MAASAI MARA UNIVERSITY

REGULAR UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR
FIRST YEAR SECOND SEMESTER

SCHOOL OF BUSINESS AND ECONOMICS

MASTER OF BUSINESS ADMINISTRATION

COURSE CODE: MBA 8221
COURSE TITLE: INVESTMENT ANALYSIS & MANAGEMENT

DATE: 13TH DECEMBER 2022 **TIME: 1430-1730**

INSTRUCTIONS TO CANDIDATES

Answer Question **ONE** and any other **TWO** Questions

*This paper consists of **4** printed pages. Please turn over.*

Question One

a) Briefly explain the following concepts used in equity market transactions:

i) Bid-ask spread. **(3 Marks)**

ii) Margin trading. **(3 Marks)**

iii) Short selling. **(3 Marks)**

b) Discuss THREE objectives of fundamental analysis in investments analysis. **(6 Marks)**

c) Joel follows Sono Company. The company appears to have a dividend policy of recognizing sustainable increases in the level of earnings with increases in dividends, keeping the dividend payout ratio within a range of 40% to 60%. Joel also notes that:

- The company's most recent quarterly dividend (ex-dividend date: 15th August 2021) was Ksh. 0.26 consistent with a current annual dividend of sh.1.04 per year.
- Company's forecasted dividend growth rate is 6% per year.
- Beta (β_i) is 1.13.
- Equity risk premium is 4.5%
- Risk free rate is 5%

Joel believes that Gordon growth model would be the most appropriate model for valuing the company.

Required:

i) Company's required return on equity. **(4 marks)**

ii) Gordon growth model value for Sono stock. **(4 marks)**

iii) If the current market price of Sono stock is sh. 30.18. using your answer to question (ii) judge whether Sono stock is fairly valued, undervalued or overvalued. **(3 marks)**

d) Indenture and covenants contain the promises of the issuer and rights of bondholders. As part of the indenture, there are affirmative covenants and negative covenants. Discuss FOUR negative covenants. **(4 Marks)**

Question Two

a) Explain SIX types of risks associated with fixed income instruments. **(6 Marks)**

b) Consider a 20 years 100 par value 10% semi annual pay bond with a full price of 112 that can be called in 5 years at 102 and called at par in 7 years. **Calculate:**

i) Yield to Maturity (YTM). **(3 Marks)**

ii) Yield to Call (YTC). **(3 Marks)**

iii) Yield to first par call. **(3 Marks)**

Question Three

a) In the context of Derivatives, explain the purpose of derivatives market.

(5 Marks)

b) Highlight FOUR differences between forward and futures contracts.

(4 Marks)

c) A three-month forward contract exists on a bond that does not offer any coupon. The face value of the bond is sh. 1 million but is currently trading at sh. 500,000. From available market data, the risk-free annual interest rate is 6%.

Required:

i) The price of forward contract under no-arbitrage principle.

(3 Marks)

ii) Assume that after exactly two months, the spot price of the bond is Ksh. 515,000 while the risk-free rate remains unchanged. Determine the value of the long and short position in the forward contract.

(3 Marks)

Question Four

a) Discuss the main steps followed in portfolio management process.

(6 Marks)

b) Mark has decided to hold a portfolio with 80% invested in the S&P 500 U.S. stock index and the remaining 20% in the MSC emerging markets index. The expected return is 9.3% for S&P and 18.20% for the emerging markets. The risk is 16.21% for S&P and 33.1% for the emerging markets index. The co-variance between S&P and emerging markets index is 0.5%.

Required:

i) The portfolio's expected return. **(3 Marks)**

ii) The portfolio's expected risk. **(3 Marks)**

c) Given an investment with an expected return of 10%, a risk rate of 20% and risk aversion coefficient of 3. Calculate the utility of the investment.

(3 Marks)

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