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93203A



932031

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# TOP SCHOLAR



NEW ZEALAND QUALIFICATIONS AUTHORITY  
MANA TOHU MĀTAURANGA O AOTEAROA

## Scholarship 2009 Accounting

9.30 am Monday 16 November 2009

Time allowed: Three hours

Total marks: 48

### ANSWER BOOKLET

Check that the National Student Number (NSN) on your admission slip is the same as the number at the top of this page.

Use this booklet to answer all questions from Question Booklet 93203Q.

Write ALL your answers in this booklet.

Begin the answer to each new question (but not part of a question) on a NEW page. Number each question and part of the question carefully and legibly.

Show ALL working.

Check that this booklet has pages 2–22 in the correct order and that none of these pages is blank.

**YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.**

Question Two

2.

- c) The concept of sustainability reporting has become increasingly popular in recent years and has been embraced by companies such as Manaaki Whenua - Landcare Research and Sanford Limited. Sustainability is the capacity to maintain a certain process or state indefinitely, and ~~can~~<sup>has</sup> been expressed as meeting the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability can be delivered in a number of ways and using the example of Sanford this company's key goals for achieving sustainability include promoting all aspects of sustainability in governance respecting stakeholders, respecting the environment and generating economic benefit for New Zealand stakeholders and the company itself. Both Landcare and Sanford have acknowledged the importance of Corporate Social Responsibility<sup>in achieving sustainability</sup>, where the organisation considers the interests of society by taking responsibility for the impacts of their activities on stakeholders and the environment. Corporate social responsibility reflects key values and ~~philosophy~~ philosophies that are imbedded in the organisation and evident in day to day activities. The triple bottom line is important in sustainability reporting, where companies focus not just on profit but also the ~~in~~ social and environmental impacts of their business operations. The economic aspect is of course important as it is a sustainable company that is likely to have

A sound long term future and remain profitable.

Economically SanFord has implemented sustainability by ~~existing~~ broadening decision-making processes to include social and environmental aspects and also encouraging supplier participation in sustainability practices. The environmental side is important and reflected in the saying in SanFord's ~~2008~~ report, "We do not inherit earth from our ancestors, we borrow it from our children." Companies look at initiatives to reduce both resource usage and their carbon footprint. As SanFord has much direct contact with marine life they implement strategies to minimise harm ~~as part of~~ as part of sustainability practices. Landcare has the Carbon Emissions Measurement and Reduction Scheme that has been recently implemented as part of their sustainability practice. NZ Carbon Emissions Tracking Scheme relates directly to the issue of sustainability and Landcare was carbon neutral in 2008. It is hoped that carbon will become a cost of production ~~in~~ <sup>accepted</sup> in years to come.

~~The social~~ Social sustainability is also important with respecting stakeholders and promoting safe and healthy environments for employees and customers as well as strengthening relationships with the wider community. SanFord has many internal socially sustainable schemes such as first aid training and the Turanga plant's 12 week quit smoking programme. They also have much community involvement with partnerships such as Kiwccan, participation in the

Corporate Blood NZ Blood Corporate Shuttle Service and the clonation of low value fish to the conservation reserve Penguin Palace //

- b) There are many purposes and benefits of reporting on sustainability issues. First of all there are the specific purposes of benchmarking where sustainability performance can be assessed with regards to codes, laws and standards. It also allows sustainability measures to be compared between years, which is seen with Landcare who has been reporting sustainability since 1999.

There is also the way NZ is seen very much as a clean green country and companies would want to be seen as supporting that image. Being sustainable ensures companies are likely to retain and attract customers who are likewise interested in environmental issues. For a company such as Sunford who relies on there being fish to catch, sustainability is of clear importance as without the sustainability the business would simply go out of business in the long run. As a result of Mt Manaaki Whenua Landcare Research's existence is primarily for the purpose of taking care of the land. Manaaki is a Maori word meaning to cherish, conserve and sustain and therefore in its very name sustainability is shown to be at the heart of company operations.

