



**SEPTEMBER TRIAL EXAMINATION**

**GRADE 12**

**COMPUTER APPLICATIONS TECHNOLOGY P1  
SEPTEMBER 2014**

**MARKS: 180**

**TIME: 3 hours**

**This exam paper consists of 15 pages, 1 Appendix and a HTML tag sheet.  
Please complete the separate information sheet after the examination.**

**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 Name and Surname in the header of EVERY document that you create or save.
3. The data files can be found in the Exam Data folder on the network or a local computer. 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 should make sure that ALL the files are saved on the network as explained to you by the invigilator/teacher. Make absolutely sure that all files can be read.
10. The separate information sheet which has been provided with this 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 make use of the help functions of the programs which you are using. You may NOT use any other resource material.
12. If data is derived from a previous question that you could not answer, you should still proceed with the questions that follow.
13. Unless instructed otherwise, formulae and/or functions must be used for ALL calculations in spreadsheet questions. Absolute cell references must be used only where necessary to ensure that formulae are correct when they are copied to other cells in the spreadsheet.

14. For all word processing questions, the language should be set to English (South Africa). The paper size is assumed to be A4 Portrait, unless instructed otherwise.
15. The examination folder that you receive with this question paper will contain all the files listed below. Ensure that you have all the files before you begin this examination.

|                        |                      |
|------------------------|----------------------|
| • 1TourHistory         | Word processing file |
| • 2ArgusLogo           | Image file           |
| • 2EntryForm           | Word processing file |
| • 3Bronze Medal        | Image file           |
| • 3Results_Resultate   | Spreadsheet file     |
| • 4Cycling_Fietsry     | Spreadsheet file     |
| • 5Argus Tour          | Database file        |
| • 5ArgusPnPCycleTour   | Image file           |
| • 5CategoryWinners2013 | Database file        |
| • 6PlaceCard           | Word processing file |
| • 6SeedingEvents2014   | Word processing file |
| • 6Winners2013         | Database file        |
| • 7chappies            | Image file           |
| • 7CycleClub           | HTML file            |
| • 7Week1               | HTML file            |

**SCENARIO**

Your school, Fleet High, has decided to start a cycling club. The members of the club are very keen to take part in the Argus Cycle Tour next year. They have collected a lot of information about the tour and have asked you, a CAT learner, to edit and modify some documents.

**QUESTION 1**

The club members have downloaded information about the history of the Argus Cycle Tour from the website <http://www.cycletour.co.za/index.php/information/history>. They want to add this document to the school's website but it needs to be edited first.

Open the document **1TourHistory**.

- 1.1 Modify the default *Heading 1* style by changing the font colour to black. (1)
- 1.2 Create a new paragraph style called *Tour Head* based on the *Heading 1* style. Edit the new style as follows:
- Set the font to Comic Sans 18 pt italics
  - Give the text a light blue background colour.
- Apply the new style to the first heading ('*History*') at the top of page 1. (4)
- 1.3 Format the first paragraph under the heading '*2012 Highlights*', starting with the text 'Following perfect ...' and ending with '...light cooling breeze.' as follows:
- 1.3.1 Change the paragraph spacing to 6 pt before and after the paragraph. (1)
- 1.3.2 Change the line spacing to exactly 16 pt. (2)
- 1.3.3 Expand the character spacing by 1.5 pt. (1)
- 1.4 Add automatic page numbering to the footer of the document. Odd numbered pages must be left-aligned and even numbered pages must be right-aligned. (3)
- 1.5 Change the case of the heading '*OUR HISTORY ... FROM 1998*' from upper case to sentence case. (1)
- 1.6 Place the text under the heading '*OUR HISTORY ... FROM 1998*' till before the heading '*2011 Highlights*' into landscape orientation. (2)
- 1.7 Change the text in 1.6 above (which is in three columns) to appear in four columns. The columns should be 1 cm apart and there must be a vertical line between each column. (4)
- Ensure that each year starts at the top of a new column.
- 1.8 The text under the heading '*2011 Highlights*' from '*After two years ...*' to '*... Magnificent Seven finished!*' appears three times in the document. (1)
- Find the first two occurrences of this text and delete it from the document.
- 1.9 Locate the word 'Facebook' in the text under the heading '*2011 Highlights*'. (3)
- Add a hyperlink to this text as follows:
- The hyperlink must link to the website <http://www.facebook.com>.
  - The text 'Social media network' must display when the mouse hovers (is moved) over the hyperlink.

