



COMPUTER APPLICATIONS TECHNOLOGY: PAPER I

Time: 3 hours

180 marks

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. This question paper consists of 17 pages and an appendix (HTML Tag List and Input Mask Character Sheet) of 2 pages (i–ii). Please check that your question paper is complete.
2. Before you begin, change your Data Files folder to *your* examination number. E.g.  **Data Files** becomes  **1234567890**.
3. The examination consists of 5 sections and 9 questions. All questions in all sections must be answered. Follow the instructions for each question carefully.
4. You must use a text editor for the HTML section. Acceptable applications are Notepad, Notepad++ or WordPad. Microsoft Word may **NOT** be used for HTML coding.
5. Unless otherwise instructed, use functions and/or formulas to calculate answers.
6. Take note of the mark allocation to ascertain the complexity of the solution required and the amount of time you should spend on each question.
7. Save your work regularly.
8. Ensure your Developer Tab is enabled in Microsoft Word and Microsoft Excel.
9. If you are unable to get a formula/function to work correctly, open the **Student Screenshots** document. Indicate the question number, paste a screenshot showing the issue and provide a brief explanation to obtain part marks. You may then leave it out of the spreadsheet or database solution.
10. Screenshots should be appropriately cropped to display all relevant information only.
11. Unless other instructions are given, all word-processing documents should be set up as follows:
 - Measuring units – centimetres (cm)
 - Language – English (South Africa)
 - Page size – A4
 - Margins – 2.54 cm



12. If available, you may use the offline help function in each application.
13. Figures in the question paper have a border. When a figure is provided as part of a question, you are not expected to add the border unless instructed to do so.
14. Do not rename any files or folders unless instructed to do so.
15. Do not create any folders or subfolders unless instructed to do so.
16. Do not delete, move, or duplicate any files or folders unless instructed to do so.
17. Save your work at regular intervals to prevent data loss. If needed, your teacher/invigilator will make back up data files available to you.

The contents of your examination Data Files folder and subfolders are as follows:

Data Files	Q1 * <i>Empty</i>	Q2
<ul style="list-style-type: none"> Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Student_Screenshots.docx 	<ul style="list-style-type: none"> Backup * _Q1_Answers.docx Barcodes.csv Employees.xlsx Logo.png Margarine.jpg Prices.xlsx Product Presentation.pptx Products.xlsx Rice.jpeg Sunflower Oil.png Welcome to Wholesale Bargain Store.docx White Sugar.png 	<ul style="list-style-type: none"> 2BusinessPlan.docx Logo.png
		Q3
		<ul style="list-style-type: none"> 3AboutWholesale.docx Logo.png Product Presentation.pptx
		Q4
		<ul style="list-style-type: none"> 4SupplierLetter.docx
		Q5
		<ul style="list-style-type: none"> 5SupplierInfo.xlsx Groceries.jpg
		Q6
		<ul style="list-style-type: none"> 6Products.xlsx
		Q7
		<ul style="list-style-type: none"> 7PopularBrands.xlsx
Q8	Q9	Q9 img
<ul style="list-style-type: none"> 8WholesaleData.accdb Groceries.jpg 	<ul style="list-style-type: none"> img 9WholesaleHome.html 	<ul style="list-style-type: none"> Groceries.jpg Logo.png Sugar.png Oil.png Tea.jpeg

Check each folder and ensure that every file/document/folder is accessible.

Scenario**The Wholesale Bargain Store**

The *Wholesale Bargain Store* sells household products and groceries. Products can be bought individually or in bulk. The *Wholesale Bargain Store* has many promotional specials on items at regular intervals. Items for sale include well-known brands and the store's exclusive brand, The *Wholesale Bargain Store*.

SECTION A FILE AND FOLDER MANAGEMENT**QUESTION 1**

Open and work only in the folder named **Q1**.

Ensure that the view in the **File Explorer** window is set to the **Details** layout view.