Thus sustainability reporting is of clear importance and great benefit. Reporting sustainability shows interested parties that a company is being proactive in ~~present~~ the use of sustainable practice and taking responsibility for the impacts of their operations socially and environmentally, strengthening stakeholder relationships. Companies such as Sanford and Landcare want to be seen as making a difference in their environment.

Question Three

3. There are disadvantages and advantages for both preparing a statement of comprehensive income classified by nature or preparing one classified by function.

A comprehensive income statement classified by nature aggregates expenses by nature on the face of the income statement, for example for Dust mite Limited, Depreciation expense, employee benefits costs and purchases. No further reallocation is then needed to allocate expenses to their function. This ~~method~~ type of classification has the advantage of being inexpensive and simple as there is no need for arbitrary judgments. However, As gross profit or cost of goods sold are not calculated, this type of comprehensive statement of comprehensive income is useful for reporting for service entities that do not have cost of goods sold. Due to its simplicity it can also be useful for smaller ~~countries~~ companies in preparing their financial statements. Use of this form of income statement therefore depends on size and nature of a company ~~as well as~~ ~~but~~ and for comparative purposes, if similar entities are using a comprehensive income statement classified by nature, the company should likewise report in this way.

A comprehensive income statement classified by function aggregates expenses according to their function for example for Dust mite Limited, Cost of Sales, Selling and distribution expenses and administrative expenses. The classification of expenses

By nature is then disclosed in a note, as seen in note 4 in Resource 2. This ~~is~~ An income statement by function often provides more relevant information than one by nature, especially for trading entities as the cost of goods sold calculation is an important one, as seen by the significant size of cost of sales (\$3 975 000) for Dustmite Limited. From cost of goods sold and gross profit ~~percentages~~ percentages such as gross profit and mark-up can be calculated which are important in decision making processes of management. Especially with the economic climate as it is and has been in recent months, profit margins would be an important calculation that would help Dustmite Limited determine whether profit margins were being retained or adversely affected by the harsh economic climate. Dustmite Limited would use the Statement of Comprehensive Income classified by Function shown in Resource Two due to its relevance for decision-making as a trading entity.

An income statement by function does have disadvantages, one such being the need for considerable judgment in the allocation of expenses ~~to~~ most significantly between distribution and cost of sales functions. ~~This~~

Judgment required for allocation may be time consuming, however directors' allocation is still likely to be reliable and thus this form of income statement is the best to choose for Dustmite Limited as a trading entity.

6. ~~The relevant range~~

- a) The relevant range is the range of output that can be produced using the given level of resources. For Chris, this relevant range is 0-4500 biscuits per month. Fixed costs are costs that remain constant (fixed) over the relevant range of 0-4500 biscuits. ~~Chris' fixed costs of \$1150 will be required to paid regardless of whether 0 biscuits are made or the maximum 4500 biscuits are made. For Chris to exceed this maximum level of production, new resources would need to be obtained, thus increasing fixed costs.~~ As the number of biscuits produced increases, fixed costs per unit will decrease, due to its constant total of \$1150. ~~An example of~~

- b) The direct material cost per biscuit means the cost of the raw materials that can be directly attributed to a particular biscuit. This is an example of a variable cost, where ~~as~~ variable costs increase as total production increases. The increase in direct material cost will be constant per unit (that is per biscuit) and will increase proportionately to changes in Chris's output. ~~Examples of direct material~~ Direct material costs for Chris' business venture would be the ingredients put into the biscuits, examples being flour, sugar and butter. These can be directly attributable as recipes outline the weight/volume of ingredients used in the baking of the biscuits.

