# NEW ZEALAND SCHOLARSHIP 2004

# ASSESSMENT SCHEDULE FOR ACCOUNTING

**QUESTION ONE: ACCOUNTING INFORMATION FOR MANAGEMENT**
**PART A: Cost behaviour**

**(a) Explanation of variable costs and fixed costs**

Variable costs are those costs that increase in total as the volume of production increases. These costs are usually variable in total but constant per unit. Variable costs can include direct materials, direct labour, variable overheads like lighting and heating, repairs and maintenance, and variable selling costs. Therefore, a variable cost is a cost that will vary proportionately with changes in the level of activity.

Examples relating to Ben's sausage sizzle venture are:
Direct labour: the person being paid wages to cook and sell the sausages.
Direct materials: the cost of sausages, bread and tomato sauce.
Variable overheads: vehicle expenses for bringing the barbecue on campus each day and oil and gas for cooking.

Fixed costs are those costs that do not vary over wide ranges of output of final product. These costs are paid regardless of how much capacity has been utilised to produce units of output. Such costs can include rates, rent and depreciation, which are incurred each period whether or not production has occurred. These costs are fixed in total over a range of output but are usually variable per unit. For instance, if total production increases, then, while the total fixed costs stay the same within that range of output, the fixed cost per unit will decrease as the volume of output increases. Therefore, a fixed cost will not change in total amount with changes in the level of activity.

Examples relating to Ben's sausage sizzle venture are:
Fixed overheads: lease for the barbecue, university charge for the barbecue space.

**Judgement for B in (a)**
- Clearly explains the concepts of variable costs and fixed costs and identifies some of the items that can be classified under the appropriate cost classifications.

**(b) Break-even concept**

The break-even concept is the starting point for cost–volume–profit analysis. The cost–volume–profit analysis model is used by management to evaluate the interrelationships of sales volume, selling price, variable costs and fixed costs in order to plan acceptable levels of profit. The break-even analysis is a tool under cost–volume–profit analysis that is used to indicate the possible impact of alternative courses of action on the break-even point. The break-even point indicates the sales volume (or sales dollars) at which total revenues are equal to the total costs of making and selling that product. This can be depicted by the formula:

$$\text{Break-even sales in units} = \frac{\text{Fixed costs}}{\text{Sales price per unit} - \text{variable cost per unit}}$$

It is important that Ben understands the break-even point related to the running of his sausage sizzle venture. It is only above the break-even point that Ben will start to make profits. If his sales volume is below the break-even point then he will be incurring losses. The break-even point indicates to Ben the target minimum level of sausages that he should be selling in order to just cover total costs. Ben should ensure that he is selling above the break-even level. The break-even point will not be a desired level of performance for his sausage sizzle venture as it would mean that he is not making a return at all.

**Judgement for B in (b)**
- Explains the break-even concept beyond simply writing the formula down i.e. demonstrates wider knowledge of the break-even concept.
- No formula is required if the explanation shows evidence of understanding break even.

**(c) Contribution margin**

Contribution margin = Sales less total variable costs
Contribution margin per unit = Sales price per unit less variable cost per unit

The contribution margin approach helps with decision making. According to this approach, the aim of the company is to maximise the contribution towards covering fixed costs so that profits can be made. The contribution margin indicates that variable costs are being covered by sales revenue. Where there is a positive contribution margin, it means that there are available revenues to contribute towards covering the fixed costs of production. For decision making purposes, it is important to remember that once you begin a business venture, fixed costs will be incurred regardless of whether you produce or not. You will therefore continue to operate as long as variable costs are covered and there is a contribution from your revenues to cover the fixed costs. However, it is important that for business survival all costs (both variable and fixed) should be covered.

It is therefore important that Ben continues to operate even on the days that he thinks he is not selling very many sausages. As long as his sales are covering his variable costs and ultimately contributing to covering his fixed costs, Ben needs to operate his sausage sizzle. The contribution he makes from these sales will help to increase his overall profits. If he does not operate on these days then he will have to ensure that he sells more sausages on other days to make up for the lost contribution.

**Judgement for B in (c)**
- Explains the contribution margin concept beyond simply writing the formula down to demonstrate i.e. demonstrates wider knowledge of the contribution margin.
- No formula is required if the explanation shows evidence of understanding break even.

**Judgement for A in PART A**

B in two of (a),(b) and (c) plus:
- Supporting examples and use of appropriate terminology provide evidence of an outstanding level of critical thinking about the issues of variable costs and fixed costs. The items listed are not exhaustive and candidates may bring in other items, but these should clearly relate to the sausage sizzle venture.
- An outstanding level of critical thinking could be illustrated by the candidate indicating reservations on whether or not oil and gas for cooking could be classified under direct materials cost or under the variable overheads cost classification. Also, arguably, candidates might indicate direct labour cost as Ben paying himself to run the sausage sizzle. However such payment under GAAPs (generally accepted accounting principles) in financial accounting would be viewed as drawings by the owner rather than a direct labour wages cost.
- An outstanding level of critical and flexible thinking could be illustrated by the candidate relating the break-even explanation to Ben's sausage sizzle venture.
- Evidence of a wider knowledge of the break-even concept and how it is a management tool for internal decision making.
- An outstanding level of critical and flexible thinking could be illustrated by the candidate relating the contribution margin discussion to Ben's sausage sizzle venture.

