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KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY UNIVERSITY EXAMINATION, 2022/2023 ACADEMIC YEAR FOR THE FOR THE DIPLOMA OF ACCOUNTING DBF 1106 - INVESTMENT ANALYSIS

Date: 14th April, 2022 Time: 2.30 pm – 4.30pm

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONONE (COMPULSORY) AND ANYOTHER TWO QUESTIONS QUESTION ONE (30 MARKS)

- a) Describe three types of market anomalies that can disprove their efficiency. (6 Marks)
- b) For accuracy purposes, the Black-Scholes Options Pricing model is based on a number of assumptions. List three of these assumptions. (6 Marks)
- c) With the help of examples, identify the risk perceptions adopted by different investors. (6 Marks)
- d) Amara wishes to invest in the stock market and is considering two assets, A and B. The beta of asset A is 1.2 while the beta of asset B is 0.8 and these assets are trading in a financial market whose average rate of return is 14%. Presently, the 90-day T-bill rate as per the central bank is 6.5%. **Required;**
 - i) Explain to Amara what the risk levels of assets A and B in relation to the market mean and their impact on expected returns. (4 Marks)
 - ii) Using the Capital Asset Pricing Model, obtain the expected rate of return of assets A and B and comment on the best choice for her to make. (4 Marks)
- e) The National Police Service is one of the largest users of lease finance. Outline three differences between operating leases and finance leases. (6 Marks)
- f) The beta is a commonly used measure in the analysis of asset performance. Highlight the applications of beta. (4 Marks)

QUESTION TWO (20 MARKS)

- a) With the aid of an illustration, demonstrate how feasible portfolios, efficient portfolios, and optimal portfolios are identified. (10 Marks)
- b) Investments are meant to earn a holder positive cash flows in the future. However, one needs to know the available options in order to make the right choice. Giving examples in each, evaluate the three main categories of investment types and their properties. (10 Marks)

QUESTION THREE (20 MARKS)

- a) Companies have a wide range of financing options available to them and their source of finance depends on various factors. With the aid of appropriate examples, discuss the factors that determine a firm's choice of finance. (8 Marks)
- b) Debentures are a form of debt finance commonly used by firms. Briefly examine the features of debentures. (6 Marks)
- c) Chika Ltd is a publicly trading company at the NSE. They intend on raising more funds by conducting a rights issue. Their current share price is Ksh. 150 and the subscription price of a right is Ksh. 130. If five share are needed to buy one right;
 - i) What is the theoretical value of one right?

(3 Marks)

ii) What is the theoretical ex-rights value?

(3 Marks)

QUESTION FOUR (20 MARKS)

Annalisa is an investor who wishes to invest her savings in the NSE and she has identified two possible assets, X and Y. She has obtained the following information regarding the asset returns and possible outcomes;

Economy	Asset X	Asset Y
Boom: 0.5	15%	-5%
Moderate: 0.3	-8%	25%
Recession: 0.2	25%	18%

Required:

i) Calculate the expected returns of assets X and Y.

(4 Marks)

ii) Calculate the standard deviation of assets X and Y.

- (6 Marks)
- iii) Calculate the portfolio expected return if she chose to invest equally in both assets. (2 Marks)
- iv) Calculate the portfolio standard deviation.

(5 Marks)

v) Interpret the correlation coefficient obtained.

(3 Marks)

QUESTION FIVE (20 MARKS)

- a) Discuss the difference between the portfolio covariance and portfolio coefficient correlation. Highlighting their relevance. (6 Marks)
- b) Explain why the Arbitrage Pricing Theory model is considered superior to the Capital Asset Prancing Model. (4 Marks)
- c) Before the optimal investment is chosen, one needs to make some considerations given their situation. As such, discuss the steps taken in the decision making process when choosing an investment. (10 Marks)