Mark Scheme

## June 2019

Pearson LCCI<br>Cost and Management Accounting<br>(VRQ) Level 3<br>(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) 2 | Mark |
| :---: | :---: | :---: |
| Q1a(i) | Award 1 mark for both correct entries on the debit side. <br> Award 1 mark for all correct entries on the credit side. |  |
| Question | Answer (AO2) 2 | Mark |
| Q1a(ii) | Award 1 mark for the correct entry on the debit side. <br> Award 1 mark for both correct entries on the credit side. | (2) |
| Question | Answer (AO2) 3 | Mark |
| Q1a(iii) | Award 1 mark for all FOUR correct entries on the debit side. <br> Award 1 mark for the correct entry on the credit side. <br> Award 1 mark for of balance c/d. <br> Award OF for balance if an entry on the left is missing or contains an alien |  |
| Question | Answer (AO2) 3 | Mark |
| Q1a(iv) | Award 1 mark for all FOUR correct entries on the debit side. <br> Award 1 mark for the correct entry on the credit side. <br> Award 1 mark for of balance c/d on credit side. <br> Award OF for balance if an entry on the left is missing or contains an alien | (3) |


| Question Number | Answer (AO2) 2 | Mark |
| :---: | :---: | :---: |
| Q1a(v) | Award 1 mark for both correct entries on the debit side Award 1 mark for both correct entries on credit side. | (2) |
| Question | Answer (AO2) 4 | Mark |
| Q1a(vi) | Award 1 mark for correct entry on the debit side. Award 1 mark for all FOUR entries on credit side. <br> Allow 1of mark for balance on the debit side provided that full workings are shown if the answer is incorrect. <br> Allow 1 of for the Profit c/d on the credit side, provided that full workings are shown if the answer is incorrect. | (4) |
| Question Number | Answer (AO1) 2 (AO3) 2 | Mark |
| Q1b | Answers may include: 1 mark for point made, 1 mark for development TWO required <br> The non-integrated system has a set of cost accounts (1), which are kept separate from the financial accounts (1) <br> The non-integrated system uses control accounts (1) to check the accuracy of the ledgers (1) <br> The non-integrated system uses a financial ledger control account, to maintain a set of balances (1), and which also calculates a profit according to the cost accounts (1). | (4) |

)Total for Question 1 = $\mathbf{2 0}$ marks

| Question Number | Answer (AO2) 17 | Mark |
| :---: | :---: | :---: |
| Q2a |  | $(17)$ |
| Question | Answer (A01) 2 | Mark |
| Q2b | Fixed budgets are set for one level of activity (1) <br> A flexible budget has all costs and revenues adjusted to take account of different levels of activity (1) | (2) |
| Question | Answer (A01) 2 | Mark |
| Q2c | Two required: <br> 1. The budget could be flexed on a planned production level, i.e. output (1) <br> 2. The budget could be flexed on a planned level of service e.g. hotel rooms (1) | (2) |