**Judgement for B in PART A**

B in two of (a),(b) and (c)

**Judgement for C in PART A**

B in one of (b) and (c) plus:
- Clearly explains the concepts of variable costs and fixed costs, or identifies some of the items that can be classified under the appropriate cost classifications.

**PART B: Cost–volume–profit analysis**

**(a)**

$$\text{Break-even (units)} = \frac{\text{Fixed costs}}{\text{Unit contribution margin}}$$

$$\text{BE (units)} = \frac{\$400}{\$1 - (0.15 + 0.25 + 0.20)}$$

$$\text{BE (units)} = \frac{\$400}{\$1 - \$0.60}$$

$$\text{BE (units)} = \frac{\$400}{0.40}$$

BE (units) = 1 000 sausages

BE (Sales dollars) = BE (units) * sales price
BE (Sales dollars) = 1 000 × $1 per sausages
BE (Sales dollars) = $1 000

**Judgement for B in (a)**

- Clear detailed working provided for calculations. If answers are correct, detailed working calculations (as above) are not required)

**(b)**

$$\text{Desired sales volume (units)} = \frac{\text{Fixed costs + Profit}}{\text{Unit contribution margin}}$$

$$\text{Desired sales volume} = \frac{\$400 + \$5\,000}{\$1 - (0.15 + 0.25 + 0.20)}$$

$$\text{Desired sales volume} = \frac{\$5\,400}{\$1 - 0.60}$$

$$\text{Desired sales volume} = \frac{\$5\,400}{0.40}$$

Desired sales volume (over 30 weeks) = 13 500 sausages

Average daily sales = 13 500 / (30 weeks × 5 days a week)

Average daily sales = 90 sausages daily

**Judgement for B in (b)**

- Clear detailed working provided for calculations. If answers are correct, detailed working calculations (as above) are not required)

**(c)(i) Comparative profit statement**

| | First year's profit | Second year's predicted profit |
|---|---|---|
| Sales (15 000 sausages) | $15 000 | $15 000 |
| Less Variable Costs: | | |
| Direct labour | 2 250 | 2 700 |
| Direct materials | 3 750 | 4 200 |
| Variable overheads | 3 000 | 3 300 |
| Total Variable Costs | 9 000 | 10 200 |
| Contribution Margin | 6 000 | 4 800 |
| Less Fixed Costs: | | |
| Lease/Depreciation on Barbecue | 100 | 120 |
| University charge on space | 300 | 360 |
| Total Fixed Costs | 400 | 480* |
| Profit | $5 600 | $4 320 |

**(ii)** The profit made in the first year, with sales volume at 15 000 sausages, was $5 600. If Ben keeps his sales price at $1 per sausage, his profit in the second year will decrease to $4 320. This is because of the increased variable costs, the increase in fixed costs for the usage of university space and the depreciation charge on the barbecue that is more than the cost of leasing the barbecue.

**(iii)** Ben will need to consider the following strategies for his sausage sizzle venture in the second year in order to try and achieve the target profit of $5 000:

Increase his sales price per sausage. If he wants to maintain the profits at the same level as the first year, then he must increase his sales price to $1.05 (rounded to nearest cent) per sausage. If he wants to improve his profit from the first year level then he must sell his sausage sizzles at above $1.05 per sausage.

Working:

$$\text{Desired sales volume (units)} = \frac{\text{Fixed costs + Profit}}{\text{Unit contribution margin}}$$

$$15\,000 = \frac{\$480 + \$5\,000}{\$SP - (0.18 + 0.28 + 0.22)}$$

$$15\,000 = \frac{\$5\,480}{\$SP - 0.68}$$

$$15\,000\ SP - 10\,200 = \$5\,480$$

$$SP = \$1.045333333$$

It is important that Ben notes that by increasing the sales price per sausage he might face a decrease in demand for sausages. He will need to do some research and find out if candidates are willing to pay more for a sausage, or if he may potentially be turning away customers with the increased sales price.

Increase his sales volume. If he wants to maintain the profits at the same level as the first year and the same sales price per sausage, then he must increase his sales volume to 17 125 sausages. If he wants to improve on his profit from the first year, then he must sell above this sales volume.

