



# basic education

Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

## **NATIONAL SENIOR CERTIFICATE**

**GRADE 12**

**COMPUTER APPLICATIONS TECHNOLOGY P1**

**NOVEMBER 2024**

**MARKS: 150**

**TIME: 3 hours**

**This question paper consists of 16 pages, an HTML tag sheet,  
an input mask character sheet, two pages for planning 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 tasks associated with the examination have been finalised. During the examination, the standard examination 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 SEVEN 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 regularly as a precaution against possible power failures.
10. You may NOT use any resource material.
11. Accuracy will be taken into account.
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. Borders around images or screenshots in this question paper are intended for clarity. Do NOT insert borders unless you are instructed to do so.
19. Use the correct settings or features in an application as required by a question.
20. The data files that you need to complete this question paper have been provided to you on the disk/CD/DVD/flash disk or on the disk space allocated to you. The files are provided in the form of a password-protected executable file.

Do the following:

- Double-click on the password-protected executable file:  
**CAT P1 Nov 2024 DATA.exe**
- Click on the 'Extract' button.
- Click the 'Show Password' check box.
- Enter the following password: **N#24@**
- Once extracted, verify the contents of the folder by opening one or more files.
- Delete the **.exe** file.
- Once the contents of the files have been verified, rename the folder **CAT P1 Nov 2024 DATA** with your examination number.

The list of files on the next page will be available in the folder.

• 1Back	Image
• 1Solar	Word processing file
• 2Moon	Word processing file
• 3Sales	Spreadsheet
• 4Shows	Spreadsheet
• 5Events	Spreadsheet
• 5Inventory	Database
• 5Logo	Image
• 6_1Button	Image
• 6_1Galaxy	Image
• 6_1Gift	Image
• 6_1Star	HTML
• 6_2Mars	HTML
• 6_2Planet	Image
• 7Chart	Word processing file
• 7Envelope	Word processing file
• 7Inventory	Spreadsheet
• 7Members	Spreadsheet
• 7Stock	Spreadsheet

**SCENARIO**

There are many stars and planets in the solar system, including asteroids, comets and meteoroids. Outer space is the area directly outside of the Earth's atmosphere. Many humans have travelled into space and to the moon.

**QUESTION 1: WORD PROCESSING**

Open the **1Solar** word processing document that contains information about our solar system.

Insert your examination number in the header of the document.

- 1.1 Edit the author properties to display your examination number. (1)
- 1.2 Modify the shadow effect for the style 'Solar' to any blue colour and change the distance to 50 pt from the text. (3)
- 1.3 Ensure the heading '4. The solar system ...', paragraph and image always remain together. (1)
- 1.4 Insert a cross-reference on the text 'Question/Vraag 1.4' that goes to the 'Venus' bookmark. (2)
- 1.5 Find the word 'NASA' and insert an endnote on the word as follows: (3)
  - Apply the 'a, b, c, ...' number format.
  - Add the endnote text 'America'.
- 1.6 Edit the image below the heading 'Planets:' to appear as shown below. (4)

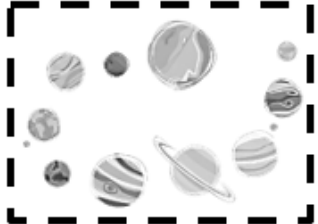
**NOTES:**

- The thickness of the image border is 3 pt.
- Ignore the colour.

**Planets:**

As per the Scientific Union of Astronomers, an object is said to be a planet if —

1. It orbits around a star.
2. It is big enough to look like a sphere.
3. It has a specific orbit that is not occupied by any other heavenly body.



*Space 5: Planets*

- 1.7 Convert the text below the heading 'Differences between the ...' to a table and apply any List Tables style. (2)

- 1.8 Format and change the current list style, 'Planets', of the list that starts with '1. Mercury: ...' and ends with '... 14 known moons.' to display as shown in the example below.

