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Edexcel
Success through qualifications

Key skills

Information and communication technology

Level 4 - Rewards

Wednesday 17 - Friday 19 November 2004

Test Paper

YOU NEED

- This test paper
- A cover sheet
- Access to a computer, software and a printer
- Access to the data files to support the scenario 'Rewards': **Salewkly and Quarters**

You may use a bilingual dictionary

Do NOT open this paper until you are told to do so by the supervisor

THERE ARE 4 TASKS IN THIS TEST

Task A (total 11 marks)

Task B (total 20 marks)

Task C (total 18 marks)

Task D (total 1 mark)

Total marks available: 50

Try to complete ALL the tasks

YOU HAVE 2 HOURS 30 MINUTES TO FINISH THE TEST

INSTRUCTIONS

- Make sure your personal details are entered correctly on the cover sheet
 - Make sure you print out all your work
 - Task D **must** be completed; if necessary, it may be carried out after the end of the test
-

At the end of the test, check that your name appears on EVERY printed page
Attach your printouts and this test paper to the cover sheet and hand them to the supervisor

REMEMBER: YOU HAVE 2 HOURS 30 MINUTES TO FINISH THE TEST

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Ref: IT/L4/4/BW

Try to complete ALL the tasks
ENTER YOUR NAME ON EVERY PAGE, PREFERABLY AS A FOOTER
Pages without a name will not be marked

A salesperson is paid bonuses based on their weekly sales and an annual bonus based on overall company sales. You are required to use spreadsheet software to

- import data files to analyse sales and bonuses
- produce reports including charts
- prepare a table of annual bonuses
- perform 'what-if' analyses.

Task A

A spreadsheet is required to calculate weekly bonuses.

1 A spreadsheet is required.

- a Open a spreadsheet application and create a new spreadsheet. Import the data file **Salewkly** into the spreadsheet starting at the cell **A1**. (If the software you are using does not allow import, then open the data file.) The data is comma delimited and text is enclosed in quotes (").

	A	B	C	D	E	F
1	Quarter	Week Number	Month	Value of Sales	Number of Sales	Company Sales
2	Q1		1Jan	335.22	7	3057.5
3	Q1		2Jan	1110.45	8	8019.7

- b Set the format for the values in the columns **D** and **F** as currency to two decimal places.
- c Name the worksheet **SalesData**.
- d Create a new worksheet named **BonusRate**.
- e Enter the following data into the **BonusRate** worksheet starting at cell **A1**.

	A	B	C	D
1	Value	Average	Rate	Sales Team
2	500	50	0.025	10

- f Set the format for the values in the cells **A2** and **B2** as currency to two decimal places.
- g Set the format for the value in cell **C2** as percentage to one decimal place.
- h Use the column headings in the cells **A1**, **B1**, **C1** and **D1** to create named cells for the values in each of the cells **A2**, **B2**, **C2** and **D2**.
- i On the **SalesData** worksheet insert a column between columns **E** and **F** and add the heading **Bonus** in cell **F1**.
- j Set the format for the values in column **F** as currency to two decimal places.
- k A bonus is paid if **Value of Sales** is greater than the named cell **Value** and the average value of sales for the week is greater than the named cell **Average**, otherwise no bonus is paid. (The average value of sales is **Value of Sales** divided by **Number of Sales**.) In cell **F2** enter a formula to calculate any bonus earned as **Value of Sales** multiplied by the named cell **Rate**, otherwise display zero.
- l Replicate the formula in cell **F2** over the cell range **F3:F53**.
- m Save the spreadsheet (in normal spreadsheet format, ie NOT as a .txt file) using the characters **S1**- followed by your initials as a filename, for example **S1-FJB**.
- n Place your name, today's date, the page number and number of pages and the title **Printout-1** in a footer and print the **SalesData** worksheet in landscape form, showing all formulas, sheet row numbers, sheet column letters and gridlines. Make sure all information is fully displayed.
- o Save the spreadsheet using the characters **S2**- followed by your initials as a filename, for example **S2-FJB**.

11 marks

Task B

A report and chart showing quarterly sales are required.

- 2 Subtotals for each quarter and a grand total are required.
 - a Open (revert to) spreadsheet **S1** -.
 - b Create a new worksheet named **Quarters**.
 - c Import the data file **Quarters** into the **Quarters** worksheet starting at cell **A1**. (If the software you are using does not allow import, then open the data file.) The data is comma delimited and text is enclosed in quotes (").

