

# NATIONAL SENIOR CERTIFICATE

**GRADE 11** 

# **NOVEMBER 2013**

# **COMPUTER APPLICATIONS TECHNOLOGY P1**

MARKS: 180

TIME: 3 hours

This question paper consists of 17 pages including an annexure.

#### INSTRUCTIONS AND INFORMATION

- 1. Due 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. Enter your name and surname in the *header* of every document that you create or save.
- 3. The invigilator will give you ALL the files needed for the examination or you will be told where the files can be found on the network. If your work is 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 you accidentally corrupt the files given to you, you may request further copies from the invigilator.
- 5. Make sure that you save each document using the file name given. Save your work at regular intervals as a precaution against possible power failures.
- 6. Read through EACH question before answering or solving the problem. Do NOT do more than is required by the question.
- 7. At the end of the examination you must hand in ALL your files or make sure that ALL the files have been saved on the network as explained to you by the invigilator/educator. Ensure that ALL files can be read.
- 8. Note that NO printing is required.
- 9. During the examination you may use the help function of the program which you are using. You may NOT use any other resource material.
- 10. Note that if data is derived from a previous question that you cannot answer, you should still proceed with the questions that follow.
- 11. Formulas and/or functions must be used for ALL calculations in questions involving spreadsheets, unless otherwise specified. *Absolute cell references* must only be used where necessary to ensure that formulae are correct when they are copied to other cells in a spreadsheet.
- 12. In ALL questions involving word processing, the language should be set to English (South Africa). The paper size is assumed to be A4 Portrait, unless otherwise instructed.
- 13. All measuring units should be set to *centimetres*.
- 14. This question paper consists of seven questions. Answer ALL the questions.

#### NOTE:

The examination folder that you will receive with this question paper contains the folder and the files listed below. Ensure that you have the folder and ALL these files before you begin this examination:

A folder called **EXAM DATA** with files and a subfolder called:

•	q1Form	Word processing file
•	q2Letter	Word processing file
•	q2Address	Database file
•	q2Table	Spreadsheet file
•	q3Incredible	Spreadsheet file
•	Upload	Text file
•	q4Statistics	Spreadsheet file
•	q5Stock	Database file
•	q5Table	Spreadsheet file
•	q6Web	Folder
•	q6Digital	HTML file (inside the q6Web folder)
•	q6Computer	Image file (inside the q6Web folder)
•	q7Answers	Word processing file
•	q7Computers	Word processing file
•	Group	Image file

#### **SCENARIO:**

Technology has a profound impact on our country. Your School Management Team has decided to promote CAT as subject as they believe it is of great educational value. Their main aim is to prevent a digital divide in your community. They would also like to encourage web based learning and teaching in the classrooms.

The School Management Team wants to involve the learners with the establishment of a *new Computer Lab*. Your Learners Council asked you to assist them with some of the documents, as you are computer literate.

#### **QUESTION 1**

A document **q1Form** has been saved in your **EXAM DATA** folder. This document will be sent by e-mail to parents. The last page of the document is an electronic survey that parents need to complete. The School Management Team requested that you make the following changes to this document:

#### Open the file q1Form.

1.1	Replace the current cover page with the Alphabet cover page.	(1)
1.2	Justify the entire document.	(1)
1.3	Change the language of the entire document to English (South Africa).	(1)
1.4	Correct all spelling errors in the document.	(1)

1.5 Apply automatic hyphenation to the entire document.

(1)

1.6 Apply the style **Title** to the main heading "**COMPUTERS IN THE CLASSROOM: USES, ABUSES, AND POLITICAL REALITIES**", at the top of page 3 of the document.

(1)

1.7 Create an automatic Table of Contents below the heading "Table of Content". Only headings formatted with the style Heading 1 must appear in the Table of Contents.

(2)

1.8 Change the highlighted paragraphs on page 3 to two equal columns with a 1 cm/0.39 inches space between the two columns.

