Mark Scheme

April 2019

Pearson LCCI
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.

Question	**Answer (AO2) 1**	Mark
1(a)(i)	Selling price = 478 000 / 40 000 or 836 500 / 70 00 = **$11.95 per unit (1)**	**(1)**
Question	**Answer (AO2) 3**	Mark
1(a)(ii)	Materials 152 000 / 40 000 or 266 000 / 70 000 = **$3.80 (1)** Prod Overheads 137 500 – 133 000 / 70 000 – 40 000 = **$0.15 (1)** **Variable Cost per unit** **$3.95 (1of)**	**(3)**
Question	**Answer (AO2) 3**	Mark
1(a)(iii)	Labour $244 000 **(1) for both** Non-Prod Overheads $117 000 Prod Overheads = 137 500 – (70 000 x 0.15) = $127 000 **(1of)** **Fixed Costs per month** **$488 000** **(1of)** Alternative answer: $764 500 - $276 500 ($3.09 x 70000) = $488 000	**(3)**
Question	**Answer (AO2) 3**	Mark
1(a)(iv)	Contribution = 11.95 (ai) – 3.95 (aii) = **$8.00 per unit (1of)** Break-Even Point = 488 000 (aiii) / 8.00 = **61 000 units (1of)** Break-Even Revenue = 61 000 x 11.95 = **$728 950 (1of)**	**(3)**
Question	**Answer (AO2) 2**	Mark
1(a)(v)	Margin of Safety (units) = 70 000 – 61 000 (aiv) = **9 000 units (1of)** Margin of Safety (%) = 9 000 / 70 000 x 100 = **12.86% (1of)**	**(2)**
Question	**Answer (AO2) 2**	Mark
1(a)(vi)	Required Output = 488 000 (aiii) + 100 000 **(1of)** / 8.00 (aiv) = **73 500 units (1of)**	**(2)**
Question	**Answer (AO1) 1 (AO3) 1**	Mark
1(b)(i)	Award 1 AO1 mark for basic point and 1 AO3 mark for development. Relevant costs: are those costs that will **change** based on decision making **(1)** - they are **future costs** that will differ among alternative decisions **(1)** They can be avoided if the decision does not go ahead **(1)**.	**(2)**
Question	**Answer (AO1) 1 (AO3) 1**	Mark
1(b)(ii)	Award 1 AO1 mark for basic point and 1 AO3 mark for development. Sunk costs: are those costs that have already been **incurred** / that cannot be **recovered/** they are **unavoidable (1)** - they are **past costs** that will have **no bearing** (irrelevant) on any future decision-making **(1)**.	**(2)**

Total for Question 1 = 18 marks

<table>
<tr><td>Question</td><td>Answer (AO2 3)</td><td>Mark</td></tr>
<tr><td>2(a)</td><td>
<table>
<tr><td>Materials</td><td>36 400 / 32 000 x $510 000 =</td><td>580 125</td><td>(1)**</td></tr>
<tr><td>Labour</td><td>36 400 / 32 000 x $147 600 =</td><td>167 895</td><td>(1)**</td></tr>
<tr><td>Overheads</td><td></td><td>278 400</td><td></td></tr>
<tr><td colspan="2">Total cost</td><td>1 026 420</td><td>(1of)*</td></tr>
</table>
*All 3 costs must be included and the overhead figure must be as stated.
** Accept rounding e.g. $580 216, $167 913 and $1 026 529
***$1 604 700 = 2 marks (936 000 / 32 000 x 36 400)
</td><td>(3)</td></tr>
<tr><td>Question</td><td>Answer (AO2 3)</td><td>Mark</td></tr>
<tr><td>2(b)(i)</td><td>Material usage: (77 350 – 76 440) 910 x 7.50 (OF) = $6 825 Fav (1OF)

Standard quantity = (68 000 / 32 000) x 36 400 = 77 350 kg (1)
Budgeted price = 510 000 / 68 000 = $7.50 / kg (1)

Variance must be correctly identified as favourable or adverse for final mark.</td><td>(3)</td></tr>
<tr><td>Question</td><td>Answer (AO2 2)</td><td>Mark</td></tr>
<tr><td>2(b)(ii)</td><td>Material price: (7.50 – 7.25) 0.25 (1) x 76 440 = $19 110 Fav (1)

