

QUESTION 1

COST ACCOUNTING

(50 MARKS)

Leather Brown is the owner of Brown Bag Manufacturers. The business has been experiencing a decline in profits over the last few years to the extent of now registering a net loss. Leather Brown approach you for assistance to turn things around.

The following information from records of the financial statements for the year ending 30 June 2021 was presented to you with comparative figures.

Study the information and answer the questions that follow. Your answers should clearly indicate your advice to Leather Brown.

INFORMATION:

Information from the Production Cost Statement on 30 June:	2021		2020	
	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE
	R	R	R	R
Direct Material Cost	5 436 000	?	4 144 000	74,00
Direct Labour Cost	5 073 600	84,00	4 480 000	80,00
Primary Cost	10 509 600		8 624 000	
Factory overhead cost*	3 387 200	?	3 136 000	56,00
Total cost of production	13 896 800		11 760 000	210,00

Units produced and sold	60 400 Bags		56 000 Bags	
Break-even point	?		20 910 Bags	

Information from the Income Statement on 30 June:	R	R	R	R
Sales	16 670 400	276,00	14 560 000	260,00
Cost of sales	(13 896 800)		(11 760 000)	210,00
Gross Profit	2 773 600		2 800 000	
Selling and Distribution cost	(1 449 600)	24,00	(1 008 000)	18,00
Administration cost	(1 570 400)	26,00	(1 344 000)	24,00
Net Profit	(246 400)		448 000	

Selling price of opposition		270,00		260,00
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Note:

- There is no work-in-progress; all bags produced was sold.

ADDITIONAL INFORMATION

Errors and omissions to correct Factory Overhead Cost only.

- The entire rent expense of R327 600 was entered in the factory overhead cost account. The rent should be split in the ratio 5 : 3 : 1 to the factory, sales and office respectively.
- The employer's contributions to the factory supervisor was not recorded. The details of his salary is as follows:

	Supervisor's deduction	Employer's contribution
Pension fund	R4 560 (7,5%)	10%
UIF	R608 (1%)	1%

- The outstanding water and electricity account for June 2021, R16 640, was not taken into account. 80% of the water and electricity expense is allocated to the factory.

REQUIRED:

- 1.1 Differentiate between Fixed cost and Variable cost. Provide one example of each. (4)
- 1.2 Calculate the following unit costs for 2021:
 - Direct material cost per unit. (2)
 - Total variable cost per unit. (4)
- 1.3 An inspection revealed that the Factory Overhead Cost was not correctly calculated. Take into account the errors and omissions identified and calculate the correct Factory Overhead Cost. Note that all other cost accounts were adjusted correctly. (9)
- 1.4 Calculate the break-even point for 2021. Comment on your findings. (8)
- 1.5 In addressing the issue of the declining profits, consider the figures of both year and report on the following:
 - 1.5.1 Calculate the correct profit/loss after adjusting the Factory Overhead Cost. (5)
 - 1.5.2 Provide a suitable reason for the change in the direct material cost per unit, and give a suggestion on how this cost can be managed better (4)
 - 1.5.3 One of the managers suggested that material be imported from Thailand. How would you address this suggestion in your report? Provide THREE points. (6)
 - 1.5.4 Explain the change in the factory overhead cost per unit (after the adjustment of the factory overhead cost – show the calculation). (4)
 - 1.5.5 The owner feels that the selling price must increase each year due to inflation. What advice would you offer? Provide TWO points. (4)

QUESTION 2

PROJECTED INCOME STATEMENT

(50 MARKS)

Study the case study and answer the questions that follows.

1. Business background

Avi Aysen resigned from her work at the airport four years ago and used R1 600 000 of her pension payout to start a business, **Curly-Shine Distributors**. The business sells and distributes hair products and cleaning materials at a fee to hair salons and to the public. Goods are purchased in bulk and repacked in smaller quantities.

On 23 March 2020 the South African President announced a national lock down from 26 March 2020 due to the Covid-19 pandemic. Due to the negative impact on her business Avi Aysen decided to replace the selling and distribution of hair products with personal protective equipment (PPE) from 1 May 2020 to businesses which were allowed to trade during the lock down period.

