		3

**TOTAL SECTION C: 50**

**GRAND TOTAL: 150**