

Mark Scheme

June 2018

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



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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	Answer (AO2) 5							
Number									Mark
1(a)(i)	Award 1	l mark f	or each	correct	column of f	igures			
		Order	No of	Order	Average	Holding	Total		
		size	orders	costs	inventory	costs	costs		
		(kg)		(\$)	(kg)	(\$)	(\$)		
		500	12	2 400	1 250	1 125	3 525		
		1 000	6	1 200	1 500	1 350	2 550		
		1 500	4	800	1 750	1 575	2 375		
		2 000	3	600	2 000	1 800	2 400		
		3 000	2	400	2 500	2 250	2 650		
			(1)	(1)	(1)	(1of)	(1of)		
									(5)

Question Number	Answer (A04) 1 (A05) 1	Mark
1(a)(ii)	Award 1of mark for answer.	
	1 500 kg (1) as this has the lowest total cost (1of)	(2)

Question	Answer (AO1) 1	
Number		
1(a)(iii)		
	The most efficient re-order level in terms of ordering and holding costs	
		(1)

Question Number	Answer (A02) 1	Mark
1(b)(i)	Award 1 mark for correct answer.	
	Reorder level = 280 x 21 = 5 880 kg (1)	(1)

Question Number	Answer (AO2) 2	Mark
1(b)(ii)	Award 1 method mark and 1of for answer.	
	Minimum control level = $5 880 \text{ (of)} - (250 \times 18) 4 500 \text{ (1)} = 1 380 \text{ kg}$ (10f)	(2)

Question Number	Answer (AO2) 3	Mark
1(b)(iii)	Award 2 method marks and 1of for answer. Maximum control level = $5880 \text{ (of)} - (220 \times 15) \ 3300 = 2580 \ (10f)$ $2580 + 8000 \ (1) = 10580 \ \text{kg} \ (10f)$	(3)

Question Number	Answer AO1 (2) AO3 (2)	Mark
1(c)	Answers may include	
	Having too little inventory could lead to a 'stock-out' (no available inventory) (1) resulting in lost production/lost sales/lack of customer confidence (1) If you want repeat custom, you need to meet customer demand quickly (1) TWO max	
	Having too much inventory might tie up working capital (1) and lead to expensive handling and storage costs (1) There is also the risk that the inventory might become obsolete or damaged (1) TWO max	
	TWO required x 2	(4)

Total marks for Question 1 = 18 marks

Question Number	Answer A	02 (6)				Mark
2(a)(i)	\$375 000 \$200,000 Residual	$\times 0.40 = 9$	\$150 000 for ea \$80 000 for year 000 added to end	rs four and fiv	e (1)	
	Year	Net cash flows	Disc. Factor	Present values		
		\$000	12%	\$000		
	0	(510)	1.000	(510.00)		
	1	150	0.893	133.95		
	2	150	0.797	119.55		
	3	150	0.712	106.80	1of* (for all 3)	
	4	80	0.636	50.88		
	5	140*	0.567	<u>79.38</u>	1of (for 4 and 5)	
			NPV =	(19.44)	1of	
	*Years 1	3 can be c	combined to giv	e a PDV of \$	360.30	(6)

Question Number	Answer A	02 (4)					Mark
2(a)(ii)	Internal	rate of return ((IRR)				
	Year	Net cash flows	Disc. Factor	Present values			
		\$000	10%	\$000			
	0	(510)	1.000	(510.00)			
	1	150	0.909	136.35			
	2	150	0.826	123.90			
	3	150	0.751	112.65			
	4	80	0.683	54.64			
	5	140	0.621	86.94	1of		
			NPV =	4.48	1of		
	IRR =	10% + (2% ×	4.48 (4.48 + 19.4) 44) (1) =	<u>10.37%</u>	1of	(4)

Question Number	Answer AO2 ((3)			Mark
2(a)(iii)	Discounted	payback (12%)			
	Year	Present values	Cumulative DCF		
	0	(510.00)	(510.00)		
	1	133.95	(376.05)		
	2	119.55	(256.50)	1of (for all three)	
	3	106.80	(149.70)		
	4	50.88	(98.82)		
	5	79.38*	(19.44)	1of (for all three)	
	The investme	nt fails to pay back	within the five years	s (1) .	(3)

Question Number	Answer AO4 (3)	Mark
2(b)	The investment in new machinery should NOT be undertaken: (1of) It earns an IRR of 10.37% which is lower than the cost of capital of 12% (1)	
	It generates a negative NPV of \$19 440 which doesn't recover the initial cost.	
	It doesn't provide a discounted payback within the five-year life of the investment (1).	
	Max 3	(3)

