

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF COMMERCE
DEPARTMENT OF BANKING**

**TREASURY MANAGEMENT II
[CBA 2208]**

SUPPLEMENTARY EXAMINATION

AUGUST 2011

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATES

- Answer any **FOUR (4)** questions
- Start the answer to each question on a fresh page of the answer sheet.
- Indicate on your answer booklet whether you are in the conventional or parallel programme
- Show all workings
- Questions may be written in any order, but must be legibly numbered.

INFORMATION FOR CANDIDATES

The paper contains SIX (6) questions.

All questions carry equal marks [25 marks].

The businesses in this question paper are intended to be fictitious.

This paper consists of 5 printed pages

Copyright: National University of Science and Technology, 2011[Turn over]

QUESTION ONE

a) Discuss the merits and demerits of using duration analysis in measuring interest rate risk. **[10 Marks]**

b) A bank issued a \$100 bond with a coupon of 8% per annum, yield of 6% and maturity period of 4 years. Calculate the following for the bond:

- i. Macaulay Duration **[4 Marks]**
- ii. Modified Duration **[3 Marks]**

c) State and explain the four forms of interest rate risk. **[8 Marks]**

TOTAL [25 MARKS]

QUESTION TWO

a) Companies A and B have been offered the following rates per annum on a \$20 million five year loan.

	FIXED RATE	FLOATING RATE
COMPANY A	12.0%	Libor +0.1%
COMPANY B	13.4%	Libor+0.6%

Company A requires a floating rate loan whereas Company B requires a fixed rate loan. Design a swap that will appear equally attractive to both companies. (Show diagrammatically with explanations) **[12 Marks]**

b) Define securitization and outline the benefits that arise from it. [13 Marks]

TOTAL

[25 MARKS]

QUESTION THREE

Write brief notes, giving practical examples where possible, on the following

- i. Unit investment trusts **[5 Marks]**
- ii. Managed investment Companies **[5 Marks]**
- iii. Mutual Funds **[5 Marks]**
- iv. Exchange traded funds **[5 Marks]**
- v. Hedge Funds **[5 Marks]**

TOTAL

[25 MARKS]

QUESTION FOUR

a) Calculate the settlement proceeds of a 90 day forward rate agreement contract with the following variables:

Nominal Amount \$ 10 million

FRA Rate 4 %

Reference Rate 5%

Day Base 360 days

[5 Marks]

b) Define the term net asset value.

[2 Marks]

- c) Calculate the net asset value of a mutual fund with 5 million shareholders, a portfolio of securities worth \$120 million, and owes \$4 million to its investment advisors and another \$ 1 million for rent and wages. **[4 Marks]**
- d) Evaluate the strengths and weaknesses of active strategies in the management of equity portfolios. **[14 Marks]**

TOTAL

[25 MARKS]

QUESTION FIVE

- (a) State and explain any five active equity portfolio management strategies. **[10 Marks]**
- (b) What are the requirements for successful active bond portfolio management? **[6 Marks]**
- (c) Briefly explain how the Markowitz portfolio theory is related to modern portfolio theory and state its relevance as a tool for portfolio selection. **[9 Marks]**

TOTAL

[25 MARKS]

QUESTION SIX

(a) Distinguish between a rate anticipation swap and a yield pick up swap. **[4 Marks]**

(b) State and explain any five passive equity portfolio management strategies.

[10 Marks]

(c) Consider the following stocks:

Delta has an expected return of 12% and Beta of 1. Gamma has an expected return of 13 % and Beta of 1.5. The market's expected return is 11% and the Treasury Bill Rate is 5 %.

- i. Which of the 2 stocks is better according to CAPM? **[6 Marks]**
- ii. Plot the Security Market Line and each stock's return on a graph. **[5 Marks]**

TOTAL[25MARKS]