## basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

## NATIONAL SENIOR CERTIFICATE

## GRADE 12



MARKS: 150

TIME: 3 hours

This question papers 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. 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 2023 DATA.exe
- Click on the 'Extract' button.
- Click the 'Show Password' check box.
- Enter the following password: 1234cars
- Once extracted, verify the contents of the folder by opening one or more files.
- Once the contents of the files have been verified, rename the folder CAT P1 Nov 2023 DATA with your examination number.

The following list of files will be available in the folder:

| - 1Top10 | Word processing document |
| :--- | :--- |
| - 1Toyota | Image |
| - 2Tips | Word processing document |
| - 3CarSales | Spreadsheet |
| - 4Sales | Spreadsheet |
| - 5Bus | Image |
| - 5Card | Image |
| - 5Shuttle | Database |
| - 6_1Rover | Image |
| - 6_1Win | HTML file |
| - 6_2Father | Image |
| - 6_2Logo | Image |
| - 6_2Opening | HTML file |
| - 7Bookings | Spreadsheet |
| - 7New | Word processing document |

## SCENARIO

Different types of transportation are used for moving people and goods from one point to another. Although many people use public transportation, cars have become more popular over the years.

## QUESTION 1: WORD PROCESSING

Open the 1Top10 word processing document and insert your examination number in the header or footer.

The document contains information about the top ten car brand sales in South Africa during 2022.
1.1 Insert the Retrospect cover page as follows:

- Document title: 'Popular Cars'
- Remove the subtitle control.
1.2 Find the heading that starts with 'These were South ...' and use font formatting to display the heading as shown below.

1.3 Find the text 'Question/Vraag 1.3' and replace it with the image 1Toyota. Apply a 'Soft-Edge Rectangle' picture style to the image.
1.4 Find and replace all occurrences of the word 'Hilux' so that it appears expanded by 1 pt with a scale of $150 \%$.
1.5 Find the table below the heading that starts with 'South Africa's 10 ...' and modify it to appear as the example below.

| South Africa's 10 best-selling car brands of 2022 |
| :--- | :--- | :--- |
| $\qquad$Car brand Units sold \%Value <br> Ford 26335 $-15.40 \%$ <br> Haval 22644 $18.80 \%$ <br>  Hyundai 36047 <br>  $7.70 \%$  <br> Isuzu 21274 $7.00 \%$ <br> Kia 22766 $12.90 \%$ <br> Nissan 30487 $1.00 \%$ <br> Renault 27251 $29.60 \%$ <br> Suzuki 47178 $71.00 \%$ <br> Toyota 132035 $12.20 \%$ <br>  Volkswagen 69801 <br>  $-2.50 \%$  <br> Minimum \%Value $-15.40 \%$  |

NOTE: The data for Volkswagen is moved into the table.
1.6 Find the chart/graph below the text that starts with 'The graph below ...' and insert the caption to display as 'Graph 2: Bestsellers'.
1.7 Find the letter ' D ' below the heading 'Expectations for new ...' and format the letter as displayed in the example below.

Despite the positive numbers for car manufacturers in 2022, the new car market's strong performance is decelerating due to repeating increases in interest rates since November 2021. NAAMSA and car retailer Combined Motor Holdings (CMH) expect this to burden car sales.

NOTE: The background colour of the letter $D$ should display in a green shading.
1.8 Find the heading that starts with 'The top $10 \ldots$ ' and the table below the heading.

Change the settings to make sure that the heading and the table will always remain together.
1.9 Insert the file path in the header of the last page only.

Save and close the 1Top10 document.

## QUESTION 2: WORD PROCESSING

Open the 2Tips word processing document and insert your examination number in the header or footer.

The document contains tips that can be followed when buying a vehicle.
2.1 Change the margins of the document to narrow margins.
2.2 Add a 3 pt border on the left and right side of the first page only.
2.3 Create a link as follows:

- Find the text 'Contact form' and create a bookmark called 'Contact'.
- Insert a link on the text 'choosing' in the first paragraph to the 'Contact' bookmark.
2.4 Find the text that starts with '1. A new vehicle ...' and ends with '... start the research:'.

Change the numbered list to a bulleted list with the symbol (Webdings: Character code: 142).
2.5 Edit the form controls below the heading 'Contact form' as follows:
2.5.1 Find the text form field next to the text 'Surname' and apply a word processing feature to the text form field so that it appears as the rest of the form fields.
2.5.2 Change the text form field next to the text 'Name' to display the data in capital letters.
2.5.3 Edit the text form field next to the 'Contact number' so that it can only accept the correct number of digits.

