



**NAMIBIA UNIVERSITY  
OF SCIENCE AND TECHNOLOGY**

**FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION**

**DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE**

<b>QUALIFICATION:</b> BACHELOR OF ACCOUNTING (HONOURS)	
<b>QUALIFICATION CODE:</b> 08BOAC	<b>LEVEL:</b> 8
<b>COURSE CODE:</b> AMA811S	<b>COURSE NAME:</b> ADVANCED MANAGEMENT ACCOUNTING
<b>SESSION:</b> JULY 2023	<b>PAPER:</b> THEORY AND CALCULATIONS
<b>DURATION:</b> 3 HOURS	<b>MARKS:</b> 100

<b>SECOND OPPORTUNITY EXAMINATION QUESTION PAPER</b>	
<b>EXAMINER</b>	Lameck Odada
<b>MODERATOR</b>	Lazarus Shinkeva

<b>INSTRUCTIONS</b>
<ol style="list-style-type: none"><li>1. Answer ALL FOUR questions in blue or black ink only. <b>NO PENCIL.</b></li><li>2. Start each question on a new page, number the answers correctly and clearly.</li><li>3. Write clearly, and neatly and show all your workings/assumptions.</li><li>4. Work with four (4) decimal places in all your calculations and only round off only final answers to two (2) decimal places unless otherwise stated.</li><li>5. Questions relating to this examination may be raised in the initial 30 minutes after the start of the examination. Thereafter, candidates must use their initiative to deal with any perceived error or ambiguities and any assumptions the candidate makes should be clearly stated.</li></ol>

**PERMISSIBLE MATERIALS**

1. Silent, non-programmable calculators

**THIS QUESTION PAPER CONSISTS OF 6 PAGES (excluding this front page)**

**QUESTION 1****[25 MARKS]**

The Food Company Ltd (hereafter FCL) is a Namibian Stock Exchange (NSX) listed company operating in the fast-moving consumer goods industry. The industry average debt-to-equity ratio for both 2021 and 2022 is 38%. FCL manufactures and distributes everyday food items such as bread, pasta, rice, sauces, and canned food throughout Namibia. FCL's success is mainly attributed to its strategy of continuous improvement and innovation.

The company requires a large amount of capital expenditure to upgrade its plant and equipment. Energy efficiency will be a key part of this upgrade. Facilities will be fitted with energy-efficient lighting and refrigeration. FCL is also planning to use biodegradable packaging for some of its products. While this project will require a significant capital outlay, it will also result in a significant cash injection into the economy and the creation of job opportunities.

The following information relates to FCL.

	2022	2021
Skills development spend (N\$m)	39,32	36,86
Energy (Kwh)	86,19	83,32
Production (tons)	1 545 880	1 557 276
Carbon emissions	0,17	0,15
Capital structures (debt/equity)	45:55	35:65

During the current year at one of the manufacturing sites in the Khomas region, the food inspection officer realised expired ingredients were being used while baking bread. The inspector was afraid to notify management as, in the past, colleagues of his were fired immediately for not timeously identifying and removing expired ingredients, despite the error being their first. He thought it would be best if he and his team managed the problem independently. He called a friend, who owns a fleet of trucks, loaded all the 'damaged' loaves of bread onto his trucks, and asked his friend to dump the loaves of bread onto an unoccupied piece of land about 100km away from the manufacturing facility.

Some of the initiatives undertaken by FCL, post-year end, include significantly reducing the salt and sugar content of various products and increasing the level of detail about ingredients on the packaging.

REQUIRED		MARKS
a)	Discuss the non-financial performance of FCL.	20
b)	Advise FCL on whether it should fund the plant and equipment upgrade using debt financing. Provide reasons for your answer.	5

**QUESTION 2****[25 MARKS]**

DRAB Limited (Ltd) is a division of Odada Enterprises and has been allocated N\$ five million for capital expansion in the forthcoming year. The management of DRAB Ltd believes that the company must spread its risk by investing in projects with different risk profiles and has identified two possible investments (projects A and B). The capital available to DRAB Ltd is sufficient to invest in only one of the projects. The following information has been made available:

Economic growth (annual average)	Probability of occurrence	Estimated return %		
		Project A	Project B	Existing investments
Zero	0.3	14	8	6
3%	0.4	10	6	12
6%	0.3	8	22	16
Book value		N\$5 million	N\$5 million	N\$10 million
Market value		N\$5 million	N\$5 million	N\$15 million

The division manager has requested you as the accountant to determine which of the two projects should be accepted using the portfolio theory to make the selection.

REQUIRED		MARKS
a)	Calculate the expected returns together with the risk for both projects and the existing investments	9
b)	Determine the expected returns of the portfolio, assuming that DRAB forms a portfolio of each project and the existing investments	6
c)	Determine the risk of the portfolio, assuming that DRAB forms a portfolio of each project and the existing investments	10

**QUESTION 3****[25 MARKS]**

Odada (Pty) Limited (Ltd) is a company operating in the retail industry in the two regions in Namibia. The company is privately owned with a staff complement of 100. The company is forty percent equity funded.