- 1.1 Sort the contents in ascending order according to file type. Provide a screenshot in the **_Q1_Answers.docx**. (3)
- 1.2 Answer the following questions by inserting your answers in the **_Q1_Answers.docx** document.
 - 1.2.1 Determine the bit depth of the PNG file named **Logo.png**. Type your answer in the **_Q1_Answers.docx** document. (1)
 - 1.2.2 Add the Author Property to the **Details** view and provide a screenshot in the **_Q1_Answers.docx** document. (1)
 - 1.2.3 Take a screenshot of the edition of the operating system installed on your computer and place it in the **_Q1_Answers.docx** document. (1)
 - 1.2.4 Determine the size of the **Products.xlsx** document on the disk in KB. Type your answer in the **_Q1_Answers.docx** document. (1)
- 1.3 Edit the properties of the **Product Presentation.pptx** document so that no changes can be made or saved to that file. (1)
- 1.4 Copy the **Product Presentation.pptx** file into the **Backup** folder. (1)
- 1.5 Move all the files with the .xlsx file extension into the **Backup** folder. (2)
- 1.6 Compress the **Backup** folder and rename the zipped folder to **Archive**. (2)
- 1.7 Save the file **Welcome to Wholesale Bargain Store.docx** as a PDF document with the same name. (1)
- 1.8 Create a shortcut to the word processing application on your computer. (2)

16 marks

SECTION B WORD PROCESSING**QUESTION 2**

Open and work only in the folder named **Q2**.

Open the document **2BusinessPlan.docx** and edit it according to the instructions below.

- 2.1 Insert the **ViewMaster** cover page. (1)

Page 2

- 2.2 Insert the image **Logo.png** located in the **Q2** folder at the top of page 2. (1)

- 2.2.1 Ensure the height is exactly 5 cm and the width is exactly 6 cm. (2)

- 2.2.2 Centre the image. (1)

- 2.3 Insert a drop cap in margin on the first letter of the first heading 'Executive Summary' that drops over two lines. (2)

Page 3

- 2.4 Below the heading 'Financial Plan' on page 3, format the text from '...retail sales...' to '...workshops' to a numbered list and ensure the numbered list is left aligned at 0 cm. See *Figure 1* below as an example. (2)

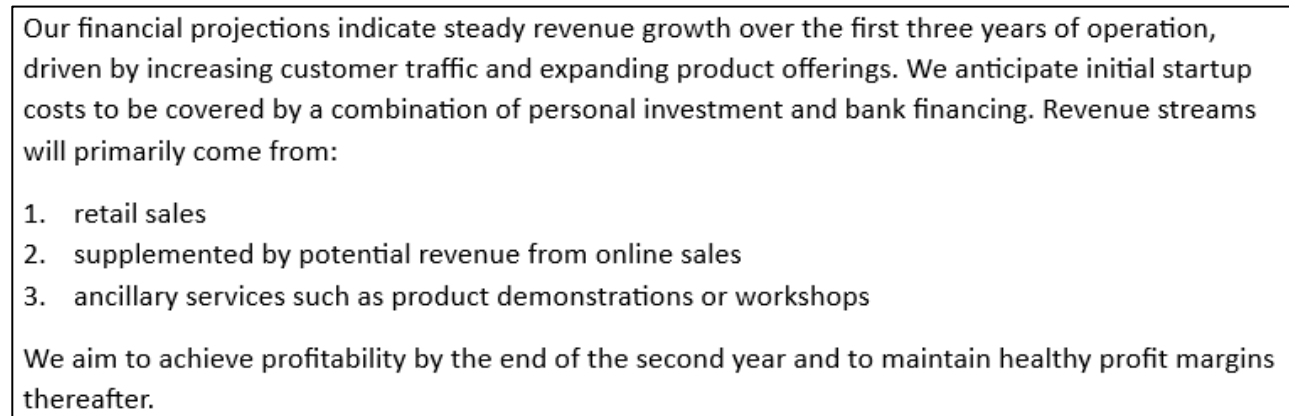


Figure 1

Page 4

- 2.5 Use a feature in Microsoft Word to ensure the paragraphs below the heading 'Conclusion' will never split across two pages. (2)