Working:

$$\text{Desired sales volume (units)} = \frac{\text{Fixed costs + Profit}}{\text{Unit contribution margin}}$$

$$\text{Desired sales volume} = \frac{\$480 + \$5\,000}{\$1 - (0.18 + 0.28 + 0.22)}$$

$$\text{Desired sales volume} = \frac{\$5\,480}{0.32}$$

Desired sales volume = 17 125 sausages

It is important that Ben notes that there might not be a big enough market on campus for sausages, and he may find it difficult to reach that higher sales volume. He will need to find out if the University will be increasing the number of candidates on campus next year.

Continue to lease the barbecue rather than purchase a new one for his business venture. This will have the effect of reducing the second year's total fixed cost by $20 and thereby increasing profit by $20 (ie $4 340). While this amount of cost savings may seem insignificant on its own, together with other cost savings, predicted profit for the second year could improve significantly if the barbecue were leased instead of purchased.

Decrease his variable costs by looking at cheaper suppliers or bulk buying for direct materials and seeing whether he can control variable overheads and bring this cost down also. If Ben is paying himself for direct labour cost, then he may possibly leave that at the old rate of $0.15 per unit instead of increasing it to $0.18. Also, he may leave the direct labour cost out of the calculation of profit (could argue that this is drawings rather than a direct cost).

Advertise his venture to get more sales. However, this would increase his costs, so he would have to either sell a higher volume to cover this increased cost or increase his sales price even further.

Sell other things with his sausages such as burgers, sandwiches or onions. He would need to assess the market situation and the costs of providing the additional food products.

**Judgement for B in (c)**

- Clear detailed working provided for calculations. If answers are correct, detailed working calculations (as above) are not required)
- In (c) (i) format must be as per the question, showing clearly contribution margin and profit
- In (c) (i) totals only are acceptable (as highlighted in assessment schedule).
- If Fixed Cost figure for Year 2 is $580 (thereby still including leased barbecue) accept providing clear explanation given that leased barbecue is retained, plus treatment of purchase of (second) barbecue is correct.
- Clear explanation in (c)(ii) with regards to the change in the profits from year 1 to year 2 as a result of the increase in variable and fixed costs.
- Identification and clear discussion of appropriate strategies that Ben could consider in order to achieve the profit target of $5,000.
- An attempt must have been made for c(i), to achieve for c (ii) & (iii)
- A minimum of two strategies (to increase profitability) is required

**NOTE:** Candidates might have made some incorrect calculations, but the strength of their discussion-type questions might still enable them to achieve B.

**Judgement for C in (c)**

- Clear detailed working provided for calculations. If answers are correct, detailed working calculations (as above) are not required)
- Correct calculation of contribution margin and profit
- In (c) (i) totals only are acceptable (as highlighted in assessment schedule).
- If Fixed Cost figure for Year 2 is $580 (thereby still including leased barbecue) accept providing clear explanation given that leased barbecue is retained, plus treatment of purchase of (second) barbecue is correct.
- Clear explanation in (c)(ii) with regards to the change in the profits from year 1 to year 2 as a result of the increase in variable and fixed costs.
- Identification of appropriate strategies that Ben could consider in order to achieve the profit target of $5,000.
- A minimum of two strategies (to increase profitability) is required.

**Judgement for A in PART B**

B in two of (a), (b) and (c)plus:

- All calculations are done correctly.
- There is evidence demonstrating an outstanding level of critical and flexible thinking. For example, the candidate provides strategies for Ben to increase the profitability of his sausage sizzle venture to achieve the target profit of $5 000.
- The candidate is able to support their answer with relevant calculations of increased volume and/or increased selling price.
- Minimum of two strategies in C(ii), but completed to a high level of thinking.

NOTE: A number of different strategies have been identified for Part B (c)(iii). Candidates might not have identified all of the strategies given in this schedule. Judgement is based on the strength of discussion, not the number of strategies identified.

**Judgement for B in PART B**

B in two of (a), (b) and (c)

**Judgement for C in PART B**

C in two of (a), (b) and (c),
*or*
C in one of (a), (b) and (c) + B in one of (a), (b) and (c)

**PART C: Partnership and Budgeting**

**(a) Weekly Cash Budget**

| **CASH BUDGET for *Frodo's Magic Sizzles* for the first TWO weeks of 2005 academic year** | Week One | Week Two |
|---|---|---|
| ***Estimated number of sausages*** | 550 | 500 |
| ***Estimated Receipts:*** | | |
| Sales revenue (@ $1.30) | $715.00 | $650.00 |
| Total estimated receipts | $715.00 | $650.00 |
| ***Estimated Payments:*** | | |
| University space | $375.00 | |
| Barbecue (first installment) | $500.00 | |
| Partner's salary* | $200.00 | $200.00 |
| Direct labour (@ $0.20) | $110.00 | $100.00 |
| Direct materials (@ $0.29) | $159.50 | $145.00 |
| Variable overhead (@ $0.23) | $126.50 | $115.00 |
| Total estimated payments | $1 471.00 | $560.00 |
| **Surplus/(deficit)** | ($756.00) | $90.00 |
| Bank balance beginning | $500.00 | ($256.00) |
| *Bank balance at end of the week (Overdraft)* | ($256.00) | ($166.00) |

* Calculation of weekly salary for Joel as a partner for the business. $6 000 for 30 weeks = $200 per week to be paid every Friday on a weekly basis.

