

Mark Scheme

September 2019

Pearson LCCI Certificate in Cost and Management Accounting (VRQ) Level 3(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.
- Where marks are awarded for own figure answers, these marks can only be awarded if evidence of how the candidate arrived at their values has been provided (their workings).
- If candidate's fail to provide their workings when instructed in the paper, it may not be possible to achieve all marks associated with the question, even
- If the final answer is correct.
- For calculation questions full marks can be awarded where correct answer is seen with no workings shown, unless question states that candidate must provide workings.

Abbreviation

of Own Figure rule

Accuracy marks can be awarded where the candidates' answer does not match the mark scheme, though is accurate based on their valid method.

cao Correct Answer Only rule

Accuracy marks will only be awarded if the candidates' answer is correct, and in line with the mark scheme.

fb Both entries/answers should be present

Question	Answer (A01 1) (A03 1)	Mark
1(a)	(a) Award 1 AO1 mark for basic explanation and 1 AO3 mark for development.	
	Ideal Standard is the standard set under the highest (or best ever) level of performance and efficiency / under perfect operating conditions (1) – it makes no allowance for wastage, inefficiency or production problems. (1)	(2)

Question	Answer (AO1 1) (AO3 1)	Mark
1(b)	Award 1 AO1 mark for basic explanation and 1 AO3 mark for development.	
	 Answers may include: Given that perfect conditions rarely exist (or cannot be bettered) (1) - it is likely that variances arising will be adverse (and meaningless) As this standard is unlikely to be achieved very often (1) - workers are likely to become very demotivated. (1) 	
		(2)

Question	Answer (AO2 3)	Mark
1(c)(i)	Material price: (8.70 – 9.25) 0.55 x 54 120 = \$29 766 Adv (1)	
	Actual price = 500 610 / 54 120 kg = \$9.25 / kg (1)	
	Standard price = 438 480 / 50 400 kg = \$8.70 / kg (1)	
	The variance must be correctly identified as adverse to get the final	(\mathbf{a})
	тагк.	(3)

Question	Answer (AO2 2)	Mark
1(c)(ii)	Material usage: (57 600 - 54 120) 3 480 x 8.70 = \$30 276 Fav (1)	
	Standard quantity = (50 400 / 63 000) x 72 000 = 57 600 kg (1)	
	The variance must be correctly identified as favourable for the final mark.	(2)

Question	Answer (AO2 3)	Mark
1(c)(iii)	Labour rate: (12.00 - 12.10) 0.10 x 22 540 = \$2 254 Adv (1)	
	Actual rate = 272 734 / 22 540 hours = \$12.10 / hour (1)	
	Standard rate = 264 600 / 22 050 hours = \$12.00 / hour (1)	
	The variance must be correctly identified as adverse to get the final	
	mark.	(3)

Question	Answer (AO2 2)	Mark
1(c)(iv)	Labour efficiency: (25 200 - 22 540) x 12.00 = \$31 920 Fav (1)	
	Standard quantity = (22 050 / 63 000) x 72 000 = 25 200 hours (1)	
	The variance must be correctly identified as favourable to get the final mark.	(2)

Question	Answer (AO2 1)	Mark
1(c)(v)	Fixed overhead expenditure: 385 200 - 340 200 = \$45 000 Adv (1)	
	The variance must be correctly identified as adverse to get the mark.	(1)

Question	Answer (AO2 2)	Mark
1(c)(vi)	Fixed overhead volume: 5.40 x (72 000 - 63 000) = \$48 600 Fav (1)	
	OAR = \$340 200 / 63 000 = £5.40 / unit (1)	
	The variance must be correctly identified as favourable to get the final mark.	(2)

PROFIT RECONCILIA	ATION ST	TEMENT	\$	
Standard Profit for A	Actual pro	duction	116 280	
Variances	Fav \$	Adv \$		
Direct materials price		29 766)(1of)
Direct materials usage	30 276			for)both
Direct labour rate		2 254)(1of)
Direct labour efficiency	31 920)both
Fixed overhead expend		45 000		(1)OF
Total variance	62 196	77 020	(14 824)	(1of) for all 3*
Actual Profit for Act	ual produc	ction	101 456	(1of)

Question	Answer (AO1 1)	Mark
1(e)(i)	Answers may include:	
	Material used might have been of a higher quality (1) Higher skilled workers wasted less material than expected (1) There were less machine-related problems that reduced wastage (1) Inappropriate standard setting at the time of preparing the budget (1)	
	or rule applies	(1)

