A project of the Computer Society of South Africa, sponsored by UniForum SA.
Co-sponsored by the Department of Science and Technology.

COMPUTER APPLICATIONS OLYMPIAD FINALS 2012

[4 Hours]

It is important to save every step of your work for later evaluation

For this part of the contest you will be provided with new data, but this time you will have more freedom as to which data you wish to use and how you wish to use it. Much of the information you need will be in a PowerPoint Presentation. Some hard copy examples are available, but be careful; they may be bad examples.

A local sports Club "*Courers Lents*" has asked you to develop a set of materials that they can use to organise their 2012 Half Marathon. Your job is to produce the required material in the time allocated, using the Office 2010 package and other applications of your choice that may be available on your PC. You will be given all the images, pictures, text, information, etc., that you need, and you are free to use any application or combination of applications that you deem suitable.

The requirements for the tasks are given below. The tasks are listed in alphabetical order. You may produce the material in any order. However, it is important that you submit something in each of the five categories.

1. DATABASE

Create a database "**Participants 2012"** with an associated form to capture prospective runners' details. Your design must enable a non-computer person to capture information as accurately as possible. You may have to do some analysis of the 2011 data to plan for 2012. You will be given a file of 2012 data already captured, to import in your new 2012 database. This data will be in the form of a CSV file.

Mark Allocation:	Structure of the database	4	
	Capture form	4	
	Importation success	4	
	Impression	3	**[15 points)**

2. FLYER

Create a one-page document, "**Flyer 2012**", promoting the 2012 race that can be printed and handed out at (for example) other local races to attract runners to the event. It must be printed as a single A4 sheet. You will find a wealth of information about the 2011 event in the PowerPoint presentation "**Coureurs Lents 2011**". It is up to you which information you wish to use, and which you will discard.

Mark Allocation:	Information	4	
	Impression layout	3	
	Impression artwork	3	**[10 Points]**

3. **PERSONALISED LETTER**

Using the spreadsheet **"Personal Best"**, make it possible for "*Coureurs Lent*" to print an individualised document "**Letter 2012**" to all runners who in 2011 equalled or bettered their personal bests; congratulating them on their achievement and inviting them to enter the 2012 event. The letter is to include the information by how much time the addressee bettered his/her time. Inform **ONLY** those to whom it applies, that the prize money for winning the "Open" age group is R4,000 and that the prize money for winning in the other age groups is R2,000.

Mark Allocation:	Selecting correct recipients: Personal best	4
	Selecting correct recipients: Age group	4
	Letter information	4
	Letter impression	3 **[15 Points]**

4. **REPORTS**

The results of the race are captured when runners cross a mat at the finishing post, and are given to you as a CSV file **"Results"**. Using this and the database **"Participants 2012"** you created in question 1, create a number of reports that you think will be useful in the preparation of media releases by "*Coureurs Lent*" and participating clubs.

You should have at least the following:

1. Race results in finishing order, providing a field to indicate place.
2. A list of non-finishers.
3. The top ten in each age category.
4. Results for any specified club. The judges will tell you which club they want.
5. A table of entrants by age category and club.

(Should you not have succeeded in importing the data, you are to populate your database with 5 fictional people in order to show reports with some information.)

Mark Allocation:	Correct information (5 x 3)	15
	Impression (for all 5)	3 **[18 Points]**

5. **ROUTE PROFILE**

Use the information in "**Spreadsheet 2011**" to draw a profile of the route (height v distance). Add as much imaginary detail (water points, medical posts, etc.) as you think appropriate.

An example of a route profile is available in the PowerPoint presentation.

Mark Allocation:	Accurate profile	4
	Additional information	4
	Impression	3 **[11 Points]**

Morning Session   33 Points
Afternoon Session   69 Points

TOTAL FINALS   102 Points