**NATIONAL
SENIOR CERTIFICATE**

GRADE 11

NOVEMBER 2016

COMPUTER APPLICATIONS TECHNOLOGY P1

MARKS: 180
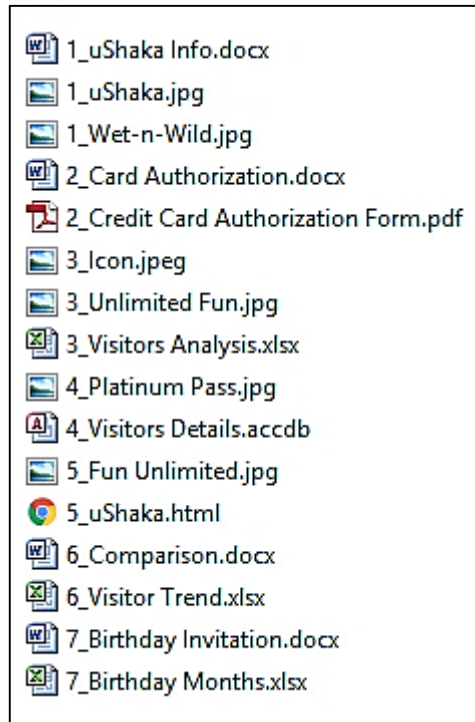
TIME: 3 hours

I C A T N E

This question paper consists of 15 pages, including an annexure.

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. 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 name on the label. If you are working on the network, you must follow the instructions provided by the invigilator.

3. 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.

4. This question paper consists of SEVEN questions.

5. Answer ALL the questions.

6. 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.

7. Read through each question before answering or solving the problem. Do NOT do more than required by the question.

8. At the end of the examination you must hand in the disk given to you by the invigilator with ALL the files saved on the disk, OR you should make sure that ALL the files are saved on the network/computer as explained to you by the invigilator/teacher. Make absolutely sure that ALL files can be read.

9. During the examination you may make use of the help functions of the programs which you are using. You may NOT use any other resource material.

10. If data is derived from a previous question that you cannot answer, you should still proceed with the questions that follow.

11. 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.

12. 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 indicated otherwise.

13. In ANNEXURE A the HTML Tag sheet is provided.

14. The examination folder/data disk that you receive with this question paper will contain the folder and files listed below. Ensure that you have the folder and ALL the files before you begin this examination.

```
1_uShaka Info.docx
1_uShaka.jpg
1_Wet-n-Wild.jpg
2_Card Authorization.docx
2_Credit Card Authorization Form.pdf
3_Icon.jpeg
3_Unlimited Fun.jpg
3_Visitors Analysis.xlsx
4_Platinum Pass.jpg
4_Visitors Details.accdb
5_Fun Unlimited.jpg
5_uShaka.html
6_Comparison.docx
6_Visitor Trend.xlsx
7_Birthday Invitation.docx
7_Birthday Months.xlsx
```

SCENARIO

The world class uShaka Marine World, situated in Durban, South Africa, opened its doors to the general public on April 30th, 2004. Close to three years in the making, uShaka has fast positioned itself as a key attraction on Durban's Golden Mile, offering a world of entertainment, excitement, fun and uniqueness.

uShaka has brought together cultures, like no other place in Africa – into a safe, secure and clean environment that resonates the sound of fun, laughter and the spirit of togetherness. Entertainment is non-stop, extending from the day-time operations of Sea World, Wet 'n Wild and uShaka Beach, to the night time festivities of the Village Walk.

The officials asked the Grade 11 learners to assist them in computerising some of their official work.

QUESTION 1: WORD PROCESSING

A document was created to give background information about uShaka Marine World and the activities that happens at the theme park.

Open the **1_uShaka Info** word processing document.

