**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

SEPTEMBER 2022

COMPUTER APPLICATIONS TECHNOLOGY P1

MARKS: 150

TIME: 3 hours

This question paper consists of 16 pages, an HTML tag sheet, an input mask character sheet and an information sheet.
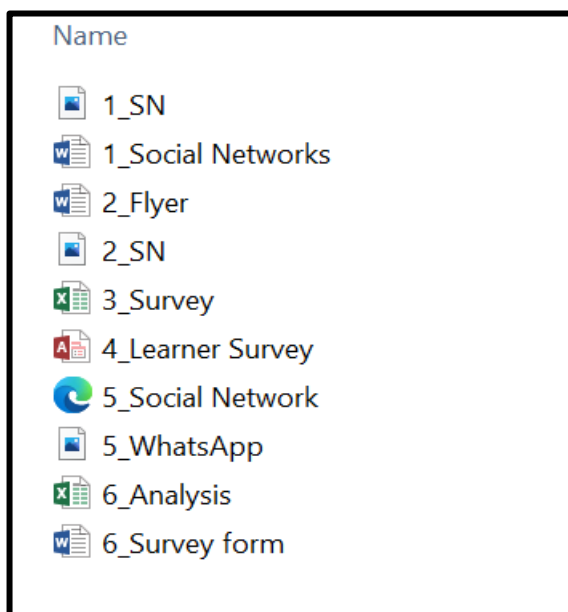
INSTRUCTIONS AND INFORMATION

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, the normal rules regarding leaving the examination room apply.

2. If you are working on the network, or the data files have been preloaded on your system, you must follow the instructions provided by the invigilator/ educator.

3. At the end of the examination, you must make sure that ALL your answer files are saved on the network/computer as explained to you by the invigilator/educator.

4. Make absolutely sure that ALL files can be read. Do NOT save unnecessary files/folders and do NOT hand in duplicate answer files/folders. Do NOT delete any original files that you did not work on.

5. 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.

6. 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.

7. This question paper consists of SIX questions. Answer ALL the questions.

8. Read through each question before answering or solving the problem. Do NOT do more than is required by the question.

9. 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.

10. You may NOT use any resource material.

11. Accuracy will be taken into account, e.g. if a question requires the answer to be in cell F3 in a spreadsheet, and you enter the answer in cell G4, it will NOT be marked.

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

13. 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. Use centimetres as the unit of measurement.

14. Ensure that the Developer tab and Ruler are activated.

15. Ensure that the decimal symbol is set as a full stop ('.') and the list separator is set as a comma (',').

16. Formulae and/or functions must be used 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.

    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.

17. You may NOT use a word processing program such as Word to answer the HTML question.

18. The examination data folder 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.

> Name
>
> 1_SN
>
> 1_Social Networks
>
> 2_Flyer
>
> 2_SN
>
> 3_Survey
>
> 4_Learner Survey
>
> 5_Social Network
>
> 5_WhatsApp
>
> 6_Analysis
>
> 6_Survey form

SCENARIO

Like technology in general, social media has both an upside and a downside. When it comes to the social media effects on teens, there are pros and cons. Your school has decided to run a campaign on the safe use of social networks.

QUESTION 1: WORD PROCESSING

A document was created to give some basic facts about safe use of social networks.

Open the **1_ Social Networks** word processing document.

1.1   Create a new character style in the document as follows:

       1.1.1   Name the new character style Media.   (1)

       1.1.2   Set the font size to 17 pt.   (1)

       1.1.3   Set paragraph spacing to 18 after.   (1)

       1.1.4   Apply the style Media to the first heading in the document, 'What is social media?'   (1)

1.2   Apply a Drop Cap feature for the first letter of the word 'Social' in the first paragraph, so that it appears over 2 lines and 0.2 cm away from the text.   (3)

1.3   Insert the footnote <u>on</u> yellow highlighted text 'social media' found in paragraph 2 as follows:

       1.3.1   Use the footnote Wingdings symbol ☞ (character code 70).   (2)

       1.3.2   Add the text '**https://www.investopedia.com'** to the footnote.   (1)

1.4   Find the text, 'Facebook' in paragraph 3. Insert a citation on this text as follows

       1.4.1   Type of source: Film   (1)

       1.4.2   Title: The Social Networks   (1)

       1.4.3   Ensure that the APA style has been selected.   (1)

1.5   Set the proofing language for the whole document to English South African.   (1)

1.6   Use a word processing feature to ensure that the text in the paragraph under the heading 'TikTok' appears on the same page.   (1)

