# Mark Scheme 

July 2017<br>Results

## Pearson LCCI (ASE20098) Level 3 <br> Certificate in Cost and Management Accounting

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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) 2 | Mark |
| :--- | :--- | :--- |
| $\mathbf{1 ( a i )}$ | Ideal Standard - is the standard set under the highest <br> (or best ever) level of performance and efficiency (1) <br> usually under perfect operating conditions (1) | (2) |


| Question | Answer (AO3) 2 | Mark |
| :--- | :--- | :--- |
| $\mathbf{1 ( a i i )}$ | Answers may include: |  |
| Given that perfect conditions rarely exist (or cannot be <br> bettered) (1), it is likely that most variances arising from <br> its use will be adverse (1) | (2) |  |


| Question | Answer (AO2) 2 | Mark |
| :--- | :--- | :---: |
| $\mathbf{1 ( b i )}$ | Material price $(\mathrm{SP}-\mathrm{AP}) \times \mathrm{AQ}$ <br> Actual price $=\$ 150380 / 41200 \mathrm{~kg}=\$ 3.65 / \mathrm{kg}$ (1) <br> $(3.80-3.65) \times 41200=\$ \mathbf{6 1 8 0}$ Favourable (1) | $\mathbf{( 2 )}$ |


| Question | Answer (AO2) 2 | Mark |
| :--- | :--- | :---: |
| $\mathbf{1 ( b i i )}$ | Material usage (SQ - AQ) $\times \mathrm{SP}$ <br> Standard quantity $=(45000 / 12000) \times 10760=40350$ <br> $\mathrm{~kg}(\mathbf{1})$ <br> $(40350-41200) \times 3.80=\mathbf{\$ 3} \mathbf{2 3 0}$ Adverse (1) | $\mathbf{( 2 )}$ |


| Question | Answer (AO2) 2 | Mark |
| :---: | :---: | :---: |
| 1(biii) | Labour rate (SP - AP) x AQ <br> Actual rate $=\$ 143520 / 15600$ hours $=\$ 9.20 /$ hour (1) <br> $(9.00-9.20) \times 15600=\$ 3120$ Adverse (1) | (2) |


| Question | Answer (AO2) 2 | Mark |
| :--- | :--- | :---: |
| $\mathbf{1 ( b i v )}$ | Labour efficiency (SQ - AQ) $\times$ SP <br> Standard quantity $=(16800 / 12000) \times 10760=15064$ <br> hours (1) <br> $(15064-15600) \times 9.00=\$ 4 \mathbf{8 2 4}$ Adverse (1) | (2) |


| Question | Answer (AO2) 2 | Mark |
| :--- | :--- | :---: |
| $\mathbf{1 ( b v )}$ | Fixed overhead expenditure <br> Budgeted Overheads $=12000 \times 6.25=\$ 75000$ (1) <br> $75000-78150=\$ \mathbf{3 1 5 0}$ Adverse (1) | (2) |


| Question | Answer (AO2) 2 | Mark |
| :--- | :--- | :---: |
| $\mathbf{1 ( b v i )}$ | Fixed overhead volume OAR $\times$ (actual - budgeted <br> output) <br> $6.25 \times(10760-12000)(\mathbf{1})=\mathbf{\$ 7} \mathbf{7 5 0}$ Adverse (1) | (2) |


| Question | Answer (AO1) 1 | Mark |
| :--- | :--- | :--- |
| $\mathbf{1 ( c i )}$ | Own figure rule applies. Based on answer to (b)(i). |  |
|  | Answers may include: <br> Material bought from an alternative supplier (1) <br> Material might have been of a lower quality (1) <br> Material might have been bought in bulk (1) <br> Market prices for material might have fallen / excess <br> supply on markets (1) | (1) |


| Question | Answer (AO1) 1 | Mark |
| :--- | :--- | :--- |
| $\mathbf{1 ( c i i )}$ | Own figure rule applies. Based on answer to (b)(iv). |  |
|  | Answers may include: |  |
| Workers may have been of a lower quality / skill level (1) |  |  |
| There may have been material breakdowns / idle-time (1) |  |  |
| Workers may have had difficulty using poor quality |  |  |
| materials (1) |  |  |
| Market prices for material might have fallen / excess |  |  |
| supply on markets (1) |  |  |
| Standard hours might have been based on an ideal |  |  |
| standard (1) |  |  |$\quad$|  |
| :--- |


| Question | Answer (AO1) 2 (AO3) 2 | Mark |
| :--- | :--- | :--- |
| 2(a) | Award 1 AO1 mark for basic point and 1 AO3 mark for <br> development. <br> Answers may include: <br> Physical space (1) - the company may not have <br> enough room to store the inventory / may not wish to <br> spend money on renting space (1) <br> Life-span of product (1) - to avoid wastage/ if too <br> much inventory is held then some of it may perish and <br> have to be thrown away (1) <br> Financial constraints (1) - inventory is money tied up <br> in the stockroom which could be better used elsewhere <br> (1) <br> Holding Costs (1) - for example heating, security cost <br> which the company may have to keep to a minimum (1) | (4) |


