

## Cost Accounting Level 3

### **Model Answers** Series 2 2013 (ASE3017)

# Level 3 Cost Accounting

## Series 2 2013

### How to use this booklet

Model Answers have been developed to offer additional information and guidance to Centres, teachers and candidates as they prepare for LCCI International Qualifications. 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.

Pearson provides Model Answers to help candidates gain a general understanding of the standard required. The general standard of model answers is one that would achieve a Distinction grade. Pearson accepts that candidates may offer other answers that could be equally valid.

© Pearson Education Ltd 2013

All rights reserved; no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the Publisher. The book may not be lent, resold, hired out or otherwise disposed of by way of trade in any form of binding or cover, other than that in which it is published, without the prior consent of the Publisher.

EDI  
LCCI IQ SERIES 2 EXAMINATION 2013  
COST ACCOUNTING  
LEVEL 3  
MARKING SCHEME

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

TOTAL 100 MARKS

**QUESTION 1**

**Syllabus Topic 4: Budgetary Planning and Control (4.4)**

**Syllabus Topic 1: Material and Stock Control (1.9)**

(a) (i) **Production budget for the month of May**  
**Product**

	<b>Tee (units)</b>	<b>Pee (units)</b>	
Closing stock	65	25	
plus sales	<u>600</u>	<u>200</u>	<b>1</b>
	665	225	
less opening stock	<u>60</u>	<u>20</u>	<b>1</b>
<b>Production</b>	<b><u>605</u></b>	<b><u>205</u></b>	<b>1</b>

(3 marks)

(ii) Purchases budget for the month of May

**Material A purchases**

		<b>kg</b>	
Closing stock of Product Tee	(640 x 25% x 4kg)	640	<b>1/2</b>
Closing stock of Product Pee	(260 x 25% x 12kg)	<u>780</u>	<b>1/2</b>
		1,420	
plus product Tee usage	(605 x 4kg)	2,420	<b>1/2</b>
plus product Pee usage	(205 x 12kg)	<u>2,460</u>	<b>1/2</b>
		6,300	
less opening stock of product Tee	(605 x 25% x 4kg)	605	<b>1/2</b>
less opening stock of product Pee	(205 x 25% x 12kg)	<u>615</u>	<b>1/2</b>
<b>Purchases (kg's)</b>		<b>5,080</b>	<b>1of</b>
<b>Purchases (£'s)</b>	(5,080 x £4)	<b>£20,320</b>	<b>1of</b>

(5 marks)

**Material B purchases**

		<b>kg</b>	
Closing stock of Product Tee	(640 x 25% x 8kg)	1,280	<b>1/2</b>
Closing stock of Product Pee	(260 x 25% x 16kg)	<u>1,040</u>	<b>1/2</b>
		2,320	
plus product Tee usage	(605 x 8kg)	4,840	<b>1/2</b>
plus product Pee usage	(205 x 16kg)	<u>3,280</u>	<b>1/2</b>
		10,440	
less opening stock of product Tee	(605 x 25% x 8kg)	1,210	<b>1/2</b>
less opening stock of product Pee	(205 x 25% x 16kg)	<u>820</u>	<b>1/2</b>
<b>Purchases (kg's)</b>		<b>8,410</b>	<b>1of</b>
<b>Purchases (£'s)</b>	<b>(8,410 x £5)</b>	<b>£42,050</b>	<b>1of</b>

(5 marks)

### QUESTION 1 CONTINUED

Workings:

Production budget for the month of June

	Product	
	Tee (units)	Pee (units)
Closing stock	55	35
plus sales	<u>650</u>	<u>250</u> 1
	705	285
less opening stock	<u>65</u>	<u>25</u> 1
<b>Production</b>	<b><u>640</u></b>	<b><u>260</u></b> 1

(3 marks)

(b) Principles of a just-in-time approach to stock management:

Stock/materials are delivered just as they are needed for production (2) for explanations

Stock levels are kept to a minimum (1) if included

No need for buffer (safety stock) (1) if included

(4 marks)

**(Total 20 marks)**

**QUESTION 2**

**Syllabus Topic 2: Costing Methods and Systems (2.3) and (2.4)**

(a) **Process One**

	Kg	£'s		Kg	£'s	
Direct material	1,900	40,000	Normal loss	285	5,700	1
Direct labour		76,800	Process Two	1,575	157,500	1 of
Overhead		<u>50,400</u>	Abnormal loss	<u>40</u>	<u>4,000</u>	1 of
	<u>1,900</u>	<u>167,200</u>		<u>1,900</u>	<u>167,200</u>	

Workings:  
 Cost per kg  $\frac{\pounds 167,200 - \pounds 5,700}{1,615 \text{ kg } (0.85 \times 1,900)}$  = £100 per kg 2

