basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

SENIOR CERTIFICATE EXAMINATIONS

<div style="border:1px solid">

COMPUTER APPLICATIONS TECHNOLOGY P1

2018

</div>

MARKS: 180

TIME: 3 hours

**This question paper consists of 17 pages,
an HTML tag sheet, an input mask character 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.	Enter your examination number in the header or footer of EVERY document that you create or save, where applicable.

3.	The invigilator will give you a CD/DVD/flash drive 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/flash drive has been issued to you, you must write your examination number and centre number on the CD/DVD/flash drive. If you are working on the network, you must follow the instructions provided by the invigilator/educator.

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 drive 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/educator. Make absolutely sure that all files can be read. Do NOT save unnecessary files/folders and 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 offline 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 spreadsheet questions. 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 the data changes.

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). The paper size is assumed to be A4 Portrait, unless instructed otherwise.

16.   Ensure that the regional settings are set to South Africa and date and time settings, number settings and currency settings are set correctly.

17.   The examination folder/CD/DVD/flash drive 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.

• 1Artists	Word processing file
• 1Daniella	Image file
• 2Art	Image file
• 2Top15SA	Word processing file
• 3Sales	Spreadsheet file
• 4Novice	Spreadsheet file
• 5ArtData	Database
• 6Expensive	HTML file
• 6No1	Image file
• 6No3	Image file
• 7ForSale	Spreadsheet file
• 7Global	Word processing file
• 7Ruga	Word processing file
• 7Watercolour	Database

> **SCENARIO**
>
> South Africa has a wealth of artistic talent. You were asked to research some of the artists and their work.

QUESTION 1: WORD PROCESSING

Open the **1Artists** word processing document, which contains background information on the ten top young South African artists. Insert your examination number in the header or the footer.

1.1	Change the top margin of the document to 2.5 cm.	(1)

1.2   Format the heading 'Ten young artists of South Africa' as follows:

- Centre the heading.
- Expand the character spacing by 2 pt.   (3)

1.3   Add the following to the source 'Culture Trip (2017)':

- 'S Keam' as the author
- 'South Africa's 10 Young Artists' as the name of the web page

   NOTE: If a warning appears, select 'Yes'.   (3)

1.4   Format the paragraph that starts with 'South Africa boasts …' and ends with '… in South Africa' with the same paragraph spacing as the rest of the paragraphs in the document.   (1)

1.5   Find the last sentence in the first paragraph that starts with 'We discover …' and ends with '… citation here)'. Make the following changes:

   1.5.1   Display only the year in the citation 'Webb, 2017'.

             Do NOT change the source.   (1)

   1.5.2   Replace the text 'insert citation here' with a citation to the source 'Young Talent (2017)'.   (1)

1.6   Insert a text box above the text 'Athi Patra-Ruga' and add the text 'DID YOU KNOW?'   (2)

1.7   Find the numbered text below the heading 'Athi Patra-Ruga'.

        Replace the automatic numbers with bullets using the '▯' symbol (Webdings character code 162).   (2)

1.8   Use a word processing feature to display ALL occurrences of the word 'culture' in small caps.   (2)

1.9   Insert the image **1Daniella** found in the examination folder as follows:

- The image should appear to the right of the paragraph with the heading 'Daniella Mooney'.
- The size of the image should be exactly the same as the image of 'Athi Patra-Ruga' in the previous paragraph.   (5)

1.10   Add the caption above the last image in the document to appear as 'Figure 5: Destinies'.   (2)

1.11   Insert a table of figures below the text 'Table of Figures' at the end of the document.

Display the table of figures in the 'Simple' format.   (2)

1.12   Insert a text watermark as follows:

- Insert the text 'Top Ten' as the watermark text.
- Do NOT display the watermark on the first page.   (4)

Save and close the **1Artists** document.   **[29]**

QUESTION 2: WORD PROCESSING

Open the **2Top15SA** word processing document, which contains a list of 15 of the most famous South African artists.

2.1   Edit the cover page as follows:

- Insert your examination number as the author.
- Change the image on the first page to the **2Art** image found in the examination folder.
- Find the text that starts with 'Although it is impossible ...' and ends with '… no particular order).' on the third page. Move this text to the abstract on the cover page.   (5)

2.2   Change the page numbers of the document as follows:

- Start the numbering on the page after the table of contents with 1.
- Change the page numbering format to 'Page X of Y'.
- The cover page and the table of contents page should NOT be numbered.   (3)

2.3   Find the heading 'Marlene Dumas', the paragraph about Marlene Dumas and the image of Marlene Dumas.

Change the paragraph setting to display the heading, paragraph and image together and not split over two pages.   (2)

2.4   Find the table under the heading 'Explore our Art Galleries' and change the whole table as follows:

- Apply shading to the row containing headings in any colour of your choice.
- Sort the table alphabetically, first by location and then by gallery name.