2. Staff in service

Avi has 1 vehicle driver and 2 packers in service. The driver's salary is double what each packer receives. She plans to expand her business by appointing a second driver from 1 May 2020. She also employs a cleaner.

3. Business premises

Avi Aysen rents a part of a building from where she operates. Rent is calculated at a fixed amount per square metre. She currently rents 60 square metres, but will increase this floor space from 1 April 2020 due to expanding operations.

4. Fixed deposit

The business has a fixed deposit of R936 000 which matures 31 March 2020.

5. Fixed Assets

Curly-Shine Distributors owns fixed assets (details provided below):

- Avi Aysen plans to buy an additional delivery vehicle, a Nissan NP300 pick-up truck on 1 May 2020.
- The Nissan NP200 pick-up truck will still be used by the business.
- The business intends to replace all the packing equipment on 1 June 2020. The old equipment will be traded in at New Tech Machinery. The outstanding amount will be financed with a loan (at 15% p.a. interest). The trade-in value is expected to be R46 000, while the cost of the new equipment will amount to R804 000.

Details of fixed assets

	Date of purchase	Cost price	Accumulated depreciation on 28 Feb 2020	Depreciation rate (all on cost price)
Packing equipment	1 Mar 2016	R328 000	295 200	30% p.a.
Nissan NP200 pick-up truck	1 Aug 2017	R240 000	R132 000	20% p.a.
Nissan NP300 pick-up truck*	1 May 2020	?	?	20% p.a.

You are provided with a Projected Income Statement (prepared before the lock down measures were announced) and additional information regarding Curly-Shine Distributors for the period from 1 March to 31 May 2020. Avi Aysen also prepared the cash budget for the same period - some budgeted figures are available. The financial year ends on 28 February each year.

**CURLY SHINE DISTRIBUTORS
PROJECTED INCOME STATEMENT FOR 1 MARCH to 31 MAY 2020**

	MARCH	APRIL	MAY
	R	R	R
Sales of inventory	175 000	210 000	245 000
Cost of sales	100 000	120 000	140 000
Gross Profit	(a)?	90 000	105 000
Other Operating Income	244 000	244 000	324 000
Fee income from clients	240 000	240 000	320 000
Sundry income	4 000	4 000	4 000
OPERATING EXPENSES	190 700	230 024	255 594
Salary of drivers and packers	51 000	55 080	68 850
Wage of cleaner	6 800	7 344	7 344
Rent of premises	49 200	61 500	61 500
Consumable goods	28 800	28 800	38 400
Water and electricity	12 000	12 000	14 000
Telephone	4 400	4 400	4 400
Advertising	16 000	30 000	16 000
Motor expenses	2 800	11 200	11 200
Repairs and maintenance of equipment	7 000	7 000	7 000
Sundry expenses	4 600	4 600	4 600
Depreciation on vehicles	4 000	4 000	18 200
Depreciation on equipment	4 100	4 100	4 100
OPERATING PROFIT	(b)?	103 976	173 406
Interest income	6 630	0	0
	134 930	103 976	173 406
Interest on loan	1 500	(c)?	1 000
NET PROFIT	133 430	102 726	(d)?

ADDITIONAL INFORMATION:

The following figures was taken from the accounting records of the business and compared with the budgeted figures:


		Budgeted April 2020	Actual April 2020	Budgeted May 2020	Actual May 2020
A	Telephone	4 400	1 760	4 400	6 600
B	Water & electricity	12 000	9 600	14 000	16 800
C	Fee income	240 000	72 000	320 000	448 000
D	Sales of inventory	210 000	42 000	245 000	441 000
	Cost of sales	100 000	30 000	140 000	252 000
	Gross profit	120 000	12 000	105 000	189 000

REQUIRED:

- 2.1 Refer to the Projected Income Statement and compare / calculate the following:
- 2.1.1 Calculate the missing figures (a) to (d). (4)
- 2.1.2 The monthly salary of the driver and each packer for March 2020. (4)
- 2.1.3 The % increase in salaries and wages that employees can expect to receive during the projected period. (2)
- 2.1.4 The interest rate % on the Fixed Deposit. (3)
- 2.1.5 The rent per square metre, and the total additional square metres which Avi will rent from 1 May 2020. (3)
- 2.2 As an expert on the subject of Accounting you had been approached to make a comparison between the budgeted figures and the actual figures for April and May 2020. Refer to D for the budgeted and actual figures:
- 2.2.1 Comment on the following items: (6)
- Telephone for April 2020
 - Fee income for May 2020
- 2.2.2 Calculate % percentage difference between the actual sales and budgeted sales for May 2020. (3)
- 2.2.3 Do you think it was good decision of Avi to replace the hair products with personal protective equipment (PPE). Explain by quoting two different items with figures. (6)
- 2.3 Avi is considering changes to the Fixed Assets.
- 2.3.1 Calculate the cost price of the vehicle which she plans to purchase on 1 May 2020. (5)
- 2.3.2 Prepare the Asset Disposal Account for the trade in of the old equipment on 1 June 2020. (10)
- 2.3.3 Avi is thinking of purchasing the business premises rather than renting it. Explain one major advantage and one major disadvantage of this option. (4)

TOTAL
100

50

Grade 12 _____	Case Study	 Term 3, 2022
Learner Name & Surname		
Date Completed		Stanmorephysics.com

TOTAL MARK ACHIEVED
100

**QUESTION 1
COST ACCOUNTING**

1.1 Differentiate between fixed cost and variable cost. Provide one example of each.

Fixed cost:

Variable cost:

4

1.2 Calculate:

Direct material cost per unit	<table border="1" data-bbox="1365 1535 1458 1608"><tr><td> </td></tr><tr><td>2</td></tr></table>		2
2			
Total Variable cost per unit	<table border="1" data-bbox="1365 1776 1458 1852"><tr><td> </td></tr><tr><td>4</td></tr></table>		4
4			

1.3 Calculate the correct factory overhead cost:

TOTAL (given)	3 387 200

9

1.4 Calculate the break-even point for 2021.



Comment:

5

3

1.5.1 Calculate the correct profit/loss after adjusting the Factory Overhead Cost.

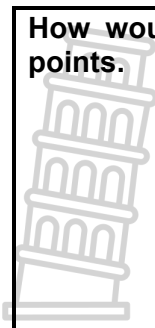
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1.5.2 Provide a suitable reason for the change in the direct material cost per unit and give a suggestion on how this cost can be managed better.

REASON	SUGGESTION

4

1.5.3 How would you address this suggestion in your report? Provide THREE points.

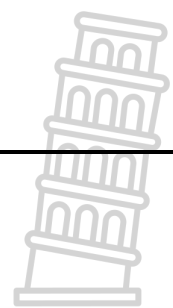


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1.5.4 Explain the change in the factory overhead cost per unit (after the adjustment of the factory overhead cost - show the calculation)

4

1.5.5 What advice would you offer? Provide TWO points.



4

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QUESTION 2

2.1 Calculate / Compare

2.1.1

Calculate the missing figures.	
(a)	
(b)	
(c)	
(d)	

4

2.1.2

The monthly salary of the driver and each packer for March 2020	
Driver	
Each packer	

4

2.1.3

The % increase in salaries and wages that employees can expect to receive during the projected period.
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2

2.1.4

The interest rate % on the Fixed Deposit.

3

2.1.5

Calculate the rent per square metre:
Calculate the total additional square metres which Avi will rent from 1 May 2020:

3

2.2

2.2.1	Comment on:	
	Telephone for April 2020	
2.2.2	Fee income for May 2020	
	Calculate the % difference between the actual sales and the budgeted sales for May 2020.	
2.2.3	Do you think it was good decision of Avi to replace the hair products with personal protective equipment (PPE). Explain by quoting two different items with figures.	
	Item	Figure

6

3

6

2.3.1

Calculate the cost price of the vehicle which she plans to purchase on 1 May 2020.
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2.3.2

ASSET DISPOSAL				

10

2.3.3

Explain one major advantage and one major disadvantage of this option.

Advantage:

Disadvantage:

4

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Grade 12 _____	Case Study Marking guidelines	Term 3, 2022
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QUESTION 1
COST ACCOUNTING

1.1

Differentiate between fixed cost and variable cost. Provide one example of each.