Process Two 1,575 kg x £100 = £157,500

Normal loss 1,900 kg x 0.15 = 285 kg  
 Normal loss 285 kg x £20 = £5,700

Abnormal loss 1,615 kg - 1,575 kg = 40 kg  
 Abnormal loss 40 kg x £100 = £4,000

(6 marks)

(b) **Process Two**

	Kg	£'s		Kg	£'s	
Process One	1,575	157,500	Normal loss	300	5,400	1
Direct material	1,425	60,000	Finished Goods	2,760	331,200	1 of
Direct labour		78,300				
Overhead		33,600				
Abnormal gain	<u>60</u>	<u>7,200</u>				1 of
	<u>3,060</u>	<u>336,600</u>		<u>3,060</u>	<u>336,600</u>	

Workings:  
 Cost per kg  $\frac{\pounds (336,600 - 7,200 - 5,400)}{90\% \times (1,575 + 1,425) \text{ kg}}$  = £120 per kg 2

Process Two 2,760 kg x £120 = £331,200

Normal loss (1,575 kg + 1,425 kg) x 0.10 = 300 kg  
 Normal loss 300 kg x £18 = £5,400

Abnormal gain 90% x (1,575 kg + 1,425 kg) - 2,760 kg = 60 kg  
 Abnormal gain 60 kg x £120 = £7,200

(6 marks)

(c) **Normal Loss account**

	Kg	£'s		Kg	£'s	
Process One	285	5,700	Abnormal gain	60	1,080	1
Abnormal loss	40	800	Bank	565	10,820	1
Process Two	<u>300</u>	<u>5,400</u>				
	<u>625</u>	<u>11,900</u>		<u>625</u>	<u>11,900</u>	

(All of marks)

(4 marks)

**QUESTION 2 CONTINUED**

(d)

**Abnormal Loss/Gain account**

	<b>Kg</b>	<b>£'s</b>		<b>Kg</b>	<b>£'s</b>
Process One	40	4,000	Scrap sales	40	800
Scrap sales	60	1,080	Process Two	60	7,200
Profit & loss a/c		<u>2,920</u>		<u>100</u>	<u>8,000</u>
	<u>100</u>	<u>8,000</u>			

**(All of marks)**

(4 marks)

**(Total 20 marks)**

**QUESTION 3**

**Syllabus Topic 4: Budgetary Planning and Control (4.8) and (4.9)**

**Syllabus Topic 3: Cost Volume Profit Analysis (3.2)**

(a) Cost element	Flexed budget (£) (4,600 units)	Actual costs (£)	Variance (£)
Direct materials	220,560 <b>1of</b>	221,060	500 Adv <b>1of</b>
Direct labour	92,000 <b>1</b>	91,000	1,000 Fav <b>1of</b>
Production overhead	113,600 <b>1of</b>	116,100	2,500 Adv <b>1of</b>
Administration overhead	60,000 <b>1</b>	66,000	6,000 Adv <b>1of</b>
Selling overhead	42,400 <b>2</b>	41,400	1,000 Fav <b>1of</b>

Workings:

**Direct materials**

Total cost (no discount) for 4,600 units = 4,600 x 4 kg x £12  
 = 18,400 x £12 = £220,800 **1**  
 Discount @ 5% for 4,600 units = (18,400 - 18,000)kg x £12 x 95% = £240 **1**  
 Total cost with discount = £220,800 - £240 = £220,560

Workings

Material cost (no discount) = £192,000/4,000 units = £48

**Direct labour**

No excess production cost increase  
 Labour cost = £80,000/4,000 units = £20 per unit  
 Total cost at 4,600 units = 4,600 x £20 = £92,000

**Production overhead**

Cost for 4,000 units (no additional stepped cost) = £100,000  
 Cost for 5,000 units (without stepped cost) = (£120,000 - £4,000) = £116,000  
 Unit variable cost = (£116,000 - £100,000)/(5,000 - 4,000 units) = £16 per unit **1**  
 Fixed element = £100,000 - (4,000 x £16) = £36,000 **1**  
 Total cost at 4,600 units = £36,000 + (4,600 x £16) + £4,000 = £113,600

**Selling overhead**

Fixed element = £40,000 - (4,000 x £4) = £24,000  
 Total cost at 4,600 units = £24,000 + (4,600 x £4) = £42,400

(15 marks)

(b) Break-even (units) = £120,000/50 = **2,400 units 1of**  
 Break-even (revenue) = 2,400 x £138 = **£331,200 1of**

Workings:

Variable cost [up to 4,500 units per month (£18,000/4)] = (£48 + £20 + £16 + £4) = £88 **1**  
 Fixed cost = (£36,000 + £60,000 + £24,000) = £120,000 **1**  
 Contribution = (£138 - £88) = £50 per unit **1**

(5 marks)

