basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SENIOR CERTIFICATE EXAMINATIONS

COMPUTER APPLICATIONS TECHNOLOGY P1

2016

MARKS: 180

TIME: 3 hours

**This question paper consists of 16 pages,
an HTML tag sheet and a separate information sheet.**

INSTRUCTIONS AND INFORMATION

1.   Owing to the nature of this practical examination, it is important to note that, even if you complete the examination early, you will NOT be permitted to leave the examination room until all the administrative functions associated with the examination have been finalised. During the examination normal rules regarding leaving the examination room apply.

2.   Type your examination number in the header of EVERY document that you create or save, where applicable.

3.   The invigilator will give you a CD/DVD/flash disk containing all the files needed for the examination OR you will be told where the files can be found on the network or computer. If a CD/DVD has been issued to you, you must write your centre number and examination number on the CD/DVD. If you are working on the network, you must follow the instructions provided by the invigilator/teacher.

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 must hand in the CD/DVD/flash disk given to you by the invigilator with ALL your answer files saved onto it, OR you should make sure that ALL your answer files are saved on the network/computer as explained to you by the invigilator/teacher. Make absolutely sure that all files can be read. Do NOT save unnecessary files/folders. Do NOT hand in duplicate answer files/folders.

10.   The information sheet that has been provided with the 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 consult the help functions of the programs that you are using. You may NOT use any other resource material.

12.   Unless instructed otherwise, use formulae and/or functions for ALL calculations in questions involving spreadsheets. Use absolute cell references only where necessary to ensure that formulae are correct when you copy them to other cells in a spreadsheet.

13.   **NOTE:**   All formulae and/or functions should be inserted in such a manner that the correct results will still be obtained even if changes are made to the existing data.

14.   If data is derived from a previous question that you could not answer, you should still proceed with the questions that follow.

15.   In all questions involving word processing, you should set the language to English (South Africa). Assume that the paper size is A4 Portrait, unless instructed otherwise.

16.   Use centimetres as the unit of measurement when you answer this question paper.

17.   Generally one mark is allocated per action; therefore, a 2-mark question would <u>usually</u> require TWO actions, et cetera.

18.   The examination folder/CD/DVD/flash disk that you receive with this question paper contains the files listed below. Ensure that you have all the files before you begin with this examination.

• 1Effect_Effek	Word processing file
• 1Music_Musiek	Image file
• 2Facts_Feite	Word processing file
• 3Learners_Leerders	Spreadsheet file
• 4Club_Klub	Spreadsheet file
• 5Music_Musiek	Database file
• 6Poster_Plakkaat	HTML file
• 6Sixty_Sestig	Image file
• 7Answ_Antw	Word processing file
• 7Compet_Kompet	Word processing file
• 7Data	Spreadsheet file
• 7Form_Vorm	Word processing file
• 7Music_Musiek	Spreadsheet file
• 7Sixties_Sestigs	Database file

SCENARIO

Music is a universal language that brings people in all walks of life together. Your school has chosen music as a theme for this year and has started a music club. Activities such as music concerts will take place.

QUESTION 1: WORD PROCESSING

A document was set up to give background information on the impact of music on people.

Open the **1Effect_Effek** document and insert your examination number in the header.

1.1   Edit the first page by doing the following:

1.1.1   Insert the **1Music_Musiek** picture found in the examination folder in the top right-hand corner of the first page.   (3)

1.1.2   Insert a text box in the bottom left-hand corner of the first page and add the text 'Elvis High School' in the text box.   (2)

1.2   Create a new style called 'Music', as follows:

- Format the font size to 48 pt.
- Centre the text.   (3)

1.3   Insert any page border on the first page only.   (2)

1.4   Insert the text 'First Draft' as a watermark. The watermark should appear on the first page only.   (2)

1.5   Remove the comment found at the top of the second page.   (1)

1.6   Apply an orange gradient text fill effect to the heading 'The Effect Music Has On Me'.   (2)

1.7   Apply a dropped cap effect to the first letter of the word 'Music' in the first paragraph, so that it appears over TWO lines and 0.6 cm/16 pt away from the text.   (3)

1.8   Correct the line spacing of the second paragraph so that it is the same as the other paragraphs in the document.   (1)

1.9   Locate the text 'Rap and Rock' in the third paragraph. Insert an endnote to these words, as follows:

- The endnote must use the Roman number format 'I' (in capital letters).
- Insert the text 'Adapted from an article by S Mariam' as the endnote text.   (3)

1.10   Manual line breaks ('soft enters') were used to separate some of the paragraphs in the document.

Use the find and replace feature to replace all the manual line breaks in the document with paragraph marks.   (2)

Save and close the **1Effect_Effek** document.   **[24]**

QUESTION 2: WORD PROCESSING

Open the **2Facts_Feite** document and insert your examination number in the header.

