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#### KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY

UNIVERSITY EXAMINATIONS, 2022/2023 ACADEMIC YEAR SECOND YEAR,SECOND SEMESTER END OF SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF EDUCATION (ARTS)

KFI 2202:BASICS OF INVESTMENT

Date: 9<sup>th</sup> December 2022 Time:11.30am-1.30pm

# INSTRUCTION TO CANDIDATES: ANSWER QUESTION ONE (COMPULSORY)AND ANY OTHER TWO QUESTIONS QUESTION ONE (30 MARKS)

- a) There are a number of investment instruments that investors can choose from. However, their choice of instruments or assets is largely determined by a number of factors. Highlight five of these factors. (5 marks)
- b)Mr.Omondi has an investment capital of a Sh.1,000,000 .He wishes to invest in two securities A and B in the following proportion Sh.200,000 in security AandSh.800,000 in security B.

The returns on these two securities depend on the state of the economy as shown below:

| tate of economy | Probability | Return of  | Return of  |
|-----------------|-------------|------------|------------|
|                 |             | Security A | Security B |
| Boom            | 0.4         | 18%        | 24%        |
| Normal          | 0.5         | 14%        | 22%        |
| Recession       | 0.1         | 12%        | 21%        |

#### Required:

- i) Compute the expected portfolio return
- ii)Determine the correlation coefficient between security A and security B
- iii) Calculate the portfolio risk

(15 marks)

- c) One of the methods of raising capital for a firm is through the issue of ordinary shares. Identify any four features unique to ordinary shares. (4 marks)
- d) When determining an asset's risk level, the beta is a commonly used. Highlight three applications of the beta measure. (6 marks)

#### **QUESTION TWO (20 MARKS)**

a) An investor is evaluating six portfolios with the following characteristic:

| Portfolio | Portfolio Expected return% | Portfolio standard deviation |
|-----------|----------------------------|------------------------------|
| 1         | 19                         | 8                            |
| 2         | 25                         | 12                           |
| 3         | 16                         | 6                            |
| 4         | 32                         | 16                           |
| 5         | 22.5                       | 10                           |
| 6         | 8                          | 2                            |

The expected return on the market portfolio is 12% with an accompanying standard deviation of 4%. The risk free interest is 5%

#### Required:

Using the CML, advice the invest on which of the above portfolios are efficient and inefficient. (10 marks)

b) Differentiate between Capital market line and Security Market line

(2 marks)

c) Elucidate the merits of incorporation

(8 marks)

## **QUESTION THREE (20 MARKS)**

- a) Differentiate between the following terms used in investment:
  - i. Call option and Put option
  - ii. Forward and futures
  - iii. Right issue and bonus issue
  - iv. Hedgers and speculators
  - v. Financial inclusion and financial deepening

(10 marks)

b)Kivumbi limited is a private company and wishes to raise more funds by issuing shares in the securities market. They have approached you as a consultant in search for an advice on the process of listing their company. Discuss the steps the company should follow to list the company in the securities market.

(10 marks)

#### **QUESTION FOUR (20 MARKS)**

a) Highlight at least Five assumptions of Portfolio Theory

(5 marks)

b) An investor expects a risk-free rate of return of 4.5% per annum and the market rate of return of 14.5% per annum. Two stocks A and B have the following betas and estimated returns.

| Stock | Beta | Expected return |
|-------|------|-----------------|
| A     | 1.2  | 16%             |
| В     | 0.8  | 14%             |

#### Required:

1. Assuming stock A and B are fairly valued under the CAPM, use a graph to indicate the points where the stocks would be plotted on the SML.

2. State whether stock A and stock B are undervalued or overvalued.

(10 marks) (5 marks)

c) Highlight the functions of a commercial bank

### **QUESTION FIVE (20 MARKS)**

a) Discuss the role of the Nairobi stock exchange in the capital market

(10 marks)

b) Differentiate between speculation and investment

(4 Marks)

c) Professor Eugene Fama defined a market to be "informationally efficient". Discuss the forms of market efficiency. (6 marks)