**Judgement for B in (a)**

- Budget format is clear and key figures are provided (key totals only, as highlighted in assessment schedule, are acceptable).

**(b)(i) Predicted annual profit statement for 2005:**

| | | |
|---|---|---|
| Sausage sales (average of 525 sausages per week × 30 weeks × $1.30) | | $20 475.00 |
| Less variable costs: | | |
| Direct labour (525 × 30 weeks × $0.20) | $3 150.00 | |
| Direct materials (525 × 30 weeks × $0.29) | $4 567.50 | |
| Variable overheads (525 × 30 weeks × $0.23) | $3 622.50 | |
| Total variable costs | | $11 340.00 |
| Total contribution margin | | $9 135.00 |
| Less fixed overhead costs | | |
| University space | $375.00 | |
| Depreciation on barbecue | $140.00 | |
| Less total fixed costs | | $515.00 |
| Profit | | $8 620.00 |
| Less Joel's salary | | $6 000.00 |
| Profit to share | | $2 620.00 |

**Judgement for B in (b) (i)**

- Predicted annual profit statement for 2005 appropriately classified and determined figures presented to an appropriate level.

**(b)(ii) Can Ben afford to have Joel as a partner in the business?**

It may appear that the *Frodo's Magic Sizzles* has financial difficulties, as the bank balance at the end of the first two weeks shows a $166 overdraft. Therefore, on the basis of the weekly cash budget, it may look like Ben can not afford to have Joel as a partner in the business, earning a fixed salary of $6 000 which is being paid at $200 per week. However, it is important to note that the first week's cash budget includes the full payment of $375 of fixed overhead: university space costs, the first cash installment of the barbecue and the $500 cash capital investment by Ben. The second week provided a cash surplus of $90. The third and fourth weeks will also provide a cash surplus of $113.20 and $95.80 respectively; as there will only be Joel's fixed salary, direct costs and variable costs to cover. However, the first week of the next month will again provide a cash deficit, as the second installment of the barbecue's cost will have to be paid. Once this cost is paid, the only major cost to be met each week will be Joel's fixed salary cost of $200.

If we use the average (525) sausages per week information, when there is only the salary and variable costs to pay, there will be a weekly surplus of $104.50, [525 × $1.30 – (525 × ($0.20 + $0.29 + $0.23)) – $200]. Over the 30-week period this will work out to $3 135. Deducting $1 000 for the barbecue and $375 for university space, there will be a cash surplus of $1 760. This $1 760 will require a further deduction of cash for Joel in terms of a profit share that has to be determined (see predicted annual profit report provided in the appendix). If we make the assumption that the direct labour cost was being paid to Ben, his income only amounts to $3 150 [using the average of 525 sausages: 525 × $0.20 × 30 weeks]. Joel will earn a much higher salary and together with a profit share will definitely be the higher-income earner in the sausage sizzle venture.

If Joel's salary was excluded from the cash budget, the **cash surplus**, using the average 525 sausages, will work out to $7 760 [ie ((525 × $1.30) – (525 × ($0.20 + $0.29 + $0.23)) × 30 weeks) – $1000 – $360]. The profit, calculated without Joel's salary deducted as a fixed cost, will provide a return of $8 620. In addition, depreciation must be accounted for in this profit determination, and the barbecue cost becomes a capital expenditure item to be shown in the Statement of Financial Position, rather than in the Statement of Financial Performance (see predicted annual profit statement, part B(i)).

The deduction of Joel's salary after the profit figure of $8 620 shows profits to share of $2 620. If we assumed an equal share of 50:50, Joel will earn a total of $7 310 ($6 000 + $1 310) and Ben will get $4 460 ($3 150 + $1 310, assuming direct labour cost was being paid to Ben).

Ben must also consider that the increased price of $1.30 may actually result in fewer sausages being sold. Candidates may find it difficult to pay $1.30 and may give the sausage sizzle a miss. If this happens, the predicted profits and cash surplus will be significantly less and, given Joel's fixed salary cost, the venture may not be profitable to operate.

I recommend that Ben does not accept Joel's suggestion to be a partner in *Frodo's Magic Sizzles*. Ben can pay (according to the predicted profit report in the appendix) a fixed salary to Joel of $6 000. However, Ben should note that the profit of $2 620, of which he also has to provide a share to Joel, would give him a return that will be much lower comparatively to what Joel is able to earn as a partner in the partnership business venture. Ben would be financially better off without Joel, as he would not have to pay Joel a high fixed salary cost and a share of the profit. Without the cost of having Joel as a partner, Ben would have a cash surplus of $7 760 and a profit of $8 620. If Ben really needed help to run the sausage sizzle business, then he might be better off employing a helper and paying him/her at the direct labour cost of $0.20 per unit. This would cost Ben $3 150, rather than the total $7 310 he would have to pay Joel.