1.1   This document has a cover page. Make the following changes to the diamond auto shape found in the cover page.

      1.1.1   Insert the image **1_uShaka.jpg** into the diamond auto shape.   (1)

      1.1.2   Add any glow picture effect to the auto shape.   (1)

1.2   Insert a 6pt paragraph spacing before and after for the whole document.   (1)

1.3   Locate the letter **U** found in the first paragraph on page 3 under the heading *Durban - uShaka Marine World*.

- Add a drop cap effect for the letter **U** to drop over 3 lines.   (1)
- The distance from the text should be set to 1 cm.   (1)

1.4   Set the left and bottom margins to **1.5 cm**.   (1)

1.5   Locate the heading *Other attractions include* on page 4.

- Place the contents of this paragraph into 3 columns with equal width.   (1)
- Place a line in between the columns and set the spacing to 1 cm.   (2)
- Ensure that the two green highlighted words *The Open Ocean* and *Seals* starts at the top of the respective columns.   (1)

1.6   Locate the four highlighted (in pink) paragraphs after the heading *Wet 'n Wild World* on page 5.

- Ensure that these paragraphs are displayed as a bulleted list.   (1)
- Make use of the image *1_Wet-n-Wild.jpg* in the examination folder as the bullet.   (1)

1.7   Make the following changes to the properties of Heading 2 style.

- Change the style name to *Unlimited Fun*   (1)
- Font colour should be red   (1)
- Apply a blue paragraph shading   (1)
- The style should be right aligned   (1)
- Update these changes to the whole document where this style was used.   (1)

1.8   Locate the word *Souvenir* highlighted in yellow below the heading *Toys and Accessories* on page 6.

- Add a footnote to this text that reads *Memento*.   (2)

1.9   The GPS co-ordinates for *uShaka Marine World* was mentioned under the heading '*Directions'* on page 6.

- Ensure that the degree (°**)** symbol is displayed correctly (in places) as shown below.

               GPS Co-ordinates: 31°2'36"E, 29°52'0"S   (1)

1.10   Make the following changes to the existing **Bibliography** in the document.

- Add the URL to www.ushakamarineworld.co.za.   (1)

1.11   The merit awards that *uShaka Marine World* achieved over the past years are displayed on page 8 under the heading *'Merit Awards For uShaka Marine World'*.
- Group the 6 awards as a single object.   (2)

1.12   Locate the heading *uShaka Map* and the map below the heading on the last page of the document.

- Change the page orientation of only the last page to be landscape.   (1)
- Change the height and width of the picture to **15 cm** and **25 cm**.   (1)

1.13   Make the following changes to the Table of Contents displayed on the second page.

- Change the format to **simple**   (1)
- Right align the page numbers   (1)

1.14 Add automatic page numbering to the document as follows:

- Place the page numbers in the page footer in the format *Page i*.
- Ensure that no page numbers appears on the first and last page of the document.
- The page numbering should start from page 2 onwards. The second page should be numbered *'i'*. (5)

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QUESTION 2: WORD PROCESSING

A form was created for visitors who wish to make payment with a credit card. The visitors are supposed to fill in this authorisation form for making payment via a credit card.

Open the **2_Card Authorisation** word processing document.

2.1   Insert a text form field after the word *'I'* in the first paragraph so that:

- It accepts a maximum of 25 characters for the FULL NAME.   (2)
- It will always be displayed in CAPITAL letters.   (1)

2.2   Insert a drop down list next to *Type of Ticket* section so that it lists the following:

          Platinum
          Play
          Normal   (2)

2.3   Edit the *Total Transaction Amount* field so that:

- The maximum length of the numbers is 4.
- It displays the value in currency format.   (2)

2.4   Insert a check box form field after each *Card Type*. The check box size should be exactly 15pt.   (2)

2.5   Insert a table after the heading *Card Number* so that:

- It can accommodate 20 numbers   (1)
- AutoFit the contents   (1)

2.6   Apply any table style other than the default style to the table shown under the heading *Client's Details*.   (1)

2.7   Set tab stops after the *SIGNATURE* and *DATE* section so that:

- The first tab stop is at 8 cm
- The second tab stop is at 17 cm
- Use dashed leaders for both tab stops   (3)

2.8   Locate the text box at the bottom of the page and do the following:

- Insert the file **2_Credit Card Authorisation Form.pdf**, which you will find in your examination folder, as an icon in this text box.
- Ensure that any changes made to the source file (**2_Credit Card Authorisation Form.pdf**) will be reflected in the document (**2_Card Authorisation**).   (3)

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QUESTION 3: SPREADSHEET

The statistical analysis for all the uShaka Marine World visitors in the recent weeks are stored in the **3_Visitors Analysis** spreadsheet.