Examples: 0825893654 or 0359586321
2.5.4 Edit the text form field next to the text 'Preferred time to call' so that a user can insert a specific time of day in the format: h:mm am/pm
2.6 Insert a shape to appear as in the example below.

2.7 Find the SmartArt on the last page and format the SmartArt to appear as shown in the example below.


NOTE: A '3D Cartoon' style was applied.
Save and close the 2Tips document.

## 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 3CarSales spreadsheet which contains the number of cars sold by the salespersons for the period October 2022 to September 2023.

Work in the Total worksheet.
3.1 Edit the heading in row 1 as follows:

- Merge and centre cells A1:J1.
- Apply a 'Distributed (Indent)' horizontal text alignment with an indent of 13.
3.2 The total number of cars sold by each salesperson for the period 2022/2023 is stored in row 7.

Insert a function in cell E3 to determine the second lowest total number of cars sold by a salesperson for the period 2022/2023.
3.3 Insert a function in cell E4 to determine the number of months in which the total monthly sales of cars were fewer than 15.
3.4 Apply a spreadsheet feature to cells C9:I20 to display the percentage values of 0 to 50 in a two-colour scale format style. Change the colour of the minimum value to blue.
3.5 Insert a lookup function in cell F23 to display the name of the salesperson who sold the most cars for the period 2022/2023.

Save and close the 3CarSales spreadsheet.

## 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 4Sales spreadsheet which contains information on cars bought in September 2023 at Sam's Dealership.

NOTE: A dialogue box will display when opening the file. Click on OK.
Work in the Sales worksheet.
4.1 Change the format in column $\mathbf{H}$ to an appropriate data type and make sure that all the information in the column is visible.
4.2 The function in cell C3 was an attempt to determine if the total interest (cell E3) is $8 \%$ of the total car prices (column E).

However, the function displays an incorrect result.
Correct the formula in cell C3 to display the correct result.
4.3 Insert a function in cell C5 to calculate the total price (column E) for all the Hyundai i-models.
4.4 Modify the function in cell A11 to only display the initial(s) of the customer (column B).
4.5 The total cost for a car is calculated by adding the price and the interest. However, if a buyer wants extra accessories (column G), an additional $5 \%$ is added to the total cost.

Insert a formula/function in cell $\mathbf{H 1 0}$ to calculate the final total cost for Basson.

Work in the Chart worksheet.
4.6 Modify the chart to appear as the example below.


NOTE: The column colours have been set to vary by point.
Save and close the 4Sales spreadsheet.

## QUESTION 5: DATABASE

The database contains information on the drivers and clients of a shuttle company.
Open the 5Shuttle database.
5.1 Open the tbl5_1 table in Design View.
5.1.1 Change the properties of the Name field to make sure that a name is always entered.
5.1.2 Edit the properties of the StartDate field to display in the format: dd-mmm-yy
5.1.3 A driver's licence number must be entered in a specific format.

Change the properties of the LicenceNo field so that a user will enter data as follows:

- SIX compulsory numbers; followed by
- THREE capital letters; followed by
- ONE optional number

Examples: 435698XKJ8 or 963214PJH
5.1.4 Change the properties of the Rating field to ONLY accept ratings from 1 to 5 . No default value should appear in this field.
5.1.5 Insert a new field called LicenceCard above the LicenceNo field.

Insert the 5Card image, in Datasheet View, for the driver Mark Lopez.
Save and close the tbl5_1 table.
5.2 Open the frm5_2 form, based on the Pre-bookings table, in Design View and edit as follows:

- Insert the 5Bus image in the form header as a logo.
- Change the properties of the Reason field to a combo box to display the options 'Business' and 'Personal'.

Save and close the frm5_2 form.
5.3 Create a query called qry5_3 based on the Pre-bookings table as follows:

Display only the name, surname and contact number of the following clients:

- Business clients who travel more than 30 km
- Any clients who travel 10 km or less

Save and close the qry5_3 query.
5.4 Open the qry5_4 query, based on the Pre-bookings table, in Design View.

Modify the query to display the clients who will use the shuttle services to depart in December.

Save and close the qry5_4 query.
5.5 Open the qry5_5 query, based on the Pre-bookings table, in Design View.

