



General Certificate of Education  
Advanced Level Examination  
January 2013

## Accounting

## ACCN4

### Unit 4 Further Aspects of Management Accounting

Tuesday 29 January 2013 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.
- 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: 16 marks**

*Spirit Boosters* manufactures high quality bracelet charms. Each bracelet charm is made from glass in the casting department, polished to a high shine in the polishing department and decorated in the finishing department.

On 1 November 2011, the directors set a target profit of £150 000 for the year ending 31 October 2012. They planned annual production and sales to be 24 000 bracelet charms.

The direct costs per bracelet charm for the year ended 31 October 2012 were expected to be:

	Casting department	Polishing department	Finishing department
Materials	25g at £8 per 100g	0	50g at £18 per 100g
Labour	40 mins at £12 per hour	15 mins at £8 per hour	2 hours at £14 per hour

The fixed overheads were expected to be £240 000 for the year and were to be absorbed based on the number of direct labour hours.

- 0 1** Calculate the expected full production cost per bracelet charm. (8 marks)
- 0 2** Calculate the expected selling price per bracelet charm which is needed to achieve the target profit of £150 000. (4 marks)
- 0 3** Explain **two** limitations of using absorption costing. (4 marks)

## Task 2

Total for this task: 34 marks

The Finance Manager of *Spirit Boosters* decided to introduce a system of budgetary control for labour costs.

The labour costs per department per bracelet charm were expected to be:

Casting department: 40 mins at £12 per hour
Polishing department: 15 mins at £8 per hour
Finishing department: 2 hours at £14 per hour

The business is open for 50 weeks a year and each employee works for 40 hours a week. Annual production was expected to be 24 000 bracelet charms. The target profit for the year ended 31 October 2012 was £150 000.

- 0 4** Prepare a labour budget for the year ended 31 October 2012. The budget should show the labour hours, the number of employees and the annual labour costs for each department. (13 marks)  
(includes 1 mark for quality of presentation)

- 0 5** Explain **two** reasons why this budget would be useful to the Finance Manager of *Spirit Boosters*. (4 marks)

The actual production for the year ended 31 October 2012 was 28 500 bracelet charms.

The labour variances have been calculated as:

	Casting department	Polishing department	Finishing department
Rate	?	£9 500 adverse	£52 250 adverse
Efficiency	?	£19 000 favourable	£66 500 favourable

The labour costs for the casting department were £332 500 for 23 750 hours.

- 0 6** Calculate the labour sub-variances for the casting department. (6 marks)
- 0 7** Calculate the change in the target profit for the year ended 31 October 2012 after adjusting for all of the labour sub-variances. (3 marks)
- 0 8** Advise the Finance Manager on the usefulness of the labour sub-variances as a means of identifying how to improve profitability. (8 marks)

Turn over ►

## Task 3

Total for this task: 30 marks

The Finance Manager of *Spirit Boosters* has decided that in order to improve profitability, he should invest in a new casting machine. This will reduce the number of employees in the casting department by two. Increased efficiency of the remaining workforce will allow annual production to rise to 32 000 bracelet charms.

The variable costs per bracelet charm will then be reduced to:

	£
Materials	9.50
Labour	28.50

The selling price will be set at £55 per bracelet charm.

Investment in the new casting machine will have the following costs.

- The purchase of the new casting machine will cost £900 000.
- The machine will last 4 years and is depreciated using the straight-line method.
- Annual finance costs for the purchase of the machine will be £260 000.
- Maintenance of the machine will cost £20 000 per year.
- Insurance of the machine will cost £9000 per year.
- The remaining employees will have to be retrained in order to use the new machine. This will cost an extra £32 000 in year 1.
- Redundancy costs of £8000 will be payable in year 1.

The cost of capital is 15%. An extract from the net present value table for £1 shows:

Year	Discount factor
1	0.870
2	0.756
3	0.658
4	0.572

- 0 9** Calculate the payback period of the new machine. (11 marks)
- 1 0** Calculate the net present value of the new machine. (7 marks)  
(includes 1 mark for quality of presentation)
- 1 1** Advise the Finance Manager on whether the new machine should be purchased. Consider **only** financial factors. (12 marks)

**Task 4****Total for this task: 10 marks**

*Spirit Boosters* purchased a second-hand polishing machine. Unfortunately, it was soon discovered that, during the polishing process, fumes escaped from the machine. It is rumoured that these fumes might adversely affect the workers' breathing. The Finance Manager has decided to pay the workers on this machine an extra £3 per hour and has insisted that they wear protective masks.

**1 | 2**

Discuss the possible implications for the business of continuing to use this second-hand machine. (10 marks)  
*(includes 2 marks for quality of written communication)*

**END OF QUESTIONS**

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