MACHAKOS UNIVERSITY

University Examinations for 2021/2022 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

Second year…….. SEMESTER EXAMINATION FOR

BACHELOR OF ECONOMICS & STATISTICS

BACHELOR OF ECONOMICS

EAE 202: FINANCIALS INSTRUMENTS AND RISK MANAGEMENT

DATE: **TIME:**

INSTRUCTIONS:

Answer Question **ONE** and any other **TWO** questions

QUESTION ONE (COMPULSORY) (30 MARKS)

a) The finance manager of Machakos ltd investment company is concerned about the volatility of interest rates. His company needs to borrow KES 100 Million in six months for two years. Current interest rates are 14% per year for the type of loan that the company needs. The financial manager does not wish to pay an interest higher than this. He is considering different alternatives. Briefly explain each of the following alternatives that the finance manager can consider.

i) Forward rate agreement (2 marks)

ii) Interest rates futures (2 marks)

iii) Interest rate options (2 marks)

iv) Interest rate swaps (2 marks)

b) Compare and contrast bonds and preferences share (6 marks)

c) With the help of a graphical illustration, state and explain the expectation hypothesis

(5 marks)

d) Using relevant examples, distinguish between the following pair of terms

i) A commercial paper and a note (2 marks)

ii) Consol and perpetuities (2 marks)

iii) Building societies and credit unions (2 marks)

e) A bond paying a coupon of 7% is redeemable in five years at nominal value ($100) and is currently trading at $106.62. Estimate its yield (required rate of return). (5 marks)

QUESTION TWO (20 MARKS)

a) Covenants can both be negative or positive. Highlight and explain the specific operating and financial constraints in each category. (10 marks)

b) Highlight and discuss the main characteristics and the pay off of a plain vanilla option (10 marks)

QUESTION THREE (20 MARKS)

a) Suppose that you have been hired as a risk manager of XYZ consulting company. Your role is to advise financial institutions on various types of risks they are likely to face in their operations and ways of mitigating these risks. Discuss what you will include in your presentation to a client. (10 Marks)

b) Financial records from Worldtec limited company indicate that the net asset worth of the company as of 31st April 2021 was USD 6 Million. On average, the company has an annual asset growth of 40%. Last year the company issued a remarkable five-year bond with a coupon yield of 10% paid semi-annually. It is expected that the holders of the bond will receive 10,000 after maturity. If the current debt ratio of the company is 10%

i) What is the price of this bond (3 marks)

ii) How much will the bondholder earn from the bond by the end of next year

(2 marks)

iii) What is the current total debt liability of the company (2 marks)

iv) If the bond was convertible after three years and each bond was split into 500 shares of common stock, what would be the least price for each stock? (2 marks)

QUESTION FOUR (20 MARKS)

a) Matumanini Ltd company has sold 10,000 ordinary shares of KES 30 plus 40,000 KES 45 preferences shares which are convertible .compute the total number of ordinary shares after conversion (4 Marks)

b) The total market value of an initial portfolio is Ksh 300,000. An investor has Equities (E) and Bonds (B) in his portfolio. If Ksh 113,400 is invested in equities and Ksh. 96,600 is invested in bonds. What is the weight of E and B in the complete portfolio? (4 marks)

c) Discuss the process of introducing stocks in the primary market and how they are traded in the secondary market (12 marks)

QUESTION FIVE (20 MARKS)

a) Discuss the role of hedgers, speculators and arbitrageurs in the derivatives market. (9 marks)

b) Explain factors that shift the bond market demand curve (6 marks)

c) State and discuss five major roles of financial institutions (5 marks)