Mark Scheme

March 2017
Results

Pearson LCCI (ASE20098) Level 3 Certificate in Cost and Management Accounting

LCCI Qualifications

LCCI qualifications come from Pearson, the world's leading learning company. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information, please visit our website at www.lcci.org.uk.

Pearson: helping people progress, everywhere

Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

All the material in this publication is copyright
publication code: 54313_ms
© Pearson Education Ltd 2017

ASE20098
March 2017

General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question number	Answer (AO2) 10					Mark
1(a)	Production in units	**16 800**	**18 900**	**21 000**	**Marks**	
	Costs	$	$	$		
	Direct Materials	67 200	**75 600**	**84 000**	**1 mark for workings and 1 mark for <u>both</u> correct answers**	
	Direct Labour	50 400	**56 700**	**63 000**	**1 mark for workings and 1 mark for <u>both</u> correct answers**	
	Production overheads	61 950	**66 150**	70 350	**1 marks for workings and 1 mark for correct answer**	
	Non production overheads	53 100	**57 930**	**62 760**	**1 mark for workings and 1 mark for <u>each</u> correct answers**	
	Total costs	232 650	**256 380**	**280 110**	**1 mark for both totals (of)**	

Workings

[W1] Materials $67 200 / 16 800 = **$4 per unit (1)** x 18 900 = **$75 600of**. $4 x 21 000 = **$84 000 (1of)**

[W2] Labour $50 400 / 16 800 = **$3 per unit (1)** x 18 900 = **$56 700of**. $3 x 21 000 = **$63 000 (1of)**

[W3]

	Production overheads	
	Costs	**Units**
High	70 350	21 000
Low	61 950	16 800
Diff	**8 400**	**4 200**

Variable cost element = $8 400 / 4 200 units **= $2 per unit**

Fixed cost element
$70 350 - $42 000 (21 000 x $2) **= £28 350** $61 950 - $35 600 (16 800 x $2)
= $28 350 (1)

18 900 x $2 = $37 800 + $28 350 = **$66 150 (1of)**

[W4] Non production overheads

Total cost = $53 100 less FC $14 460 = VC $38 640 / 16 800 = **$2.30 VC per unit (1)**

18 900 x $2.30 = $43 470 + $14 460 = **$57 930 (1of)**

21 000 x $2.30 = $48 300 + $14 460 = **$62 760 (1of)**

10

Question number	Answer (AO2) 2	Mark
1(b)		**(2)**

Production and Sales in units	**16 800**	**18 900**	**21 000**	**Marks**
Total costs	232 650	**256 380**	**280 110**	**(OF)**
Cost per unit	13.85	**13.56**	**13.34**	**1 mark for each answer (OF)**

$256 380 / 18 900 = **$13.56** $280 110 / 21 000 = **$13.34**

Question number	Answer (AO4) 2	Mark
1(c)	**Award 1 mark for each answer** The cost per unit decreases as production increases as only the variable costs increase **(1)**. The fixed costs remain the same so the amount is divided by a greater number of units **(1)**. Or As production increases there may be economies of scale such as direct labour efficiencies **(1)**. If material quantities increase there may be additional discounts **(1)**.	**(2)**

Question number	Answer (AO1) 1 (AO3) 1	Mark
1(d)(i)	**Award 1 mark for the definition and 1 mark for the example** A semi variable cost has an **element of both a fixed and variable cost (1)**. A **utility bill, like heat and light**, might have a fixed charge for the equipment and a variable cost for the actual gas/electricity consumed **(1)**.	**(2)**

Question number	Answer (AO1) 1 (AO3) 1	Mark
1(d)(ii)	**Award 1 mark for the definition and 1 mark for the example** A stepped fixed cost will **increase by a specific amount at a certain level of output (1)**. An example could be that an **additional supervisor** needs to be employed once **production exceeds a certain level of output (1)**.	**(2)**

Question number	Answer (AO2) 6	Mark
2(a)(i)	**Award 1 mark for each of the first three columns. Award 2 marks for all correct answers on the fifth column (1 mark for three correct answers).**	