2.1 Insert automatic page numbering in the footer of the document as follows:

- The page numbers in the footer must be centred.
- The first page of the document must NOT be numbered.
- Page numbering must start on the second page and be numbered from 1 onwards. (5)

2.2 Insert an automatically generated table of contents below the heading 'TABLE OF CONTENTS'. Use the following options:

- Use the 'Fancy' format style.
- Show TWO levels of headings.
- Use a solid line leader tab for the page numbers. (4)

2.3 Apply the 'Heading 1' style to the heading '60s Music Facts' on the page after the table of contents and update the table of contents. (2)

2.4 Locate the text 'Placeholder1' and do the following:

- Add a new <u>interview</u> source with the interviewee named 'Steve Johnson'.
- Replace the text 'Placeholder1' with an automatic citation of the source you just added. (3)

2.5 Locate the text that starts with the heading 'Early '60s …' and ends with '… earlier psychedelic vibe'. Place the text in columns, as follows:

- Place the text in THREE columns.
- Change the space between the columns to 1.1 cm.
- Ensure that the subheadings always appear at the top of a column.
- Justify all the text in the columns. (4)

2.6 Locate the text that starts with 'Influences …' and ends with '… at the time' and change it as follows:

- Place ONLY the pages with this text in landscape orientation.
- The pages before and after the text must remain in portrait orientation. (2)

2.7   Locate the text that starts with 'Monterey International Pop Festival' and ends with 'Creedence Clearwater Revival'.

Create a multilevel list to automatically number the text to resemble the example below.

1.	**Monterey International Pop Festival – Acts included:**
	• The Mamas & the Papas
	• Janis Joplin
	• Jimi Hendrix
2.	**Newport Pop Festival – Acts included:**
	• The Byrds
	• Illinois Speed Press
	• Steppenwolf
3.	**Miami Pop Festival – Acts included:**
	• Fleetwood Mac
	• Buffy Sainte-Marie
	• Chuck Berry
4.	**Newport '69 – Acts included:**
	• Ike & Tina Turner
	• The Rascals
	• The Byrds
	• Creedence Clearwater Revival

The text indentation of the numbers and the alignment of the bullets must be set as follows:

- The number alignment must be set to 1 cm.
- The text indentation for the numbers must be set to 2 cm.
- The bullet alignment and text indent for the bullets must be set to 2 cm.   (5)

2.8   Locate the table on the last page of the document.

Insert a word processing function in the bottom right-hand (shaded) cell of the table that will determine and display the average number of people that attended the festivals.   (1)

Save and close the **2Facts_Feite** document.   **[26]**

QUESTION 3: SPREADSHEET

Use formulae and/or functions for ALL calculations in the spreadsheet. Use absolute cell references <u>only</u> where necessary to ensure that formulae are correct when you copy it to other cells in the same column (copy down). All formulae and/or functions should be inserted in such a manner that the correct results will still be obtained, even if changes are made to the existing data.

All the information about the school's music club members is stored in the spreadsheet called **3Learners_Leerders**.

Open the **3Learners_Leerders** spreadsheet and work in the **Member_Lid** worksheet.

3.1	Merge and centre the contents of **cells A1:M1**.	(1)
3.2	Insert a function in **cell G2** that will always display the current date.	(1)
3.3	Insert a function in **cell B3** to determine the number of members listed.	(2)
3.4	The surnames should appear in capital letters. Use a function in **cell A5** to display the surname in **cell B5** in capital letters.	(2)
3.5	Set the print area of the **Member_Lid** worksheet to include a list of only the members' surnames, names and their year of birth, <u>with</u> gridlines. Include the headings, but DO NOT PRINT.	(2)
3.6	Change the format of ALL the data in **column G** to appear as dates in the format 1998-03-26.	(1)
3.7	The telephone numbers in **column I** do not include the area code. Use a function/formula to add the area code '011' to the beginning of the number and display it in **cell H5**. **EXAMPLE:** The telephone number 3672211 will appear as 0113672211.	(3)
3.8	The club needs to send an e-mail to every person who does NOT have a cellphone number (**column J**). Insert a function in **cell K5** to determine if an e-mail must be sent to the person or not. If an e-mail must be sent, 'Yes' must be displayed, otherwise 'No' must be displayed. Copy this function to **cells K6:K103**.	(4)

3.9   In order to create mailing lists the secretary would like to separate the ISP domains from the rest of the e-mail addresses.

