## NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

## B. COMM (HONOURS) INSURANCE AND RISK MANAGEMENT

## INTRODUCTIONS TO FINANCIAL MARKETS \& INSTITUTIONS : CIN 2210

## NOVEMBER/DECEMBER 2004 FIRST SEMESTER EXAMINATION

## Instructions to Candidates

1. Answer four (4) questions only
2. Candidates may use a non-programmable calculator

## Question 1

(a) "A country is always worse off when its currency is weak (falls in value)". Is this statement true, false or uncertain? Explain.
[10 marks]
(b) How can a large balance-of-payments surplus contribute to the country's inflation rate?
[712 marks]
(c) If nominal interest rates in the U.S.A. rise but real interest rates fall, predict what will happen to the U.S. exchange rate.
[7122 marks]

## Question 2

Discuss why the Zimbabwean government intervenes in private sector financial activity. Explain the principal ways (giving examples) in which the government intervenes. Why is government financial intermediation generally perceived to be a high cost of providing services?
[25 marks]

## Question 3

(a) For what major purposes are interest rate swaps used by institutions?
[10 marks]
(b) Company X, a British manufacturer wishes to borrow US dollars at a fixed rate of interest. Company Y, an American multinational, wishes to borrow sterling (pounds) at a fixed rate of interest. They have been quoted the following rates per annum:

|  | Sterling | US Dollars |
| :--- | :---: | :---: |
| Company X | $11.0 \%$ | $7.0 \%$ |
| Company Y | $10.6 \%$ | $6.2 \%$ |

Design a swap that will net a bank acting as intermediary 10 basis points per annum and that will produce a gain of 15 basis points per annum for each of the two companies.
[15 marks]

## Question 4

(a) What is the risk-return trade off? Give a real-life example that illustrates this economic relationship.
[8 marks]
(b) Would you expect the volatility of a share index to be greater or less than the volatility of a typical share? Explain your answer.
[8 marks]
(c) If the interest rate is $10 \%$, what is the present value of a security that pays you $\$ 1100$ next year, $\$ 1210$ the year after, and $\$ 1331$ the year after that?
[3 marks]
(d) Would a dollar tomorrow be worth more or less to you today when the interest rate is $20 \%$ or when it is $10 \%$ ? Explain.
[3 marks]
(e) Why is the return on a bond not necessarily equal to the interest rate on that bond?
[3 marks]

## Question 5

Critically review the flaws in the licencing and regulation of financial services and markets in Zimbabwe which have resulted in the collapse of several financial institutions and "denting" of consumer confidence (give examples to back your explanations).

In your opinion what needs to be done to rebuild customer confidence in Zimbabwean financial services and markets.
[25 marks]

## Question 6.

(a) Who are the participants in the derivative market? What are their motives for trading derivatives?
[5 marks]
(b) Briefly describe the term derivative.
(c) The buyer of a commodity hedges himself/herself against an increase in the price of the commodity by buying future contracts on 1 March. The contracts are fairly priced and expire on 21 June.

The following apply on 1 March:

- the spot price of a commodity is $\$ 100000$ per tonne
- short term interest rates are $36 \%$ per annum
- other costs such as storage and insurance of the commodity amounts to $\$ 5500$ per tonne per annum.

The following applies on the close of date:

- The price of the commodity has increased to $\$ 130000$ per tonne
- The short term interest rate has decreased to $32 \%$
- Other costs have remained unchanged.

Has the hedge improved the position of the buyer? Show your calculations, and ignore margining and transaction costs.

