

## NATIONAL SENIOR CERTIFICATE EXAMINATION NOVEMBER 2014

#### COMPUTER APPLICATIONS TECHNOLOGY: PAPER II

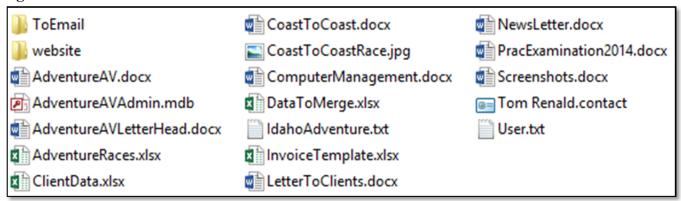
Time: 3 hours 180 marks

#### PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY

- 1. This question paper consists of 12 pages and an HTML Tag List insert of one page. Please check that your question paper is complete.
- 2. You must answer ALL the questions. Please read the entire question before attempting a solution. Do not do more than is required by the question.
- 3. Take note of the mark allocation to ascertain the solution required and the amount of time needed to spend on each question.
- 4. To assist yourself, get into the habit of saving regularly.
- 5. Make sure that your examination number appears on every task and on every document.
- 6. If a formula/function such as a complicated *if* statement does not work, indicate the question number, give a brief explanation and paste a screen shot of the spreadsheet or database into the **Screenshots** document to obtain part marks; you may then leave it out of the spreadsheet or database program.
- 7. It is recommended that you make a backup copy of all database files **before** you start your examination.
- 8. All word processing documents should be set up as follows (unless other instructions are given)
  - The default for measuring units centimetres (cm)
  - Language English (South Africa)
  - Page size A4
  - Margins 2,54 cm
- 9. Note that you may use the *offline* help function available in each application.
- 10. All data files listed in Instruction 11 on the next page can be found on the network drive that has been allocated for this examination. Please note that all solutions must be saved to your examination folder on this network drive.

11. You have been supplied with three subfolders and twenty three files in your examination folder. Refer to **Figure 1** below and check that the following folders and files exist in your examination folder:

#### Figure 1



The **ToEmail** subfolder contains 3 files. Refer to **Figure 2** below.

#### Figure 2



The website subfolder contains 2 files and 1 subfolder. Refer to Figure 3 below.

Figure 3



The **images** subfolder within the website folder contains 1 file. Refer to **Figure 4** below.

Figure 4



[20]

Read the scenario below that describes the background to the practical tasks you are required to perform.

#### **SCENARIO**

You and a few of your friends have decided to pool together resources and start a professional photography business called *ExtremeAV* which will focus on adventure activities. The organisers of adventure races and individuals going on an adventure holiday will hire you to ensure the event or holiday is well documented electronically and may require your help in advertising.

# **QUESTION 1**

Compress the folder called **ToEmail** and save it in your examination folder. This 1.1 compressed file should be named **ToEmailCompressed**. (3) 1.2 In your examination folder, create a shortcut that will open your spreadsheet application. (3) 1.3 The company created a letterhead as a document called **AdventureAVLetterHead**. Modify this file so that it is saved as a template. (2) 1.4 1.4.1 Create a sub folder in your examination folder called **TomRenald**. (1) 1.4.2 Move the contact file for Tom Renald into the **TomRenald** folder. (2) 1.4.3 Rename the file **User** to your examination number. (1) 1.5 Set the document properties of **AdventureAV** as follows: 1.5.1 Set the author to your examination number. (1) 1.5.2 Set the file to read only. (1) Open the word processing document ComputerManagement and make the following changes: Give the file size of the **AdventureAV** document. 1.6 (1) 1.7 Capture a screenshot of the HTML editor and paste it in the appropriate section of the ComputerManagement document. (2) The screenshot may be of the icon which opens the editor or of the editor itself. 1.8 In the appropriate section of the ComputerManagement document record the operating system you are using and the actions that would need to be taken to empty the computer's recycle bin. (3) Add your examination number to the header of the document.

IEB Copyright © 2014 PLEASE TURN OVER

Save and close the document **ComputerManagement**.

You have been asked to create a flyer for the coast to coast race starting on 28 August 2015.