**Judgement for B in (b) (ii)**

- Clear explanation and reasoning of the financial implications given, as to whether Ben should or should not have Joel as a partner in his business.

**Judgement for C in (b) (ii)**

- Some explanation and/or reasoning of the financial implications given, as to whether Ben should or should not have Joel as a partner in his business.

**Judgement for A in PART C**

B in (b) (ii) + one of (a) or (b) (i) plus:

- There is evidence demonstrating an outstanding level of critical and flexible thinking. For example, in the candidate's discussion as to whether or not Ben can afford to pay Joel a partner's salary and in particular that the salary Joel is demanding exceeds any amount Ben would be able to earn from the partnership, even if the direct labour cost was being paid to Ben. Calculations supporting this discussion will demonstrate Scholarship Plus ability. General discussion by candidates without supporting calculations will only show Scholarship.

**Judgement for B in PART C**

B in (b) (ii) + one of (a) or (b) (i)

**Judgement for C in PART C**

C in (b) (ii) + B in one of (a) or (b) (i)

**Overall Judgement for A IN QUESTION ONE**

Overall A in Parts A, B, and C

or

Overall A in one of Parts A, B and C *plus* B in two of Parts A, B and C *including that*:

- All calculations are done correctly.
- Evidence of an outstanding level of critical and flexible thinking illustrated by the discussion, and the clarity of their explanations with regards to their overall efforts in Question One

**Overall Judgement for B in QUESTION ONE**

Overall A in one of Parts A, B and C *plus* overall B in one of Parts A, B and C *plus* overall C in one of Parts A, B and C

or

Overall B in two of Parts A, B and C *plus* overall C in one of Parts A, B and C

**Overall Judgement for C in QUESTION ONE**

Overall B in one of Parts A, B and C *plus* overall C in one of Parts A, B and C

or

Overall C in two of Parts A, B and C

**QUESTION TWO: Financial Reporting Issues**

**(a)** The Statement of Concepts (paragraph 5.1) states that unless there are special circumstances, preparers of financial reports should usually apply the assumptions that (a) the entity is a going concern; (b) the entity's economic activity can be divided into nominated time periods for period reporting; and (c) the entity's revenue and expenditure are reported on an accrual basis.

The going-concern assumption assumes that the entity will continue in business for the foreseeable future. This generally means that there is no intention or necessity by the entity to liquidate or significantly reduce the scale of its operations in order to survive. The financial statements of an entity are thus prepared on the basis that it will continue indefinitely, and an appropriate measurement base like the historical cost may be used to prepare these financial statements.

**Judgement for B in (a)**

- A clear understanding of the going-concern assumption as provided in the Statement of Concepts and the implications of applying this concept on the preparation of financial statements.
- Specific reference to Air New Zealand is not required
- Accrual Accounting also acceptable as an example

**(b)** It would be inappropriate for Air New Zealand to state the company's assets at the net realisable value basis. The company would need to consider the balance between qualitative characteristics. To revalue assets to their net realisable values would raise the reliability versus relevance issue. For example, whether the company provides information that is reliable and verifiable through the historical cost concept, or whether the company should estimate the net realisable value for its assets, which might make the information more relevant. However, it could be argued that Air New Zealand has not actually been declared bankrupt, and to use the net realisable values for its assets would give the wrong information to its stakeholders. Furthermore, the understandability and comparability qualitative characteristics could be compromised by the use of net realisable values for its assets, as this measurement basis might understate the values of the assets for a company that is still operating, but appears to be facing financial difficulties. Users of the information would have to read the accounting policies carefully to understand why asset values are significantly different from the historical cost figures, and they would not be able to compare financial statements from earlier periods of reporting.

The balance between cost and benefit would also have an impact, as Air New Zealand would probably need to spend a significant amount of money on valuation consultants to find out what the company's assets would be worth if they were to be sold off. The cost of obtaining this information might not bring any benefits to the organisation. Firstly, using net realisable values for a company's assets would signal that the auditors had serious concerns about the going concern of the company and were not prepared to approve the company's financial statements unless the statements were more reflective of the company's economic reality. Secondly, it could cause the company's actual collapse when it might have been possible to avoid this collapse through careful consideration of its operating costs and debts. Air New Zealand would need to consider the materiality and prudence factors, and disclose carefully in its annual report that the company is facing financial difficulties, so that stakeholders are kept informed of their financial status. However, if Air New Zealand understates its assets (a possibly result of using the net realisable value basis) it might compromise the qualitative characteristics of reliability, relevance, understandability and comparability in terms of the objectives of general purpose financial reports.