- 1.10 Attach a footnote to the word '*Chappies*' under the heading '*2004*'. Use the bicycle symbol (Webdings character 98) as a custom symbol and type in '*Chapman's Peak Drive*' as the footnote text. (3)
- 1.11 A table of sources has been created for this document (go to Citations and Bibliography under References).
- 1.11.1 The website with author Anthony Hitchcock has been added in error. Remove this reference from the table of sources. (1)
- 1.11.2 Add an automatic bibliography at the end of the document under the heading '*Bibliography*'. Replace the yellow shaded text with the bibliography. (1)
- 1.12 A count of the number of words in the document must be inserted at the end of the document.
- Insert a field to display the number of words at the end of the document replacing the text '<< *Insert the field here* >>'. (1)

Save and close **1TourHistory**

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**QUESTION 2**

An entry form for the cycle tour has been created for learners to fill in electronically. The form is incomplete.

Open the document **2EntryForm** and make the necessary changes.

- 2.1 **Appendix A** shows a completed form. Use the appendix to guide your formatting choices.
- 2.1.1 Add the logo **2ArgusLogo** in the position shown on Appendix A. The logo should be resized so that the image remains in the correct proportions. The width of the logo should 3 cm. (4)
  - 2.1.2 Format the main heading in the same way as displayed in Appendix A. (3)
  - 2.1.3 Add bullets to the form instructions. (2)
  - 2.1.4 Format the heading '*CONTACT DETAILS*' in the same way as the heading '*PERSONAL DETAILS*'. (1)
- 2.2 Some form field controls have already been added to the form. The form designer made use of the legacy controls.
- 2.2.1 Set and apply appropriate tab stops to align the content controls as in Appendix A. No marks will be awarded for using the default tab setting. (3)
  - 2.2.2 Add the items *Male* and *Female* to the drop down form field next to '*GENDER*'. (2)
  - 2.2.3 Format the text form field control next to '*DATE OF BIRTH*' to allow only dates in the format required to be entered. (2)
  - 2.2.4 Add the two missing controls at the places indicated by the yellow shaded text. Delete the shaded text once you have added the controls. (2)
- 2.3 Add the text '*CAT Examination*' to the document's subject property. (1)
- 2.4 Restrict editing of the document to only allow the form items to be filled in. Do NOT use a password! (1)

Save and close **2EntryForm**

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**QUESTION 3**

The race results of some of the cyclists were recorded in a spreadsheet named **3Results\_Resultate**.

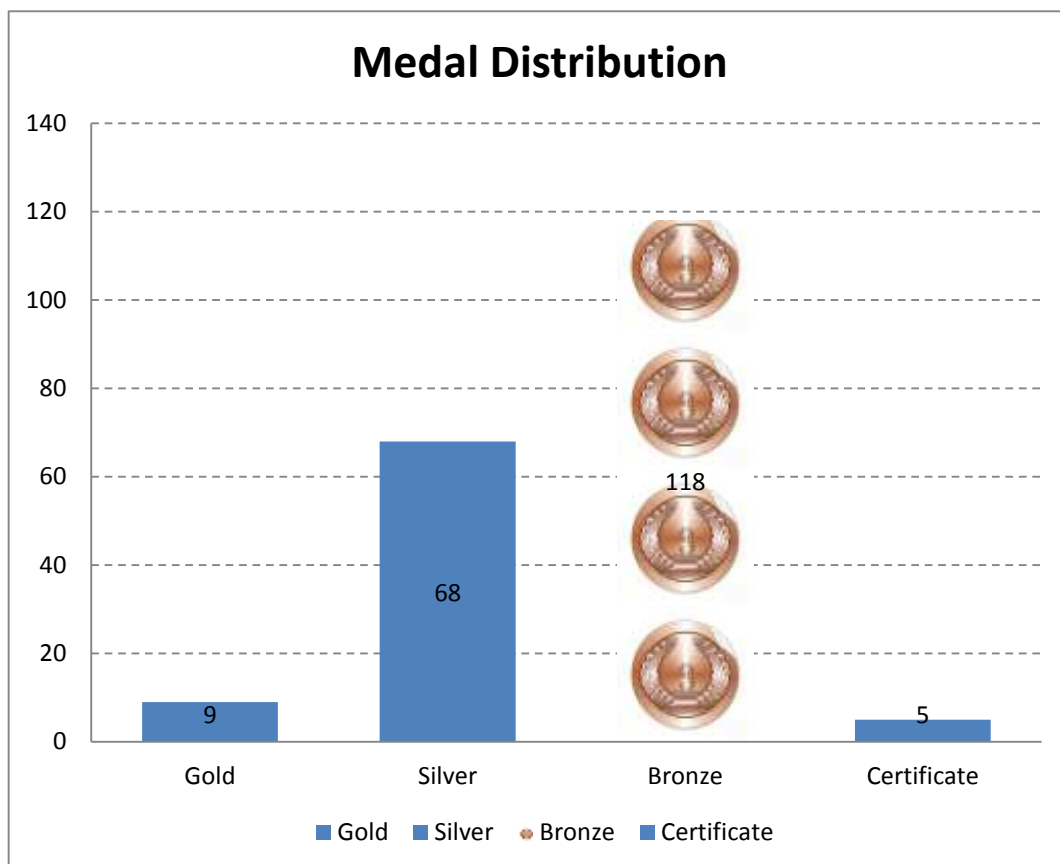
Open **3Results\_Resultate** and work in the **Cyclist\_Fietsryers** worksheet