Question	Answer (AO1 1)	Mark
1(e)(ii)	Answers may include: Increased output and overheads not entirely fixed (1) There may have been an increase in overheads between budget-setting and the work being done (1) OF rule applies	(1)

Question	Answer (AO2 5)				
2(a)(i)	Operational overheads:				
	Licences /	4 x 4 650	\$18 600) 1 for	
	Insurance) both	
	Servicing /	4 x 3 x 1 250	\$15 000		
	Repairs				
	Depreciation	4 x <u>(320 000 – 50 000)</u>	\$180 000	(1)	
		6			
			+20.400		
	lyres	4 x 2 x 8 x 600	\$38 400	(1)	
		Operational overheads	\$252 000	(1 of)	
		Budgeted Km 4 x 90 000	360 000		
		OAR per km	\$0.70	(1 of)	
	Overheads (1of) – must have all four elements				
	OAR (10f) – must	divide operational overhead	is by 360 000	l km	(5)

Question	Answer (AO2 1)	Mark
2(a)(ii)	Administrative overheads:	
	Overhead Absorption Rate = $\frac{$153\ 000}{850\ jobs}$ = \$180 per job (1)	(1)

Question	Answer (AO3 2)	Mark
2(b)	Answers may include:	
	 This will ensure that costs are passed onto the customer as and when work is done (1) which will hopefully ensure that all overhead costs are covered during the period (1). This will assist with cost-plus price-setting (1) as it will help to ensure that even the indirect costs are considered when providing a quotation (1). 	
	Maximum of 2 Marks	(2)

Question	Answer (AO3 1)	Mark
2(c)(i)	 Answers may include: Operational overheads: as these are largely related to the amount of distance travelled by the buses and so it seems fair to charge a customer more whose job requires the buses to travel greater distances (1). 	
	Accept that these costs are variable	(1)

Question	Answer (AO3 1)	Mark
2(c)(ii)	Answers may include:	
	• Administration overheads: regardless of size, each job requires a similar amount of Administration and so it seems fair to pass these costs onto the customer on a 'per job' basis (1).	
	Accept that these costs are fixed	(1)

Question	Answer (AO2 2)			Mark
2(d)(i)	Operational absorbed 178 400 x \$0.70 OF =	\$124 880	(1)OF	
	Operational overheads incurred	\$147		
		630		
	Under-absorption	\$22	(1of)	
		750		(2)

Question	Answer (AO2 2)			Mark
2(d)(ii)	Administrative absorbed 465 x \$180 OF =	\$83 700 \$81 760	(1)0F	
	Over-absorption	\$1 940	(1of)	(2)

Question	Answer (AO4 5) (AO5 1)	Mark
2(e)	Answers may include:	
	 Negative factors: The company has under-absorbed by \$20 810 / is on track to under-absorb by \$41 620 (1) - which means that overheads costs per job / km will be more than budgeted (1). Under-absorption means that not all of the overhead costs have been passed onto the customer (1) - which is eating into the profits of the business (1). If the company continues to do less work than budgeted then there will be less contribution made (1) - and therefore less profit (1). If the company is charging a market price, then the underabsorption will result in less contribution than expected (1) - and therefore less profit will be made (1). 	
	 Positive factors: If the market is competitive then prices quoted might be lower than they should have been (1) – and some customers who might have gone elsewhere will be attracted (1). 	
	General point: Both under- or over-absorption of overheads can cause a problem (1) – but it is better to over-absorb than under-absorb overheads (1).	
	Maximum of 4 marks for presenting only one side of the argument.	
	Conclusion: The under-absorption of overheads is likely to cause more problems than provide benefits. (1)	
	Award 1 mark for conclusion that is compatible with the points made.	(6)

Total for Question 2 = 20 Marks

Question	Answer (AO2 1)	Mark
3(a)(i)	Reorder level = 8 x 250 = 2 000 kg (1)	
		(1)

Question	Answer (AO2 2)	Mark
3(a)(ii)	Minimum level = 2 000 OF (ai) - (6 x 175) 1 050 (1) = 950 kg	
	(1of)	(2)

Question	Answer (AO2 1)	Mark
3(a)(iii)	Reorder quantity = 7 500 - 950 OF (aii) = 6 550 kg (1 of)	
	Accept alternative formula	(1)

Question	Answer (AO2 2)	Mark
3(a)(iv)	Average Inventory (kg)=950 OF (aii) + (6 550 OF / 2) (aiii) (1 of) =	
	4 225 kg (1 of)	
	Accept alternative formula	(2)
		(2)