The first four rows of the table should appear as below:

Province	Gallery Name	Location
KwaZulu-Natal Art Galleries	Imbizo Gallery	Ballito
Western Cape Art Galleries	Magpie Art Collective Gallery	Barrydale
Gauteng Art Galleries	Afrinova	Braamfontein
Gauteng Art Galleries	Wits Art Museum	Braamfontein

(4)

2.5   Find the table under the heading 'Most famous works'. Insert a formula in the first cell in the last row to display the total number of artists listed in the table.   (2)

2.6   Display only the text that starts with the heading 'Photo credits …' and ends with '… cross reference here)' on a landscape page.   (2)

2.7   Insert a cross reference to the caption 'Figure 3: Irma Stern' to replace the text '(Insert cross reference here)' at the end of the document.   (2)

Save and close the **2Top15SA** document.   **[20]**

QUESTION 3: SPREADSHEET

NOTE:

- 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 them 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 the existing data changes.

Open the **3Sales** spreadsheet, which includes a summary of the gallery's sales. Work in the **Summary_Opsomming** worksheet.

|		
3.1	Change the vertical alignment of **row 1** to centre.	(1)
3.2	Insert a function in **cell K3** to determine the average selling price of all the art pieces sold (**column G**).	(2)
3.3	Insert a COUNTIFS function in **cell K4** to determine the number of art pieces sold in 30 days or less (**column F**) AND sold for an amount of more than R2 000 (**column G**).	(5)
3.4	Insert a function in **cell K5** to determine the total value of all the art pieces sold (**column G**), for experience code 1 (**column D**).	(4)
3.5	Each art piece must have a selling code.	

Insert a combination of functions in **cell H3** to create the code as follows:

- The artist's surname (**column B**)
- Followed by the first two letters of the artist's name (**column A**)
- Followed by a random three-digit number   (7)

Work in the **Chart_Grafiek** worksheet.

3.6   Change the chart in the worksheet to appear as shown below:

- Insert data labels for the amounts of each code. Ignore the position of the data labels.
- Remove the legend.
- Set the major axis units to 10 000.
- Fill only the back wall of the chart with any colour of your choice.

(4)
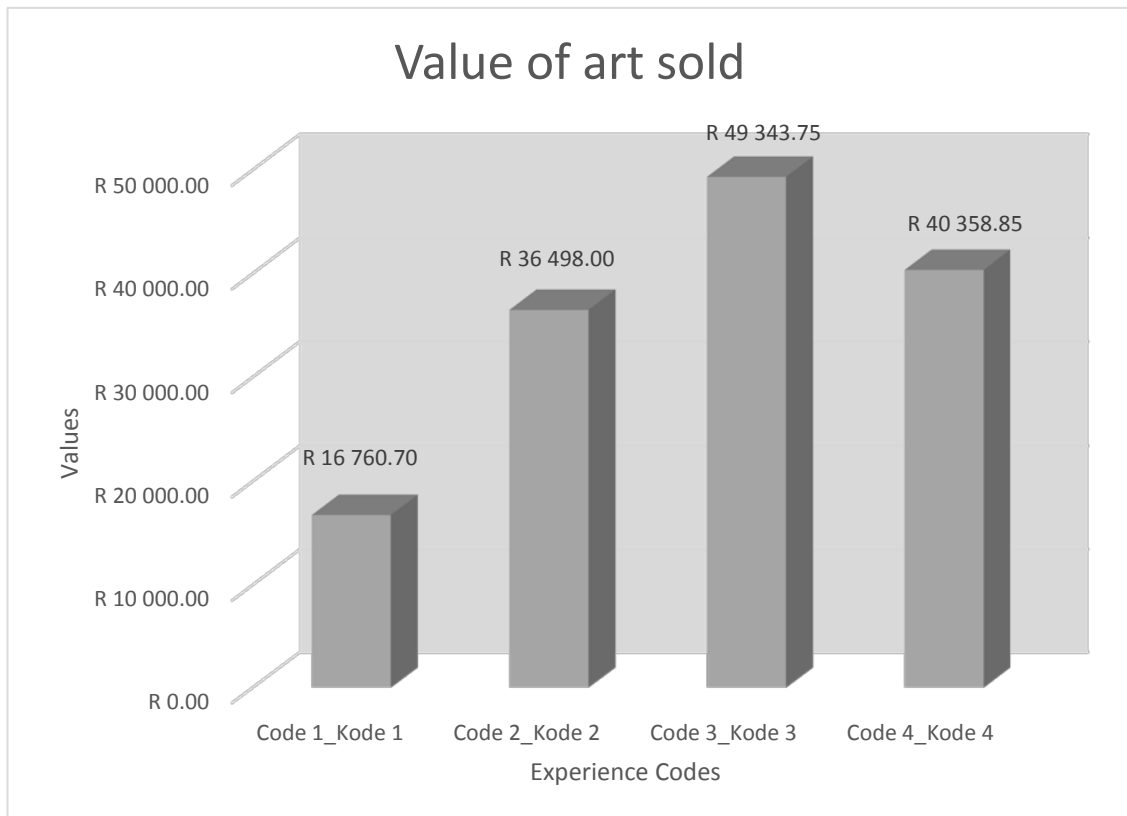
Save and close the **3Sales** spreadsheet.   **[23]**

