

**Assessment Schedule – 2019****Accounting: Demonstrate understanding of management accounting to inform decision-making (91408)****Evidence**

| Q1          | Sample evidence  |   |
|-------------|--|---|
| (a)         | Break-even number of drinks per day $\text{Fixed costs} / \text{Contribution margin}$<br>$\$65\,000 / (8.00 - 3.00) = 13\,000 \text{ units}$<br><i>Smooth As</i> is open Wednesday to Sunday (ie 5 days per week) $5 \times 52 \text{ weeks} = 260 \text{ days per year}$<br>$13\,000 / 260 = 50 \text{ drinks per day.}$  | <b>C</b> for correct figure   |
| (b)         | <p><i>Smooth As's</i> margin of safety is the difference between production level and breakeven level. At break-even level of production all costs are covered. Beyond this point <i>Smooth As</i> makes a profit. The larger the margin of safety, the higher the profit.</p> <p>To get to 'explain', the candidate needs to embed supporting data. Allow follow-through from Q1(a)</p> <p>During seven months of the year (January and February, school holiday period, and the ship season) <i>Smooth As</i> has an MOS of 100 drinks per day (<math>150 - 50</math>). So for 7 months of the year the business is sustainable. However, for the other 5 months of the year <i>Smooth As</i> does not reach break-even (<math>50 \text{ drinks per day} - 20 \text{ drinks per day} = \text{a shortfall of } 30 \text{ drinks per day}</math>).</p>   | <b>Dc</b><br><br><b>E</b>   |
| (c)         | <p><i>Smooth As's</i> fixed costs remain constant / do not change. Variable costs change in proportion to the production level.</p> <p>To get 'explain', the candidate needs to apply fixed cost definitions to the context with application to the data.</p> <p><i>For example:</i></p> <p>Fixed costs do not vary with production. <i>Smooth As</i> will still have to pay its fixed costs of interest on the loan, regardless of whether <i>Smooth As</i> produces any drinks.</p>  | <b>Dc</b><br><br><b>E</b>   |
| (d)<br>(i)  | <p>Target profit <math>(\text{Fixed costs} + \text{Profit target}) / \text{Contribution margin}</math>:</p> $(\$65\,000 + \$123\,500) / (\$8 - \$3)$ $= \$188\,500 / \$5$ $= 37\,700 \text{ drinks per year} = 145 \text{ drinks per day}$   | <b>C</b> for correct figure   |
| (d)<br>(ii) | <p><i>Smooth As</i> would have to sell 145 drinks per day (allow follow-through), which is 95 drinks more than break-even.</p> <p>To get 'explain', the candidate needs to apply the provided and calculated data to the context, using 'because' or similar.</p> <p><i>For example:</i></p> <p><i>Smooth As</i> is open for 260 days a year (5 days a week x 52 weeks). This means Phoebe would have to produce 145 drinks a day every day <i>Smooth As</i> is open throughout the year.</p> <p>Justification involves linking information to realistic implications for Phoebe's business.</p> <p><i>For example:</i></p> <p>For some months of the year, <i>Smooth As</i> has access to a large number of customers (e.g. during the cruise ship tourist season) but when <i>Smooth As</i> is relying on locals only (during the winter months), the business is unlikely to have sufficient customers to justify these levels of production. Currently, <i>Smooth As</i> produces 23 000 smoothies a year, or an average of 88 per day. Given current resources, it is unlikely that <i>Smooth As</i> will be able to reach Phoebe's profit target of \$123 500.</p> | <b>Dc</b><br><br><b>E</b><br><br><br><br><br><br><br><br><br><b>J</b> |

**Dc** Described in context**E** Explain**J** Justify

| N1   | N2   | A3   | A4  | M5   | M6   | E7  | E8  |
|--|--|--|---|--|--|---|---|
| Any TWO answers – need <b>not</b> be in context. | Any THREE answers – need <b>not</b> be in context. | <p><b>C</b><br/><b>Dc</b></p> <p>ONE correct calculation from (a) or (d)(i)</p> <p><i>AND</i></p> <p><b>Describes in context (Dc)</b> ONE management accounting element from (b), (c), or (d)(ii).</p> | <p><b>C</b><br/><b>Dc × 2</b></p> <p>ONE correct calculation from (a) or (d)(i) or any other calculation where working is shown</p> <p><i>AND</i></p> <p><b>Describes in context (Dc)</b> TWO management accounting elements from (b), (c), or (d)(ii).</p> | <p><b>C × 2</b><br/><b>E</b></p> <p>TWO correct calculations from (a) and (d)(i)</p> <p><i>AND</i></p> <p><b>Explains in context</b> ONE management accounting element from (b), (c), or (d) (ii).</p> | <p><b>C × 2</b><br/><b>E × 2</b></p> <p>TWO correct calculations from (a) and (d)(i) AND supporting calculation from elsewhere in Q1</p> <p><i>AND</i></p> <p><b>Explains in context</b> TWO management accounting elements from (b), (c), or (d)(ii).</p> | <p><b>C × 3</b><br/><b>E</b><br/><b>J</b></p> <p>TWO correct calculations from (a) and (d)(i) AND supporting calculation elsewhere in Q1</p> <p><i>AND</i></p> <p><b>Explains in context</b> ALL management accounting elements from (b), (c), and (d)(ii).</p> <p><i>AND</i></p> <p><b>Justifies explanations</b> by linking information to realistically reaching <i>Smooth</i> As's profit target.</p> | <p><b>C × 3</b><br/><b>E × 2</b><br/><b>J</b></p> <p>TWO correct calculations from (a) and (d)(i) AND supporting calculation elsewhere in Q1</p> <p><i>AND</i></p> <p><b>Explains in context</b> ALL management accounting elements from (b), (c), and (d)(ii).</p> <p><i>AND</i></p> <p><b>Justifies explanations</b> by linking information to realistically reaching <i>Smooth</i> As's profit target</p> <p><i>AND</i></p> <p>the candidate's explanation is well-balanced, logical, and perceptively linked to the realities of the case study scenario.</p> |

