NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF COMMERCE
DEPARTMENT OF BANKING

BANKING AND FOREIGN EXCHANGE
CBA 2202

FINAL EXAMINATION **MAY 2008**

TIME: 3 HOURS

INSTRUCTIONS TO CANDIDATES

Answer any FOUR (4) questions.

Indicate on your answer booklet whether you are in the conventional or parallel programme.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.

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

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

This paper consists of 5 printed pages

[Turn over]

QUESTION 1

Interest rates in Zimbabwe and South Africa for similar investments are 18% and 20% per annum respectively. The foreign exchange rates are as follows.
Spot rate Z$/ZAR =6.5
1 year forward rate is Z$/ZAR =6.35

(a) Show that an arbitrage opportunity exists? **[5 Marks]**

(b) Calculate how much covered or riskless profit could be made by using the Forward exchange markets given that you had access to a loan equivalent to Z$ 5 million. **[10 Marks]**

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

	Harare	Johannesburg
Spot exchange rates	ZW$1,62220/ZAR	ZAR 0,6165/ZW$
Expected Inflation rate	Unknown	3% p.a
1 year treasury bill rate	6,25% p.a	5,50% p.a

(i) Estimate inflation in Zimbabwe next year. **[5 Marks]**

(ii) Estimate today's one-year forward exchange rate between the Zimbabwean dollar and the South African Rand. **[5 Marks]**

TOTAL [25 MARKS]

QUESTION 2

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

(b) What is the significance of these different types of exposures to the Financial Manager? **[10 Marks]**

TOTAL [25 MARKS]

QUESTION 3

Standard arranges a forward contract with its exporter customer for the bank to buy US$40 000 at the rate of Z$/US$ =40. Payment was delayed by the US buyer and the exporter asked for an extension of 1 month fixed. The rates ruling on the Maturity dates of the forward contracts were as follows.

	Z$/US$	
Spot rates	41.9500	42.0700
1 month	0.70C	0.60C

(a) Show how the bank will effect the extention of a forward contract. **[15 Marks]**

(b) Yearly interest rates in Botswana is 15% and that of Namibia is 9%. Spot rate is BP/N$ =9. If interest rate parity theory holds, calculate the 90 day, 1 year and 2 year exchange rates. **[10 Marks]**

TOTAL [25 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 6 months. The spot rates of exchange between the Australian and New Zealand dollars are NZ$1,1 to A$1.

(a) If spot rate of exchange in 6 months is NZ$1,2 to A$1, what exchange rate gain or loss will be made by the Australian exporter? **[5 Marks]**

(b) If the spot rate of exchange in 6 months is NZ$1,05 to A$1, what exchange rate Gain or loss will be made by the Australian exporter? **[5 Marks]**

(c) A 6 month forward is available at NZ$1,09 to A$1. Show how this can be reduced using the forward contract. **[5 Marks]**

(d) Discuss the relevant merits and demerits of using forward contracts and options to hedge against currency risk. **[5 Marks]**

(e) What are the basic differences between a futures contract and an options contract? **[5 Marks]**

TOTAL [25 MARKS]

QUESTION 5

(a) Barclays Bank Zimbabwe agreed to enter into a fixed forward contract with ABG Ltd, an exporter of tomatoes to Botswana. The contract was for the bank to buy BP 1 million and was to be delivered in 6 months time. Unfortunately, the exporter could not perform its side of the contract at the expiry of the contract because of several reasons and Barclays decided to effect a close out. Given that the following were the rates on the day of entering into a forward contract.

	Z$/BP	
Spot	8.2579	8.2595
6 months forward	0.76C	0.67C

And that spot rates 6 months later were: 8.2659 8.2671

(i) Show how the bank will effect a close out in the exporter account. **[5 Marks**]

(ii) Has the customer benefited or lost as a result of the close out? **[5 Marks]**

(iii) What would be the situation like if the spot rate 6 months later was: 8.2401(bid) and 8.2417(offer). **[5 Marks]**

(b) CBZ agreed to enter into a forward contract with the importer. The forward Contract is for CBZ to sell US$1.5 million to the importer in 90 days time. Close out had to be effected after 90 days as the importer did not receive the Imported consignment. The rates on the date of entering into the forward contract were as follows.

	Z$/US$	
Spot rates	6.2513	6.2547
90 days forward rates	0.52C	0.41C

The spot rate after 90 days were: 6.2479(bid) and 6.2488(offer).

You are required to effect a close out **[10 marks**]

TOTAL [25 MARKS]

QUESTION 6

(a) An exporter holds a Bankers Acceptance (BA) with the following details.

Face value $1 million

Discount rate	12,5% p.a
Acceptance fee	0,75% p.a
Maturity period	180 days

(i) Discount it immediately **[3 Marks]**

(ii) Hold it to maturity **[2 Marks]**

(b) Given that the opportunity cost of funds for the exporter in (a) above is 12% p.a, determine if it would be wise to hold the BA to its maturity. **[3 marks]**

(c) The annual inflation rates in country A and country B are 5% and 3% l Respectively. In the foreign exchange markets, the spot rate between the two Countries is quoted as A900=B1, where A and B are the currency units for country A and country B respectively.

(i) Using the Purchasing Power Parity Theory (PPPT) estimation formular, determine the spot rates expected in 1 year and 3 years time. **[5 Marks]**

(d) In the morning, you went to three banks and observed the following exchange rate Quotations which may be used either for buying or selling transactions.

Bank 1	Z$99,375 = US$1
Bank 2	BP5 = US$1
Bank 3	Z$18,875 = BP1

(i) Calculate the Z$/BP cross rate between Bank 1 and Bank 2. **[2 Marks]**

(ii) Given your answer to (i) above and the initial quotations from the three banks, explain how an interbank foreign currency dealer can take advantage of the situation and make riskless profit. **[4 Marks]**

(iii) If the foreign currency trader in (ii) above had access to Z$100 Million, Calculate how much profit in Zimdollar terms he could make by taking Advantage of the situation explained in (ii) above. **[3 Marks]**

(iv) Explain FOUR ways by which a multinational company can control its Transaction exposure and state the advantage of hedging foreign exchange Risk using options as opposed to other derivative instruments. **[3 Marks]**

TOTAL **[25 MARKS]**