1.7   Modify all the bullets under the heading, 'Why teens use social media?' as follows:

    1.7.1   Replace the bullets with the 1_SN. jpg picture found in your exam folder   (1)

    1.7.2   The alignment of the bullets must be changed to centred   (1)

1.8   Locate the bulleted list on the paragraph under the heading, 'What are the benefits of social media for teenagers?' and do the following:

    1.8.1   The text must be in two columns with a line in between   (2)

    1.8.2   Use the word processing feature to ensure that there are four bullets in each column   (1)

1.9   Find the bulleted list under the heading, 'What are the risks of using social media?' Create and apply a multi-level list as follows:

    1.9.1   Insert the numbering I, II, III… for the 1st level at 1 cm
           and i, ii, iii … for the 2nd level at 2 cm as shown in the example below.   (4)
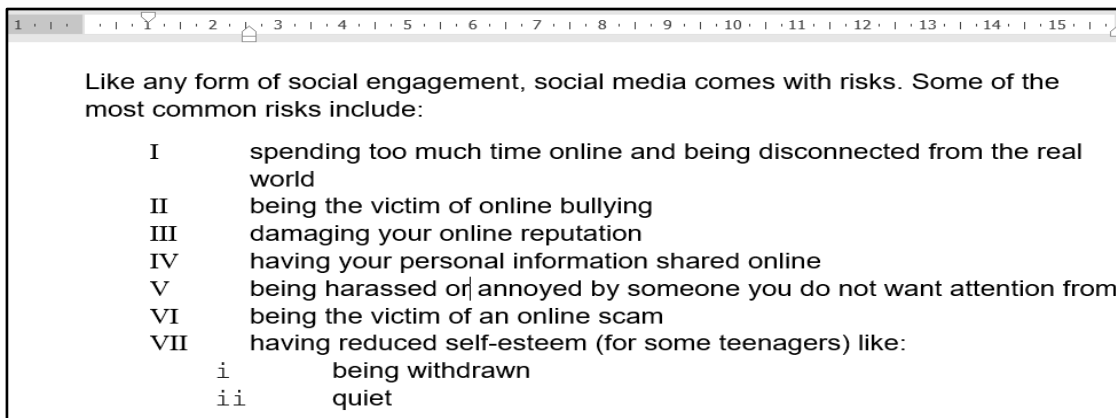

1.10   Apply page numbering to the document as follows:

    1.10.1   Use the Arrow 1 style.   (1)

    1.10.2   No page number on first page.   (1)

    1.10.3   Must be odd and even numbers.   (2)

1.11   Find the text, 'Back to the Top' at the end of the document. Hyperlink this text to the top of the document.   (2)

1.12   Hide the text, '**adapted from https://parents.au.reachout.com**', at the end of the document.

    NOTE: Do NOT delete this text.   (1)

    Save and close 1_Social Networks.   **[31]**

QUESTION 2: WORD PROCESSING

You are requested to modify the flyer. This flyer will be distributed to students for awareness.