Question Number	Answer AO5 (4)	Mark
2(c)		
	Using a discounted payback approach takes into account the time value of money (1). This overcomes the weakness of the traditional payback method as a means of appraising an investment (1).	
	In this instance the discounted payback shows that the project does NOT make a positive return within the estimated five-year life (1).	
	Had the traditional method been used it would have shown that the investment made a payback sometime within the fourth year (1)	(4)

Total marks for Question 2 = 20 marks

Question Number	Answer (AO2) 1	16				Mark
3(a)						
		Budget \$	Actual \$	Variance \$		
	Production Costs	8 400 units	8 400 units			
	Direct materials	33 600 (1)	36 900	3 300 Adverse	(1of)	
	Direct labour	25 200 (1)	23 100	2 100 Favourable	(1of)	
	Prod Overheads	30 975 (3)	32 175	1 200 Adverse	(1of)	
	Selling and Dist	15 825 (2)	16 680	855 Adverse	(1of)	
	Administration	10 725 (2)	10 310	415 Favourable	(1of)	
	Total Costs	116 325 (1of)	119 165	2 840 Adverse	(1of)	
	Direct labour: \$28 Production overhea		•	•		
	High 3 Low <u>3</u> Diff		xed Costs = \$33 =	100 / 1 050 = \$2 per un 075 - (9 450 x \$2) 18 900 \$14 175 (1) 75 (1)		
	Selling and dist \$1 8 400 units x \$1.50 Admin: \$11 565 - \$	7 400 - \$3 225 = VC pu = \$12 600 + \$3 2 \$4 005 = VC \$7 560 /	\$14 175 / 9 450 225 = \$15 825 (9 450 units = \$ (units = \$1.50 VC p.u. (1 1) 0.80 VC per unit (1))	
	8 400 units x \$0.80)pu = \$6 720 + \$4 00)5 = \$10 725 (1)		(16)

Question Number	Answer (AO1) 1	Mark
3(b)	Any one: The budget could be flexed on a planned production level (1). The budget could be flexed on a planned level of service e.g. hotel rooms(1)	
		(1)

Question Number	Answer (AO1) 1	
3(c)	Any one: The size of the company might dictate the length of the budget period (1). The complexity of the company - many departments/offices/factories (1). The requirement of external agencies, like a bank (1). Government requirements - tax rules (1). A rolling/continuous budget might have a specific timescale (1).	(1)

Question Number	Answer (AO1)2 (AO3)2	Mark
3(d)	Award one mark for point made and a second mark for development.	
	In terms of behaviour, costs (in the short-term) can be thought of as variable, semi-variable or fixed (1). Cost behaviour dictates that not all costs change in direct proportion to the increases or decreases in output (1).	
	As time progresses, all costs are thought to be variable (1). An example of this is factory rent, which in the short term is fixed. However, this cost could change in the long-term (1).	(4)
		(4)

Total marks for Question 3 = 22 marks

Question Number	Answer AO2 (3)				Mark		
4(a)(i)	(a)(i) Award 1 mark for both correct entries on the debit side. Award 1 mark for both correct entries on credit side and 1 mark for correct calculation of WIP on credit side.						
		Raw Materi	als Control Account				
	Balance b/d	69 100	WIP control	434 290			
	Financial ledger control	482 040	Prod ohs control	35 200			
			Balance c/d	<u>81 650</u>			
		<u>551 140</u>		<u>551 140</u>			
					(3)		

Question Number	Answer AO2 (2)				Mark
4(a)(ii)			nce on debit side. entries on the credit	t side.	
		Wages	Control Account		
	Financial ledger control	202 400	WIP control	134 500	
			Prod ohs control	67 900	
		<u>202 400</u>		<u>202 400</u>	
					(2)

Question Number	Answer AO2 (3)				Mark	
4(a)(iii)	i) Award 1 mark for all correct entries on debit side (excluding Bal c/d). Award 1 mark for correct entry on credit side. Award 1 mark for correct Balance c/d and placement on debit side.					
		Production Overl	heads Control Ac	count		
	Balance b/d	4 350	W I P control	155 250		
	Raw materials control	35 200				
	Wages control	67 900				
	Financial ledger control	45 800				
	Balance c/d	2,000				
		<u>155 250</u>		<u>155 250</u>		
					(3)	

Question	Answer AO2 (3)				
Number					Mark
4(a)(iv)	A(a)(iv) Award 1 mark for first two entries on debit side (allow OF for Materials control). Award 1 mark for second two entries on the debit side. Award 1 mark for OF calculation of FG control and correct balance on credit side.				
		WIP Co	ntrol Account		
	Balance b/d	36 500	Finished good	740 440 of	
	Materials control	434 290 of			
	Wages control	134 500			
	Prod ohs control	<u>155 250</u>	Balance c/d	20 100	
		<u>760 540</u>		<u>760 540</u>	
					(3)