**Judgement for B in (b)**

- A clear explanation is given of how it could be difficult for Air New Zealand to apply the net realisable values with regards to the qualitative characteristics, and the other factors that will influence the characteristics. The candidate clearly demonstrates his/her understanding of the net realisable value basis.
- Minimum acceptable is: 3 out of 4 qualitative characteristics addressed, including Relevance and Reliability, plus discussion on Balance Between Qualitative Characteristics.

**Judgement for C in (b)**

- An explanation is given of how it could be difficult for Air New Zealand to apply the net realisable

values with regards to the qualitative characteristics, and the other factors that will influence the characteristics. The candidate demonstrates some understanding of the net realisable value basis.

- Minimum acceptable is: 3 out of 4 qualitative characteristics addressed, including Relevance or Reliability, plus reference to Balance Between Qualitative Characteristics.

**Overall Judgement for A in QUESTION TWO**

Answers (a) and B in (b) plus:

- Discussion demonstrates an outstanding level of critical and flexible thinking that clearly explains how the application of a going-concern assumption for an entity and an appropriate measurement base should be used.
- Discussion of the influences on qualitative characteristics and the clarity of explanations demonstrates an outstanding level of critical and flexible thinking.

**Overall Judgement for B in QUESTION TWO**

Answers (a) and B in (b)

**Overall Judgement for C in QUESTION TWO**

Answers (a) and C in (b)

**QUESTION THREE: Company Accounts – Interpretation and Analysis**

**(a)** Evaluation Report to the Bank Manager:

**(i)** Analysis of profitability:

Return on Assets was 0.55% in 2002. This has improved significantly to a positive 6.13% in the year 2003. This improvement implies that assets were being used much more effectively in 2003 to generate positive returns, compared with the negative returns of 2002.
In a similar manner, the Net Profit % shows a significant turn-around for Air New Zealand. It was making a negative return of 7.23% in the year 2002, but in 2003 had turned that around to a positive Net Profit % of 4.59%. This is due to having greater control over expenses. Although operating revenues have decreased, expenses have decreased at a greater rate proportionally. Key expense reductions are unusual items, interest (due to significant repayment of borrowings), and payments to suppliers and employees (due to staff cuts).
The profitability ratios of Air New Zealand indicate that the company has managed to improve its financial performance in 2003. Although these ratios are positive, they appear to be quite low returns and it is important that the company continue to improve its performance.

**(ii)** Analysis of liquidity:

The Current Ratio, if we refer to the ideal ratio being $2 : $1 or the acceptable current ratio of $1 : $1, shows that Air New Zealand may not have concerns with its ability to repay short-term debts. There has been a slight increase from $1.15 : $1 (2002) to $1.21 : $1 (2003). This is due to the decrease in current liabilities occuring at a proportionally higher rate than the decrease in current assets.
However, it is important to note that it is only slightly above the acceptable levels for the Liquidity Ratio and may pose short-term financial solvency risks for the organisation should any unexpected events occur. Furthermore, it is important to also look at the components of the current assets and current liabilities to assess, for instance, whether the company has a lot of accounts receivables that may result in bad-debt losses. It may be important to consider that the airline business can probably operate with a lower current ratio due to the cash nature of the business.

**(iii)** Analysis of financial stability:

The Gearing Ratio indicates that Air New Zealand is a very risky company, if we accept the conservative benchmark of 1 : 1 as the acceptable Gearing Ratio for any organisation in terms of safe financial stability. Air New Zealand's Gearing Ratio, while it has decreased from a very high 3.42 : 1 in the year 2002 down to 2.59 : 1, is still quite high as it shows that debt is still more than twice that of equity.
The Times Interest Earned Ratio indicates that Air New Zealand would have been in a very unfavourable position in the year 2002, as it had a negative 0.42 ratio, indicating that there were no earnings available to cover interest payments. Although the Gearing Ratio shows that Air New Zealand is still very highly geared in 2003, it has improved its Times Interest Earned Ratio to a very favourable 17.92 ratio. This indicates that Air New Zealand should not have any problems meeting interest on debt obligations.

**(iv)** Overall findings:

Overall, it may appear that Air New Zealand has improved its profitability, liquidity and financial stability in the year 2003. It should be safe for the bank to lend to the company. However, the analysis is limited to using financial information, while external factors such as increased competition or world recession may also impact on the future performance and position of the company.