**(Total 20 marks)**

#### QUESTION 4

#### Syllabus Topic 5: Standard Costing and Variances (5.1), (5.3), (5.8) and (5.17)

- (a) (i) Ideal standards, which is the performance that can be achieved under perfect operating conditions (i.e. maximum efficiency). Such standards are unlikely to be achieved and may as a consequence be de-motivational. **2**
- (ii) Attainable standards, which assume efficient levels of operation but make some allowance for losses and waste etc. Such standards are commonly adopted as they can be seen to be achievable with effort and thus may provide motivation to improve performance. **2**  
(4 marks)

(b) (i) **Sales price variance**

$$\text{Variance} = \text{Sales revenue} - (\text{Actual sales} \times \text{standard price})$$

$$\text{Variance} = \text{£}152,000 - (7,700 \times \text{£}20)$$

$$\text{Variance} = \text{£}2,000 \text{ Adverse} \quad \mathbf{2}$$

(ii) **Sales volume profit variance**

$$\text{Variance} = (\text{Actual sales units} - \text{Budgeted sales units}) \times \text{Budgeted profit}$$

$$\text{Variance} = (7,700 - 7,500) \times (\text{£}20 - \text{£}14)$$

$$\text{Variance} = \text{£}1,200 \text{ Favourable} \quad \mathbf{2}$$

(4 marks)

(c) (i) **Labour hours worked**

$$\text{Labour rate variance} = \text{Total labour cost} - (\text{Actual hours} \times \text{Standard rate})$$

$$1150 \text{ Adverse} = 37,150 - (\text{Actual hours} \times 8) \quad \mathbf{2}$$

$$\text{Actual hours} = (37,150 - 1150)/8$$

$$\text{Actual hours} = \mathbf{4,500} \quad \mathbf{2}$$

(ii) **Standard hours per unit**

$$\text{Labour efficiency variance} = \text{Std hours @ Std rate} - \text{Actual hours @ Std rate}$$

$$480 \text{ Favourable} = (\text{Std hours} \times 8) - (4,500 \times 8) \quad \mathbf{2}$$

$$\text{Std hours} = 480/8 + 4,500 \quad \mathbf{1}$$

$$\text{Std hours} = 4,560$$

$$\text{Std hours per unit} = 4,560/7,600$$

$$\text{Std hours per unit} = \mathbf{0.6} \quad \mathbf{2}$$

(9 marks)

(d) **Reasons for labour variance:**

The company could have increased the employees' rate of pay (adverse rate variance) which in turn motivated the employees to complete the work in a production time that was quicker than the standard time (favourable efficiency variance).

(3 marks)

**(Total 20 marks)**

**QUESTION 5****Syllabus Topic 6: Accounting Systems (6.1) and (6.6)****Syllabus Topic 5: Standard Costing and Variances (5.13)**

- (a) (i) Stock values in cost ledger (£'s)

	<b>Opening stock</b>		<b>Closing stock</b>
Raw materials	<b>95,000</b>	(102,500-7,500)	<b>120,000</b>
Work-in-progress	<b>36,000</b>	(34,500+1,500)	<b>44,000</b>
Finished goods	<b>305,000</b>	(303,400+1,600)	<b>360,000</b>
		<b>1½ each = 9 marks</b>	

- (ii) Actual overhead expenditure (£'s)

Production overhead			
Absorbed	72,250	(8,500 x £8.50)	
Plus under absorbed	<u>4,750</u>		
Incurring	<u>77,000</u>		<b>2</b>
Administration overhead (£'s)			
Absorbed	120,000	(15% x £800,000)	
Plus under absorbed	<u>2,300</u>		
Incurring	<u>122,300</u>		<b>2</b>
Selling and distribution overhead (£'s)			
Absorbed	48,000	(6% x £800,000)	
Less over absorbed	<u>1,400</u>		
Incurring	<u>46,600</u>		<b>2</b>

(15 marks)

- (b) An integrated system uses a common input of data for both financial and cost accounts.
- 1**

A non-integrated system has two sets of accounts being kept in agreement the use of control accounts or reconciled by other means. **1**

(2 marks)

- (c) Absorbed overhead is calculated by applying the predetermined overhead absorption rate to the actual output.
- 1**

Over absorbed overhead is when the actual overhead incurred is less than absorbed overhead. **1**

Under absorbed overhead is when the actual overhead incurred is more than the absorbed overhead. **1**

(3 marks)

**(Total 20 marks)**

**Pearson**

190 High Holborn  
London  
WC1V 7BH

Tel. +44 (0) 247 651 8951

Fax. +44 (0) 247 651 6566

Email. [internationalenquiries@pearson.com](mailto:internationalenquiries@pearson.com)

[www.lcci.org.uk](http://www.lcci.org.uk)

[www.pearson.com/uk](http://www.pearson.com/uk)