(*Knowledge for Development*)

KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

FOURTH YEAR SECOND SEMESTER

SPECIAL/SUPPLEMENTARY EXAMINATION

FOR THE DEGREE OF BACHELOR OF COMMERCE

COURSE CODE : BCF 421

COURSE TITLE : PORTFOLIO THEORY AND MANAGEMENT.

DATE: 25TH NOVEMEBER,2021 TIME: 8.00AM-10.00AM

INSTRUCTIONS TO CANDIDATES

Answer Question One in Section A and Any other TWO (2) Questions in Section B

TIME: 2 HOURS

KIBU observes ZERO tolerance to examination cheating

This Paper Consists of 4 Printed Pages. Please Turn Over.

SECTION A.

1. (a) Distinguish with a brief explanation between Portfolio theories according to Harry Markowitz and the Traditional approach. **(10 Marks).**

(b). Marks Company Ltd has a beta of 0.90.It's risk free rate of return is 12 per cent and the expected rate of return on the market portfolio is 15 per cent. The company currently pays a dividend of shs 3.00 per share and shareholders expect it to experience a growth in dividends of 14 per cent per annum for many years to come.
Required:

(i). What is the stock's required rate of return according to CAPM? **(4 Marks).**
(ii) Assuming the above (i) required return; calculate the stock's present market price per share? **(4 Marks).**
(iii). If the beta was adjusted upwards to 1.2, calculate the required return and market price per share. **(4 Marks).**

(c).Explain with examples the meaning of Portfolio revision. **(8 Marks).**

SECTION B

QUESTION TWO.

Describe in detail the steps necessary in proper portfolio management process.
(20 Marks).

QUESTION THREE.

(a). What are the assumptions underlying the Black Scholes option valuation model?
(8 Marks).

(b). The shares of Masaku Ltd are currently selling at shs. 240 each at the Nairobi Securities Exchange (N.S.E).The exercise price for a six month call option is shs.210.The prevailing risk free rate is 12% per annum.The standard deviation of Masaku Ltd share price has been 14%.

Required.

Using the Black Scholes option valuation model, determine the value of the call option.
(12 Marks).

QUESTION FOUR.

Write short notes on the following:
(i). Causes of market risk under the Arbitrage Pricing Theory (APT). **(5 Marks).**
(ii). Security Market Line. **(5 Marks).**
(iii).Futures Contract. **(5 Marks).**

(iv)Bond convexity

(5 marks).

QUESTION FIVE.

(a). Consider a put option with the following characteristics:

(i) Exercise price shs. 40
(ii) Premium per put option shs.5
(iii) Time to expiry for the option is 6 months

Required:

Calculate the value of put option and the profit or loss assuming the following market prices of the underlying security after 6 months.
Shs 30, shs 35, shs 40, shs 45 and shs 50.

(10 Marks).

(b). An investor is considering making an investment in the share of X Ltd. The following are the attributes of five economic forces that influence the return on X Ltd.'s share. The anticipated risk free rate of return on X Ltd.'s share is 10 per cent.

Factor	Beta	Expected Value (%)	Actual Value (%)
G.N.P	1.80	5.00	7.50
Inflation	0.90	6.00	8.00
Interest rate	1.20	7.00	7.50
Stock Market Index	2.20	8.50	11.50
Industrial Production	2.00	10.00	11.00

Required:

Calculate the total return on the share.

(10 Marks).