**N0** = No response; no relevant evidence.

## Question TWO

| Q2  | Sample evidence  |                 |  |
|-----|--|-----------------|--|
| (a) | <i>Smooth As</i><br><b>Cash Budget for the two months ending February 2020</b> |                 |  |
|     | <b>January</b>   | <b>February</b> |  |
|     | <b>Receipts</b>  |                 |  |
|     | Sales: Cruise ship passengers  | 14 400          | 12 000   |
|     | Sales: Other tourists  | 24 000          | <b>M</b>   |
|     | Sales: Locals  | 3 200           | <b>M</b>   |
|     | <b>Total receipts</b>  | 41 600          | 27 200   |
|     | <b>Less payments</b>   |                 |  |
|     | Drawings   | 5 000           | 5 000  |
|     | Wages  | 1 500           | 1 200  |
|     | Rent   | 450             | 450  |
|     | Other expenses   | 1 000           | 1 000  |
|     | Interest on loan   | 50              | 50   |
|     | Cost of supplies   | 15 600          | 10 200   |
|     | GST payable  | 6 500           | <b>V</b>   |
|     | <b>Total payments</b>  | 30 100          | 17 900   |
|     | Surplus / (deficit) of cash  | 11 500          | 9 300  |
|     | Opening bank balance (overdraft)   | (2 500)         | 9 000  |
|     | Closing bank balance   | 9 000           | 18 300   |
|     |  |                 | <b>E for correct number<br/>and process</b><br>OR<br><b>M for a number and<br/>correct process</b> |



**Question THREE**

| Q3  | Sample evidence                                     |  |                                |
|---|---|--|--------------------------------|
| <b>Marking codes</b>  |   |  |                                |
| <b>i = Idea</b>   | <b>J = Justified link to information in context</b> | F = Financial information  | NF = Non-financial information |
| <b>Fi and NFi are awarded to candidates who provide evidence of ideas only (N/A or A grades)</b>  |   | <b>FJ and NFJ are awarded to candidates who provide evidence of links to data, additional calculations using case study material, use of ideas outside the case study material, or consequences on business.</b> |                                |
|   | <b>Container drinks</b>                             | <b>eScooters</b>   |                                |
| Fixed costs   | \$65 000  | \$100 000  |                                |
| Selling price   | \$8.00 per drink                                    | \$18.00 per hour   |                                |
| Variable costs  | \$5.00  | \$8.00   |                                |
| Contribution margin   | \$3.00  | \$10.00  |                                |
| Break-even per year   | 13 000 drinks                                       | 10 000 hours, 200 hours a year per scooter   |                                |
| Days or hours per year  | 5 days per week for 52 weeks per year = 260 day     | 15 hours per day for 7 days per week for 52 weeks per year = 5 460 hours   |                                |
| Break-even in drinks per day (based on open 5 days per week for café )  | 50  |  |                                |
| Break-even in hours (based on 15 hours per day)   |   | Approx. 2 hours per day  |                                |
| Target Profit \$123 500   | 37 700 drinks per year<br>145 drinks per day        | 22 350 hours per year<br>Approx. 4 hours per day   |                                |
| <b>Recommendation (1): Should continue to operate as container drinks stop only</b>   |   |  |                                |
| <b>Financial information: (F)</b>   |   |  |                                |
| Additional costs faced undertaking new eScooter – an additional \$65 000 just for the purchase of the scooters and fitting of app access alone.   |   |  |                                |
| Container business may not be likely to make the desired \$123 500 profit, but it could easily make greater than \$50 000 profit (average NZ income approximately \$49 000).  |   |  |                                |
| Simple business model means simple cost structure and easy to manage financial side of business – low risk predictability.  |   |  |                                |
| Damage to eScooters (due to vandalism, stupidity, or wear-and-tear) is costly to either repair (payment of a technician with computer and electronic skills) or replace (new Scooter \$800 plus \$500 setup costs). |   |  |                                |
| <b>Non-financial information: (NF)</b>  |   |  |                                |
| Simple business means Phoebe could be sick and just not open for that day – particularly convenient during winter months when there are few customers around anyway.  |   |  |                                |
| Proposed new business is much more complex to organise than the old one, requiring hiring of juicers and technical staff (who will need to be paid whether there is maintenance required on the eScooters or not).  |   |  |                                |
| There is a lot of negative press globally about accident risks associated with eScooters.   |   |  |                                |
| Someone has to be available seven days a week, all year, with the eScooter model, whereas the container drinks model does not require this time commitment from Phoebe or her staff.                                |   |  |                                |