	A	B	C	D	E	F
1	Quarter	Month	Value of Sales	Number of Sales	Bonus	Company Sales
2	Q1	Jan				
3	Q1	Feb				
4	Q1	Mar				
5	Q2	Apr				
6	Q2	May				

- d Set the format for the values in columns **C**, **E** and **F** as currency to zero decimal places.
- e In cell **C2** enter a formula that calculates the total value of sales for the month of January from the weekly sales data on the worksheet **SalesData**.
- f Adjust the formula in column **C** so that it can be replicated to calculate the total value of sales for each month.
- g Adjust the formulas in column **C** so that they can be replicated across to calculate the totals for **Number of Sales**, **Bonus** and **Company Sales** for each month from **Jan** to **Dec**.
- h Use a subtotal function to calculate the total **Value of Sales**, **Number of Sales**, **Bonus** and **Company Sales** for each **Quarter** and the grand total for the year.

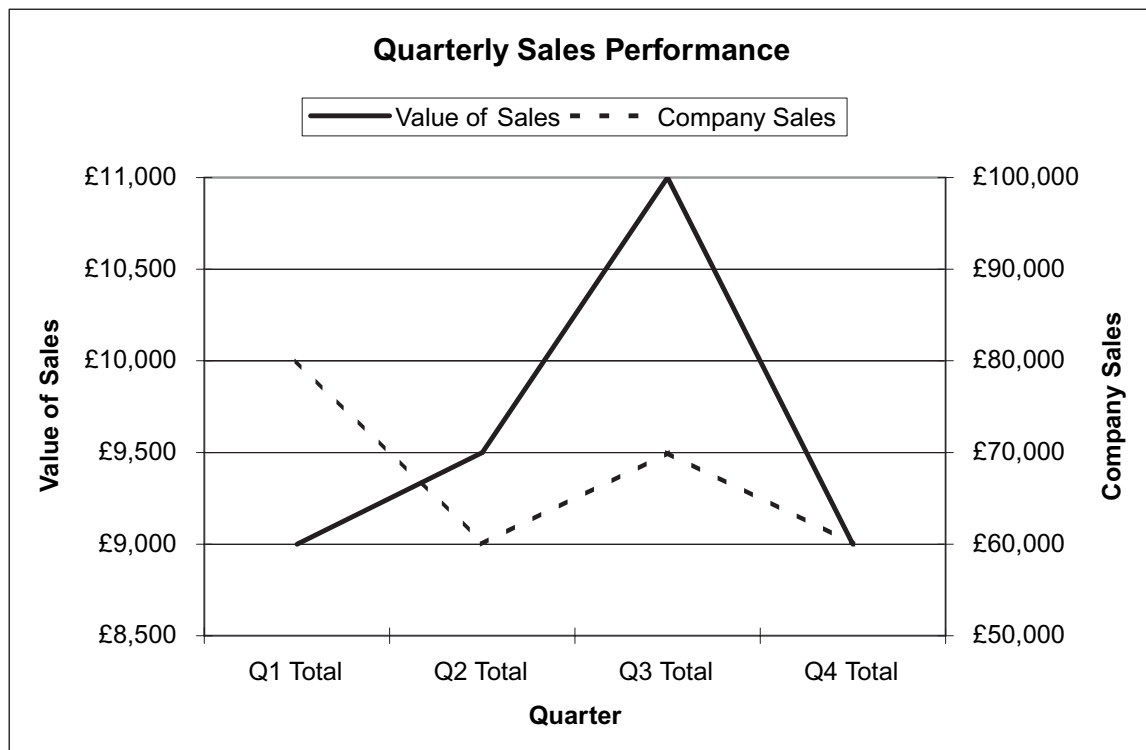
	A	B	C	D	F
1	Quarter	Month	Value of Sales	Number of Sales	Company Sales
2	Q1	Jan	£3,432	34	£25,181
3	Q1	Feb	£2,387	27	£32,252
4	Q1	Mar	£3,146	25	£32,610
5	Q1 Total		£8,965	86	£90,042
6	Q2	Apr	£2,545	31	£28,764

- i Save the spreadsheet using the characters **S3-** followed by your initials as a filename, for example **S3-FJB**.
- j Place your name, today's date, the page number and number of pages and the title **Printout-2** in a footer and print the **Quarters** worksheet in landscape form, showing all formulas, sheet row numbers, sheet column letters and gridlines. Make sure all information is fully displayed.
- k Save the spreadsheet using the characters **S4-** followed by your initials as a filename, for example **S4-FJB**.

