# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF COMMERCE DEPARTMENT OF BANKING BACHELOR OF COMMERCE HONOURS DEGREE IN BANKING <br> BANKING AND FOREIGN EXCHANGE CBA 2202 

SUPPLEMENTARY EXAMINATION
OCTOBER 2009

## TIME: 3 HOURS

## INSTRUCTIONS TO CANDIDATES

- The paper contains SIX (6) questions.
- Answer any FOUR (4) questions.
- All questions carry equal marks [25 marks].
- 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.


## INFORMATION FOR CANDIDATES

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

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

## 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
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.
d) 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]
e) Identify 3 participants in the forward exchange market and explain fully, each of their roles.
f) 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?

## QUESTION 2

Here are some prices in the international money markets:
Spot Rate $\quad=\$ 0,75 /$ 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?
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
[25MARKS]

## QUESTION 3

a) How can a central bank use direct intervention to change the value of a currency?
b) How can a central bank use indirect intervention to change the value of a currency?
c) What is the impact of a weak home currency on the home economy, other things being equal?
d) Consider a recent action by the Government of South Africa to reduce one of its key interest rates. The values of several SADC currencies were expected to change substantially against the South African rand in response to the news. Explain why the SADC currencies could be affected by a cut in South Africa's interest rates.
e) In the period 2005 - 2008, Zimbabwe's nominal interest rates were by far the highest in the world. This however, did not attract investment flows. Instead, there was capital flight. Explain why?

TOTAL
[25MARKS]

## QUESTION 4

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

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

Compute the Q1 - Q4 exchange rates in the fifth year using the moving average method.

TOTAL
[25MARKS]

## QUESTION 5

In January 2008, Shoprite, a South African based retailer purchased 29\% stake in the Zimbabwean premier supermarket chain, OK Bazaars. It intends to buy a further 160 million rand worth of the OK stork, to bring its shareholding to $49 \%$ if OK is agreeable. Shoprite is uncertain whether OK or the regulatory authorities in Zimbabwe would accept its bid. Shoprite decided to convert 160 million rand into Zimbabwe dollars and place them on deposit in Harare, pending the outcome of its discussions with OK's management. What exchange risk does Shoprite face and has it chosen the best way to protect itself from that risk?

TOTAL
[25MARKS]

## QUESTION 6

Discuss any three (3) methods of financing international trade, with particular emphasis on their advantages and disadvantages.

TOTAL
[25MARKS]