Open the **2_Flyer** word processing document and modify the document to resemble the one below.
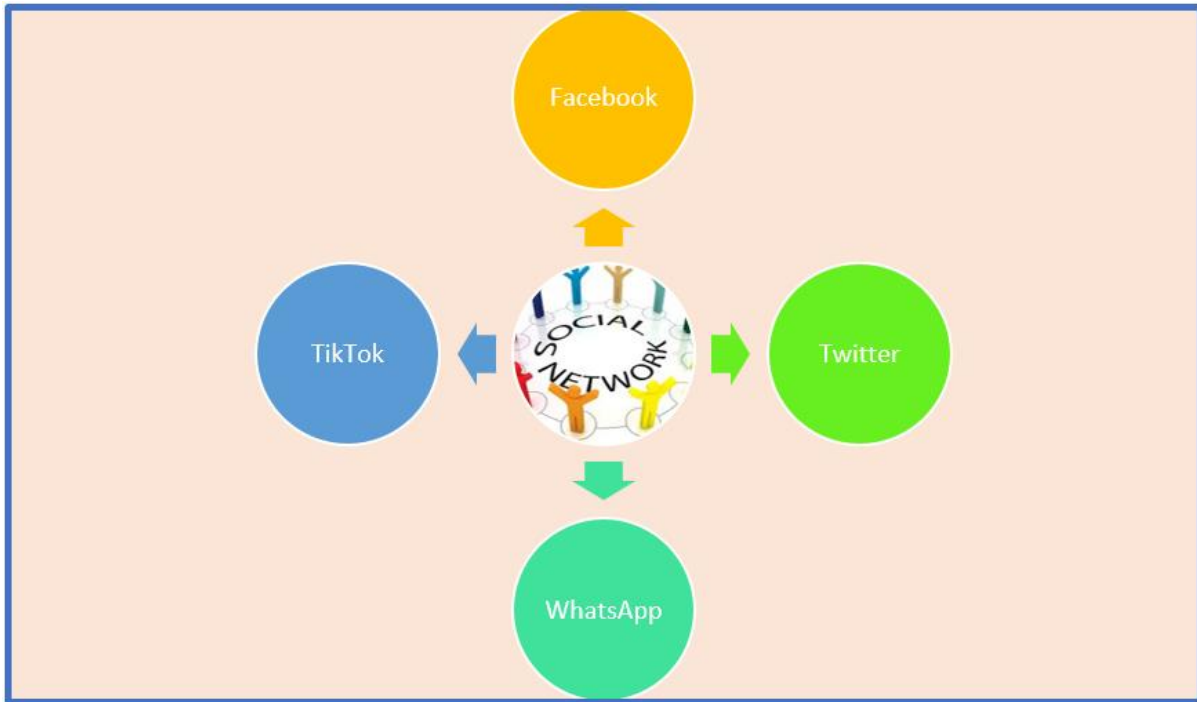
2.1   Modify the SmartArt to Cycle Diverging Radial.   (1)

2.2   Add ALL text as it appears in the picture.   (1)

2.3   Insert the 2_SN.jfif picture found in your exam folder as follows:

- In the centre of the SmartArt.
- Resize the picture to 2.5 cm x 2.5 cm.
- Set the picture style to soft edge oval.   (5)

2.4   Format the SmartArt as follows:

- Insert a shape fill colour of your choice.
- Add a blue shape outline with a weight of 2¼ pt.   (3)

      Save and close 2_Flyer.   **[10]**

QUESTION 3: SPREADSHEET

A spreadsheet **3_Survey** has been created to record all the results of the survey conducted by the learners.

Open the **3_ Survey** spreadsheet and work in the **Summary** worksheet.

3.1   Row 1 and row 2 must be changed as follows:

         3.1.1   Merge cells A1:U2   (1)

         3.1.2   Heading must be horizontally and vertically centred   (1)

         3.1.3   Background (fill) colour must be standard green   (1)

         3.1.4   Change font colour of the heading to white   (1)

3.2   Ensure that the contents of **cell S4** are visible without increasing the width of the column.   (1)

3.3   Change the format of the dates of birth (column D), so that the date will display in the format dd-mm-yyyy and copy to formula down to the rest of the cells in column D.   (2)

3.4   Insert a function in **E5** to calculate the age of Emery Schwartz.

     The final answer must be a whole number, in <u>completed</u> number of years.   (3)

3.5   Column F contains e-mail addresses of all learners that participated in the survey. These e-mail addresses are made up as follows:

- Surname as in column C
- A full stop, followed by
- First letter of the name of the learner in lower case, followed by
- @school.za

     Use a function in **cell F5** to display the correct e-mail address for the learner Emery Schwartz.   (4)

3.6   The learners were asked to list the social networks they frequently use. Those who listed WhatsApp first and Facebook second are Old Users and the others are New Users.

     Use a function in **cell K5** to determine what type of a user Emery Schwartz is.   (4)

3.7   Add a conditional formatting rule to column P, so that cells containing the text 'Watch Videos' are filled with red thin horizontal crosshatch pattern.   (4)

3.8 Learners who have encountered any challenges will be enrolled for an online safety course.

Use a function in **cell O5** to display the text Online Safety Course to all the learners who have encountered any of the three challenges in their survey and leave blank for those who do not encounter. (5)