QUESTION 4: SPREADSHEET

NOTE:

- 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 them 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 the existing data changes.

Open the **4Novice** spreadsheet, which contains information about new artists' work displayed in a gallery. Work in the **Artist_Kunstenaar** worksheet.

4.1   Format **row 1** as follows:

- Merge **cells A1:M1**, but DO NOT centre the text.
- Increase the font size to 32.
- Apply any gradient fill to **cells A1:M1**.   (3)

4.2   The e-mail addresses in **column C** should NOT include upper case letters.

Use an appropriate function in **column D** to display the data only in lower case.

Copy the function to the rest of the cells in the column.   (2)

4.3   Use an appropriate LOOKUP function in **cell F3** to determine the description in the **Code_Kode** worksheet by using the 'Type code' in **column E**.   (4)

4.4   The percentage of the commission depends on the artist's experience code in **column G**.

Use a function in **cell H4** to determine the commission percentage as follows:

CODE	PERCENTAGE
3	20%
2	25%
1	33%

(6)

4.5   The art gallery will display the art pieces for a certain number of months, as given in **column I**.

The date on which the display of the art piece starts appears in **column J**.

Use a function in **cell K5** to determine the date at which the artist's art pieces will be removed.   (5)

4.6   Change the format of the values in **column L** to currency.   (1)

4.7   Each artist sets a price (**column L**) for his/her art piece. The gallery's commission is calculated by using the artist's price and adding the commission percentage (**column H**).

        Insert a formula in **cell M6** to calculate the selling price of an art piece by adding the percentage of the gallery's commission to the artist's price.   (3)

4.8   All art pieces in the spreadsheet are exhibited in the art gallery currently.

        If the date in **column K** is BEFORE the current date, the art piece should have been removed.

        Use conditional formatting to shade the cells in **column K** with any colour of your choice to show which art pieces should be removed.

        NOTE: This feature must work on any day.   (3)

Save and close the **4Novice** spreadsheet.   **[27]**

QUESTION 5: DATABASE

Open the **5ArtData** database, which stores data of new artists at the gallery.

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

        5.1.1   Remove the *ID* field.   (1)

        5.1.2   Change the data type of the *Name* field to a more suitable data type.   (1)

        5.1.3   Set the field properties of the *Cellnumber* field so that the user is
                  forced to enter data in this field.   (1)

        5.1.4   Set the field properties of the *StreetName* field so that it will not
                  accept more than 25 characters.   (1)

        5.1.5   Insert a field named *PostalCode* between the *City* field and
                  the *E-mail* field.   (2)

        5.1.6   Change the format of the *E-mail* field to display the address in
                  lower case.   (1)

        5.1.7   The *Genre* field allows the user to choose only one option from a list
                  of options.

                  Change a property of the *Genre* field to allow the user to choose
                  more than one genre.

                  NOTE: If a warning appears, select 'Yes'.   (1)

        5.1.8   Create an input mask on the *ArtistCode* field to ensure that the user
                  inserts a code for the artist in the following format:

                  • ONE compulsory letter
                  • Followed by ONE compulsory letter or digit
                  • Followed by at least ONE digit, but possibly TWO digits

                  Example of a valid *ArtistCode* include: x35, Aa3, gg52   (4)

Save and close the **tblArtists** table.

5.2   Create a new form called **frm5_2** based on the **tblArtists** table.

- Include ALL the fields.
- Add your examination number in the form header.
- Change the font colour of the *Name* field so that ALL names display in red.

