## Business Finance

Level 2
8990-02-002
Sample paper 1

## Candidate's name (Block letters please)

## Centre no Date

Time allowed: 1 hour 30 minutes (plus 5 minutes reading time).

Note making is not allowed during reading time.
Answer all questions.
Show all your workings. All final answers must be written in blue or black ink.

Your answers should be written in the question booklet in the spaces provided.

If additional separate sheets of paper are used, make sure each page is clearly labelled with your name.

Recommended equipment: calculator, pencil, ruler, protractor, eraser.

## For examiner's use only

| Task 1 | Task 2 | Task 3 | Task 4 | Task 5 | Task 6 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 123 | /18 | $/ 11$ | /15 | 18 | 125 | /100 |

## Complete all tasks

You are employed in the office of a small manufacturing company called Open Display. You have been asked to assist your manager by completing a number of tasks.

## Task 1

You have been asked to prepare a cash budget for a project team who are piloting a new product on a small scale for a three month period.

The following are forecasts for the months January to March.

|  | Materials <br> $£$ | Wages <br> $£$ | Additional <br> costs <br> $£$ | Sales <br> $£$ |
| :--- | :---: | :---: | :---: | :---: |
| January | 1800 | 1350 | 500 | 4200 |
| February | 1740 | 1550 | 500 | 4100 |
| March | 1680 | 1600 | 500 | 3900 |

Half the income from sales will be received in the month of sale. The other half will be received one month after sale.

Materials will be paid for one month after the month of production. All other costs will be paid in the month incurred.
It is proposed that the project team will be provided with a bank balance of $£ 1000$ on 1 January.
a) Calculate the cash receipts from sales in each of the four months January to April.

|  | January <br> $£$ | February <br> $£$ | March <br> 保 | April <br> $£$ |
| :--- | :---: | :---: | :---: | :---: |
| Received in month <br> of sale |  |  |  |  |
| Received one <br> month after sale |  |  |  |  |
| Total cash <br> receipts from <br> sales |  |  |  |  |

(6 marks)
b) Calculate the cash payments in each of the four months January to April.

|  | January | February <br> $£$ | March <br> $£$ | April <br> $£$ |
| :--- | :---: | :---: | :---: | :---: |
| Materials |  |  |  |  |
| Wages |  |  |  |  |
| Additional costs |  |  |  |  |
| Total payments |  |  |  |  |

c) Complete the cash flow summary for the four months January to April.

|  | January <br> $£$ | February <br> $£$ | March <br> $£$ | April <br> $£$ |
| :--- | :---: | :---: | :---: | :---: |
| Opening balance |  |  |  |  |
| Receipts |  |  |  |  |
| Sub-total |  |  |  |  |
| Payments |  |  |  |  |
| Closing balance |  |  |  |  |

(13 marks)
d) As part of your task your manager has asked you to check if the opening balance of $£ 1000$ will be sufficient for the project. Tick $(\sqrt{ })$ the appropriate box.

| Yes |  |
| :--- | :--- |
| No |  |

## Task 2

The company is currently preparing production budgets for various products. You have been asked to prepare the production budget for display cases as information is now available for this product.

| Stock of display cases available today | 20000 units |
| :--- | :--- |
| Expected closing stock of display cases in one year | 30000 units |
| Expected sales income for the year | $£ 1040000$ |
| Sales price per unit | $£ 16$ |

One display case (one unit) is made from two units of the material plastic, two units of dye and four units of hardener.
a) Complete the production budget for display cases for the next year using the form below.

| Production Budget: Display cases | Units |
| :--- | :---: |
| Sales |  |
| Plus closing stock |  |
| Sub-total |  |
| Less Opening stock |  |
| Production |  |

b) Calculate the number of units of each material below which will be needed for the year's production of display cases.

| Ingredients of display cases | Units |
| :---: | :--- |
| Plastic |  |
| Dye |  |
| Hardener |  |

c) It is expected to take two hours to complete each display cases at a rate of $£ 6$ per hour. Complete the labour budget for display cases.

| Labour Budget: Display cases |  |
| :--- | :--- |
| Budgeted production (units) |  |
| Hours per unit |  |
| Total budgeted hours |  |
| Budgeted wage rate per hour |  |
| Total wages |  |

d) Wage negotiations are taking place. This may lead to a pay increase. The amount is not decided but a $4 \%$ increase is most likely.
i) Calculate the total actual wages if a 4\% increase in wages takes place for the entire year for the production of display cases.
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$\qquad$
$\qquad$
ii) Calculate the variance between the actual wages calculated in (d) (i) and the budgeted wages from (c). State if the variance would be favourable or adverse.
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## Task 3

The maintenance department of the company has been asked to clean out a building and carry out some work before the project team piloting the new product can begin work.

