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 2014

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.
- 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**

- **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 2014

QUESTION 1

a) Give a full definition of foreign exchange. [3 marks]

b) What is the difference between the retail or client market and the wholesale or interbank market for foreign exchange? [6 marks]

c) Japan is one of the economic super powers. However, the role of Japan on the international market is limited? Why is that so? [16 marks]

TOTAL **[25 MARKS]**

QUESTION 2

a) A bank trader is currently quoting a small figure bid-ask of 35-40 for the USD/CAD exchange rate when the rest of the market is trading at 1.3436 - 1.3441. What is implied about the trader's beliefs by his prices? [4 marks]

b) What is triangular arbitrage? What is a condition that will give rise to a triangular arbitrage opportunity? [6 marks]

c) Assume you are given the following exchange rates:

Value of the Great Britain Pound in United States Dollars   1.65

Value of the Malaysian Ringgit in United States Dollars   0.25

Quoted cross rate between the Great Britain Pound and the Malaysian Ringgit   6.8

Given this information, is triangular arbitrage possible? If so, explain the sequence of events that would reflect triangular arbitrage and compute the profit from this strategy if you had USD 1 000 000 to use. [12 marks]

d) What is the impact of the sequence of events explained in (c) above? [3 marks]

TOTAL **[25 MARKS]**

QUESTION 3

a) Suppose a UK exporter expects to receive USD1 million in one year's time. The following information is provided:

> Spot rate GBP 1 : USD 1.5
> Eurodollar one year fixed interest rates 6%
> Eurosterling one year fixed interest rates 10%

Create a synthetic forward contract and compute the forward rate from the information given above. [8 marks]

b) What are the assumptions from a synthetic forward contract? [6 marks]

c) Explain the following forms of Purchasing Power Parity theory:

(i) the Absolute Purchasing Power Parity theory [3 marks]

(ii) the Relative Purchasing Power Parity theory [3 marks]

d) What causes deviations from the Purchasing Power Parity? [5 marks]

TOTAL **[25 MARKS]**

QUESTION 4

a) Restate the following One-month, Three-month and Six-month outright forward European term bid-ask quotes in forward points.

Spot	1.3431-1.3436
One-Month	1.3432-1.3442
Three-Month	1.3448-1.3463
Six-Month	1.3488-1.3508

[6 marks]

b) Suppose that the market conditions is summarized as follows:

   Three-month interest rate in the United States: 8.0% per annum
   Three-month interest rate in Germany: 5.0% per annum
   Current spot exchange rate: EUR00.0800/USD
   Three-month forward exchange rate: EUR0.7994/USD

   Assuming the arbitrager can borrow up to USD 1 000 000;

   (i) Determine whether interest rate parity is holding.   [7 marks]

   (ii) If interest rate parity is not holding, how would you carry out covered interest arbitrage? Show all the relevant steps and determine the arbitrage profit.   [12 marks]

   TOTAL   **[25 MARKS]**

QUESTION 5

a) Distinguish between forward exchange contracts and foreign currency options.
                                                                 [12 marks]

b) Assume a call option has the following characteristics:

Strike price	3.40
Base currency	Sterling
Underlying currency	Deutschmarks
Current spot rate	3.10
Amount of base currency	£12 500

   Compute the intrinsic value of the call option on the expiry day   [7 marks]

c) Explain the benefits to the customer of currency traded options?   [6 marks]

   TOTAL   **[25 MARKS]**

QUESTION 6

a) Define the term countertrade. [3 marks]

b) Explain the following forms of countertrade;

    (i) Link purchase [3 marks]

    (ii) Buy back deals [3 marks]

    (iii) Switching trading [3 marks]

    (iv) Evidence accounts [3 marks]

c) Discuss the determinants of operating exposure? [10 marks]

TOTAL **[25 MARKS]**