Open the **3_Visitors Analysis** spreadsheet and work in the **Details** worksheet.

3.1   An attempt was made to display the contact number for **uShaka Marine World** in cell **O2**. Ensure that the telephone number is displayed correctly.   (1)

3.2   Merge and centre the cells **A1** to **P1** and fill it with a dark blue fill colour.   (2)

3.3   Insert the image **3_Unlimited Fun.jpg** in cell **A2** with height of **2 cm** and width to **17 cm**.   (3)

3.4   Make the following changes to the cells **H4 : L4:**

   • The contents within these cells should be displayed on multiple lines.
   • Centre the text horizontally and vertically.   (2)

3.5   Apply conditional formatting to the **Age** given in column **D**.

   • Visitors above the age of 60 should be formatted.
   • Apply a **thin diagonal stripe** pattern style with **red** pattern colour.   (3)

3.6   Add a function in cell **E5** to display the gender category for **Jacob Andreas** which can be calculated based on **Age** column:

Age	Gender Category
Age greater than or equal to 61	**Pensioner**
Age between 13 and 60	**Adult**
Age less than or equal to 12	**Child**

     (5)

3.7   The favourite adventures chosen by the visitors are displayed with tick marks (✓) in columns **H** to **L**.

   • Use a function in cell **M5** to calculate the number of adventures selected by the visitor(s).
   • Use the auto fill feature to list the total number of adventures selected by all the visitors.   (5)

3.8   The rates for the different adventures are listed from cells **H3:L3**. Use the necessary functions / formulae to calculate the pass rates in cell **P5** that each visitor has to pay for their favourite adventures.

   HINT: If a visitor has selected the adventures **Wet 'n Wild** and **Kids World** he/she is suppose to pay a pass rate of
       (R158 + R20 = R178.00).   (6)

3.9   Change the tab colour of this worksheet to blue.   (1)

Work in the **Monetary Details** worksheet.

3.10   The theme park's directors are planning to give a discount to the visitors on their **PASS RATES** amount based on the **Renewal Years** (in Column **G**) which is as follows:

Renewal Years	Discount Percentage
0	No Discount
1	20%
2	25%
3	30%

Add a function in cell **I3** to determine the **Discount Amount** that **Jacob Andreas** is likely to receive on the **PASS RATE** amount.

Copy the function you added in cell **I3** to cells **I4:I102**. Ensure that it works correctly.   (6)

3.11   Calculate in cell **L2** the amount paid in total by the *Pensioners.*   (4)

3.12   Use a function in cell **L5** to find the number of visitors who did not opt for **food reservation**.   (2)

3.13   Insert the current date and time in the header of this worksheet as a field so that it updates automatically.   (2)

Work in the **Graph** worksheet.

3.14   Create a graph based on the data given in the **Graph** worksheet and ensure that the graph resembles the one given below:
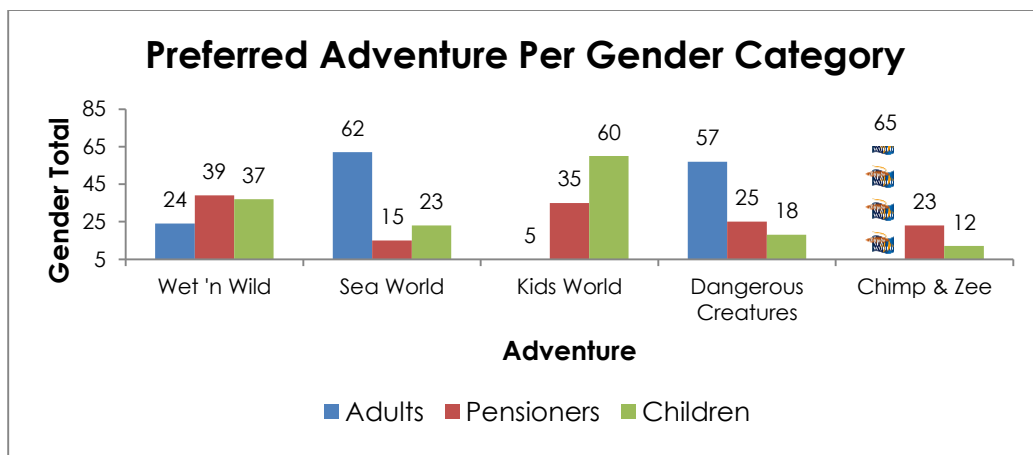
NOTE:
- The graph should be a column graph with the correct data.
- Insert the chart title as **'Preferred Adventure Per Gender Category'**.
- Insert the x and y-axis titles as **Adventure** and **Gender Total**.
- Fill the highest data bar with the image **3_Icon.jpg**.
- Display the legend at the bottom of the graph.
- No gridlines should be displayed.   (8)
                                                                                                [50]

