



**Western Cape
Government**

Education

SEPTEMBER TRIAL EXAMINATION

GRADE 12

**COMPUTER APPLICATIONS TECHNOLOGY P1
SEPTEMBER 2012**

MARKS: 200

TIME: 3 hours

This exam paper consists of 14 pages

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 in case of 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, ***Exam Data_Sept 2012*** that you receive with this question paper will contain the folder and all the files listed below. Ensure that you have the folder and all the files before you begin this examination.

Rename the folder as follows: ***Gr 12A_Surname and Initial***

A folder called **Comrades** and the following files

- | | |
|-----------------------|----------------------|
| • 1Answers_Antwoorde | Word Processing file |
| • 2Comrades Route | Word Processing file |
| • 3Forgotten Comrades | Word Processing file |
| • 4Females2012 | Spreadsheet file |
| • 5Comrades | Spreadsheet file |
| • 6Comrades Results | Database file |
| • 6ComradesLogo | Image file |
| • 7Data | Database file |
| • 7Komen | Image file |
| • 7Merge_Saamvoeg | Word Processing file |
| • 7Paste | Spreadsheet file |
| • olive-branches | Image file |
| • runners finish | Image file |

SCENARIO

The 2012 Comrades Marathon was timed using the ChampionChip Timing system. This system which uses the “runner’s chip” allows for an accurate record of not only finish times, but also records runners’ split times taken at various points during the event. The chip which is laced to a runner’s shoe is linked to a database and records the runner’s chip code and time when he/she crosses a reading mat.

**QUESTION 1**

In the folder Comrades you find the files with information you have obtained from the official website of the popular marathon. You want to organise the saved files to make it easy for people to access this information on a USB flash drive.

- 1.1 In the **Comrades** folder create a folder named **Forms**. (1)
- 1.2 Move the files that deal with the entry forms (tip: they have “form” as part of the file name) from the **General Rules and Information** to the **Forms** folder you created. (3)
- 1.3 Write down the number of compressed files (archives) in the **General Rules and Information** folder to **1Answers_Antwoorde.doc**. (1)
- 1.4 Rename the folder **Training Methods** in the **Training** folder to **Methods**. (1)
- 1.5 Copy the file **Training Methods.backup** in the **Training** folder to the folder **Backup** in **Comrades**. (1)
- 1.6 Which of the following files (in the **Statistics** folder) is the most recent file:
Comrades-2012-Bill-Rowan-Program-Dec-May or
Comrades-2012-Finishers-Programme-Dec-May?
Write your answer down in **1Answers_Antwoorde.doc**. (1)
- 1.7 Find a template file among the files in the **Statistics** folder and write down its name and size in **1Answers_Antwoorde.doc**. (2)

[10]

QUESTION 2

The Comrades organisers held a competition for high school learners to compile an informative document about the route from Pietermaritzburg to Durban. You entered and received the following instructions to enable you to complete the document.

Open the file **2ComradesRoute.doc**

- 2.1 Insert the main heading: "Route Description" at the top of the document. Use **WordArt** of your choice and format it as follows:
- Fill the **WordArt** with the picture called **runners finish.jpg**
 - Add an outline of 1.25 pt. (3)
- 2.2 Change the margins to 2 cm at the top and bottom of the page. (1)
- 2.3 Change the text from the start of the first paragraph: "For both..." to "view of the universe" as indicated by the yellow highlighting as follows:
- 2.3.1 Put it into 3 columns with a line between. (2)
- 2.3.2 The space between the columns must be exactly 1 cm. (1)
- 2.3.3 Change the font in only these columns to Times New Roman, 11pt. (1)
- 2.3.4 Change only the first 2 pages containing the columns to landscape. The remaining pages stay portrait. (2)
- 2.4 Insert automatic page numbering at the bottom centre contained in square brackets, for example [1]. (2)
- 2.5 Change the distance of the footer to 0.5 cm from the bottom edge. (1)
- 2.6 Change the first letter (F) of the first paragraph to a dropped Cap over 2 lines and the font of only that letter to Arial Black. (3)
- 2.7 Shade the paragraph starting with the words "The start..." (indicated by green highlight) and ending with "... the field from the start" with any shading of your choice. (1)
- 2.8 Insert a watermark into the document to indicate that this is only a "Draft". The word "Draft" must lie diagonally across each page. (2)
- 2.9 Resize and group the pictures of the 3 medals (found in the document) to be able to move them as one object.
- Move these pictures into the gap at the end of the 3 columns. (3)
- 2.10 In order to move through the long document more easily a bookmark has already been inserted. Now create a hyperlink from the word Durban, (highlighted in green) to this existing bookmark. Underline the bookmark. (3)

