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KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY UNIVERSITY EXAMINATION, 2024/2025ACADEMIC YEAR THIRD YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE (BUSINESS ADMINISTRATION)

Date: 8th August, 2024 Time: 11.30am –1.30pm

KFI 2302 INVESTMENT ANALYSIS 1

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS_

QUESTION ONE (30 MARKS)

CASE STUDY: MONEY CORP

Money Corp is a well-established manufacturing company that produces industrial machinery. The company has been profitable but wants to explore new opportunities. The management team is considering two investment options: expanding into a new product line or diversifying into a different industry. They also intend on floating a green bond worth Ksh. 50 million to finance the selected investment and any other related activities.

New Product Line	Diversification	
(Option A):	(Option B):	
Develop and manufacture electric	Invest in renewable energy projects (solar and wind	
vehicles (EVs).	farms).	
Initial investment: Ksh. 40 million.	Initial investment: Ksh. 30 million.	
Expected present values of annual cash	Expected present values of annual cash flows	
flows (after-tax):	(after-tax):	
i. Year 1: Ksh. 10 million	i. Year 1: Ksh. 12 million	
ii. Year 2: Ksh. 15 million	ii. Year 2: Ksh. 15 million	
iii. Year 3: Ksh. 25 million	iii. Year 3: Ksh. 18 million	
Projected growth rate: 5% per year.	Projected growth rate: 8% per year.	
Risk level: Moderate.	Risk level: High due to market volatility.	

Required:

- a) Explain how Money Corp. can diversify its portfolio effectively by either choosing option A or option B, and the benefits of diversification. (5 marks)
- b) Determine the ideal investment option by evaluating the projects' risk-return trade-off, and alignment to the firm's expansion strategy assuming a risk averse position. (5 marks)

- c) Using your knowledge of investment instruments, explain why Money Corp's decision to raise a green bond is appropriate and its impact on the firm's capital structure. (5 marks)
- d) The investments under consideration will be exposed to various risks which must be considered before proceeding. Describe the two classifications of risk that Money Corp. is expected to deal with. (4 marks)
- e) Danisac Securities Ltd. is a financial services firm and the following information was extracted from their financial records for the year ended 31st December 2023:

Net profits	KSns. 100 million
Financed by:	
10,000,000 Ordinary shares	Kshs. 200 million
10%, 2,000,000 Preference shares	Kshs. 50 million

Notes:

- Retention ratio 30%
- Cost of equity 10%
- Dividend growth rate 5%
- Market share price at the NSE as at 31st July 2024 Ksh. 130
- Current revalued preference share price as at 31st July 2024 Ksh. 32
- Preference shares are redeemable at revalued price.

Required:

i)	Calculate the share price of Danisac's ordinary stock.	(4 marks)
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- ii) Calculate the value of Danisac's preference stock. (3 marks)
- iii) Comment on whether each of the firm's shares are under- or over-priced and what an existing shareholder (of both ordinary and preference) of the company should do regarding their portfolio. (4 marks)

QUESTION TWO (20 MARKS)

 a) Mercer Inc. has 12,000,000 shares outstanding at the current market price of Ksh. 250 per share. The company wishes to raise Ksh. 450 million to finance a number of proposed projects. The Board has decided to conduct a rights issue to raise these funds where the subscription prion per share has been set at Ksh. 150.

Required;

- i) How many shares are required to purchase one right? (3 marks)
- ii) Determine the theoretical value of one right. (2 marks)
- iii) Determine the theoretical ex-right price of the share. (3 marks)
- b) In your own opinion, explain why the rate of return on a treasury bill is lower than a commercial paper, yet they both belong to the same group of short-term investments. (3 marks)
- c) Firms can raise additional equity capital through a number of ways in secondary financial markets. However, for an existing shareholder, the decision to invest in more of a firm's stock is influenced by various factors including whether their shareholding will increase or decrease.
 - i) Discuss three methods that firms use to issue additional shares. (6 marks)
 - ii) Explain their effect on an existing investor's wealth. (3 marks)

QUESTION THREE (20 MARKS)

- a) Orchid is an avid investor in the Kenyan bond market where she has been investing in various types of bonds over the years. She recently came across a firm issuing two bonds with different terms; Bond A has a face value of Ksh. 4,000,000, coupon rate of 12% and matures in 5 years. Bond B on the other hand has a face value of Ksh. 5,000,000, coupon rate of 10% and matures in 3 years. Showing your workings, determine the profit she stands to make from each bond and advise her on the appropriate bond to invest in considering Bond A pays its coupon annually, while Bond B pays semi-annually, and the yield to maturity for both bonds is 14%.
- b) Justify why an investor would prefer a bond whose coupon rate of return is lower than his or her minimum required rate of return. (2 marks)
- c) The Efficient Market Hypothesis explains the movement of asset prices in the stock market. Discuss the assumptions on which this hypothesis relies upon. (10 marks)

QUESTION FOUR (20 MARKS)

- a) Bonds are financial instruments commonly issued by corporations and the government and can be traded in financial markets. Discuss why a firm would issue a bond compared to other debt instruments such as a loan. (6 marks)
- b) Financial literacy is expected of every investor that wishes to be successful. In order to make wise investment decisions, an investor is advised to follow an outlined order of activities. Describe the steps involved in the decision making process. (10 marks)
- c) Inuka Properties Ltd is a land buying company situated in Mwihoko. In their last staff meeting, it was suggested that the company should buy a big flat screen TV to be placed at the reception area. However, one manager thinks that this is not a wise idea since a TV is not an investment, while another insists that this could be viewed as an investment. In your own words, justify on whether you think a TV is an investment or not. (4 marks)

QUESTION FIVE (20 MARKS)

- a) Anthony wants to invest in a commodity presently worth Ksh. 100,000 today. The risk-free rate is 8% and he expects to hold it for a period of 8 months. 4 months later, the spot rate has changed to Ksh. 120,000 and that the risk-free rate has also changed to 9%. Determine whether he should sell the contract or continue holding onto it. (4 marks)
- b) Rachel is considering investing in the stock market and has identified two potential stocks in different stock markets that she believes are ideal for her, and has approached you to help her determine which stock she should choose.

	KVM	CFG
Asset Beta	0.8	1.2
91-day treasury bill	10.2%	9.8%
Expected market return	15%	13%

Required:

Using the Capital Asset Pricing Model, advise on the best share to invest in if Rachel's minimum required rate of return is 14%. (8 marks)

c) The Arbitrage Pricing Theory is used as an alternative to the CAPM is valuation of stocks by various investors, with some scholars arguing it is an even better model. Discuss the reasons why APT is considered a more superior model to CAPM in investment. (8 marks)