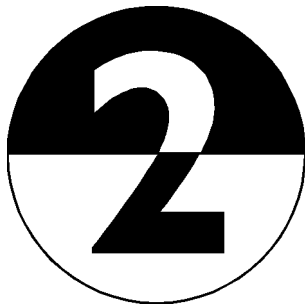


Cost Accounting



Level 2

Series 2 2003

(Code 2016)

Model Answers

Cost Accounting Level 2

Series 2 2003

How to use this booklet

Model Answers have been developed by LCCIEB to offer additional information and guidance to Centres, teachers and candidates as they prepare for LCCIEB examinations. The contents of this booklet are divided into 3 elements:

- (1) Questions – reproduced from the printed examination paper
- (2) Model Answers – summary of the main points that the Chief Examiner expected to see in the answers to each question in the examination paper, plus a fully worked example or sample answer (where applicable)
- (3) Helpful Hints – where appropriate, additional guidance relating to individual questions or to examination technique

Teachers and candidates should find this booklet an invaluable teaching tool and an aid to success.

The London Chamber of Commerce and Industry Examinations Board provides Model Answers to help candidates gain a general understanding of the standard required. The Board accepts that candidates may offer other answers that could be equally valid.

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Cost Accounting Level 2

Series 2 2003

QUESTION 1

The basic costing method applicable is jointly determined by the type of industry involved and the routines by which goods are manufactured or services provided.

REQUIRED

- (a) Name:
- (i) 3 specific order costing methods (6 marks)
 - (ii) a continuous operation costing method. (2 marks)
- (b) For **each** of the **four** methods named in part (a), describe briefly the nature of production or type of service which determines its application. In each case give an example of an industry or service which uses that method. (12 marks)

(Total 20 marks)

Model Answer to Question 1

- (a) (i) Job costing
Contract costing
Batch costing
- (ii) Process costing
- (b) **Job costing** is used when customers specify their requirements. Jobs are normally small in size and duration. Costs are attributed to individual jobs. Each job is distinct and identifiable eg printing industry, car repairs.

Contract costing. Costs are attributed to individual contracts for work undertaken to customer's specification. Work is normally extensive and of long duration and carried out on site eg construction industry, civil engineering projects.

Batch costing is used when a quantity of identical units are manufactured in one batch. The batch is treated as a job and all costs are charged to it. Total costs divided by good units produced give average cost per unit eg clothing, shoe making, light engineering industry.

Process costing is applied where cost units are identical and where goods or services result from a sequence of continuous or repetitive operations or processes. Costs are averaged over the units produced during the period, being initially charged to the operation or process eg brewery, food (canning beans, peas etc).

QUESTION 2

Endron Ltd produces a single product. The cost per unit is made up as follows:

	£
Direct materials	68
Direct labour	25
Variable overhead	12
Fixed overhead	<u>28</u>
	<u>133</u>

The selling price is £156.

Currently the firm is producing and selling at its maximum capacity of 90,000 units of product per annum.

Demand is expected to increase by 30,000 units. To achieve the extra production required, it is proposed to introduce a night shift. This would increase fixed costs by £840,000 per annum. The direct labour hourly rate would increase by 10% for the night shift.

Raw materials are currently supplied at a contracted price. Additional raw materials at market price would mean that unit material costs would increase by 5% for the further quantities purchased. The selling price and other costs would remain the same per unit.

REQUIRED

- (a) A statement on a marginal cost basis to show the benefit, if any, of introducing the proposed night shift. (9 marks)
- (b) Calculate:
- (i) the contribution to sales ratio for the night shift production
 - (ii) the minimum increase in production required to justify the night shift. (7 marks)
- (c) Name **two** matters, other than Sales, that could be the principal budget factor with regard to the proposed night shift. (4 marks)

(Total 20 marks)

Model Answer to Question 2

	Per Unit		
	£	£	£
(a) Sales (30,000 x £156)	<u>156.00</u>		4,680,000
Less: Direct material (£68 + 5% x 30,000)	71.40	2,142,000	
Direct labour (£25 + 10% x 30,000)	27.50	825,000	
Variable overhead (£12 x 30,000)	<u>12.00</u>	<u>360,000</u>	<u>3,327,000</u>
Contribution	45.10		1,353,000
Less: Fixed Costs			<u>840,000</u>
NET PROFIT			<u>513,000</u>

(b) (i) $WN1 \frac{\underline{£1,353}}{£4,680} \times 100 = 28.9\%$

(ii) $\frac{\underline{£840,000}}{£1,353 \div 30} = 18,625 \text{ units}$

- (c) Availability of labour
Supplies of raw material
Initial finance for working capital prior to sales receipts
Maintenance requirements of plant and machinery re capacity increase.