Total for Question 2 = 21 marks

| Question | Answer (AO2) 4 | Mark |
| :---: | :---: | :---: |
| Q3a | Calculation of overhead absorption rate <br> Machine hours $=2 \times 4800=9600.1 .5 \times 4000=6000.2 \times 2000=4000 .=19600$ hours in total (1). $\$ 370800 / 19600=\$ 18.92$ per machine hour (1of) <br> Alpha $=\$ 18.92 \times 2=\$ 37.84$ per unit $\quad$ (1of) <br> Beta $=\$ 18.92 \times 1.5=\$ 28.38$ per unit (1of) <br> Delta $=\$ 18.92 \times 2=\$ 37.84$ per unit $\quad(1$ mark for Alpha and Delta) | ) |
| Question | Answer (AO2) 13 | Mark |
| Q3b | $\left.\begin{array}{lrrrr}\text { Production overhead cost per unit } \\ \text { Alpha } \\ \text { \$/unit }\end{array} \quad \begin{array}{l}\text { Beta } \\ \text { \$/unit }\end{array} \quad \begin{array}{c}\text { Delta } \\ \text { \$/unit }\end{array}\right]$ <br> Machine set up $=\$ 150000 / 25$ orders $=\$ 6000$ per order. (1) <br> Alpha $=\$ 6000 / 400(4800 / 12)=\$ 15$ per unit. Beta $=\$ 6000 / 500$ <br> $(4000 / 8)=\$ 12$ per unit. Delta $=\$ 6000 / 400(2000 / 5)=\$ 15$ per unit <br> Production inspection $=\$ 80000 / 50$ production runs $=\$ 1600$ per order (1) <br> Alpha $=\$ 1600 / 200(4800 / 24)=\$ 8$ per unit. Beta $=\$ 1600 / 250$ <br> $(4000 / 16)=\$ 6.40$ per unit. Delta $=\$ 1600 / 200(2000 / 10)=\$ 8$ per unit <br> Machine maintenance $=\$ 58800 / 19600$ hours (see a) $=\$ 3$ per hour. (1) <br> Alpha $=\$ 3 \times 2=\$ 6$ per unit. Beta $=\$ 3 \times 1.5=\$ 4.50$ per unit <br> Delta $=\$ 3 \times 2=\$ 6$ per unit <br> Product packaging $=\$ 42000 / 280$ crates <br> $(4800 / 40=120+4000 / 50=80+2000 / 25=80)=\$ 150$ per crate. (1) <br> Alpha $=\$ 150 / 40=\$ 3.75$ per unit. Beta $=\$ 150 / 50=\$ 3$ per unit <br> Delta $=\$ 150 / 25=\$ 6$ per unit <br> Material handling $=\$ 40000 / 80000 \mathrm{~kg}(4800 \times 5+4000 \times 10+2000 \times 8)$ $=\$ 0.50$ per kg (1). <br> Alpha $=\$ 0.50 \times 5=\$ 2.50$ per unit. Beta $=\$ 0.50 \times 10=\$ 5$ per unit <br> Delta $=\$ 0.50 \times 8=\$ 4$ per unit <br> ** For OF marks to be valid the answers MUST be in the correct proportions, e.g. Material handling: Alpha 50\%, Beta 100\% and Delta 80\% <br> See scanned example for an alternative model answer | (13) |
| Question | Answer (AO1) 2 (AO3) 2 | Mark |
| Q3c | 1 mark for the initial point and I mark for development. TWO required It could provide a more realistic allocation of costs (1) which could lead to a more accurate overhead cost for each product (1) <br> If changes led to more accurate costs this could lead to improvements in the company's performance/ profit (1) via pricing decisions/ sales strategies / performance management / decision making (1) <br> Accept any other reasonable comment | (4) |

Total for Question 3 = 21 marks

| Question | Answer (AO2) 10 | Mark |
| :---: | :---: | :---: |
| Q4a(i) |  Year One Year Two <br> $\frac{\text { Inventory } \times 365}{\text { Cost of sales }}$ $\frac{85 \times 365}{966}=32.12$ days (1) $\frac{160 \times 365}{957}=61.02$ days (1)  <br> Average Inventory 40.81 days (1) 46.72 days (1) <br> ALL the answers must be to TWO decimal places | (2) |
| Question | Answer | Mark |
| Q4a(ii) | $\frac{\text { Trade rec } \times 365}{\text { Sales }} \frac{105 \times 365}{1380}=\mathbf{2 7 . 7 7}$ days (1) $\frac{280 \times 365}{1636}=\mathbf{6 2 . 4 7}$ days (1) | (2) |
| Question | Answer | Mark |
| Q4a(iii) | $\frac{\text { Trade payables } \times 365}{\text { Purchases }} \frac{120 \times 365}{920}=47.61$ days (1) $\frac{160 \times 365}{1032}=56.59$ days $(1)$ <br> Accept cost of sales $=$ Year One 45.34 days and Year Two 61.02 days | (2) |
| Question | Answer | Mark |
| Q4a(iv) | $\begin{array}{lll} \text { Current assets }  \tag{1}\\ \hline \text { Current liabilities } & \frac{240}{120}=2.00: 1 \quad \text { (1) } \quad \frac{440}{305}=1.44: 1 \end{array}$ <br> Ratio answers MUST be complete | (2) |
| Question | Answer | Mark |
| Q4a(v) | $\frac{\text { Current assets -Inventory }}{\text { Current liabilities }} \frac{(240-85) 155}{120}=\mathbf{1 . 2 9 : 1 ( 1 )} \frac{440-160) 280}{305}=\mathbf{0 . 9 2 : 1 ( 1 )}$ | (2) |


