General Certificate of Education
Advanced Level Examination
January 2012

Accounting ACCN4

Unit 4 Further Aspects of Management Accounting

Monday 30 January 2012 1.30 pm to 3.30 pm

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.

Answer **all** questions.

Task 1 **Total for this task: 8 marks**

Keisa Watling makes and sells scarves. During the year, she expects to make 600 scarves.
The expected direct costs for all 600 scarves are:

	£
Direct materials	2100
Direct labour	1500

Fixed overheads are expected to be £2400 per year.

The selling price is calculated as full cost plus 20%.

0 1 Calculate the selling price per scarf. *(4 marks)*

0 2 Using the selling price you calculated in **0 1**, calculate the:

(i) number of scarves that Keisa needs to make to break even
(ii) revenue at the break-even point. *(4 marks)*

Task 2 **Total for this task: 30 marks**

Locksum Ltd manufactures padlocks.

The following information is available for the year ended 31 October 2011.

	£
Inventory (stock) of raw materials	
At 1 November 2010	12 000
At 31 October 2011	16 000
Inventory (stock) of work in progress	
At 1 November 2010	6 400
At 31 October 2011	4 200
Inventory (stock) of finished goods	
At 1 November 2010	26 000
At 31 October 2011	34 000
Revenue (sales)	460 800
Purchases of raw materials	64 500
Carriage inwards	6 100
Wages	84 300
Rent	18 900
Royalties	7 000
Factory overheads	24 200
Insurance	13 200
Administration costs	42 000
Distribution costs	27 000

Additional information

(1) At 31 October 2011, wages owing were £9200. 60% of the total wages for the year were to be allocated to the factory. Of the factory wages, 30% were direct and the rest were indirect.

(2) At 31 October 2011, rent paid in advance amounted to £1200. Two thirds of the rent for the year was to be allocated to the factory and the rest was for the office and distribution centres.

(3) 75% of the insurance for the year was to be allocated to the factory and machinery.

(4) Machinery at cost was £300 000. Depreciation is to be charged over 5 years using the straight-line method. There is no expected scrap value at the end of the 5 years.

(5) The company produces 400 000 padlocks per year.

0 3 Prepare the manufacturing account for *Locksum Ltd* for the year ended 31 October 2011.

(14 marks)
(this includes 1 mark for quality of presentation)

The directors of *Locksum Ltd* are considering a relocation of the manufacturing process to eastern Europe. This will cost the business £1.5 million, which includes redundancy payments to the current workforce. The directors, however, believe that profitability will increase in the long term as the cost per padlock will be reduced to 40p.

0 4 Write a report to the directors of *Locksum Ltd* recommending whether or not the manufacturing process should be moved to eastern Europe. Consider both the financial effects and the non-financial effects from the viewpoint of the shareholders.

(16 marks)
(this includes 2 marks for quality of written communication)

Task 3 **Total for this task: 31 marks**

The directors of *Morgernzstern Ltd* plan to introduce a new product. In order to manufacture the product, a new machine will have to be purchased at a cost of £300 000. This machine is expected to be operational for 3 years, at the end of which there is no expected residual value. The machine will be depreciated using the straight-line method.

The new product is expected to sell for £40 per unit.

The cost of each unit will be made up of:

Direct materials: 0.25 metres at £16 per metre

Direct labour: 30 minutes at £28 per hour.

Annual production is expected to be 6000 units in the first year. Thereafter, annual production will increase by 20% compared to the previous year.

Maintenance costs are expected to be £2000 per annum, which will increase in year 3 to £3000. Annual fixed costs are expected to be £40 000.

The cost of capital is 8%.

The following discount factors are available:

	8%
Year 1	0.926
Year 2	0.857
Year 3	0.794

0 5 Calculate the net present value of the new machine. *(18 marks)*

Turn over for the next question

The directors decided to buy the new machine. During the first year, 6200 units were produced. The actual expenditure for the first year was:

	£
Direct material (2600 metres)	31 200
Direct labour (3000 hours)	60 000

0 6 Calculate the following sub-variances:

(i) direct material price variance
(ii) direct material usage variance
(iii) direct labour rate variance
(iv) direct labour efficiency variance. *(8 marks)*

0 7 Explain:

(i) **two** possible reasons for the labour efficiency variance
(ii) the effect of the labour efficiency variance on the budgeted profit for the first year. *(5 marks)*

Task 4 **Total for this task: 21 marks**

Calvin Clobber Ltd manufactures three types of jacket: Leather, Sports and Flak.

The company has one machine which is operating at full capacity but demand cannot be fully satisfied.

The following information is available for the three jackets.

	Leather	**Sports**	**Flak**
	£	**£**	**£**
Selling price	114	98	72
Direct materials (£12 per metre)	36	24	18
Direct labour (£12 per hour)	18	24	12
Expected annual demand (units)	18 000	10 000	9 000

Only 33 000 labour hours are available per annum.

0 8 Calculate the contribution per labour hour for **each** jacket. *(6 marks)*

0 9 Calculate the optimum production plan which *Calvin Clobber Ltd* could introduce that, given the limited number of labour hours available, would maximise profit. *(4 marks)*

1 0 Explain briefly the limitations of the production plan calculated in **0 9**. *(4 marks)*

The directors decide to implement the production plan from **0 9**. The directors intend to make full use of the 33 000 labour hours available per annum. Over the year, the business operates over 13 four-week periods, with five working days in each week. Each factory employee works 40 hours a week, except in periods 11, 12 and 13 when demand is at a seasonal peak and each employee does an extra two hours per day.

1 1 Prepare an extract from the labour budget for each of the periods 10 – 13, showing the maximum number of employees and the total hours worked per period. *(7 marks)*
(this includes 1 mark for quality of presentation)

END OF QUESTIONS

There are no questions printed on this page