QUESTION 3

Vohersage Ltd is preparing a cash budget. The following information is available:

Month	Sales £000	Purchases £000	Overheads £000
August (actual)	90	60	11
September (actual)	75	72	9
October (estimated)	60	75	10
November (estimated)	75	70	12
December (estimated)	90	65	11

Other relevant information:

- (1) On 1 October, the bank balance was £2,000 overdrawn.
- (2) All purchases are paid for in the month following purchase.
- (3) Overheads include a monthly depreciation charge. Depreciation is calculated at the rate of 10% per annum on fixed assets of £144,000 at cost.
- (4) All sales are on credit. Half of the sales are paid for during the month following sale, the balance being paid during the next month.
- (5) Half of the overheads are paid during the month in which they are incurred, the balance being paid in the following month.

REQUIRED

- (a) Prepare a cash budget for **each** of the 3 months October to December. (16 marks)
- (b) Briefly state **4** courses of action management could take to deal with a cash deficit. (4 marks)

(Total 20 marks)

Model Answer to Question 3

(a)

CASH BUDGET

	October	November	December
	£	£	£
RECEIPTS:			
Debtors - 1st month	37,500	30,000	37,500
2nd month	<u>45,000</u>	<u>37,500</u>	<u>30,000</u>
	<u>82,500</u>	<u>67,500</u>	<u>67,500</u>
PAYMENTS:			
Purchases	72,000	75,000	70,000
Overheads * 1st Month	4,400	5,400	4,900
2nd Month	<u>3,900</u>	<u>4,400</u>	<u>5,400</u>
	<u>80,300</u>	<u>84,800</u>	<u>80,300</u>
Net Cash Flow	2,200	(17,300)	(12,800)
Opening Balance	(2,000)	200	(17,100)
Closing Balance	200	(17,100)	(29,900)

* Deduct £1,200 depreciation from original overheads figure

- (b) (i) Improve credit control eg by urging late debtors to pay amounts due
(ii) Adjust terms of credit policy with the agreement of customers
(iii) Factor debtors
(iv) Negotiate longer credit term with suppliers
(v) Reduce stocks
(vi) Negotiate overdraft/loan

Other valid suggestions are acceptable

QUESTION 4

Doppelt Ltd produces two products, DA and DB in batches on the same production line. Details for one unit of each product are:

	DA	DB
Direct Materials	£8	£10
Direct Labour at £4.00 per hour	£12	£20
Machine time	6 hours	5 hours

Budgeted production for the year:

DA 5,000 units DB 2,000 units

Total budgeted production overheads for the year are: £120,000.

Selling prices are based on the estimated total factory cost plus 15%.

REQUIRED

(a) Calculate a predetermined absorption rate for production overhead based upon:

- (i) Direct material cost (percentage of cost);
- (ii) Direct labour hours (rate per hour);
- (iii) Machine hours (rate per hour).

(10 marks)

(b) Calculate **3** separate selling prices for product DA only, using each of the absorption rates calculated in part (a) above.

(10 marks)

(Total 20 marks)

Model Answer to Question 4

(a) (i) DIRECT MATERIAL COST

	£
5,000 units x £8	= 40,000
2,000 units x £10	= <u>20,000</u>
TOTAL	<u>60,000</u>

$$\text{OAR} = \frac{\pounds 120,000}{60,000} \times 100\% = 200\% \text{ of direct material cost}$$

(ii) DIRECT LABOUR HOURS

5,000 units x 3 hours	= 15,000
2,000 units x 5 hours	= <u>10,000</u>
TOTAL	<u>25,000</u>

$$\text{OAR} = \frac{\pounds 120,000}{25,000 \text{ hours}} = \pounds 4.80 \text{ per direct labour hour}$$

