Assessment Schedule – 2013 Accounting: Demonstrate understanding of management accounting to inform decision-making (91408)

Assessment Criteria

Achievement	Achievement with Merit	Achievement with Excellence		
Demonstrate understanding – involves preparing financial information and applying management accounting elements to inform decision-making, based on financial and non-financial information.	Demonstrate in-depth understanding – involves preparing detailed financial information and explaining the application of management accounting elements to inform decision-making, based on financial and non-financial information.	Demonstrate comprehensive understanding – involves preparing extensive financial information and justifying the application of management accounting elements to inform decision-making, based on financial and non-financial information.		

Evidence Statement

Question	Expected Coverage				
ONE	Relevant range is the output possible given SOO's current resources . Current resources relates to the 300 trees producing 18 000 kg of olives per year.				
(a)	The output refers to the number of litres of olive oil able to be pressed from these olives.				
(b)	Fixed costs remain constant over the relevant range.				
	Interest on Mortgage will be incurred regardless of any production.				
	[Candidates may realise, but are NOT expected to comment on the idea that, to extend the relevant range, it is likely that Sarah will have to borrow more to fund the purchase of additional land, machinery or whatever, meaning that, outside the relevant range, all costs become variable.]				
	Variable costs vary in proportion to a change in volume or output over the relevant range – the more olives the trees produce, the more oil will be able to be pressed out of them. This will require a larger number of bottles to be used. The evidence must link clearly to the volume of oil produced (output).				
(c)	Strategic decisions are those designed to assist SOO meet its long-term goals and objectives.				
. ,	A strategic decision for Sarah in 2014 could be to investigate whether she should purchase her own pressing machine.				
	[Other examples from the case study information could be used, eg leasing the orchard to someone else to run.]				
	This could potentially reduce her variable costs in the future, leaving a greater profit as a reward for her investment, skills, time commitment, and risk (improved reward to the owner over time is a long-term goal).				
	Candidates should NOT describe strategic decisions solely by saying what they are not. So 'NOT day-to day decisions' is not acceptable.				
(d)	A Production Budget is a plan where Sarah matches when and how much she will harvest with other requirements, such as labour (workers), trucking firms, and processing at the pressing plant.				
	When a difference (variance) from the plan (Production Budget) occurs, Sarah will review what happened, and learn from the experience, to make production more efficient in the future.				
	This allows her to control her costs better, and should produce more profit per kg of olives (or per tree) in the future.				
	The problem with frosts is that they are fairly unpredictable and make a big / significant / material difference to the cost of growing olives.				
	If the decision is made to not pay for the helicopter, the risk is total loss of this year's crop.				
	Sarah could include costs associated with a frost in her Production Budget (ie hire of the helicopter), but it would be difficult to budget for loss of production, or frequency of frosts.				
	She may have already offered contracts to her staff, but now has fewer olives to harvest.				
	Staff will have to be paid, but have less – or nothing – to harvest.				
	This means that Sarah's Production Budget may end up having little connection to the reality of the season.				

Not	N1	Any ONE answer – need not be in context, eg variable costs vary with output.
Achieved	N2	Any TWO answers – need not be in context
Achieveme	А3	Any TWO of the following: relevant range in context fixed cost <i>OR</i> variable cost described in context appropriate example of a strategic decision understands that output is olives <i>OR</i> olive oil is able to describe what a Production Budget is.
nt	A4	Any THREE of the following: • relevant range in context • fixed cost <i>OR</i> variable cost described in context • appropriate example of a strategic decision • understands that output is olives <i>OR</i> olive oil • is able to describe what a Production Budget is.
	M5	Any TWO of the following: TWO of relevant range, fixed cost, or variable cost in context explains strategic decisions and selects appropriate example links costs associated with production and output of olive oil to Production Budget links Production Budget to analysis of current events and outcomes with future production and planning ie what has been learned to manage future planning.
Merit	M6	 Any THREE of the following: TWO of relevant range, fixed cost, or variable cost in context explains strategic decisions and selects appropriate example links costs associated with production and output of olive oil to Production Budget links Production Budget to analysis of current events and outcomes with future production and planning i.e. what has been learned to manage future planning.
Excellence	E7	 Any TWO of the following: relevant range, fixed cost, and variable cost in context links appropriate strategic example to realistic long-term goal or objective for Sarah links Production Budget to current production analysis and development of future Production Budgets using what was learned from the current season.
	E8	 Any TWO of the following: relevant range, fixed cost, and variable cost in context links appropriate strategic example to realistic long-term goal or objective for Sarah links Production Budget to current production analysis and development of future Production Budgets using what was learned from the current season. comprehensive coverage required.