1. Mercury:

◆ It is the smallest planet in the solar system and is also the closest to the Sun.

◆ It does not have an atmosphere. So, the days are very hot and the nights are equally cold.

◆ Mercury's one year is of 88 Earth days.

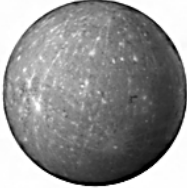
◆ It does not have any moon.

2. Venus:

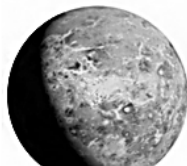
◆ It is the 2<sup>nd</sup> planet from the Sun.

◆ Its size is similar to that of the Earth.

◆ However, it is surrounded by a toxic and thick atmosphere of carbon dioxide. Therefore, it is the hottest planet in the solar system.



Space 6: Mercury



(3)

- 1.9 Add page numbering in the footer as follows:

- Insert automatic page numbers in the format Page X of Y.
- Align odd page numbers to the left and even page numbers to the right.

(4)

- 1.10 Insert the **1Back** image as a watermark on the last page only.

(2)

Save and close the **1Solar** document.

**[25]**

QUESTION 2: WORD PROCESSING

Open the **2Moon** word processing document that contains information about the moon.

Insert your examination number in the header of the document.

- 2.1 Insert the Slice (Dark) cover page and remove the additional content control, besides the title. (2)
- 2.2 Change the line spacing of the paragraphs that start with 'Introduction' and end with '... Moon since then.' to be exactly 20 pt with a hanging indentation of 1 cm. (3)
- 2.3 Find and replace all the occurrences of the exact word 'planet' with a small caps effect formatting and raise the position of the text by 3 pt. (3)
- 2.4 Insert an automatic bibliography below the text 'Question/Vraag 2.4' in the APA style. (2)
- 2.5 Find the text below the heading 'Moon Phases for 2024' and format the text to appear as shown below. (4)

Moon Phases for 2024		
New Moon	September 3, Tue	03:56
First Quarter	September 11, Wed	08:06
Full Moon	September 18, Wed	04:36
Last Quarter	September 24, Tue	20:52
New Moon	October 2, Wed	20:50
First Quarter	October 10, Thu	20:56
Full Moon	October 17, Thu	13:27
Last Quarter	October 24, Thu	10:05
New Moon	November 1, Fri	14:48

- 2.6 Change the page orientation of the last page only to landscape. (2)
- 2.7 Replace the text watermark with the ☾ symbol (Webdings character code 224) of a 800 pt size. (3)
- 2.8 Add the file path in the footer of the document. (1)

Save and close the **2Moon** 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 it to other cells in a spreadsheet.
- Insert formulae and/or functions in such a manner that the correct results will still be obtained even if values are changed in the existing data.
- Should you need to use building blocks, use the space allocated for this in the spreadsheet data file.

Open the **3Sales** spreadsheet that contains information about the most popular products sold by the SPACE OUT shop during September 2024.

Work in the **Target** worksheet.

- 3.1 Move the **Target** worksheet to a new workbook. Save the new workbook as **3Target** in your examination folder. (2)

Save and close the **3Target** spreadsheet.

Work in the **Sales** worksheet.

- 3.2 Insert a comment in **cell A1** with the text 'Popular'. (1)

- 3.3 Insert a function in **cell D3** to display the price of the cheapest product sold. (1)

- 3.4 Insert a COUNTIFS function in **cell D5** to determine how many products have a delivery shipment method with a total cost of R1 000 or more. (4)

- 3.5 Insert a combination of functions in **cell A12** to create the receipt number for the Galaxy (T-shirt) product.