3.9 Insert a function in **cell S56** to determine the most common amount used by learners to buy data. (2)

3.10 Insert a formula in **cell U5** to calculate the deficit of data that learners needed and the data used. Copy the formula down to the rest of the cells in column U.
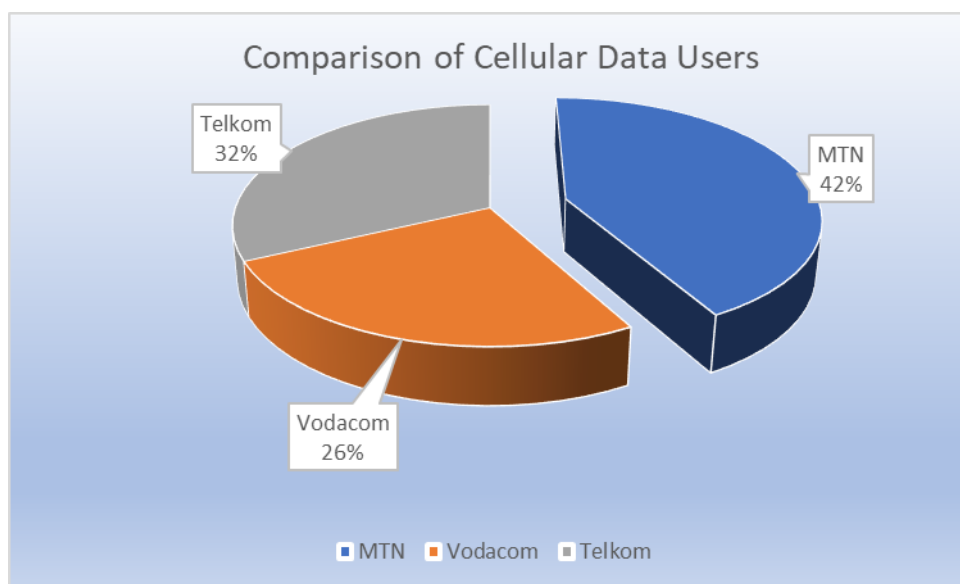
MTN has pledged an amount of R7 020.00. This amount is the total deficit amount of all learners using MTN.

Insert a function in **cell S58** to calculate how MTN calculated the amount of R7 020.00. (6)

Work in the **Graph** worksheet.

3.11 Use the data provided in Sheet 1 to create a graph similar to the one shown below.

NOTE:
- The chart title must be centred
- Callout data labels
- Legends at bottom
- MTN explosion point must be set at 30%
- Gradient fill applied to a plot area
- Rename Sheet 1 to Graph (8)

Save and close the 3_Survey. **[43]**

QUESTION 4: DATABASE

A database of all learners that participated in the survey was created. **Modify the database and do all queries in design view.**

Open the **4_Learner Survey** database.

4.1   Edit the **Registrations** table as follows:

     4.1.1   Insert an input mask for the ***Code*** field, to ensure that the user enters a code made up as follows:

- three compulsory lowercase letters, followed by
- a hyphen (-), followed by
- three uppercase letters, the first two of which must be compulsory, and the last one optional.

         For example, the following are valid codes: boy-BOY or xyz-AB.   (5)

     4.1.2   Add the values 'Male" and "Female" to the drop-down list for the Combo Box for the ***Gender*** field.   (2)

     4.1.3   Change a field property of the ***CellNo*** field, to ensure that cellphone numbers cannot be duplicated.   (1)

     4.1.4   Enter a validation rule for the ***RegistrationDate*** field, so that it conforms (matches) the validation text property of the same field.   (2)

     4.1.5   Change the properties of the ***Transport*** field, so that when a new record is added, the value "Yes" for this field will be automatically displayed.   (1)

4.2   Open the form **frm4_2.**

     Modify the form as follows:

- Change the background colour of the **Detail** section of the form to any colour of your choice.
- Distribute-align the text in the **CellNo** field.
- The **Pledge** text box on the form displays a "Type of User" information when the form is opened in design view. Make the necessary correction.   (3)

4.3   Open query **qry4_3.**

Modify the query to give the outcome below:

Name	Surname	CellNo	Type of User	Education	Pledge
Malik	Brown	0831992535	New Users	Class Groups	R 50.00
Cruz	Murray	0831047214	Old Users	Class Groups	R 50.00
Maxwell	Schultz	0831632218	Old Users	Class Groups	R 50.00
Total					**R 150.00**

(5)

4.4   Open query **qry4_4.**

Modify the query to extract the following information:

- All learners with no cell numbers.

- Learners who are old users.

The learners will receive a deduction of 15% on their pledge money.

- Create a calculated field called Balance to display the amount left after the deduction.

- Apply a red alternate row colour to the query.   (6)

4.5   Create a report from the **Survey Data table**.

- Only the following fields must be used: Name, Surname, CellNo, Pledge and Education.