c) Fixed costs: \$1150

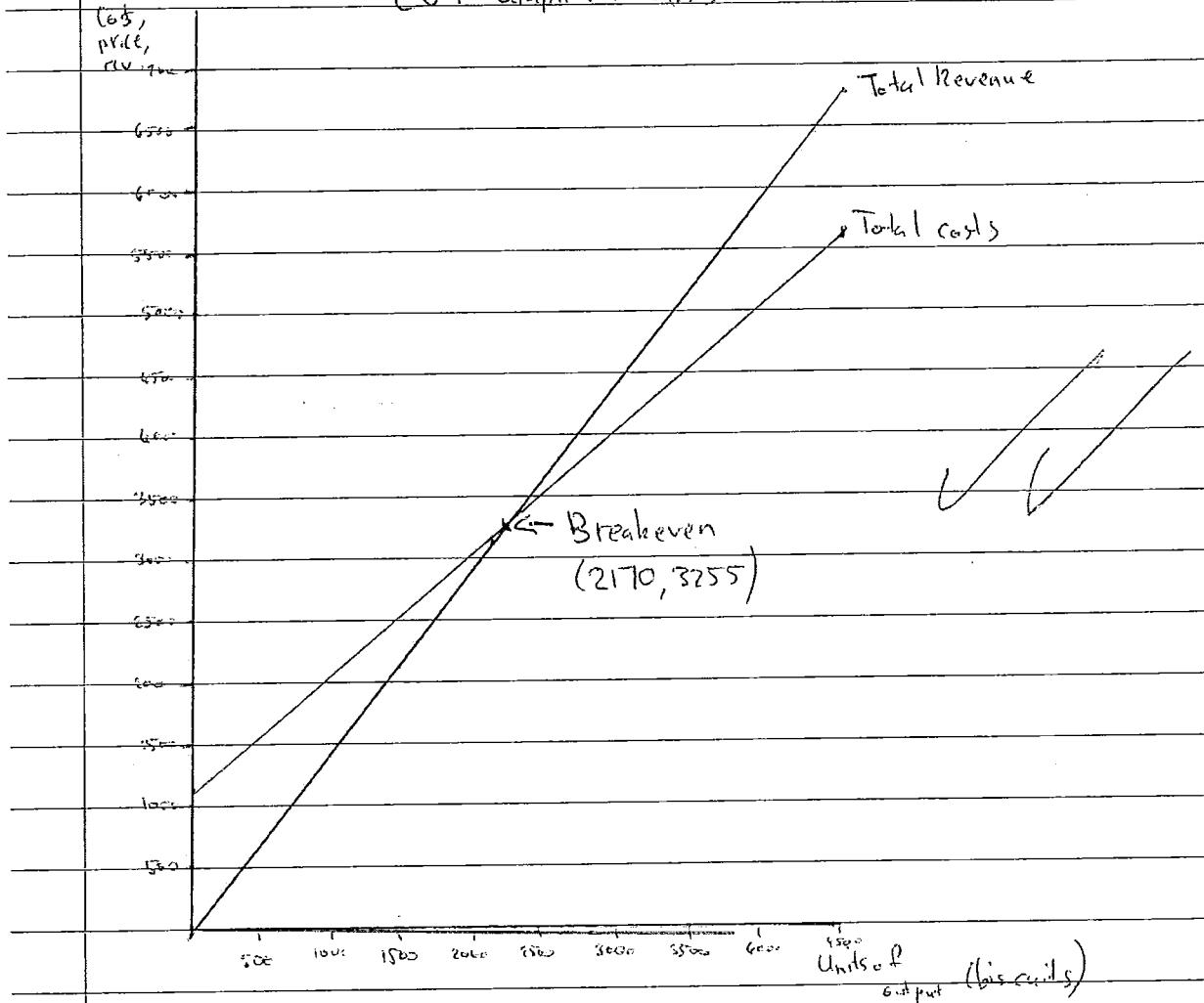
$$\text{Variable costs (per unit)} = 0.22 + 0.63 + 0.12 = \$0.97.$$