The receipt number is created as follows:

- The day of the month on which the product was bought, followed by
- The first three letters of the product, followed by
- @SO (5)

- 3.6 Insert a formula in **cell F11** to calculate the total VAT (15%) payable on the price for the product sold. (3)

- 3.7 Apply a spreadsheet feature to **column G** to display all cells with a yellow background fill where the shipment method is the same as the selection made in **cell H3**. (5)

Save and close the **3Sales** spreadsheet. [21]



**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 it to other cells in a spreadsheet.
- Insert formulae and/or functions in such a manner that the correct results will still be obtained even if values are changed in the existing data.
- Should you need to use building blocks, use the space allocated for this in the spreadsheet data file.

Open the **4Shows** spreadsheet which contains information about the planetarium shows that are booked for November 2024 to December 2024 at the SPACE OUT shop.

Work in the **Sheet1** worksheet.

- 4.1 Rename **Sheet1** to **Shows**. (1)
- 4.2 Insert a function in **cell D3** to determine the fourth highest number of people that will attend a show. (2)
- 4.3 Insert a function in **cell D5** to calculate the total number of people who will attend the Milky Way shows. (3)
- 4.4 Insert a function in **cell C10** to determine the session for Pieterse, B. Use the show time and the **Session** worksheet. (4)
- 4.5 Insert a formula in **cell D12** to determine the number of days from the current date until the show begins. (2)
- 4.6 The final cost is calculated by multiplying the cost per person with the number of people, and then give discount, if applicable.

Discount is given as follows:

- If the session is a morning session and the organisation is a school, 5% discount is given.
- If the organisation is a business, 3% discount is given.
- No discount is given in all other cases.

Insert a nested IF in **cell J10** to calculate the final cost. (7)

Save and close the **4Shows** spreadsheet. [19]

**QUESTION 5: DATABASE**

The database contains details about the SPACE OUT shop's employees, customers and stock.

Open the **5Inventory** database.

5.1 Open the **tbl5\_1** table in Design View and edit it as follows:

5.1.1 Edit the field properties of the *Name* field so that the name will appear in capital letters. (1)

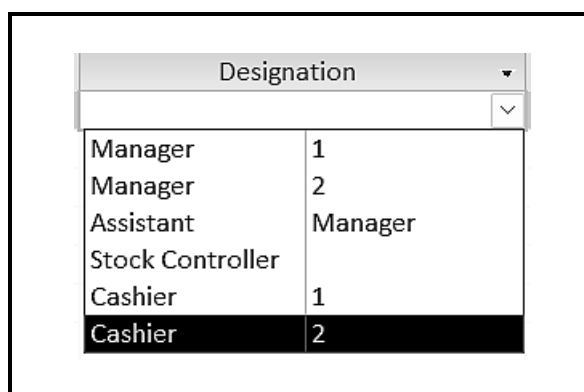
5.1.2 Change the *IDNo* field as follows:

- Ensure that an employee can only be captured once.
- Edit the field size to accept a South African ID number without spaces. (2)

5.1.3 Insert a validation rule for the *StartDate* field to make sure that valid dates are entered as follows:

- The company started on 1 June 2021.
- Employees cannot be appointed after the current date.
- Add appropriate validation text. (4)

5.1.4 Modify the lookup properties for the *Designation* field for the values to appear as shown in the example below when viewed in Datasheet View.



Designation	
Manager	1
Manager	2
Assistant	Manager
Stock Controller	
Cashier	1
Cashier	2

(2)