N0 = No response; no relevant evidence.

	Expected Coverage			
TWO				
(a)	FIXED COSTS:			
()	Interest on mortgage	30 000		
	Depreciation on machinery and storage containers	6 600		
	Insurance, irrigation etc	15 000		
	Pickers' wages	1 800		
	TOTAL	\$53 400		
	VARIABLE COSTS:			
	Bottles	2.10		
	Labels	.50		
	Pressing costs	1.40		
	TOTAL	\$4.00		
(b)	Sales	129600		
(b)				
		129600		
	3240 litres x 4 (bottles are 250ml) x \$10			
	Less Expenses	(52.400)		
	Less Expenses Fixed costs	(53400)		
	Less Expenses Fixed costs Variable costs \$4.00 x 12960 (ie 3240 x 4 as bottles are 250ml)	(51840)		
	Less Expenses Fixed costs Variable costs \$4.00 x 12 960 (ie 3240 x 4 as bottles are 250ml) Expected profit OR	, ,		
	Less Expenses Fixed costs Variable costs \$4.00 x 12 960 (ie 3240 x 4 as bottles are 250ml) Expected profit OR Sales less variable costs	(51 840) \$24 360		
	Less Expenses Fixed costs Variable costs \$4.00 x 12 960 (ie 3240 x 4 as bottles are 250ml) Expected profit OR Sales less variable costs 3240 litres x 4 bottles per litre = 12 960 bottles x \$6 (contribution margin)	(51840)		
	Less Expenses Fixed costs Variable costs \$4.00 x 12 960 (ie 3240 x 4 as bottles are 250ml) Expected profit OR Sales less variable costs 3240 litres x 4 bottles per litre = 12 960	(51 840) \$24 360		
	Less Expenses Fixed costs Variable costs \$4.00 x 12 960 (ie 3240 x 4 as bottles are 250ml) Expected profit OR Sales less variable costs 3240 litres x 4 bottles per litre = 12 960 bottles x \$6 (contribution margin)	(51 840) \$24 360 77 760		

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Not	N1	 EITHER: No valid evidence but some correct working. (eg, total fixed costs, or total variable cost production for year in bottles, correct) OR Some valid discussion in (c). 					
Achieved	N2	BOTH of: • provides some correct working (eg, total fixed costs, or total variable costs, or production for the year, correct) BUT final answer is incorrect • answer for (c) is attempted but is not in context.					
Achieveme	А3	 TWO of: uses mostly correct working for break-even but has calculation errors shows some correct working for profit for the year recognises that the margin of safety shows SOO is above break-even, with no link to numbers or percentages. 					
nt	A4	 THREE of: uses some correct working for break-even but has calculation errors shows some correct working for profit for the year recognises that the margin of safety shows SOO is above break-even, with no link to numbers or percentages. 					
	М5	 ALL of: correctly calculates break-even in sales dollars shows correct profit for the year with working in (c) explains margin of safety shows SOO is above break-even OR making some use of supporting financial information. 					
Merit	М6	 ALL of: correctly calculates break-even in sales dollars shows correct profit for the year with working in (c) explains margin of safety shows SOO is above break-even AND uses supporting financial information at a profit of \$36 000. 					
	E 7	 ALL of: correct calculations in (a) and (b). calculates level of production for a profit of \$36 000 OR links \$35 000 to break-even profit links calculations to show an improved margin of safety at \$36 000 profit. 					
Excellence	E8	 ALL of: correct calculations in (a) and (b). calculates level of production for a profit of \$36 000, links this to break-even profit, compares (b) and (c) to show an increased distance between production and break-even production, meaning an improved margin of safety at \$36 000 profit, justification must including supporting numbers and/or percentages. comprehensive coverage required 					

N0 = No response; no relevant evidence.

