## AQA

Please write clearly in block capitals.
$\square$ Candidate number $\square$

Surname
Forename(s)
Candidate signature $\qquad$

## A-level

## ACCOUNTING

## Unit 4 Further Aspects of Management Accounting

## Friday 17 June 2016

Morning
Time allowed: 2 hours

## Materials

For this paper you must have:

- a calculator


## Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer all questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- All workings must be shown and clearly labelled; otherwise marks for method may be lost.
- Do all rough work in this book. Cross through any work you do not want to be marked.


## Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 90 .
- You will be marked on your ability to:
- use good English
- organise information clearly
- use specialist vocabulary where appropriate.

Answer all questions in the spaces provided.

1
Total for this question: 16 marks
The following information relates to the business of Allam Limited, manufacturer of beds.

| Balances at 1 April 2015 | $£ 000$ |
| :--- | ---: |
| Inventory |  |
| Raw materials | 53 |
| Finished goods | 18 |
| Work in progress | 19 |
| Non-current assets at net book value | 106 |
| Factory machinery | 14 |
| Loose tools | 33 |
| Office equipment | 9 |
| Prepayment - premises rental | 3 |
| Provision for unrealised profit |  |
| Receipts and payments during the year ended 31 March 2016 |  |
| General expenses - factory | 105 |
| General expenses - office | 45 |
| Premises rental | 32 |
| Purchase of finished goods | 251 |
| Purchase of raw materials | 983 |
| Revenue | 112 |
| Wages - factory operatives | 29 |
| Wages - factory supervisors | 24 |
| Wages - sales and administrative staff |  |
| Balances at 31 March 2016 |  |
| Inventory | 62 |
| Raw materials | 30 |
| Finished goods | 26 |
| Work in progress | 90 |
| Non-current assets at net book value | 12 |
| Factory machinery | 26 |
| Loose tools | 14 |
| Office equipment |  |
| Prepayment - premises rental |  |

## Additional Information

(1) There were no purchases or disposals of non-current assets during the year.
(2) Premises rental is to be apportioned $80 \%$ to the factory and $20 \%$ to the office.
(3) Finished goods are transferred from the factory at cost plus $20 \%$.
(4) The closing inventory of finished goods comprised only goods manufactured by Allam Limited.

## Workings

1 (a) Prepare the manufacturing account for Allam Limited for the year ended 31 March 2016.
[13 marks]
[includes $\mathbf{2}$ marks for quality of presentation]

Allam Limited
Manufacturing Account for the year ended 31 March 2016
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1 (b) Calculate the amount to be shown in the balance sheet for the provision for unrealised profit at 31 March 2016.
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Turn over for the next question

CH Products manufactures parts for the electronics industry. The manufacture is heavily machine based in two production departments; machining and finishing. In addition, a stores department supplies both production departments. The company operates a system of activity based costing.

2 (a) Explain the following terms:

2 (a) (i) Cost pool
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2 (a) (ii) Cost driver
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2 (b) State one example of a cost pool for CH Products and an associated cost driver.
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2 (c) State three advantages of operating a system of activity based costing.

## Advantage 1

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Advantage 2 $\qquad$
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Advantage 3 $\qquad$
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Question 2 continues on the next page

Charlotte Ltd is a manufacturing company recently taken over by CH Products. This company operates a system of marginal costing. The directors have produced the following breakeven chart to assist in their management of the business.

## Breakeven Chart



2 (d) Identify the correct reference for each of the following, by referring to the chart above. (Tick one box only in each part).

2 (d) (i) Total cost

|  | $\checkmark$ |
| :--- | :---: |
| Point A to Point G |  |
| Point A to Point H |  |
| Point B to Point F |  |

2 (d) (ii) Profit at an output of 6000 units

|  | $\checkmark$ |
| :--- | :---: |
| Point A to Point G |  |
| Point F to Point G |  |
| Point G to Point H |  |

2 (d) (iii) Margin of safety at an output of 6000 units

|  | $\checkmark$ |
| :--- | :---: |
| Point A to Point E |  |
| Point A to Point H |  |
| Point E to Point H |  |

Turn over for the next question

Zelta Frames manufactures window frames. The company operates a system of marginal costing. The standard cost data for one window frame is as follows:

Direct materials $\quad 15$ metres of wood at $£ 1.80$ per metre
Direct labour $\quad 1.5$ hours at $£ 8.40$ per hour
The following budgeted information was available for the year ended 31 December 2016:
Inventory of finished goods 150 units
Inventory of direct materials 12000 metres of wood
Sales
22200 units @ £55
It is expected that both production and sales are spread evenly over the year. Inventories of finished goods and direct materials are expected to remain constant throughout the year.

