CHUKA UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF PROCUREMENT AND LOGISTICS MANAGEMENT

BPLM 421: INVESTMENT MANAGEMENT

STREAMS: BPLM (Y4S1) (ODEL) **TIME: 2 HOURS**

DAY/DATE: WEDNESDAY 07/08/2024 **2.30 P.M. – 4.30 P.M.**

INSTRUCTIONS:

- **Answer question ONE and any other TWO questions**

QUESTION ONE

a) Consider the following information

$R_A(\%)$	$R_B(\%)$	$R_C(\%)$	Probability
18	20	10	0.3
16	18	12	0.5
15	14	14	0.2

Determine the portfolio expected return and the expected risk if 40% is invested in A, 30% in B and 30% in C. (12 marks)

b) 10-year bond of sh 10,000 has a coupon rate of 10% and is currently selling at sh 12,000. The market interest rate is 12%. The bond is redeemable after 6 years. Calculate the duration of the bond. (8 marks)

c) Explain the process involved in investment. (10 marks)

QUESTION TWO

a) Consider the following five portfolios

Porfolio	Expected return (%)	Standard deviation ()
A	21	8%
B	22	10%
C	16	6%
D	19	7%
E	16	5%

If the market return is 16% with a standard deviation of 5% and risk free rate of 10%, determine which of the portfolios are efficient and which are inefficient. [10 marks]

b) Shantel bought a four-month call option on a share currently selling at sh 130 and the exercise price is sh 120 and the call premium is sh 10. Shantel expect that the share prices to change as follows 90,100,110,120,130,140 and 150. Required use a diagram to show the payoff of Shantel and the seller (10 marks)

QUESTION THREE

a) Compare the following three portfolios and calculate their performance on the basis of Treynor, Sharpe and Jensen and comment on the results

Portfolio	Expected return	Standard deviation	Beta
A	14%	16%	0.8
B	19%	18%	1.2
C	13%	6%	0.5

The market average return is 16%, standard deviation of the market is 12 %, risk free rate is 10% and the beta of the market is 1

b) Explain the types of capital market efficiency (6 marks)

c) Describe any two features of an investment program (4 marks)

QUESTION FOUR

a) Two portfolios were constructed, one consisting of equity shares and the other one consisting of debentures. The shilling value of equity shares at the time of constituting the portfolio was 120,000 and 100,000 debentures. The investor opts to use constant shilling plan. The revision point is fixed at ±0.1 the share prices fluctuations are shown below

Period	Share price	
	1	100
	2	90
	3	80
	4	70
	5	60

Assume that the prices of debentures in the defensive portfolio do not change. Required explain the portfolio revision pattern of the investor. (14 marks)

b) Discuss any three types of mutual funds (6 marks)

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