#### Example:

The NEXT BIG THING in educational technology was supposed to be the language lab. Schools invested heavily in such labs during the 1970s, installing rows of cubicles with headphones for skill and drill instruction in Spanish, French, and German. Again the technology proved to be a failure. Students learned languages more effectively when they interacted with real people in immersion environments than when they listened to bits of canned speech and made rote responses. In retrospect, the outcome seems obvious, but technology has a way of turning people's heads. Eventually, most of the expensive high school language labs were dismantled.

Recently, politicians and some educators have begun touting computers as the next technological panacea, the one that will turn classrooms into cybernetic gardens for growing young minds. The difference, this time, is that the technologists might be right. As we shall see, computers do have the potential to revolutionize teaching and learning, but only if in implementing their use in classrooms we take seriously the lessons learned from the failure of educational television and of the language lab. Before considering these lessons, however, and their implications for using computers in education, it will be useful to consider the general political climate driving educational reform today.

(2)

1.9 Change the computer bullets of the highlighted text on page 4 to (Wingdings 56) hollets of 14 pt.

#### Example:

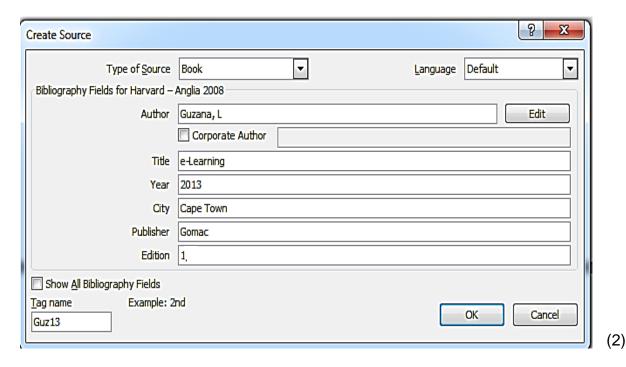
- communicate effectively in speech and in writing
- nork collaboratively
- use technological tools such as computers
- analyze problems, set goals, and formulate strategies for achieving those goals
- seek out information or skills on their own, as needed, to meet their goals (2)
- 1.10 Replace all occurrences where two spaces were left between words with one space only. (1)

1.11 Format the *WordArt* heading reading "**How to avoid digital divide**" as shown in the example below:

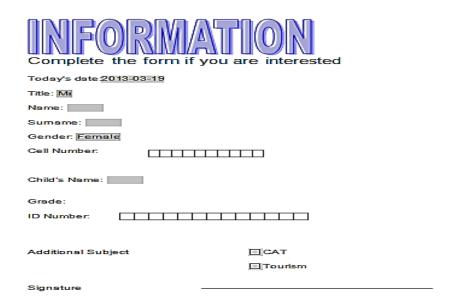


- Fill the WordArt with a Water droplets texture fill.
- The WordArt must appear Horizontally centred as well as the image.
- Adjust the spacing between the letters of the *WordArt* to **Very Loose**. (3)
- 1.12 Remove the left paragraph indent from the text shaded in blue on page 5 of the document. (1)
- 1.13 Find the following words in the document "Web Based learning", and insert a number footnote on the same page with the following explanation of the words: "Online Education".
  (2)
- 1.14 Insert the following in the **footer** of the document:
  - Insert an automatic page number in the footer of the odd pages. Note that the page number will not appear on the first page.
  - Insert the document file name as a field in the footer of the **even pages**. (4)

1.15 Add the following **Reference Source** to the document and create an automatic **Bibliography** below the heading "Bibliography" that appears on the second last page. Use all the sources for your Bibliography.



1.16 Format the electronic form at the end of the document to appear as follows:



NOTE: Make use of the **Legacy Form** fields.

- 1.16.1 Switch the Form Field Shading function of the application on. (1)
- 1.16.2 Add a **Drop-down Form Field** to the right of the word "**Title**" with the following options Mr, Mrs, Ms and Dr. (2)

#### **QUESTION 2**

The School Management Team needs to set up a Mail Merge document that can be used to send letters to those parents who do not have e-mail addresses. They will complete the database at a later stage as many of the records have not been captured up to date.