- 2.11 Place a double line page border only around the pages that are in portrait orientation. (2)
- 2.12 Modify the style Heading 1 as follows:
- 2.12.1
- Font: Arial, 16 pt, Italics
 - Space before: 6 pt, Space after: 3 pt (2)
- 2.12.1 Apply the modified Heading 1 style to the following 3 subheadings:
- The Down-Run
The Big Five
Other Points Of Interest (1)
- 2.13 Make the following changes to other headings in the document:
- 2.13.1 Make any 2 changes to the existing Heading 3 style.
Rename this new style based on Heading 3 to Big Five. (4)
- 2.13.2 Apply the new style Big Five to the 5 headings under the subheading Big Five. (1)
- 2.14 Insert a table of contents on a new page at the beginning of the document.
Ensure that the page numbering still starts at 1 on the new second page. (4)
- 2.15 Use the picture **olive branches.gif** as a bullet for the 8 headings under **Other Points Of Interest.** (2)
- 2.16 Indent the paragraph under die heading **Highest Point** by 0.5 cm on either side. Insert a border around this paragraph. (2)
- 2.17 Change all occurrences of the word **Comrades** to bold and underlined. (2)
- Save **2ComradesRoute.doc** and close it. [45]

Question 3

The organisers want to celebrate forgotten comrades who have completed the race. They decide to have a flyer containing the names of these comrades in the competition. Create the flyer by doing the following:

Open **3Forgotten Comrades.doc**.

3.1 Resize the page to Executive (18.41 cm x 26.67 cm). (1)

3.2 Modify the document to resemble the following screen shot. Follow the instructions below:

FORGOTTEN COMRADES

1. Men

- 1.1. Robert Mtshali
- 1.2. Zwelitshe Gono
- 1.3. Simon Mkhize
- 1.4. Vincent Rakabaele
- 1.5. Sam Tshabalala
- 1.6. Jetman Msutu
- 1.7. Hoseah Tjale

2. Women

- 2.1. Frances Hayward
- 2.2. Geraldine Watson
- 2.3. Mavis Hutchinson
- 2.4. Maureen Holland
- 2.5. Lettie Van Zyl
- 2.6. Elizabeth Cavanagh

3.2.1 Apply outline numbering to number the paragraphs automatically. (3)

3.2.2 Use the following measurements:

- The main numbers start at 0 cm and the subnumbers at 1.5 cm.
- The names of the comrades start at 2.5 cm. (3)

3.3 Insert the picture **olive branches.gif** on the **right** hand side of the page and resize the picture to be exactly 9.5 x 9.5 cm (3)

3.4 Insert an arrow from the Shapes at the bottom of the page and change the arrow to a hyperlink that will link to 2Comrades Route.doc (3)

- 3.5 Insert a footnote next to the heading “FORGOTTEN COMRADES” to show the website from which the information has been taken:
Use Webdings 37 (¶) as the symbol for the footnote and type the name of the website in the footnote: www.comrades.com (2)
- 3.6 Choose a forgotten comrade from the list by inserting a tick box next to his or her name at 8 cm. Format the tick box so that it is checked. (3)
- 3.7 Insert a text field next to the tick box in which your motivation can be typed. Format the text field that it will display the first letter as a capital. (2)
- Save and close 3Forgotten Comrades.doc [20]**

QUESTION 4

The file **4Females2012** contains information about all the female entrants in the 2012 Comrades Marathon. The organisers will be using this spreadsheet to provide information to the news media. You are required to edit the spreadsheet in order to assist the race organisers. (**Note:** This spreadsheet contains a large amount of data. The last row to have data is row 4349).

Work on the sheet **Results**.

- 4.1 Row 1 of the worksheet **Results** contains headings. Make the following changes to ensure that the headings stand out. Only apply the changes to cells that contain data.
- 4.1.1 Apply a suitable background colour as shading to all the heading cells. Ensure that the text can easily be read. (1)
- 4.1.2 Change the font of the heading cells to **Comic Sans 12 pt bold**. (2)
- 4.1.3 Align the contents of the heading cells so that they are centred both horizontally and vertically. (2)
- 4.1.4 Adjust the height of row 1 to **25 pt**. (1)
- 4.2 Apply a border to all the data on the worksheet. (Cells A1 to N4349). (2)
- 4.3 The spreadsheet will be easier to read if gridlines are visible. Turn on the gridlines. (1)
- 4.4 The information in the column with heading “**Medals**” lists the number of medals won by runners in previous Comrades Marathons. Cells Q2 to R6 contain a summary of this information.
- 4.4.1 Merge and centre the heading in Q2 across columns Q and R. (1)
- 4.4.2 Add a function to cell R3 to determine the most common number of medals previously won. (2)

- 4.4.3 In cell R4 add a function to determine the average number of medals previously won. Round the answer off to the nearest whole number. (4)
- 4.4.4 In cell R5 add a function to determine the highest number of medals previously won. (2)
- 4.4.5 In cell R6 add a function to determine the second highest number of medals previously won. (3)
- 4.5 The organisers would like to know how many minutes the Gold medal winners took to complete the race.
- 4.5.1 In cell O1 type in the heading "**Time in minutes**". Apply the same formatting as the other heading cells to this cell. (2)
- 4.5.2 Add a formula to cell O2 to determine the number of minutes taken by the first Gold medal winner to complete the race. Make use of the information in cell R8 in your formula.