| Question | Answer (AO4) 3 (AO5) 5 | Mark |
| :---: | :---: | :---: |
| Q4b | The company's inventory holding period has worsened (1) [not longer or bigger] This indicates that too much working capital may be tied up unnecessarily (1*) <br> There may be issues with stock holding costs (wastage/damage/security) which will affect the profitability of the company (1) <br> 2 max <br> The trade receivables collection period has worsened (1) [not longer or bigger] This indicates a poor credit control system is operating (1). <br> (Once again too much working capital is being tied up*) <br> This may lead to an increase in non payments (bad debts) (1) <br> 2 max <br> The trade payables period is too long, based on the standard of 30 days credit (1). There is a positive point that delaying payments helps the cash flow (1) However, the company is at risk of a supplier refusing to deal with them / not giving reasonable discounts / thus having to seek alternative suppliers / who might charge a higher price (1). |  |


|  | Evaluation <br> Although the current ratio and acid test appear to be healthy the company has a <br> serious liquidity issue (1) The accounts show that the company has gone from a <br> positive cash balance in year one, to an overdraft in year two (1), meaning they have <br> NO immediate liquid funds to repay trade payables (1) <br> The company needs to take action to improve its liquidity by reducing inventory <br> levels (which should reduce trade payables) and chasing up trade receivables (1). | $\mathbf{2 ~ m a x}$ |
| :--- | :--- | :--- |

## Total for Question 4 = 18 marks

| Question | Answer (AO2) 6 |  | Mark |
| :---: | :---: | :---: | :---: |
| Q5a(i) | Calculation of net present value (NPV) |  |  |
|  | Accounting profit + depreciation = cash flows (\$000) |  |  |
|  | Year $2 \quad 60+135^{*}=\$ 195$ |  |  |
|  | Year 3 75 + | * $=\$ 210$ |  |
|  | $\begin{array}{ll}\text { Year } 4 & 90+1\end{array}$ | = \$225 |  |
|  | Year $5 \quad 80+1$ | * $=\$ 215$ (1 for all five) |  |
|  | *Annual depreciation $=(825-150) 675 \div 5$ years $=\mathbf{\$ 1 3 5 0 0 0} \mathbf{( 1 )}$ |  |  |
|  | Year Net cash flow | Discount factor@15\% Present values |  |
|  | (\$000 | ( \$000 |  |
|  | 0 (825) | 1.000 (825.00) |  |
|  | 1175 OF | 0.870 152.250 |  |
|  | 2195 OF | 0.756147 .420 |  |
|  | 3210 OF | 0.658 138.180 |  |
|  | 4225 OF | 0.572 128.700 (1) |  |
|  | 5 365 ** | $0.497 \underline{181.405}$ (1) |  |
|  |  | NPV = (77.045) (10F) |  |
|  | ** Year 5 net cash flow $=215$ OF +150 = 365 OF (1) |  |  |
|  | Do NOT accept 10\% calculations. Correct answer must be negative. |  | (6) |
| Question | Answer (AO2) 4 |  | Mark |


| Q5a(ii) |  <br> Correct answer must be positive. Negative NPV in part ai and aii will likely lead to a large negative IRR calculation | (4) |
| :---: | :---: | :---: |
| Question | Answer (AO4) 2 (AO5) 1 | Mark |
| Q5b | The investment should not be undertaken (1) it generates a negative NPV/will not recover the initial investment (1) and will earn an IRR of $\mathbf{1 1 . 5 1 \%}$ which is lower than the cost of capital of $15 \%$. (1) | (3) |
| Question | Answer (AO3) 2 (AO4) 2 | Mark |
| Q5c | The original proposal makes a negative return of $\$ 77 \mathbf{0 4 5 0}$ (of) and the alternative proposal makes a positive NPV of $\$ 88760$ (1) which makes a total of $\$ 165805$ (10f). <br> To justify the purchase of the original equipment would mean that the purchase price would need to reduce (1) to \$659 195 (10f) (\$825 000 less $\$ 165805$ ). <br> Two marks for the basic calculations and two marks for the overall advice | (4) |
| Question Number | Answer (AO1) 1 (AO3) 2 | Mark |
| Q5d | Using the discounted method takes into account the time value of money (1), which overcomes any weakness of a more traditional method (1). In this example the discounted method shows that the project does not make a positive return on the investment (1) | (3) |

Total for Question 5 = 20 marks
Total for Paper = $\mathbf{1 0 0}$ marks

