## Accounting

## ACCN4

## Unit 4 Further Aspects of Management Accounting

## Monday 1 February 2010 9.00 am to 11.00 am

For this paper you must have:

- a 12-page answer book.

You may use a calculator.

Time allowed

- 2 hours


## Instructions

- Use black ink or black ball-point pen.
- Write the information required on the front of your answer book. The Examining Body for this paper is AQA. The Paper Reference is ACCN4.
- Answer all questions.
- All workings must be shown and clearly labelled; otherwise marks for method may be lost.
- Make and state any necessary assumptions.
- Do all rough work in your answer book. Cross through any work that you do not want to be marked.


## Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 90 .

Four of these marks will be awarded for:

- using good English
- organising information clearly
- using specialist vocabulary where appropriate.

Total for this question: 21 marks

The production manager of Matt Daniels Ltd is considering the purchase of either machine Heath or machine Field.

The following information is available.

|  | Heath | Field |
| :--- | :---: | :---: |
| Purchase price | $£ 169000$ | $£ 250000$ |
| Annual production (units) | 13000 | 18000 |
| Expected life | 8 years | 12 years |

Each unit of production has a selling price of $£ 6$ and costs $£ 4$ to manufacture.
Machine Field needs specialised maintenance at an annual cost of $£ 3000$.
Matt Daniels Ltd is experiencing cash flow problems.

## REQUIRED

(a) Calculate the payback period for each machine.
(8 marks)
(b) Advise the production manager of Matt Daniels Ltd which machine should be purchased. Justify your recommendation.
(13 marks)

## Total for this question.

Hall Ltd manufactures a single product.
The budgeted costs per unit were:

|  | $\mathfrak{£}$ |
| :--- | :---: |
| Direct materials (£8 per kilo) | 16 |
| Direct labour (£15 per hour) | 45 |

Production for February was expected to be 4000 units.
The actual costs for February were:

|  |  |
| :--- | ---: |
| Materials (5000 kilos) | 60000 |
| Labour (9250 hours) | 157250 |

Actual production in February was 3700 units.

## REQUIRED

(a) Calculate the material price and material usage sub-variances.
(b) Calculate the labour rate and labour efficiency sub-variances.
(c) Prepare a statement reconciling the budgeted costs with the actual costs for February.

## Turn over for the next question

## Total for this question:

Giorgi Gates Ltd manufactures wooden gates.
The direct labour cost per gate is $1 \frac{1}{2}$ hours at $£ 7.20$ per hour.
Budgeted production of gates for the year ending 31 March 2011 is to be as follows:

|  | 1 April to <br> 31 October | November | December | January | February | March |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gates per <br> month | 1000 | 800 | 200 | 200 | 800 | 1000 |

The following budgeted information is available for the year ending 31 March 2011.

## £

Stock at 1 April 2010
Raw materials
12500
Work in progress
16000
Finished goods 23000

Administration expenses
65400
Factory overheads
151900
Purchases of raw materials
360000
Sales
924000
Selling and distribution costs 62000

## Additional information

(1) At 31 March 2011, stock is expected to be:
£
Raw materials 17400
Work in progress 18000
Finished goods 39000
(2) One quarter of the budgeted administration expenses are to be apportioned to the factory.

## REQUIRED

(a) Prepare a quarterly direct labour budget for the year ending 31 March 2011. (8 marks)
(b) Prepare the budgeted manufacturing account for the year ending 31 March 2011, showing clearly the prime cost.
(8 marks)
(for quality of presentation: plus 2 marks)

Turn over for the next question

## Total for this question:

Pot Proud Ltd manufactures ornamental garden pots in three different sizes: $20 \mathrm{~cm}, 40 \mathrm{~cm}$ and 60 cm diameters.

The financial director believes that profit is not being maximised. The company is operating at full capacity by manufacturing 12000 pots of each size. He believes that they are overstocked at the year end as production exceeds demand.

The following information is available for the year ending 31 March 2011.

## Pot sizes

|  | $\mathbf{2 0} \mathbf{c m}$ | $\mathbf{4 0} \mathbf{~ c m}$ | $\mathbf{6 0} \mathbf{~ c m}$ |
| :--- | :---: | :---: | :---: |
| Demand for pots (in units) | 8000 | 2000 | 10000 |
| Direct labour time per pot | 30 minutes | 45 minutes | 60 minutes |
| Direct materials per pot | 2 metres | 4 metres | 6 metres |

## Additional information

(1) The selling price is to be set at marginal cost plus $50 \%$ mark-up.
(2) Raw materials cost $£ 5$ per metre.
(3) Direct labour is paid at $£ 8$ per hour. There are 13500 direct labour hours available.

## REQUIRED

(a) Calculate the optimum production that would maximise profits.
(15 marks)

The financial director is considering changing the method of calculating the selling price to being based on Activity Based Costing (ABC).

## REQUIRED

(b) Currently, overheads are not considered when setting the selling price. Explain the difference between ABC and marginal costing. Make a recommendation to the financial director on whether he should change the method of calculating the selling price.
(8 marks)

During April 2009, forty 60 cm pots had been returned by customers because they wer cracked. It was discovered that there was a fault in the casting process. The total cost of t repairs would be financed by a bank loan of $£ 70000$ at $8 \%$ interest per annum.

A competitor is willing to supply Pot Proud Ltd with the pots at a cost of $£ 9600$ per 200 pots.

The factory is not able to work at full capacity without the repairs to the casting process and as a result $35 \%$ of the workforce would have to be made redundant.

## REQUIRED

(c) Discuss whether the casting process should be repaired or whether the pots should be purchased from the competitor. Include a financial analysis of each option and any other relevant information which should be considered.
(10 marks)
(for quality of written communication: plus 2 marks)

## END OF QUESTIONS

There are no questions printed on this page