Open the word processing document CoastToCoast and make the following changes:

2.1	1 Create a new style in the document as follows:		
	2.1.1	Create a new paragraph style called AdventureHeading.	(1)
	2.1.2	Set the paragraph alignment to centre.	(1)
	2.1.3	Set the <i>font effects</i> to <i>small caps</i> .	(1)
	2.1.4	Set the <i>border style</i> to a single bottom solid line.	(1)
	2.1.5	Set the paragraph spacing to 9 pt after.	(1)
	2.1.6	Add the following shortcut key for using the $\mathbf{AdventureHeading}$ style: $\mathbf{Alt} + \mathbf{Ctrl} + \mathbf{Shift} + \mathbf{B}$ .	(1)
	2.1.7	Apply the style to 'COAST TO COAST ADVENTURE RACE: 28 – 31 AUGUST 2015'.	(1)
2.2	Create	e TWO tab stops for all text after 'Pricing' as follows:	
	2.2.1	8 cm centred tab stop with no leader.	(2)
	2.2.2	16 cm right aligned tab stop with a dotted leader.	(3)
2.3	Add a	n image into the document as follows:	
	2.3.1	Insert the image CoastToCoastRace into your document.	(1)
	2.3.2	Set the wrapping of text around the image to be square.	(1)
	2.3.3	Place the image on the right immediately below the heading 'COAST TO COAST ADVENTURE RACE: $28-31$ AUGUST 2015'.	(1)
	2.3.4	Add a solid black line as the border around the picture with a weight of $2\frac{1}{4}$ pt.	(2)
2.4	Apply	a solid double line page border with a width of 1 ½ pt.	(2)
Add y	our exa	mination number to the header of the document.	
Save a	and clos	te the document CoastToCoast.	[19]

**AdventureAV** have finalised a deal with **outsideonline.com** to create a newsletter for all their clients. Open the word processing document **NewsLetter** and make the following changes:

- 3.1 Setup a front page as follows:
  - 3.1.1 Insert a new page before 'Jordan Romero7. Teenie Breakers'. This first page should be landscape, and the rest of the document portrait. (3)
  - 3.1.2 Create a word art object with the text 'AdventureAV' as a title on the first page. (1)
  - 3.1.3 Set the shape of the word art object to arch up (Curve), refer to **Figure 5** below. (1)

# Figure 5



- 3.1.4 Set the colour of the word art object to be red. (1)
- 3.2 Set up the header and footer of the document as follows:
  - 3.2.1 Set your header and footer properties to have a different first page to the rest of your document. (1)
  - 3.2.2 Add your examination number in the centre of the header on page 1. (1)
  - 3.2.3 Add an automatically updating date in the left of the footer on page 1. (2)
- 3.3 Insert a caption to the image with the text 'Jordan Romero at home'. (2)
- 3.4 Modify the paragraph about the Iran Hikers, which begins 'In July of 2009 ...' and ends '... out last spring.' to be in two columns with a line in-between. (3)

Add your examination number to the header of the document.

Save and close the document **NewsLetter**.

[15]

(2)

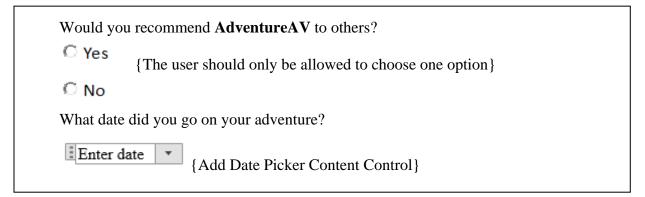
#### **QUESTION 4**

You want to evaluate the performance of your photographers and decide to do this utilising a survey you will send to your clients.

Open the word processing document **LetterToClients** and make the following changes:

4.1	Process a	mail	merge	with	this	document	as	follows:
-----	-----------	------	-------	------	------	----------	----	----------

- 4.1.1 Process a mail merge with the spreadsheet file called **DataToMerge**. (2)
- 4.1.2 Sort the data source list and arrange it in ascending order according to the **Photographer** of each client. The data source must be edited during the mail merge process and not in the spreadsheet **DataToMerge**.
- 4.1.3 Replace the text <<cli>ent>> with the field codes <<name>> and <<surname>>; ensure the client's full name will be presented correctly. (2)
- 4.2 After the given text, create a form utilising control elements following the instructions given in { } brackets. (7)



4.3 Complete the mail merge process by editing the individual forms. Save the completed merge as **ClientForms**. (1)

Add your examination number in the header of both documents.

