CHUKA



UNIVERSITY

SUPPLEMENTARY / SPECIAL EXAMINATIONS

FOURTH YEAR EXAMINATION FOR THE AWARD OF BACHELOR OF COMMERCE (FINANCE OPTION) AND COOPERATIVE MANAGEMENT

BCOM 435: INVESTMENT & PORTFOLIO MANAGEMENT

STREAMS: BCOM/BCOP Y4S2

TIME: 2

HOURS

DAY/DATE: MONDAY 16/11/2020 11.30 A.M - 1.30 P.M.

INSTRUCTIONS:

Answer question ONE and any other TWO questions

QUESTION ONE (30 MARKS)

- (a) Distinguish between systematic and non-systematic risk citing two sources of each (4 marks)
- (b) Discuss the essential features investors consider while selecting investment alternatives. (10 marks)
- (c) Using suitable examples, distinguish between the following security types: Fixed income, Equities and derivatives. (6 marks)
- (d) The following is data on return-risk characteristics of two risky securities X and Y. The standard deviation on security X and Y is 30% and 26% respectively. The correlation of returns between X and Y is -0.5 while that between X and the market portfolio is +0.25. The standard deviation of the market portfolio is estimated to be 6%.
 - (i) The covariance of returns on assset X and Y. (2 marks)
 - (ii) Calculate the proportion of investment in each security that would yield lowest risk assuming that an investor combines security X and Y in a portfolio.(4 marks)
 - (iii) Estimate the beta for security X and interprete your result (4 marks)

QUESTION TWO (20 marks)

(a) Explain the following terms as used in portfolio management

(i) Efficient portfolio (2 marks)

(ii) Bond duration (2 marks)

(iii) Portfolio revision (2 marks)

(b) Consider the following data for a particular sample period

	Fund A	Market Portfolio (M)
Average Return	35%	28%
Beta	1.2	1.0
Standard deviation	42%	30%
Non-systematic risk	18%	0%

The 91-days Treasury-bill rate during the period was 6%. Calculate and comment on the following performance measures of fund A in relation to the market portfolio

(i) Sharpe (ii) Treynor (iii) Jensen's (alpha) (iv) Information ratio

(8 marks)

(c) Explain diagrammatically the investment efficient set for a two risky asset portfolio.

(6 marks)

QUESTION THREE

- (a) Investors in the bond market are generally exposed to price risk and reinvestment risk. Explain (6 marks)
- (b) An investor is evaluating three portfolios with the following characteristics:

Portfolio	Portfolio Estimated return %	Portfolio Beta
1	10	1.2
2	14	0.8
3	13.5	0.9
4	12.5	0.6

The expected return on the market portfolio is 14.5%. The risk-free rate of interest is 4.5%.

Required: Basing on CAPM, advice on which among the above portfolios are suitable candidates for buying. (6 marks)

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(c) Bond A and B have similar characteristics except the maturity period. Both bonds carry 9% coupon rate with face value of Ksh.10, 000. The YTM is 8%. If the YTM is to rise to 11%, what will be the respective percentage price change in bond A with 5 years to maturity and B with 6 years to maturity? (8 marks)

QUESTION FOUR

- a. Distinguish between active and passive portfolio revision strategies (6 marks)
- b. Explain the following fund types: Equity fund, Money market fund and balanced fund. (6 marks)
- c. Old Mutual Asset Managers Ltd. manages a balanced fund scheme. The following information is given with regard to the fund on 26th February 2020.

Portfolio composition:

	Value (Ksh.M)
Equity shares	400
Bonds	300

Ks	sh.M		
Cash and cash equivalents	20		
Accrued income	1		
Short-term liabilities	10		
Long-term liabilities	15		
Accrued management expenses for the day	1		
Total shares outstanding	6.6 million		
Required: Calculate the Net Asset Value for the fund and interpret your answer (8 marks)			