(iii) MACHINE HOURS

5,000 units x 6 hours	= 30,000
2,000 units x 5 hours	= <u>10,000</u>
TOTAL	<u>40,000</u>

$$\text{OAR} = \frac{\pounds 120,000}{40,000 \text{ hours}} = \pounds 3.00 \text{ per m/c hour}$$

(b) SELLING PRICE – DA

	% Direct Material £	Direct Labour Hours £	Machine Hours £
Prime Cost	20.00	20.00	20.00
Overhead:			
£8 x 200%	16.00		
3 hours x £4.80		14.40	
6 hours x £3.00			<u>18.00</u>
Production Cost	<u>36.00</u>	<u>34.40</u>	<u>38.00</u>
Add 15%	<u>5.40</u>	<u>5.16</u>	<u>5.70</u>
Selling Price	<u>41.40</u>	<u>39.56</u>	<u>43.70</u>

QUESTION 5

Speedco Ltd provides a delivery service and is contracted by Centro Ltd to deliver goods to a regular customer.

The standards set for each journey are as follows:

Drivers' wages	£5 per hour
Journey time	8 hours
Fuel consumed	80 litres
Fuel cost	£0.68 per litre

In Month 8 the actual wages paid for making 20 journeys cost £858 and the fuel used cost £1,190. From the commencement of Month 8 there had been an increase over standard of 4% in the wage rate per hour and the price of fuel had increased to £0.70 per litre.

REQUIRED

- (a) Calculate for the 20 journeys in Month 8:
- (i) the total standard cost
 - (ii) the total actual cost
 - (iii) the total variance.
- (8 marks)
- (b) Analyse the total material (fuel) cost variance between price and usage.
- (6 marks)
- (c) Analyse the total labour cost variance between rate and efficiency.
- (6 marks)
- (Total 20 marks)**

Model Answer to Question 5

(a) (i)	Standard Cost per journey	£
	Material (80 x £0.68)	54.40
	Labour (8 x £5)	<u>40.00</u>
		<u>94.40</u>
	Total = 20 x £94.40 =	<u>£1,888</u>

OR:	Material (80 x £0.68 x 20)	£
	Labour (8 x £5 x 20)	1,088
		<u>800</u>
		<u>1,888</u>

(ii)	Total Actual Cost	£
	Material	1,190
	Labour	<u>858</u>
		<u>2,048</u>

(iii)	Total Variance	£
	Standard Cost	1,888
	Actual Cost	<u>2,048</u>
	Adverse	<u>160</u>

(b)	Total Material Cost Variance	£
	Standard Cost	1,088
	Actual Cost	<u>1,190</u>
	Adverse	<u>102</u>

Material Usage:	
Standard Usage (20 x 80 litres)	1,600 litres
Actual Usage (£1,190 / £0.70)	<u>1,700 litres</u>
	<u>100 litres</u>

Excess usage litres	
At standard, £0.68	Adverse £68

Material Price	
1,700 litres x (£0.70 – £0.68)	Adverse £34

(c)	Total Labour Cost Variance	£
	Standard Cost	800
	Actual Cost	<u>858</u>
	Adverse	<u>58</u>

Labour Efficiency

Standard Hours (20 x 8 hours) = 160 hours

Actual Hours (£858/£5 + 4%) 165 hours
5 hours

Excess Hours at standard rate, £5 Adverse £25

Wage Rate 165 Hours x (£5.20 - £5.00) Adverse £33

QUESTION 6

L Dunst is employed in the Finishing Department of Nebel Ltd. His basic rate is £6.20 per hour and normal hours are: 40 hours for a 5 day week, from Monday to Friday. Overtime on weekdays is paid at time and a half. Saturday and Sunday working is paid at double time.

A premium bonus scheme is in operation. The employee receives a bonus of 20% of time saved (comparing actual production hours against the standard time allowed), paid at the basic rate. If idle time occurs these hours are paid a bonus based on the average bonus earned for the week.

In Week 13 L Dunst attended for the following hours:

Day	Hours
Monday	10
Tuesday	10
Wednesday	8
Thursday	8
Friday	8
Saturday	6
Sunday	<u>4</u>
	<u>54</u>

The standard hours allowed for Week 13 were 64. Idle time occurred on Wednesday for 2 hours due to a power cut.

REQUIRED

Calculate the gross wage for L Dunst for Week 13.

(20 marks)



**EXAMINATIONS
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