**Relevant calculations to support Evaluation Report**

| | | **2003** | **2002** |
|---|---|---|---|
| **Profitability:** | | | |
| Return on total assets % = | Earnings before interest and taxes × 100<br>Average total assets | 233 × 100<br>(3700 + 3896) ÷ 2<br>= 6.13% | (33) × 100<br>(3896 + 8114) ÷ 2<br>= (0.55%) |
| Net profit % = | Earnings after tax × 100<br>Operating revenue | 166 × 100<br>3617<br>= 4.59% | (320) × 100<br>4424<br>= (7.23%) |
| **Liquidity:** | | | |
| Current ratio = | Current assets<br>Current liabilities | 1371<br>1137<br>= 1.21 : 1 | 1436<br>1248<br>= 1.15 : 1 |
| **Financial Stability:** | | | |
| Gearing ratio = | Total liabilities<br>Equity | 2668<br>1032<br>= 2.59: 1 | 3014<br>882<br>= 3.42 : 1 |
| Times interest earned = | Earnings before interest and taxes<br>Interest | 233<br>13<br>= 17.92 | (33)<br>78<br>= (0.42) |

**Judgement for B in (a)**

- Findings and conclusions on the profitability, liquidity and financial structure of the company are based on the analysis and interpretation of their calculations and the given financial information. (NOTE: ALL 3 areas are required.)
- Rationale or explanation of the reasons for changes in figures is given.
- Uses appropriate accounting and business terminology.
- Specifically addresses any areas of concern for the bank manager.
- Supporting calculations are indicated and included as an appendix to the report.
- A high level of relevant accounting and business language is used.
- A clear conclusion to any concerns the bank manager may have – if any – about the company's profitability, liquidity and financial stability is given. Conclusion may be 'yes' or 'no', providing clear justification given.
- Non-financial justifications may be included, but not comprise the whole answer.

**NOTE**: Candidates with incorrect calculations will have their report assessed in line with their calculations to determine their achievement for this part of the question.

**Judgement for C in (a)**

- Findings and conclusions on the profitability, liquidity and financial structure of the company are based on the analysis and interpretation of their calculations and the given financial information. (NOTE: ALL 3 areas are required.)
- Rationale or explanation of the reasons for changes in figures is given.
- Uses appropriate accounting and business terminology.
- Identifies areas of concern
- Supporting calculations are indicated and included as an appendix to the report.
- A conclusion to any concerns identified about the company's profitability, liquidity and financial stability is given. Conclusion may be 'yes' or 'no', providing some justification given.
- Non-financial justifications may be included, but not comprise the whole answer.

**NOTE**: Candidates with incorrect calculations will have their report assessed in line with their calculations to determine their achievement for this part of the question.

**(b)(i) Importance of evaluating the Statement of Cash Flows**

The Statement of Cash Flows summarises how an organisation's operating, investing and financing

activities have affected cash during an accounting period. The operating activities show cash flows directly related to the production and sale of the organisation's goods and services. Investing activities show cash flows related to the acquiring and selling of non-current assets and investments. Financing activities show cash flows related to equity capital contribution and rewards to owner(s) and debt borrowing and repayments.

Understanding a business's cash flows is important. For a business to survive and do well, it must create sufficient cash flows from its operations to pay operating costs, meet maturing debts and provide a return to its owners. The cash solvency of a business is provided by information in a Statement of Cash Flows. It is therefore important to evaluate the Statement of Cash Flows.

**(ii) Analysis of cash flows of Air New Zealand Ltd:**

Operating Activities:
Net cash received under operating activities was $146 million in 2001. This decreased to $56 million in 2002, but increased substantially to $523 million in 2003. It is of interest to note that one of the reasons for the increase in operating activities was due to the substantial reduction in interest paid on debt. Overall cash received from customers has almost halved, but in line with the reduction in cash received from customers, payments to suppliers and employees were also significantly reduced.

Investing Activities:
Air Zealand's net expenditure on investing activities has increased from $133 million in 2002 up to $217 million in 2003. This implies that Air New Zealand is targeting for future growth by its higher spending on the purchase of property, plant and equipment assets. There was $225 million spent on the purchase of property, plant and equipment in 2003 compared with the sale of $58 million of such assets in 2002.

Financing Activities:
Although it would appear that Air New Zealand has a negative cash outflow in 2003, the earlier positive cash flow in financing activities was due to significant debt borrowings of $1 480 million and share issues of $280 million in 2001. In 2002, Air New Zealand had significantly reduced its debt borrowings and was repaying a significant amount ($1 093 million) of borrowing. However the financing activities may indicate that the company has to borrow to repay debt. There was no payment of dividends to shareholders in the years 2002 and 2003.

**(iii)** Air New Zealand has an overall positive cash inflow in 2003 generated mainly by the significantly increased 2003 cash flows from operating activities. Its operating cash flows have also increased quite significantly from $146 million in 2001, to $523 million for the year 2003, and was sufficient to meet Investing and Financing outflows. The company also has a strong closing cash position of $765 million and, with historical financial backing from the New Zealand Government, the bank manager should not be concerned about Air New Zealand's performance and position.

**Judgement for B in (b)**
- Clear findings on cash flows and any concerns that the evaluation of the Statement of Cash Flows may cause for the bank manager.
- Report uses appropriate accounting and business terminology.

**Judgement for C in (b)**
- Clear findings on cash flows and any concerns that the evaluation of the Statement of Cash Flows may cause.