For the year ended 31 December 2016, the annual fixed overheads were budgeted to be £108 000 .

3 (a) Calculate the budgeted contribution and the budgeted profit for March 2016.
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The actual results for Zelta Frames for the month of March 2016 were as follows:

| Sales | 1900 units @ £57 |
| :--- | :--- |
| Direct materials used | 29260 metres of wood costing £57 057 |
| Direct labour cost | 3040 hours costing £26 296 |

The actual fixed overheads for the month of March 2016 cost $£ 9000$.

3 (b) Calculate the actual contribution and the actual profit for March 2016.
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3 (c) Calculate the sub-variances for direct materials and direct labour for March 2016.
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Zelta Frames' accountant has calculated that as a result of the actual sales volume being in excess of the budgeted sales volume, additional contribution of $£ 770$ will be gained.

3 (e) Complete the following table to reconcile the budgeted profit for March 2016 with the actual profit.

|  | $£$ |  |
| :--- | :---: | :--- |
| Budgeted profit for March 2016 |  |  |
| Sales volume additional contribution | 770 | Favourable |
| Sales price variance |  |  |
| Direct material price variance |  |  |
| Direct material usage variance |  |  |
| Direct labour rate variance |  |  |
| Direct labour efficiency variance |  |  |
| Actual profit for March 2016 |  |  |

3 (f) State four benefits of maintaining a system of standard costing.

## Benefit 1

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Benefit 2 $\qquad$
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Benefit 3 $\qquad$
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Benefit 4 $\qquad$
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Buckley Products is a large supplier of kitchen units situated in rented premises on a small industrial estate in a large market town in the north of England. The components for the kitchen units are purchased from a major manufacturer and assembled and fitted by Buckley Products' employees. The company currently has 8 employees.

The company has been established for ten years and turnover and profits have both risen by an average of $10 \%$ per annum for each year. Due to the current financial climate and the competitive nature of the market, the directors feel that the cash received from sales will remain at its current level for the next five years.

The current annual turnover is $£ 4 \mathrm{M}, 80 \%$ of which is to trade customers, mainly local builders, and the remaining $20 \%$ is direct to the public at the same profit margin. Profit for the year ended 31 October 2015 was $£ 320000$.

The directors are considering whether the company should set up a production line to manufacture the units themselves, rather than buying in.

The cost to the company of buying in the units will be $£ 250000$ next year and this is expected to increase by $10 \%$ per annum in each subsequent year. The directors are projecting that Buckley Products' turnover will remain static over the same period.

The initial cost of the necessary machinery would be $£ 180000$ and the directors estimate that it would have a useful life of five years and an estimated residual value of $£ 30000$. The machinery would be depreciated on a straight-line basis.

To finance the purchase, the directors have been offered a five-year bank loan for the full amount required at an interest rate of $12 \%$ per annum.

The directors estimate that the following costs would be incurred.

|  | Direct <br> materials <br> $£ 000$ | Wages <br> $£ 000$ | Maintenance <br> $£ 000$ | Other costs <br> (including depreciation) |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Year 1 | 90 | 65 | 10 | 60 |
| Year 2 | 105 | 70 | 12 | 65 |
| Year 3 | 120 | 76 | 15 | 70 |
| Year 4 | 138 | 82 | 20 | 75 |
| Year 5 | 155 | 90 | 25 | 80 |

4 (a) Calculate the net cash savings of purchasing the machinery for each year and in total, if the directors decide to manufacture the units rather than buy in the units.
[6 marks]
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4 (b) Calculate the payback period of the machinery.
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4 (c) Calculate the net present value of the machinery. The discount factors for $12 \%$ are as follows:

| Year | Discount <br> factor |
| :---: | :---: |
| 1 | 0.893 |
| 2 | 0.797 |
| 3 | 0.712 |
| 4 | 0.636 |
| 5 | 0.567 |

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The directors have recently been informed that the annual rent on the company's premises is to increase by $75 \%$ from the current figure of $£ 80000$. As a result of this increase and the fact that more space would be required, they are considering relocating the business to a remote location on the outskirts of a small village, thirty miles away, where suitable premises are available at an annual rent of $£ 50000$.

4 (d) Advise the directors whether they should invest in the machinery and relocate the business or whether they should continue to buy in the units. Consider both financial and non-financial issues and give reasons for your advice.
[15 marks]
[includes 2 marks for quality of written communication]
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