Question	Answer (AO2 1)	Mark
3(a)(v)	Average Inventory (\$) = 4 225 kg OF (aiv) x \$4.80 per kg = \$20 280 (1 of)	(1)

Question	Answer (A01 1) (A02 3)	Mark
3(b)	$EOQ = \sqrt{2 c d} (1)$	
	Н	
	Award the formula mark if the answer is correct	
	c = cost of placing the order	
	d = demand	
	h = holding costs	
	$=\sqrt{2 \times 500 \times 3600}$ (1) = 1 200 kg (1)	
	2.50 (1)	
		(4)

Question	Answer (AO1 2)	Mark
Question 3(c)	Answer (A01 2) Answers might include: Material handling costs (1) Rental of warehouse space (1) Heat & light (1) Warehouse staff wages (1) Depreciation of equipment (1) Security staff (1) Security equipment (1) Financial costs (interest, money tied up) (1) Wastage (1) Theft (1)	Mark
	NOT ordering costs	(2)

Question	Answer (A01 2) (A03 2)	Mark
Question 3(d)	 Answer (AO1 2) (AO3 2) 1 AO1 mark for basic point and 1 AO3 mark for development. Answers may include Information will no longer need to be copied from one part of the system to another / only one set of accounts (1) – this will reduce errors / save time / reduce compatibility problems (1). When data is entered onto the system, all relevant parts of the system will be updated (1) – this means that information is upto-date / there is only one figure stored for any given item (1). Integrated systems usually have a reports menu where formats can be adapted (1) – this means that Hyperion can produce reports quickly / in the required format (1). Integrated systems usually have inbuilt protections / audit tools (1) – so it less likely that impossible data can be entered onto 	
	the system / this will highlight irregular and possibility fraudulent behaviour (1). 2 points required which must relate to the BENEFITS of operating such a system ** Items in bold will relate to non computerised systems	(4)

Question	Answer (AO1 1) (AO3 1)	Mark
3(e)	1 AO1 mark for basic point and 1 AO3 mark for development.	
	Answers may include	
	 Answers may include Strong or unique / frequently changing passwords (1) - this will make it more difficult for people accessing systems / data that they are not authorised to see (1). Logging out (1) - requiring staff to log out when not at their workstation will prevent people gaining unauthorised access (1). Computers locking (1) - ensuring automatic locking after a short period of inactivity will prevent people from improperly accessing the workstation (1). Restriction on use of 'memory sticks' (USB-drives) (1) - this will reduce the risk of viruses that might corrupt or steal data, being introduced to the system / this will make it more difficult for staff to download and steal data (1). Encryption of 'memory sticks' (USB-drives) (1) - this will make it more difficult for outsiders to read the information if the USB is lost or stolen (1). Not allowing access to non-work-related websites / introducing rules about opening emails from unrecognised sources (1) - will reduce the risk of viruses that might corrupt or steal data, being 	
	 introduced to the system (1). Restricted access (1) – only allowing people access to the parts of the system related to their job will prevent unauthorised access to really sensitive information (1). 	
	 Regular backing up (1) – this will reduce the likelihood of data being lost or corrupted by unexpected problems like power cuts (1). 	
	1 point required	
		(2)

Total for Question 3 = 19 Marks

Question	Answer (AO2 4)					Mark
4(a)(i)						
		Product A	Product B	Product C	Total	
	Contribution	320 000	175 000	81 000	576 000	
	Revenue	800 000	500 000	300 000	1 600 000	
	C/S Ratio	40% (1)	35% (1)	27% (1)	36% (1)	(4)

Question	Answer (AO2 2)	Mark	
4(a)(ii)			
	Break-Even Revenue = \$449 280 / 36% (1of) = \$1 248 000 (1of)		
	Own figure must come from 4ai with clear workings.		
	NOT \$21.50 which is the contribution OR 1.02	(2)	

Question	Answer (AO2 3)	Mark	
4(a)(iii)			
	Target Revenue = \$539 280 (1) / 36% (1of) = \$1 498 000 (1of)		
	Required contribution = \$449 280 + \$90 000 = \$539 280		
	Own figure must come from 4ai with clear workings.		
	NOT \$21.50 which is the contribution OR 1.02	(3)	

Question	Answer (AO2 3)	Mark
4(a)(iv)	Margin of Safety (\$) = 1600 000 (ai) OF - 1 248 000 (aii) OF = \$352 000 (1of)	
	Margin of Safety (%)= <u>\$352 000</u> (1of) x 100= 22.00% (1of) [2] \$1 600 000	(3)