Open the document q2Letter.

2.1	Edit the drop-cap effect so that it drops over 2 lines and does not appear in the margin.	(2)
2.2	Change the right-hand margin of the document to 1.5 cm.	(1)
2.3	Change the line spacing to exactly 15 pt for the entire letter.	(1)
2.4	Remove the picture watermark.	(1)
2.5	Use this letter as the basis for a Mail Merge. Link the <b>q2Parent</b> table in the database file <b>q2Address</b> as the data source.	(1)
2.6	The letter contains the names of the fields in angled brackets e.g. << PARENT_INITIALS>> to show you where to insert the merge fields. Replace these placeholders with the correct matching merge fields.	(2)
2.7	Paste the contents of the <b>Table</b> worksheet form the <b>q2Table</b> spreadsheet, as a linked object above the words "Yours in Education" and keep the source formatting.	(2)
2.8	Insert a mailing rule below the table. The rule must display the message "Please hand in at the office!" if the learner is not a hostel border. It must display the message "Please post to our school" for those who are hostel borders.	(3)
2.9	Complete the Mail Merge to a new document using only recipients who do not have e-mail addresses. Save the original document <b>q2Letter</b> and save the merged letters as <b>q2Merge</b> .	(2)
	Save and close all QUESTION 2 documents.	[15]

(2)

(2)

#### **QUESTION 3**

The following spreadsheet shows the results provided by the Grade 12 team who gathered computer information. Help the School Management Team to modify the spreadsheet.

Open the file called q3Incredible.

Work in the **Incredible** worksheet.

- 3.1 Type the heading "Incredible Computer Stock" in **Row 1**. The font size of the heading must be 25 pt. (2)
- 3.2 Change the row height of **Row 1** to 60. (1)
- 3.3 Merge **Cells A1:I1** and centre the text vertically and horizontally across the new merged cell.
- 3.4 Add any green border below the merged cell in **Row 1**. (2)
- 3.5 Wrap the text in **Row 2** and change the text alignment to Vertical Text. (2)
- 3.6 Resize the row height of **Row 2** and edit the data so that the heading appears similar to the example provided.

	Incredible Computer Stock							
SN eu rm ib ae Ir	R o o m N	D e T v y i p c e e	M o d e I	C uV ra r! eu ne t	p u r c a h t a e s e	R e p p e o r n s s o i n b	U s e r C o d	TOP SEVES

- 3.7 Add the current **date** as a function to **Cell J1**. The date must update automatically. (1)
- 3.8 Rename the sheet **Incredible** to **Info** and change the Tab Colour to red. (2)
- 3.9 **Unfreeze** the **panes** of the worksheet. (1)
- 3.10 Format the **Range E3:E83** so that it appears in South African currency. (1)

Link **Cell H4** in the **Info** worksheet to **Cell B3** in the **UserCodes** worksheet. The user code you have generated in QUESTION 3.18 will therefore be reflected in

3.20 Import the data from the text file called **Upload** to the worksheet called **Import**.

Remember to save and close the **q3Incredible** document.

(1)

(2)

[43]

**Cell H4** of the **Info** worksheet.

Work in the **Import** worksheet.

#### **QUESTION 4**

The learners who are involved in the project used a spreadsheet to save statistics on computer sales. They asked you to design a graph that will make it easier for them to interpret the data.

Open the spreadsheet file called **q4Statistics**.

Work in the Invoice worksheet.

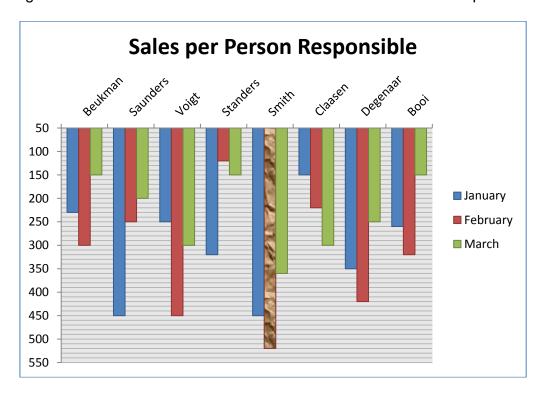
- 4.1 Insert the **File Path** on the right hand side of the header. (1)
- 4.2 Calculate the subtotal owed in **Cell F22**. (2)
- 4.3 Calculate the **VAT** in **Cell F24** as 14% of the actual amount owed. The actual amount owed is calculated by subtracting the **Discount** form the **Subtotal**. (2)

Work in the CHART worksheet.