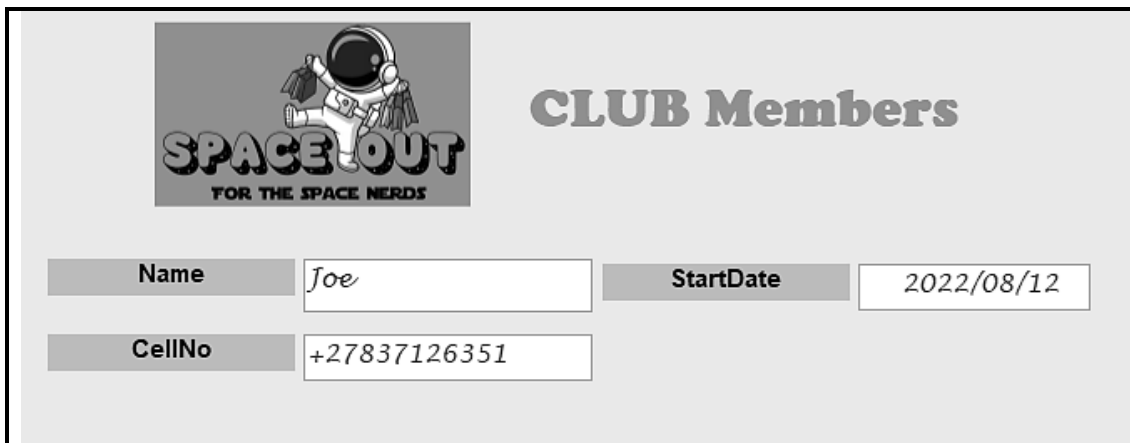
Save and close the **tbl5\_1** table.

5.1.5 Import the **5Events** spreadsheet as a new table **tblEvents** into the database. Make sure that there is no primary key in the table. (3)

- 5.2 Modify the form **frm5\_2** based on the **tblMembers** table to display as shown in the example below.

**NOTE:**

- The size of the image **5Logo** is 5 cm x 3 cm.
- An input mask was added to the *CellNo* field so that data is captured in the correct format.



CLUB Members	
Name	Joe
StartDate	2022/08/12
CellNo	+27837126351

Save and close the **frm5\_2** form.

(6)

- 5.3 Open the query called **qry5\_3** based on the **tblStock** table in Design View.

Insert a calculated field *Profit* to calculate the amount of profit that will be made on each product.

Save and close the **qry5\_3** query.

(3)

- 5.4 Open the **qry5\_4** query based on the **tblStock** table in Design View.

Create a list to display the T-shirt products that have less than five items in stock or any other product with 15 or more items in stock.

Save and close the **qry5\_4** query.

(5)

5.5 Open the **qry5\_5** query based on the **tblStock** table in Design View.

Modify the query to display as shown in the example below.

qry5_5	
Category	SumOfInventoryValue
Puzzle	R15 020.00
Coffee Mug	R16 400.00
Building Blocks	R16 791.00
Bedding	R17 964.00
Astronomy	R29 234.00
Clothing	R29 935.00
Toys	R59 000.00
Decorative	R76 774.00

Save and close the **qry5\_5** query.

(5)

5.6 Open the **rpt5\_6** report based on the **tblStock** table in Design View and make the following changes:

- Replace the report header with the text 'Stock'.
- Add a function in the *Category* footer to display the number of products per category.
- Add a suitable label to the function.

Save and close the **rpt5\_6** report.

(4)

Save and close the **5Inventory** database.

[35]

**QUESTION 6: WEB DESIGN (HTML)****NOTE:**

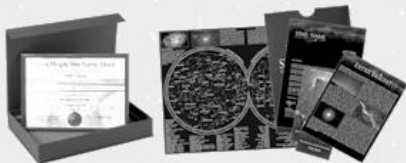
- You may **NOT** use a word processing program such as Word to answer the HTML questions.
- An HTML tag sheet has been attached for reference.
- All files needed to complete this question can be found in the examination folder.

A web page was created to promote the initiative of naming a star.

- 6.1 Open the incomplete **6\_1Star** file in a web browser and also in a text/HTML editor (NOT a word processing program such as Word).

Your final web page should look like the example below.

## Name a STAR



### South Africa's #1 Star Registry!

Name a South African visible star for someone special. Naming a star is as easy as filling in our short form and then waiting for your pack in the post or by e-mail. Prices start from just R575. Please contact us if you require any help. We have live chat and are quick to reply by e-mail.