2.6 Format the SmartArt diagram as follows:

2.6.1 Change the colours to any colourful option of your choice. (1)

2.6.2 Add the text 'Best Service' as the final block to the SmartArt diagram. See *Figure 2* below as an example. (1)

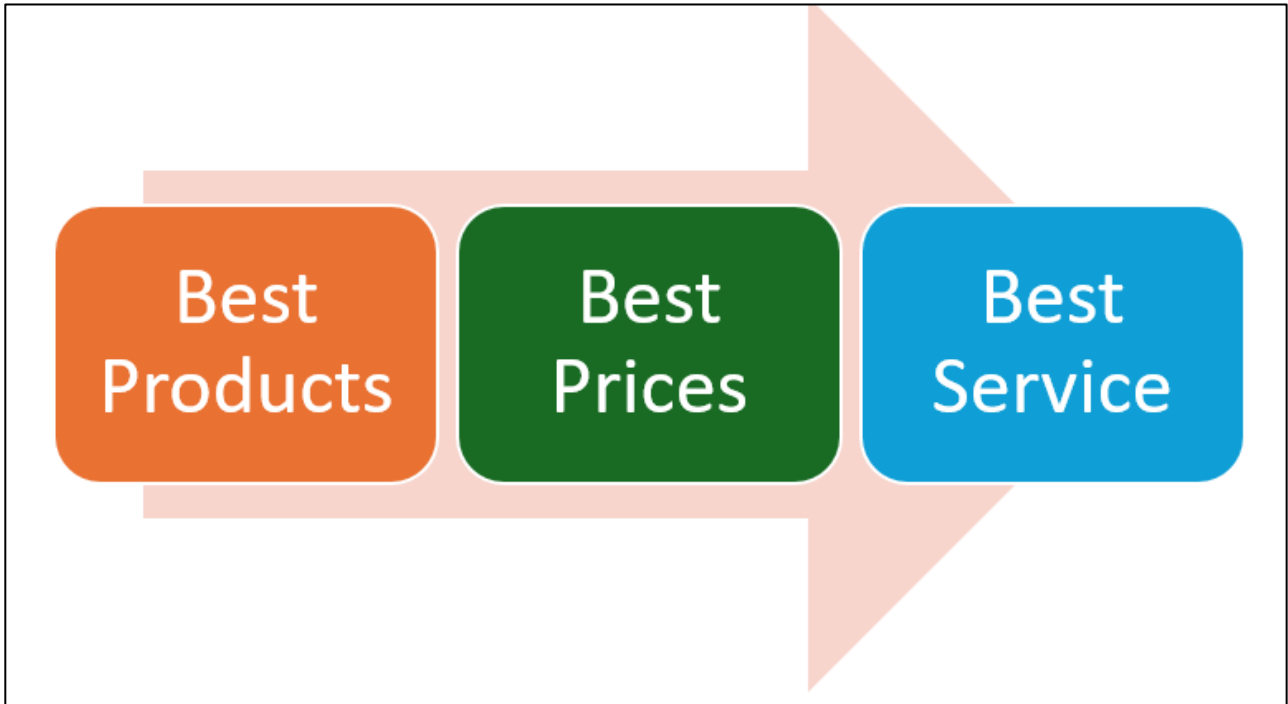


Figure 2

2.7 Apply the style *Intense Quote* to the text 'The End' in the document. (1)

2.8 Insert the file path as a field in the Footer. (1)

Save and close the document.

[15]

QUESTION 3

Open and work only in the folder named **Q3**.

Open the document **3AboutWholesale.docx** and edit it according to the instructions below.

3.1 Change the page orientation to Portrait. (1)

Page 1

3.2 Change the title's font at the top of the page to Tahoma, 33 pt. (2)

3.3 Change the image's position to the middle centre of the page. (1)

3.4 Add the caption 'Figure 1 – Logo' to the image. (1)

Page 2

3.5 Insert the file **Product Presentation.pptx** below the heading 'Our Products' from the **Q3** folder. The presentation must display as an icon. Ensure the file is linked to the original file. (3)

Page 3

3.6 Fix the spelling error on page 3. (1)

3.7 Edit the text below the heading 'Contact Information' with the following **tab stops** and ensure that your text displays correctly. See *Figure 3* below as an example.

