## UNIVERSITY EXAMINATIONS CHUKA /EMBU

## EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF COMMERCE AND BACHELOR OF COOPERATIVE MANAGEMENT

## BCOM 433/435: INVESTMENT AND PORTFOLIO MANAGEMENT

STREAMS:Y4S2
TIME: 2 HOURS
DAY/DATE: TUESDAY 17/04/2018

## INSTRUCTION:

- Answer question one and any other two questions

1. (a) As an investment advisor, recommend the essential consideration for selecting a suitable investment.
[4marks]
(b) Using suitable examples differentiate among investment, speculation and gambling.

> [3marks]
(c) With the aid of a diagram discuss the efficient frontier of investment in many assets.
(d) Differentiate between growth funds and aggressive growth funds. [3marks]
(e) During the last four years the average return on the markets is $12 \%$ and the average return on the treasury bill was $7 \%$ consider the following information.

| Investment | Average rate <br> of return | Beta of portfolio | Stard deviation |
| :--- | :--- | :--- | :--- |
| A | $15 \%$ | 1.25 | $25 \%$ |
| B | $12 \%$ | 0.75 | $30 \%$ |
| C | $10 \%$ | 1.0 | $20 \%$ |

The standard deviation of the market portfolio is $25 \%$.

## Required :

Evaluate the performance of the investment using Sharpe, Treynor and Jensen measures and rank them while commenting on their performance. [9marks]
(f) Consider the returns of the three securities with the respective probabilities.

| Probability | RA \% | RB\% | RC \% |
| :--- | :--- | :--- | :--- |
| 0.3 | $16 \%$ | $14 \%$ | $10 \%$ |
| 0.2 | $20 \%$ | $19 \%$ | $15 \%$ |
| 0.5 | $24 \%$ | $23 \%$ | $18 \%$ |

Determine the portfolio expected return and portfolio risk for a portfolio consisting of $30 \%$ in A, $40 \%$ in B and $30 \%$ in C.
[8marks]
2. A 10 year bond with a par value of ksh 1,000 has a coupon rate of $12 \%$ and is currently priced at ksh 950 . The market interest rate is $18 \%$. The bond is redeemable after 10 years. Calculate the duration of the bond.
[10marks]
(b) Explain how fundamental analysis is conducted in analyzing securities for investment. [4marks]
(c) A company is considering investing in a 4 year $8 \% \mathrm{ksh} 10,000$ bond currently selling for ksh 8,800 . Calculate the yield to maturity of the bond.
[3marks]
(d) Explain the working of mutual funds.
[3marks]
3. (a) No investment is risk free in review of this statement discuss the types of investment risks to which investors are exposed.
(b) Asembo limited holds shares in four companies.

| Company | Number of <br> shares | Mps | Beta | Expected <br> return (\%) |
| :--- | :--- | :--- | :--- | :--- |
| A | 120,000 | 65 | 1.12 | 18 |
| B | 160,000 | 50 | 0.90 | 23 |
| C | 200,000 | 45 | 0.60 | 11 |
| D | 250,000 | 80 | 0.70 | 18 |

The current market return is $15 \%$ and the treasury bill yield per annum is $9 \%$.

## Required :

(i) Determine the required return on each of the share on the four companies and hence advise the worth of each investment in the portfolio.
[5marks]
(ii) Determine the expected return and required return on the overall portfolio of the company and comment on the worth of the portfolio.
[5marks]
(c) How does markowitz portfolio theory differ from shape single index model.
[3marks]
(d) Differentiate between capital market line and security market line.
4. (a) Two portfolios were constructed one consisting of equity shares and debenture. The shilling value of equity shares at the time of constructing the portfolio was 150,000 and 100,000 debenture, the investor opts to use constant ratio plan of 1:5:1 and fixes a revision point of $\pm 0.1$. The share prices are as follows;

| Period | Share price |
| :--- | :--- |
| 1 | 100 |
| 2 | 90 |
| 3 | 85 |
| 4 | 75 |
| 5 | 65 |

Required: Explain the portfolio revision pattern of the investor.
[10 marks]
(b) Differentiate between passive and active portfolio revision strategies. [2marks]
(c) The rate of return of stock A and the markets portfolio for five periods are given below.

| Periods | Return on stock <br> A(\%) | Return on the <br> market(\%) |
| :--- | :--- | :--- |
| 1 | 18 | 10 |
| 2 | 15 | 13 |
| 3 | 14 | 12 |
| 4 | 16 | 9 |
| 5 | 10 | 14 |

Required : Calculate the beta of stock A
(d) Differentiate yield to maturity and current yield of a bond.

