## Accounting

## ACCN4

## Unit 4 Further Aspects of Management Accounting

## Monday 18 June 2012 9.00 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.
- 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.

Xenox Ltd is a small limited company. It has two directors, Justin and Seeta. Justin believes that the highest priority for the company is to reach its break-even point. Seeta disagrees. She believes that having sufficient liquid funds is more important.

| 0 | $\mathbf{1}$ |
| :--- | :--- |


| 0 | 2 | Do you agree with Justin or Seeta? Give reasons for your choice. |
| :--- | :--- | :--- | (7 marks)

## Task 2

Total for this task.
The following information is available for the manufacturing business owned by Lily Jones for th year ended 31 March 2012.

## $£$

Draft manufacturing profit for the year
78420
Inventory (stock) of finished goods at cost at 1 April 201112600
Increase in provision for unrealised profit 840
Lily believes that she can record the inventory (stock) of finished goods in her financial statements at cost plus a mark-up of $20 \%$.

| 0 | 3 | Prepare an extract from the income statement (trading and profit and loss account) for |
| :--- | :--- | :--- | the year ended 31 March 2012 to show the necessary adjustment to manufacturing profit to account for unrealised profit.


| 0 | 4 | $C a l c u l a t e ~ t h e ~ v a l u e ~ o f ~ t h e ~ i n v e n t o r y ~(s t o c k) ~ o f ~ f i n i s h e d ~ g o o d s ~ h e l d ~ a t ~$ |
| :--- | :--- | :--- |
| 31 |  |  | March 2012.


| 0 | 5 | Prepare an extract from the balance sheet at 31 March 2012 to show how the inventory |
| :--- | :--- | :--- | (stock) of finished goods is recorded.


| 0 | 6 | Explain to Lily why it is necessary to adjust for unrealised profit in the financial |
| :--- | :--- | :--- | statements.

## Turn over for the next task

R H Wheels Ltd manufactures steering wheels. Each steering wheel sells at full cost plus $40 \%$
The standard cost per steering wheel is:
direct materials: 1.27 kilos at $£ 21$ per kilo
direct labour: 4 hours and 20 minutes at $£ 21$ per hour.
Annual production is expected to be 45000 steering wheels.
Annual fixed overheads of $£ 780000$ are absorbed per direct labour hour.

| 0 | $\mathbf{7}$ | Calculate the standard selling price per steering wheel. |
| :--- | :--- | :--- |

During the year ended 31 December 2011, production was 54000 steering wheels.
The actual direct labour cost was $£ 6600000$ for 275000 hours.

| 0 | 8 |
| :--- | :--- |
| Calculate the direct labour rate variance. |  |


| 0 | 9 |
| :--- | :--- |

The directors of RH Wheels Ltd are considering using robots on the production line to reduo direct labour costs.

The robots will cost $£ 8000000$ and are expected to be operational for 10 years, at the end of which there is no expected residual value.

## Additional information

(1) Production and sales are expected to be a minimum of 54000 steering wheels per year.
(2) The full direct cost per steering wheel is expected to be $£ 120$.
(3) It is expected that 140 members of the production staff will be made redundant at the start of year 1 at a cost of $£ 876000$.
(4) Annual maintenance costs of the robots are expected to be $£ 80000$, increasing to $£ 130000$ from year 3.
(5) Other fixed overheads are expected to be $£ 780000$ per year, increasing to $£ 926000$ from year 4.
(6) The selling price is expected to be $£ 175$ per steering wheel, increasing to $£ 192$ per steering wheel from year 4.

| 1 | 0 | Calculate the payback period (in years and months) of the purchase of the robots. |
| :--- | :--- | :--- |

(11 marks)

| 1 | 1 |
| :--- | :--- | Write a report to the directors of $R$ H Wheels Ltd recommending whether the purchase of robots should go ahead. Make reference to both financial and non-financial considerations in your recommendation.

(14 marks)
(includes 2 marks for quality of written communication)

## Turn over for the next task

## Task 4

Stuart Turner owns a factory manufacturing three types of wallpaper: Patterned, Striped and Plain.

The following information is available for the three types of wallpaper.

|  | Patterned | Striped | Plain |
| :--- | ---: | ---: | ---: |
|  | $£$ | $£$ | $£$ |
| Selling price per roll | 42 | 36 | 28 |
| Direct materials (£6 per metre) | 18 | 15 | 12 |
| Direct labour (£12 per hour) | 12 | 9 | 6 |
| Expected annual demand (rolls) | 100000 | 80000 | 60000 |

The factory is operational for 13 periods a year, with each period consisting of 4 weeks.
The staff work a daily 10 hour shift, 5 days a week. Stuart currently employs 50 staff.
The business is operating at full capacity but demand cannot be fully satisfied due to the limited labour hours.

Fixed overheads are $£ 1800000$ per annum.

| 1 | 2 | Prepare a contribution statement showing the maximum profit achievable with the limited |
| :--- | :--- | :--- | labour hours available.

(13 marks)
(includes 1 mark for quality of presentation)

Stuart wishes to meet total demand for all three types of wallpaper. He has two options.
Option 1: Employ part-time staff during the winter periods when demand is at a seasonal peak. The part-time staff will be paid $£ 8$ per hour.

Option 2: Buy in the deficit stock: Patterned at $£ 36$ per roll; Striped at $£ 30$ per roll; and Plain at $£ 24$ per roll.

| 1 | 3 | $C a l c u l a t e ~ t h e ~ a n n u a l ~ p r o f i t / l o s s ~ i f ~ t h e ~ p a r t-t i m e ~ s t a f f ~ a r e ~ e m p l o y e d . ~$ |
| :--- | :--- | :--- |


| 1 | 4 |
| :--- | :--- | Calculate the annual profit/loss if the deficit stock is bought in.


| 1 | 5 | $R e c o m m e n d ~ w h i c h ~ o p t i o n ~ S t u a r t ~ s h o u l d ~ u s e ~ t o ~ m e e t ~ t o t a l ~ d e m a n d . ~ G i v e ~ r e a s o n s ~ f o r ~$ |
| :--- | :--- | :--- | your choice.

## END OF QUESTIONS

There are no questions printed on this page