$$\text{CM/unit} = \$1.50 - \$0.97 = \$0.53$$

$$\text{Break-even (units)} = \frac{1150}{0.53} = 2170 \text{ biscuits (hence)}$$

$$\text{Break-even (sales dollars)} = 2170 \times 1.50 = \$3255$$

CVP Graph for Chris



d)

$$(1) \text{ Margin of Safety} = \frac{2800 - 2170}{2800} = 22.5\%$$

This means that at the expected number of biscuits sold of 2800, Chris can afford for sales to fall by 22.5% before a break-even is reached and a loss is made. This appears satisfactory. This calculation is

important because it determines for Chris how much sales could fall should new competition enter the market or pricing the effect of pricing policies. With a margin of safety of 22.5%, Chris appears safe from these effects (a profit should be retained) but a low marginal safety (below 20%) indicates high risk if new competition enters the market.

(i)	Sales (2800 x \$1.50)	4200
	Variable Cost (2800 x \$0.47)	2716
	Contribution margin	1,484
	Less Fixed costs	1,150
	Equals Profit	<u>\$334</u>

(This profit appears quite low but considering the low-scale in part-time nature of the business, this may be satisfactory).

e) Profit of 720 units =  $\frac{720 + 1150}{\$0.53} = \$3202 \cancel{3444}$

3529 is the minimum number of biscuits that need to be sold to ensure a profit of at least \$720 per month.

f) There are a number of factors that need to be considered. First of all, is Chris able to produce more than 4500 biscuits a month with other commitments he has is the question he must ask himself. A new machine would need to be purchased and increased to extend the relevant range and the cost of this plus any

financing costs (interest) must be considered. If direct material ~~costs~~ increases increasingly significantly, could Chris look at ~~a~~ new suppliers that may reduce this area of variable costs by buying more significantly in bulk. It is important also to consider demand for the biscuits; will Chris be able to find enough customers in the local coffee's to sell more than 4500 biscuits a month? //

4. EBITDA stands for Earnings Before Interest tax, depreciation and amortisation. This is a measure that is very limited in its usefulness to investors. A company such as Restaurant Brands likes to report ~~set~~ a measure such as EBITDA because, as can be seen in Resource Three, all areas of Restaurant Brands (excepting Pizza Hut Victoria~~2~~ which is discontinuing operations) show a positive result. This can then be contrasted to actual profit for ~~the~~ KFC ~~or~~ Pizza Hut and Starbucks. ~~where~~ Pizza Hut has been showing increasing negative growth for the last two years. EBITDA can be a way to show a 'positive something' to investors when results are quite negative.

EBITDA is said to have usefulness as a measure of cash flow, however this is not really the case, because although depreciation and amortisation are significant non-cash expenses, both tax and interest are included in cash flow. In addition to this the income statement shows incomplete cash flows as it does not show the effects of changes in inventories and other such measures seen in the cash flow statement that must be found from the Balance Sheet. Therefore EBITDA is not a useful measure of cash flow for investors to base decisions on and a more reliable measure of free cash flow can be obtained by deducting <sup>net</sup> net inflow from operating activities (cash flow statement) capital expenditure.

b) An investor would make use of the segment report for Restaurant Brand as in segment reporting, the company cannot hide negative business areas behind the positive results. This is especially significant considering that although KFC has been showing strong growth, Pizza Hut has seen a decline in sales as well as a net deficit for the past two years. As is outlined in resource four, KFC now accounts for two-thirds of RB's (Restaurant Brand's) sales but Pizza Hut's negative and extremely poor performance is being offsetting strong growth in KFC. Segment reporting gives investors information on the specific businesses within RB, so that informed decisions could be made based on knowledge of not just overall growth but also that Pizza Hut has been struggling and as is said in Resource five is the company's "Achille's heel".

