

Mark Scheme (Results)

Series 2 2014

Pearson LCCI Level 3
Cost Accounting (ASE3017)

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**LCCI IQ SERIES 2 EXAMINATION 2014
COST ACCOUNTING
LEVEL 3
MARKING SCHEME**

**DISTINCTION MARK 75%
MERIT MARK 60%
PASS MARK 50%**

TOTAL 100 MARKS

Question 1

**Syllabus Topic 1: Materials and stock control (1.9)
Syllabus Topic 4: Budgetary planning and control (4.4)**

(a) Week 5 Weight of each ingredient in finished production (kgs)

	Ingredient A		Ingredient B	
	P	Q	P	Q
Mon	24	36	96	108
Tues	40	54	160	162
Weds	48	60	192	180
Thurs	32	60	128	180
Fri	<u>24</u>	<u>18</u>	<u>96</u>	<u>54</u>
Total	<u>168</u>	<u>228</u>	<u>672</u>	<u>684</u>
	(2½)	(2½)	(2½)	(2½)

Budgeted purchase order quantity, for week 5:

Ingredient A total = 168 + 228 = 396kgs

Ingredient A (plus manufacturing loss) = 396 / 0.8 = 495kgs

(1)

Ingredient A = 495kgs

Ingredient B total = 672 + 684 = 1,356 kgs

Total required 1,356

Plus closing stock 339 (1,356 x 25%)

Less opening stock (350)

Ingredient B 1,345 kgs

(2)

(13 marks)

Alternative Answer

	Budgeted units for week 5	Ingredient A	Ingredient B
Product P	2,100	2,100 x 0.2 x 8/20 = 420(1½) x 0.4(1) = 168	2,100 x 0.8 x 8/20 = 1,680(1½) x 0.4(1) = 672
Product Q	1,520	1,520 x 0.25 x 12/20 = 380(1½) x 0.6(1) = <u>228</u> 396	1,520 x 0.75 x 12/20 = 1,140(1 ½) x 0.6(1) = <u>684</u> 1,356
Plus weight loss (396/0.8)		495(1of)	
Plus closing stock ingredient B (1,356 x 25%)			339(1of)
Less opening stock ingredient B			<u>350</u>
			1,345(1of)

Workings for Monday:	Product P	Product Q
Order requirement	300 units	240 units
Number of batches	15 (300/20)	12 (240/20)
Finished product weight (kgs)	120 (15 x 8)	144 (12 x 12)
Ingredient A weight (kgs)	24 (20% x 120)	36 (25% x 144)
Ingredient B weight (kgs)	96 (80% x 120)	108 (75% x 144)

(b)

Budgeted daily delivery schedule for Ingredient A (kgs)

	Mon	Tues	Weds	Thurs	Fri	
	24+36	40+54	48+60	32+60	24+18	
Weight of ingredient in finished product =	60	94	108	92	42	(1)
Delivery schedule =	60/0.8	94/0.8	108/0.8	92/0.8	42/0.8	(1)
	75	117.5	135	115	52.5	(1)

(3 marks)

- (c) (i) Stock/materials are delivered just as they are needed for production (1).
Stock levels are kept to a minimum – there are no buffer stocks (1).

(2 marks)

- (ii) The manufacturer needs reliable suppliers who can supply quality products on time (1).
There is a danger of running out of stock required for production (1).

(2 marks)

(Total 20 marks)

Question 2

Syllabus Topic 2: Costing methods and systems (2.9)

(a)	No of units	
Production for period	2,000	
Sales for period	1,500	
Closing stock of unpacked units	<u>400</u>	
Closing stock of packed units	<u>100</u>	(2)
Units completed and packed in period (1.500+100)	1,600	(1)

(3 marks)

(b) (i) Budgeted Manufacturing and Trading Account for the period (Absorption Costing)