Budgeted price = 510 000 / 68 000 = $7.50 / kg

Actual price = 554 190 / 76 440 kg = $7.25 / kg

Variance must be correctly identified as favourable or adverse for final mark.</td><td>(2)</td></tr>
<tr><td>Question</td><td>Answer (AO2 3)</td><td>Mark</td></tr>
<tr><td>2(b)(iii)</td><td>Labour efficiency:
(16 380 – 18 200) 1 820 (1) x 10.25 (OF) = $18 655 Adv (1OF)

Standard quantity = (14 400 / 32 000) x 36 400 = 16 380 hours

Budgeted rate = 147 600 / 14 400 hours = $10.25 / hour (1)

Variance must be correctly identified as favourable or adverse for final mark.</td><td>(3)</td></tr>
<tr><td>Question</td><td>Answer (AO2 2)</td><td>Mark</td></tr>
<tr><td>2(b)(iv)</td><td>Labour rate: (10.25 – 10.10) 0.15 x 18 200 = $2 730 FAV (1)

Budgeted rate = 147 600 / 14 400 hours = $10.25 / hour

Actual rate = 183 820 / 18 200 hours = $10.10 / hour (1)

Variance must be correctly identified as favourable or adverse for final mark.</td><td>(2)</td></tr>
</table>

Question	**Answer (AO2) 1**	Mark
2(b)(v)	**Fixed overhead expenditure:** 278 400 – 285 150 = **$6 750 ADV (1)** Variance must be correctly identified as favourable or adverse to get the mark.	**(1)**

Question	**Answer (AO2) 3**	Mark
2(b)(vi)	**Fixed overhead volume:** 8.70 **(OF)** x **4 400** (36 400 – 32 000) **(1)** = **$38 280 FAV (1OF)** $278 400 / 32 000 = **$8.70 (1)** The variance must be correctly identified as favourable or adverse to get the final mark.	**(3)**

Question	**Answer (AO4 3) (AO5 2)**	Mark
2(c)	Candidates should be awarded a **maximum of 2 marks** for using variances that they have calculated earlier in the question. Answers may include: • Control of costs was good because, there was a favourable labour rate variance of $2 730 **(1).** • Control of costs was poor because, there was an adverse labour efficiency variance of $18 655 **(1).** Candidate may provide possible reasons for those variances and attempt to evaluate whether those reasons imply good/poor control of costs or are factors beyond the control of the business. Answers may include: • The adverse labour efficiency variance might be due to less-experienced employees who were less-skilled **(1)** • The favourable labour rate variance was the result of the less-experience employees being paid a lower hourly rate than the usual workers **(1)** • These should / could not have been foreseen by the managers of Thalassa Ltd **(1)**. Candidates should be awarded a maximum of 2 marks for using numerical evidence without providing reasons and evaluation. **Conclusion:** Control of labour costs was poor because, there is an overall adverse labour variance of $15 925 **(1).** Candidates should be awarded 1 mark for a conclusion that reflects a valid argument made.	**(5)**