Copy the formula to show the information for the other Gold medal winners. (The first ten runners to complete the race each get a Gold medal). (4)
- 4.6 The first ten runners to complete the race are awarded a gold medal. Add an IF function to cell K7 to determine whether a gold medal should be awarded. If the runner does not earn a gold medal, the cell should remain blank. (3)
- 4.7 Medals for the runners in 11th place onwards are awarded as follows:
- Wally Hayward Medals Position 11 to sub 6hrs 00min
 - Silver Medals 6hrs 00min to sub 7hrs 30min
 - Bill Rowan Medals 7hrs 30min to sub 9hrs 00min
 - Bronze Medals 9hrs 00min to sub 11hrs 00min
 - Vic Clapham Medals 11hrs 00min to sub 12hrs 00min
- Add a suitable function to cell K21 to determine the type of medal that should be awarded to Stephanie Ackerman. You may make use of the table on the worksheet **Medal Times**. Your function must give the correct result if it is copied to other cells. (5)
- 4.8 The race organisers have been asked by a local radio station to provide them with the names of the first three finishers in each age group.
- 4.8.1 Copy the names, finishing (gun) time, category and category position of the top 3 finishers in each age group to a new worksheet. Use the same headings as those in the **Results** worksheet. (3)
- 4.8.2 Sort the information on the new worksheet in ascending order of category and category position. (2)

4.8.3 Rename the new worksheet as **Top 3**. (1)

4.9 Ensure that the heading cells of the **Results** worksheet (A1 to O1) cannot be deleted by any other user of the spreadsheet. Protect these cells using the password 123. (2)

Work on the **Summary** sheet.

4.10 The worksheet has a summary of the number of female entrants for the 2012 marathon.

4.10.1 In cell C2 add a function to determine the number of runners who started the race but did not finish (DNF). (3)

4.10.2 In cell C8 add a function to determine the total number of female entrants in the 2012 Comrades Marathon. (2)

4.10.3 In cell C9 add a formula to determine what percentage of runners did not make it to the start of the race, i.e. they did not qualify, did not start or withdrew. (4)

Save and close **4Females2012** [52]

QUESTION 5

The spreadsheet **5Comrades** contains a summary of the number of entrants in the 2012 Comrades Marathon and gives their country of origin.

Work on the worksheet **Stats 2012**.

5.1 In cell H3 use a SUMIF function to determine the total number of South African female entrants. (3)

5.2 The chart on the **Stats 2012** worksheet shows the number of entrants from the different South African athletics regions. Edit the graph as follows:

- Give the graph a suitable title
- Label the horizontal and vertical axes
- Edit the labels "Series 1" and "Series 2" to show "Men" and "Women" respectively
- Change the maximum value on the vertical axis to 4 500
- Move the chart to a new worksheet called **Chart**. (6)

Save and close **5Comrades** [9]

QUESTION 6

The organisers were particularly interested in the performance of the senior runners (60+) during the 2012 Comrades Marathon. They have recorded the data in a database to extract certain information.

Open the Database **6Comrades Results**.

6.1 The design of the table **tblResults** is shown below:

▲	Field Name	Data Type	Description
	Year	Number	The year in which the event took place
	Position	Number	The position the runner finished the race
	Race No.	Number	The race number of each runner
	First Name	Text	The first name of the runner
	Last name	Text	The Surname of the runner
	Gun Time	Text	The time the runner reached the finish line
	Category	Text	The age category
	Category Position	Number	The ending position of the age specific category
	Gender	Text	The gender of the runner
	Gender Position	Number	Finish position according to gender
	Medal Award	Text	Indicating if a medal is awarded for the current race
	Status	Text	Indicating whether the runner completed the race
	No. of Medals	Number	The number of medals the runners received over the years

- 6.1.1 The field **Medal Award** does not contain any records. Delete this field. (1)
- 6.1.2 Change the data type of the **Gun Time** field to a more suitable data type. (1)
- 6.1.3 **The Year** field is a compulsory field. Change the properties of the field so that the data must be entered in the field. (1)
- 6.1.4 Set a primary key to the most suitable field. (2)
- 6.1.5 Change the field size of the **Last Name** field to a more suitable length. (1)
- 6.1.6 Design an input mask for the **Year** field to allow only the 4 digits. (2)
- 6.1.7 The **Status** field contains information that is very time consuming to capture. Apply the Lookup Wizard feature to the **Status** field that will allow the user to select the relevant information from the **tblStatus** table. (3)
- 6.1.8 Create a new field called **Photo** between **Last Name** field and the **Gun Time** field to store a photograph of the runner. Choose a suitable data type for the new field. (3)

