

No part of the candidate evidence in this exemplar material may be presented in an external assessment for the purpose of gaining credits towards an NCEA qualification.

3

91408



914080



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD
KIA NOHO TAKATŪ KI TŌ ĀMUA AO!

SUPERVISOR'S USE ONLY

Level 3 Accounting, 2016

91408 Demonstrate understanding of management accounting to inform decision-making

2.00 p.m. Friday 18 November 2016
Credits: Four

Achievement	Achievement with Merit	Achievement with Excellence
Demonstrate understanding of management accounting to inform decision-making.	Demonstrate in-depth understanding of management accounting to inform decision-making.	Demonstrate comprehensive understanding of management accounting to inform decision-making.

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

Pull out Resource Booklet 91408R from the centre of this booklet.

You should attempt ALL the questions in this booklet.

If you need more room for any answer, use the extra space provided at the back of this booklet.

Check that this booklet has pages 2–14 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.

Merit

TOTAL

15

ASSESSOR'S USE ONLY

Notes:

- Ignore GST for all calculations.
- For any required calculations, you must provide detailed and labelled workings. Labelled workings may be assessed.
- Refer to the information provided in **Resource Booklet 91408R** to answer all questions.

QUESTION ONE

- (a) Define the cost concept "relevant range", and explain a factor that will limit the relevant range for *Te Kete Mātauranga Crafts (TKMC)*.

Note: You are NOT required to calculate relevant range.

The relevant range is the level of possible output (flax basket production), given TKMC's current resources. This means is the range in which variable costs will not change over the range of output, and anything ^(exceeding) beyond this range will require an increase in variable costs. For example if TKMC have a limited number of experienced weavers, production/output of flax baskets is limited to the relevant range possible with the number of weavers.

- (b) If selling price is \$70 per unit per kete, variable costs are \$35 per kete, and fixed costs are \$11 340 per annum, calculate the contribution margin for each kete.

$$\begin{aligned}\text{Contribution margin} &= \text{selling price} - \text{variable costs} \\ &= \$70 - \$35\end{aligned}$$

Contribution margin: \$35 (per kete)

- (c) Awhina and Pita want to produce a profit of \$14 000 in TKMC's first year of operation. Calculate how many kete they would need to sell to achieve this profit target.

$$\begin{aligned}\text{Profit target} &= \frac{\text{fixed costs} + \text{profit target}}{\text{contribution margin}} \\ &= \frac{11340 + 14000}{35}\end{aligned}$$

Targeted kete production to achieve profit of \$14 000: 724

- (d) (i) Calculate the margin of safety in terms of the number of kete (assuming that TKMC has achieved the targeted kete production from (c) on the previous page.)

ASSESSOR'S
USE ONLY

$$\text{Margin of safety} = \frac{\text{total sales}}{\text{contribution margin}} - \frac{\text{total revenue}}{\text{break even sales}} = 724 - 324$$

$$\text{break even} = \frac{\text{fixed costs}}{\text{contribution margin}} = \frac{11340}{35} = 324$$

Margin of safety: 400 number of kete

- (ii) Explain the concept of "margin of safety", and apply this to Awhina and Pita limiting their student loans.

margin of safety is the margin that Awhina and Pita can lose/gain while still breaking even. If they reach their profit target of \$14 000, selling 724 kete, their margin of safety is 400 kete (meaning they can lose 400 sales and still break even). Any sales made above the break even point (324 kete sales) is profit for Awhina and Pita and can go towards limiting their student loans. ~~if they reach~~ Their profit target of \$14 000 means they will have an allowance for loss of sales of 400 kete before they go below breakeven (make a loss). This is a positive margin of safety for TKMC and will help limit their student loans. //

- (e) Justify the importance to Awhina and Pita of preparing and regularly updating a production budget for TKMC.

It is important for Awhina and Pita to prepare and regularly update a production budget for TKMC in order to plan / estimate potential output / production based on their current resources.

Without a well-updated production budget, TKMC may not be able to meet customer demand for ~~these~~ as their estimates ^{for production} may be too far off actual production for TKMC.

QUESTION TWO

- (a) Complete the Cash Budget below for TKMC showing the receipts and payments for October, November, and December 2016.

