



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF COMMERCE, HUMAN SCIENCES AND EDUCATION

DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE

QUALIFICATION: BACHELOR OF ECONOMICS HONOURS	
QUALIFICATION CODE: O8BECH	LEVEL: 8
COURSE CODE: FEO810S	COURSE NAME: FINANCIAL ECONOMICS
SESSION: JUNE 2024	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Ms Kasnath Kavezeri
MODERATOR:	Dr Reinhold Kamati

INSTRUCTIONS
<ol style="list-style-type: none">1. Answer ALL the questions.2. Write clearly and neatly.3. Number the answers clearly.

PERMISSIBLE MATERIALS

1. Pens/pencils/erasers
2. Calculator
3. Ruler

THIS QUESTION PAPER CONSISTS OF 4 PAGES (Including this front page)

QUESTION 1**[25 Marks]**

1. What is the real interest rate if the nominal interest rate is 12% and the expected inflation rate is 7%? (2)
2. Compute the expected return for a one-year discount bond with a face value of N\$1,000 but sells for N\$900. (4)
3. Compute the price of a share of stock that pays N\$1 per year dividend and that you expect to be able to sell in one year for N\$50, assuming you require a 15% return. (2)
4. The current price of a stock is N\$65.88. The dividends are expected to be N\$1 per share for the next five years, and the required return is 10%.
 - (a) Write down the formula that is used to calculate what the price of this stock should be in 5 years when you plan to sell it. (3)
 - (b) If the dividend and required return remain the same, and the stock price is expected to increase by N\$1 five years from now, does the current stock price also increase by N\$1? Why or why not? (4)
5. Suppose that the one-year interest rate over the next five years is expected to be **2%, 3%, 4%, 6%, and 7%**, while the liquidity premiums for one-to five-year bonds are **0%, 0.5%, 2%, 2.25%, 3.6%**, respectively. Using the liquidity premium theory of the term structure, calculate the one-to five-year interest rates on the bonds. (10)

QUESTION 2 [25 Marks]

1. Security X has an expected rate of return of 13% and a beta of 1.15. The risk-free rate is 5% and the market expected rate of return is 15%. According to the capital asset pricing model, is security X priced fairly, underpriced, or overpriced? Justify your answer by showing your calculations. (6)
2. You invest N\$1,200 in security A with a beta of 1.5 and N\$800 in security B with a beta of 0.90. Compute the beta of this formed portfolio. (3)
3. The risk-free rate and the expected market rate of return are 5% and 15% respectively. According to the capital asset pricing model, what is the expected rate of return on security X if the beta is 1.2? (5)
4. Briefly discuss the importance and applicability of the capital asset pricing model. (4)
5. Differentiate between systematic and unsystematic risk. (6)
6. What do you think will happen to interest rates on a corporation's bonds if the government guarantees today that it will pay creditors if the corporation goes bankrupt in the future? (1)

QUESTION 3 [25 Marks]

1. What do we call the relationship between yield and maturity of the same type of security? (2)
2. Why are financial markets important to the health of the economy? (3)
3. State the two main sources of cash flows for a stockholder. (2)
4. What effect might a fall in stock prices have on business investment? (2)
5. If you expect that a company will go bankrupt next year, would you rather hold bonds issued by the company or equities issued by the company? Give a reason for your answer. (2)
6. Which two basic facts about financial structure are best explained by the presence of the lemons problem in securities markets? (4)
7. Compare the rights and obligations of the buyer and seller of a call option with the rights and obligations of the buyer and seller of a futures contract. (10)

QUESTION 4 **[25 Marks]**

1. Explain why bonds that have the same maturities might have different interest rates, or yields to maturity? (10)
2. Briefly discuss the three theories that attempt to explain why yield curves take on different shapes at different times. (15)

TOTAL = 100 MARKS