Question Number	Answer AO2 (2)				Mark
4(a)(v)				OF for WIP control. OF for Prod cost of	
		Finished Good	s Control Accour	nt	
	Balance b/d	53 100	Prod cost of sales	750 140 of	
	WIP control	740 440 of	Balance c/d	43 400	
		793 540		<u>793 540</u>	
	sales.				
					(2)

Question Number	Answer AO2 (5)			Mark	
4(a)(vi)	Award 1 mark for sales on debit side and 1 mark for balance provided that workings are shown if incorrect. Award 1 for first two credit entries. Award 1 for further two entries Award 1 mark for profit provided that workings are shown if incorrect.				
		Financial Led	ger Control Account		
	Sales	851 650	Balance b/d	163 050	
			Raw mats control	482 040	
			Wages control	202 400	
			Prod ohs control	45 800	
	Balance c/d (W1)	143 150	Profit c/d (W2)	101 510	
		994 800		994 800	
	W2		00 - Prod o/h \$2 000 (C f sales \$750 140 (OF) =	OF) = \$143 150 (OF) Profit \$101 510 (OF)	(5)

Question Number	Answer AO1 (1) AO3 (3)	Mark
4(b)	In a non-integrated system the cost accounts are kept separate from the financial accounts and it will be necessary for the two sets of accounts to be reconciled with the use of control accounts (1).	
	Using control accounts will enable the company to frequently check the accuracy of the accounts and highlight any errors (1).	
	Any over or under absorbed production overhead can be carried forward as a balance into the next period's accounts (1).	
	The financial ledger control account will keep a record of all the individual control account balances, as a further means of checking on the accuracy of the control accounts (1).	
		(4)

Total for Question 4 = 22 marks

Question Number	Answer (AO2) 2	Mark
5a(i)	Award 1 mark for each correct answer.	
	Rate of inventory turnover =	
	Year 2016 = 78(000) x 365 = 28 470 / 468 = 61 days (1)	
	Year 2017 = 96 x 365 = 35 040 / 458 = 77 days (1)	(2)

Question Number	Answer (AO2) 2	Mark
5a(ii)	Award 1 mark for each correct answer.	110111
	Trade receivables collection period =	
	Year 2016 = 51 x 365 = 18615 / 788 = 24 days (1)	
	Year 2017 = 88 x 365 = 32 120 / 876 = 37 days (1)	(2)

Question Number	Answer (AO2) 3	Mark
5a(iii)	Award 1 mark for each correct answer.	
	Trade payables repayment period	
	Year 2016 = 48 x 365 = 17 520 / 485 = 36 days (1)	
	Year 2017 = 67 x 365 = 24 455 / 490 = 50 days (1)	(2)

Question Number	Answer (AO2) 3	Mark
5a(iv)	Award 1 mark for each correct answer (two decimal places).	
	Current ratio	
	Year 2016 = (51 + 78 + 38) 167 : 48 = 3.48 : 1 (1)	
	Year 2017 = (88 + 96) 184 : (67 + 24) 91 = 2.02 :1 (1)	(2)

Question Number	Answer (AO2) 3	Mark
5a(v)	Award 1 mark for each correct answer (two decimal places)	
	Acid test ratio	
	Year 2016 = (51 + 38) 89 : 48 = 1.85 : 1 (1)	
	Year 2017 = 88 : (67 + 24) 91 = 0.97 : 1 OR 1 : 1.03 (1)	(2)

Question	Answer (AO3) 3 (AO4) 3 (AO5) 2	
Number		Mark
5(b)	Answers may include:	
	The company's rate of inventory turnover measured in days has increased/worsened, indicating that the company is taking more time to sell its inventory (1) so too much working capital is being tied up (1) [*award this point only once]	
	The trade receivables collection period has increased/worsened indicating that debtors are taking longer to repay (1) . The company needs to take action (credit control) to recover its debts sooner (1)	
	The trade payables payment period is taking longer . There could be a risk of a supplier refusing to deal with the company (1) . On the other hand this may help the cash flow position (1) .	
	The current ratio has reduced but the accounts show that too much working capital is tied up in inventory and trade receivables (1) [*award this point only once]	
	The acid test appears to be reasonable but the accounts show that the company has a bank overdraft (1)	
	6 max. Conclusion (AO5)	
	The company has a liquidity problem. (1) It has a bank overdraft in year 17 and has no immediate means to pay its trade payables (1)	(8)