Save and close the **frm5_2** form.   (5)

5.3   Open the **qry5_3** query based on the **tblData** table.

- Modify the query so that it displays the total amount of each *TypeDescription*, as shown below.
- Sort the values from the highest to the lowest on the *ArtistPrice* field to display as follows:

TypeDescription	SumOfArtistPrice
Drawing	R 73 441.00
Watercolour	R 70 690.00
Architecture	R 67 903.00
Sculpture	R 57 224.00
Crafts	R 56 767.00
Painting	R 54 935.00
Ceramics	R 45 480.00
Design	R 45 061.00
Printmaking	R 43 103.00
Filmmaking	R 37 141.00

Save and close the **qry5_3** query.   (5)

5.4   An error was made in the database when dates were captured incorrectly.

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

- Add a calculated field called *NoDays*, which will determine for how many days the work of art has been exhibited, using the *DateIn* field and the *DateOut* field. Errors will show as a negative value.
- Display only the error records where the *DateIn* value is after the *DateOut* value.
- Display only the *DateIn* field, the *DateOut* field and the new calculated field, *NoDays*.

Save and close the **qry5_4** query.   (7)

5.5   Open the **qry5_5** query and do the following:

Display only the records of those artists whose price (*ArtistPrice*) was more than R2 500 AND whose art pieces were sold (*Sold*).

Save and close the **qry5_5** query.   (4)

5.6   Open the **rpt5_6** report and turn on 'Group & Sort', if it is not already displayed.

• Add the current date and time in the report footer.
• Insert a function to determine the total *ArtistPrice* for art pieces per *TypeDescription*.
• Change the grouping of the *DateOut* field to display per month instead of per year.
• Ensure that the text box in the *DateOut* header displays the month.

Save and close the **rpt5_6** report.   (7)

Save and close the **5ArtData** database.   **[40]**

QUESTION 6: WEB DESIGN (HTML)

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

NOTE:

- Question numbers are inserted as comments in the coding as guidelines to show approximately where the answer(s) should be inserted.
- Your web page may display differently depending on the web browser used.
- An HTML tag sheet has been attached for reference.

Your final web page should look like the example below.

NOTE: Use the example on the previous page to help you with this question.

6.1   Insert tags to ensure that the text 'Most Expensive Artworks!' displays in the
          browser tab.   (1)

6.2   Change the font of the entire web page to 'Calibri'.   (2)

6.3   Change the text 'Most Expensive Artworks Ever sold' as follows:

          • Display the text as a 'Heading 1' style heading.
          • Centre the heading.   (2)

6.4   Find the text that starts with '*Adapted from article …' and ends with
          '… 4 Jan 2017'.

          Insert tags to display this text in italics.   (1)

6.5   Insert tags to set the size of the horizontal line to 10.   (1)

6.6   Add an attribute to the image to display the text 'Painting by Paul Gauguin' if
          the image cannot be displayed.   (2)

6.7   Insert tags so that the text 'Nafea Faa Ipoipo (When Will You Marry?) –
          Paul Gauguin' appears as a bulleted point.   (1)

6.8   Modify the table as follows:

          • Set the colour of the table to orange.
          • Change the border to 5.
          • Set the cell spacing of the table to 10.
          • Insert tags to display the 1st artist correctly.   (7)

6.9   An attempt was made to create a link on the text 'No. 6 (Violet, Green and
          Red)' in the fourth row of the table to link to the image **6No3.jpg** in the
          examination folder.

          Modify the HTML code so that the image can be opened when the user clicks
          on the text 'No. 6 (Violet, Green and Red)' in the web browser.   (2)

Save and close the **6Expensive** web page.   **[19]**

QUESTION 7: GENERAL

Contemporary South African artists have started using new media technologies.

7.1   Open the **7Global** word processing document.

    7.1.1   Fill the background of the WordArt shape with a colour pattern of your choice.   (2)

    7.1.2   Find the text 'Insert linked object'.

        Insert the document **7Ruga**, found in the examination folder, to display as an icon.   (3)

    7.1.3   Modify the 'Intense Quote' style as follows:

        • Set the numbering format to 1), 2), 3), etc.
        • Apply the 'Intense Quote' style to all 'Heading 2' headings.   (2)

    7.1.4   Insert a comment on the text 'Resources' at the top of the last page of the document with the text 'Media resources'.   (2)

Save and close the **7Global** document.

7.2   Open the **7Watercolour** database.

    7.2.1   Add the data in the **tblA** table and the **tblB** table to the **tblColours** table.   (2)

    7.2.2   Export the data in the **tblA** table to a pdf format file and save it as **7WColour** in die examination folder.   (2)

Save and close the **7Watercolour** database and the **7WColour** pdf document.