Question	Expected coverage
THREE (a)	See Appendix One.
(b)	A cash budget allows Sarah to plan how to use surplus funds effectively (not holding too much in a cheque account with lower levels or no interest receivable) or to plan short-term or longer-term cash shortfalls.
	In Sarah's case, March and May have overdraft requirements.
	Careful management of her financial needs with her bank finance officer should result in their continued support.
	Unplanned extensions of overdrafts or unreasonable/unjustifiable borrowing will not. This will also cost her penalties and potentially higher rates of interest in the future.
	Sarah's bank may refuse to honour her cheques, meaning that Sarah will be unable to pay her private living expenses (eg power bill, telephone bill etc).
	At worst, it could result in bank foreclosure on the property, and sale of Sarah's home and business to repay the bank borrowing.
	A cash budget also encourages Sarah to review every item of expenditure to ensure it is essential and, if so, is at a reasonable level.
	This ensures that Sarah is likely to be able to sustain a profitable business, which will ensure her desired standard of living.
	Having planned ahead, when additional unexpected events occur, Sarah is able to adjust her spreadsheet to incorporate the additional information and adjust her behaviour accordingly in line with the effect on her bank balance.
	For example, there could be several frosts in a row. Helicopter hire cost is significant, and may lead Sarah to search for some other means of frost prevention.
	By sharing the cost with other horticulturalists around her, she becomes dependent on them for her business continuity.
	Full use of evidence in the case study may include reference to other borrowing (\$600 000 mortgage) and how this will impact on the bank's view of Sarah as a risk for repayment.
	Candidates could also recognise that current sales must be the end of last year's crop (since this year's crop was not harvested until May), so after May she will have a whole year's production available for sale.
	Income from this process should allow her to plan for the loan principal payment in September and clearing of the bank overdraft of \$3 144.
	Example of E 7 and E 8
	Having planned ahead, when additional unexpected events occur, Sarah is able to adjust her spreadsheet to incorporate the additional information and adjust her behaviour accordingly in line with the effect on her bank balance.

Not	N1	6 V or C	
Achieved	N2	8 V or C	
Achieveme	А3	(a) 9 V or C (b) not needed.	
nt	A4	(a) 10 V or C (b) answer includes a reference to any of the items in the budget / states the purpose for SOO.	
Merit	М5	(a) 12 V or C (b) answer explains the purpose of the budget for SOO, with at least ONE link to the figures / item in the budget.	
	М6	(a) 14 V or C, No F (b) answer explains the purpose of the budget for SOO, with at least TWO links to the figures / items in the budget.	
Excellence	E7	(a) 17 V or C, P, No F (b) answer explains how the budget can be used to make decisions (effective business) about SOO with links to the figures / items in the budget.	
	E8	(a) 18 V or C, P, No F (b) answer explains how the budget can be used to make decisions (effective business) about SOO with links to the figure / items in the budget, and understanding that the overdraft must be carefully managed with her bank. Comprehensive coverage required	

N0 = No response; no relevant evidence.

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Question	Expected coverage
FOUR	Evidence depends on candidate's other answers and recommendation.
	Candidate's evaluation is in context of SOO, and justifies the recommendation using all the information provided, linking financial (F) and non-financial (NF) information.
	SHOULD PURCHASE
	Financial Information:
	 Sarah will have to find additional funds to purchase the machine (as she already has a \$600 000 loan and an overdraft of \$3144 – which will increase her interest and principal repayments. However, purchase of the machine will save her \$18 144 a year in pressing costs.
	 Repayment of the purchase price using borrowing means the cost can be spread over a number of years, with the benefit to cash flow of an immediate reduction in pressing costs of \$18 144.
	Owning her own Pressing Machine means that Sarah can save on cartage costs.
	• Linking to the idea of multiple harvests (Press available all year) Sarah will have a greater level of output per tree, and therefore more to sell for a higher profit.
	Sarah may be able to press olives for other growers, which will allow her another income stream when they pay for the service.
	Sarah's purchase of the Pressing Machine repays itself over two and a half years, therefore, a higher return on capital
	Sarah could make a deposit of \$15000 on the Press and NOT repay the mortgage. This will help her fund the purchase of the Press
	Non-Financial Information:
	*Sarah will have greater control over her business with her own Press. She will not have to wait in a queue for other olive growers' jobs to be pressed first.
	• *Sarah will be able to complete multiple harvests, as the Press will be at her disposal throughout the year. This will result in healthier trees, as they are able to be managed more closely.
	 * Longer picking season (over three months) creates a longer employment period and will give pickers job security etc
	SHOULD NOT PURCHASE:
	Financial Information:
	Sarah already has an overdraft and a \$600 000 loan. She may start to struggle to meet her finance repayment commitments.
	 Machine expertise will replace the pressing cost (\$18 144) with operator's and / or mechanic's costs. Normally this expertise is brought in from outside, which is costly and does not always happen immediately/wages costs may increase
	Sarah's intention to repay \$15000 off the mortgage in September means the purchase of the Press will put her into further debt
	Sarah already has drawings of \$4000 per month, plus her off-orchard income as a financial advisor. If, instead of this expensive standard of living, she reduced her drawings and allocated these funds to reducing her overdraft, loan balance, and bank interest, she would more easily be able to afford the Press in the future.

