## Mark Scheme

## January 2020

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 <br> 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



|  | -Joint-products are two or more products that are intentionally <br> produced by a single manufacturing process that share common costs <br> (1) whereas <br> by-products are an incidental consequence of the process (1). <br> The proceeds from the sale of joint-products tends to be <br> commercially significant (1) whereas the proceeds from the sale of <br> by-products is generally regarded as being of minor value (1). <br> The costs of the process prior to the split-off point are apportioned <br> between the joint-products (1) but are not apportioned to the by- <br> products (1). <br> Joint products are usually separated at some point and each requires <br> further work (1) whereas by-Products are usually disposed of <br> straightaway (1). | (4) |
| :--- | :--- | :--- |
| A maximum of two points to be made. |  |  |


| Question | Answer (AO4 2) | Mark |
| :--- | :--- | :--- |
| $\mathbf{1 ( d )}$ | Answers may include: <br> -The products do not sell for the same price (1) and so the products <br> making a greater contribution to the business' revenue or profitability <br> are not currently bearing a higher share of the costs - which is unfair <br> (1). <br> The method results in all joint products having the same cost per unit, <br> which might mean those with lower prices show a loss (1) This might <br> be misleading for decision making as the nature of joint products is <br> that they all have to be produced from the common process (1). <br> ONE required$\quad$ (2) |  |


| Question | Answer (AO1 2) (AO3 2) | Mark |
| :--- | :--- | :--- |
| $\mathbf{1 ( e )}$ | A (AO1) mark for basic point and 1 (AO3) mark for development <br> Answers may include: <br> The business may be involved in production that takes time or is of a <br> continuous nature, where there is likely to be work-in-progress at the <br> period end (1) - the use of "equivalent units" enables the value of <br> finished product and work-in-progress can be calculated (1). |  |
| -Process costing is suitable when there are several stages to production <br> / goods are transferred from one stage to another (1) - this will <br> enable costs of each stages to be identified (1). |  |  |
| -Process costing is suitable where there are joint and or by-products <br> (1) - this will enable the common-costs to be attributed to the <br> relevant products (1). |  |  |
| A maximum of 2 points to be made. |  |  |


| Question | Answer (AO2) $\mathbf{1}$ | Mark |
| :--- | :--- | :---: |
| $\mathbf{2 ( a ) ( \mathbf { i } )}$ | Labour fixed $=75000-(80000 \times \$ 0.05)=\$ \mathbf{7 1} \mathbf{0 0 0 ( 1 )}$ | (1) |


| Question | Answer (AO2) 1 | Mark |
| :--- | :--- | :---: |
| $\mathbf{2 ( a ) ( i i ) ~}$ | Heat, light and power variable $=\underline{24000-16000=\$ \mathbf{0 . 1 0} \text { per unit }}$(1)$\quad$ (1) |  |


| Question | Answer (AO2) 1 | Mark |
| :--- | :--- | :---: |
| $\mathbf{2 ( a ) ( i i i ) ~}$ | Cost of hiring 1 machine $=\frac{\$ 14400}{3}=\mathbf{\$ 4} \mathbf{8 0 0}$ (1) | (1) |


| Question | Answer (AO2) 4 | Mark |
| :---: | :---: | :---: |
| 2(a)(iv) | $\begin{aligned} & \text { Variable }=\$ 166350-162600=\underline{3750}(\mathbf{1})=\$ \mathbf{0 . 2 5} \text { per unit (1) } \\ & \text { [2] } \\ & \qquad 80000-65000 \\ & \text { Fixed }=\$ 166350-(80000 \times \$ 0.25)(\mathbf{1})=\$ \mathbf{1 4 6} \mathbf{3 5 0}(\mathbf{1 o f}) \\ & \begin{array}{l} \text { Or } \$ 162600-(65000 \times \$ 0.25) \\ \text { [2] } \\ \mathbf{\$ 1 4 6} \mathbf{3 5 0} \end{array} \end{aligned}$ | (4) |



| Question | Answer (AO2 2) | Mark |
| :---: | :---: | :---: |
| 2(c) | Margin of Safety (units) $=80000-76000=4000$ units (1of) <br> Margin of Safety (\%) $=\frac{4000}{80000} \times 100=\mathbf{5 . 0 0 \%}$ (1 of) | (2) |
| Question | Answer (AO3 6) | Mark |
| 2(d) | Marks to be awarded for the following: <br> Labelling of both axes (1) <br> Correct cost line - cost at 110000 units will be \$1 350520 (1) <br> Correct revenue line - revenue at 110000 units will be \$1 485000 <br> (1) <br> Break-even point of 93600 units (1of) <br> Margin of Safety of $\mathbf{1 6 4 0 0} \mathbf{4 0}$ units (10f) <br> Profit at 110000 units of $\$ 134480$ (1of) | (6) |