10 marks

Please go on to the next page

- 3 A chart showing annual sales is required.
- Open (revert to) the spreadsheet **S3-**.
 - In the **Quarters** worksheet using only the totals of **Value of Sales** and **Company Sales** for each Quarter, create a line graph similar to the one illustrated below. (Note the values are not the same.) Position the chart below the data on the worksheet **Quarters**.
 - Provide a secondary y-axis with the range £75,000 to £100,000 for plotting the **Company Sales** and label this axis **Company Sales**.
 - Set the range of the y-axis to be £8,500 to £11,000 and label this axis **Value of Sales**.
 - Label the x-axis **Quarter**.
 - Give the chart the title **Quarterly Sales Performance**.
 - Position a suitable legend at the top of the graph.
 - Modify the format of the chart so that it can be printed clearly.



- Place your name, today's date, the page number and number of pages and the title **Printout-3** in a footer and print the **Quarters** worksheet, including the chart, in portrait form. Make sure all information is fully displayed.
- Save the spreadsheet using the characters **S5-** followed by your initials as a filename, for example **S5-FJB**.

10 marks

Please go on to the next page

Task C

Reports and calculations for annual bonuses are required.

4 A report on bonuses is required.

- On the **SalesData** worksheet use the cell range **A1:G53** to create a filter to display only data on which the bonus paid was more than £20 and less than £30 and where the company sales is more than £9,300.
- Save the spreadsheet using the characters **S6-** followed by your initials as a filename, for example **S6-FJB**.
- Place your name, today's date, the page number and number of pages and the title **Printout-4** in a footer and print only the result of the filter in portrait form showing sheet row numbers, sheet column letters and gridlines. Make sure all information is fully displayed.

6 marks

5 A table of annual bonuses is required.

- Open (revert to) the spreadsheet **S5-**.
- On the **BonusRate** worksheet add the following information in the cells shown.

	A	B	C	D	E	F	G	H	I
5				Annual Bonus	Company Sales				
6	Value of Sales	15000			100000	200000	300000	400000	500000
7	Sales Rate			20000					
8	Company Sales	50000		25000					
9	Company Rate	0.0075		30000					
10			Value of Sales	35000					
11				40000					
12				45000					
13				50000					

- Set the format for the values in the cells **B6** and **B8** and the cell range **D6:I13** as currency to zero decimal places.
- Set the format for the values in the cells **B7** and **B9** as percentage to two decimal places.
- Set cell **B7** equal to the named cell **Rate**.
- Annual Bonus** is the **Value of Sales** multiplied by the **Sales Rate** plus the **Company Sales** multiplied by the **Company Rate**. Use the cell range **D6:I13** to create a two-variable 'What if' data table to show the total bonus payable for different levels of Company Sales and Value of Sales.

- g Place your name, today's date, the page number and number of pages and the title **Printout-5** in a footer and print only the **BonusRate** worksheet, in landscape form. Make sure all information is fully displayed.
- h Save the spreadsheet using the characters **S7-** followed by your initials as a filename, for example **S7-FJB**.
- i Change the value for **Rate** in cell **C2** to 1%.
- j Amend the title in the footer to **Printout-6** and print only the **BonusRate** worksheet, in landscape form. Make sure all information is fully displayed.
- k Amend the title in the footer to **Printout-7** and print the **BonusRate** worksheet in landscape form, showing all formulas, sheet row numbers, sheet column letters and gridlines. Make sure all formulas are fully displayed.
- l Save the spreadsheet (in normal spreadsheet format, ie NOT as a .txt file) using the characters **S8-** followed by your initials as a filename, for example **S8-FJB**.

12 marks

Task D

The following task must be completed. If you have not completed this item within the time allowed, it must be completed at the end of the test.

- 6 A printed list of the filenames you produced during the test is required.
 - a Produce a list of all the files created during the test. This may be in the form of a screen dump (print screen) of the filenames with your name, today's date and the title **Printout-8** as a footer.

1 mark

End of test

Important note

Collect together all your printouts. They should include

- Printout-1** Formulas used on the **SalesData** worksheet
- Printout-2** Formulas used on the **Quarters** worksheet
- Printout-3** Totals and chart of **Quarterly Sales Performance**
- Printout-4** Filtered data on the **SalesData** worksheet
- Printout-5** Two-variable 'What If' data table on the **BonusRate** worksheet
- Printout-6** Same as Printout-5 using different values
- Printout-7** Formula printout of the **BonusRate** spreadsheet
- Printout-8** A list of filenames created

Check that your name is printed on every page. If it is not, write it there. Now attach all the pages in order, and this test paper, to the cover sheet and hand them to the supervisor.