- 4.4 Use a function in **Cell D27** to count the number of empty cells in the **Range B7:D24**. (1)
- 4.5 Grade the computer sales people according to the total number of sales they made from January to March. Make use of a function in **Cell E7** to determine the grading.

If the total sales for Mr Beukman is **equal to and more** than 800 the word "Excellent" must appear in **Cell E7** and if his sales are less than 800 the cell must be left empty. Fill the function down to the rest of the sales people.

4.6 Change the chart to a Clustered Column chart as shown in the example below.



(1)

(3)

• SerialNumber: S6

• Room: D201

DeviceType: Scanner

• Model: HP 2400

CurrentValue: R1 300.00DatePurchased: 2012/01/01

PersonResponsible: Ms V Saunders

WorkingOrder: Yes (2)

- 5.3 Add the following field below the **PersonResponsible** field:
  - Field Name: Cellphone
  - Data Type: TextField Size: 10
  - Input Mask: restrict the entry to 10 numbers

(5)

- 5.4 *Sort* the table in descending order according **PersonResponsible**.
- (2)

5.5 Show only *vertical gridlines* of the table.

(1)

5.6 Change the **SerialNumber** field so that it is the *Primary Key* field.

(1)

5.7 Change the *Default Value* of the **WorkingOrder** field to **Yes**.

(1)

5.8 Add a *Validation Rule* to the **DatePurchased** field so that the date cannot be before 1 January 2005. The *Validation Text* for this field must read: "Cannot be purchased before 1 January 2005".

(3)

5.9 The **Room** field must be a *Required* field.

(1)

Import data to create a new table called **TextBooks**.

5.10 Import the Worksheet called **Books** from the **q5Tabel** spreadsheet to appear as an additional new table in your **q5Stock** database called **TextBooks**. Use **Row 1** of the worksheet as your **Field Names**.

(3)

Save and close all tables.

#### Query:

- 5.11 Create a guery based on the **Incredible** table to find all **HP printers**.
  - Name the query Printers.
  - Show only the **SerialNumber**, **Model** and **DeviceType** fields in the query, and in this order.
  - Sort the query according to the **Room** field.

(7)

Save and close your query.

#### Form:

- 5.12 Create a form called **Stock**.
  - Use all the fields from the **Incredible** table.
  - Use the **Justified** layout for the form.
  - The label in the Form Header must be changed so that it reads: "All Stock"
  - Change the background colour of the *Detail* section to green.
  - Insert the date in the Form Footer as a function.

(6)

(2)

[42]

Save and close the form.

#### Report:

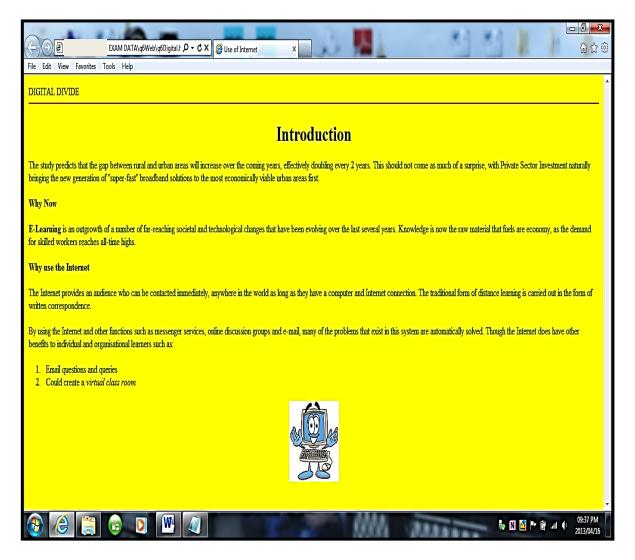
- 5.13 Open the **Items** report and make the following changes to it:
  - 5.13.1 Change the font colour of the heading in the *Report Header* to **Red** and centre the heading in the *Report Header*.
  - 5.13.2 Insert the **Group.jpg** logo (picture) to the right of the *Report Header*.