3.7.1 Left tab at 6 cm. (1)

3.7.2 Right tab at 15 cm. (2)

3.7.3 Ensure that the tab stops have been applied to the text and it displays the same as shown in *Figure 3* below. (1)

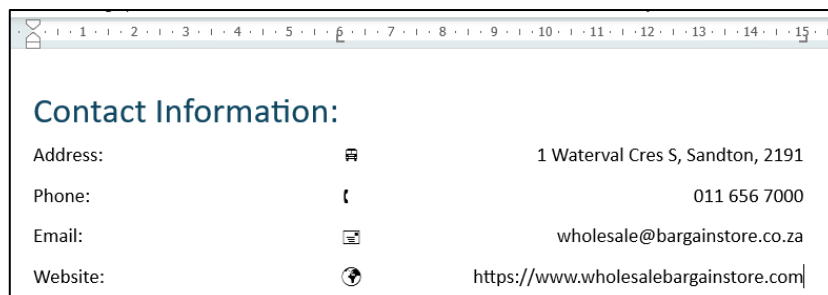


Figure 3

Page 4

3.8 Convert the footnote at the end of this page to an endnote. Ensure that the letter A is used as the numbering format for the endnote. (2)

Save and close the document.

[15]

QUESTION 4

Open and work only in the folder named **Q4**.

Open the document **4SupplierLetter.docx** and edit it according to the instructions below.

- 4.1 Change the page margins to Narrow. (1)
- 4.2 Change the page colour to any shade of orange for the whole document. (1)
- 4.3 Add automatic page numbers to the bottom of the page in the centre of the footer in the format 'Page X of Y'. (3)
- 4.4 Change the paragraph spacing to 6 pt after this for the whole document. (1)

Page 1

- 4.5 Place the following text displayed at the top of the document in a text box. (1)
See Figure 4 below as an example.

David Malcolm	1 Waterval Crescent, Sandton, 2191
Founder	wholesale@bargainstore.co.za
Wholesale Bargain Store	011 656 7000

Figure 4

- 4.6 Insert the date in the format 23 April 2024 as a field at the placeholder 'Date' at the beginning of the document and ensure this field updates automatically. (2)
- 4.7 Format the text of the four paragraphs starting with 'I hope this letter ...' and ending with '... for our mutual success' in columns:
- 4.7.1 Ensure that all the text is placed in two columns. (1)
- 4.7.2 Ensure that there is a line between the columns. (1)
- 4.7.3 Use a word processing feature and ensure that the paragraph that starts with 'At Wholesale Bargain Store ...' moves to the top of the second column. (1)

- 4.8 Convert the text 'Here is a summary of products sold between 2023 and 2024:' to a table and ensure the table is autofitted to the contents. See *Figure 5* below as an example. (2)

	2023	2024
Sales Normal Price	58 050 641	58 724 025
Sales on Promo Price	69 437 291	69 124 258

Figure 5

- 4.9 Apply a red 3 pt paragraph border around the paragraph starting with 'Thank you' and ending with '... our customers'. (2)
- 4.10 Edit the content controls used for suppliers to fill in their information at the bottom of the page as follows:
- 4.10.1 Insert a text form field next to the 'Supplier Name'. (1)
 - 4.10.2 Change the 'Supplier Code' text form field length to 5. (1)
 - 4.10.3 Change the checkbox form field next to 'Interested' so it is checked by default. (1)
 - 4.10.4 Ensure that the list item 'Product' appears first on the drop-down list form field next to 'Product or Service'. (1)

Save and close the document.

[20]

50 marks

SECTION C SPREADSHEETS**QUESTION 5**

Open and work only in the folder named **Q5**.

Open the workbook **5SupplierInfo.xlsx** and edit it according to the instructions below.

Work in the *Suppliers* worksheet.

