#### TECHNICAL UNIVERSITY OF MOMBASA

#### SHOOL OF BUSINESS

### DEPARTMENT OF ACCOUNTING AND FINANCE

## UNIT CODE: BFI 4402 UNIT TITLE: PORTFOLIO MANAGEMENT AND INVESTMENT ANALYSIS

### SERIES: FEB/MAY

### TERM PAPER TWO

## TIME: 2 HOURS

#### INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS

## **QUESTION 1**

- a) What do you understand by market Capital line in Portfolio Management perspective? (7marks)
- b) Students in a financial Management class are considering investing in Mega ltd. Their beta values and expected returns are as follows:

	Beta Values	Expected returns
Mega Ltd	1.5	18%
Pori Ltd	1.1	18%

The market return is 15% and the risk –free return is 5%

### Required

What investment advice would you give the students? (8Marks)

- c) "Do not put all your eggs in one basket" Discuss this statement in respect to Harry Markowitz Theory (10Marks)
- d) Consider a mutual fund that manages a portfolio of securities worth \$120 million. Suppose the fund owes \$4 million to its investment advisers and owes another \$ 1million for rent, wages due and miscellaneous expenses. The fund has 5 million shares outstanding. Required work out the Net Asset Value (NAV) (5Marks)

## **QUESTION 2**

Mabati Ltd is considering investing in one of the two short-term portfolios of four short-term financial investments. The correlation between the returns of the individual investments is believed to be negligible (Zero/independent/no correlation). See portfolio 1 and Portfolio 2. The market return is estimated to be 15%, and the risk free rate 5%

# Portfolio 1

Investment	Amount invested 4million	Expected return	Total risk	Beta
А	10	20%	8	0.7
В	40	22%	10	1.2
C	30	24%	11	1.3
D	20	26%	9	1.4

# Portfolio 2

Investment	Amount invested \$ million	Expected return	Total risks	Beta
A	20	18%	7	0.8
В	40	20%	9	1.1
С	20	22%	12	1.2
D	20	16%	13	1.4

# Required

a) Estimate the risk and return of the two portfolios using the principles of both portfolio Theory and CAPM and decide which one should be selected.(10marks)  b) How would you alter your calculations for the summary table if you were told: "The correlation between the returns of the individual returns of the individual investments is perfectly correlated"(10marks)

# **QUESTION 3**

- a) Discuss the difference between APT and CAPM. (10marks)
- b) The Sharpe ratio characterizes how well the return of an asset compensates the investor for the risk taken, the higher the Sharpe ratio numbers the better. You are asked to discuss the advantages and limitation of his ratio. (10marks)

## **QUESTION 4**

- a) Discuss factors that determine the value of the Option (10marks)
- b) Discuss the advantages and limitations of Mutual fund.
- c) Discuss the characteristics that distinguish a closed –end fund from an open end fund mutual fund.(6Marks)

## **QUESTION FIVE**

a) A farmer in Rwanda is considering investing in Z plc. The correlation coefficient between the Company's returns and the return on the market is 0.7. The standard deviation of the returns for the company and the market are 8% and 5% respectively.

Required: Calculate the beta value. (10Marks)

b) Sumac ltd is evaluating a project which has a beta value of 1.5. The return on the bourse is 15%. The return on government treasury bills is 6%. What is the cost of equity? (10Marks)