- 3.1 Improve the readability of the spreadsheet by applying the following formatting features to the worksheet:
- 3.1.1 Format the heading in row 1 so that it stretches from **column A to N**. (1)
  - 3.1.2 Use a cell formatting feature to ensure that all headings are visible. Do not adjust the column width or text direction. (1)
  - 3.1.3 Apply borders around **all** the cells in the spreadsheet which contain data. (1)
  - 3.1.4 Use the freeze pane feature to ensure that the contents in only rows 1 and 2 remain on the screen if the user scrolls down. (1)
- 3.2 Use a page setup feature that will display the headings in row 2 on each page if multiple pages are printed. (1)
- 3.3 Format **column C** to change the background colour of the cells containing cyclists who have finished in the **first 10** positions. (2)
- 3.4 The race time of the cyclists is displayed in **column C**. Use a formula in **column J** that will display the time at which **each** cyclist finished. Do this calculation for all the cyclists. (3)
- 3.5 The organizers of the cycling event would like to extract some key statistics. Answer the following questions in the cell ranges **P3 to P5**
- 3.5.1 The average speed is displayed in **column M**. Use a function in **cell P3** to display the speed that appears the **most**. (2)
  - 3.5.2 Use a function in **cell P4** to display how many female cyclists were recorded. (3)
  - 3.5.3 Study the data in **column G** very carefully. Use a formula in **cell P5** to calculate the **percentage** of **male** cyclists (in relation to all cyclists) who participated. (3)
- 3.6 In order to qualify for the next race, cyclists must have an average speed **below 40 km/h**. **Column N** shows the cyclists who will qualify.  
Use a **function** in **cell N3** to determine whether cyclist Marco Abrahams will qualify. (4)

- 3.7 The organisers would like to see a summary of medals that were issued to the top performers in the race.

Use the data in the **Category\_Kategorie** sheet to create a chart as follows:

- Create a Column Chart
- The title appears above the chart/graph
- The horizontal gridlines appear in dash type style
- The legend appears at the bottom of the chart
- The data labels showing the number of medals should be displayed inside the column
- The Bronze column is stacked filled with the image “Bronze Medal”
- The chart appears in a new sheet renamed as “Medal Chart”



(9)

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**QUESTION 4**

The organisers of the race would like to improve their systems for the following year's event.

Open the **Q4Cycling\_Fietsry** workbook.

Work in the **Race\_Reis** worksheet

4.1 Display the values in **column J** as South African Rand (1)

4.2 Format the information from **column C to column J** so that it appears in the centre of each column. (1)

4.3 The cyclists shown in the worksheet are from the United States of America (USA), the United Kingdom (UK) and the Republic of South Africa (RSA). The non-South African cyclists would like to determine their prize money in their country's own currency.

Insert a Nested-IF function in **column K** using the information in the currency exchange table (**cells O3:P4**) to **calculate** what prize money each non-South African cyclist will receive in their respective country's currency.

Use a feature that will format the figures to zero decimals.

Do NOT convert the South African cyclists' prize money (7)

4.4 Each participant will receive a medal based on the prize money in **column J**.

The medal categories can be found in the **Medal\_Medalje** worksheet.

Use a spreadsheet function in **cell L3** to determine the type of medal Marco Abrahams will receive. (4)

4.5 The result of each cyclist is published on the web as a code next to the cyclist's surname and name. The code consists of the following:

- The **first three** letters of the surname in **capital letters (column B)**
- The participant's nationality (**column C**)
- The position they finished the race (**column E**), for example

**BES-RSA-6**

Each of the above parts of the code is separated by a dash (-) symbol.

Use text functions to complete the result code for cyclist Marco Abrahams in **cell M3** to resemble the result code as it appears in the rest of **column M**. (4)

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**QUESTION 5**

The category winners of the 2013 Cycle Tour are stored in the database **5CategoryWinners2013**.