An estimate has been provided and you are asked to check the estimate to ensure it is arithmetically correct and restate it on a company job cost sheet. A mark-up of $30 \%$ is applied for inter-departmental work.

| Open Display |  |
| :---: | :---: |
| Maintenance |  |
| Department ESTIMATE |  |
| Cleaning building |  |
|  |  |
| 5 employees @ $£ 96$ per person per day for one day $=384.00$ |  |
| Building work |  |
| Materials $=170.00$ |  |
| 2 employees @ $£ 115$ per person per day for two days $=460.00$ |  |
| Administration expenses $=40.00$ |  |
| Direct expenses $\quad=\underline{60.00}$ |  |
| TOTAL 1141.00 |  |

a) Check the arithmetical accuracy of the estimate and note any errors below:
b) Complete the following Job Cost Sheet.

| Open Display | Date: |
| :--- | :--- |
|  | Job Cost Sheet |
| @ |  |
| Direct materials |  |
| Direct labour |  |
| Direct expenses |  |
| Total direct costs |  |
| Indirect costs |  |
| Sub-total |  |
| Departmental mark-up | $(30 \%)$ |
| Cost of job |  |

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## Task 4

One of the materials the company uses to make display cases is a liquid dye. The dye is only used for display cases and is not used in the production of any other products.

Your manager has noticed that the dye has been valued in the business at cost using the FIFO method of stock valuation and feels that AVCO would be better option. Before a decision is made to change the valuation basis, he wishes to see if the difference between FIFO and AVCO is significant.

He has provided you with the stock records for the last three months commencing with the opening balance of 20000 units on 1 October.
Stock records of Dye - First In, First Out (FIFO)

| Date | Receipts |  |  | Issues |  |  | Balance |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity units | Price £ | Value £ | Quantity units | Price £ | Value £ | Quantity units | Price £ | Value £ |
| 1 Oct | Balance | 0.60 | 12000 | 18000 | 0.50 | 9000 | 20000 | 0.50 | 10000 |
| 15 Oct | 20000 |  |  |  |  |  | 2000 | 0.50 | 1000 |
| 1 Nov |  |  |  |  |  |  | 2000 | 0.50 | 1000 |
|  |  |  |  |  |  |  | $\underline{20000}$ | 0.60 | 12000 |
|  | 10000 |  |  |  |  |  | 22000 |  | 13000 |
| 16 Nov |  | 0.65 |  | 2000 <br> 9000 <br> 11000 | 0.50 0.60 | $\begin{array}{r} 1000 \\ 5400 \\ \hline \end{array}$ |  |  |  |
|  |  |  |  | 11000 |  | 6400 | 11000 | 0.60 | 6600 |
| 1 Dec |  |  | 6500 |  |  |  | 11000 | 0.60 | 6600 |
|  |  |  |  |  |  |  | 10000 | 0.65 | 6500 |
|  |  |  |  |  |  |  | 21000 |  | 13100 |
| 13 Dec |  |  |  | 11000 | 0.60 | 6600 |  |  |  |
|  |  |  |  | 7000 | 0.65 | 4550 |  |  |  |
|  |  |  |  | $\overline{18000}$ |  | 11150 | 3000 | 0.65 | 1950 |

Complete the stock records for October to December for dye using the Weighted Average Cost (AVCO) on a perpetual basis. Figures should be rounded to the nearest pence.

Stock records of Dye - Weighted Average Cost (AVCO)


## Task 5

Management are deciding the price to charge for the product which is currently being tested in the new project. The cash price of $£ 30$ has been decided and management is considering the credit price to set. It has been decided to use past experience of the cost of selling on credit and bad debts to decide the credit price.

You have been asked to make some calculations to help with the decision making. The following is the age analysis of debtors at 31 December.

|  |  | Period Outstanding |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Debtor | Total £ | Current <br> £ | $\begin{aligned} & 30 \text { days } \end{aligned}$ | $\begin{aligned} & 60 \text { days } \\ & £ \end{aligned}$ | 90 days £ | Over 90 days £ |
| Able Brothers | 14700 | 6300 | 4300 | 4100 |  |  |
| Chart Down Ltd | 23660 | 9500 | 7400 | 6500 | 260 |  |
| Engineering Factors | 17140 | 12300 | 4840 |  |  |  |
| Great Higham Ltd | 29380 | 18020 | 8020 | 3240 | 100 |  |
| Ingham \& Jackson | 19480 | 11400 | 6200 | 1880 |  |  |
| Khan Ltd | 2420 |  |  |  |  | 2420 |
| Majid Naim Ltd | 14220 | 8000 | 3360 | 960 | 1900 |  |
|  | 121000 | 65520 | 34120 | 16680 | 2260 | 2420 |