| Question | Answer (AO2) 2 | Mark |
| :--- | :--- | :--- |
| $\mathbf{2 ( b )}$ | Orders required $(6000 \times 12) / 8000=\mathbf{9}$ orders (1) <br> $9 \times \$ 200=\mathbf{\$ 1} \mathbf{8 0 0}(\mathbf{1}$ of) | (2) |
|  | For an of the number of orders must be a whole figure. |  |


| Question | Answer (AO2) 2 | Mark |
| :--- | :--- | :---: |
| 2(c) | Average Inventory $=2000+(8000 / 2)=\mathbf{6 0 0 0} \mathbf{~ k g}$ <br> $\mathbf{( 1 )}$ <br> $6000 \times \$ 0.75=\mathbf{\$ 4} \mathbf{5 0 0}$ (1) | (2) |



| Question | Answer (AO4) 2 | Mark |
| :--- | :--- | :--- |
| 2(e) | Own figure based on answer from 2(d). |  |
| The company will save money (1) if the size of its orders <br> is $24000 \mathrm{~kg} .(1)$ | (2) |  |


| Question | Answer (AO1) 2 (AO3) 2 | Mark |
| :--- | :--- | :--- |
| 2(f) | Answers might include (TWO required): |  |
|  | Business would hold enough inventory (1) - this <br> would ensure that it never lost <br> production/sales/customers as a result of running out <br> (1). | (4) |
| Business would hold the right type of inventory (1) - <br> this would help the business to maximize sales/reduce <br> wastage (1). | The business would not hold too much stock (1) - <br> ensuring that holding / ordering costs are <br> minimized/less money is tied up/less wastage is <br> suffered (1) |  |



| Question | Answer (AO2) 2 |  | Mark |
| :---: | :---: | :---: | :---: |
| 3(aii) | Administrative overheads: Office rent, rates and insurance Administrative <br> Jobs <br> OAR per job | $\begin{array}{r} \$ 50000 \\ \\ \$ 16000 \\ \$ 66 \\ \mathbf{0 0 0} \\ 300 \\ \$ 220 \end{array}$ | (2) |


| Question | Answer (AO1) 2 | Mark |
| :--- | :--- | :--- |
| $\mathbf{3 ( b )}$ | Answers may include: TWO required. |  |
| Using a pre-determined overhead absorption rate will <br> ensure that indirect costs are included when setting <br> prices (1) | Assuming that budgeted overheads and output are <br> accurately assessed, the indirect costs will be passed <br> onto the customer (1) | (2) |
| Including overheads will provide a more accurate cost of <br> producing the product and will help with decision-making <br> like assessing the viability of an activity (1) |  |  |


| Question | Answer (AO3) 2 | Mark |
| :--- | :--- | :--- |
| 3(c) | Advantages may include: <br> Operational overheads: Most of the operational <br> overheads are costs that increase as distance increases <br> or are related to usage of the lorries (1) <br> Administrative overheads: Every job that is arranged <br> requires a certain degree of administration regardless of <br> the size of the job (1) | (2) |


| Question | Answer (AO2) 3 |  | Mark |
| :--- | :--- | ---: | :--- |
| $\mathbf{3 ( d )}$ |  |  |  |
|  | Drivers Wages $40 \times £ 15=$ | $\$ 600$ ) |  |
|  | Fuel (900 / 6) $\times \$ 1.50=$ | $\$ 225$ ) (1) |  |
|  | Operational overheads $900 \times$ | $\$ 387$ ) | (3) |
|  | $\$ \mathbf{0 . 4 3}(O F)=$ |  |  |
|  | Administrative overheads (OF) | $£ 220$ )(1) |  |
|  |  | $\mathbf{\$ 1}$ (1 OF) |  |
|  |  | $\mathbf{4 3 2}$ |  |



| Question | Answer (AO4) 4 (AO5) 2 | Mark |
| :--- | :--- | :--- |
| 3(f) | Answers may include: <br> Positive factors: <br> At current rates, the company will over-absorb by $\$ 30$ <br> 552 (1) - which means that overheads costs per job / <br> km were less than budgeted (1) <br> If the company continues to do more work than <br> budgeted then there will be more contribution made <br> (1) - and therefore more profit (1) <br> If the company is charging at a market rate, then the <br> over-absorption will result in more contribution than <br> expected (1) - and therefore more profit will be made <br> (1) |  |
|  | Negative factors: <br> If the market is competitive then prices quoted might <br> be higher than they should be (1) - and some <br> customers might be lost (1) | (6) |
|  | Maximum of 4 marks for each side of the argument. <br> Decision: Laburnum should re-calculate overhead <br> absorption rate (1) which both should be made smaller <br> (10f) |  |
| Award 2 marks for conclusion that is compatible with the |  |  |
| points made. |  |  |


| Question | Answer (AO2) $\mathbf{1}$ | Mark |
| :--- | :--- | :--- |
| 4(ai) | Selling price $=\underline{595000}$ or $\underline{892} 500=\mathbf{\$ 5 . 9 5}$ per unit <br> $\mathbf{( 1 )}$ | (1) |