- 5.1 Open the database **5CategoryWinners2013** and make the following changes to the table **Category Winners**.
- 5.1.1 Adjust the properties of the **Surname** field so that it will contain a maximum of 30 characters. (1)
- 5.1.2 Add an AutoNumber field named **ID** in front of the **Code** field.  
Set the **ID** field as the primary key. (2)
- 5.1.3 Add an input mask to the **Code** field to only accept a code in the following format:  
  
Three optional digits followed by a hyphen, followed by three compulsory upper case letters, for example: **78-MPH** (4)
- 5.1.4 Add a validation rule to the **Gender** field to ensure that only the letters "M" or "F" will be accepted.  
  
Add a validation text that will display a suitable message if necessary. (3)
- 5.1.5 A combo box list has been added to the **Category** field. Add the following entries to the existing entries in the list:  
  
Overall  
Ladies  
Tandem (2)

Close and save the database **5CategoryWinners2013**

The results of the Argus Cycle Tour are recorded in the database **5Argus Tour**.

Open it and answer the following questions.

- 5.2 Create a query based on the **Results\_Uitslae** table to display all the *M Elite* and *M Junior* cyclists who cycled at an average speed of more than 40.9 km/h. Display only the **Surname**, **FirstName** and **Gender** fields.  
  
Save your query as **FastCyclists**. (5)

- 5.3 An error occurred in the calculation of the average speed for all participants between 38.3 km/h and 40 km/h. The error can be corrected by adding 1.7 km/h to the average speed.

Create a query named **SpeedError** based on the **Results\_Uitslae** table with a calculated field called **Penalty Speed**, which will show the correct average speed for each of the affected participants.

Show only the following fields: **Surname**, **FirstName**, **Avg Speed** and **Penalty Speed**.

(6)

- 5.4 Create a report called **MyEliteRep**. It must:

- Be based on the existing query called **qryElite**
- Show only the **FirstName** and **Avg Speed** fields
- Be sorted in descending order according to the **Avg Speed** field.
- Appear in Landscape orientation.

(5)

- 5.5 Open the existing report called **Results\_Uitslae**.

- 5.5.1 Change the heading of the report to a white font colour with a dark blue background.

(2)

- 5.5.2 Group the report according to the **Age Group** field and sort it according to the **Avg Speed** field.

(2)

- 5.5.3 Insert the image **5ArgusPnpCycleTour.jpeg**, which can be found in your exam folder, into the report to appear at the top of the first page of the report.

(2)

- 5.5.4 Insert the page numbers in the centre at the bottom of **each** page. Page numbers should not be displayed on the first page of the Report.

(3)

- 5.5.5 Use a function to determine the average speed of all the participants in each **Age group** during the race. Give a suitable description for the calculation.

(3)

Close the database **5Argus Tour**

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**QUESTION 6**

The cycling club is having a dinner to raise funds in aid of the following year's Argus Cycle Tour.

An incomplete place card for each special guest is in the document **6PlaceCard**.

- 6.1 Open **6PlaceCard** and format the card as follows so that it resembles the one below:



- 6.1.1 Convert the text '*Fundraising Dinner*' to WordArt with.
- Font size: 36 pt
  - Black fill colour
  - Red outline
- (4)
- 6.1.2 Move the WordArt into the oval shape. (1)
- 6.1.3 Move the textbox containing the yellow highlighted text into the square shape. (1)
- 6.1.4 Change the formatting of the yellow highlighted text to resemble the screenshot above. You may choose any suitable font and font size. Take note of the text alignment. (3)
- 6.1.5 The names of the 2013 winners are stored in the database **6Winners2013**, in the **AgeGrpWinners** table. Carry out a mail merge as follows:
- Link the document **6PlaceCard** to the database table **AgeGrpWinners**.
  - Link the placeholders shaded in yellow to the appropriate fields.
  - Only those cyclists who have indicated that they will be attending should be selected.

Do NOT complete the merge yet.

Save the document **6PlaceCard**.

(3)

- 6.1.6 Complete the merge and save the merged document in your examination folder as **6PlaceCardMerged**. (2)

Save and close **6PlaceCard** and **6PlaceCardMerged**

- 6.2 A cyclist's best time in the seeding events is used to determine what time the cyclist will start the Argus Cycle Tour.  
Open the document **6SeedingEvents2014** containing information about the seeding events in the form of a table and carry out the following instructions:

- 6.2.1 Accept the track change in the first row of the table. (1)

- 6.2.2 Carry out the instructions in the comment and then delete the comment. (2)

- 6.2.3 Replace the word 'Event' (highlighted in yellow) with a suitable synonym. (1)

Save **6SeedingEvents2014** but do not close the document.