**(c)(i) Reasons Air New Zealand may want to repurchase its shares from its shareholders:**

- To improve earnings per share or rate of return for its shareholders. The company may also want to strengthen its future dividend flow by reducing the number of shares on issue so that the same total dividend will be paid on fewer shares in the future.

- To avoid a takeover, the company may wish to reduce the number of shares held by shareholders in the share market.

- To stimulate an increase in the company's share market price. By driving up its share price to enhance its market image, and offering to repurchase its shares at an appropriate price, the company can create a demand for its shares in the share market.

- The company can repurchase shares to gain more control over who has ownership of its shares.

- To invest surplus cash (the cash flow statement of 2003 shows a strong closing cash position of $765 million). The company may consider it the best way to invest its cash (because of any of the above reasons).

**(ii)** A share buy-back is like a distribution to shareholders. If permitted by the rules laid down in the company's constitution, the share capital of a company may be repurchased by the company as a means of improving the rate of return to shareholders. Similar to dividends, share buy-backs can only happen if the directors certify that the company will meet the solvency test, after the dividends or share buy-backs have been made.

The Companies Act 1993 requirements before a company may pay dividends or make share buy-backs:

(Extracted from the Companies Act 1993, paragraph 4: Meaning of 'solvency test')

For the purposes of this Act, a company satisfies the solvency test if –
(a) the company is able to pay its debts as they become due in the normal course of business; and
(b) the value of the company's assets is greater than the value of its liabilities, including contingent liabilities.

**Judgement for B in (c)**
- two valid reasons for the share-repurchase
- Clear discussion of the Companies Act 1993 requirements before any share buy-backs can be made by a company. The candidate should clearly indicate that the solvency test is to be applied as if the share buy-back has happened, and if the test fails then share buy-backs should not happen, as the company will be placing itself in financial risk.

**Judgement for C in (c)**
- one valid reason for the share-repurchase.
- The candidate should indicate that the solvency test is to be applied.

**Overall Judgement for A IN QUESTION THREE**

B in two of (a), (b) and (c) plus:

- Outstanding level of critical and flexible thinking shown by evidence of wider reading and background knowledge of the company and its current situation in the economy.
- Identifies that Air New Zealand, while it appears to have high risk in terms of its debt gearing, has improved all of its ratios.
- Identifies clearly that, despite the financial risk caused by high levels of debt and overall decreased operating levels, the company appears to have significant positive cash flows from operating activities in the year 2003.
- Demonstrates an awareness of the limitations of an evaluation based solely on financial information and ratio analysis, and identifies that further information would be required for a proper evaluation to be conducted.
- Demonstrates knowledge of Air New Zealand and the importance that the New Zealand Government has placed on its continued survival for the New Zealand economy.
- Evidence of an outstanding level of critical and flexible thinking illustrated by the discussion, and the clarity of their explanations in relation to any concerns about the share buy-backs being made by the company.

**NOTE**: For parts (a) and (b) of Question Three, discussion may vary slightly from the schedule. Judgement is made on the strength of their discussion in relation to the topic area.

**Overall Judgement for B in QUESTION THREE**

B in two of (a), (b) and (c)

**Overall Judgement for C in QUESTION THREE**

C in two of (a), (b) and (c),

*or*

C in one of (a), (b) and (c) + B in one of (a), (b) and (c)

**Performance Summary Scholarship Accounting (93203)**

<table>
<tr><th colspan="2">Question</th><th colspan="2">Possible performance</th><th>Overall judgement for each question</th></tr>
<tr><td rowspan="13">ONE</td><td colspan="3">PART A</td><td rowspan="13">A or B or C</td></tr>
<tr><td>(a)</td><td>B</td><td rowspan="3">A or B or C</td></tr>
<tr><td>(b)</td><td>B</td></tr>
<tr><td>(c)</td><td>B</td></tr>
<tr><td colspan="3">PART B</td></tr>
<tr><td>(a)</td><td>B</td><td rowspan="3">A or B or C</td></tr>
<tr><td>(b)</td><td>B</td></tr>
<tr><td>(c)</td><td>B or C</td></tr>
<tr><td colspan="3">PART C</td></tr>
<tr><td>(a)</td><td>B</td><td rowspan="3">A or B or C</td></tr>
<tr><td>(b) (i)</td><td>B</td></tr>
<tr><td>(c) (ii)</td><td>B or C</td></tr>
<tr><td rowspan="2">TWO</td><td>(a)</td><td>B</td><td rowspan="2"></td><td rowspan="2">A or B or C</td></tr>
<tr><td>(b)</td><td>B or C</td></tr>
<tr><td rowspan="3">THREE</td><td>(a)</td><td>B or C</td><td rowspan="3"></td><td rowspan="3">A or B or C</td></tr>
<tr><td>(b)</td><td>B or C</td></tr>
<tr><td>(c)</td><td>B or C</td></tr>
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