Question	Answer (AO2 2)	Mark
4(a)(v)	Forecast Profit = \$576 000 (ai) (10F) - \$449 280 = \$126 720 (1of)	(2)

Question	Answer (AO2 3)				Mark	
4(b)(i)						
		Cost \$	Total Equiv units			
	Material	16 175 + 60 545 = 76 720	11 000 + (75% x 3 600) = 13 700	\$5.60	(1)	
	Labour & overheads	28 240 + 61 950 = 90 190	11 000 + (40% x 3 600) = 12 440	\$7.25	(1)	
	Total cost			\$12.8 5	OF	
	Value of Go = \$141 35	ods sent to custor 0 (1of)	ner = 11 000 x 12.85 (OF	=)		(3)

Question	Answer (AO2 3)				Mark
4(b)(ii)	Value of closing work	-in-progress:			
	Material (3 600 x 70%)	2 700 equiv units x 5.60 (of)	\$15 120	(1of)	
	Labour & overheads (3 600 x 40%)	1 440 equiv units x 7.25 (of)	<u>\$10 440</u>	(1of)	
	Total cost		<u>\$25 560</u>	(1of)	
	Both materials and overheads must clearly show the proportion of equivalent units.				
					(3)

Total for Question 4 = 20 Marks

Question	Answer (AO2 6)	Mark
5(a)	Selling price = \$502 200 / 36 000 = \$13.95 (1)	
	Absorption cost = \$533 400 / 36 000 = \$14.82 (1) (4.80 + 0.65 = 0.20 + 5.25 + 3.92)	
	Marginal cost = \$4.80 (1) + \$0.65 (1) + \$0.20 (1) = \$5.65 (1) [4]	
	Material costs = \$172 800 / 36 000 = \$4.80 (1)	
	Labour cost (variable) = (\$212 400 - \$189 000) / 36 000 = \$0.65 (1) Direct labour NOT \$5.90	
	Overhead (variable) = (\$148 200 - \$141 000) / 36 000 = \$0.20 (1) Overheads NOT \$4.12	(6)

Question	Answer (AO2 3)	Mark
5(b)		
	Contribution = \$9.95 - \$5.65 OF = \$4.30 (1of)	
	Loss = $(31\ 200) + (6\ 000\ \times\ 4.30)$ 25 800 OF (1) = loss of \$5 400 (1of)	
		(3)

Question	Answer (AO3 1) (AO4 1)	Mark
5(c)	Answers my include:	
	 Accept the offer (1) The loss will be reduced / by \$25 800 per quarter (1). The business will be selling the product in a new market - which may lead to further contracts / expansion (1). Expansion may enable the business to gain economies of scale / for example, discounts from buying materials in bulk (1). 	
	 Do not accept the offer (1): Existing customers may not be happy to find the new customer is paying a lower price / they may seek to renegotiate / cease buying (1). The customer may use a different currency/ a change in the exchange rate may cause problems (1). The costs of transportation might be significant/ this may remove the contribution gained on the extra units (1). Expanded production might require more staff / invest in new machinery / increased capacity / might be expensive / difficult to achieve (1). There may be legal / technical requirements in the customer's country / this might mean the business has to make alterations to the product (1). 	(2)

Question	Answer (AO4 3) (AO5 3)	Mark
5(d)	Answers may include:	
	 Short-term (keeping production): Keep production as the selling price is greater than the variable costs (1), so a contribution is being made to fixed costs (1) If the business closes down, it will fixed costs of \$330 000 (1) - which will lead to bigger losses than the \$31 200 currently being made (1). The product is making a positive contribution of \$298 800 (1) - which will be lost if it closes down production (1). The prediction about sales and costs not changing may be wrong (1) - there may be an upturn in the market / more contract offers (1). ** 	
	 Short-term (stopping production): It may be possible to use the resources to make another product (1) - which might lead to profits being made (1). 	
	 Long-term (keeping production): The contract from the overseas customer may be the first of many (1) - long-term the product may have a profitable future (1) The prediction about sales and costs not changing may be wrong (1) - there might be an upturn in the market / profitability (1) ** 	
	 Long-term (stopping production): The sales revenue does not cover all the costs (1) so a loss is being made (1) Fixed costs are only fixed in the short-term (1) - a planned closure in the future will eliminate the losses (1) The company may already be designing a new / replacement product (1) - this might be more profitable than the existing one (1) Conclusion: The company should / should not continue to produce Exe (1) Maximum of 3 marks for short-term or long-term. 	
	TT Unly award once	(6)

Total for Question 5 = 17 Mark

TOTAL FOR PAPER = 100 MARKS