### Over 150 000 stars named

We have named over 150 000 stars for our customers all across the globe! Our award-winning customer support team is here to help, so don't hesitate to contact us with any questions you might have. We name stars for any occasion such as a romantic gift for your partner, in remembrance of someone or as a gift (especially a birthday gift!).

<b>Standard Star</b> (R575.00)	<p>These packages include the full documentation to name your very own star. Packages contain the following information:</p> <ul style="list-style-type: none"><li>◦ Entry into the registry</li><li>◦ Locating via our new app</li><li>◦ A4 Star Name Deed</li><li>◦ The Sky Atlas star maps</li><li>◦ Confirmation letter</li><li>◦ Free stargazing software download</li><li>◦ Gift explanation</li></ul>
<b>Extra Bright Star</b> (R775.00)	
<b>Binary Star</b> (R975.00)	

[Name a Star](#)

**NOTE:**

- Use the example on the previous page as a guideline when answering this question.
- Question numbers appear as comments in the coding to indicate where you should insert the answer(s). DO NOT delete these comments.

6.1.1 Insert your examination number as a comment in the web page. (1)

6.1.2 Insert the image **6\_1Gift** so that it appears as in the example on the previous page. (2)

6.1.3 Format the table as follows: (6)

- Set the space between the text and the cells to 15 pt.
- Edit the columns and the list to appear as in the example on the previous page.

6.1.4 Insert tags on the image **6\_1Button** that links it to the URL at the bottom of the web page. (2)

Save and close the **6\_1Star** file.

- 6.2 Open the incomplete **6\_2Mars** file in a web browser and also in a text/HTML editor (NOT a word processing program such as Word).


Modify the existing HTML code so that your final web page displays like the example below.

**NOTE:** Do NOT change the background colour.

## Living on Mars

### Could we really live on Mars?

The possibility of life on Mars is a subject of interest in astrobiology due to the planet's proximity and similarities to Earth.



### WHY MARS?

Mars is one of Earth's closest habitable neighbours. Mars is about half as far from the Sun as Earth is, so it still has decent sunlight.

---

Diameter - 6 791 km

Gravity - 38% of Earth

Distance - 225 M km

*"You want to wake up in the morning and think the future is going to be great - and that is what being a spacefaring civilisation is all about. It is about believing in the future and thinking that the future will be better than the past. And I cannot think of anything more exciting than going out there and being among the stars."*

-Elon Musk

Save and close the **6\_2Mars** file.

(3)

ONE mark will be allocated for closing tags and correct nesting in both the web pages.

(1)  
**[15]**

**QUESTION 7: GENERAL**

Open the **7Envelope** document.

7.1 Prepare envelopes using mail merge as follows:

Only new members from the SPACE OUT shop will receive a letter.

