



MURANGA UNIVERSITY COLLEGE

(A constituent College of Jomo Kenyatta University of Agriculture & Technology)

MAIN CAMPUS

SPECIAL / SUPPLEMENTARY EXAMINATIONS

2014/2015 ACADEMIC YEAR

THIRD YEAR SECOND SEMESTER EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF COMMERCE**

COURSE CODE: HBF 2304

**COURSE TITLE: INVESTMENT ANALYSIS AND PORTFOLIO
MANAGEMENT**

DATE:

TIME:

INSTRUCTIONS TO CANDIDATES

Question ONE (1) is compulsory

Answer ANY OTHER TWO (2) questions

MRUC observes ZERO tolerance to examination irregularities

This Paper Consists of 3 Printed Pages. Please Turn Over. ►

QUESTION ONE (COMPULSORY)

- a. Two securities J and K has the following characteristics under different economic states

Economic state	Probability of occurrence	Returns (%)	
		J	K
A	0.20	20	5
B	0.25	10	15
C	0.40	7	25
D	0.15	2	20

Calculate

- i. The return and risk of the individual securities J and K (6 marks)
 - ii. The risk of the optimum portfolio formed by Securities J and K (10 marks)
- b. Under what circumstances is it possible to diversify virtually all systematic risk (2 marks)
 - c. Using a well labeled diagram, explain the relationship between risk and diversification (5 marks)
 - d. Highlight the steps involved in portfolio management process (7 marks)

QUESTION TWO

- a. Highlight the various assumption that inform Capital Asset Pricing Model as a tool for investment management (6 marks)
- b. Differentiate between active and passive investment portfolio management strategy (6 marks)
- c. A stock of JEE holdings is currently trading at Sh. 20 and the company is expected to pay a dividend of sh. 1.10, sh. 1.20 and sh. 1.35 on the stock for the next three years. At the end of the third year, the stock can be sold at sh. 34. An investor whose required rate of return is 14 percent is contemplating acquiring this stock. Advise the investor (8 marks)

QUESTION THREE

- a. How is 'gambling' different from 'investment' and speculation (6 marks)
- b. A bond has a face value of Sh. 15000 and pays interest at the rate of 12 percent per annum. The current market price of the bond is Sh. 11000. However the bond has a call option of Sh. 10,000 after 6 years
 - i. Compute the bonds approximate yield to call using the formula method (4 marks)
 - ii. Calculate the bond's duration considering the call period only (10 marks)

QUESTION FOUR

- a. An investor holds a 10 percent 10 year Sh. 40,000 par value convertible bond. It has been established that the conversion price is Sh. 200 and the investors required rate of return is 14 percent. The common stock of the company is currently trading at sh. 260
- Using appropriate methods, advise the investor whether she can convert (6 marks)
 - Compute the value of the bond at the date of conversion (4 marks)
- b. A portfolio consists of three securities A, B and C with the following parameters

Security (weight)	A (0.4)	B (0.35)	C (0.25)	Correlation Coefficient
Expected Returns (%)	15	12	8	
Standard deviation (%)	11	8	6	
$Cor_{A,B}$				-0.9
$Cor_{B,C}$				-0.6
$Cor_{A,C}$				0.2

- Determine the return of the portfolio formed by the three securities (2 marks)
 - Calculate the risk of return of the portfolio formed by the three securities (5 marks)
- c. What steps are involved in portfolio selection as prescribed by the separation theorem (3 marks)