	2008	2007	2006
Return on total assets	9.57%	5.67%	NA
Return on equity	$\frac{11,044}{(5,837 + 32,912)} = 32.3\%$		

Return on total Assets:

$$2008: \frac{[(112,969 + 117,736) : 2]}{11,044} = 9.57\%$$

$$2007: \frac{[112,969 + 117,736] : 2}{11,044} = 9.57\%$$

$$2007: \frac{11,542}{11,044} = 5.67\%$$

$$2006: NA$$

## Return on equity

Net profit

### Return on total assets

Formula:  $\frac{\text{NP before interest} + \text{tax}}{\text{Average assets}}$

$$2008: 17,655 \div [(112,969 + 117,734) \div 2] = 14.79\%$$

$$2007: (1,657) \div [(117,734 + 109,290) \div 2] = -0.93\%$$

$$2006: \text{NA} \quad -0.93\%$$

This calculation shows the return on total assets and demonstrates how efficiently resources have been utilised by Restaurant Brands. The increasing trend from the negative 0.93% to 14.79% is very ~~signifi~~ satisfactory indicating improving efficiency. This has largely arisen through cessation of losses from Pizza Hut Victoria (notice \$(13,856) deficit for 2007 to compared to only \$(81) in 2008).

## Return on equity

Formula:  $\frac{\text{NP}}{\text{Average equity}}$

$$2008: 11644 \div [(35,837 + 32,631) \div 2] = 32.26\%$$

$$2007: 6,542 \div [(32,631 + 39,16) \div 2] = 17.09\%$$

$$2006: \text{NA}$$

There has been a very significant increase in this percentage as well which is also very satisfactory, demonstrating increasing efficient use of capital and equity.

## Profit margin:

Formula:  $\frac{\text{Profit} + \text{Gross profit}}{\text{Cost of sales}}$

$$2008:$$

Total debt-to-equity ratio:

Formula:  $\frac{\text{Total liabilities}}{\text{Total equity}}$

$$2008: \frac{771302}{35837} = 2.15: 1$$

$$2007: \frac{85167}{32631} = 2.61: 1$$

$$2006: \frac{65330}{63910} = 1.49: 1 \quad \checkmark$$

In the last two years debt-to-equity ratio decreased which is satisfactory as ~~the~~ more less liabilities + equity renders ~~the~~ Restaurant Brands more financially stable. This has likely arisen as liabilities (especially current liabilities classified as held for sale) have decreased as Pizza Hut Victoria activities have come to a close.

Although this is a satisfactory trend, the equity ratio of 2.15:1 is significantly higher than 1.49:1 in 2006. This has good sides as it means that RB is not being overprotective of its resources but it also means the company is not as financially stable.

Resources 4 and 5 effectively demonstrate the differences between the three segments of Restaurant Brands.

Pizza Hut as the Achille's Heel has been struggling and with many stores closed in 2008 ~~sign~~ three more were closed in the first half of the 2009 financial year.

KFC has however been doing extremely well with improved facilities and fresh menu ideas. Overall KFC is doing satisfactorily as demonstrated by positive return on equity, assets and debt-to-equity percentages/ratios. The economic climate has shaken RB somewhat as seen by resources, however KFC is a vital ~~reson~~ buffer against a downturn in consumer spending.

$$\text{5. Depreciation plant & equipment } 15\% \times 180,000 = \$27,000$$

$$\text{Depreciation buildings: } 2\% \times 854,000 = \$17,280$$

### Clown Limited

#### Statement ~~Balance~~ of Financial Position

as at 31 March 2009

Note	\$	\$	\$
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#### Current Assets

Accounts receivable	1.	73,986	
Cash		15,120	
Inventory	2.8	179,400	268,506

#### Non-current Assets

##### Property, plant & equipment

Total carrying amount	3.1	1,946,400	1,946,400
Total Assets.			2,214,906

#### Less Liabilities

##### Current Liabilities

Accounts payable	4.	20,160	
Income tax payable		18,720	
Current portion of loan		72,000	110,880