	£	£	£
Sales (1,500 x £20)			30,000
Direct material (2,000 x £4.50)	9,000		
Direct labour - machine dept (2,000/100 x £10 x 5)	1,000		
Direct labour - finishing dept (2,000/20 x £12 x 4)	4,800		
Labour - dispatch dept (1,600/20 x £10)	800		
Material - packing boxes (1,600 x £0.50)	<u>800</u>	16,400	(3)
Fixed overheads			
Machine dept (2,000/100 x £15 x 5)	1,500		
Finishing dept (2,000/20 x £12 x 4)	4,800		
Dispatch dept (1,600 x £1)	1,600		
		<u>7,900</u>	(2)
		24,300	
Less closing stock of work in progress (unpacked units)		<u>(4,220)</u>	(2)
Manufacturing cost of units completed		20,080	
Less closing stock of completed packed units		<u>(1,255)</u>	(2)
Manufacturing cost of sales			<u>(18,825)</u>
Gross profit			<u>11,175</u> (1)

(10 marks)

Workings:

Closing stock of completed unpacked units
 = [(9,000+1,000+4,800+1,500+4,800) / 2,000] x 400
 £4,220

Closing stock of completed packed units
 = (20,080 / 1,600) x 100
 £1,255

Question 2 Continued

(b) (i) Budgeted Manufacturing and Trading Account for the period (Marginal Costing)

	£	£	£
Sales (1,500 x £20)			30,000
Direct material (2,000 x £4.50)	9,000		
Direct labour - machine dept (2,000/100 x £10 x 5)	1,000		
Direct labour - finishing dept (2,000/20 x £12 x 4)	4,800		
Labour - dispatch dept (1,600/20 x £10)	800		
Material - packing boxes (1,600 x £0.50)	<u>800</u>		
Variable cost of production		16,400	(1)
Less closing stock of work in progress (unpacked units)		<u>(2,960)</u>	(2)
		13,440	
Less closing stock of completed packed units		<u>(840)</u>	(2)
Variable production cost of sales			(12,600)
Contribution			17,400 (1)
Less fixed overheads			<u>(7,900)</u>
Gross Profit			<u>9,500 (1)</u>

(7 marks)

Workings:

Closing stock of completed packed units

$$= [(9,000+1,000+4,800) / 2,000] \times 400$$

£2,960

Closing stock of completed packed products

$$= (13,440 / 1,600) \times 100$$

= £840

(Total 20 marks)

Question 3

Syllabus Topic 3: Costing methods and systems (3.2, 3.3, 3.4, 3.5 and 3.6)

(a)

Fixed cost:	£'s	
Total salaries	54,000	
Less Commission (20,000 x £20 x 0.05)	<u>(20,000)</u>	
Fixed salaries	34,000	(1)
Rent	25,000	
Other fixed costs	<u>5,000</u>	
Total Fixed Cost	<u>64,000</u>	(1)
Variable cost:	£'s /unit	
Purchase cost	11.00	
Less Commission (£20 x 0.05)	<u>1.00</u>	
	<u>12.00</u>	(1)
Contribution (20.00 – 12.00)	£8.00	(1)of
Break-even point		
Total fixed cost / unit contribution (64,000/8)	8,000 pairs	(1)of
Margin of safety		
Expected sales – break-even sales (20,000 – 8,000)	12,000 pairs	
Percentage of expected sales (12,000/20,000)	60%	(1)of
Profit		
Total contribution – fixed costs [(20,000 x 8) – 64,000]	£96,000	(1)of

(7 marks)

(b)

Fixed costs		
Increase by £17,000 (64,000 + 17,000)	£81,000	(1)of
Variable unit cost		
Decrease by £1.00 (12 – 1)	£11 per unit	
Contribution per unit (20 – 11)	£9.00	(1)of

Original salary structure (commission paid)

Profit = (Number of pairs x £8) – £64,000

Proposed salary structure (no commission paid)

Profit = (Number of pairs x £9) – £81,000

Point at which profits are equal

(Number of pairs x £8) - £64,000 = (Number of sales units x £9) – £81,000

Number of pairs = (81,000 – 64,000) / (9 – 8)

Number of pairs = 17,000 pairs

(2)of

Advise company to pay increased salaries with no commission if sales exceed 17,000 pairs of boots.