- 5.1 Merge and centre the contents in the cell range **A1:E1**. (1)
- 5.2 Apply a thick outside border around cell **A1**. (1)
- 5.3 Freeze the top 2 rows of the worksheet. (1)
- 5.4 Use a spreadsheet feature to remove the duplicates in *SupplierName* and *ProductCategory*. (2)
- 5.5 Use a spreadsheet feature to assign a number in **Column A** to each supplier. (1)
- 5.6 Create a unique *SupplierCode* for each supplier in **Column B** consisting of the first four letters of the *SupplierName* and the *SupplierNumber*.
Example of a unique Supplier Code: ABCD1 (4)
- 5.7 Use an appropriate function in **Column E** to determine if a supplier is currently part of the Wholesale Bargain Store. Check in the *CurrentSuppliers* worksheet and 'Yes' or 'No' is indicated next to the 'Supplier Name'. Display 'Yes' or 'No' next to the supplier based on the information on the *CurrentSuppliers* worksheet. If a supplier is not on the list, it must display the text 'Not found'. (5)
- 5.8 Use an appropriate function in cell **H3** to determine how many suppliers are part of the Wholesale Bargain Store. (3)
- 5.9 Use an appropriate function in cell **K2** to determine the number of suppliers. (2)

Work in the *WholesaleProducts* worksheet.

- 5.10 Create a 3-D clustered bar chart using the data in the cell range **A2:B16**. See *Figure 6* on the next page as an example. (1)
- 5.11 Ensure that the title of the chart reads 'Products'. (1)
- 5.12 Add a horizontal axis title labelled 'Price'. (1)
- 5.13 Add the picture **Groceries.jpg** from the **Q5** folder as the chart's background and change the transparency to 70%. (3)

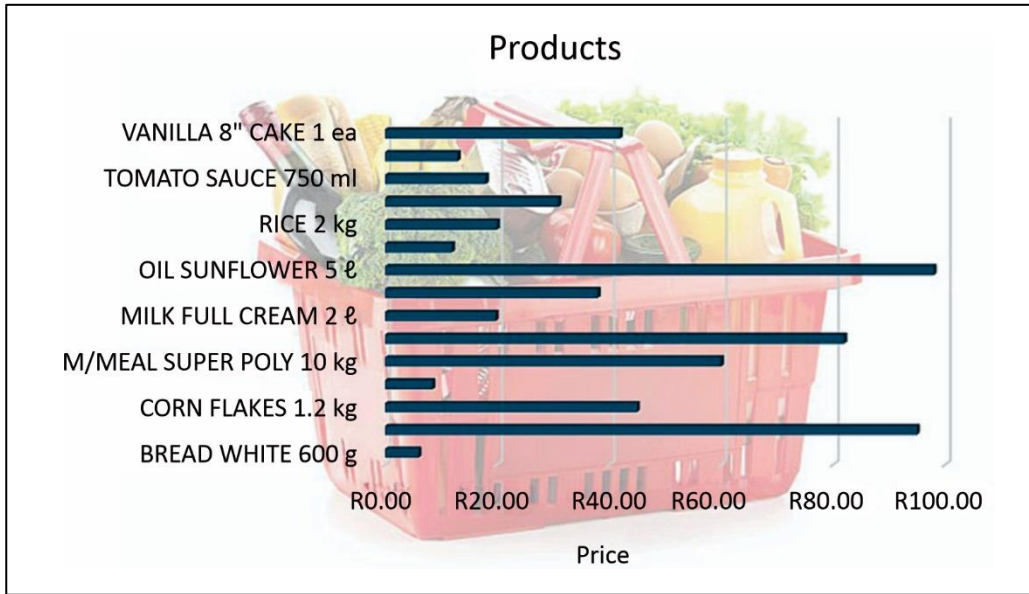


Figure 6

Save and close the workbook.

[26]

QUESTION 6

Open and work only in the folder named **Q6**.

Open the workbook **6Products.xlsx** and edit it according to the instructions below.

Work in the *Products* worksheet.