     EXAMPLE: For the e-mail address <u>pepetal@yahoo.com</u> the domain is <u>yahoo.com</u>.

Use a formula in **cell M5** to display the ISP domain.

HINT: First determine the position of '@'. You may use any of the 'blank' columns, such as **columns N** and **O**, for calculating any interim results.   (7)

3.10   Copy the information of only the members born in December to the **Dec_Des** worksheet.   (2)

Save and close the **3Learners_Leerders** spreadsheet.   **[25]**

QUESTION 4: SPREADSHEET

Use formulae and/or functions for ALL calculations in the spreadsheet. Use absolute cell references only where necessary to ensure that formulae are correct when you copy it to other cells in the same column (copy down). All formulae and/or functions should be inserted in such a manner that the correct results will still be obtained, even if changes are made to the existing data.

A spreadsheet contains a list of all the songs that are available in the music club.

Open the **4Club_Klub** spreadsheet and work in the **Music_Musiek** worksheet.

4.1	Adjust the width of **column B** so that all the data in this column is displayed and visible.	(1)
4.2	Display the contents of **column G** to TWO decimal places.	(1)
4.3	The different storage types for songs are stored in the **Code_Kode** worksheet.	

             Add a LOOKUP function in **cell F2** in the **Music_Musiek** worksheet to determine the song's storage type.

             The storage type code is in **column A** in the **Music_Musiek** worksheet and the lookup table is in the **Code_Kode** worksheet.

             Copy this function to correctly display the storage type for each of the songs.   (5)

4.4	There has been an increase in the prices of the songs since the last update of the spreadsheet.	

             The increase in price is as follows:

- Code 1 songs (CD) increased by 20%.
- Code 2 songs (DVD) increased by 25%.
- Code 3 songs (MP3) increased by 15%.

             Insert a function in **cell H2** to determine the new increased price based on the information above.   (4)

|		
4.5	The function in **cell L2** works correctly. Change the function so that it can be copied to **cells L3:L17** and still give the correct results for all the years.	(2)
4.6	Use a function in **cell L21** to determine the total value of all the 'Pop' albums using the original prices in **column G**.	(4)

Work in the **Copy_Kopieer** worksheet.

4.7	In **cell J2**, display the number of different owners in the list. Explain the method you used to determine the answer in **cell J3**.	

             NOTE: Count each owner only ONCE.   (3)

Work in the **Graph_Grafiek** worksheet.

4.8   Edit the graph in the **Graph_Grafiek** worksheet to display as shown in the example below.
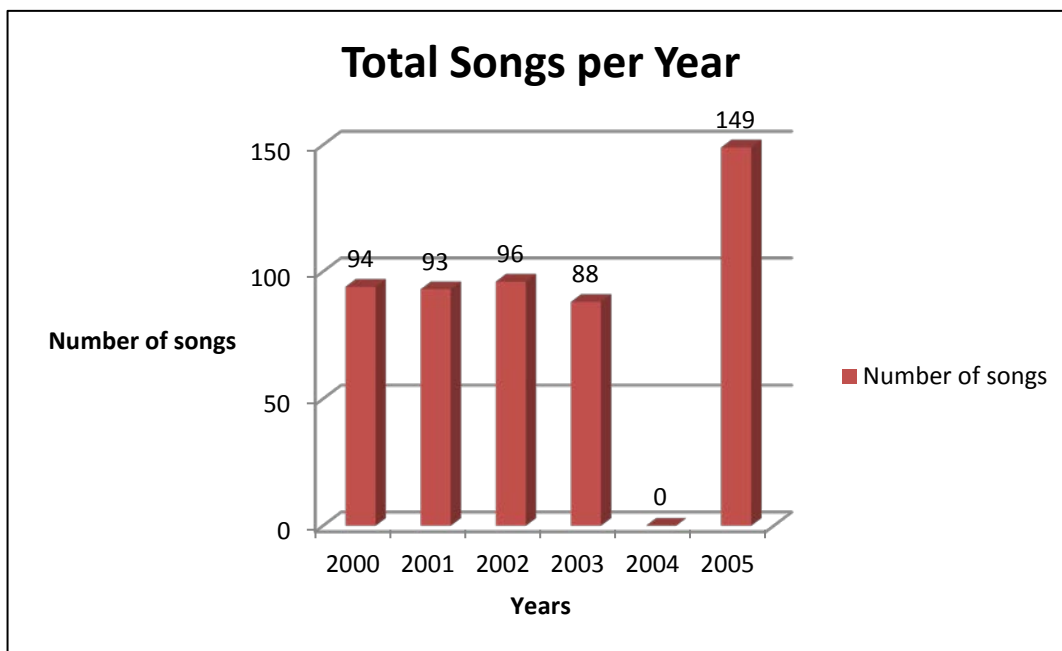
(5)

