## NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

 FACULTY OF COMMERCE
## DEPARTMENT OF BANKING

BACHELOR OF COMMERCE HONOURS IN BANKING AND INVESTMENT MANAGEMENT

BANKING AND FOREIGN EXCHANGE [CBA 2202]

## TIME 3 HOURS

## INSTRUCTIONS TO CANDIDATES

- Answer any FOUR questions.
- Start the answer to each full question on a fresh page of the answer sheet.
- All calculations are to be presented in good style and workings should be shown.


## INFORMATION FOR CANDIDATES

- The businesses in this question paper are intended to be fictitious.
- All questions carry equal marks [25 marks].


## QUESTI ON ONE

a) Define the following terms:
i. Foreign exchange market
ii. Foreign exchange transaction
iii. Vostro account
[2 marks]
b) Discuss the three major functions of the foreign exchange market? [9 marks]
c) How are foreign exchange markets connected for trading activities? [10 marks] TOTAL
[25 MARKS]

## QUESTI ON TWO

a) With reference to interbank quotations, what is the difference between American and European terms?
b) On your post-graduation celebratory trip, you decide to travel from Bulawayo, Zimbabwe to Moscow, Russia. You leave Zimbabwe with EUR15 000 in your wallet. You obtain the following exchange rates:

| Spot rate | EUR/USD | 1.314 |
| :--- | :--- | :--- |
| Spot rate | USD/RBL | 130.96 |

i. What is the EUR/RBL cross rate?
ii. How many RBL will you obtain from your EUR?
c) Use the following spot and forward bid-ask exchange rates for the USD/JPY to answer the following questions:

| Period | USD/JPY bid rate | USD/JPY ask rate |
| :--- | :--- | :---: |
| Spot | 85.41 | 85.46 |
| 1-month | 85.02 | 85.05 |
| 3-months | 84.86 | 84.90 |
| 6-months | 84.17 | 83.20 |

i. What is the mid rate for each maturity?
ii. What is the annual forward premium or discount for the 1-month, 3month and 6-month maturities?

## TOTAL

[25 MARKS]

## QUESTI ON THREE

a) What is the difference between locational, triangular and covered interest arbitrage in the foreign exchange market? [6 marks]
b) Andre Brazio just started as a dealer for BancABY in Zurich, Switzerland. He receives the following USD/CHF for spot, one-month forward, three-month forward and six-months forward.

| Spot exchange rate |  |  |
| :--- | :--- | :--- |
| Bid rate | USD/CHF | 1.2575 |
| Ask rate | USD/CHF | 1.2585 |
| One-month forward |  | 10 to 15 |
| Three-month forward |  | 14 to 22 |
| Six-month forward |  | 20 to 30 |

i. Calculate outright quotes [6 marks]
ii. What do you notice about the spread as quotes evolve from spot towards six months? [4 marks]
c) A corporate treasury working out in Vienna with operations in New York simultaneously calls Citibank in New York and Barclays Bank in London. The banks give the following quotes on the EUR simultaneously;

Citybank, New York
EUR/USD 0.7521-41
0.7445-75

Using USD1 000 000, show how a corporate treasury dealer could make locational arbitrage profit with the two quoted exchange rate quotes.

## TOTAL

## QUESTI ON FOUR

a) A newspaper shows the prices below for the previous day's trading in EUR-USD currency futures. Explain the meaning of the given terms.
Settlement ..... 0.9136
Change ..... $+0.0027$
High ..... 0.9147
Low ..... 0.9098
Estimated volume ..... 29,763
Open interest ..... 11,360
b) Akulandaba writes a put option on the Japanese Yen with a strike price of USD0.00800/J PY at a premium of 0.0080c per Yen and with an expiration date six months from now. The option is for JPY12 500 000. What is Akulandaba's profit or loss at maturity if the ending spot rates are JPY110/USD and JPY135/USD?
c) What happens to the premium Akulandaba paid for the above option in the event that he decides to let the option expire unexercised?

## TOTAL

[25 MARKS]

## QUESTI ON FIVE

a) Why are some multinational corporations subject to a greater degree of transaction exposure than others?
b) Assume that the Dollar is expected to strengthen against the Euro over the next several years. Explain how this will affect the consolidated earnings of United States based multinational corporations with subsidiaries in Europe.
c) Mangena Enterprises, a United States firm plans to use a money market hedge to hedge its payment of 3 million Australian dollars for Australian goods in one year. The United States interest rate is 7 percent while the Australian interest rate is 12 percent. The spot rate of the Australian dollar is United Stated Dollar 0.85 while the 1 -year forward rate is United States Dollar 0.81 . Determine the amount of United States Dollars needed in 1 year if a money market hedge is used.
[6 marks]
d) What does it imply if a Bill of Lading is said to be a:
i. Straight Bill of Lading
ii. Order Bill of Lading [2 marks]
iii. Clean Bill of Lading [2 marks]
iv. Foul Bill of Lading
[2 marks]

TOTAL
[25 MARKS]

## QUESTI ON SIX

a) Why do some governments impose exchange controls?
b) Explain two types of dollarization. [6 marks]
c) Evaluate the policy of adopting dollarization in an economy faced with deep rooted macroeconomic challenges.
[13 marks]

## TOTAL

[25 MARKS]