- 6.1 If a product's 'Sales on Non Promo' is more than its 'Sales on Promotion', the text 'More' needs to be displayed in **Column H**. If the 'Sales on Non Promo' is not more, the text 'Less' needs to be displayed in **Column H**. Use a function in cell **H2** to display the correct text for this product. (4)
- 6.2 Calculate the total amount of sales in cell **I2** using the data in **Column D** 'Promo Price', and **Column F**, 'Sales in Promotion'. The answer should represent the total amount for the number of products sold on the promotion price. (2)
- 6.3 Calculate the total amount of sales for all the non-promotional products in cell **J267**. Ensure that this value is rounded off to a whole number with no decimals. (4)
- 6.4 Determine the second cheapest product's price in cell **E271** when it is not on promotion using the 'Non Promo Price' data in **Column E**. (3)
- 6.5 Determine the total amount of product sales of more than 100 000 sales on the non-promotional price in cell **E272** using the data in **Column G**, 'Sales on Non Promo', and the data in **Column J**, 'Total Amount on Non Promo'. (4)
- 6.6 Set the print area to **A1:J266** and ensure the first row's headings will repeat on all pages when printed. (2)

Save and close the workbook.

[19]

QUESTION 7

Open and work only in the folder named **Q7**.

Open the workbook **7PopularBrands.xlsx** and edit it according to the instructions below.

Work in the *PivotTable* worksheet.

7.1 Create a pivot table using the data from the **Data** worksheet. The table must display the total amount of sales on promotion and the total amount not on promotion for each brand and their product. See *Figure 7* below as an example.

Row Labels	Sum of Sales on Promotion	Sum of Sales on Non Promo
ACE	18251	14819
ACE MAIZE RICE 2.5 kg	4738	2063
ACE MAIZE SAMP 2.5 kg	13513	12756
BARTLET	308080	152479
BARTLET EGGS LARGE 0 30s	308080	152479
BLUE RIBBON	98876	33330
BLUE RIBBON PREMIER CLASSIC BROWN 700 g	98876	33330
BOKOMO	5627	2578
BOKOMO OATS MORNING 1 kg	5627	2578
BULL BRAND	138187	147342
BULL BRAND CORNED MEAT CHAKALAKA 300 g	5021	1052
BULL BRAND CORNED MEAT CHILLI 300 g	8135	624
BULL BRAND CORNED MEAT REG 300 g	125031	145666
CREMORA	531865	203597
CREMORA CREAMER BOX 800 g	531865	203597
EXCELLA	14599	30239
EXCELLA OIL SUNFLOWER 750 ml	14599	30239
F&M	25610	40932
F&M PASTA MACARONI 1 kg	9757	13771
F&M PASTA SPAGHETTI 1 kg	15853	27161
FRISCO	13629	5257
FRISCO COFFEE INSTANT GRANULES 250 g	13629	5257
GLEN	58182	48648
GLEN ROOIBOS TBAG TAGLESS 80s	58182	48648

Figure 7

[5]

Save and close the workbook.

50 marks

SECTION D DATABASE

QUESTION 8

Open and work only in the folder named **Q8**. Remember to save each query, form, and report before closing.

Open the database file **8WholesaleData.accdb**.

Tables

Working in the *tbl_Suppliers*

8.1 Ensure that the contents in the fields SupplierName and ProductCategory are entirely visible in Datasheet view. (1)

8.2 Adjust the field properties of the following fields:

	Field Name	Properties	
8.2.1	<u>SupplierCode</u>	<ul style="list-style-type: none"> • Data entered must be in the following format: <ul style="list-style-type: none"> ○ All uppercase. ○ Four letters compulsory. ○ One number compulsory. ○ Three numbers optional. 	(4)
8.2.2	<u>SupplierName</u>	<ul style="list-style-type: none"> • Data must be entered in this field. 	(1)
8.2.3	<u>ProductCategory</u>	<ul style="list-style-type: none"> • Data type must be changed to accept more than 255 characters. 	(1)
8.2.4	<u>PartOfWholesale</u>	<ul style="list-style-type: none"> • Must have the values 'Yes' and 'No'. • Must display as a combo box. • Make sure that only 'Yes' and 'No' can be entered. 	(3)
8.2.5	<u>DateJoined</u>	<ul style="list-style-type: none"> • The date joined can only be from 1 January 2007 until 31 December 2023. • Provide a suitable message if an incorrect date is entered. 	(3)

Save and close *tbl_Suppliers*.

