#  <br> MAASAI MARA UNIVERSITY 

# REGULAR UNIVERSITY EXAMINATIONS 2017/2018 ACADEMIC YEAR FOURTH YEAR SECOND SEMESTER 

## SCHOOL OF BUSINESS AND ECONOMICS BACHELOR OF BUSINESS MANAGEMENT

COURSE CODE: BBM 414
COURSE TITLE: INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT

INSTRUCTIONS TO CANDIDATES

- Question ONE is compulsory
- Answer any other THREE Questions


## QUESTION ONE

Refer to the following observations for stock A and the market portfolio in the table:

| Month | Rate of return |  |
| :--- | :---: | :--- |
|  | Stock A | Market portfolio |
| 1 | 0,30 | 0,12 |
| 2 | 0.24 | 0,08 |
| 3 | $-0,04$ | $-0,10$ |
| 4 | 0,10 | $-0,02$ |
| 5 | 0,06 | 0,08 |
| 6 | 0,10 | 0,07 |

a)Calculate the main statistic measures to explain the relationship between stock A and the market portfolio:
i) The sample covariance between rate of return for the stock A and the market
ii) The sample Beta factor of stock A
iii) The sample correlation coefficient between the rates of return of the stock A and the market
iv) The sample coefficient of determination associated with the stock A and the market.
b) Draw in the characteristic line of the stock A and give the interpretation what does it show for the investor.
c)Calculate the sample residual variance associated with stock 's A characteristic line and explain how the investor would interpret the number of this statistic. Do you recommend this stock for the investor with the lower tolerance of risk?
(5 marks)
d)With the help of a well-drawn diagram distinguish between systematic and unsystematic risk.
(5 marks)

## QUESTION TWO

a) Refer to the following information on joint stock returns for stock 1, 2, and 3 in the table.

| Probability | Return for stock |  |  |
| :--- | :--- | :--- | :--- |
|  | Stock 1 | Stock 2 | Stock 3 |
| 0.20 | 0.20 | 0.25 | 0.10 |
| 0.30 | -0.05 | 0.10 | 0.05 |
| 0.25 | 0.10 | 0.05 | 0 |
| 0.25 | 0 | -0.10 | -0.05 |

If you must choose only two stocks to your investment portfolio, what would be your choice? Present your arguments and calculations, to explain your decision.
b) "Young Kenyans should not invest in risky assets such as stock market" Discuss
(5 marks)

## QUESTION THREE

Distinguish between
i) Historical returns and expected returns.
(3 marks)
ii) Holding period return and holding period yield.
(3 marks)
iii) Arithmetic and geometric mean
iv) Direct and indirect investment
(3 marks)
v) Cash price and market price

## QUESTION FOUR

a) Many of underlying assumptions of the CAPM are violated in some degree in "real world". Does that fact invalidate model's calculations? Explain.
(5 marks)
b) In terms of the Markowitz portfolio model, explain, how an investor identifies his / her optimal portfolio. What specific information does an investor need to identify optimal portfolio?
(10 marks)

## QUESTION FIVE

a) Explain why most investors prefer to hold a diversified portfolio of securities as opposed to placing all of their wealth in a single asset.
(5marks)
b) Describe the relationship between option prices and their intrinsic value
c) Explain the difference between option premium and option price
(5marks)

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