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KIBABII UNIVERSITY

KNOWLEDGE FOR DEVELOPMENT

UNIVERSITY EXAMINATIONS

MAIN EXAMINATIONS

2019/2020 ACADEMIC YEAR

FOURTH ~~FIRST~~ YEAR SECOND SEMESTER

FOR THE DEGREE OF BACHELOR OF BUSINESS MANAGEMENT(BBM)

COURSE CODE: BBF 422

COURSE TITLE: PORTFOLIO THEORY & ANALYSIS

DATE:10TH NOVEMBER2020 **TIME: 9.00AM-11.00AM**

INSTRUCTIONS TO CANDIDATES
Answer Question ONE (compulsory) and ANY OTHER TWO questions

QUESTION ONE

. a)

Find the portfolio return and risk

STOCK	E[R]	WEIGHT	VARIANCE	SD
A	0.12	0.40	0.0064	0.08
B	0.18	0.60	0.60	0.01

Correlation (A, B) = 0.8

(5 marks)

b)

Using the following data on portfolio weights of two assets A & B, explain and illustrate Harry Markowitz Portfolio Theory ;

Time(T)	Weight (Asset A)	Weight (Asset B)	E[R]	VARIANCE (σ^2)
1	1	0.00	0.1	0.00680
2	0.8	0.20	0.12	0.00272
3	0.6	0.40	0.14	0.003232
4	0.5	0.50	0.15	0.00392
5	0.3	0.70	0.17	0.006253
6	0.2	0.80	0.18	0.00752
7	0.00	1.00	0.20	0.0121

[15 marks]

c)

The following illustrates the market returns (M) and the returns from security (j)

Time(T)	Returns Stock (j) %	Market returns (M) %
1	10	12
2	15	14
3	18	10
4	14	9
5	10	13

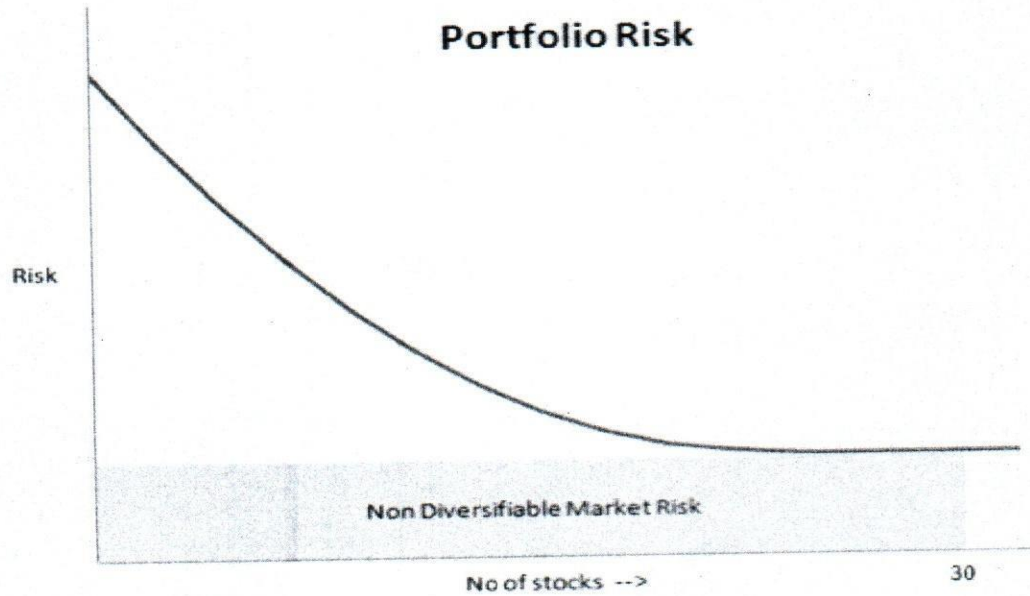
Required;

Calculate Beta and explain its importance in portfolio analysis [10 marks]

[TOTAL = 30 MARKS]

QUESTION TWO

a) The diagram below is an investor's extract of risk in a portfolio of securities and bonds.



