**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

SEPTEMBER 2022

**COMPUTER APPLICATIONS TECHNOLOGY P1
(DEAF)**

MARKS: 150

TIME: 3 hours

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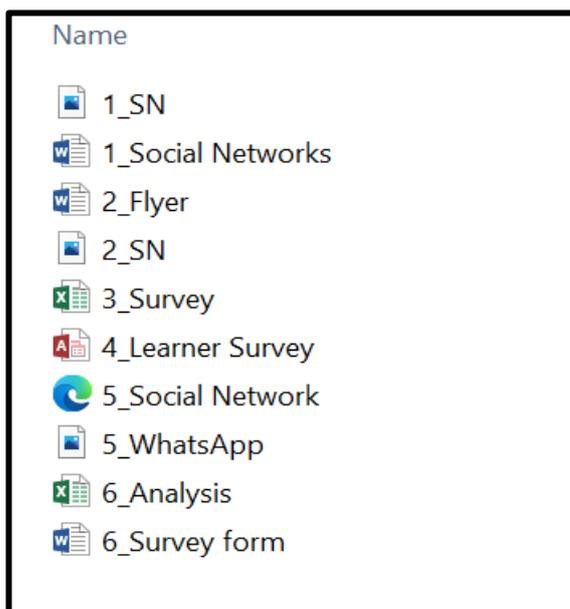
INSTRUCTIONS AND INFORMATION

1.   **Owing(Due)** 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(allowed)** to **leave** the **examination room** until **all** the **administrative functions associated(linked)** 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(ask)** another **copy** from the invigilator.

7.   This question paper has 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(wanted)** 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(protection)** 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 seen as 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(drive)** 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)
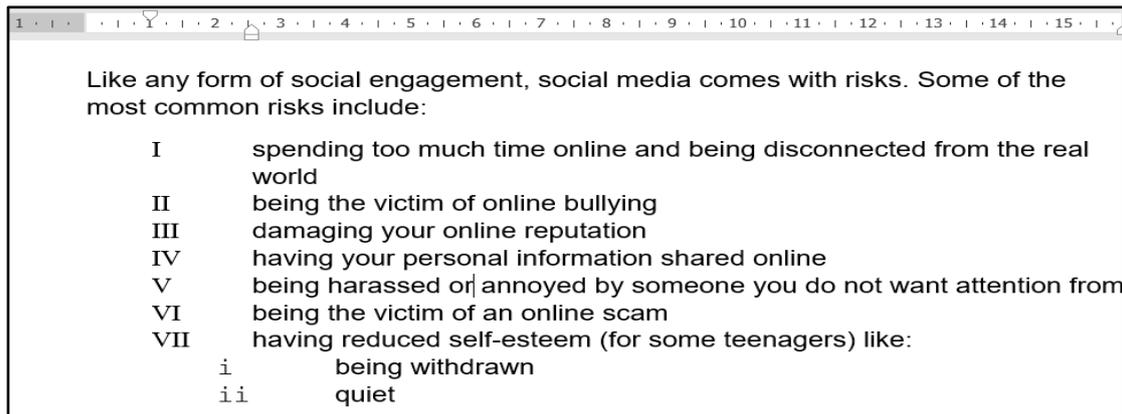

1.10   **Apply page numbering** to the document as follows:

      1.10.1   **Use** the **Arrow 1 style**.   (1)

      1.10.2   **No page numbe**r 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 **documen**t.

      NOTE: Do **NOT delete** this **text**.   (1)