**Recommendation (2): Should expand into eScooters available 7 days a week for 15 hours a day, using software app**

**Financial information: (F)**

Potential to significantly increase sales, with each sale contributing \$10 to *Smooth As* to pay other costs.

Reduces the impact on cash inflows due to seasonal fluctuations in tourist availability (already showing in the February data from the Cash Budget).

The cash surplus (\$9 300 in February) with the current business model indicates that the simpler business is unlikely to generate the returns that Phoebe wants (\$123 500).

**Non-financial information: (NF)**

Opens business to new customers.

Follows current business trend of popularity of scooter use in other markets in NZ and throughout the world.

**Explanation of 'justified'**

Justification involves making sophisticated, insightful and / or original responses to the context, integrated with accurate and relevant evidence.

Responses will typically incorporate in-depth thinking (insight, perception) about consequences of actions / decisions in the particular business context. It is expected that reasonable assumptions (i.e. things not explicitly addressed in the case study information) about the unique nature of the business will be attempted and incorporated into the thinking about the decision-making process for the particular business context.

The evidence will show a logical, developed argument of the choices and likely outcomes for the business.

The evidence will be consistent with the recommendation.

A strong justification is likely to involve a well-balanced discussion incorporating elements of both financial AND non-financial information.

**Accept any relevant / logical reasons.**

| N1  | N2   | A3   | A4   | M5   | M6   | E7   | E8   |
|---|--|--|--|--|--|--|--|
| <p>Describes a recommendation but lacks context. Attempts examples but demonstrates no real understanding of the problem posed in the case study.</p> | <p>Describes a recommendation but lacks context. States a reason for recommendation.</p> | <p>Describes a recommendation in context. States ideas but does not explain them. Does not use 'because' or 'what happens next'.<br/><br/>Uses examples that show an understanding of financial AND non-financial information but does not necessarily clearly delineate what each one relates to.</p> | <p>Describes a recommendation in context. States ideas but does not explain them. Does not use 'because' or 'what happens next'.<br/><br/>Uses examples that show an understanding of financial AND non-financial information.</p> | <p>Explains a recommendation in context.<br/><br/>Uses examples, in context, that show an understanding of financial AND non-financial information.<br/><br/><b>Links (J)</b> EITHER financial OR non-financial items of information to informed decision-making.<br/><br/>Provides relevant supporting evidence, using data from case study and / or own calculations, e.g. break-even, profit target, contribution margin.</p> | <p>Explains a recommendation in context.<br/><br/>Uses examples that show an understanding of financial AND non-financial information.<br/><br/><b>Links (J)</b> at least TWO explanations, including at least ONE financial AND ONE non-financial item of information, to informed decision-making.<br/><br/>Provides relevant supporting evidence, using data from case study and own calculations, e.g. break-even, that shows broad understanding of the case study context.</p> | <p>Explains a recommendation in context.<br/><br/>Uses examples that show an understanding of financial AND non-financial information.<br/><br/><b>Links (J)</b> at least THREE explanations, including at least ONE financial AND ONE non-financial item of information.<br/><br/>Provides relevant supporting evidence, using data from case study and own calculations, e.g. break-even, that shows broad and insightful understanding of the case study context.</p> | <p>Explains a recommendation in context.<br/><br/>Uses examples that show an understanding of financial AND non-financial information.<br/><br/><b>Links (J)</b> at least THREE explanations, including at least ONE financial AND ONE non-financial item of information.<br/><br/>Provides relevant supporting evidence, using data from case study.<br/><br/>Makes appropriate additional calculations to provide supporting evidence, e.g. calculation of new contribution margin, break-even, etc.<br/><br/>Shows broad and insightful understanding of the two business opportunities. Shows evidence of thinking about consequences of business decisions.<br/><br/>May include evidence such as:</p> <ul style="list-style-type: none"> <li>• connections to other similar businesses</li> <li>• awareness of the business environment in which this business operates, showing connections between this and the context calculations and other evidence.</li> </ul> <p>Uses report format and produces material that has a high level of literacy, with well-developed, linked paragraphs.</p> |

N0 = No response; no relevant evidence.

**Cut Scores**

| <b>Not Achieved</b> | <b>Achievement</b> | <b>Achievement with Merit</b> | <b>Achievement with Excellence</b> |
|---------------------|--------------------|-------------------------------|------------------------------------|
| 0 – 8               | 9 – 13             | 14 – 18                       | 19 – 24                            |