Order Size	No of Orders	Annual ordering costs $	Average inventory (units)	Annual inventory holding costs $	Total cost $
500	12	6 000	250	1 200	7 200
1 000	6	3 000	500	2 400	**5 400**
1 500	4	2 000	750	3 600	5 600
2 000	3	1 500	1,000	4,800	6 300
3,000	2	1 000	1,500	7 200	8 200
	(1)	**(1)**	**(1)**	**(2of)**	**(1of)**

(6)

Question number	Answer (AO4) 1	Mark
2(a)(ii)	**Award 1 OF mark for optimum size** The optimum order size is **1,000 units (1of)**	**(1)**

Question number	Answer (AO2) 6	Mark
2(b)(i)	**Award 1 mark for the totals of each column. Award 1 OF mark for the optimum size of order.** **Award 1 mark for each calculation of the purchase cost and inventory holding cost.** **Ordering cost should be as 2a.** (b) **Order quantity** **1 000** **2 000** **3 000** Annual costs Purchase cost 351 000 (1) 342 000 333 000 (1 for next two answers) Ordering cost 3 000 1 500 1 000 Inventory holding cost 2 340 (1) 4 560 (1) 6 660 (1) TOTAL 356 340 348 060 **340 660 (1 mark for all three)** Workings for Purchase cost Orders of 1 000 units = 6 000 x $60 = $360 000 x 97.5 **= $351 000 (1)** Orders of 2 000 units = $360,000 x 95% = **$342 000** Orders of 3 000 units = $360 000 x 92.5% = **$333 000 (1 mark for remaining two)** Inventory holding cost 1 000 units = $2 400 x 97.5% **= $2 340 (1)** 2 000 units = $4 800 x 95% = **$4 560 (1)** 3 000 units = $7 200 x 92.5% = **$6 660 (1)**	**(6)**

Question Number	Answer (AO4) 1	Mark
2(b)(ii)	**Award 1 OF mark for optimum quantity** Order quantity to minimize costs is **3,000** units **(1of)**	**(1)**

Question number	Answer (AO1) 3 (AO3) 3	Mark
2(c)	**Three benefits required.** **Award 1 mark for benefit and 1 mark for development. Maximum 6 marks.** **Answers may include:** Maintaining planned levels of inventory **–** helps the company decide exactly how much inventory is needed. **(1)** This will help prevent product shortages (stock outs) **(1)** or avoid having excess inventory which will tie up working capital. **(1)** Keeping inventory costs to a minimum **–** for example stock holding and ordering costs. **(1)** Avoiding the cost of discarding out of date inventory. **(1)** Helps save time and money by keeping a constant record of products in inventory and/or ordered. **(1)** Inventory levels are known reducing the need to do an inventory recount to ensure records are accurate. **(1)** Increases efficiency and productivity **-** Inventory management devices, such as barcode scanners, can help improve on efficiency and productivity. **(1)** These devices will help eliminate manual processes so your employees can focus on other areas of the business. **(1)** Satisfied customers will return if good service is provided. **(1)** Inventory management helps you to have the right products on-hand as soon as your customers need them. **(1)**	**(6)**

Total for Question 2 = 20 marks

Question number	Answer (AO2) 9	Mark
3(a)	**Award 1 mark for each correct item.** **Reconciliation statement** **$ $** Actual costs ($258 250 + $147 200 + $90 250) 495 700 **(1)** Variances: Direct materials $258 250 - $271 610 **(1)** (3,140 × $86.50) = **13 360 Favourable** **(1)** Direct labour $147 200 – $137,532 **(1)** (3,140 x $43.80) = **9 668 Adverse** **(1)** Fixed prod o'heads $90 250 - $93 258 **(1)** (3,140 × $29.70) = **3 008 Favourable** **(1)** Total 6 700 Favourable **(1)** Standard costs 3,140 x $160 ($86.50 + $43.80 + $29.70) = **502 400** **(1)**	**(9)**