Total for Question 2 = 22 marks

<table>
<tr><td>Question</td><td>Answer (AO1) 2</td><td>Mark</td></tr>
<tr><td>3(a)</td><td>Two required. Answers might include:
• Warehouse / stockroom rental (1) wages (1) heat and lighting costs (1)
• Security equipment / staff (1)
• Insurance (1)
• Wastage / deterioration of inventory (1)
• Theft (1)
• Money tied up in inventory / opportunity cost / interest paid (1)
NOT ordering costs e.g. telephone charges or internet</td><td>(2)</td></tr>
<tr><td>Question</td><td>Answer (AO2) 2</td><td>Mark</td></tr>
<tr><td>3(b)</td><td>Orders required (3 000 x 12) / 6 000 = 6 orders (1) x $1 200 = $7 200 (1 of)</td><td>(2)</td></tr>
<tr><td>Question</td><td>Answer (AO2) 2</td><td>Mark</td></tr>
<tr><td>3(c)</td><td>Average Inventory = 4 500 + (6 000 / 2) = 7 500 kg (1) x $1.25 = $9 375 (1 of)</td><td>(2)</td></tr>
<tr><td>Question</td><td>Answer (AO2) 7</td><td>Mark</td></tr>
<tr><td>3(d)</td><td>
<table>
<tr><td>Costs</td><td>6 000 kg</td><td>18 000 kg</td><td></td></tr>
<tr><td>Purchasing</td><td>$302 400</td><td>$287 280</td><td>95% x 36 000 x $8.40 (1)</td></tr>
<tr><td>Ordering</td><td>$7 200</td><td>$2 400</td><td>36 000 / 18 000 = 2 (1)
2 (OF) x $1 200 = $2 400 (1 of)</td></tr>
<tr><td>Holding</td><td>$9 375</td><td>$16 875*</td><td>4 500 + (18 000 / 2) = 13 500 (1)
13 500 (OF) x $1.25 = $16 875 (1 of)</td></tr>
<tr><td>Total</td><td>$318 975</td><td>$306 555</td><td></td></tr>
<tr><td></td><td>(1 of)</td><td>(1 of)</td><td>Figure must include purchasing, ordering and holding costs.</td></tr>
</table>
*$16 031 = 1 mark
</td><td>(7)</td></tr>
<tr><td>Question</td><td>Answer (AO5) 1</td><td>Mark</td></tr>
<tr><td>3(e)</td><td>The company will save $12 420 if it increases the order size to 18 000 kg (1).

MUST provide a reason for the decision</td><td>(1)</td></tr>
<tr><td>Question</td><td>Answer (AO1) 2 (AO3) 2</td><td>Mark</td></tr>
<tr><td>3(f)</td><td>Award 1 AO1 mark for basic point and 1 AO3 point for development.

Answers might include:
• Business might not hold enough inventory (1) – this could result in lost production/sales/customers as a result of running out (1).
• Business might not hold the right type of inventory (1) – this might mean that the business lost sales or had to dispose of obsolete inventory (1).
• The business might hold too much inventory (1) – this could mean that holding costs are excessive/more money is tied up/more wastage is suffered.
• Employees might realise that the business did not know how much inventory was being held (1) – this might result in an increase in theft (1).
• The stockroom may be disorganized/untidy (1) – which could mean that people are needlessly ordering inventory because they cannot find items and think that they have run out/ this could represent a safety hazard (1).</td><td>(4)</td></tr>
</table>

Total for Question 3 = 18 marks

Question	Answer (AO1 1)	Mark
4(a)(i)	**Marginal cost** – the extra / variable cost of producing **one unit** of output **(1)**	**(1)**

Question	Answer (AO1 1)	Mark
4(a)(ii)	**Absorption cost** – the total cost of producing **one unit** of output including **fixed and variable** costs **(1)**	**(1)**

Question	Answer (AO2 6)	Mark
4(b)		**(6)**

		Marginal		**Absorption**	
Materials		2.25	**) (1)**	2.25	
Labour (f)			**) for**	1.60	**(2)**
Labour (v)		0.20	**) both**	0.20	
Overheads (f)	84 000 / 35 000			2.40	**(1)**
		$2.45	**(1)**	**$6.45**	**(1of)**

Labour (fixed) = 32 x 175 x 10.00 = **$56 000** (1) / 35 000 = **$1.60** (1)

Overheads (fixed) = $84 000 / 35 000 = **$2.40** (1)

Question	Answer (AO2 12)	Mark
4(c)		**(12)**

		Marginal		**Absorp**
		$		**$**
Revenue		238 500	**(1)**	238 500
Opening Inventory	37 720	**(1)**	97 580	**(1)**
Cost of Production	85 750	**(1of)**	225 750	**(1of)**
Closing Inventory	(48 020)	**(1of)**	(126 420)	**(1of)**
Cost of Sales		(75 450)		(196 910)
Contribution	**(1 of)**	163 050	GP	41 590
Labour (fixed)	56 000	**) (1) for**		
Overheads (fixed)	84 000	**) both**		
Profit	**(1 of)**	**23 050**	**(1 of)**	**41 590**

Revenue 31 800 x $7.50 = $238 500 **(1)**

Opening Inventory (marginal) = 16 400 x **$2.30** = $37 720 **(1)**
Opening Inventory (absorption) = 16 400 **x $5.95** = $97 580 **(1)**

