LCCI International Qualifications

Series 4 Examination 2008

COST ACCOUNTING

Level 3

Tuesday 11 November

Subject Code: 3016

Time allowed: **3 hours**

INSTRUCTIONS FOR CANDIDATES

- Answer **5** questions.
- All questions carry equal marks.
- Write your answers in blue or black ink/ballpoint. Pencil may be used only for graphs, charts, diagrams, etc.
- Begin your answer to each question on a new page.
- All answers must be correctly numbered, but need not be in numerical order.
- Workings must be shown.
- Presentation is important.
- You may use a calculator provided the calculator gives no printout, has no word display facilities, is silent and cordless. The provision of batteries and their condition is your responsibility.

QUESTION 1

A company has three production departments (Machining, Assembly and Finishing) and two service departments (Stores and Maintenance) within its factory. The budgeted production overhead costs, allocated to the five departments for a period, were as follows:

Allocated overheads	£
Machining dept	83,000
Assembly dept	40,000
Finishing dept	23,000
Stores dept	34,500
Maintenance dept	37,000

The following budgeted costs for the period have yet to be apportioned to the five departments:

	£
Building related	20,000
Labour related	12,000
Depreciation of machinery	10,000

In addition, the following budgeted information relating to the five departments for the period is available:

Department	Floor Area (Sq metres)	Number of Employees	Machine Value (£)	Direct Labour Hours	Machine Hours
Machining	2,000	10	35,000	6,700	8,000
Assembly	2,000	20	-	13,500	-
Finishing	4,000	15	5,000	10,000	1,000
Stores	1,000	10	7,500	-	-
Maintenance	1,000	5	2,500	-	-

Service department overhead costs are apportioned on the following basis:

Department	Stores	Maintenance
Machining	40%	50%
Assembly	20%	20%
Finishing	20%	15%
Stores	-	15%
Maintenance	20%	-

Actual results for the period were:

Department	Direct Labour Hours	Machine Hours	Actual Department Overheads (£)
Machining	6,800	7,600	125,000
Assembly	13,100	-	60,500
Finishing	10,800	950	58,160

QUESTION 1 CONTINUED

REQUIRED

For the period:

(a) Produce a budgeted overhead distribution table, showing the allocated and apportioned costs for the five departments.

(3 marks)

(b) Re-apportion the budgeted service department's costs to the production departments using simultaneous equations.

(Full marks will not be awarded for other methods)

(10 marks)

(c) Calculate a suitable overhead absorption rate for each of the production departments.

(3 marks)

(d) Calculate the over/under absorbed overhead for each of the production departments.

(4 marks)

(Total 20 marks)

QUESTION 2

Blue Stock Ltd maintains stock record cards that clearly show physical stock, allocated stock, amount on order and free stock.

The stock record card for one item of stock, Part Number B100, recorded the following information and balances at the beginning of month 2:

Re-order level	600 units of free stock
Re-order quantity	500 units
Physical stock	250 units
Allocated stock	110 units
Amount on order	500 units

The following transactions relating to Part Number B100 took place during month 2:

Day	
2nd	60 units allocated to job No. 21
3rd	110 units issued to job No. 16 (previously allocated)
4th	20 units issued to job No.122 (not previously allocated)
8th	Materials ordered at end of month 1 received
10th	100 units issued to job 23 (not previously allocated)
14th	80 units allocated to job 24
15th	50 units returned to supplier as faulty. Supplier agreed to replace
20th	60 units issued to job 21 (previously allocated)
26th	200 units issued to job 25 (not previously allocated)
28th	Materials ordered in month 2 received plus replacement materials returned on 15^{th} of month
30th	100 units issued to job 26 (not previously allocated)

REQUIRED

(a) Write up the detailed stock record card for Part Number B100 for month 2

(15 marks)

(b) Briefly explain the meaning of:

- (i) Re-order level (1 mark)
- (ii) Allocated stock (1 mark)
- (iii) Free stock (3 marks)

(Total 20 marks)

QUESTION 3

A company budgeted to make and sell 500 units of its single product in a period. The company uses standard costing and produced the following budgeted information on the product:

		£/unit	£/unit
Selling price			80
Direct labour	(2hrs @ £8 per hour)	16	
Direct materials		28	
Fixed overheads	(£12 per direct labour hour)	24	
Standard cost			68
Gross profit			12

Actual sales and costs relating to the period were as follows:

Sales volume	400	units
Revenue from sales	£34,000	
Direct labour	£6,200	
Direct material	£11,800	
Fixed production overheads.	£8,500	

The following information has also been provided:

(1) All production was sold during the period and there was no opening stock.
(2) Actual direct labour worked was 825 hours.

REQUIRED

(a) Calculate the following variances for the period:

(i) sales price
(ii) sales volume profit
(iii) total cost.

(6 marks)

(b) Reconcile the budgeted gross profit with the actual gross profit using the variances calculated in part (a).

