



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF BUSINESS & ECONOMICS**  
**UNIVERSITY EXAMINATION FOR DEGREE OF MASTER OF BUSINESS**  
**ADMINISTRATION -FINANCE OPTION**  
**2<sup>ND</sup> YEAR 2<sup>ND</sup> SEMESTER 2016/2017 ACADEMIC YEAR**  
**KISII CAMPUS-PART TIME**

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**COURSE CODE: MBA 822**

**COURSE TITLE: SECURITY ANALYSIS AND VALUATION**

**EXAM VENUE: LR 10**

**STREAM: (MBA)**

**DATE: 21/12/16**

**EXAM SESSION: 9.00 – 12.00 NOON**

**TIME: 3 HOURS**

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**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**

- a) Explain the meaning of security valuation? (4 marks)
- b) In 2014 the price of a security was Ksh. 100. In 2015, the price was Ksh. 200. The cash dividend of the security was Ksh. 50. What is the value of the actual return on investment (3 marks)
- c) Consider the following returns of security **A** and security **B**:

		Security Cash flows/Returns (\$)	
State of economy	Probability	<b>Security A</b>	<b>Security B</b>
1	0.1	4	13
2	0.2	5	10
3	0.4	6	8
4	0.2	7	6
5	0.1	8	4

Required: Advise management on the riskiness of the above securities (4 marks)

- d) Discuss Efficient Market Hypothesis Theory outlining its application in security analysis and valuation (4 marks)
- e) Use the information below relating to investment in Security **X** and **Y**.

	% Returns	
Probability	<b>Security X</b>	<b>Security Y</b>
0.1	-8	14
0.2	10	-4
0.4	8	6
0.2	5	15

0.1	-4	20
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Required: Determine the expected returns of each security and the expected return of the portfolio if the investor decides to invest 70% of his wealth on X (5 marks)

- f) XYZ Ltd has paid a dividend this year of Sh 300 Million. The company expects the dividend to rise by 2% a year in perpetuity which is an expectation that is also shared by investors. The current return expected by investors from shares in the same industry as XYZ is 12%. What is the expected value of the shares? (3 marks)
- g) Highlight reasons of issuing a bond (4 marks)
- h) ABC Ltd has provided you with the following information: Total assets-4M; Total liabilities; 0.2 M. The company financed by share capital amounting Ksh. 1M. Each share costs Ksh. 25. Determine the current value of the share. (3 marks)

**Question Two**

- a) What is security portfolio Management? (2 marks)
- b) Kampani Ltd issues Ksh 1000 per debenture paying annual interest of 12%. The debenture can be sold to the public at Ksh. 1020 with the cost of Ksh 40. The company is in 40% tax bracket. Determine the effective value of the debenture. (4 marks)
- c) Explain five common strategies for investing (5 marks)
- d) If the risk-free rate of return is 6% and the return on the market portfolio is 10%, what is the expected return on an asset having a Beta of 1.4, according to the CAPM? (3 marks)
- e) An investor is considering investing in a security with the following characteristics:

States of nature	Outcome Sh`000'	Probability
Pessimistic	300	0.2
Moderately successful	600	0.6
Optimistic	900	0.2

**Required:**

- a) What is the security expected return of the security (2 mark)
- b) Advise on the risk of the security (4 marks)

**Question Three**

- a) Explain the differences between:
  - i. Money market and capital market (2 marks)
  - ii. Options and futures (2 marks)
  - iii. Systematic risk and unsystematic risk of a security (2 marks)
  - iv. Fundamental and technical security analysis (2 marks)
- b) The risk free rate is 10% and the expected return on the market portfolio is 15%. The expected returns for 4 securities are listed below together with their expected betas:

SECURITY	EXPECTED RETURN	EXPECTED BETA
A	17.0%	1.3
B	14.5%	0.8
C	15.5%	1.1
D	18.0%	1.7

**Required:** On the basis of these expectations, advise which securities are:

- i) Overvalued
  - ii) Undervalued (4 marks)
- c) Abba investments want to invest in securities **X** and **Y** in two different industries. The following information relates to the two securities.

	<b>X</b>	<b>Y</b>
Return	14%	12%
Probability	5	3
Amount of money invested	Shs 720,000	Shs 480,000

**Required:**

Advise on the expected security portfolio return. (6 marks)

- d) Officecare Ltd issues a zero-coupon bond having a 10 year maturity and a Sh 100,000 face value. If the required rate of return is 12%, determine the value of the bond. (2 marks)

#### **Question Four**

- a) Discuss reasons for investing (4 marks)
- b) Explain four types of bonds (4 marks)
- c) Assuming a bond will pay Sh 8,000 interest annually into perpetuity. What would be the value of the bond if the current yield is 8%? (2 marks)
- d) Explain the Gordon dividend Growth Model of security valuation (3 marks)
- e) A company wishes to value its common stock. The prevailing market price of its common stock is Ksh. 200 and expects to pay dividends of ksh. 16 at the end of the coming year. The dividend growth rate is approximated at 5%. Advice. (3 marks)
- f) Assuming you are to invest in a security with the following details: Initial cost of the security is Ksh 3M. The returns from the security for the first five years of investment are estimated to be; 0.3, 0.7, 1.3, 1.5 and 4.6M respectively. The rate of rate of the security is 10%. Perform the valuation of the security using NPV to inform your decision (4 marks)