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**KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**UNIVERSITY EXAMINATION, 2023/2024 ACADEMIC YEAR**  
**THIRD YEAR, FIRST SEMESTER EXAMINATION**  
**FOR THE DEGREE OF BACHELOR OF SCIENCE**  
**(BUSINESS ADMINISTRATION)**

Date: 7<sup>th</sup> December, 2023

Time: 8.30am –10.30am

**KFI 302 - INVESTMENT ANALYSIS 1**

**INSTRUCTIONS TO CANDIDATES**

**ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS**

**QUESTION ONE (30 MARKS)**

- a) Multiple definitions of the term, 'investments' have been suggested by various scholars. However, two common concepts can always be identified in all these definitions, 'risk' and 'return'. With the help of an appropriate diagram, explain the risk-return concept. (6 marks)
- b) Seneca Ltd. is a securities brokerage firm consulted by Sir Charles. They advised him to invest in Stargaze Ltd.'s shares, a promising biotech company situated in Konza Techno City, which they believe will fit his investment objectives. Seneca Ltd. forecasts that Stargaze Ltd's dividends will grow at a constant rate of 10% per year, while the firm's dividend policy recommends a payout ratio of 70%. Their most recent net profits were Ksh. 120 million and the firm has 10 million outstanding ordinary shares. Sir Charles' regular minimum required rate of return in this market is 15%?  
Required:
- i) If Stargaze Ltd current market share price is Ksh. 195, do you think their stock is over- or under-priced? (Show your workings) (3 marks)
- ii) Would you advise Sir Charles buy the stock if the company decides to pay a constant dividend per share of Ksh. 22 in perpetuity without any growth? Justify your answer. (3 marks)
- iii) Seneca's financial analysts predict that Stargaze share value in the market will grow by 10% in the next 12 months. What would be the firm's share intrinsic value after a single-period? (3 marks)
- c) Highlight the anomalies that violate the concept of perfection and efficiency of capital markets, giving examples in each. (6 marks)
- d) Akai Ltd. has preference shares with a face value of Ksh. 100 and pays 6% dividends. If the required rate of return of a rational, risk-averse investor is 10%, what is the intrinsic value of the preference share? (3 marks)
- e) Investor decisions and behaviour are influenced by various factors including the investor's risk tolerance. Outline the different perceptions to risk that investors have in a market such as the Nairobi Securities Exchange. (6 marks)

**QUESTION TWO (20 MARKS)**

- a) The Efficient Market Hypothesis states that asset prices reflect all available information regarding that asset, and that any new information is instantaneously reflected in the price. However, for this theory to hold true, it relies on agreed upon assumptions. Discuss the assumptions of this hypothesis. (10 marks)
- b) Adix Ltd. is a plastics manufacturer that intends to expand their operations by raising additional finance. They are torn between issuing preference share capital and ordinary share capital. As an investment analyst, relying on the differences between ordinary and preference shares, justify why Adix should issue ordinary shares over preference shares. (10 marks)

**QUESTION THREE (20 MARKS)**

- a) 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 wealth/shareholding will increase or decrease. Discuss three methods that firms use to issue additional shares and their effect on shareholders' wealth. (9 marks)
- b) Betty 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.

	Asset A	Asset B
Asset Beta	0.9	1.1
91-day treasury bill	13.2%	-9.8%
Expected market return	18%	14%

Required:

Using the Capital Asset Pricing Model, advise on the best choice of asset that Betty should undertake if her minimum required rate of return is 15%.

- (7 marks)
- c) Bonds are debt instruments commonly used and preferred by firms in need of a large amount of capital injection. Explain why a firm would choose to issue a bond over other forms of financing known to you. (4 marks)

**QUESTION FOUR (20 MARKS)**

- a) Financial literacy has been highlighted as one the key skills required by an investor. In order to make wise investment decisions, an investment is advised to follow an outlined order of activities. Describe the steps involved in the decision making process. (10 marks)
- b) Grace 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. 2,000,000, coupon rate of 12% and matures in 5 years. Bond B on the other hand has a face value of Ksh. 2,500,000, 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%. (8 marks)
- c) 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)

**QUESTION FIVE (20 MARKS)**

- a) The Arbitrage Pricing Theory model was developed as an alternative to the Capital Asset Pricing Model and as a solution to the critiques of CAPM. Discuss the reasons why APT is considered a superior asset pricing model to CAPM. ( 8 marks)
- b) Empire Business has 1.2 million shares outstanding at the current market price of Ksh. 65 per share. The company wishes to raise Ksh. 22 million to finance a number of proposed projects. The Board has decided to conduct a rights issue to raise these funds where the subscription price per share has been set at Ksh. 55.  
Required;
- i) How many shares are required to purchase one new right? (3 marks)
- ii) Determine the theoretical value of one right. (3 marks)
- iii) Determine the theoretical ex-right price of the share. (3 marks)
- c) 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 classification of short-term investment instruments. (3 marks)