For most of the year, the machine will sit idle, and may require maintenance during this time.

Additional expertise may be required to run and / or maintain the machine.

the Press in the future.

Non-Financial Information:

		вотн:	
Not Achieved	N1	 describes a recommendation but lacks context in relation to SOO attempts examples but demonstrates no real understanding of the nature of the business. 	
	N2	BOTH: • describes a recommendation but lacks context in relation to SOO • uses ONE OR TWO examples but demonstrates little understanding of the nature of the business.	
Achievement	А3	ALL of: describes a recommendation in the context of SOO states ideas but does not explain them uses ONE relevant example.	
	A 4	 ALL of: describes a recommendation in the context of SOO states ideas but does not explain them uses some relevant examples. 	
Merit	M5	BOTH: • explains a recommendation in the context of SOO • links financial information to SOO OR links non-financial information to SOO.	
	М6	BOTH: explains a recommendation in the context of SOO rather than evaluates links are made between items of financial information relevant to SOO OR links are made between items of non-financial information relevant to SOO.	
Excellence E7 Candidate explains in context of SOO, and justifies the recommendation using almost information provided, linking financial and non-financial information. (See E8).			

Candidate's explanation is **comprehensive**, is in context of *SOO*, and justifies the recommendation using all the information provided, linking financial (F) and non-financial (NF) information.

For example, if the candidate thinks SOO should purchase the Pressing Machine, the answer will include:

- Sarah will have to find additional funds to purchase the machine (as she already has a \$600 000 loan and an overdraft of \$3 144 – which will increase her interest and principal repayments. However, purchase of the machine will save her \$18 144 a year in pressing costs. (F)
- Repayment of the purchase price using borrowing means that the cost can be spread over a number of years, with the benefit to cash flow of an immediate reduction in pressing costs of \$18144. (F)
- Owning her own Pressing Machine means that Sarah can save on cartage costs. (F)
- Sarah will have greater control over her business with her own Press. She will not have to wait in a queue for other olive growers' jobs to be pressed first. (NF)
- Sarah will be able to complete multiple harvests, as the Press will be at her disposal throughout the year. This will result in healthier trees, as they are able to be managed more closely. (NF)
- Linking to above, Sarah will have a greater level of output per tree, and therefore more to sell for a higher profit. (F)
- Sarah may be able to press olives for other growers, which will allow her another income stream when they pay for the service. (F)

For example, if the candidate thinks SOO should not purchase the Pressing Machine, the answer will include:

- Sarah already has an overdraft and a \$600 000 loan. She may start to struggle to meet her finance repayment commitments. (F)
- For most of the year, the machine will sit idle, and may require maintenance during this time. (NF)
- Additional expertise may be required to run and / or maintain the machine. (NF)
- Machine expertise will replace the pressing cost (\$18144) with operator's and / or mechanic's costs. Normally this expertise is brought in from outside, which is costly and does not always happen immediately. (F)
- Sarah already has drawings of \$1500 per week, plus her off-orchard income as a financial advisor. If, instead of this expensive standard of living, she reduced her drawings and allocated these funds to reducing her overdraft, loan balance, and bank interest, she would more easily be able to afford the Press in the future. (F)

N0 = No response; no relevant evidence.

Judgement Statement

	Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
Score range	0 – 10	11 – 17	18 – 24	25 – 32

E8

THREE

(a) Appendix One

Sole Optimus Olive Cash Budget

	March	April	May	
Receipts				
Sales	29 500	24 500	19 800	CVVV
Less payments				
Interest on mortgage	2 500	2 500	2 500	CVVV
Insurance, irrigation, etc	1 250	1 250	1 250	VVV
Pickers' wages			1 800	С
Bottles purchased	42 000			С
Labels purchased	10 000			С
Pressing costs			18 144	С
Drawings	4 000	4 000	4 000	VVV
Helicopter hire		2 000		С
Total payments	59 750	9 750	27 694	
Surplus (deficit) of cash	(30 250)	14 750	(7 894)	
Opening bank balance	20 250	(10 000)	4 750	
Closing bank balance	(10 000)	4 750	(3 144)	Р

Marking codes:

- **C V** = (C) correct calculation/s (V) any figure in correct month
- V must be correct figure
- **C** correct calculation
- P is correct process to calculate bank balance
- **F** mark for non-cash depreciation is only real example that could be included if included one F for three figures and will preclude E and high M grades.