Mark Scheme
April 2018

Results

Pearson LCCI Level 3 Certificate in Cost and Management Accounting (VRQ) 2015
(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 (AO1) 1 (AO3) 1	Mark
1(a)(i)	**Award 1 AO1 mark for basic point and 1 AO3 mark for development.** **Attainable Standard** – is the standard considered to be challenging but achievable under current operating condition **(1)** which allows for a small amount of wastage, idle time or inefficiency **(1).**	**(2)**

Question	Answer (AO1) 1 (AO3) 1	Mark
1(a)(ii)	Award 1 AO1 mark for basic point and 1 AO3 mark for development. Given that this standard is achievable **(1)** - it may motivate workers to work efficiently / give of their best **(1).** **OR** Given that the standard is seen to be fair **(1)** – both adverse and favourable labour variances are likely to arise **(1)**	**(2)**

Question	Answer (AO2) 2	Mark
1(b)(i)	**Material price:** (5.60 – **6.00**) x 43 170 = **$17 268 Adv (1)** Actual price = 259 020 / 43 170 kg = **$6.00** / kg **(1)** This must be correctly identified as favourable or adverse to get the final mark.	**(2)**

Question	Answer (AO2) 2	Mark
1(b)(ii)	**Material usage:** (**40 984** – 43 170) 2 186 x 5.60 = **$12 241.60 Adv (1)** Standard quantity = (47 000 / 25 000) x 21 800 = **40 984 kg (1)** This must be correctly identified as favourable or adverse to get the final mark.	**(2)**

Question	Answer (AO2) 2	Mark
1(b)(iii)	**Labour rate:** (7.20 – **7.10**) x 5 720 = **$572 Fav (1)** Actual rate = 40 612 / 5 720 hours = **$7.10** / hour **(1)** This must be correctly identified as favourable or adverse to get the final mark.	**(2)**

Question	Answer (AO2) 2	Mark
1(b)(iv)	**Labour efficiency**: (5 450 – 5 720) 270 x 7.20 = **$1944 Adv (1)** Standard quantity = (6 250 / 25 000) x 21 800 = **5 450 hours (1)** This must be correctly identified as favourable or adverse to get the final mark.	**(2)**

Question	Answer (AO2) 2	Mark
1(b)(v)	**Fixed overhead expenditure: 110 000** – 108 300 = $**1 700 Fav (1)** Budgeted Overheads = 25 000 x 4.40 = **$110 000 (1)** This must be correctly identified as favourable or adverse to get the final mark.	**(2)**

Question	**Answer (AO2) 2**	Mark
1(b)(vi)	**Fixed overhead volume:** 4.40 x 3 200 (21 800 – 25 000) **(1)** = $**14 080 Adv (1)** This must be correctly identified as favourable or adverse to get the final mark.	**(2)**

Question	**Answer (AO1) 1**	Mark
1(c)(i)	Adverse material usage Answers may include: Material used might have been of a lower quality **(1of)** There may have been more wastage / production problems than expected **1of)** Workers may have been less skilled than expected **(1of)**	**(1)**

Question	**Answer (AO1) 1**	Mark
1(c)(ii)	Favourable labour rate Answers may include: Workers may have been of a low quality / skill level **(1of)** Standard hours may have been set incorrectly at the start of the budget period **(1of)**	**(1)**

TOTAL FOR QUESTION 1 = 18 MARKS

Question	**Answer (AO2) 3**	Mark
2(a)(i)	Variable costs = $\frac{\$602\,270 - \$558\,070}{55\,000 - 42\,000 \text{ units}}$ = \$44 200 **(1)** = **\$3.40 / unit (1of)** 13 000 **(1)**	**(3)**

Question	**Answer (AO2) 2**	Mark
2(a)(ii)	High: FC = 602 270 – 187 000 (55 000 x 3.40) **(1of)** = **\$415 270 (1of)** **OR** 558 070 – 142 800 (42 000 x 3.40) = \$415 270	**(2)**

