



# MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

SECOND YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF ECONOMICS AND STATISTICS

BACHELOR OF ECONOMICS AND FINANCE

BACHELOR OF ECONOMICS

EAE 202: FINANCIAL INSTRUMENTS & RISK MANAGEMENT

DATE: 10/5/2019

TIME: 2.00-4.00 PM

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## INSTRUCTIONS:

- (i) Answer question one (Compulsory) and any other two questions
- (ii) Do not write on the question paper
- (iii) Show your working clearly

## QUESTION ONE (Compulsory) (30 MARKS)

- a)
  - i) Equities(E) and bonds(B) are the basic financial instruments and both are considered as risky instruments. If ksh. 120,400 is invested in Equities and ksh.90,600 is invested in bonds. What is the weight of E& B in a complete portfolio? (3 marks)
  - ii) Suppose the owner of these portfolio wishes reduces the risky portfolio to 0.43, what will be the value of the non-risky portfolio and the risky portfolio? (4 marks)
- b) There are various types of financial markets operational in the Kenyan Economy. Discuss this statement. (9 marks)
- c) What are the main determinants of an option contract price? (4 marks)

- d) Explain the following terminologies as used in finance:
- i. Yield curve
  - ii. Future contract
  - iii. Covenants
  - iv. Embedded derivative
  - v. Liquidity of a security
  - vi. Risk
  - vii. Term structure of interest rate
  - viii. Real interest rate
  - ix. Hedging
  - x. Investment financial intermediaries (10 marks)

**QUESTION TWO (20 MARKS)**

- a) Explain what you understand by the term ‘Bond pricing’ and discuss the various ways in which different types of bonds are priced. (14 marks)
- b) Classify financial institutions into three categories and briefly explain them. (6 marks)

**QUESTION THREE (20 MARKS)**

- a) With illustration where possible, explain how futures, forwards and options are used in risk management. (10 marks)
- b) Preferred Stock has features similar to both equity and debt. Explain its main attributes. (10 marks)

**QUESTION FOUR (20 MARKS)**

- a) Explain various types of risks faced by financial institutions in most developing countries. (12 marks)
- b) Consider a 5 year coupon bond with a face value of Ksh 3000 sold at Ksh. 1500 at an interest rate of 11 percent, paid semi annually. Required:
- i. calculate the price of this bond (3 marks)
  - ii. Suppose the bond in question above is a consol what is its price (3 marks)
- c) What is meant by ‘a highly leveraged company’? (2 marks)

**QUESTION FIVE (20 MARKS)**

- a) Although similar in nature, forwards and futures exhibit some fundamental differences in terms of organization and contract characteristics. Give the distinguishing features between these two. (8 marks)
- b) Discuss the specifications of a negative covenant in relation to long-term loan agreements. (12 marks)