- Group according to Pledge field.

- Sort ascending according to the Surname field.

- In the Pledge footer, use a function to calculate the total number of records for the group.

- Also add a function in the Pledge footer to calculate the total amount per group.

- Ensure that the calculation is in Rands currency.

- Save the report as rpt4_5.   (10)

Save and close 4_Learner Survey.   **[35]**

QUESTION 5: WEB DESIGN (HTML)

A web page has been created to make people aware of the popular networks for Children.

Open the incomplete **5_Social Network website.html** web page in a web browser and also in a text/HTML editor e.g. Notepad (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.
- An HTML tag sheet has been attached for reference.

Your final web page should look like the example below.

5.1   Add a HTML code to display the text, 'Popular Social Networks' in the browser.   (1)

5.2   Adjust the heading 'Popular Networks for Children' as follows:

- Centre the heading 'Popular Networks for Children'.

- Change the font colour to red.   (2)

5.3   Modify the bulleted list as per example above and also change the list to Roman figures.

- The Roman figures must be in uppercase.

- Ensure that the list can be read by all browsers.   (3)

5.4   A table has been created, but does not display correctly. Correct it as follows:

- Set the width of the table to 500.
- Set the cell spacing to 5.   (2)

5.5   Set the fill colour of the first row of the table to yellow.   (1)

5.6   Insert the image, WhatsApp.png from your data folder in the second row, fourth column.

- Both width and height of the picture must be set at 30.   (3)

5.7   Insert a red horizonal line below the table. The size of the line must be 10.   (2)

5.8   The heading Further Reading must be changed to heading 2 as well as bold and italics.   (2)

5.9   Insert a hyperlink to the text 'Click here' to open a website, Raising children. Use the link provided.   (3)

ONE mark will be allocated for closing tags <u>and</u> correct nesting.   (1)

Save and close 5_Social Network.   **[20]**

QUESTION 6: GENERAL

6.1   Open the spreadsheet **6_Analysis** and make the necessary changes.

     6.1.1   Data for learners has been copied to a new worksheet, all the learners appear more than once.

           Use a spreadsheet function in worksheet **Q6.1** to remove the reproductions of learners.

           Mention the function used in **cell E104**.   (3)

     6.1.2   The school governing body has organised short courses for the learners to be safe when using social networks.

           Each **course** is **allocated(given)** a number of minutes per day. All courses start at 09H00.

           In worksheet **Q6.2** in **cell C4 calculate** the **end time** for the first course.   (3)

           Save and close 6_Analysis.

6.2   Open the **6_Survey** form and prepare the survey as follows:

- Insert a text form field next to the text 'Name' to display the names in capital letters.
- Add the option 'TikTok' to the drop-down form field.
- Replace the symbols next to the text 'Do you want …?' with a checkbox form field. Check the Yes checkbox.   (5)

Save and close 6_Survey.   **[11]**

                                       TOTAL: 150

ANNEXURE A – HTML TAG SHEET

Basic Tags

Tag	Description
`<body></body>`	Defines the body of the web page
`<body bg color="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 document
`<html></html>`	Creates an HTML document – starts and ends a web page
`<title></title>`	Defines a title for the document
`<!-- -->`	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

Link Tags

Tag	Description
`<a href="URL"></a>`	Creates a hyperlink
`<a href="URL"><img src="URL"></a>`	Creates an image link
`<a name="NAME"></a>`	Creates a target location
`<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 "centre"
` `	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 upon the type of list selected
`<img src="name">`	Adds an image
`<img src="name" align="left">`	Aligns an image: can also be "right", "centre"; "bottom", "top", "middle"
`<img src="name" border="1">`	Sets size of 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 line
`<hr width="80%"/>`	Sets width of 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) (can also be "centre" or "right")
`<tr valign="top">`	Sets the vertical alignment for cell(s) (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 to right. You can include the exclamation point anywhere in the input mask.
!	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 (for example, \A is displayed as just A)

COMPUTER APPLICATIONS TECHNOLOGY P1 – SEPTEMBER 2022

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

SCHOOL:

NAME:

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 (QUESTION 6) (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	Maximum achieved	Marker	HOD	Cluster	EM
1	1_Social Networks			31					
2	2_Flyer			10					
3	3_Survey			43					
4	4_LearnerSurvey			35					
5	5_Social Networks			20					
6	6_Analysis 6_Survey			11					
			TOTAL:	**150**					

Comment (for marker use only)