TKMC Cash Budget

	October	November	December
Receipts			
Grant from iwi	2000	0	0
Cash sales	700	2 450	4 200
Cash from accounts receivable	630	630 1720	1260 1260
TOTAL RECEIPTS	2 700	3 080	5 460
Less payments			
Cellphone costs	55	55	55
Other fixed operating expenses	275	275	275
Storage rental to marae committee	100	100	100
Vehicle expenses	140	140	140
Vehicle loan	1 000	1 000	1 000
Wages to weavers	600	1 650	2 400
Other variable costs	100	275	400
TOTAL PAYMENTS	2 270	3 495	4 370
Surplus (deficit) of cash	430	(415)	1 090
Opening bank balance	250	680	265
Closing bank balance and available to cover university costs	680	265	1 355

ASSESSOR
USE ONLY

CC

CC

V

V

C

V

.

.

CC

CP

12-

- (b) Justify whether the Cash Budget you completed on page 6 indicates that TKMC will help Awhina and Pita limit their student loan debt.

ASSESSOR'S
USE ONLY

Include in your answer:

- specific examples from the cash budget to support your explanation as to whether TKMC will help to limit the student loan debt
- an explanation of why Awhina and Pita need to understand that TKMC's cash budget is estimating monthly kete sales.

From the evidence in the cash budget showing the estimated cash inflow and outflow for the first 3 months of operations, their hopes of ~~gaining~~ ~~profit~~ using TKMC to help limit their student loan debt is looking very promising. At the end of each of the 3 months is a forecasted cash surplus ^(October \$680, November \$65, and December \$1355) which ^{gives} Awhina and Pita a total of \$2300 closing bank balance at the end of the first 3 months of \$1355 to be available to cover university costs and pay off/limit their student ^{loan} debt. Awhina and Pita do, however, need to understand that TKMC's cash budget is only estimating monthly kete sales, because the first few months may not necessarily be as successful as planned due to people not knowing about TKMC etc. I do believe, however, that the estimates are quite realistic, with only 20 kete sales in the 1st month, 55 in the second and growing to 80 in the 3rd - so they have obviously taken into account these factors. //

E

5

The following Planning Template is provided for you to use to develop ideas for your report.

ASSESSOR'S
USE ONLY

Recommendation: Awhina and Pita should set up a mobile-friendly website to expand their business - TKMC.	
Financial considerations	Non-financial considerations
<p>↑ costs</p> <p>Fixed costs will increase due to website expense $\\$30/\text{month} = \\$360/\text{year}$ Fixed costs = $\\$11\,700/\text{year}$</p> <p>Variable costs increase to $\\$40$ (+$\\$5$ for delivery bags) + increased wages if more staff are needed</p> <p>May need to ↑ rent of shed for more space</p> <p>Going by first 3 months, if the next year follows same trend TKMC will be very profitable.</p>	<p>Kete are increasingly popular with both tourists and locals</p> <p>Experienced staff could easily pass on knowledge/training</p> <p>Shed storage may run out</p> <p>More staff may be needed</p> <p>Location: access to flax for free (+agreement w council)</p>

I recommend that Awhina and Pita should expand TKMC by setting up a mobile-friendly website enabling customers to order and pay online. If TKMC is successful ^{in paying} ~~after~~ off their student loan debt after the first year of university. This is a strategic business decision that will ^{impact} ~~require~~ the business in the future, so it is important that Awhina and Pita consider both financial and non-financial ^{information} ~~factors~~ to inform their decision-making. ^{Both} ~~The difference and importance between~~ non-financial and financial information ^{is important} in the informing of decision-making as non-financial information informs us on things such as consumer preferences, location, skills etc. (popularity of a product)

More answer space is available on the next page

that will affect the outcome of the decision in a non-financial manner. Financial information is also very important to consider as it gives indications as to whether the business will be able to sustain the impacts of the decision.

There are numerous reasons that I ~~recommend~~ ^{recommend} Awhina and Pita expand their business TKMC if it is successful in paying off their student loans in the first year of university. The first reason is the increase in sales that will come about due to the mobile-friendly website allowing customers to buy online since the kete are becoming increasingly popular with tourists and locals, (there is ~~high~~ increasing demand for the kete - Flax baskets), the website will make it easier and more convenient for people who are interested in kete to ^{make a} purchase.

