



**The Co-operative University of Kenya**  
**END OF SEMESTER EXAMINATIONS AUGUST-2022**  
**EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN FINANCE**  
**(YR III SEM I)**  
**UNIT CODE: BFIN 3106**  
**UNIT TITLE: FIXED INCOME SECURITIES ANALYSIS AND VALUATION**

**DATE: 31<sup>ST</sup> AUGUST 2022**

**TIME: 9:00 AM – 11:00 AM**

**INSTRUCTIONS:**

- Answer question **ONE (compulsory)** and any other **TWO** questions

**QUESTION ONE**

- (a) Suppose that the discount bond prices are as follows

t	1	2	3	4	5
Bt	0.952	0.898	0.863	0.807	0.757

Calculate the price of the coupon bond. (10 Marks)

- (b) Explain the following terminologies as applied in financial analysis

- i. Spot interest rates (2 Marks)
- ii. Coupon bonds (2 Marks)
- iii. Forward interest rates (2 Marks)
- iv. Zero – coupon bonds (2 Marks)

- (c) A bond was originally issued to have a life of 20 years. Its book value is 1,000 with an interest rate of 10%. If the investors required rate of return on the bond currently stands at 12%, determine the bonds current value. (6 Marks)

- (d) A company issues 10,000 equity shares of sh 100 each at a premium of 10%. The company has been paying 25% dividend to equity shareholders for the past five years and expects to maintain the same in the future also;

Required:

- i. Compute the cost of equity capital. (2 Marks)
- ii. If the desired market price of equity is kshs. 175, determine the viability index. (4 Marks)

- (e) Highlight and explain **THREE** objectives of monetary policy

**QUESTION TWO**

- (a) Discuss the various forms of EMH and their applications in determination of investment frontier. (12 Marks)

- (b) A firm's net operating income is sh 100,000 and has interest payment of amounting to 5% on NOI. The equity capitalization rate is 6% and the cost of Debt is 11%. Using the Net Operating Income approach calculate;

- i. The value of the firm (3 Marks)
- ii. Cost of capital (3 Marks)
- iii. The weighted Average Cost of capital of the firm. (2 Marks)

**QUESTION THREE**

- (a) Explain various features to consider when choosing between environment and domestic markets. (5 Marks)
- (b) Explain the various principles under which mutual funds operate (Give examples in each cases) (5 Marks)
- (c) Give reasons as to why investors use derivatives. (10 Marks)

**QUESTION FOUR**

- (a) Explain FIVE reasons for rapid growth of futures and options markets. (10 Marks)
- (b) Discuss FIVE important market functions of a foreign exchange market (10 Marks)

**QUESTION FIVE**

- (a) Explain the various financial innovations in the financial markets (10 Marks)
- (b) Explain the meaning and use of warrants, convertibles, futures and illustrate the fundamental differences between futures and options. (10 Marks)