Insert a new field Total to calculate the total travel cost for a client for a return trip. The client is charged R6,25 per kilometre travelled.

Save and close the qry5_5 query.
5.6 Open the rpt5_6 report, based on the Pre-bookings table, in Design View and modify as follows:

- Insert a function in the group footer to indicate the total clients per Reason.
- Change the page orientation to landscape.
- Export the report as a PDF document called 5Pre-bookings to your data folder.

Save and close the rpt5_6 report.
Save and close the 5Shuttle database.

## 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 data folder.

A web page was created for a promotional competition to win a car from Sam's Dealership.
6.1 Open the incomplete 6_1Win file in a web browser and also in a text/HTML editor.

Your final web page should look like the example below.


Join the friendly people from Sam's Dealership and stand a chance to win.


Ts and $C_{s}$
a. This promotional competition is organised by Sam's Dealership.
b. No director, subscriber, partner, employee, agent of, or consultant to the Promoter or any other person who directly or indirectly controls or is controlled by the Promoter, their advertising agencies, or their spouses, life partners, parents, children, brothers, sisters, business partners or associates, may enter this promotional competition.
c. All participants must be resident in South Africa and be over the age of 18 years.
d. By entering the competition you agree and understand that there is no guarantee that you will win a prize.
e. There will be one winner only.
f. Prizes are not transferable, may not be deferred or be exchanged for cash or otherwise.
g. If any taxes, levies, duties or any charges whatsoever are levied on a prize by any competent authority, the winner will be liable for these and the prize value will not be increased to compensate for such charges.
h. The winner will be randomly drawn at Head Office.
i. The decision of the judges will be final and no correspondence regarding this will be entered into.

## NOTE:

- Use the example above as a guide 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 an attribute to the body tag so that the web page colour displays light blue.
6.1.2 Modify the image tag attributes so that the images appear as shown in the example on the previous page.
(2)
6.1.3 Change the HTML code so that the 'Home' text displays in the table as shown in the example on the previous page.
6.1.4 Insert a tag to the table heading 'Ts and Cs' so that it will link to the 6_1Win web page.
6.1.5 Modify the HTML code to display the list as shown in the example on the previous page.

Save and close the 6_1 Win file.
6.2 Open the incomplete 6_2Opening web page in a web browser and also in a text/HTML editor.

Complete the web page to resemble the example below.


Save and close the 6_2Opening file.
ONE mark will be allocated for closing tags and correct nesting in both the files.

## QUESTION 7: GENERAL

Open the 7New word processing document.
7.1 The shuttle company is upgrading their logo. Use WordArt and the images in the file to create a new logo, as shown below.


## NOTE:

- The final logo should be one image.
- Save the final logo as an image called 7NewLogo.

Save and close the 7New document.
7.2 Open the 7Bookings spreadsheet.
7.2.1 Shuttle drivers need to be notified one and a half hours before a client's departure time.

Insert a function in cell D8 to calculate the time a driver should be notified.
7.2.2 Insert a formula in column $\mathbf{G}$ to calculate the number of days between the departure and return dates for all clients.
7.2.3 Edit the worksheet as follows:

- Change the settings to make sure that when the entire worksheet is printed, the information in columns $\mathbf{A}$ to $\mathbf{G}$ will appear on the first page.
- Edit the print options to include the row and column headings.

Save and close the 7Bookings spreadsheet.