Save and close the documents **LetterToClients** and **ClientForms**.

[14]

Open the spreadsheet **AdventureRaces** and note that the workbook consists of two worksheets, namely **Data** and **Summary**.

Note all the changes below must be applied to the worksheet labelled **Data**:

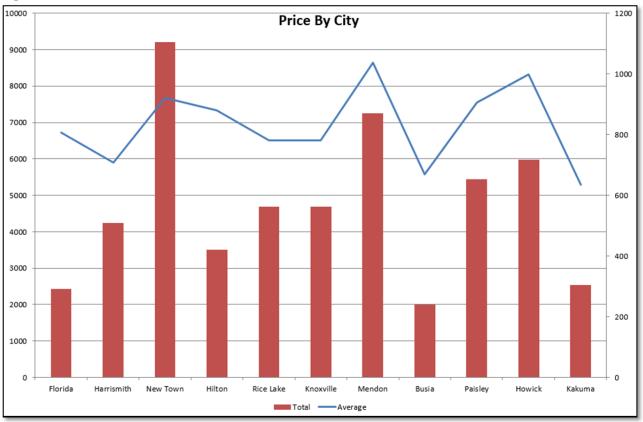
- 5.1 Modify column A (**Date**). Change the date format to display as follows: 08 February 2015 (2)
- 5.2 Apply conditional formatting to Column B (**Category**) to display as follows:
  - 5.2.1 Any cell containing a 'C' will be displayed with a green fill. (1)
  - 5.2.2 Any cell containing a 'B' will be displayed with an orange fill. (1)
  - 5.2.3 Any cell containing an 'A' will be displayed with a red fill. (1)
- 5.3 Sort the data in Columns A through to H of the worksheet by Column B (**Category**) in ascending order and then by Column C (**Cost**) in descending order. (3)
- Insert a calculation in cell F2 that automatically updates the count down of the number of days until the event based on the current date. The number of days should be rounded off to 0 decimal places. Expand the calculation to cells F3 to F62. (5)
- 5.5 Determine if the event is a local or international event:
  - 5.5.1 Insert a VLookup in cell G2 to determine the country in which this race takes place. Use the table in columns J and K. Expand the calculation to cells G3 to F62. (5)
  - 5.5.2 Insert a calculation in cell H2 to determine if the race is local (in SA) or international (in any other country). Expand the calculation to cells H3 to H62. *Note if your calculation in 5.5.1 does not work, you can place example data in column G to test your solution.* (5)

Note all the changes below must be applied to the worksheet labelled **Summary**.

- 5.6 Create calculations to summarise the pricing of the events as follows:
  - 5.6.1 In cell B2 calculate the value of the most expensive race. (2)
  - 5.6.2 In cell B3 calculate the value of the second most expensive race. (2)

5.7 By utilising the data in cells A6:C17 (*Price by City*) on the **Summary** worksheet, recreate the following chart exactly as given on a new sheet, refer to **Figure 6**. (8)

Figure 6



Add your examination number in the header of each worksheet.

Save and close the workbook **AdventureRaces**.

[35]

Open the spreadsheet **InvoiceTemplate** and perform the following changes.

6.1 Rename the worksheet **Sheet1** to **Invoice**. (1) 6.2 Merge and centre cells A1:J1. (2)6.3 Apply formatting to A12:J12 as follows: (1) 6.3.1 Text to be displayed as bold. (1) 6.3.2 Displayed with a blue fill. (1) 6.3.3 Double border around the outside of the range of cells. (2) 6.4 Modify column H (Unit Price) to display currency in Rand format with 2 decimal places. (2) 6.5 Your company has been experiencing an issue with the sales representatives messing up the calculations on the invoices. In the **InvoiceTemplate** workbook; set the following cell ranges B7:B9, F7:H8 and A13:I37 to not lock when protection is applied, then protect and save the workbook, leaving the password blank. Ensure

you have completed Questions 6.1 through to 6.4 before attempting this question.

Add your examination number in the header of the worksheet.

Save and close the workbook **InvoiceTemplate**.