Cost of Production (marginal) = **35 000** x $2.45 **(OF)** = $85 750 **(1of)**
Cost of Production (absorption) = **35 000** x $6.45 **(OF)** = $225 750 **(1of)**

Closing Inventory = 16 400 + 35 000 – 31 800 = **19 600 hats (1)**
Closing Inventory (marginal) = **19 600** x $2.45 **(OF)** = $48 020 **(1of)**
Closing Inventory (absorption) = **19 600** x $6.45 **(OF)** = $126 420 **(1of)**

Question	Answer (AO3 2) (AO4 2)	Mark
4(d)	The opening and closing inventory figures using absorption costing are **higher** than under marginal costing ($97 580 and $126 420 as opposed to $37 720 and $48 020) **(1)** because when using absorption costing a **proportion of the fixed overhead** is carried forward in the value of the closing inventory **(1)** This means that the cost of producing goods sold under absorption costing is **lower** by **$18 540*** **(1)** and the profit is therefore **higher (1).** 19 600 x $4 = $78 400 less (16 400 X 3.65) $59 860 **= $ 18 540** **Candidate MUST refer to the inventory values having an effect on the cost of sales and the resulting profit**	**(4)**

Total for Question 4 = 24 marks

Question	Answer (AO4) 3 (AO5) 3	Mark
5(a)	Answers may include: **Strong controls** (maximum 3 points)**:** • The rule about saving work hourly and backing up files daily will ensure that **little work or time is lost** in the **event of systems crashing** or other physical disaster **(1)**. • The rule about logging out or locking computers will **reduce the risk of unauthorised or malicious access** when user is not at their desk **(1)**. • Not allowing use of own 'memory sticks' (USB-drives) will **reduce the risk of viruses** that might **corrupt or steal data (1)**. • Not allowing access to non-work-related websites will **reduce the risk of viruses** that might corrupt or steal data **(1)**. **Weak controls** (maximum 2 points)**:** • Employees having access to all parts of the management information system using their username and password means that **anyone could cause damage or steal information (1)**. • The infrequent changes to a password may enable **unauthorised users having access the system** for a long period **(1)**. • Passwords based on initials and date of birth are easy to decode, and this could enable **someone to log on to the system** and not be identified **(1)**. **Conclusion** (1 mark)**:** The rules and procedures, if followed, do / do not safeguard the security and confidentiality of the company's management information **(1)**. The conclusion should reflect the balance of the arguments presented. It is possible that candidates may use the points listed above to argue the opposite side of the case – provided that there is some justification, all valid points should be rewarded.	**(6)**
Question	**Answer (AO1) 2 (AO3) 2**	**Mark**
5(b)	Award 1 AO1 mark for each basic measure suggested and 1 AO3 mark for developing how each measure would help to improve compliance with company policy. Answers may include: • Induction / refresher training **(1)** – this would ensure employees were aware of the rules and why they were important **(1)**. • Issue Code of Conduct / Staff Handbook **(1)** – when in doubt, employees could look up the policies / procedures to see what was expected **(1)**. • Issue and enforce a Disciplinary Procedure **(1)** – employees would know what the offences and penalties were and hopefully would comply with the rules **(1)**. • Introduce unannounced inspections **(1)** - knowing that they could be inspected at any time might encourage employees to follow the rules **(1)**. Accept other reasonable answers.	**(4)**

Question	**Answer (AO2 1)**	Mark
5(c)(i)	Standard hours production = 221 280 = **5 532 hours (1)** 40	**(1)**

Question	**Answer (AO2 2)**	Mark
5(c)(ii)	Production Efficiency = 5 532 **(1of)** x 100 = **116.22% (1of)** 4760	**(2)**

Question	**Answer (AO2 3)**	Mark
5(c)(iii)	Capacity = 4 760 x 100 **(1of)** = **97.14% (1of)** 4 900 Budgeted hours = 28 x 175 = 4 900 hours **(1)**	**(3)**

Question	**Answer (AO2 2)**	Mark
5(c)(iv)	Volume = 5 532 x 100 **(1of)** = **112.90% (1of)** 4 900 Or: 116.22% **(of)** x 97.14% **(1of)** = 112.90% **(1of)**	**(2)**

Total for Question 5 = 18 marks

Total for Paper = 100 marks