



**PAMIBIA UNIVERSITY**  
OF SCIENCE AND TECHNOLOGY

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

**DEPARTMENT OF ECONOMICS, ACCOUNTING, AND FINANCE**

<b>QUALIFICATION: BACHELOR OF ACCOUNTING</b>	
<b>QUALIFICATION CODE: 07BOAG</b>	<b>LEVEL: 7</b>
<b>COURSE CODE: MFN710S</b>	<b>COURSE NAME: MANAGERIAL FINANCE 320</b>
<b>SESSION: NOVEMBER 2025</b>	<b>PAPER: THEORY AND CALCULATIONS (PAPER 1)</b>
<b>DURATION: 3 HOURS</b>	<b>MARKS: 100</b>

<b>FIRST OPPORTUNITY EXAMINATION QUESTION PAPER</b>	
<b>EXAMINERS</b>	Lameck Odada, Dr Moses Nyakuwanika and Laban Nashinwe
<b>MODERATOR</b>	Alfred Makosa

<b>INSTRUCTIONS</b>	
<ol style="list-style-type: none"><li>1. This examination question paper consists of <b>FOUR (4)</b> questions</li><li>2. Answer ALL the questions in blue or black ink only. <b>NO PENCIL.</b></li><li>3. Start each question on a new page and number the answers correctly and clearly.</li><li>4. Write clearly and neatly, showing all your workings/assumptions.</li><li>5. Round off only final answers to two (2) decimal places.</li><li>6. 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 address any perceived errors or ambiguities, and any assumptions they make should be clearly stated.</li></ol>	

**PERMISSIBLE MATERIALS**

1. Silent, non-programmable calculators

**THIS QUESTION PAPER CONSISTS OF 5 PAGES (including this front page)**

**QUESTION 1****[30 MARKS]**

Sisedi Investment Group (SIG) represents the ownership and accountability taken by its female founders for the development of Namibia. Sisedi, meaning 'it is ours' in the Namibian Khoekhoegowab language. The firm, which is 100% owned by black Namibian females and owner-managed, was founded in 2018 and commenced operations in 2019. SIG operates in the 'trust business' and seeks to safeguard and grow its clients' life savings to secure their financial futures. With a combination of seasoned investment expertise and intuitive feminine insights, SIG aims to make a meaningful impact in the investment management industry.

SIG has allocated N\$5 million for capital expansion in the 2026 financial year. The management of SIG believes that the company must spread its risk by investing in projects with different risk profiles and has identified two possible investments (projects 1 and 2). The two projects are mutually exclusive. There is a 40% chance that the economic growth will be 3% and an equal chance that the economic growth will be zero or 6%.

The following information has been made available:

Economic growth (annual average)	Zero	3%	6%
	Estimated return %		
Existing investments	6	12	16
Project 2	8	6	22
Project 1	14	10	8
	Existing investments	Project 2	Project 1
Book value (Million N\$)	10	5	5
Market value (Million N\$)	15	5	5

As the accountant, the management of SIG has requested that you determine which of the two projects should be accepted in line with the portfolio theory.

REQUIRED		MARKS
a)	Calculate the standard deviation of project 1, project 2, and the existing investments	9
b)	Determine the expected return if SIG forms two separate portfolios with each project. Which of the two projects would you recommend that SIG select?	7
c)	Determine the standard deviation if SIG forms two separate portfolios with each project. Which of the two projects would you recommend that SIG select?	14

**QUESTION 2****[20 MARKS]**

Build It is a division of the SPAR Group Limited, South Africa. A voluntary trading group of individually owned retail stores with more than 10 000 employees across the group. They currently have stores in South Africa, Namibia, Swaziland, Lesotho, and Mozambique, with plans to expand into Botswana and Zambia in the near future. With each of their stores being owner-run and managed, their customers can be assured of the best possible service and advice. They view themselves not only as a supplier of materials, but as a partner to their valued customers in accomplishing their building or renovation projects. Build It produces one product, an angle grinder. Last year, 50 000 grinders were sold at N\$20 each. The income statement of Build It for the year ended December 31<sup>st</sup>, 2024, is as follows:

Build It Income Statement for the year ended December 31<sup>st</sup>, 2024

	N\$	N\$
Sales		1 000 000
Less variable costs	(400 000)	
Fixed costs	<u>(200 000)</u>	<u>(600 000)</u>
EBIT		400 000
Less interest		<u>(125 000)</u>
Net income before tax		275 000
Income tax at 40%		<u>(110 000)</u>
Net income		<u>165 000</u>
Earnings per share (100 000 shares)		<u>1.65</u>

Build It is considering a new production process in 2026, which would involve manufacturing the grinders. Highly automated and capital-intensive, the new process will double fixed costs to N\$400 000 but will decrease variable costs to N\$4 per unit. If the new equipment is financed with bonds, interest will increase by N\$70 000; if it is financed by ordinary shares, the total number of shares outstanding will increase by 20 000 shares.

<b>REQUIRED:</b>	<b>MARKS</b>
(a) Define and calculate the following for the Build It 2024 level of sales <ul style="list-style-type: none"> <li>(i) The degree of operating leverage</li> <li>(ii) The degree of financial leverage</li> <li>(iii) The degree of combined leverage</li> </ul>	<b>9</b>
(b) If sales remain constant, calculate for each of the two proposed financing methods: <ul style="list-style-type: none"> <li>(i) The earnings per share</li> <li>(ii) The combined leverage effect.</li> </ul>	<b>11</b>

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

Orange River Co operates a chain of vegetarian restaurants and has the following abbreviated Statement of Financial Position as at 30 November 2024.

	N\$m
Total assets less current liabilities	37.5
Share capital	12.5
Retained earnings	15.0
Non-current liabilities	27.5
Debt capital	10.0
	37.5

Over the past four years, the company has generated the following after-tax profits.

After-tax profits Year ended 30 November	N\$m
2021	3.97
2022	4.29
2023	4.63
2024	5.00

The board of directors of Orange River Co. is currently considering whether to recalculate the company's cost of capital. When evaluating investment decisions, the board employs the net present value method, using a cost of capital of 16%. This figure, however, was calculated four years ago, and since then, the company has undergone various changes.

The following information is also available:

1. The debt capital consists of 8% bonds that are redeemable in three years. The current market value of the bonds is N\$95 per N\$100 nominal value. The debt capital will be redeemed at its nominal value in three years.
2. The company has 25 million equity shares in issue, and these shares are currently trading at a P/E ratio of 7.6 times.
3. The dividend policy of the company is to maintain a dividend cover of 2 times.
4. At a recent board meeting, the directors decided to maintain the current capital structure of the company for the foreseeable future.
5. Assume a tax rate of 25% and that tax relief on interest is received in the year that the interest is paid.

REQUIRED		MARKS
a)	Discuss the arguments of Modigliani and Miller concerning capital structure and its effect on the value of a company, assuming a world without taxes	5
b)	Calculate, for Orange River Co., each of the following to the nearest % i.) The cost of debt capital. ii.) the cost of equity capital; and, iii.) the weighted average cost of capital	3 5 6
c)	Identify and describe the THREE (3) key assumptions that underpin the use of the weighted average cost of capital as a discount rate in investment appraisal.	6

**QUESTION 4**

**[25 MARKS]**

Damaraland Co expects annual demand for product X to be 255 380 units. Product X has a selling price of N\$19 per unit and is purchased from a supplier, MKR Co., for N\$11.

Damaraland Co. places an order for 50 000 units of Product X at regular intervals throughout the year. As the demand for product X is to some degree uncertain, Damaraland Co. maintains a safety (buffer) inventory of product X, which is sufficient to meet demand for 28 working days. The cost of placing an order is N\$25, and the storage cost for Product X is 10 cents per unit per year.

Damaraland Co. typically pays trade suppliers after 60 days, but MKR has offered a 1% discount for a cash settlement within 20 days.

Damaraland Co. has a short-term cost of debt of 8% and operates on a 365-day working year.

REQUIRED		MARKS
a)	Calculate the annual cost of the current ordering policy. Ignore financing costs in this part of the question.	7
b)	Calculate the annual savings if the economic order quantity model is used to determine an optimal ordering policy. Ignore financing costs in this part of the question.	8
c)	Determine whether the discount offered by the supplier is financially acceptable to Damaraland Co.	10

**END OF EXAMINATION QUESTION PAPER**