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

# BANK LENDING AND CREDIT RISK MANAGEMENT II CBA 4206

SUPPLEMENTARY EXAMINATION

**AUGUST 2008** 

TIME: 3 HOURS

**INSTRUCTIONS TO CANDIDATES** 

Answer any FOUR (4) questions.

Indicate on your answer booklet whether you are in the conventional or parallel programme.

# **INFORMATION FOR CANDIDATES**

The number of marks is given in brackets [] at the end of each question or part question.

Questions may be written in any order, but must be legibly numbered.

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

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[Turn over]

### **QUESTION 1**

- (a) Explain why credit risk is more critical for the banking portfolio than for the trading portfolio. [10 Marks]
- (b) With the aid of a diagram, illustrate how the Bottom Up & Top Down process of risk management can be used by banks to identify and control risks.

[10 Marks]

(c) Explain how Country risk can affect the credit worthiness of a corporate borrower to international lenders. [5 Marks]

TOTAL

[25 MARKS]

### **QUESTION 2**

- Explain why, for interest rate risk, the Asset-Liability Management (ALM) function usually looks at the global view as opposed to a transaction by transaction view.
  [6 Marks]
- (b) You are given the following abridged Balance Sheet for XYZ Bank as at 30 June 2008.

### ASSETS

	\$100 000 000
Variable rate assets	\$30 000 000
Fixed rate assets	\$70 000 000

#### LIABILITIES

	\$100 000 000
Variable rate liabilities	\$20 000 000
Fixed rate liabilities	\$80 000 000

You are also given that the market interest rate is currently averaging 80% and that the Fixed Rate Assets and Fixed Rate Liabilities are reset every quarter in March, June, September and December. Commercial margins are +10% and -20% for loans and deposits respectively.

#### Required:

- i) Calculate the interest margin given the current market rate [3 Marks]
- ii) Calculate the interest margin after an interest rate rise of 10 percentage points on the market rate, 75 days after the Balance Sheet date [3 Marks]
- iii) Reconcile the change in margin brought about by the 10 percentage point rise in market interest rates by showing the variations in margins for each item in the Balance Sheet. Explain the variations. [5 Marks]

c) State and discuss any four (4) limitations of interest rate gaps

# TOTAL

# QUESTION 3

(a) "Models, including those for managing credit risks, are not 100% true. They are mere simplifications or replications of reality"

Given the above statement and its implications on the results that one would get by using a model, why should banks continue to employ models in trying to manage credit risk in the real world? [10 Marks]

[8 Marks]

[25 MARKS]

(b) Define what a *Risk Rating* is and describe the factors that usually contribute to the differences between a *facility* Risk Rating and a *Borrower Rating*. **[15 Marks]** 

### TOTAL

### QUESTION 4

(a) (i) Explain how a company wishing to introduce a new product can forecast that product's performance in support of a request for a project financing bank loan.

(ii) Identify the type of the forecasting technique that would be used in (i) above and list its limitations. [6 Marks]

(b) Describe each of the following methods that are used with some forecasting techniques.

(i)	Moving averages	[5 Marks]
(ii)	Exponential smoothing	[4 Marks]

TOTAL

# QUESTION 5

Identify and describe briefly, each of the subcategories of operating costs that banks have to consider in pricing loans under the traditional pricing technique.

# TOTAL

# [25 MARKS]

[25 MARKS]

[25 MARKS]

(c) Identify the shortcomings of predictive modelling

TOTAL

# **QUESTION 6**

- (a) Describe how a bank can improve the quality of its loan book by using each of the following techniques:
- Diversification (i)
- Novation (ii)
- Participation (iii)
- Syndication (iv)
- (b) If the use of the above techniques does improve credit quality, why are banks in Zimbabwe not applying them? [8 Marks]
  - TOTAL

# [25 MARKS]

#### **QUESTION 7**

(a) Define what predictive modelling is and describe the steps it entails.

[3 Marks]

[25 MARKS]

- (b) How can banks use predictive modelling to improve on the following areas:-
  - Customer Acquisition (i) [4 Marks] **Credit Origination** (ii) [4 Marks] **Customer Retention** [4 Marks] (iii) **Customer Value Management** [4 Marks] (iv) [6 Marks]

4

- [4 Marks] [4 Marks]

- [4 Marks]
- [5 Marks]