LCCI International Qualifications

SERIES 4 EXAMINATION 2006

MANAGEMENT ACCOUNTING

LEVEL 3

(Code No: 3723/S)

TUESDAY 28 NOVEMBER

Instructions to Candidates

(a) *The time allowed for this examination is **3** hours.*

(b) *Answer **5** questions.*

(c) *All questions carry equal marks.*

(d) *All answers must be clearly and correctly numbered but need not be in numerical order.*

(e) *Your answers should be written in blue or black ink/ballpoint. Pencil may be used only for graphs, charts, diagrams, etc.*

(f) *Candidates may use calculators provided the calculators give no printout, have no word display facilities, are silent and cordless. The provision of batteries and responsibility for their condition must rest with the candidate.*

(g) *All workings must be shown.*

QUESTION 1

(a) Explain what is meant by **Activity based Costing**, making comparison with traditional absorption costing.

(6 marks)

(b) Discuss the **human behavioural problems** that can be associated with budgetary control systems.

(8 marks)

(c) Describe what is meant by a **transfer price**. State why transfer prices may be required between divisions in a decentralised organisation, and the objectives of transfer prices in such an organisation.

(6 marks)

(Total 20 marks)

QUESTION 2

A company has budgeted to sell 200,000 units of its single product in the forthcoming year at a selling price of $20 per unit. The variable cost per unit will be $12.

The company's budgeted fixed costs are $1,000,000 for the year.

REQUIRED

(a) Calculate for the year:

(i) the budgeted break-even point (in units) (3 marks)

(ii) the budgeted margin of safety (in units) (2 marks)

(b) Explain the significance of both the break-even point and the margin of safety.

(4 marks)

(c) Calculate the increase in budgeted sales units required:

(i) to increase the existing budgeted profit by one third (3 marks)

(ii) to maintain the existing budgeted profit if the company now budgets for an advertising campaign at a cost of $250,000 (2 marks)

(d) Calculate: the selling price that will be required, assuming that sales units remain at 200,000, to maintain the original budgeted profit if the advertising campaign in (c) goes ahead and the variable cost per unit increases by $1 per unit.

(6 marks)

(Total 20 marks)

QUESTION 3

A company produces and sells a single product, the standard selling price and production costs of which are:

	$ per unit
Selling price	25
Direct material 1 kilo x $7 per kilo	7
Direct labour 2 hours x $4 per hour	8
Fixed overhead 2 hours x $2 per hour	4

The figures for a recent period were:

Budgeted production and sales	20,000 units
Actual production	19,000 units
Actual units sold	18,800 units
Actual sales revenue	$451,200
Actual direct material 19,000 kilos x $6.8 per kilo	$129,200
Actual direct labour 38,200 hours x $3.8 per hour	$145,160
Actual fixed production overhead	$83,900

Raw material stocks were unchanged during the period.

REQUIRED

(a) Calculate for the period:

(i) The standard gross profit (2 marks)

(ii) The actual gross profit (2 marks)

(b) Calculate the following variances for the period:

(i) Selling price (2 marks)

(ii) Sales volume profit (2 marks)

(iii) Material price (2 marks)

(iv) Labour rate (2 marks)

(v) Labour efficiency (2 marks)

(vi) Fixed production overhead expenditure (2 marks)

(vii) Fixed production overhead capacity (2 marks)

(viii) Fixed production overhead efficiency (2 marks)

(Total 20 marks)

QUESTION 4

A company commenced trading on 1 July, producing and selling a single product.

Unit variable cost and selling price details of the product are:

	$ per unit
Selling price	50
Direct material	10
Direct labour	12
Variable production overhead	4
Variable selling and distribution overhead	3

Monthly fixed overheads are:

Production overheads	$100,000
Selling and distribution overheads	$60,000

Activity is budgeted at 10,000 units per month, which is used to establish a pre-determined fixed overhead absorption rate if absorption costing is used.

The following activity took place during July and August:

	July	**August**
Sales	9,000 units	11,000 units
Production	12,000 units	13,000 units

REQUIRED

(a) Prepare profit statements for each month using:

(i) Marginal costing (9 marks)

(ii) Absorption costing (8 marks)

(b) Prepare a statement reconciling the marginal with the absorption profit for each month. (3 marks)

(Total 20 marks)

QUESTION 5

A company has been awarded a contract to produce 85,000 units of a new product over five years. A machine has to be purchased to fulfil the contract at a cost of $600,000 with a residual value of $50,000 at the end of five years.

The selling price of the product will be $24 per unit with a variable production cost of $7 per unit, and other variable overheads of $2 per unit. Incremental fixed cost (other than depreciation of the machine) will be $50,000 per year.

The customer is prepared to take delivery of the product under two alternative schedules, schedule 1 and schedule 2.

The output/sales under each schedule would be:

	Schedule 1	**Schedule 2**
Output (units)		
Year 1	22,000	17,000
Year 2	22,000	17,000
Year 3	15,000	17,000
Year 4	15,000	17,000
Year 5	11,000	17,000

The company has a cost of capital of 10% per annum.

Discount factors at 10% are:

Year 1 .909
Year 2 .826
Year 3 .751
Year 4 .683
Year 5 .621

REQUIRED

(a) Calculate:

the Accounting Rate of Return for the contract (using average investment)

(3 marks)

(b) Evaluate each schedule using:

(i) Payback (6 marks)

(ii) Net Present Value (6 marks)

(c) Recommend with reasons, which schedule should be undertaken.

(2 marks)

(d) A further method of evaluation is the Internal Rate of Return. State briefly how the Internal Rate of Return is calculated and its significance (You are **NOT** required to calculate the Internal Rate of Return).

(3 marks)

(Total 20 marks)

QUESTION 6

A company prepared the following budgets for the first two months of its trading period:

	Month 1	Month 2
Production (units)	13,500	20,800
Sales (units)	15,000	20,000
Costs ($000)		
Material	216	332.8
Labour	270	416
Overhead:		
Production	235	308
Administration	46	53.3
Selling and distribution	180	195

Overheads are comprised of fixed costs and proportionately variable costs.
The variable elements of selling and distribution overheads vary with sales.
All other variable costs vary with production.

The actual sales and production for month 2 are:

Sales	21,000 units
Production	21,500 units

The following actual costs were recorded for month 2:

	($000)
Material	350
Labour	482
Overhead:	
Production	352
Administration	60
Selling and distribution	205

REQUIRED

(a) Prepare the revised cost budget for month 2 based on the actual sales and production.

(8 marks)

(b) Calculate:

the cost variances for Month 2

(8 marks)

(c) Calculate:

the total budgeted production cost per unit for each of months 1 and 2, based on the original budget and explain the difference between the figures.

(4 marks)

(Total 20 marks)