- 6.2 Make the following changes to the **frmResults** form:
- 6.2.1 Change the heading of the form to “Comrades Results”. Resize the label that will display the heading in a single line. (2)
- 6.2.2 Place the image **6Comrades Logo** in the header of the form. Ensure that the image is inserted on the right so that no text is obscured. (2)
- 6.2.3 Format only the labels of the fields in the main form so that it is emphasized with any bright font colour. (1)
- 6.2.4 The **Gender** field does not appear on the form. Create a **list box**, with a label called **Gender** which will allow the user to select either “Male” or “Female”. Place the list box just before **Gender Pos** field. (3)
- 6.3 Open the query **qryFinished**
Modify the query to show all the runners that **finished** the race. The records must be sorted in ascending order of the **Last Name** field.
Display **only** the **First Name**, **Last Name** and **Status** fields. (3)
- 6.4 The female senior runners who complete the race before 11:00 AM will receive a gold medal. Create a new query using the **tblResults** table to show the **First Name**, **Last Name**, **Gun Time** and **Gender** fields of those **female** runners who meet the above criteria.
Save the query as **qryGold Medal** (3)
- 6.5 The organisers of the Comrades Marathon would like to reward those runners who were committed to the competition with a R100 for each medal they have won over the years providing that the person obtained **more than 25** medals.
For example, a person who has obtained 30 medals will receive a reward of R3000.
Open the query **qryReward** and insert a calculated field called **Remuneration** that will display the reward in South African Rand. (4)
- 6.6 Create a report named **repJunior** with the following criteria:
- The report must be based on the table **tblFemaleResults**
 - Only include the **Year**, **Race No**, **Last name**, **First name**, **Position** and **Status** fields
 - Group the records according to the **Status** field
 - Display the report in landscape
 - Change the heading of the report to **Junior Female Results** and format the background of the **label** to a colour of your choice. (5)

- 6.7 Open the report named **repSummary**.
- 6.7.1 Insert a function that will display the current date in the textbox provided in the header of the report. The date must be displayed in the format dd/mmm/yyyy, i.e. 06 September 2012. (2)
- 6.7.2 A textbox, "Runners per Gender" was inserted in the Gender header.
Insert a function in the appropriate space that will show how many male and female runners entered for the race respectively. (2)
- 6.7.3 The organisers would like to determine how many medals the senior runners received over all the years.
Insert a function in the report footer with a suitable label, to show the total number of medals all the senior runners have received. (4)

[45]

Question 7

You need the following files to answer this question: **7Merge_Saamvoeg**
7Komen
7Paste
7Data

You would like to invite some top female performers from the latest Comrades marathon to a breast cancer awareness charity event. The letter to those people needs to be formatted and merged before it can be sent.

Open the document **7Merge_Saamvoeg**.

- 7.1.1 The tear-off slip section at the bottom of the document has a table inside a shape. Remove the shape so that only the table will remain in that section. (3)
- 7.1.2 Insert the picture from file **7Komen** so that it appears between the two horizontal lines close to the right margin. (3)
- 7.1.3 Change the text of the hyperlink to “our website”, and make sure the hyperlink correctly points to *http://www.komen.org*. (2)

Open the workbook **7Paste**. The sheet entitled **Graph** has a graph and a table you will need.

- 7.1.4 Place the graph from the spreadsheet into the middle section of the document where indicated. The graph should be a simple image in the letter. (2)
- 7.1.5 Put the table from the spreadsheet into the document under the graph. One should be able to update the table in the letter with the data from the spreadsheet. (2)

The letter you have prepared needs to be sent to multiple recipients.

- 7.2.1 Use the **7Merge_Saamvoeg** document as a form letter and the database **7Data** to prepare for a mail merge as follows:
 - Use the existing table **Data** in the **7Data** database as the data source for the letters
 - Make sure that only the top ten women athletes are invited. (Hint: the gender information appears in the field **Gender**, and the athletes' finishing position is captured in the field **Gen Pos**)
 - Sort the recipients (letters) in descending order of the gender finishing position in the race (**Gen Pos**)
 - Add the merge fields **First Name** and **Last Name** with a space in between to the greeting line at the beginning of the letter.

Save this one-page document (**7Merge_Saamvoeg**) before performing the mail merge in the next question. (6)

- 7.2.2 Complete the mail merge and save the final document containing the required number of letters as **7MergeALL**. (1)

[19]

TOTAL 200