

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY  
FACULTY OF COMMERCE  
DEPARTMENT OF BANKING  
BACHELOR OF COMMERCE HONOURS DEGREE IN BANKING**

**BANKING AND FOREIGN EXCHANGE  
[CBA 2202]**

**FINAL EXAMINATION**

**MAY 2011**

**TIME: 3 HOURS**

**INSTRUCTIONS TO CANDIDATES**

- Answer any **FOUR (4)** questions.
- Start the answer to each full question on a fresh page of the answer sheet.
- You may use a calculator.
- All calculations are to be presented in good style and workings should be shown.
- Questions may be written in any order, but must be legibly numbered.

**INFORMATION FOR CANDIDATES**

- **The businesses in this question paper are intended to be fictitious**
- **The paper contains SIX (6) questions.**
- **All questions carry equal marks [25 marks].**

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This paper consists of 5 printed pages  
National University of Science and Technology 2011

## **QUESTION 1**

- a) Given the following rates, calculate where a UK exporter would sell Swiss Francs receivables for Sterling;

*Spot: GBP/USD* 1, 5892 - 98

*Spot: USD/CHF* 1, 4454 - 1, 4500

**[5 marks]**

- b) Calculate the CHF/JPY cross from the following rates:

*Spot USD/CHF* 1, 4494 - 1, 4500

*Spot USD/JPY* 121, 21 - 121, 27

**[5 marks]**

- c) Calculate the cross rate forward outright given the following information. State the advice you would give to a customer wishing to transact on the basis of this information.

*Spot Rate: GBP/USD* 1, 5075 - 1, 5083

*3 Month Swap* 33 - 31

*Spot Rate: USD/NZD* 1, 4968 – 1, 4983

*3 Month Swap* 90 – 100

**[5 marks]**

- d) Identify **3** participants in the forward exchange market and explain fully, each of their roles.

**[5 marks]**

- e) Suppose you observe the following direct spot quotations in New York and Toronto; respectively 0, 8000 – 50 and 1, 2500 – 60. What are the arbitrage profits per \$1 million?

**[5 marks]**

**TOTAL**

**[25 MARKS]**

## **QUESTION 2**

Here are some prices in the international money markets:

*Spot Rate* = \$0, 75/Euro

*Forward rate (1 year)* = \$0, 77/Euro

*Interest Rate (Euro)* = 7% p.a.

*Interest rate (USD)* = 9% p.a.

- a) Assuming no transaction costs or taxes exist, do covered arbitrage profits exist in the above situation? Describe the flows. **[10 marks]**
- b) Suppose that transaction costs in the foreign exchange market equal 0, 25% per transaction. Do covered arbitrage profit opportunities still exist? **[5 marks]**
- c) Suppose no transaction costs exist. Let capital gains on currency profits equal 25% and the ordinary income tax on interest income equal 50%. In this situation, do covered arbitrage profits exist? How large are they? Describe the transactions required to exploit these profits. **[10 marks]**

**TOTAL**

**[25 MARKS]**

### **QUESTION 3**

The following data on the rates of the local currency, the *Zimbheda* was obtained from a Bureau d' change:

Year	Quarter	Exchange Rate
1	1	5, 1600
	2	4, 8800
	3	5, 0900
	4	5, 1400
2	1	6, 2300
	2	6, 1900
	3	6, 2400
	4	6, 4900
3	1	6, 4500
	2	6, 6700
	3	6, 8800
	4	6, 8400
4	1	6, 7700
	2	7, 0200
	3	7, 3400
	4	7, 3700

a) Compute the Q1 - Q4 exchange rates in the fifth year using the moving average method. **[20 marks]**

b) What are some limitations to using technical forecasting to predict exchange rates? **[5 marks]**

**TOTAL [25 MARKS]**

#### **QUESTION 4**

a) Define *exposure*, differentiating between accounting and economic exposure. **[5 marks]**

b) Under what circumstances might multinational firms be less subject to exchange risk than purely domestic firms in the same industry? **[5 marks]**

c) What factors influence a firm's transaction exposure? For each factor, explain the desirable characteristics that would reduce transaction exposure. **[5 marks]**

d) *Amaluba Flora* exports cut flowers to South Africa. Its main rivals in that market are Ethiopia and Kenya. All the exporters invoice their produce in US dollars. Is *Amaluba's* transaction exposure likely to be significantly affected if the rand strengthens or weakens? **[10 marks]**

**TOTAL [25 MARKS]**

#### **QUESTION 5**

In recent months, opinions have been expressed by some leading politicians in the country that Zimbabwe should abandon the multicurrency regime in favour of the Chinese yuan. Contribute to this debate, providing pros, and cons of adopting the yuan as the currency of choice.

**[25 marks]**

**TOTAL [25 MARKS]**

### **QUESTION 6**

The following transactions (expressed in US \$billions) take place during the year 2010. Calculate the Zimbabwe's merchandise trade, current account, capital account, and official reserves balances.

- a) Zimbabwe exports \$300 of goods and receives payment in the form of foreign demand deposits abroad.
- b) Zimbabwe imports \$225 of goods and pays for them by drawing down its foreign demand deposits.
- c) Zimbabwe pays \$15 to foreigners in dividends drawn on demand deposits in Zimbabwe.
- d) Zimbabwean tourists spend \$30 in South Africa using travellers' cheques drawn on Zimbabwe banks.
- e) Zimbabweans buy foreign stocks worth \$60, using foreign demand deposits held abroad.
- f) The Zimbabwean government sells \$45 in gold for foreign demand deposits abroad.
- g) In a currency support operation, Zimbabwe uses its foreign demand deposits to purchase \$8 from private foreigners in Zimbabwe. **[25 marks]**

**TOTAL**

**[25 MARKS]**