    The picture is saved in your **EXAM DATA** folder. (2)
  - 5.13.3 *Group* the report by the **DeviceType** field and *sort* it by the **Model** field. (2)

Remember to save and close all your documents.

#### **QUESTION 6**

One of the School Management Team members created a web page to inform people about the Digital Divide. Open the file **q6Digital** found in the **q6Web** folder. Carry out the instructions below. Use the application program **Notepad** to edit the web page. The final web page should resemble the screenshot below. You may use the annexure (page 17) provided for this question.



- 6.1 The title of the web page should be "**Use of Internet**". (1)
- 6.2 Insert a horizontal red line across the page below the words "DIGITAL DIVIDE" as in the example above. (3)
- 6.3 The word "Introduction" must appear as a heading in the biggest heading font size possible and must be centred on the page. (2)
- 6.4 "Why Now" and "Why use the Internet" must appear in a smaller heading font. (2)
- 6.5 Correct the body tag so that the web page has a yellow background colour. (2)
- 6.6 Format the word "E-Learning" in the second paragraph so that it appears in bold. (1)

<u>16</u>	COMPUTER APPLICATIONS TECHNOLOGY P1 (NOVEMBER 2013)	
6.7	Format the last two words "virtual classroom" of the web page, so that they appear in italics.	(1)
6.8	You must create two paragraphs under the heading "Why use the Internet" as shown in the example provided.	(1)
6.9	Chang the last part of the document to a numbered list. Each numbered point must start on its own line.	
	Example:	
	<ol> <li>E-mail questions and queries</li> <li>Could create a <i>virtual classroom</i></li> </ol>	(3)
6.10	Insert the image called <b>q6Computer.png</b> found in the <b>q6Web</b> folder at the bottom of the web page. Centre the image horizontally.	(3)
6.11	Correct the closing HTML tag.	(1)
	Remember to save and close the file.	[20]
QUES	STION 7	
•	the word processing file <b>q7Answers</b> and type the answers for the first two ions in the space provided.	
7.1	How many times does the letter "e" appear in the file called q7Computers?	(1)
7.2	Enter the number of characters (with no spaces) found in the word processing file called <b>q7Computers</b> .	(1)
7.3	Save the <b>q7Answer</b> file in pdf format in your <b>EXAM DATA</b> folder.	(1)
	Save and close all your documents.	[3]
	TOTAL:	180

### ANNEXURE:

## Basic HTML Tag list Grade 11:

	Opening tag	Closing tag
Document tags	<html> <head> <title> &lt;body&gt;&lt;/td&gt;&lt;td&gt;&lt;/html&gt; &lt;/head&gt; </title> </head></html>	
Heading elements	<h1> : <h6></h6></h1>	: 
Tag elements	  <hr/> <	
Text formatting	 <i>&gt;i&gt;  <ir><ir><strong>  <em>  <u><sup><sub>  <del><code></code></del></sub></sup></u></em></strong></ir></ir></i>	
Alignment	<pre> (also "right", "justify" "center")</pre>	
Font formatting	<font size="5"> (also face=, color=)</font>	
Body colour	<body bgcolor="green"></body>	
Link syntax	<a> a href="URL"&gt; a name="Mark"&gt; a href="#Mark"&gt; a href="C:/Accessories/Image.doc"&gt;</a>	
Images syntax	<img height="150" src="image/pic.jpg" width="105"/>	
Image alignment	<img src="image/pic.jpg" valign="middle"/> <center></center>	
Lists	<pre><ol>   <ol>   <ol>   <ol></ol></ol></ol></ol></pre>	