TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF BUSINESS

DEPARTMENT OF ACCOUNTING & FINANCE

UNIVERSITY EXAMINATION FOR:

BSMF

BFI 4351: FIXED INCOME SECURITIES

SUPPLEMENTARY/SPECIAL EXAMINATION

SERIES: MARCH, 2025

TIME: 2 HOURS

DATE: MARCH,2025

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) Define and Explain the provisions of a bond indenture (4marks)

b) Briefly explain the four characteristics of a bond (12marks)

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

d) David just issued a 10- year 12% bond. The face value of the bond is sh.1000 and the bond makes semi-annual coupon payments. If the bond is trading at sh.867.25, what is the bond's yield to maturity. (3marks)

e) A new one-year bond pays interest of 1.04%. A new two-year bond pays interest of 1.46%. Using expectations theory of term structure and assuming the market is in equilibrium, what interest rate does the market expect a new one-year bond to have one year from now? (3marks)

Question TWO

Briefly explain the following terms used in bond markets.

i) Mortgage bonds (4marks)

ii) Equipment Trust certificates (4marks)

iii) Collateral Trust bonds (4marks)

iv) Mortgage pass-Through securities (4marks)
v) Asset-Backed securities (4marks)

Question THREE

a) Briefly explain the following risks associated with investment in debt funds.
   i) Interest rate (2marks)
   ii) Credit (2marks)
   iii) Yield curve (2marks)
   iv) Reinvestment (2marks)
   v) Liquidity (2marks)
b) John enterprises has outstanding sh 1,000 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%. What is the market value of the John bond? (4marks)
c) Discuss the various provisions for paying off bonds. (6marks)

Question FOUR

a) Define immunization and discuss why a bond manager would immunize a portfolio. (4marks)

b) Assume a client wants to know the basic differences between
   i) Classical immunization
   ii) Contingent immunization
   iii) Cash-matched dedication and
   iv) Duration-matched dedication

   Required:

   Briefly describe each of these four techniques. (16marks)

Question FIVE

a) Briefly explain the limitations of Macaulay and modified duration (6 marks)

b) Discuss the term structure theories (14marks)