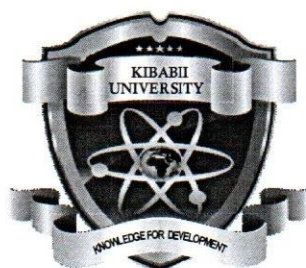# KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS

2015/2016 ACADEMIC YEAR

MAIN EXAMINATION

FOR THE DEGREE OF Master in business administration

COURSE CODE: MBA 732

COURSE TITLE: INVESTMENT AND PORTFOLIO MANAGEMENT

DATE: 11/5/2016   **TIME:** 2.00 -4.00 p.m.

INSTRUCTIONS TO CANDIDATES

Instructions to Candidates- Answer **THREE** questions. Question ONE is compulsory

TIME: 2 Hours

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This Paper Consists of **2 Printed Pages**. Please Turn Over.

READ THESE INSTRUCTIONS FIRST

✓ The number of marks is given in brackets [ ] at the end of each question or part question.

✓ Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer

✓ You are required to answer **Question ONE** which is compulsory and any other **TWO** questions.

QUESTION ONE

Q1 a) For a future contract, the futures exchange specify in detail the exact nature and terms of the agreement between two parties. Discuss the various specifications of future contracts (5mks)

(b) Security returns depend on only three risk factors-inflation, industrial production and the aggregate degree of risk aversion. The risk free rate is 8%, the required rate of return on a portfolio with unit sensitivity to inflation and zero-sensitivity to other factors is 13.0%, the required rate of return on a portfolio with unit sensitivity to industrial production and zero sensitivity to inflation and other factors is 10% and the required return on a portfolio with unit sensitivity to the degree of risk aversion and zero sensitivity to other factors is 6%. Security i has betas of 0.9 with the inflation portfolio, 1.2 with the industrial production and-0.7 with risk bearing portfolio—(risk aversion)

Assume also that required rate of return on the market is 15% and stock i has CAPM beta of 1.1

REQUIRED:
Compute security i's required rate of return using
a. CAPM
b. APT **(10mks)**

c) "The finance manager spends most of his time making managerial finance decisions as opposed to routine functions". Discuss.**(5 mks**)

d) If you were a president of a large publicly owned corporation would you make decisions to maximize shareholder welfare or your own personal interest? What are some actions stockholders could take to ensure that management's interest and those of stockholders coincided? **(5 mks)**

d) Suppose that a company's expected dividend now is kshs 3.48 per share. Its dividend are expected to grow at 15% for six years and then at a rate of 8% indefinitely. The capitalization rate is 12%. What is the price of the share today? **(5 mks)**

e) Discuss the various steps in the portfolio and investment processes **(5 mks)**

ANSWER TWO QUESTIONS.

QUESTION TWO
Q2. a)There are different categories of participants who make the derivatives market more transparent, increase liquidity and hence increase depth in the market. What are these categories of participants? Explain how they help in development of derivatives markets   (10 marks)

  b) What determines the average rate of interest in an economy? Discuss the theories of interest rate. (10mks)

QUESTION THREE
 Q3 a) Explain how an increase in inflation might affect the real interest rates and the nominal interest rates (10 mks)

b) Assume that the risk free rate of return is 8%, the market expected rate of return is 12%. The standard deviation of the market return is 2% while the covariance of return for security A and the market is 2%.

REQUIRED:

What is the required rate of return on Security A? (10 mks)
QUESTION FOUR
Q4   Four assets have the following distribution of returns.

Probability Occurrence	Rate of return (%) A	B	C	D
0.1	10.0%	6.0%	14.0%	2.0%
0.2	10.0	8.0	12.0	6.0
0.4	10.0	10.0	10.0	9.0
0.2	10.0	12.0	8.0	15.0
0.1	10.0	14.0	6.0	20.0

REQUIRED:
a) Compute the expected return and standard deviation of each asset.(6 mks)
b.   Compute the covariance of asset
   i.   A and B
   ii.   B and C
   iii.   B and D(10 mks)

c.   Compute the correlation coefficient of the combination of assets in b above. (4 mks
QUESTION FIVE

Q5 The Capital Asset Pricing Model (CAPM) has been identified as a method for estimating the cost of Equity Capital.

a) Identify and describe how this model might be applied in actual practice by a company. What is the major weakness in using CAPM as a method of valuing a firm? (**10 mks**)

b) Why would you consider the Arbitrage Pricing Theory to be much more robust than the Capital Asset Pricing Model (**10mks**).