(1)

(5 marks)

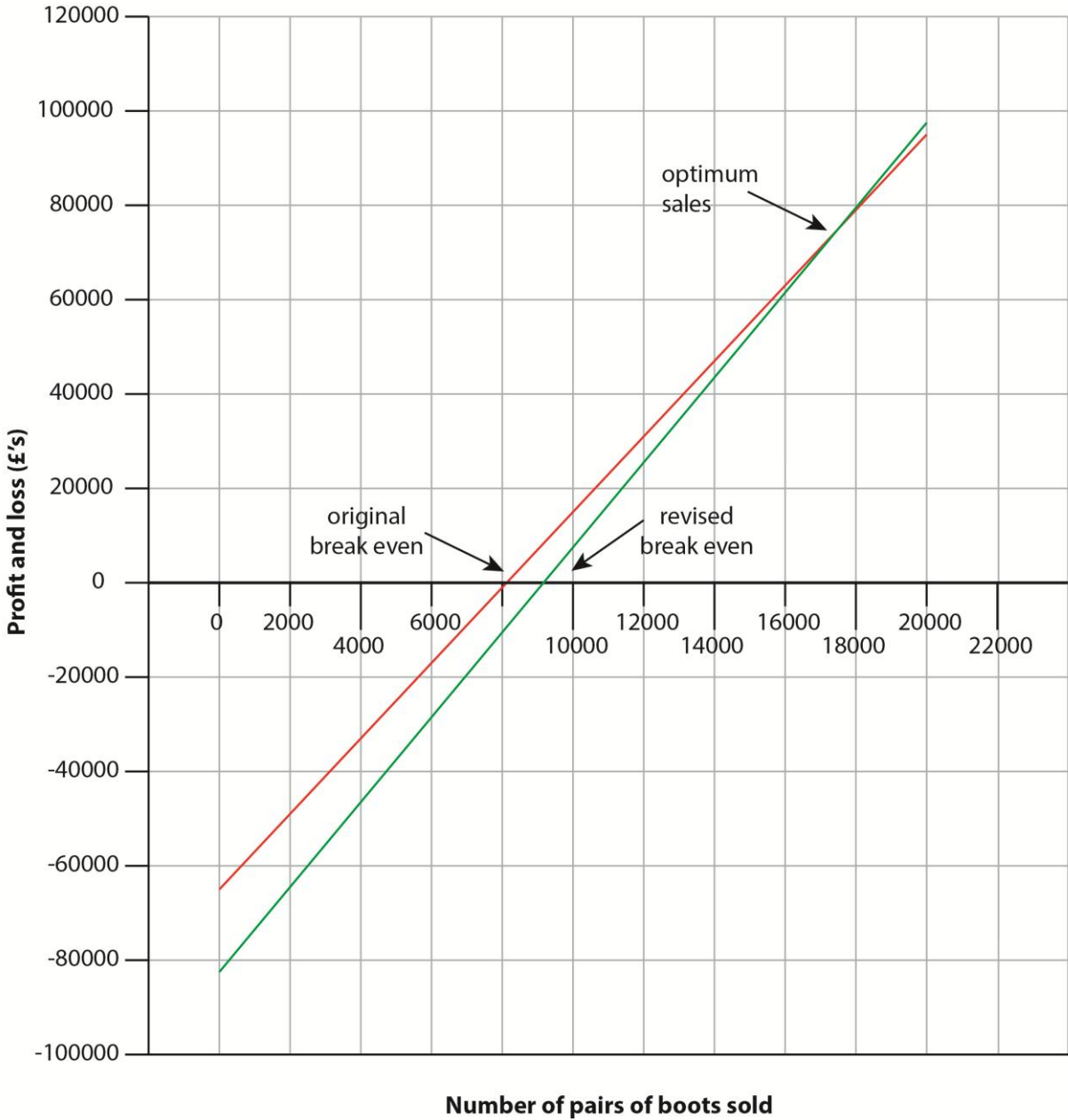
(c) Profit Volume Chart

Title	(1)	Fixed costs	(1)
Labelling	(1)	Break-even points	(1)
Lines	(2)	Point where change of salary is worthwhile	(2)

(8 marks)

Question 3 Continued

Budget Boot Co Profit-Volume Chart



(Total 20 marks)

Question 4

Syllabus Topic 4: Budgetary planning and control (4.4 and 4.5)

(a)