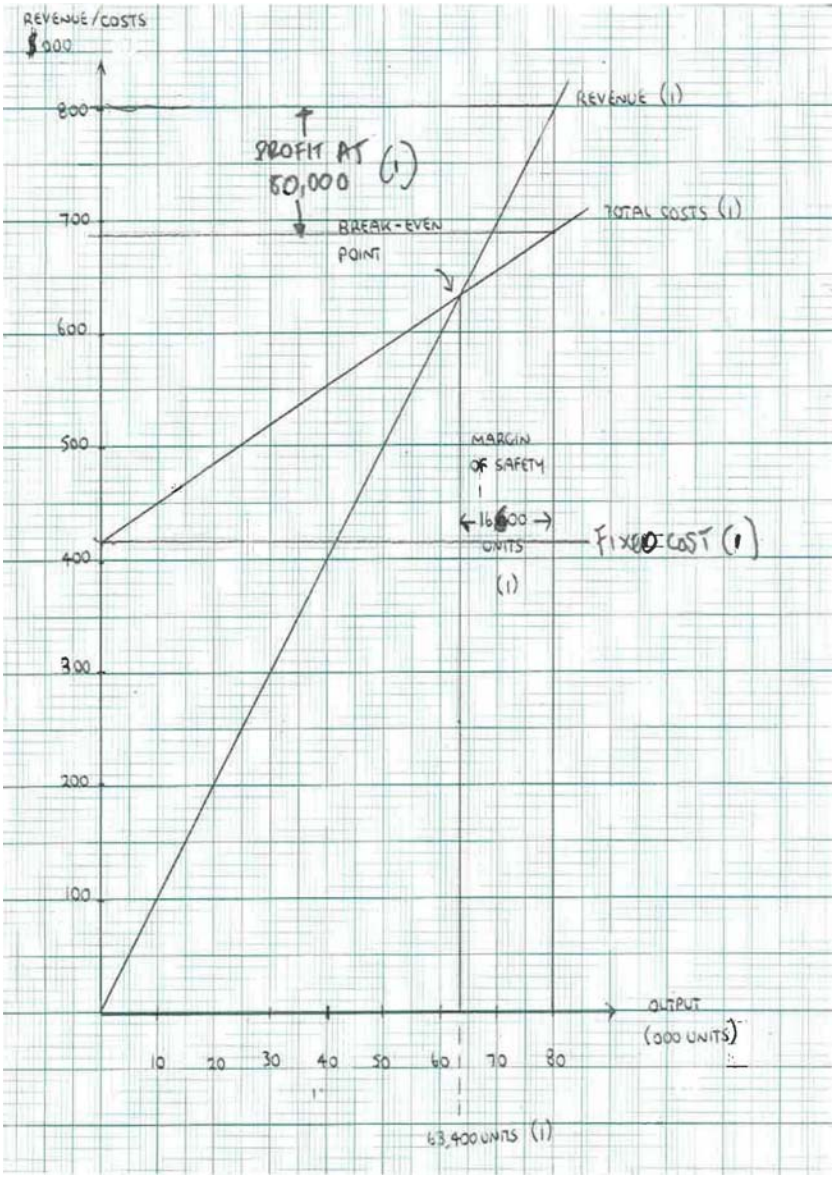
Question	**Answer (AO2) 2**	Mark
2(b)(i)	Break-even = $\frac{415\,270 \text{ (of)}}{6.55}$ = **63 400 units (1of)** **(1of)** *(9.95 – 3.40 (of) = 6.55 (of))*	**(2)**

Question	**Answer (AO2) 1**	Mark
2(b)(ii)	Break-even revenue = 63 400 (of) x 9.95 = **\$630 830 (1of)**	**(1)**

Question	**Answer (AO2) 3**	Mark
2(c)	Target Output = (415 270 + 131 000) 546 270/6.55 **(1of)** = 83 400 units (**1of)** Revenue required = 83 400 x 9.95 = **\$829 830 (1of)**	**(3)**

Question	**Answer (AO2) 1**	Mark
2(d)(i)	Margin of safety (units) = 80 000 - 63 400 (of) = **16 600 units (1of)**	**(1)**

Question	**Answer (AO2) 2**	Mark
2(d)(ii)	Margin of safety (%) = $\frac{16\,600}{80\,000}$ **(1of)** x 100 = **20.75% (1of)**	**(2)**

Question	Answer (AO3) 6	Mark
2(e)	Marks should be awarded for the following features on the chart: • Fixed Cost line = $415 270 **(1)** • Total cost line accurately drawn = $687 270 **(1)** • Revenue line accurately drawn and labelled **= $**796 000 **(1)** • Break-even point identified at 63 400 units **(1)** • Profit at 80 000 = $108 730 **(1)** • Margin of safety correctly labelled and shown to be 16 600 units **(1)**  	**(6)**