7.3   Open the **7ForSale** spreadsheet.

        This question requires you to SHOW the steps/method/formula/function in the 7ForSale spreadsheet that you used to obtain the answer.

        7.3.1   Work in the **7.3.1** worksheet.

                      Determine how many artworks are on the list.

                      Type the answer in **cell A1** of the **7.3.1** worksheet.   (1)

        7.3.2   Work in the **7.3.2** worksheet.

                      Determine how many artworks with lithograph as medium are on the list.

                      Type the answer in **cell A1** of the **7.3.2** worksheet.   (2)

        7.3.3   Work in the **7.3.3** worksheet.

                      Determine how many artworks have data for BOTH the framed categories and the unframed categories.

                      Type the answer in **cell A1** of the **7.3.3** worksheet.   (2)

        7.3.4   Work in the **7.3.4** worksheet.

                      Determine the number of different artists that appear on the list.

                      Type the answer in **cell A1** of the **7.3.4** worksheet.   (2)

        7.3.5   Work in the **7.3.5** worksheet.

                      Determine in how many different mediums the artworks of the artist 'Kentridge, William' appears on the list.

                      Type the answer in **cell A1** of the **7.3.5** worksheet.   (2)

Save and close the **7ForSale** spreadsheet.   **[22]**
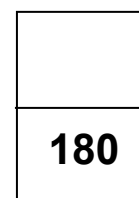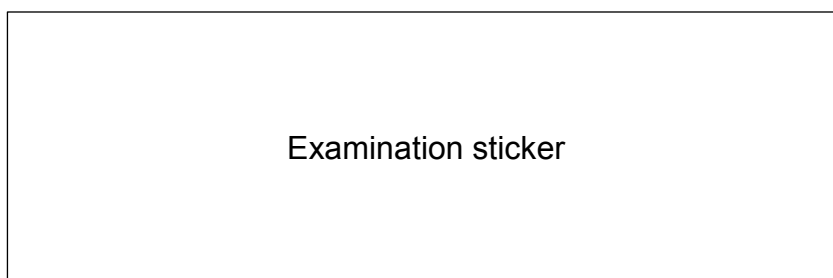
                                TOTAL: **180**

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", "bottom", "top"
`<align="center"> <img src="name">`	Aligns an image in the "center", can also be "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

INPUT MASK CHARACTER SHEET

CHARACTER	DESCRIPTION
0	Digit (0 to 9, entry required, plus [+] and minus [–] signs not allowed)
9	Digit or space (entry not required, plus [+] and minus [–] signs not allowed)
#	Digit or space (entry not required; spaces are displayed as blanks while in Edit mode, but blanks are removed when data is saved; plus [+] and minus [–] signs allowed)
L	Letter (A to Z, entry required)
?	Letter (A to Z, entry optional)
A	Letter or digit (entry required)
a	Letter or digit (entry optional)
&	Any character or a space (entry required)
C	Any character or a space (entry optional)
. , : ; - /	Decimal placeholder and thousand, date and time separators (The actual character used depends on the settings in the **Regional Settings Properties** dialog box in the Windows Control Panel.)
<	Causes all characters to be converted to lower case
>	Causes all characters to be converted to upper case
!	Causes the input mask to display from right to left, rather than from left to right. Characters typed into the mask always fill it from left to right. You can include the exclamation point anywhere in the input mask.
\	Causes the character that follows to be displayed as the literal character (e.g. \A is displayed as just A)

	Examination sticker	**180**

COMPUTER APPLICATIONS TECHNOLOGY P1 – 2018

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

CENTRE NUMBER _____

EXAMINATION NUMBER _____

WORK STATION NUMBER _____

SUITE USED (Mark appropriate box with a cross (**X**))	Microsoft Office 2010	Microsoft Office 2013	Microsoft Office 2016	Office 365
WEB BROWSER USED (Mark appropriate box with a cross (**X**))	Mozilla Firefox	Google Chrome	Internet Explorer	Other (Specify)

FOLDER NAME_____

Tick if saved and/or attempted.

Question Number	File name	Saved (✓)	Attempted (✓)	Maximum mark	Mark achieved	Marker	SM	CM	IM/EM
1	*1Artists*			**29**					
2	*2Top15SA*			**20**					
3	*3Sales*			**23**					
4	*4Novice*			**27**					
5	*5ArtData*			**40**					
6	*6Expensive*			**19**					
7	*7Global*			**22**					
	7Watercolour								
	7WColour								
	7ForSale								
TOTAL				**180**					

Comment *(for office/marker use only)*

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_____