Save and close the **4Club_Klub** spreadsheet.   **[25]**

QUESTION 5: DATABASE

A database of different types of music was created.

Open the **5Music_Musiek** database.

5.1　　Edit the **Learners_Leerders** table as follows:

　　　5.1.1　Set the default value of the *Gender_Geslag* field to 'M'.　　　(1)

　　　5.1.2　Change the properties of the *Grade_Graad* field to ensure that a user has to enter a value in this field.　　　(1)

　　　5.1.3　Change the properties of the *Class_Klas* field to display the following four options in a drop-down list:

　　　　　　・　A
　　　　　　・　B
　　　　　　・　C
　　　　　　・　D　　　(3)

　　　5.1.4　Change the *DOB_Geboortedatum* field as follows:

　　　　　　・　Format the field to display the dates in the Medium Date format.
　　　　　　・　Add an input mask to display the '#' symbol as a placeholder instead of the '_' symbol.　　　(2)

　　　5.1.5　Create a validation rule for the *Cell_Sel* field so that the user has to enter exactly 10 characters (of any type) in this field.

　　　　　　Add suitable validation text for this field.

　　　　　　HINT: Use the LEN function in the validation rule.　　　(4)

5.2　　Create a form called **frm5_2**, based on the **Learners_Leerders** table, as follows:

　　　・　Display ALL the fields on the form.
　　　・　Format the *Owner_Eienaar* field's <u>data</u> to display in a red font colour.
　　　・　Add a combo box control to the *Details* section of the form, as follows:
　　　　　○　It must allow the user to **find** and display a record based on the value selected in the combo box.
　　　　　○　The values that can be chosen from are stored in the *Owner_Eienaar* field.
　　　　　○　Add the text 'Find what' as the combo box label.
　　　・　Add a horizontal line anywhere in the form footer.

　　　Save and close the **frm5_2** form.　　　(7)

5.3 Create a query called **qry5_3**, based on the **Music_Musiek** table as follows:

- Display only the *Title_Titel*, *Artist_Kunstenaar*, *Year_Jaar* and *Genre* fields.
- Display only songs in the 'DANCE' genre released in 1996.
- Sort the records alphabetically according to the *Title_Titel* field.

Save and close the **qry5_3** query. (4)

5.4 Open the **qry5_4** query and do the following:

- Add the *Cost_Koste* field and format it to currency.
- Create a new calculated field called *Inc* to determine the increase if the cost is to be doubled.

Save and close the **qry5_4** query. (5)

5.5 Adjust the **qry5_5** query so that it displays the total cost for each of the three genres of music (Dance, Pop and Rock).

Save and close the **qry5_5** query. (3)

5.6 Open the **qry5_6** query.

Change the query to display all the records with an address that has a street number of 13 and the word 'Crescent' in their address, for example 13 Parkridge Crescent.

Save and close the **qry5_6** query. (3)

5.7 Create a report called **rpt5_7**, based on the **Music_Musiek** table as follows:

- Display the *Artist_Kunstenaar*, *Title_Titel*, *Year_Jaar*, *Cost_Koste* and *Genre* fields.
- Group the data in the report according to the *Year_Jaar* field.
- Sort the data in ascending order of the *Artist_Kunstenaar* field.
- Change the report heading to 'Year released'.
- Insert a function with a suitable label to determine the total value of the music items **per year**.
- Insert a function to determine the value of the most expensive item in the report.