HTML TAG SHEET

| Basic Tags |  | Formatting Tags continued |  |
| :---: | :---: | :---: | :---: |
| Tag | Description | Tag | Description |
| <body></body> | Defines the body of the web page | <li></li> | Inserted before each list item, and adds a number or symbol depending on the type of list selected |
| <body bgcolor="pink"> | Sets the background colour of the web page |  |  |
| <body text="black"> | Sets the colour of the body text | <img src="name"> | Adds an image |
| <head></head> | Contains information about the web page | <img src="name" align="left"> | Aligns an image: can be "right", "bottom", "top" |
| <html></html> | Creates an HTML document starts and ends a web page | $\begin{aligned} & \text { <p align="center"><img } \\ & \text { src="name"></p> } \end{aligned}$ | Aligns an image in the "center", can also be "middle" |
| <title></title> | Defines a title for the web page | <img src="name" border="1"> | Sets the size of the border around an image |
| <br/> | Inserts a line break | $\begin{aligned} & \text { <img sr="name" } \\ & \text { width="200" height } \\ & =" 200 \text { "> } \end{aligned}$ | Sets the height and width of an image |
| <!-- --> | Comment |  |  |
| Text Tags |  | <img src="name" alt="alternative text"> | Displays alternative text when the mouse hovers over the image or when the image is not found |
| Tag | Description |  |  |
| <h1></h1> | Creates the largest heading |  |  |
| <h6></h6> | Creates the smallest heading | <hr/> | Inserts a horizontal line |
| <b></b> | Creates bold text | <hr size="3"/> | Sets size (height) of a line |
| <i><li> | Creates italic text | <hr width="80\%"/> | Sets the width of a line, in percentage or absolute value |
| <u></u> | Creates underlined text |  |  |
| <font size="3"></font> | Sets size of font, from "1" to "7" |  |  |
| <font color= "green"> </font> | Sets font colour | <hr color= "ff0000"/> | Sets the colour of the line |
| <font face="Times New Roman"></font> | Sets font type | Table Tags |  |
|  |  | Tag | Description |
| Links Tags |  | <table></table> | Creates a table |
| Tag | Description | <tr></tr> | Creates a row in a table |
| <a href="URL"></a> | Creates a hyperlink | <td></td> | Creates a cell in a table |
| <a href="URL"><img src="name"></a> | Creates an image link | <th></th> | Creates a table header (a cell with bold, centred text) |
| <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 | <table width="50"> | Sets the width of the table |
| <a href= "mailto:\#NAME"></a> | Links to an e-mail address | <table border="1"> | Sets the width of the border around the table cells |
| Formatting Tags |  | <table cellspacing="1"> | Sets the space between the table cells |
| Tag | Description | <table cellpadding="1"> | Sets the space between a cell border and its contents |
| <p></p> | Creates a new paragraph | <tr align="left"> | Sets the alignment for cell(s) ("left", can also be "center" or "right") |
| <p align="left"> | Aligns a paragraph to the "left" (default), can also be "right" or "center" |  |  |
| <center></center> | "center" <br> Centre text, a table of an image horizontally | <tr valign="top"> | Sets the vertical alignment for cell(s) ("top", can also be "middle" or "bottom") |
| <ol></Ol> | Creates a numbered list |  |  |
| $\begin{aligned} & \text { <ol type="A","a", } \\ & \text { "l","i","1"></ol> } \end{aligned}$ | Defines the type of numbering used | <td colspan="2"> | Sets the number of columns a cell should span |
| <ul></ul> | Creates a bulleted list |  |  |
| $\begin{aligned} & \hline \text { <ul type="disc"," } \\ & \text { "square","circle"> <ul> } \end{aligned}$ | Defines the type of bullets used | <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 mark anywhere in the input mask. |
| 1 | Causes the character that follows to be displayed as the literal character (e.g. $\backslash \mathrm{A}$ is displayed as just A ) |

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

| Examination sticker |  <br> 150 |
| :--- | :--- |

## COMPUTER APPLICATIONS TECHNOLOGY P1 - NOVEMBER 2023

INFORMATION SHEET (to be completed by the candidate AFTER the 3-hour session)
CENTRE NUMBER $\qquad$
EXAMINATION NUMBER $\qquad$
WORKSTATION NUMBER $\qquad$

| SUITE USED <br> (Mark appropriate <br> box with a cross $($ X $)$ ) | Microsoft <br> Office 2016 | Microsoft <br> Office 2019 | Microsoft <br> Office 2021 | Office 365 |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| WEB BROWSER USED <br> (Mark appropriate <br> box with a cross $(\mathbf{X})$ ) | Mozilla <br> Firefox | Google <br> Chrome | Internet <br> Explorer | Microsoft <br> Edge | Other <br> (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 (V) | Attempted (V) | Maximum Mark | Mark Achieved | Marker Initial/ Code |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1Top10 |  |  | 24 |  |  |
| 2 | 2Tips |  |  | 21 |  |  |
| 3 | 3CarSales |  |  | 17 |  |  |
| 4 | 4Sales |  |  | 23 |  |  |
| 5 | 5Shuttle |  |  | 35 |  |  |
|  | 6_1Win |  |  |  |  |  |
| 6 | 6_2Opening |  |  | 15 |  |  |
|  | 7Bookings |  |  |  |  |  |
| 7 | 7New |  |  | 15 |  |  |
|  | 7NewLogo |  |  |  |  |  |
| TOTAL |  |  |  | 150 |  |  |

Comment: (for office/marker use only)

