LCCI International Qualifications

SERIES 2 EXAMINATION 2006

COST ACCOUNTING

LEVEL 3

(Code No: 3016)

FRIDAY 7 APRIL

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) Presentation is important.

(g) 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.

(h) It is recommended that candidates show essential workings.

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QUESTION 1

Makit Ltd manufactures a product in a single process. All materials are introduced at the start of the process and any losses that occur have no scrap value. The company uses the first-in first-out method of valuation.

Production overheads are absorbed at the rate of £12 per direct labour hour.

Direct labour is paid at the rate of £8 per hour.

The following information is available for the last period:

Opening stock of work-in-progress	1,000kg	£8,300

(The opening stock of work in progress was 60% complete with respect to labour and overheads)

Materials introduced	16,000kg	£70,000
Direct labour	£27,600	
Transfer to finished goods	14,000kg	
Closing stock of work-in-progress	1,200kg	

(The closing stock of work-in-progress was 50% complete with respect to labour and overheads)

A normal loss of 2,000kg was expected.

All losses are detected at the end of the process.

REQUIRED

(a) For the last period calculate:

(i) the equivalent units and the cost per unit for each element of cost

(4 marks)

(ii) the value of the transfer to finished goods and of the closing stock of work-in-progress

(6 marks)

(b) Prepare the process account showing both quantities and values

(5 marks)

(c) Define normal loss and abnormal loss/gain and contrast briefly their cost accounting treatment

(5 marks)

(Total 20 marks)

QUESTION 2

Ace 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. A752, recorded the following information and balances at the beginning of month 2:

Re-order level	500 units of free stock
Re-order quantity	400 units
Physical stock	250 units
Allocated stock	110 units
Amount on order	400 units

The following transactions relating to Part Number A752 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	150 units issued to job 25 (not previously allocated)
28th	Materials ordered in month 2 received plus replacement materials returned on 15th of month
30th	50 units issued to job 26 (not previously allocated)

REQUIRED

(a) Write up the detailed stock record card for Part Number A752 for month 2
(14 marks)

(b) Briefly explain the meaning of:

(i) Re-order level (2 marks)

(ii) Allocated stock (2 marks)

(iii) Free stock (2 marks)

(Total 20 marks)

QUESTION 3

ACE Ltd, which produces a single component for the motor industry, has just completed its first year of trading. The summary profit and loss account for the year, prepared on the absorption costing basis, is set out below:

	£	**£**
Sales		
		224,000
Production cost of sales:		
Cost of production:		
Direct material	37,440	
Direct labour	47,970	
Variable overhead	25,740	
Fixed overhead	38,610	
	149,760	
Less closing stock	6,400	
		143,360
Gross profit		80,640
Selling and administration costs:		
Variable	4,480	
Fixed	33,600	
		38,080
Net profit		42,560

11,700 units were manufactured in the first year and 11,200 were sold

Budgeted data for the second year of trading is as follows:

Sales units	12,100
Production units	12,500
Selling price	£22 .00 per unit
Direct material	£ 3.40 per unit
Direct labour (0.50 hours @ £9 per hour)	£ 4.50 per unit
Variable production overheads absorbed @	£ 4.50 per direct labour hour.
Fixed production overheads	£40,000
Variable selling and administration costs	£ 5,000
Fixed selling and administration costs	£36,000

REQUIRED

(a) Prepare a budgeted profit and loss account for Year 2 using the:

(i) Absorption costing basis

(ii) Marginal costing basis

(15 marks)

(b) Explain the difference between the profits calculated in part (a) Your explanation should be supported with calculations.

(5 marks)

(Total 20 marks)

QUESTION 4

A company manufactures and distributes a single product. The variable costs per unit are as follows:

Direct materials	£40.00
Direct labour	£12.00
Variable overheads	£ 8.00

The product sells for £80.00 per unit and the company expects total sales revenue in this current year of £1,200,000. Fixed overheads are forecasted at £120,000 for the year.

REQUIRED

(a) Calculate for the current year the:

(i) break-even point in units (2 marks)

(ii) contribution/sales ratio (2 marks)

(iii) margin of safety as a percentage of sales (2 marks)

(iv) expected profit (2 marks)

The following changes in cost are expected in the following year:

Raw material prices to increase by 5%
Direct wage rate to increase by 3%
Variable overheads to rise by 8% per unit of product
Fixed overheads to increase by £16,000

REQUIRED

(b) Calculate for the following year:

(i) A new selling price that maintains the current year's contribution/sales ratio (4 marks)

(ii) The sales volume required to maintain the current year's margin of safety if the selling price remains at £80 (4 marks)

(iii) The sales volume required to maintain the current year's profit if the selling price remains at £80. (4 marks)

(Total 20 marks)

QUESTION 5

A manufacturing company has prepared the following monthly overhead budget for its cost centre A12.

Units produced	9,000	10,000	11,000	12,000
	£	**£**	**£**	**£**
Indirect materials	22,500	24,500	26,950	29,400
Indirect labour	13,500	15,000	17,325	18,900
Power	2,360	2,560	2,760	2,960
Maintenance	13,200	14,500	15,800	17,100
Depreciation	6,440	6,440	6,440	6,440
Supervision	18,000	27,000	27,000	36,000

The variable indirect material cost per unit reduces by 2% for production of 10,000 units and over.

The variable indirect labour cost per unit increases by 5% for production of 11,000 units and over.

Actual production in Month 1 was 10,400 units and actual overhead expenditure was:

	£
Indirect materials	26,480
Indirect labour	15,100
Power	2,540
Maintenance	15,620
Depreciation	6,240
Supervision	27,800

REQUIRED

(a) Briefly explain the main difference between flexible and fixed budgets

(4 marks)

(b) Prepare a statement for Month 1 for cost centre A12, showing for each item of cost, the following:

(i) Flexed budget allowance

(ii) Actual cost

(iii) Expenditure variance

(16 marks)

(Total 20 marks)

QUESTION 6

The standard production costs per unit of a company's single product in a period were:

Direct materials			**£**
	RM01	4kg at £3 per kg	12.00
	RM02	2metres at £4 per metre	8.00
Direct labour			
	Grade 1	2 hours at £8 per hour	16.00
	Grade 2	1 hours at £10 per hour	10.00
	Fixed overheads		24.00
			70.00

Budgeted production for this period was 1,200 units

Actual production and costs relating to this period were as follows:

Production		1,250 units
Direct material Purchases		
	RM01	5,300 kg purchased at a total cost of £16,200
	RM02	2,400metres purchased at a total cost of £9,400
Issues to production		
	RM01	5,100kg
	RM02	2,200metres
Direct labour		
	Grade 1	2400 hours worked at a total cost of £18,600
	Grade 2	1300 hours worked at a total cost of £12,000

Fixed production overheads incurred £28,000

At the beginning of the period the following quantities of raw material were in stock:

RM01	200 kg
RM02	120 metres

There were no stocks of work in progress at the beginning or end of the period.

The company's policy is to calculate material price variance at the time of purchase.

REQUIRED

For this period

(a) Calculate the following variances:

(i) Direct material price and usage (for each type of raw material) (6 marks)

(ii) Direct labour rate and efficiency (for each grade of labour) (6 marks)

(iii) Fixed overhead expenditure and volume (2 marks)

(b) Prepare the Raw Materials Stock Account for each type of direct material (include in your accounts the price variance). (6 marks)

(Total 20 marks)