Awhina and Pita will need to take into account increasing costs that will come about with the ~~business~~ expansion of TKMC, but I don't think this should turn them away from making the decision to expand, I will explain why:

- Fixed costs will increase to \$11700 per yr due to the website expense \$30/month = \$360 per year + ^(current fixed costs) \$11340 = \$11700, and variable costs ^{more (50%)} will increase by \$5 for post bags, and if staff are hired, an increase in wages of \$10 per kete would make variable costs \$50. This would ~~this sounds bad but the breakeven would~~

hello.

Extra space if required.

Write the question number(s) if applicable.

ASSESSOR'S
USE ONLYQUESTION
NUMBER

3

make the breakeven 585 kete sales, however this is still less than the projected sales of 724 kete baskets (\$14000 profit) and TKMC would still have a positive margin of safety of \$139 (number of kete)

Based on the budgeted cashflow for December, if TKMC continued at that same selling rate for the first year, receipts would be \$5460 and payments would be \$4570 (no vehicle loan repayment (paid off) ^{plus an} increase in variable costs) which still leaves ^{the closing balance with} a cash surplus of \$890 - without even accounting for the increase in sales that will come about due to the mobile-friendly website enabling customers to purchase kete online.

Having factored in a 50% increase in the number of staff, the increased fixed costs ~~and~~ due to website expenses, AND increased variable costs due to post bags of \$5, I can still recommend that Awhina and Pita should expand their business (TKMC) by setting up the mobile friendly website. This is because the financial considerations, will be far outweighed by the ~~increase~~ non financial considerations - keeping up with

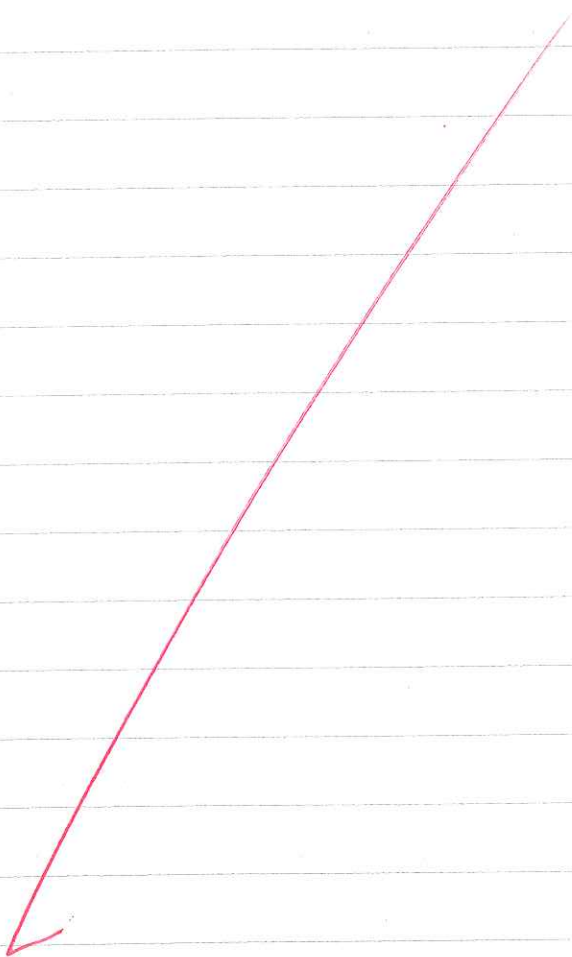
Extra space if required.

Write the question number(s) if applicable.

QUESTION
NUMBER

technology, making their product more readily available to customers and delivering further afield - all which will contribute to increased sales for TKMC.

Go for it Awhiana and Pita ☺ //



Merit exemplar 2016

Subject:		ACCOUNTING	Standard:	91408	Total score:	15
Q	Grade score	Annotation				
1	6	<p>The defined relevant range and explained a factor that limited relevant range</p> <p>All three calculations were correct.</p> <p>Margin of safety was explained and linked to the limiting of the student loan.</p> <p>Some aspects of a production budget purpose was applied.</p>				
2	5	<p>12 correct entries in the cash budget.</p> <p>A specific example given to limiting the student loan debt.</p>				
3	4	<p>A recommendation was made in context.</p> <p>Two examples were given to show an understanding of financial information.</p>				