Required;

Identify this risks on the diagram and explain their measurement [10 marks]

b)

"Growing wealth through investing typically occurs over a long time horizon that includes many bullish and bearish market cycles. While making the most out of bull markets is important, it is equally important to avoid letting the inevitable bear markets reverse your progress".

Discuss this strategy of portfolio management and investment (10 marks).

QUESTION THREE

a)

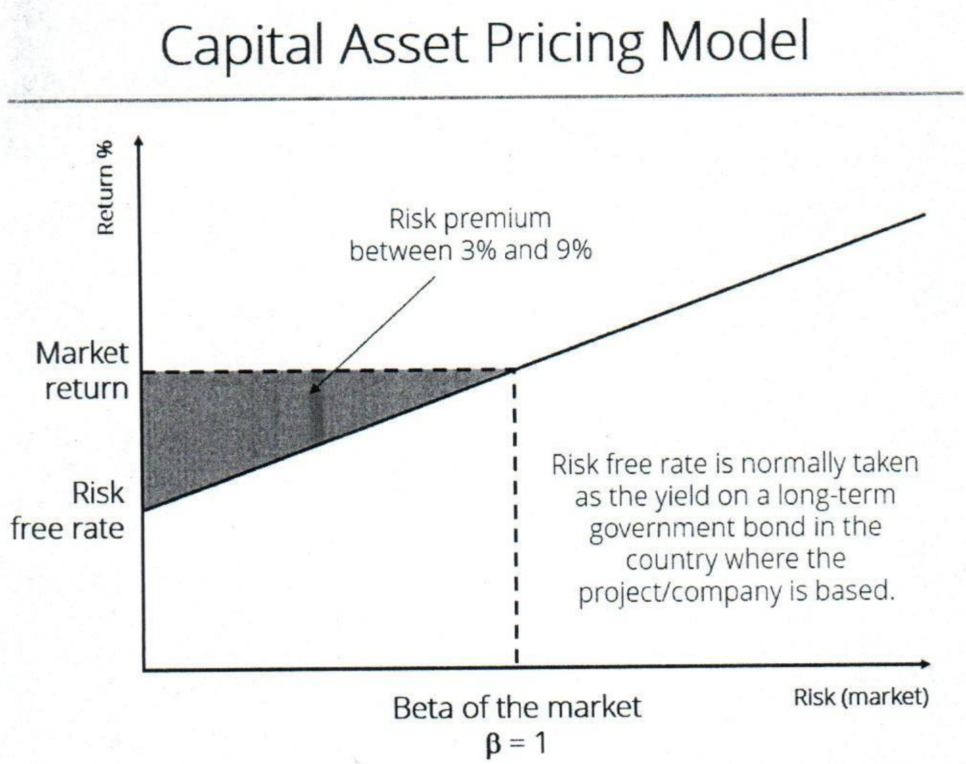
Mutual Fund	**Return (%)**	**SD (σ^2) (%)**	**Beta**
A	14	11	0.90
B	17	20	1.03
C	19	27	1.20

Suppose that the 10-year annual return for the NSE 25 (market portfolio) is 10% while the average annual return on Treasury bills (a good proxy for the risk-free rate) is 5%.

Required;

Evaluate the performance of the mutual funds using Sharpe and Treynor measures. (10 marks)

b) The capital Asset Pricing model is as shown below ;



Using the Capital Asset Pricing Model (CAPM) formula. The following information is about a stock Kakuzi Ltd known that:

- It trades on the Nairobi Securities Exchange (NSE) and its operations are based in Thika, Kenya.
- Current yield on a GOK 10-year treasury is 3.5%
- The average excess historical annual return for GOK stocks is 7.5%
- The beta of the stock is 1.25

What is the expected return of the security using the CAPM formula and state the assumptions of CAPM? (10 marks)

QUESTION FOUR

a)

Discuss the role of Covariance and Correlation in Portfolio construction [10 marks]

b)

Explain the following;

i. Fundamental Analysis [5 marks]

ii. Industry Analysis [5 marks]

QUESTIOPN FIVE

a) Discuss three forms of Market efficiency [12 marks]

b) Explain the role of Derivatives in Portfolio Construction. [8 marks]