| Question | Answer (AO2) $\mathbf{1}$ | Mark |
| :--- | :--- | :--- |
| 4(aii) | Labour-related bonus $=\frac{65000-60000}{}=\mathbf{\$ 0 . 0 5} \mathbf{~ p e r ~}$ | $\mathbf{( 1 )}$ |


| Question | Answer (AO2) 1 | Mark |
| :--- | :--- | :--- |
| 4(aiii) | Heat, light and power fixed $=22600-(100000 \mathrm{x}$ <br> $\$ 0.10)=\mathbf{\$ 1 2} \mathbf{6 0 0}(\mathbf{1})$ | (1) |


| Question | Answer (AO2) 1 | Mark |
| :--- | :--- | :--- |
| 4(aiv) | Cost of hiring 1 machine $=\$ 35000 / 5=\mathbf{\$ 7 0 0 0 ( 1 )}$ | $\mathbf{( 1 )}$ |


| Question | Answer (AO2) 2 | Mark |
| :--- | :--- | :--- |
| 4(av) | Variable $=\frac{\$ 154000-147000=\$ 0.14 \text { per unit (1) }}{150000-100000}$ |  |
|  | Fixed $=\$ 154000-(150000 \times \$ 0.14)=\mathbf{\$ 1 3 3} \mathbf{0 0 0}$ (1) | (2) |


| Question | Answer (AO3) 2 | Mark |
| :--- | :--- | :--- |
| 4(b) | Answers may include: |  |
|  | • Flexed budgets will enable more appropriate targets to <br> be set (1) performance to be more fairly judged (1). <br> OR <br> Flexed budgets will result in more appropriate <br> variances (1) resulting in more appropriate action <br> being taken (1). | (2) |



| Question | Answer (AO2 3) | Mark |
| :---: | :---: | :---: |
| 5(a) | Potential profit $=(10000-6500) \mathbf{3 0 0 ( 1 )} \times(12.50-$ 4.70) <br> $\$ 7.80$ (1) $=\$ 27300$ (1) <br> Alternative answer <br> Revenue: $\quad 10000 \times 12.50=125000$ <br> (1) <br> Variable costs: $10000 \times 4.70=47000$ <br> Fixed costs: 50700 <br> (97700) <br> (1) <br> Potential Profit 27300 <br> (1) | (3) |


| Question | Answer (AO2 2) | Mark |
| :--- | :--- | :---: |
| 5(b) | Target Profit $=(\$ 55590+27$ 300) $\$ 82890 / \$ 5.45$ (1 <br> of) $=\mathbf{1 5} 210$ units (1) |  |


| Question | Answer (AO2 2) | Mark |
| :--- | :--- | :--- |
| $\mathbf{5 ( c )}$ | Contribution $=\$ 9.95-\$ 4.50=\$ 5.45$ (1) <br> Break-even (units) $=\$ 55590 / \$ 5.45=\mathbf{1 0} \mathbf{2 0 0}$ units <br> $\mathbf{( 1 )}$ | (2) |


| Question | Answer (AO2 6) | Mark |
| :---: | :---: | :---: |
| 5(d) | Option 1: <br> Margin of safety (units) $=10000-6500=3500$ units <br> (1) <br> Margin of safety (\%) = $3500 / 10000(1$ of) $\times 100=$ $35.00 \%$ (1 of) <br> Option 2: <br> Margin of safety (units) = 16 000-10 $200=5800$ units (1 of) <br> Margin of safety (\%) = $5800 / 16000(1$ of) $\times 100=$ 36.25\% (1 of) | (6) |


| Question | Answer (AO4) 2 (A05) 2 | Mark |
| :---: | :---: | :---: |
| 5(e) | 1 AO4 mark to be awarded for basic point and 1 AO5 mark for development. <br> Answers may include: <br> In favour of option 2: <br> - Gives a higher possible profit (1) - \$31 610 exceeds the target profit of $\$ 27300$ which is not achievable under option 1 (1) <br> - Gives a slightly higher margin of safety (1) - 5800 units vs. 3500 units for option 1 (1) <br> - Give a higher margin of safety as a percentage of sales. (1) $36.25 \%$ vs. $35 \%$ for option 1 (1) <br> - Under option 2, every unit not sold will only result in lost contribution / profit of $\$ 5.45$ (1) - which is less than the $\$ 7.80$ lost under option 1 (1) <br> Against option 2 (assumptions): <br> - Contribution per unit for option 1 is higher (1) $\$ 7.80$ per unit vs. \$5.45 per unit (1) <br> - Breakeven point is lower for option 1 (1) 6500 units vs 10200 units for option 2 <br> - Assumes that the lower price will lead to sales of 16 000 units per month (1) - there is no guarantee that this demand will be there (1) <br> - It has been assumed that the variable cost will be reduced under option 2 (1) - there is no guarantee of the bulk discounts on materials (1) <br> - It has been assumed that the company has the capacity to produce 16000 units per month (1) - and that fixed costs would only increase by $\$ 4890$ (1) <br> Decision: Option Two should/should not be selected. (1) (Must have justification provided). | (4) |