Question number	Answer (AO2) 3	Mark
3(b)(i)	**Award 1 mark for each correct item** **Production efficiency ratio** Standard hours of actual production (7 376 x 2.5) = 18 440 **(1)** x 100% = **93.51 % (1)** Actual hours of production 19 720 **(1)**	**(3)**

Question Number	Answer (AO2) 3	Mark
3(b)(ii)	**Award 1 mark for each correct item** **Capacity usage ratio** Actual hours of production = 19 720 **(1)** x 100% = **103.79 % (1)** Budgeted hours of production (7 600 x 2.5) 19 000 **(1)**	**(3)**

Question Number	Answer (AO2) 3	Mark
3(b)(iii)	**Award 1 of mark for each item Production volume ratio** Standard hours of actual production = 18 440 **(1of)** x 100% = **97.05 % (1of)** Budgeted hours of production 19 000 **(of)(1)**	**(3)**

Question number	Answer (AO5) 3	Mark
3(c)	Production efficiency ratio is poor as they have exceeded standard hours for production **(1)**. Capacity usage ratio is good because more hours have been made available for production **(1)**. Production volume ratio is poor because the volume of production is less than planned and it has taken longer than anticipated **(1)**.	**(3)**

Question number	Answer (AO1) 1 (AO3) 1	Mark
3(d)(i)	A standard cost is a **predetermined (target) cost (1)** that should be able to be achieved under efficient operating conditions **(1)**.	**(2)**

Question number	Answer (AO1) 1 (AO3) 1	Mark
3(d)(ii)	The standard hour is the **quantity of work** achievable at standard efficiency levels in an hour. **(1)** It is a measure of **work performance** and **not time** spent **(1)**.	**(2)**

Total for Question 3 = 25 marks

Question number	Answer (AO2) 2	Mark
4(a)(i)	**Award 1 mark for both correct entries on the debit side.** **Award 1 mark for all correct entries on the credit side.** **Raw Materials Control Account** Balance b/d $43 250 Financial ledger control $267 800 **(1)** 311 050 W I P control $241 180 Production overheads control $19 540 **(1)** Balance c/d **50 330** 311 050	**(2)**

Question number	Answer (AO2) 2	Mark
4(a)(ii)	**Award 1 mark for the correct entry on the debit side.** **Award 1 mark for both correct entries on the credit side.** **Wages Control Account** Financial ledger control **112 320 (1)** 112 320 W I P control $74 720 Production overheads control $37 600 **(1)** 112 320	**(2)**

Question number	Answer (AO2) 3	Mark
4(a)(iii)	**Award 1 mark for all correct entries on the debit side (excluding balance c/d)** **Award 1 mark for the correct entry on the credit side.** **Award 1 mark for balance c/d on debit side.** **Production Overheads Control Account** $ $ Balance b/d 2 680 W I P control 86 450 **(1)** Raw materials control 19 540 Wages control 37 600 **(1)** Financial ledger control 25 430 Balance c/d **1 200 (1of)** 86 450 86 450	**(3)**

Question number	Answer (AO2) 3	Mark
4(a)(iv)	**Award 1 mark for all correct entries on the debit side.** **Award 1 mark for the correct entry on the credit side.** **Award 1 mark for balance c/d on credit side.** **W I P Control Account** $ $ Balance b/d 25 400 Finished goods control 412 300 **(1)** Materials control 241 180 Wages control 74 720 **(1)** Production overheads control 86 450**of** Balance c/d **15 450** **(1of)** 427 750 427 750	**(3)**

Question number	Answer (AO2) 2	Mark
4(a)(v)	**Award 1 mark for both correct entries on the debit side.** **Award 1 mark for both correct entries on credit side.** **Finished Goods Control Account** $ $ Balance b/d 29 260 Production cost of sales 416 640 WIP control 412 300 **(1)** Balance c/d **24 920** **(1)** 441 560 441 560	**(2)**