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

QUESTION 2: WORD PROCESSING

You are **requested(asked)** 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 (look like)** the one **below**.
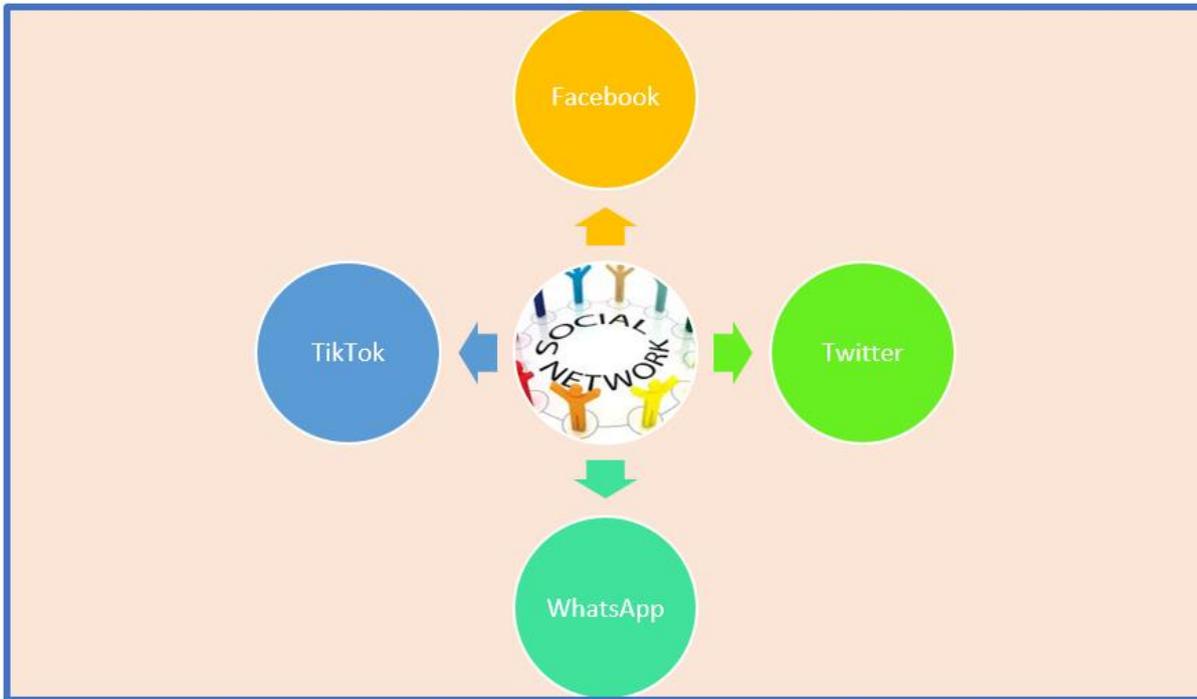
2.1   **Modify** the SmartArt to Cycle Diverging Radial.   (1)

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(come across)** 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(come across)** 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(promised)** an amount of R7 020.00. This amount is the total **deficit(shortfall)** 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.
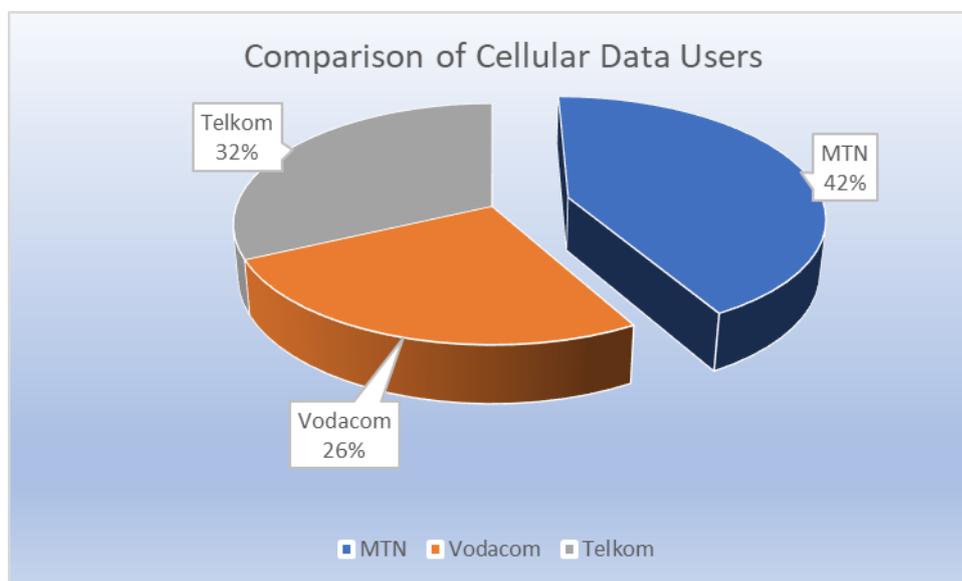
        NOTE:
        • The **chart title** must be **centred**
        • Callout data labels
        • Legends at bottom
        • MTN explosion point must be set at 30%
        • Gradient fill applied to a plot area
        • Rename Sheet 1 to Graph   (8)

        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(change) 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(change) 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**(promised) 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]**

                              Please turn over

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)

_____

_____