QUESTION 4: DATABASE

A database was created to keep track of the visitors' details for future reference.

Open the **4_Visitors Details** database.

4.1   Format the **Visitor Details** table as follows:

4.1.1   Change the row height to 20pt.   (1)

4.1.2   Ensure that only the horizontal gridlines are visible.   (1)

4.1.3   Set the alternative row colour to **green** and background colour to **yellow**.   (2)

4.1.4   Sort the table in the ascending order according to the **Surname** field.   (1)

4.1.5   Create an input mask on the **Cell Number** field to ensure that the user inserts a cell number as follows:
- Ten compulsory numbers
- In the format (000)0000000

E.g.: **(078)6725610**   (3)

4.1.6   Choose an appropriate field as the primary key.   (1)

4.1.7   Add a drop down list to the **Gender Category** field to include the following in the list:
- **Pensioner**
- **Adult**
- **Child**   (3)

4.1.8   Change the **Pass Rates** field to currency.   (1)

4.1.9   Move the **Gender Category** field to be displayed before the **Age** field.   (1)

4.1.10   Make the **Gender Category** field a required field.   (1)

4.1.11   Add a validation rule to the **Age** field so that it accepts only the values between **3** and **70**. Add a suitable validation message as well so that the entry will be appropriate.   (3)

Continue working in the **4_Visitors Details** database.

4.2   Create a query called **qry4_2** based on the **Visitor Details** table.

- Display only the *Name, Wet 'n Wild* and *Sea World* fields.
- Display only the records of those visitors who is either an **adult** or a **pensioner** and who has opted for **Wet 'n Wild** and **Sea World** adventures.   (5)

4.3   Open the query **qry4_3**. Display only the records of those visitors whose:

  - Cell Number starts with **082** and ends with **5**
  - And who resides in **Benoni**   (4)

4.4   Create a form called **frm4_4** based on the **Visitor Details** table.

  - Insert only the fields *Name, Gender Category, Pass Type, Wet 'n Wild, Sea World, Kids World, Dangerous Creatures and Chimp_Zee*.
  - Change the heading in the form header to *Platinum Pass Members.*
  - Fill the form header and form footer with a black fill colour.
  - Ensure that the fields *Wet 'n Wild, Sea World, Kids World, Dangerous Creatures and Chimp_Zee* are displayed on the right hand side with a line in between as shown below.

Name	Jacob		Wet 'n Wild	☑
			Sea World	☐
Gender Category	Adult ▼		Kids World	☐
			Dangerous Creatures	☑
			Chimp _Zee	☑
Pass Type	Platinum			

  - Insert the image *4_Platinum Pass.jpg* with height and width **3 cm** in the form header.   (7)

4.5   Create a report called **rpt4_5** based on the **Visitor Details** table.

  - Display only the fields *Name, Gender Category, Residing City, Wet 'n Wild, Sea World, Kids World & Pass Rates*.
  - Group the records based on the *Gender Category* field.
  - Sort the records based on the *Residing City* field.
  - Do the following calculations in the appropriate areas in the report:
    o Average pass rate paid by visitors under each *Gender Category,* displayed in Rands (currency) with 2 decimal places.
    o Total number of records in the report.
    o Include proper labels for your calculations.   (9)

4.6   Export the report **rpt4_5** to **MS WORD** and save the file as **4_Export** in your examination folder.   (2)

                                                                                          [45]

QUESTION 5: WEB DESIGN (HTML)

A web page has been created to give some first-hand information to visitors who are totally unaware of uShaka Marine World and the unlimited fun it has in store for them.