Question number	Answer (AO2) 4	Mark
4(a)(vi)	**Award 1 mark for correct entry on the debit side.** **Award 1 mark for all correct entries on credit side.** **Allow 1of mark for balance on the debit side and 1of for the balance on the credit side.** **Financial Ledger Control Account** $ $ Sales 474 200 **(1)** Balance b/d 100 590 Raw materials control 267 800 Wages control 112 320 **(of)** **(1)** Production overheads control 25 430 Balance c/d (W1) **89 500** Profit c/d (W2) **57 560** 563 700 563 700 W1 Balance = RM $50 330 + W I P $15 450 + FG $24 920 – Prod o/h 1 200 = **89 500 (1of)** W2 Sales $474 200 less production cost of sales $ 416 640 = **Profit $57 560 (1)**	**(4)**

Total for Question 4 = 16 marks

Question number	Answer (AO1) 1 (AO2) 2	Mark
5(a)(i)	**Award 1 mark for the formula and 1 mark for correct figures entered into the formulas.** **Finished goods inventory turnover** **Bright** **Stansted** Average Inventory x 365 / Cost of sales **(1)** — $65 x 365 / $380 = **62.43 days (1)**; $45 x 365 / $410 = **66.76 days (1)**	**(3)**

Question number	Answer (AO1) 1 (AO2) 2	Mark
5(a)(ii)	**Award 1 mark for the formula and 1 mark for correct figures entered into the formulas.** **Trade receivables collection period** Trade receivables x 365 days / Credit sales **(1)** — $55 x 365 / $650 = **30.88 days (1)**; $95 x 365 / $760 = **45.62 days (1)**	**(3)**

Question number	Answer (AO1) 1 (AO2) 2	Mark
5(a)(iii)	**Award 1 mark for the formula and 1 mark for correct figures entered into the formulas** **Trade payables payment period** Trade payables x 365 days / Purchases **(1)** — $45 x 365 / $390 = **42.12 days (1)**; $65 x 365 / $430 = **55.17 days (1)** Accept the following: Trade payables x 365 days / Cost of sales — $45 x 365 / $380 = **43.22 days (1)**; $65 x 365 / $410 = **57.86 days (1)**	**(3)**

Question number	Answer (AO2) 2	Mark
5(a)(iv)	**Award 1 mark for each correct figure.** **Current ratio** Current assets : Current liabilities $150 : $45 = **3.33 : 1 (1)** $180 : $105 = **1.71 : 1 (1)**	**(2)**

Question number	Answer (AO2) 2	Mark
5(a)(v)	**Award 1 mark for each correct figure.** **Acid test (quick) ratio** (Current assets – inventory) : Current liabilities $80 : $45 **= 1.77 : 1 (1)** $95 : $105 **= 0.90 : 1 (1)**	**(2)**

Question number	Answer (AO3) 4 (AO4) 3 (AO5) 1	Mark
5(b)	**Comments on the liquidity of each company**. Both companies are carrying too much inventory and need to take action to reduce their inventory levels **(1)**. They should investigate their inventory and put a stop on non-essential purchases and look at the physical inventory to determine which items need to be disposed of quickly **(1)**. Stansted has a worse trade receivable collection than Bright. They should employ credit control techniques to chase up payments **(1)**. Both company's are taking too long to pay their trade payables. Stansted might be in danger of losing suppliers (and/or trade discounts) **(1)**. Although both company's current ratios seem to suggest the companies have a healthy liquidity, the actual figure show differently **(1)**. Both companies have too much working capital tied up in inventory and trade receivables and need to take action to reduce these amounts **(1*)**. Although both acid tests seem to imply they are in a healthy position, Stansted has serious liquidity problems - they have no immediate cash to pay trade payables **(1)**. Stansted have a bank overdraft and no means to make repayments **(1)**. **max 6** **<u>Evaluation</u>** In terms of liquidity, Bright is the only viable option **(1)**, but would still need to make improvements to its cash flow position in the immediate future **(1)**.	**(8)**

Total for Question 5 = 21 marks

TOTAL FOR PAPER = 100 MARKS