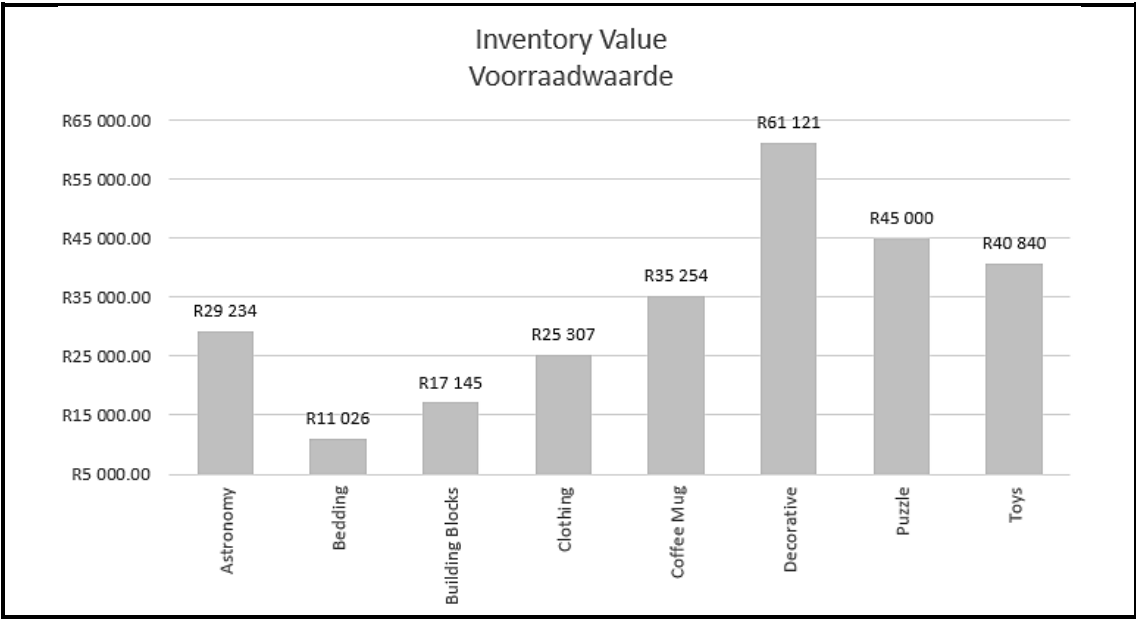
- Use the **7Members** spreadsheet as the data source for the **7Envelope** document.
- Replace the text <<ADDRESS>> with the *Address* field.
- Save the **7Envelope** document in your examination folder, but do NOT close it.
- Complete the merge and save the document as **7Merged**.

(5)

Close the **7Envelope** document.

Open the **7Chart** document.

7.2 Modify the chart in the **7Chart** document to appear as follows:



(4)

7.3 Insert a linked icon to the **7Stock** spreadsheet, below the text 'Question/Vraag 7.3', that automatically updates.

(2)

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

Open the **7Inventory** spreadsheet.

7.4 Work in the **Total** worksheet.

Apply a spreadsheet feature to display the total inventory value for each category. Make sure that each category displays on a new page.

(4)

Save and close the **7Inventory** spreadsheet.

[15]

**TOTAL: 150**



## 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
<u></u>	Creates underlined 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"></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
<a href="mailto:#NAME"></a>	Links to an e-mail address
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"
<center></center>	Horizontally centres text, a section, table or an image
<ol type="A", "a", "I", "i", "1"></ol>	Defines the type of numbering used
<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
	Adds an image
	Aligns an image: can be "right", "bottom", "top"
<p align="center"></p>	Aligns an image in the "center", can also be "middle"
	Sets the size of the border around an image
	Sets the height and width of an image
	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 cellpadding="1">	Sets the space between the table cells
<table cellspacing="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**

<b>CHARACTER</b>	<b>DESCRIPTION</b>
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 <b>Regional Settings Properties</b> 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 mark 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)

**YOU MAY USE THIS PAGE FOR ANY PLANNING PURPOSES.**

**YOU MAY USE THIS PAGE FOR ANY PLANNING PURPOSES.**

Examination sticker

**150****COMPUTER APPLICATIONS TECHNOLOGY P1 – NOVEMBER 2024****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 2016	Microsoft Office 2019	Microsoft Office 2021	Office 365	
WEB BROWSER USED (Mark appropriate box with a cross (X))	Mozilla Firefox	Google Chrome	Internet Explorer	Microsoft Edge	Other (Specify)

FOLDER NAME \_\_\_\_\_

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

Question Number	File name	Saved (✓)	Attempted (✓)	Maximum Mark	Mark Achieved	Marker Initial/ Code
1	1Solar			25		
2	2Moon			20		
3	3Sales			21		
	3Target					
4	4Shows			19		
5	5Inventory			35		
6	6_1Star			15		
	6_2Mars					
7	7Envelope			15		
	7Chart					
	7Inventory					
	7Merged					
<b>TOTAL</b>				<b>150</b>		

Comment: (for office/marker use only)