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/JUNE 2004**

INSTRUCTIONS TO CANDIDATES

(i) Time : 3 hours.
(ii) Answer any **FIVE** questions.
(iii) Show all your workings.
(iv) Each question carries 20 marks.
(v) Write legibly

QUESTION 1

(a) Explain what is meant by the terms foreign exchange translation exposure, transactions exposure and economic exposure. **[15 marks]]**

(b) What is the significance of these different types of exposure to the financial manager? **[5 marks]**

QUESTION 2

In 1990 South Korean's exports stalled. Some South Koreans firms suggested that South Korea's primary export problem is the weakness in the Japanese Yen. How would your interpret this statement. **[20 marks]**

QUESTION 3

Rumswick Ltd is an importer of clock mechanisms from Switzerland. The company was contracted to purchase 3000 mechanisms at a unit price of 18 swiss francs. Three months credit is allowed before payment is due.

Rumswick currently has no surplus cash, but can borrow short term at 2% above bank base rate or invest short term at 2% below bank base rate in either the United Kingdom or Switzerland.

QUESTION 3 [CONT…]

Exchange Rates	**Swiss Francs/£**
Spot	2.97 – 2.99
1 month forward	2.15 – 1.5 premium
3 months forward	4.5 – 3.5 premium
(The premium (in points) relates to the Swiss franc)	
Current Base Rates	
Switzertland	6% per year
United Kingdom	10% per year

Required

(a) Explain and illustrate three policies that Rumswick Ltd management adopt with respect to the foreign exchange exposure of this transaction.
Recommend which policy the company should adopt. Calculations should be included whenever relevant. **[10 marks]**

Assume that interest rates will not change during the next three months.

(b) If the Swiss Supplier were to offer 2.5% discount on the purchase price for payment within one month, evaluate whether yen would alter your recommendations in (a) above. **[4 marks]**

(c) Annual inflation levels are currently at 2% in Switzerland and 6% in the United Kingdom and the levels move during the next year to 3% in Switzerland and 9% in the United Kingdom. What effect are these changes in inflation likely to have on the relative value of the Swiss franc and the pound. **[6 marks]**

QUESTION 4

On 20 September 2003, an Australian exporter sells A$10 million of coal to a New Zealand company. The importer is sent an invoice for NZ$1.1 million payable in six months. The Spot rates of exchange between the Australian and New Zealand dollars are NZ$1.1 to A$.

Required

(a) If the spot rate of exchange in six months is NZ$1.2 to A$ what exchange rate gain or loss will be made by the Australian exporter. **[5 marks]**

(b) If the spot rate of exchange in six months is NZ$1.05 to A$ what exchange rate gain or loss will be made by the Australian exporter. **[5 marks]**

(c) A six month forward is available at NZ$1.09 to A$. Show how this can be reduced using the forward. **[5 marks]**

QUESTION 4 [CONT…]

Discuss the relevant merits and demerits of issuing forward and options to hedge currency risk.

[5 marks]

QUESTION 5

(a) The Malaysian ringgit and the Czech Kornna change in value relative to the dollar as indicated. Calculate the after change exchange rate in local currency units per dollar.

[7 marks]

Currency	**Initial Exchange Rate**	**Change Relative to US dollar**
Malaysian ringgit	MR2.54 00/$	Depreciates by 20%
Czech Koruma	CK236.2100/$	Appreciates 5%

(b) The following quotations are available to yen. (You may either buy or sell at the stated rates).

Hongkong Shangai Bank, French Franc quote for US dollar:	FF4.8600/$
Diesdner Bank, Deutschemark quote for US dollars:	DM1.4200/$
Banque National de Paris, French Franc quote for Deutschemarks:	FF3.4400/DM

Assume that you have an initial $1,000,000. Is triangular currency arbitrage possible? If so, explain the steps and compute your profit. **[13 marks]**

QUESTION 6

(a) Brit Gillespie, an arbitrager with the Bank of Auckland, faces the following New Zealand dollar/US dollar quotes.

- Spot rate NZ$1.4393/$
- Six month forward rate NZ$1.4637/$
- Six months New Zealand dollar interest rate 8.00% per annum
- Six months US dollar interest rate 5.50% per annum

Bill is authorized to use NZ$20 000 000 or its US dollar equivalent. Transactions costs would be $2700 paid at the end of six months. The ending profit, if any, should be realised in New Zealand dollars. Assume Bill can borrow or invest at the above interest rates, how can he complete a covered interest arbitrage. What will be his profit?

[12 marks]

QUESTION 6 [CONT…]

(b) Money and foreign exchange rates in Harare and Johannesburg are very efficient. You have the following information:

	Harare	**Johannesburg**
Spot exchange rates	ZW$1.62220/ZAR	ZAR0.6165/Z$
Expected Inflation rate	Unknown	3.00% p.a.
One year T. bill rate	6.25% p.a.	5.50% p.a.

(i) Estimate inflation in Zimbabwe next year. **[4 Marks]**

(ii) Estimate today's one year forward exchange rate between the Zimbabwean dollar and the South African Rand. **[4 Marks]**

QUESTION 7

Explain clearly with the aid of diagrams if necessary the following terms:

(i) Marginal Price System and the Dutch Auction System in the forex market **[4 marks]**

(ii) A call option is deep in the money **[3 marks]**

(iii) A covered call option **[5 marks]**

(iv) A bottom straddle **[5 marks]**

(v) Letter of Credit. **[3 marks]**

END OF EXAMINATION PAPER