



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2017/2018
FIRST SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF COMMERCE
BAC 408: APPLIED INVESTMENTS

DATE: Tuesday, 28th November 2017

TIME: 8.00a.m-10.00a.m

INSTRUCTIONS:

ANSWER ALL FOUR QUESTIONS

QUESTION ONE

- a) An entrepreneur is considering a huge investment in the Soft drinks industry in Africa. Recommend *any five economic analysis factors* that he must have taken into account considering that she is keen on investing in Southern Africa as opposed to North Africa (5 marks)
- b) Investment is bound to encounter financial risk. As a financial analysis, describe *hedging* in the context of investment risk management (2 marks)
- c) Using appropriate examples, explain your understanding of *active versus passive portfolio management* (4 marks)
- d) Considering your limited knowledge in capital markets, you access the services of a *Mutual fund* to achieve your objective of investing in securities. Discuss two key benefits of investing through *Mutual Funds* as opposed to investment in assets such as Land (5 marks)
- e) Explain *four limitations* of the Capital Asset Pricing Model (*CAPM*) as an equilibrium asset pricing model in comparison to Arbitrage Pricing Model (*APM*) (4 marks)

QUESTION TWO

- a) Consider a financial market with 3 possible investments which are shown below:

Probability	Asset X	Asset Y	Market Portfolio (M)
0.40	10%	12%	18%
0.20	8%	7%	15%
0.40	4%	(3%)	10%

The treasury bills pay 12% interest - this is an equivalent of the market portfolio. An investor is keen on investing in a portfolio of assets X and Y with 30% of the wealth being invested into asset Y.

- i) Suppose the covariance between assets X and M is given as 1.05. Compute the *beta factor* for asset X (4 marks)
- ii) Discuss three key contributions of Markowitz (1952) in Portfolio Selection (3 marks)
- b) Explain *any three benefits* of conducting *company analysis* before deciding on an investment option (3 marks)
- c) Explain 2 reasons why Arbitrage Pricing Model/Theory (APM/APT) is considered a superior asset pricing model (5 marks)
- d) Describe *systematic risk* and provide 2 examples of such a risk exposure (5 marks)

QUESTION THREE

- a) Explain four *key features* of *true investment* as opposed to *speculation* (4 marks)
- b) Consider the data below relating to several investments:

<u>Security</u>	<u>Expected Returns</u>	<u>Standard Deviation</u>	<u>Beta Factor</u>
A	7%	2.50	0.05
B	10%	3.55	1.50
C	8%	2.00	0.50
Treasury bills	6%	0.01	0.00
D	13%	2.10	1.15
Stock market index	12.5%	0.20	1.00

Advice Johnson on *the best investment strategy* using the Security Markets Line (SML)
(6 marks)

- c) Explain the concept of *security market index* and highlight any 2 *benefits* of utilizing it
(5 marks)

QUESTION FOUR

- a) Jane is Considering the 3 investments below. He finally opts for a portfolio containing X and Y with 40% of her wealth is to be invested into asset X:

<u>Probability</u>	<u>Asset X</u>	<u>Asset Y</u>	<u>Market</u>	<u>Portfolio</u>
0.40	10%	12%		18%
0.20	8%	7%		15%
0.40	4%	(3%)		10%
Beta factor.....	1.30	1.75		

The market pays a 12% return on risk-free assets. Assume a covariance of 1.40 between asset X and Y.

Required:

- Compute the *Sharpe's Measure* and comment on the portfolio performance (5 marks)
 - Compute the *Treynor's Measure* and comment on the portfolio performance (4 marks)
- b) Highlight *six key factors* relating to *industry analysis* of an anticipated investment in the *transport industry* in a country such as *Kenya* (6 marks)