	April	May	June	July	
Receipts					
Sales	<u>180,000</u>	<u>202,000</u>	<u>222,000</u>	<u>242,000</u>	(2)
Payments					
Product purchase	110,000	122,000	135,000	146,000	(4)
Wages	21,800	24,000	26,200	28,400	(4)
Other overheads	27,800	28,300	28,800	29,600	(2)
Capital expenditure	<u>20,000</u>	<u>30,000</u>	<u>30,000</u>	<u>30,000</u>	
	<u>179,600</u>	<u>174,300</u>	<u>220,000</u>	<u>204,000</u>	(1)
Net cash flow	400	27,700	2,000	38,000	(2)
Opening balance	(10,000)	(9,600)	18,100	20,100	
Closing balance	(9,600)	18,100	20,100	58,100	(1)

(16 marks)

Workings:

	April	May	June	July
Receipts				
Cash sales	20,000	22,000	24,000	26,000
Credit sales	<u>160,000</u>	<u>180,000</u>	<u>198,000</u>	<u>216,000</u>
	<u>180,000</u>	<u>202,000</u>	<u>222,000</u>	<u>242,000</u>

April credit sales - Debtors at beginning of April

Product purchase				
Cost of sales	120,000	132,000	144,000	
less opening stock	19,000	21,000	24,000	
add closing stock	<u>21,000</u>	<u>24,000</u>	<u>26,000</u>	
Product purchase	<u>122,000</u>	<u>135,000</u>	<u>146,000</u>	
Payments made	110,000	122,000	135,000	146,000

April payments - Creditors at beginning of April

Wages				
Basic pay	20,000	22,000	24,000	26,000
Accrued bonus	<u>1,800</u>	<u>2,000</u>	<u>2,200</u>	<u>2,400</u>
Payments made	<u>21,800</u>	<u>24,000</u>	<u>26,200</u>	<u>28,400</u>

Basic pay April - £22,000 / 110% = £20,000

Overhead payments				
P&L total less depreciation				
Incurring (60%)	16,800	17,100	17,400	18,000
Accrued (40%)	<u>11,000</u>	<u>11,200</u>	<u>11,400</u>	<u>11,600</u>
	<u>27,800</u>	<u>28,300</u>	<u>28,800</u>	<u>29,600</u>

(b)

- Cash shortages revealed early (1) and arrangements can be made for overdraft on best terms (1).
- Cash surpluses revealed (1) and investment planned (1).

(4 marks)

(Total 20 marks)

Question 5

Syllabus Topic 5: Standard costing and variance (5.1, 5.4, 5.8, 5.11, 5.12)

Syllabus Topic 6: Accounting systems (6.3)

(a) Cost variances

Direct material price	$123,960 - (19,000 \times 6.50)$	£460 A	(1½)of
Direct material usage	$[18,220 - (11,600 \times 1.6)] \times 6.50$	£2,210 F	(1½)of
Direct labour rate variance	$[78,840 - (8,810 \times 9.00)]$	£450 F	(1½)of
Direct labour efficiency	$[8,810 - (11,600 \times 0.75)] \times 9.00$	£990 A	(1½)of
Fixed overhead expenditure	$[(12,000 \times 9.75) - 116,130]$	£870 F	(1)of
Fixed overhead capacity	$[(12,000 \times 0.75) - 8,810] \times 9.75/0.75$	£2,470 A	(2)of
Fixed overhead efficiency	$[8,810 - (11,600 \times 0.75)] \times 9.75/0.75$	£1,430 A	(2)of

(11 marks)

(b) Raw Material Stock Account

	£			£	
Opening balance	10,400	(1)of	Price variance	460	(1)of
Purchases (actual cost)	123,960		Work in progress	118,430	(1)of
	<u>134,360</u>		Closing balance	15,470	(2)of
				<u>134,360</u>	

Workings:

Opening balance	= 1,600 x £6.50	= £10,400
Work in progress	= 18,220 x £6.50	= £118,430
Closing balance (kg)	= 1,600 + 19,000 - 18,220	= 2,380kg
Closing balance (£)	= 2,380 x £6.50	= £15,470

(5 marks)

(c) An ideal standard makes no allowance for normal losses (1), waste or machine down time and is only attainable under the most favourable conditions (1).

An attainable standard assumes efficient levels of operation (1) but makes allowance for normal losses, waste or machine down time (1).

(4 marks)

(Total 20 marks)