| Question | Answer (AO4 3) (AO5 2) | Mark |
| :---: | :---: | :---: |
| 2(e) | Answers may include: <br> In favour of JT44: <br> - JT44 has a lower breakeven point in units (by 17600 ) and lower revenue (\$733000) than FL26 (1) - this might be more achievable (1). <br> - JT44 has lower fixed and variable costs (by $\$ 296320$ and $\$ 2.10$ per unit) than FL26 (1) - this means less capital tied up / less risk if sales are lower than expected (1). <br> In favour of FL26: <br> - FL26 potentially gives $\$ 109680$ more profit per month than JT44 (1) - this will keep investors happy (1). <br> - FL26 has a higher margin of safety in units (by 12400 units) and as a \% (9.9\%) than JT44 (1) - this means that disappointing sales will take slightly longer to cause losses (1). <br> Maximum 4 marks. <br> Conclusion: Prospero Ltd should produce FL26 because, potentially, it offers a higher profit (1). <br> The final mark should be awarded if the conclusion is supported by at least 1 point made. <br> Check 2(c) and (d) for Own Figure marks | (5) |


|  | Answer (AO2 9) (AO 3 1) |  |  |  |  |  |  |  | Mark |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3(a) | Expense | (1) <br> Basis | Total \$ | Departments \$ |  |  |  |  |  |
|  |  |  |  | Manuf | Pack | Stores | Admin |  |  |
|  | R\&R | Area | 8000 | 3200 | 1600 | 2400 | 800 | (1) |  |
|  | Mach dep'n | Machine Value | 12600 | 9765 | 2331 | 504 | - | (1) |  |
|  | St salaries | Direct | 4700 | - | - | 4700 | - | (1) |  |
|  | Ad salaries | Direct | 3500 | - | - | - | 3500 | (1) |  |
|  | H, L \& P | Consumption | 2900 | 1305 | 580 | 290 | 725 | (1) |  |
|  | Other o/h | Allocation | 11100 | 4420 | 2780 | 1785 | 2115 |  |  |
|  | Total |  |  | 18690 | 7291 | 9679 | 7140 | (1of) |  |
|  | Reapportio | ment |  |  |  |  |  |  |  |
|  | Stores over | eads 240/400 | 60/400 | 5807 | 3872 | (9 679) | - | (1of) |  |
|  | Admin over | eads 50:50 |  | 3570 | 3570 | - | (7 140) | (1of) |  |
|  | Total |  |  | 28067 | 14733 |  |  | (10f) | (10) |


| Question | Answer (AO2 2) | Mark |
| :--- | :--- | :---: |
| 3(b) | Manufacturing OAR $=28067 / 1500=\mathbf{\$ 1 8 . 7 1}$ per machine hour <br> (1of) <br> Packing OAR $=14733 / 1600=\mathbf{\$ 9 . 2 1}$ per labour hour (1of) | (2) |



| Question | Answer (AO2 1) | Mark |
| :---: | :---: | :---: |
| 4(a)(i) | Standard hours production $=247680 / 50=4953.60$ hours (1) | (1) |
| Question | Answer (AO2 2) | Mark |
| 4(a)(ii) | $\text { Production Efficiency }=\frac{4953.60}{4290}(\mathbf{1 o f}) \times 100=\mathbf{1 1 5 . 4 7 \%}(\mathbf{1 o f})$ | (2) |
| Question | Answer (AO2 3) | Mark |
| 4(a)(iii) | $\begin{aligned} & \text { Capacity }=\frac{4290}{4080(\text { (1) }) \times 100=\mathbf{1 0 5 . 1 5 \%}}(\mathbf{1 o f )} \\ & \text { Budgeted hours }=24 \times 170=\mathbf{4 0 8 0} \text { hours [1] } \end{aligned}$ | (3) |
| Question | Answer (AO2 2) | Mark |
| 4(a)(iv) | $\text { Volume }=\frac{4953.60(10 f) \times 100=\mathbf{1 2 1 . 4 1 \%}(10 f)}{4080(\mathrm{of})}$ | (2) |
| Question | Answer (AO1 2) (AO 3 1) | Mark |
| 4(b) | 1 (AO1) mark for basic point and 1 (AO3) mark for development <br> Standard cost is the predetermined / expected cost of an activity (1) under effective working conditions / which makes allowances for a certain amount of waste or idle-time (1). | (2) |


