TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF BUSINESS

DEPARTMENT OF ACCOUNTING & FINANCE

UNIVERSITY EXAMINATION FOR:

BSMF

BFI 4351: FIXED INCOME SECURITIES

END OF SEMESTER EXAMINATION

SERIES: DECEMBER, 2024

TIME: 2 HOURS

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of FIVE questions. Question one is Compulsory. Answer any other two questions.

Do not write on the question paper.

Question ONE

a) State and explain four types of fixed income securities (8marks

b) A 10-year Treasury bond with par value of sh.1000 has a 6% coupon rate and pays interest every six months. The bond is three- year old and has just made its sixth payment. The market now only requires a 5% return on the bond.
Required: what is the expected price of the bond? (3 marks)

c) Alexis media issued five-year bonds one year ago with a 7.5% coupon that pays semi-annually (the bond just paid the second coupon payment). Alexis announced a revised advertising revenue forecast that is quite bleak compared with the prevailing forecast at the time of the bond issuance. Investors now require a 9% return on Alexis bonds.
Required:
What is the percentage change in price of the bonds associated with the change in business conditions? (3 marks)

d) Briefly explain Four factors that determine the yield to maturity of a bond (8 marks)

e) Identify and explain the four intrinsic features of a bond. (8 marks)

Question TWO

a) Elaborate on the different risks associated with debt funds (12 marks)
b) Discuss the advantages and disadvantages of investing in fixed income securities. (8marks)

Question THREE

a) Explain the factors that determine the price volatility for bonds. (8 marks)
b) Briefly explain the following active bond portfolio management strategies
i) Interest rate anticipation (3 marks)
ii) Valuation analysis (3 marks)
iii) Credit analysis (3 marks)
iv) Yield spread analysis (3 marks)

Question FOUR

a) Discuss the following term structure theories:
i) Expectations Hypothesis (4 marks)
ii) Liquidity Preference Hypothesis (4 marks)
iii) Segmented market Hypothesis (4 marks)

b) The treasury department sells a zero-coupon bond that will mature in two years. The bond has a face value of sh. 10,000, and sold at auction for sh. 9,400.
Required:
Compute the annual return for an investor buying the bond. (3marks)

c) ABC Ltd has an outstanding sh.1000 par value bond with a 11% coupon that pays at the end of each year. The bond matures in nine years. Bonds of similar risk have a required return of 10%.
Required:
What is the market value of the bond? (3marks)

Question FIVE

a) Discuss the factors that affect "Modified Duration" (10marks)
b) Briefly explain the following terms in relation to bonds
i) Senior bonds (2 marks)
ii) Junior bonds (2 marks)
iii) Debentures (2 marks)
iv)Convertible bonds (2 marks)
v)Callable bonds (2 marks)