- 6.3 Copy only the events which take place in the Western and Southern Cape into a new spreadsheet.

Keep the same headings for the worksheet as in the original table.

- Save the spreadsheet as **6CapeSeeding** in your examination folder and close the spreadsheet. (3)

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**QUESTION 7**

The school's cycling club has created a web site to assist learners preparing to compete in the Argus Cycle Tour.

Open the web page **7CycleClub** in a text editor.

Refer to the attached **HTML Tag Sheet** when necessary.

- 7.1 Change the colour of the first heading ('*Fleet High Cycle Club*') to red and align the heading in the centre of the screen. (3)
- 7.2 Change the background colour of the page to **Khaki**. (1)
- 7.3 Edit the horizontal line under the paragraph which ends with '*...Pick 'n Pay Cycle Tour*' so that its width is 70% of the screen width. (1)
- 7.4 Edit the hyperlink at the end of the paragraph '*Links to a training programme ...*' so that it links to the web page **7Week1.html**. (1)
- 7.5 The hyperlink linked to the text '*Bicycling Magazine*' does not work correctly. Identify the error and correct it. (1)
- 7.6 Change the bullet type of the list under the heading '*Safe Cycling*' from round bullets to square bullets. (1)
- 7.7 Add the image **7chappies.jpg** to the paragraph under the heading '*Training Programme*'. The image must appear in the position shown in the screen shot below:



- The text should flow around the image if the screen size is changed. (3)
- 7.8 Enter the text '*Cycling around Chappies*' to the image (added in 7.7 above) that will be shown should the image fail to be displayed. (2)

Save and close **7CycleClub**.

- 7.9 Open **7Week1.html** in a text editor.  
The table on the web page has many shortcomings. Make the following changes to the table.
  - 7.9.1 Align the table in the centre of the screen. (1)

7.9.2 Change the space between the text and the inside of the cell borders to 10 px. (2)

7.9.3 Remove the empty row at the top of the table. (1)

7.10 Make further changes to the table so that it resembles the screen shot below:

| Day       | Phase            | Training                                                             |
|-----------|------------------|----------------------------------------------------------------------|
| Monday    | Pre conditioning | 1 Hour: Self selected pace - Self selected cadence                   |
| Tuesday   |                  | REST                                                                 |
| Wednesday |                  | 1.5 Hours: Try to keep cadence high through (>90 RPM)                |
| Thursday  |                  | REST                                                                 |
| Friday    |                  | Cross Training: 1-2 hours of Gym / Pilates / core stability training |
| Saturday  |                  | 1 Hour: Self selected cadence                                        |
| Sunday    |                  | 1.5 Hours: Try to keep cadence high throughout (>90 RPM)             |

Note:

- The background colour in the first row is yellow
- The text in the first row is bold
- You do not need to add or delete any table data (<td>) tags! (4)

Save and close **7Week1.html**

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**GRAND TOTAL: 180**

## Appendix A: Completed Form



### **CAPE ARGUS PICK N PAY CYCLE TOUR** **ENTRY FORM**

- A form must be completed for each person entering, including tandem partners.
- Fields marked with an asterisk \* are compulsory
- Complete the form by filling in the relevant fields and email it to [info@cycletour.co.za](mailto:info@cycletour.co.za)
- Don't forget to sign the indemnity at the end of the form.

#### **PERSONAL DETAILS**

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|                              |                 |
|------------------------------|-----------------|
| * SURNAME                    | Bloggs          |
| * FIRST NAMES IN FULL        | Jane            |
| * GENDER                     | Female          |
| * ID NUMBER                  | 511010 1234 089 |
| * DATE OF BIRTH (YYYY/MM/DD) | 1951/10/10      |

#### **CONTACT DETAILS**

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|                    |                  |
|--------------------|------------------|
| TELEPHONE (HOME)   | 021 777 5555     |
| TELEPHONE (WORK)   | 021 751 751 1111 |
| * TELEPHONE (CELL) | 082 777 666 5555 |
| TELEPHONE (FAX)    | 0860 123 123     |
| * EMAIL ADDRESS    | bj@gmail.com     |

#### **RACING CATEGORY**

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\* PLEASE SELECT THE CATEGORY IN WHICH YOU WOULD LIKE TO PARTICIPATE

- ☒ INDIVIDUAL (normal bicycle)
- ☐ TANDEM (bicycle for two)
- ☐ HAND CYCLE (bicycle powered by the arms)