(3 marks)

(c) Calculate the following fixed overhead variances for the period:

(i) expenditure
(ii) volume
(iii) capacity
(iv) efficiency.

(8 marks)

(d) Distinguish between an ideal and an attainable standard.

(3 marks)

(Total 20 marks)

QUESTION 4

Telstar Ltd, which manufactures a single product, has prepared the following budgeted information for the next period:

Production/sales units	10,000
	£
Selling price per unit	56
Direct material	140,000
Direct labour	100,000
Production overheads	110,000
Selling and distribution overheads	70,000
Administration overheads	20,000

The following points have been revealed concerning the budget:

(1) The budget is based on 80% utilisation of maximum capacity.
(2) Production overheads are absorbed on a cost per unit basis based on the maximum capacity and a total cost of £120,000 at maximum capacity.
(3) Selling and distribution overheads include a fixed element of £30,000.
(4) Administration overheads are fixed.

REQUIRED

(a) Calculate for the next period

(i) The fixed overhead costs (5 marks)

(ii) The breakeven point (in units) (2 marks)

(iii) The margin of safety as a % of the sales (1 mark)

(iv) Profit at 80% capacity utilisation. (1 mark)

The company is considering reducing its selling price to £52 per unit. Market research suggests that this price reduction will generate the additional sales for the company to operate at maximum capacity.

REQUIRED

(b) Assuming a selling price of £52 per unit and maximum capacity utilisation, calculate for the next period:

(i) The breakeven point (in units) (1 mark)

(ii) The margin of safety as a % of sales (1 mark)

(iii) Profit at 100% capacity. (1 mark)

(c) Using the graph paper provided draw on a single profit-volume chart a separate profit line for each of the following:

(i) £56 per unit selling price (up to 80% capacity utilisation)

(ii) £52 per unit selling price (up to 100% capacity utilisation).

Clearly show on the chart the breakeven point for each selling price and margin of safety for each resulting output.

(8 marks)

(Total 20 marks)

QUESTION 5

Twin Products Ltd manufactures two products, Aye and Bee, from a single raw material. Each product passes through two production departments, Cutting and Finishing, before final inspection. The company is in the process of preparing its budgets for month 8 and has provided the following information:

	Aye	**Bee**
Budgeted sales (units)-first quality	4,000	3,000
Budgeted selling price (per unit)	£10	£15
Direct labour (per batch of 100 units)		
Cutting dept (@ £8 per hour.)	8hrs	12hrs
Finishing dept (@ £10 per hour.)	4hrs	8hrs
Finished weight of completed unit	1.5 kg	3 kg

Raw material cost £3 per kg

Raw material wastage rate (Cutting dept) - 25% of input material

No raw material waste occurs in the Finishing dept

Raw material waste is sold back to the original supplier at £2 per kg

Finished product rejection rate - 20% of products inspected

Rejected products are sold, as second quality, for £5 and £8 for Aye and Bee respectively.

Production overheads for month 8 (including inspection) £8,200

No stocks of finished units or work in progress are budgeted for

Stock levels of raw material are expected to be:

Month 7 (end)	3,000 kg
Month 8 (end)	2,000 kg

Assume that all waste material and second quality products that arise in the period are sold.

REQUIRED

(a) Prepare the following budgets for month 8:

(i) Production (units of each product) (3 marks)
(ii) Raw material usage (kgs) (3 marks)
(iii) Raw material purchases (kgs) (2 marks)
(iv) Sale of raw material waste (kgs) (2 marks)
(v) Sale of second quality products (units of each product) (1 mark)

(b) Prepare a budgeted profit statement for month 8.

(6 marks)

(c) Define, giving two examples, the term ‘principal budget factor’, and explain its influence on the budget setting process.

(3 marks)

(Total 20 marks)

QUESTION 6

The following balances were recorded in the cost ledger of a manufacturing company at the beginning of Month 2.

	£000
Raw Material Control Account	50
Finished Goods Control Account	80
Work in Progress Control Account	80
Production Overhead Control Account (over absorbed)	5
Financial Ledger Control Account	205

During Month 2 the following transactions took place

	£000
Raw material purchases	110
Returns to suppliers	3
Materials issued from store	120
Total factory wages	100
Indirect production expenses	55
Work completed at cost	300
Production cost of sales	280
Sales	400

NOTES

(i) 10% of raw material issues from stores are indirect
(ii) 80% of factory wages are direct labour
(iii) Factory overheads are absorbed at the rate of 110% of the direct labour wages.

REQUIRED

(a) Record the above transactions in the cost ledger accounts for month 2.

(14 marks)

(b) Prepare a Costing Profit & Loss Account for month 2.

(1 mark)

(c) Close the accounts at the end of Month 2 and prepare a Trial Balance.

(5 marks)

(Total 20 marks)

 © Education Development International plc 2008