TOTAL FOR QUESTION 2 = 20 MARKS

Question	**Answer (AO2) 2**	Mark
3(a)	Orders required (10 000 x 12) / 20 000 = **6 orders (1)** 6 orders x $500 = **$3 000 (1of)**	**(2)**

Question	**Answer (AO2) 2**	Mark
3(b)	Average Inventory = 5 000 + (20 000 / 2) = **15 000 kg (1)** x $0.70 = **$10 500 (1)**	**(2)**

Question	**Answer (AO2) 6**	Mark
3(c)		**(6)**

Costs	20 000 kg	60 000 kg	
Purchasing	$840 000 **(1)**	$819 000 **(1)**	97.5% x 120 000 x £7.00
Ordering	$3 000	$1 000 **(1)**	120 000 / 60 000 = 2 2 x £500 = £1 000
Holding	$10 500	$24 500 **(1)**	5 000 + (60 000 / 2) = 35 000 35 000 x £0.70 = £24 500
Total	$853 500 **(1of)**	$844 500 **(1of)**	Figure must include purchasing, ordering and holding costs.

Question	**Answer (AO4) 1 (AO5) 1**	Mark
3(d)	The company should increases the size of its orders to 60 000 kg **(1of)** This will save Metis $9 000 / reduce inventory costs **(1).**	**(2)**

Question	**Answer (AO1) 1 (AO2) 3**	Mark
3(e)	EOQ = $\sqrt{\frac{2 \times \text{order cost} \times \text{annual usage/demand}}{\text{holding cost}}}$ **(1)** EOQ = $\sqrt{\frac{2 \times 500 \times 120\,000}{0.70}}$ **(1)** = **13 093 kg (1of)**	**(4)**

Question	**Answer (AO2) 3**	Mark
3(f)(i)	Current average value of inventory **20 000 kg orders:** 15 000 kg x 7.00 = **$105 000 (1)** **60 000 kg orders:** 35 000 **(1)** x 6.825 = $238 875 **(1)** New purchase price = 97.5% x 7.00 = **$6.825**	**(3)**

Question	**(AO4) 1**	Mark
3(f)(ii)	The current insurance policy would cover the increased inventory **(1of).**	**(1)**

Question	**(AO1) 2 (AO3) 2**	Mark
3(g)	Award 1 AO1 mark for basic point and 1 AO3 mark for development. Answers might include: • Business would hold enough inventory **(1)** – this would ensure that it never lost production/sales/customers as a result of running out **(1).** • Business would hold the right type of inventory **(1)** – this would help the business to maximize sales/reduce wastage **(1).** • The business would not hold too much inventory **(1)** – this would ensure that holding costs are minimized/less money is tied up/less wastage is suffered **(1)**	**(4)**

TOTAL FOR QUESTION 3 = 24 MARKS

Question	Answer (AO1) 2	Mark
4(a)	Answers may include: **Max 2 x 1** Labour Hours **(1)** Machine Hours **(1)** Physical Space **(1)** Cash **(1)**	**(2)**

Question	Answer (AO2) 5				Mark
4(b)		A11	B22	C33	
	Revenue	132 500	164 000	166 800	
	Variable costs	62 500	80 000	78 000	**(1)**
	Contribution	70 000	84 000	88 800	**(1) for all 3**
	Kg consumed	3 500	4 800	4 800	**(1) for all 3**
	Contribution / kg	$20.00	$17.50	$18.50	**(1of) for all 3**
	Order of Production	**1**	**3**	**2**	**(1) OF for C**
					(5)

Question	Answer (AO2) 3			Mark
4(c)	Material Left	Product	Output and usage	
	11 000	**A11**	**5 000 units** x 0.70 = 3 500 kg	**(1)**
	7 500	**C33**	**3 000 units** x 1.60 = 4 800 kg	**(1)**
	2 700	**B22**	2 700 kg / 1.20 = **2 250 units**	**(1)**
				(3)