Fixed cost:

Fixed costs generally remain constant and is not influenced by the level of production such as rent, insurance etc. ✓✓

Variable cost:

Variable costs change (fluctuate) according to the level of production such as direct material, direct labour etc. ✓✓

4

1.2

Calculate:

Direct material cost (DMC) per unit

$$5\,436\,000 \div 60\,400 = R90 \checkmark\checkmark$$

2

Total Variable cost per unit

$$R90 \checkmark + R84 \checkmark + R24 \checkmark = R198 \checkmark$$

See DMC above

one part correct

4

1.3 Calculate the correct factory overhead cost:

TOTAL as per information	3 387 200	
Rent expense (327 600 x 4/9)	(145 600)	✓✓
Employer's contribution (6 080 ✓✓ + 608 ✓)	6 688	✓ One part correct
Water and electricity (16 640 x 80%)	13 312	✓✓
	3 261 600	✓ workings

9

1.4 Calculate the break-even point for 2021.

see 1.3 4 832 000

$$\frac{3\,261\,600 \checkmark + 1\,570\,400 \checkmark}{R276 \checkmark - R198 \checkmark \text{ see 1.2}} = 61\,949 \text{ units } \checkmark \text{ one part correct}$$
 (accept 61 948,7 units)

Comment: (must quote figures)

The business did not break-even. 60 400 units were produced. This is less than the BEP by 1 549 units. This resulted in the business making a loss

5

3

1.5.1 Calculate the correct profit/loss after adjusting the Factory Overhead Cost.

see 1.3

$$3\,387\,200 \checkmark - 3\,261\,600 \checkmark = 125\,600 \checkmark \text{ one part correct}$$

$$246\,400 \checkmark - 125\,600 = 120\,800 \checkmark \text{ one part correct}$$

Or:
 Cost of sales:
 $10\,509\,600 + 3\,261\,600 = 13\,771\,200$
 Gross profit: $16\,670\,400 - 13\,771\,200 = 2\,899\,200$
 Net Loss: $2\,899\,200 - 1\,449\,600 - 1\,570\,400 = 120\,800$

5

1.5.2 Provide a suitable reason for the change in the direct material cost per unit and give a suggestion on how this cost can be managed better.

REASON	SUGGESTION
Increased transport costs Scarcity of the materials Supplier has closed down Increased cost of producing the material	Look for local suppliers Use quality substitutes Take advantage of bulk discounts

4

1.5.3 **How would you address this suggestion in your report? Provide THREE points.**

THREE valid points ✓✓ ✓✓ ✓✓

- Need to consider quality, availability
- Import duties, custom duties and the fluctuating exchange rate.
- Will we be able to return defective goods easily?
- Will the customers be willing to accept foreign products?
- Will we lose clients due to not supporting local businesses?
- We will not be contributing to our economy.

6

1.5.4 **Explain the change in the factory overhead cost per unit (after the adjustment of the factory overhead cost - show the calculation)**

see 1.3

Factory overhead cost per unit: $(3\,261\,600/60\,400) = R54$ ✓✓

Fixed cost per unit are expected to remain constant, so as more units are produced, the cost per unit would decrease due to economies of scale. ✓✓

4

1.5.5 **What advice would you offer? Provide TWO points.**

TWO points ✓✓ ✓✓

- As costs increase, one would expect the selling price to increase as well, but in this case we need to consider the price of the competitors, which is lower.
- Maintain the price and try to control some of the other costs to improve profitability.
- Consider lowering the price to increase sales.

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QUESTION 2

2.1 Calculate / Compare

2.1.1

Calculate the missing figures.		
(a)	R 75 000	✓
(b)	R128 300	✓
(c)	R 1 250 / R102 950	✓
(d)	R172 406	✓

4

2.1.2

The monthly salary of the driver and each packer for March 2020	
Driver	$51\,000 \times \frac{2}{4} = 25\,500$ ✓✓
Each packer	$25\,500 / 2 = 12\,750$ ✓✓

4

2.1.3

The % increase in salaries and wages that employees can expect to receive during the projected period.
$4\,080 / 51\,000 \times 100 = 8\%$ ✓✓

2

2.1.4

The interest rate % on the Fixed Deposit.
$\frac{6\,630 \times 12}{936\,000} \times 100 = 8,5\%$ ✓ <input checked="" type="checkbox"/> one part correct