Kalisto Limited (Ltd) is a company that is also operating in the retail industry. The company is operating across Namibia and has a board of eight directors. The company also has a staff complement of 2 500. Kalisto Ltd is twenty percent equity funded and has a beta of 0.7.

**Additional information:**

- The market rate of return is thirteen percent
- Odada (Pty) Ltd debt consists of a bank loan at 8.5% interest per annum
- Five-year Government Bonds are currently trading at seven percent
- The tax rate in Namibia is twenty-eight percent

<b>REQUIRED</b>		<b>MARKS</b>
a)	Calculate a suitable beta for Odada (Pty) Ltd to the nearest whole number	<b>8</b>
b)	Calculate the cost of equity of Odada (Pty) Ltd	<b>3</b>
c)	Calculate the after-tax cost of debt	<b>3</b>
d)	Estimate the Weighted Average Cost of Capital (WACC) of Odada (Pty) Ltd	<b>3</b>
e)	Discuss the difference between systematic and unsystematic risks, giving an example of each and their impact on the beta of a company	<b>8</b>

**QUESTION 4****[25 MARKS]**

Mzoli Chairs (Pty) Limited (hereafter Mzoli Chairs) is a company that manufactures and sells two types of chairs that are sold locally, namely the “comfy” and the “modern”. At the beginning of the current financial year, the company produced the following budget:

**Budgeted statement of profit or loss for the year ending 30 September 2023**

<b>Products</b>	<b>Comfy</b>	<b>Modern</b>	<b>Total</b>
Sales units	30 000	20 000	50 000
	N\$	N\$	N\$
Sales	7 200 000	3 400 000	
<b>Cost of sales</b>			
Material	(2 400 000)	(400 000)	
Transferred in costs		(2 000 000)	
Labour	(1 500 000)	(300 000)	
Manufacturing overheads	(1 650 000)	(200 000)	
<b>Manufacturing gross profit</b>	<b>1 650 000</b>	<b>500 000</b>	<b>2 150 000</b>
Marketing division			(400 000)
Transport			(335 000)
Administration			(300 000)
<b>Profit</b>			<b>1 115 000</b>

**Budget information:**

1. The modern chair requires the base structure of a standard chair that is transferred in from Vilikazi (Pty) Limited (hereafter Vilikazi), a company within the group. The transferred-in price is set by Vilikazi.
2. All labour costs are variable.
3. **Manufacturing overheads** for the modern chair are variable. No fixed overheads are allocated, as the modern chair is treated as a marginal product for manufacturing purposes. The budget costs for the comfy chair consists of variable plus fixed overheads.
4. The **marketing division** costs are all variable. The comfy chair incurs twice as much cost per unit as the modern chair.
5. **Transport** costs have not been allocated to each product. Management is of the opinion that N\$85 000 fixed cost should be allocated to the modern chair. The balance of the transport cost is incurred by the comfy chair, and 40% of this is considered fixed.
6. **Administration** costs are fixed. Where product profitability is assessed, one third of the cost is allocated to the modern chair.

**Actual results for the year ended 30 September 2023**

<b>Products</b>	<b>Comfy</b>	<b>Modern</b>	<b>Total</b>
<b>Sales units</b>	<b>32 000</b>	<b>15 000</b>	<b>47 000</b>
Selling price per unit	N\$250	N\$175	
Production units	35 000	15 000	50 000

**Modern**

1. Manufacturing costs incurred were per budget, except for transferred-in costs which were charged by Vilikazi at a cost of N\$114 per unit.

**Comfy**

1. Actual raw material cost incurred was 10% higher than budget cost per unit.
2. Labour cost incurred were per budget.
3. The total manufacturing overhead cost incurred for the comfy chair was N\$1 825 000, which represents the same cost structure per the budget cost above.

**Other costs**

1. Marketing costs incurred were per budget, as were the variable transport costs. Fixed transport costs were however 20% higher.
2. Administrative costs were 10% below budget.

**Transferred-in material for the modern chair:**

Mzoli chairs ordered 20 000 standard chairs from Vilikazi, on condition that the purchase price was fixed at N\$100 per unit or lower. Vilikazi, however, stated that it was currently selling the required standard chairs at a market price of N\$114 and the selling price to Mzoli Chairs would have to be the same.

Mzoli Chairs was very unhappy with the new selling price and as a result, cut its order to 15 000 units in order to maximise company profit.

Vilikazi sells its standard chairs in an imperfect market and is faced with the following selling price/demand structures.

<b>Selling price</b>	<b>Demand</b>
N\$120	10 000
N\$114	15 000
N\$106	18 000

The company incurs a variable manufacturing cost of N\$80 per unit and has a manufacturing capacity of 35 000 units.

Mzoli Chairs, on the other hand, is faced with the following selling price/demand constraints.

<b>Selling price</b>	<b>Demand</b>
N\$175	15 000
N\$170	20 000
N\$154	25 000

REQUIRED	MARKS
Re-evaluate the transfer price decision made by Vilikazi (Pty) Limited and state what, in your opinion, the transfer price should have been and the consequences for Mzoli Chairs (Pty) Limited.	25

END OF EXAMINATION PAPER