Question	Answer (AO2) 4					Mark
4(d)		A11	B22	C33	Total	
	Units sold	5 000	2 250	3 000		
	Contribution / unit	14.00	21.00	29.60		**(1)**
	Total contribution	70 000	47 250	88 800	206 050	**(1of)**
	Fixed costs				(192 000)	**(1)**
				Profit	14 050	**(1of)**
	A11: 70 000 / 5 000 = $14.00 /unit. B22: 84 000 / 4 000 = $21.00 / unit C33: 88 800 / 3 000 = $29.60 / unit **(1) for all 3**					**(4)**

Question	Answer (AO4) 2 (AO5) 2	Mark
4(e)	**In Favour (TWO marks maximum):** • This product-mix ensures that the **material is used** where it will generate the **most contribution** / give the most benefit per kg **(1)** – this will ensure that the **maximum profit** is made **(1)**. • The product-mix ensures that the **product** making the **least contribution** is reduced **(1)** – this will **minimize the reduction in profit (1).** **Against (TWO marks maximum):** • This assumes that **selling price and costs will not change (1)** – any changes may mean that material is not used effectively **(1)**. • The products may be **complementary (1)** – there will be no point making one product if another is going to be reduced / withdrawn **(1)**. • Customers might only purchase because they can get the **whole range** of products from **one supplier (1)** – withdrawing or reducing one product may lose sales of the other products **(1)**. • Himalia may be **contracted to supply** all three products **(1)** – withdrawing or reducing one product may lead to legal problems **(1)**. **Conclusion:** Himalia **should / should not** adopt the optimal product-mix **(1)**. **The conclusion MUST be supported by at least one point in favour or against.**	**(4)**

TOTAL FOR QUESTION 4 = 18 MARKS

Question	**Answer (AO2 1)**	Mark
5(a)(i)	Standard hours production = 56 862 / 20 = **2 843.10 hours (1)**	**(1)**

Question	**Answer (AO2 2)**	Mark
5(a)(ii)	Production Efficiency = $\frac{2\ 843.10}{2\ 916}$ **(1of)** x 100 = **97.5% (1of)**	**(2)**

Question	**Answer (AO2 3)**	Mark
5(a)(iii)	Capacity = $\frac{2\ 916}{2\ 700}$ **(1of)** x 100 = **108.00% (1of)** **(1)** Budgeted hours = 15 x 180 = **2 700 hours**	**(3)**

Question	**Answer (AO2 2)**	Mark
5(a)(iv)	Volume = $\frac{2\ 843.10}{2\ 700}$ **(1of)** x 100 = **105.30% (1of)** (of)	**(2)**

Question	**Answer (AO2) 4**	Mark
5(b)(i)	Cost \$ / Total Equivalent units / Cost per unit Material: 2 600 + 13 720 = 16 320 / 2 700 + (50% x 1000) = 3 200 **(1)** / **\$5.10** Labour & overheads: 4 100 + 7 450 = 11 550 / 2 700 + (30% x 1000) = 3 000 **(1)** / **\$3.85** Total cost **\$8.95 (1of)** Value of Goods sent to customer = **2 700 x 8.95 = \$24 165 (1of)**	**(4)**

Question	**Answer (AO2) 3**	Mark
5(b)(ii)	Value of closing work-in-progress: Material: 500 equivalent units x 5.10 (of) = **\$2 550 (1of)** Labour & overheads: 300 equivalent units x 3.85 (of) = **\$1 155 (1of)** Total cost **\$3 705 (1of)**	**(3)**

Question	Answer (AO4) 4 (AO5) 1	Mark
5(c)	Answers may include: **Accurate and up-to-date:** • The business has the newest accounting packages **-** this should increase the speed and accuracy of information **(1)**. **Not accurate and up-to-date:** • Data has to be copied across to the general ledger – this is time-consuming and increases the chances of errors **(1)**. • Employees work independently on their own work – there is therefore no verification **(1)** which means that inaccurate data may be copied onto the general ledger **(1)** • Many of the computers are standalone which means that there may be several versions of the same information on different machines / it may not be the latest information being transferred to the general ledger **(1)**. • The system is not integrated – so there are no inbuilt checks that would warn of potential errors in data being input **(1)**. It is expected that candidates may produce stronger arguments against the system producing accurate and up-to-date information. **1 mark awarded for a conclusion that reflects the balance of the arguments.**	**(5)**

TOTAL FOR QUESTION 5 = 20 MARKS

TOTAL FOR PAPER = 100 MARKS