3

2.1.5

Calculate the rent per square metre:
$49\,200 / 60 = R820$ ✓
Calculate the total additional square metres which Avi will rent from 1 May 2020:
$61\,500 / 820 = 75$ OR $60 \times 61\,500 / 49\,200 = 75$ square metres
Increase = $75 - 60 = 15$ square metres ✓ <input checked="" type="checkbox"/> (one part correct)

3

2.2

2.2.1	Comment on:							
	<p>Telephone for April 2020</p> <p><i>Excellent answer = 3 marks; Good answer = 2 marks; Satisfactory =1; Wrong =0</i></p> <p><i>Expected answers:</i> ✓✓✓</p> <p>The telephone projection exceeds the actual cost with R2 640. Lock down period could lead to the decreased use of the telephone</p> <p><i>Alternative correct and valid responses is acceptable.</i></p>							
2.2.2	<p>Fee income for May 2020</p> <p><i>Excellent answer = 3 marks; Good answer = 2 marks; Satisfactory =1; Wrong =0</i></p> <p><i>Expected answers:</i> ✓✓✓</p> <p>There was a good increase in fee income (376 000 of 522,2%) which indicates that the business is popular with its customers. The actual income exceeds the budgeted amount with R128 000 (40%)</p> <p><i>Alternative correct and valid responses is acceptable.</i></p>	6						
	<p>Calculate the % difference between the actual sales and the budgeted sales for May 2020.</p> <p>$\frac{196\ 000}{245\ 000} \times 100 = 80\%$ ✓ <input checked="" type="checkbox"/> <i>one part correct</i></p>	3						
2.2.3	<p>Do you think it was good decision of Avi to replace the hair products with personal protective equipment (PPE). Explain by quoting two different items with figures.</p>							
	<table border="1"> <thead> <tr> <th>Item ✓ + ✓</th> <th>Figure ✓✓ + ✓✓</th> </tr> </thead> <tbody> <tr> <td>Fee income</td> <td>Budgeted amount of 320 000 is less than the actual amount of 448 000 / 116 000 under budgeted</td> </tr> <tr> <td>Sales</td> <td>Budgeted amount of 245 000 is less than the actual amount of 441 000 / 196 000 under budgeted</td> </tr> </tbody> </table>	Item ✓ + ✓	Figure ✓✓ + ✓✓	Fee income	Budgeted amount of 320 000 is less than the actual amount of 448 000 / 116 000 under budgeted	Sales	Budgeted amount of 245 000 is less than the actual amount of 441 000 / 196 000 under budgeted	
	Item ✓ + ✓	Figure ✓✓ + ✓✓						
	Fee income	Budgeted amount of 320 000 is less than the actual amount of 448 000 / 116 000 under budgeted						
Sales	Budgeted amount of 245 000 is less than the actual amount of 441 000 / 196 000 under budgeted							
		6						

2.3.1

<p>Calculate the cost price of the vehicle which she plans to purchase on 1 May 2020.</p> <p>✓ ✓ ✓ ✓ <input checked="" type="checkbox"/> <i>one part correct</i></p> <p>$14\ 200 / 0,2 \times 12 = R852\ 000$</p> <p style="text-align: center;">OR</p> <p>$14\ 200 \times 100 / 20 \times 12 / 1 = R852\ 000$</p>	5
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2.3.
2

ASSET DISPOSAL					
2020 Jun 1	Equipment ✓	✓ 328 000	2020 Jun 1	Accumulated depreciation on equipment ✓ (295 200 ✓ + 24 600 ✓)	<input checked="" type="checkbox"/> 319 800
	Profit with asset disposal ✓	<input checked="" type="checkbox"/> 37 800		Creditors control ✓	✓ 46 000
		365 800			365 800

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2.3.
3

<p>Explain one major advantage and one major disadvantage of this option.</p> <p><i>(any one valid advantage ✓✓ and any one valid disadvantage ✓✓)</i></p> <p>Advantage: Saving on rent / Earn capital gains on property values</p> <p>Disadvantage: Repairs and maintenance to be paid / She will need a bond to finance this option (high repayments)</p>
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