| Question | Answer (AO4 4) (AO 5 2) | Mark |
| :---: | :---: | :---: |
| 4(c) | Answers may include: <br> Effective Controls: <br> - The $97 \%$ compliance with saving / backing up data is high (1) - this should reduce the likelihood of information being lost should the system crash (1). <br> - Employees can only access to parts of the system required by their job role (1) - this should help maintain confidentiality of sensitive information (1). <br> - There is a high compliance with the rule concerning USB sticks (1) - this should help maintain the security/confidentiality of information (1). <br> Ineffective Controls: <br> - The $36 \%$ compliance with locking/logging out computers is low / computers take 10 minutes to lock when there is inactivity (1) this makes it easier for someone to access someone's work station and cause problems (1). <br> - $75 \%$ of employees are still using their original (weak) passwords (1) - this threatens the security of the system and its information (1). |  |

$\left.\begin{array}{|l|l|l|}\hline & \begin{array}{l}\text { The firewall and virus protection are three years old / out-of-date } \\ \text { (1) - this makes the system more likely to suffer from viruses } \\ \text { which may steal or corrupt data (1). }\end{array} & \text { (6) } \\ \text { Conclusion: Portia Ltd has effective / ineffective controls protecting } \\ \text { the safety, security and confidentiality of information (1). } \\ \text { The conclusion should reflect at least } 1 \text { point made. } \\ \text { A maximum of } 4 \text { marks to be awarded if only one side of the } \\ \text { argument is presented. }\end{array}\right]$

| Question | Answer (AO2 3) | Mark |
| :---: | :---: | :---: |
| 5(a)(i) | Material usage: (36725-37 180)(1) $455 \times 5.40=\$ 2457$ Adv (1of) $\text { Standard quantity }=(39000 / 24000) \times 22600=\mathbf{3 6} \mathbf{7 2 5} \mathbf{~ k g}$ $(1.625 \times 22600)=36725 \mathrm{~kg}$ <br> Standard price $=210600 / 39000=\$ 5.40$ (1) <br> The variance must be correctly identified as adverse to get the final mark. | (3) |
| Question | Answer (AO2 2) | Mark |
| 5(a)(ii) | Material price: ( $\mathbf{5 . 4 0}$ (of) -5.25 )(1) $0.15 \times 37180=\$ 5577$ Fav (1of) <br> Actual price $=195195 / 37180=\$ 5.25$ <br> The variance must be correctly identified as favourable to get the final mark. | (2) |
| Question | Answer (AO2 3) | Mark |
| 5(a)(iii) | Labour efficiency: (7 119-6 890)(1) $229 \times 9.50=\mathbf{S 2} 175.50$ Fav (1of) <br> Standard quantity $=(7560 / 24000) \times 22600=7119$ hours <br> Standard rate $=71820 / 7560=\$ 9.50$ (1) <br> The variance must be correctly identified as favourable to get the final mark. | (3) |
| Question | Answer (AO2 2) | Mark |
| 5(a)(iv) |  <br> Actual rate $=66144 / 6890=\$ 9.60$ <br> The variance must be correctly identified as adverse to get the final mark. | (2) |
| Question | Answer (AO2) 1 | Mark |
| 5(a)(v) | Overhead Expenditure: $166380-161490$ = \$4890 Fav (1) | (1) |
| Question | Answer (AO2 2) | Mark |
| 5(b) |   $\$$  <br>     <br> Materials $(210600 / 24000) \times 22600=$ 198315.00 ) (1) for <br> Labour $(71820 / 24000) \times 22600=$ 67630.50 both <br> Overheads  $\underline{166380.00}$  <br> Standard Cost $\mathbf{4 3 2 3 2 5 . 5 0}$ (1of)  <br> Overheads must be as shown for the own figure mark | (2) |



| Question | Answer (AO1 3) | Mark |
| :--- | :--- | :--- |
| 5(d) | Answers may include: |  |
| Material price variance |  |  |
| The lower quality material will probably have cost less per kg than |  |  |
| the normal material, resulting in a favourable material price |  |  |
| variance (1). |  |  |
| Material usage variance |  |  |
| Lower quality material may have resulted in more wastage / |  |  |
| production problems, resulting in an adverse material usage |  |  |
| variance (1). |  |  |
| Labour efficiency variance |  |  |
| More wastage / production problems caused by the lower quality |  |  |
| material will have resulted in the workers taking more time, |  |  |
| resulting in an adverse labour efficiency variance (1). |  |  |$\quad$ (3) $\quad$.

## Total for Question 5 = 20 Marks