[16]

(6)

Open the database  ${\bf Adventure AVAdmin}$  and apply the following changes:

7.1	Open the database table <b>tblPhotographerSkill</b> and create the field <b>PhotographerFK</b> as follows:					
	7.1.1	Insert a new field labelled <b>PhotographerFK</b> .	(1)			
	7.1.2	Use the lookup wizard to look up the field <b>PID</b> from the table <b>tblPhotographer</b> . Display only the <b>FullName</b> from the lookup in this field.	(3)			
7.2		the following restrictions to the table <b>tblPhotographer</b> to ensure the validity data captured.				
	7.2.1	Insert a suitable Input mask on the field <b>Cell</b> to limit the user to entering 10 numbers in the format 072-348 0589.	(2)			
	7.2.2	Insert a validation rule on the field <b>Gender</b> to allow the user to only enter 'M' or 'F'; otherwise an appropriate error message should be displayed.	(3)			
	7.2.3	Identify the field which would best identify unique records and set it as the primary key.	(2)			
7.3	Impoi	rt data from <b>Sheet1</b> in the workbook <b>ClientData</b> into the <b>tblClient</b> table.	(2)			
7.4	Create	e a form labelled <b>frmInvoices</b> for creating invoices as follows:				
	7.4.1	Use the fields <b>InvoiceID</b> and <b>Days</b> from the <b>tblInvoice</b> table; and <b>EquipmentFK</b> and <b>Quantity</b> from the <b>tblInvoiceLink</b> table. The form should be grouped by <b>tblInvoice</b> .	(6)			
	7.4.2	Add a button to the form to create a new invoice record.	(2)			
	Save	and close the form <b>frmInvoices</b> .				
7.5		ntureAV has decided to insure all their expensive equipment. Create a query ed qryInsureEquipment as follows:				
	7.5.1	Display all fields from the table <b>tblEquipment</b> .	(1)			
	7.5.2	Insert criteria to find all the equipment for which they charge more than R 300.	(1)			
	Save	and close the query qryInsureEquipment.				
7.6		e a query labelled <b>qryTypeCounts</b> based on the <b>tblEquipment</b> table which display the number of each type of equipment the company has.	(4)			
	Save	and close the query <b>TypeCounts</b> .				

(1)

[41]

7.8.5 Add your examination number to the report header.

Save and close the report **rptDetailInvoice**.

7.7

7.8

Create	e a query labelled <b>qryInvoiceCost</b> :	
7.7.1	Display the <b>InvoiceID</b> , <b>Days</b> from the table <b>tblInvoice</b> , and the fields <b>EquipmentName</b> and <b>Charge</b> from the table <b>tblEquipment</b> .	(2)
7.7.2	Add a calculated field labelled <b>TotalCost</b> with the calculation <b>Charge * Days</b> .	(2)
Save a	and close the query qryInvoiceCost.	
Create	e a report labelled <b>rptDetailedInvoice</b> :	
7.8.1	This <b>rptDetailedInvoice</b> report should be created using <b>InvoiceID</b> and <b>Days</b> from the <b>tblInvoice</b> table and <b>EquipmentName</b> , <b>Charge</b> and <b>Type</b> from the <b>tblEquipment</b> table.	(3)
7.8.2	This report should be grouped by the <b>tblInvoice</b> table.	(1)
7.8.3	This report should also be grouped by the <b>Type</b> field from the <b>Equipment</b> table.	(1)
7.8.4	Add a footer to your report containing a text field to display the total charge per day.	(4)

You have been asked to update the home and equipment pages of the **AdventureAV** website.

Open **index.html** in the subfolder **website** and apply the following changes:

- 8.1 Add a title to the page to read 'AdventureAV Your examination number'. (3)
- 8.2 Add an image to the website as follows:
  - 8.2.1 Add the image **logo.jpg** to the top of the page. (3)
  - 8.2.2 Set the alternative text of the image to 'AdventureAV Logo'. (1)
  - 8.2.3 Set the alignment of the image to centre. (1)
- 8.3 Modify the background colour of the page to be '#c8ebe5'. (2)
- 8.4 Add the text 'Equipment' under the image; and set to hyperlink to **equipment.html**. (4)

Open the file **equipment.html** and apply the following changes:

8.5 Add the following table in the body of the page, refer to **Figure 7**. (6)

Figure 7

Comoros	Sony Underwater Still Capture
Cameras	Nixon High Res Capture

[20]

Total: 180 marks