Save and close the **rpt5_7** report. (9)

Save and close the **5Music_Musiek** database. **[42]**

QUESTION 6: WEB DESIGN (HTML)

You were asked to complete a web page to share information about music.

Open the incomplete **6Poster_Plakkaat** web page in a browser and also in a text editor (NOT a word processing program such as Word).

NOTE:

- Question numbers are inserted as comments in the coding to show approximately where the answer(s) should be inserted.
- An HTML tag sheet has been attached for reference.

Your final web page should look like the example below.

6.1   Locate the title and the title tags at the bottom of the HTML code and move them to the correct position so that the text '60s Music' is displayed in the browser tab.   (1)

6.2   The image tag is supposed to display the **6Sixty_Sestig.jpg** picture stored in the examination folder.

        Add the missing part of the tag so that the picture is displayed correctly.   (2)

6.3   Change the alignment of the heading 'Music' so that it appears in the centre of the page.   (1)

6.4   Change the HTML code for the horizontal line so that:

        • The size is 3
        • The line stretches across 70% of the screen width   (2)

6.5   Apply a 'Heading 2' style to the text 'Before 1963'.   (1)

6.6   Locate the text 'The Beatles' towards the end of the first paragraph and add tags so that the text appears in bold.   (1)

6.7   Locate the text 'To mention a few …' below the heading 'Pop and Rock Artists'. Display this text in italics.

        Ensure that this text will always appear as a separate paragraph.   (2)

6.8   Edit the table as follows:

        • Change the background colour of the table to orange.
        • Insert a new row at the top of the table.
        • Add the headings 'Artist' and 'Hits' to the new first row of the table.   (4)

6.9   Add bullets to the text in the column to the right of the text 'The Beach Boys', so that it appears as follows:

The Beach Boys	1. Surfin' USA 2. Good Vibrations

          (2)

6.10   A target location for a link called 'Top' has been created below the head section of the web page.

        Create a link at the bottom of the web page as follows:

        • Insert the text 'Back to top' for the link.
        • Add a link on this text ('Back to top') that will move to the target location called 'Top'.   (3)

Save and close the **6Poster_Plakkaat** document.   **[19]**

QUESTION 7: GENERAL

The school wants to promote a music concert in the community.

7.1   Open the **7Form_Vorm** document.

         Change the comments property of the document to 'CAT Exam'.   (1)

7.2   Complete the design of the form by doing the following:

        7.2.1   Insert a suitable form field control next to the text 'Name' to allow a user to fill in his/her name.   (1)

        7.2.2   Edit the form field control next to the text 'Surname' to display the surname in upper case.   (1)

        7.2.3   Locate the text 'The top selling …'.

                Insert a drop-down form field control in the space provided to include the following three options:

                  - Beatles
                  - Elvis Presley
                  - The Beach Boys   (2)

        Save and close the **7Form_Vorm** document. Do NOT lock the form before saving.

7.3   Open the **7Compet_Kompet** document. Complete a mail merge as follows:

- Use the **Learners_Leerders** worksheet in the **7Data** spreadsheet as the data source for the mail merge.
- Insert the '*Name_Naam*' and '*DOB_Geboortedatum*' merge fields in the positions indicated and save the file.
- Complete the mail merge and save the file as **7Data**.
- DO NOT PRINT.   (3)

        Save and close all the documents.

7.4   Open the **7Sixties_Sestigs** database.

- Use any method to combine the information in the two tables in this database (**60s** and **60sMusic_Musiek**) into one new table called **7Comb** with all the records from both tables.
- Sort the new table in descending order according to the *Name_Naam* field.   (3)

        Save and close the **7Sixties_Sestigs** database.

7.5   Details of the songs that topped the American and British charts appear in the **7Music_Musiek** spreadsheet.

Open the **7Answ_Antw** document and insert your examination number in the document.

This question requires you to give the answer and <u>briefly</u> explain the <u>specific</u> method/formula/function you used to obtain the answer.

EXAMPLE:

QUESTION	ANSWER	BRIEF EXPLANATION
How many boys are in the Grade 12A class?	24	Filter to extract the boys of 12A and then use the Count function.

Use the **7Music_Musiek** spreadsheet to answer the questions below.