Open the incomplete **5_uShaka** web page in a web browser and also in a text editor, e.g. Notepad.

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.

5.1   Add the HTML code so that the text **Unlimited Fun@uShaka** appear in the browser tab.   (2)

5.2   Change the background colour of the web page to yellow.   (1)

5.3   Change the font of the whole web page to *Century Gothic*.   (2)

5.4   Correct the HTML code to display the heading **Unlimited Fun for EVERYONE!** in heading 1 style.   (1)

5.5   Insert a horizontal line after the heading ***Unlimited Fun for EVERYONE!***
and before the last line of the web page starting with ***For more
information …***

- The colour of the horizontal lines should be red
- The size should be 4   (3)

5.6   Locate the items under the heading ***Sea World***. Make the following
changes:

- Display it as an ordered list
- The list should be in the format ***A,B,C***   (2)

5.7   Insert the image **5_Fun Unlimited.jpg** before the heading ***Wet 'n Wild*** and
do the following:

- Set the height of the image to 50 percent and width to 25 percent
respectively.
- Align the image to the right.
- Insert an alternative text to display ***Unlimited Fun*** if the image does not
display.   (6)

5.8   Display the sentence ***call 031 328 8000*** found at the bottom of the web page
to be italics.   (1)

5.9   Link the web address found at the bottom of the web page that reads
www.ushakamarineworld.co.za to the same web address.   (2)

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QUESTION 6: GENERAL

6.1   Open the **6_Comparison** word processing document.

6.1.1   Use a word processing function/formula to find the maximum visitors' increase for the year 2016 in the yellow shaded area.   (2)

6.1.2   Locate the graph found in **6_Visitor Trend** spreadsheet and make the following changes:

- Copy the graph and paste it in the **6_Comparison** file (yellow shaded area) that says: ***<<Insert Graph Here>>**.*
- Paste the graph as a link so that it updates automatically.   (2)

6.1.3   Insert a custom watermark to the document:

- The watermark should read *'STATISTICS'.*
- The font size of the watermark should be **90**.   (2)

6.1.4   Insert the name of the file as a field and display it in uppercase in the header of the document.   (3)

[9]

QUESTION 7: INTEGRATION

7.1   The Board of Directors and Members of uShaka Marine World has decided to organise a birthday party for some of the kids.

7.1.1   Use the **7_Birthday Invitation** word document for your mail merge and **7_Birthday Months (Month Of Birth - Worksheet)** as your data source:

- Replace the text between '<< … >>' with the appropriate field.
- Send the invitation to **children** only.
- Who were born in the month of **December**.
- Sort the names in the ascending order.
- Save the document
- Complete the merge.
- Save the merged document as **7_Merged Invitation**.   (6)

[6]

TOTAL: 180

ANNEXURE A − HTML TAG SHEET

Basic Tags	
Tag	**Description**
`<body></body>`	Defines the body of the web Page
`<body bg color="pink">`	Sets the background colour of the web page
`<body text="black">`	Sets the colour of the body text
`<head></head>`	Contains information about the document
`<html></html>`	Creates an HTML document – starts and ends a web page
`<title></title>`	Defines a title for the document
`<!-- -->`	Comment

Text Tags	
Tag	**Description**
`<hl></hl>`	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

Link Tags	
Tag	**Description**
`<a href="URL"></a>`	Creates a hyperlink
`<a href="URL"><img src="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 "centre"
` `	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
`<img src="name">`	Adds an image
`<img src="name" align="left">`	Aligns an image: can also be "right", "centre"; "bottom", "top", "middle"
`<img src="name" border="1">`	Sets size of border around an image
`<img src="name" width="200" height ="200">`	Sets the height and width of an image
`<img src="name" alt="alternative text">`	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 "centre" 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