The total credit sales for the year were $£ 1293000$. It is the company's policy to write off as bad debts any amounts outstanding and unresolved for more than 90 days. The company also makes a $3 \%$ provision for doubtful debts.
a) Calculate the percentage of total debtors which should be written off as bad debts.
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b) Calculate the average period of credit given by the company in days.
c) Give two reasons why the company sales would increase by selling on credit.
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$\qquad$
$\qquad$
d) Give one reason why the company should charge a price above $£ 30$ for selling the new product on credit.
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$\qquad$
$\qquad$

## Task 6

The company supplies goods to a small number of customers who place significant orders. Management are keen to ensure that company employees maintain good standards and quality of service. You have been asked to compare data maintained over time and to benchmark information collected by an organisation which monitors the industry.

The following table provides details of the relevant information.

| Performance Indicator - <br> Customer Service department | Current year | Previous <br> year | Benchmark |
| :--- | :---: | :---: | :---: |
| Speed of answering telephone | 2.4 seconds | 2.2 seconds | 2.0 seconds |
| Average length of telephone call | 1.3 minutes | 1.2 minutes | 1.2 minutes |
| Customer satisfaction <br> (Ranked 1 excellent to 5 poor) | 2 | 3 | 3 |

a) Compare and comment on the company's customer service performance in the current year to the previous year and the benchmark data.
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b) The time taken to answer telephone calls is recorded on a display unit in the customer service department. The statistics for the last eight hours are given in the table below. Your manager asks you to analyse the figures graphically so any trend can be easily identified.

|  | Time |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time to answer telephone (seconds) | $\begin{aligned} & 9.00- \\ & 10.00 \end{aligned}$ | $\begin{array}{\|l\|} \hline 10.00 \\ - \\ 11.00 \end{array}$ | $\begin{aligned} & 11.00 \\ & -12.00 \end{aligned}$ | $\begin{aligned} & 12.00 \\ & -13.00 \end{aligned}$ | $\begin{aligned} & \hline 13.00 \\ & - \\ & 14.00 \end{aligned}$ | $\begin{aligned} & 14.00 \\ & - \\ & 15.00 \end{aligned}$ | $\begin{aligned} & 15.00 \\ & - \\ & 16.00 \end{aligned}$ | $\begin{aligned} & \hline 16.00 \\ & - \\ & 17.00 \end{aligned}$ |
| 1.40 and under | 6 | 3 | 2 | 0 | 0 | 0 | 1 | 2 |
| 1.60 | 21 | 18 | 15 | 10 | 10 | 10 | 9 | 9 |
| 1.80 | 32 | 33 | 31 | 30 | 28 | 26 | 18 | 15 |
| 2.00 | 34 | 34 | 36 | 34 | 32 | 28 | 21 | 15 |
| 2.20 | 32 | 28 | 28 | 30 | 36 | 28 | 25 | 15 |
| 2.40 | 26 | 22 | 24 | 30 | 36 | 20 | 18 | 10 |
| $2.60 \text { and }$ over | 9 | 12 | 14 | 21 | 23 | 8 | 18 | 4 |
|  | 160 | 150 | 150 | 155 | 165 | 120 | 110 | 70 |

Data at the industry benchmark time are shown in bold.
Percentage of telephone calls answered at the industry benchmark time.

| Time | $9.00-$ | $10.00-$ | $11.00-$ | $12.00-$ | $13.00-$ | $14.00-$ | $15.00-$ | $16.00-$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 | 15.00 | 16.00 | 17.00 |
| Percentage | 21.2 | 22.7 | 24.0 | 21.9 | 19.4 | 23.3 | 19.1 | 21.4 |

Calculate the percentage of telephone calls answered in 2.6 seconds and over.

| Time | $9.00-$ $10.00-$ <br> 10.00  | 11.00 | $12.00-$ | $12.00-$ | $13.00-$ | $14.00-$ | $15.00-$ | $16.00-$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |
| Percentage |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

(8 marks)
c ) i) Prepare a line graph to show the percentage of telephone calls answered at the industry benchmark time.
ii) Prepare a comparison line graph to show the percentage of telephone calls answered in 2.6 seconds and over.

Identify the two lines clearly on the same graph below.

## Percentage


9.00-10.00 10.00-11.00 11.00-12.00 12.00-13.00 13.00-14.00 14.00-15.00 15.00-16.00 16.00-17.00

Time
(9 marks)
d) Identify the time period from your graph at which the telephones are being answered most slowly.
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