JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF BUSINESS & ECONOMICS

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION WITH IT

3RD YEAR 2ND SEMESTER 2019/2020 ACADEMIC YEAR (PART TIME)

COURSE CODE: ABA 320

COURSE TITLE: INVESTMENT & PORTFOLIO MANAGEMENT

EXAM VENUE: **STREAM : (BBA-FINANCE OPTON)**

DATE: **EXAM SESSION:**

TIME: 2 HOURS

Instructions:

1. **Answer Question ONE (COMPULSORY) and ANY other 2 questions**
2. **Candidates are advised not to write on the question paper.**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room.**

QUESTION ONE (30 Marks)

i) XYZ ltd. is considering three possible capital projects for next year. Each project has a 1 year life, and project returns depend on next year's state of the economy. The estimated rates of return are shown below.

State of the Economy	**Probability of Occurrence**	**Rate of Return**		
		M	**N**	**Q**
High	0.25	10%	9%	14%
Medium	0.50	14	13	12
Low	0.25	16	18	10

REQUIRED:

a. determine the:
   (i) expected rate of return
   (ii) variance,
   (iii) Standard deviation and coefficient of variation. (10marks)

b. Compute the expected return on a portfolio if the firm invests equal wealth on each asset. (5marks)

ii) Briefly explain the differences between systematic risk and unsystematic risks. (5marks)

iii) Sketch a well labeled diagram showing efficient frontier (5marks)

iv) Discuss the limitations of CAPM model in investment analysis (5marks)

QUESTION TWO (20 Marks)

i) Discuss the characteristics of various investment securities traded in capital markets. (8marks)

ii) Explain the meaning of the following terms:

a) Diversification (2marks)

b) Risk and return (2marks)

c) Efficient Portfolio (2marks)

iii) Distinguish between the security market line (SML) and Capital Market Line CML) (6marks)

QUESTION THREE (20 Marks)

a) Explain key problems that are addressed by Capital Asset Models in relation to investment performance. (12marks)

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%. The security 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 that required rate of return on the market is 15% and the stock has CAPM beta of 1.1

REQUIRED:

Calculate the security's required rate of return using CAPM (8 marks)

QUESTION FOUR (20 Marks)

a) Discuss the following marketable securities:

i) Commercial Paper (2marks)

ii) Treasury Notes and Bonds (2marks)

iii) Certificate of deposits (2 marks)

b) With suitable illustrations, differentiate between Swaps and Futures contracts (6marks)

c) Discuss the difference between the payoff of a call option and payoff of a put option (8marks)

QUESTION FIVE (20 Marks)

a) Discuss any seven implications of the Capital Asset Pricing Model in relation to its application in investment portfolios. (16 marks)

b) Explain the meaning of the following terms:

i) Aggressive Assets (2 marks)

ii) Defensive Assets (2 marks)