7.5.1   Which title appeared in both the American and British charts on 1 August 1964?   (2)

7.5.2   How many different or unique titles by Elvis Presley reached the charts?   (2)

7.5.3   Which chart featured the most titles?   (2)

7.5.4   Which year featured the most titles on the charts?   (2)

Save and close the **7Answ_Antw** document.   **[19]**

                                                          TOTAL: 180

HTML TAG SHEET

Basic Tags	
Tag	**Description**
`<body></body>`	Defines the body of the web page
`<body bgcolor="pink">`	Sets the background colour of the web page
`<body text="black">`	Sets the colour of the body text
`<head></head>`	Contains information about the web page
`<html></html>`	Creates an HTML document – starts and ends a web page
`<title></title>`	Defines a title for the web page
` `	Inserts a line break
`<!-- -->`	Comment

Text Tags	
Tag	**Description**
`<h1></h1>`	Creates the largest heading
`<h6></h6>`	Creates the smallest heading
`<b></b>`	Creates bold text
`<i></i>`	Creates italic text
`<font size="3"></font>`	Sets size of font, from "1" to "7"
`<font color="green"></font>`	Sets font colour
`<font face="Times New Roman"></font>`	Sets font type

Links Tags	
Tag	**Description**
`<a href="URL"></a>`	Creates a hyperlink
`<a href="URL"><img src="name"></a>`	Creates an image link
`<a name="NAME"></a>`	Creates a target location in the document
`<a href="#NAME"></a>`	Links to a target location created somewhere else in the document

Formatting Tags	
Tag	**Description**
`<p></p>`	Creates a new paragraph
`<p align="left">`	Aligns a paragraph to the "left" (default), can also be "right" or "center"
` `	Inserts a line break
`<ol></ol>`	Creates a numbered list
`<ol type="A","a","I","i","1"></ol>`	Defines the type of numbering used
`<ul></ul>`	Creates a bulleted list
`<ul type="disc","square","circle"></ul>`	Defines the type of bullets used

Formatting Tags continued	
Tag	**Description**
`<li></li>`	Inserted before each list item, and adds a number or symbol depending on the type of list selected
`<img src="name">`	Adds an image
`<img src="name" align="left">`	Aligns an image: can be "left", "right", "center", "bottom", "top", "middle"
`<img src="name" border="1">`	Sets the size of the border around an image
`<img src="name" width="200" height ="200">`	Sets the height and width of an image
`<img src="name" alt="alternative text">`	Displays alternative text when the mouse hovers over the image or when the image is not found
`<hr/>`	Inserts a horizontal line
`<hr size="3"/>`	Sets size (height) of a line
`<hr width="80%"/>`	Sets the width of a line, in percentage or absolute value
`<hr color= "ff0000"/>`	Sets the colour of the line

Table Tags	
Tag	**Description**
`<table></table>`	Creates a table
`<tr></tr>`	Creates a row in a table
`<td></td>`	Creates a cell in a table
`<th></th>`	Creates a table header (a cell with bold, centred text)
`<table width="50">`	Sets the width of the table
`<table border="1">`	Sets the width of the border around the table cells
`<table cellspacing="1">`	Sets the space between the table cells
`<table cellpadding="1">`	Sets the space between a cell border and its contents
`<tr align="left">`	Sets the alignment for cell(s) ("left", can also be "center" or "right")
`<tr valign="top">`	Sets the vertical alignment for cell(s) ("top", can also be "middle" or "bottom")
`<td colspan="2">`	Sets the number of columns a cell should span
`<td rowspan="4">`	Sets the number of rows a cell should span

COMPUTER APPLICATIONS TECHNOLOGY P1 – 2016

INFORMATION SHEET *(to be completed by the candidate AFTER the 3-hour session)*

180

CENTRE NUMBER _____

EXAMINATION NUMBER _____

WORK STATION NUMBER _____

SUITE USED
(Mark appropriate
box with a cross (**X**))

WEB BROWSER USED
FOR QUESTION 6
(Mark appropriate
box with a cross (**X**))

Microsoft Office 2010	Microsoft Office 2013	Microsoft Office 2016	
			Other (Specify)
Mozilla Firefox	Google Chrome	Internet Explorer	

FOLDER NAME _____

Candidate must enter the file name(s) used for each answer. Tick if saved and/or done.

Question number	File name	Saved (✓)	Done (✓)	Maximum mark	Mark achieved	Marker initial/ code
1				**24**		
2				**26**		
3				**25**		
4				**25**		
5				**42**		
6				**19**		
7				**19**		
TOTAL				**180**		

Comment (*for office/marker use only*)

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