## Accounting

## ACCN4

## Unit 4 Further Aspects of Management Accounting

## Tuesday 21 June 20119.00 am to 11.00 am

For this paper you must have:

- an AQA 12-page answer book
- 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 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.

Anastasia Ltd manufactures a single product. Finished goods are transferred from the factory at cost plus $25 \%$.

The following information is available at 31 October 2010.

| Inventory (stock) of finished goods at cost plus $25 \%$ | $\mathbf{£}$ |
| :--- | :---: |
| Inventory (stock) of raw materials | 45000 |
| Inventory (stock) of work in progress | 18400 |
|  | 24800 |


| 0 | 1 | Prepare a balance sheet extract to show the inventory (stock) held by Anastasia Ltd at |
| :--- | :--- | :--- | 31 October 2010.

(for quality of presentation: plus 1 mark)

| 0 | 2 |
| :--- | :--- |
|  | Explain, with reference to relevant accounting principles, how inventories (stock) should | be valued on the balance sheet.

## Task 2

Franklin Ltd manufactures a single product.
The following information is available for a budgeted production of 25000 units for the year ending 31 July 2012.

|  | $£$ |
| :--- | ---: |
| Administration costs | 44600 |
| Direct labour | 200000 |
| Direct materials | 120000 |
| Factory insurance | 20600 |
| Factory rent and rates | 127300 |
| Office salaries | 140500 |
| Other factory overheads | 64500 |

The production manager expects to use 50000 labour hours during the year.
It takes two labour hours to produce one unit.
The financial director bases the selling price on the full cost plus $20 \%$.

| $\mathbf{0}$ | $\mathbf{3}$ Calculate the overhead absorption rate per labour hour. |
| :--- | :--- |


| 0 | 4 |
| :--- | :--- | Calculate the selling price per unit.


| $\mathbf{0}$ | $\mathbf{5}$ Explain two limitations of using absorption costing as a method of calculating the selling |
| :--- | :--- | :--- | price.

## Turn over for the next task

Yusuke Yamaguchi owns an electronics factory which produces components for computer memory boards.

The budgeted variable costs per component are:

- direct materials ( 40 grams at $£ 0.35$ per gram)
- direct labour (2 hours 15 minutes at $£ 8.00$ per hour).

For the year ended 31 March 2011, Yusuke expected to sell 20000 components at $£ 60$ each. He expected all components produced to be sold.

Annual fixed overheads were expected to be $£ 300000$.

| 0 | 6 | $P r e p a r e ~ a ~ s t a t e m e n t ~ t o ~ s h o w ~ b o t h ~ t h e ~ e x p e c t e d ~ c o n t r i b u t i o n ~ a n d ~ t h e ~ e x p e c t e d ~ p r o f i t ~ f o r ~$ |
| :--- | :--- | :--- | the year ended 31 March 2011.

Yusuke believes that there has been a reduction in profits. He compares actual results for the year ended 31 March 2011 with the expected results.

The actual costs for the production of 18000 components were:

|  | £ |
| :--- | :---: |
| direct materials (700 000 grams) | 252000 |
| direct labour (36 000 hours $)$ | 306000 |

Each component actually sold for $£ 62$. Annual fixed overheads for the year were as expected.

| 0 | 7 | $C a l c u l a t e ~ t h e ~ t o t a l ~ v a r i a n c e s ~ f o r: ~$ |
| :--- | :--- | :--- |

- direct materials
- direct labour.

| 0 | 8 | $C a l c u l a t e ~ t h e ~ s a l e s ~ p r i c e ~ a n d ~ s a l e s ~ v o l u m e ~ s u b-v a r i a n c e s . ~$ |
| :--- | :--- | :--- |


| 0 | 9 | Prepare a statement reconciling actual profit with budgeted profit for the year ended |
| :--- | :--- | :--- | 31 March 2011.


| 1 | 0 |
| :--- | :--- | Assess the effectiveness of using variance analysis to evaluate the performance of Yusuke's business. Make reference to the variances calculated.

## Task 4

Ebes Ltd produces a single product, the flet. Each unit sells for $£ 16$.
The costs per unit are:

|  | $£$ |
| :--- | :---: |
| direct materials | 8.60 |
| direct labour | 3.40 |

On 1 May 2011, there were 270 units in stock.
Predicted sales are:

|  | Units |
| :--- | :--- |
| May | 2700 |
| June | 2800 |
| July | 2600 |
| August | 2700 |

Each month's closing inventory (stock) is to be maintained at $10 \%$ of the following month's sales.

| 1 | 1 | Prepare a production budget for each of the three months ending 31 July 2011. |
| :--- | :--- | :--- |

(8 marks)

Unfortunately, the only cutting machine on the production line broke down on 14 May 2011 and all production stopped. Only 1600 units had been completed for that month. The expectation was that it would take several weeks to repair the machine. The production manager was worried that production targets would not be met in preparation for the busy summer period. He therefore purchased the shortfall in units for May from Ogo Ltd at a cost of $£ 11$ each. Each of these units had already been cut but required further production costs of $£ 3$.

| 1 | 2 |
| :--- | :--- |
| Explain the financial implications of the decision to purchase the units from Ogo Ltd. |  |

(5 marks)

Task 4 continues on the next page

At the end of May 2011, it became apparent that the machine could not be repaired. The production manager only had the choice of the following two options.

## Option 1

Lease a machine for 4 years at a cost of $£ 7000$ per month from 1 July 2011. This machine can produce 28000 units per year and all maintenance costs will be included within the cost of the lease.

## Option 2

Purchase a replacement machine at a cost of $£ 350000$ on 1 July 2011. This machine can produce 30000 units per year and is expected to last 4 years. The cost of capital is $10 \%$.

The discount factors are as follows:

| Year 1 | 0.909 |
| :--- | :--- |
| Year 2 | 0.826 |
| Year 3 | 0.751 |
| Year 4 | 0.683 |

The selling price of $£ 16$ per unit and the direct costs of $£ 12$ per unit will remain unchanged. Fixed overheads are currently £25 000 per year. These are expected to rise by $10 \%$ in Year 3.

It is assumed that all production is sold in the year.

| 1 | 3 | $C a l c u l a t e ~ t h e ~ n e t ~ p r e s e n t ~ v a l u e ~ f o r ~ O p t i o n ~$ |
| :--- | :--- | :--- |


| 1 | 4 |
| :--- | :--- |
| Advise the production manager which option he should choose. Consider both the |  | financial and non-financial implications of each option.

(8 marks)
(for quality of written communication: plus 2 marks)

## END OF QUESTIONS