Forms

- 8.3 Create a form using *tbl_Suppliers* and save the form as *frm_Suppliers*. It must contain all fields except for *DateJoined* field. (2)
- 8.4 Edit the form *frm_ProductCapture* according to the following instructions. See *Figure 7* below as an example:
- 8.4.1 Delete the Heading in the **Form Header**. (1)
- 8.4.2 Move the *ProductBrand* textbox and label to the **Form Header**. (1)
- 8.4.3 Insert the image *Groceries.jpg* as a background image in the **Details** section to match *Figure 8* below. (1)
- 8.4.4 Change the **Details** section colour to orange. (1)
- 8.4.5 Insert a button in the **Form Header** that navigates to the next record when clicked. The button must contain the text 'Next Record'. (3)

Figure 8

Save and close *frm_ProductCapture*.

Reports

- 8.5 Create a report called *rpt_TopBrands* using *tbl_PopularBrands*. (1)
- 8.5.1 Use the fields *ProductBrand*, *ProductDescription*, *SalesOnPromotion* and *SalesOnNonPromo*. (1)
- 8.5.2 Group the report according to the *ProductBrand* field. (1)
- 8.5.3 Sort the report in ascending order according to the *ProductDescription* field. (1)
- 8.5.4 Change the report's heading to 'Top Brands at Wholesale'. (1)
- 8.5.5 Add a calculation to the report's footer to determine the number of products in the report. Ensure the label is descriptive. (3)

Save and close rpt_TopBrands.

Queries

- 8.6 Create a query called *qry1_Products* using the *tbl_Products*. (1)
- 8.6.1 Display *ProductBrand*, *ProductDescription*, *PromoPrice* and *NonPromoPrice*. (1)
- 8.6.2 Sort the query in ascending order, according to *ProductBrand*. (1)

Save and close qry1_Products.

- 8.7 Open the query *qry2_SuppliersM*.
- Display all suppliers whose names start with the letter 'M' who are also part of Wholesale. (4)

Save and close qry2_SuppliersM.

- 8.8 Open the query *qry3_TotalsPromo*.
- Create a new field that calculates the total number of sales for each product according to the Promo Price. Ensure this field displays in currency. (3)

Save and close the database.

40 marks

SECTION E HTML**QUESTION 9**

Open and work only in the folder named **Q9**.

Open the webpage **9WholesaleHome.html** using your chosen text editor.

- 9.1 Change the colour of the entire webpage to **#CCFFFF**. (2)
- 9.2 Align the main heading to appear in the centre of the webpage. (1)
- 9.3 Format the text 'About Us' to display as a sub-heading of the main heading. (1)
- 9.4 Format the text under the heading 'Featured Products' to display as a bulleted list. (3)
- 9.5 If the image '**Groceries**' does not display, the text 'Groceries in a Basket' must be displayed instead. (2)
- 9.6 Add attributes to the table tag to ensure that the table border is visible and there are no spaces between cells. (4)
- 9.7 Ensure that the table heading 'Best Sellers' spans the entire table. (2)
- 9.8 Insert the image '**Oil.png**' into the correct cell without copying or moving the image from the respective **img** folder. (3)
- 9.9 Resize the image width and height to 200 pixels. (2)
- 9.10 Insert a red line with a size of 5 px below the table and above the text '© 2007 Wholesale Bargain Store. All rights reserved'. (4)

See *Figure 9* on the next page as an example of how the final webpage should display, without the border.



Welcome to Wholesale Bargain Store



About Us

Wholesale Bargain Store is your one-stop shop for quality household products and groceries sourced from South Africa. With a wide range of products and unbeatable prices, we strive to provide the best shopping experience for our customers.

Featured Products

- South African Rooibos Tea
- South African Staple Foods
- Cleaning Products
- Authentic African Spices and Sauces

Best Sellers	
Product	Price
EXCELLA OIL SUNFLOWER 750 ml	
GLEN ROOIBOS TEABAG TAGLESS 805	
SELATI SUGAR WHITE 2.5 kg	



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Figure 9

Save and close the webpage.

24 marks

Total: 180 marks