##### Non-current Liabilities

Long-term loan	4.	668,000	668,000
Total Liabilities			758,880

#### Net Assets

\$1,456,026

##### Equity

Contributed equity	1.	1,680,000	
Retained earnings		223,920	
Revaluation surplus		156,000	
Total equity			<u>\$1,459,920</u>

## Notes to the Financial Statements:

### 1. Accounts Receivable

Accounts Receivable	✓ 77,880
Less Allowance for doubtful debts	✗ 3,894
	✓ 73,986

### 2. Inventory

Raw materials	✓ 26,910
Work-in-progress	✓ 71,760
Finished goods	✓ 80,730
	✓ 179,400

### 3. Property, plant and equipment

As at 31 March 2009

Opening carrying amount  
Depreciation  
Closing carrying amount

### 3. Property, plant and equipment

As at 31 March 2009	Land	Buildings	Plant & equipment	Total
Opening carrying amount	1,020,000	727,680	290,000	2,037,680
Depreciation	✓ (17,280)	✓ (76,000)	✓ (91,280)	
Closing carrying amount.	1,020,000	710,400	216,000	1,946,400
As at 31 March 2009.				
Cost or valuation	1,020,000	864,000	480,000	2,364,000
Accumulated depreciation	0	(153,600)	(264,000)	(417,600)
Closing carrying amount	1,020,000	710,400	216,000	1,946,400

k. Depreciation is calculated on the straight-line basis at  
at the following rates:

Plant and equipment: 15% pa  
Buildings: 2% & pc.

#### 4. Long-term loan

Loan	720,000
Current portion of loan	72,000
	648,000

The long-term loan is to be paid in ten equal instalments  
with first payment being made on 31 December 2009.

The loan is secured over the company's land. Interest  
is charged at 8% per annum. /A

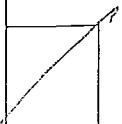
**Question  
number**

Assessor's  
use only

1. The purchase price for Cristiano Ronaldo was as 80 million pounds, or NZ \$10.4 million for ~~Manchester United~~ Real Madrid.

The definition for an asset is: a resource controlled by the entity as a result of past events from which future economic benefit is expected to flow to the entity. The recognition criteria are: it is probable that any future economic benefit associated with the item will flow to or from the entity; and the item has a cost or value that can be reliably measured.

The purchase price of Cristiano ~~Ronaldo~~ Ronaldo can thus be considered an asset. It is a resource controlled by the entity as ~~first~~ Cristiano Ronaldo may now only be played by that particular football club and his allegiances have been ~~set~~ given to this club as a result of a post-transmission ~~set~~ in January 2009 between Manchester United and Real Madrid. Future economic benefit is expected to flow to the entity as ~~first~~ Ronaldo's fame brings increased interest to the football club increasing ticket sales for matches and increasing sales for the football club apparel. As Ronaldo is such a well known player who most certainly will be played in football matches and have a significant influence on the success of the club it is probable future economic benefit will occur and the purchase price can be reliably measured through the accepted 80 million pound bid between the two clubs. Thus the purchase price of Cristiano Ronaldo is an asset.



The weekly salary paid to a player such as Ronaldo would be considered an ~~expense~~ expense.  
The element definition for an expense is decreases in economic benefit during the accounting period in the form of outflows of cash depletions of assets or increases in liabilities which result in decreases in liabilities, and are not related to transactions with equity participants.  
The same recognition criteria as for an asset apply.  
The weekly salary is an expense because it decreases economic benefit as outflows of cash are paid from the football club, decreasing the bank asset.  
This will decrease equity through a reduction in profit, and does not relate to transactions with ~~e.g.~~ shareholders as it is a transaction between the football club and the player. It is probable the future outflow of economic benefit will occur, because the football club is legally required to pay salaries to their players and can be reliably measured through an agreement between the player and the club. For Ronaldo this is £180,000 pound (NZ \$430,000) a week, and although currently this is expected only it can still be reliably measured. The weekly salary paid to Ronaldo is therefore an expense of the football club.