National University of Science and Technology
Think in Other Terms

FACULTY OF COMMERCE

DEPARTMENT OF FINANCE

BACHELOR OF COMMERCE HONOURS DEGREE IN FINANCE

PART IV 1ST SEMESTER FINAL EXAMINATION–DECEMBER 2015

INTERNATIONAL FINANCE I [CFI 4102]

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS TO CANDIDATES

1. Answer any **FOUR (4)** questions.
2. Questions may be written in any order, but must be legibly numbered.
3. Show all workings.
4. Write neatly and legibly.

INFORMATION FOR CANDIDATES

1. This paper contains **SIX (6)** Questions.
2. Questions carry equal marks (**25 marks** each).
3. This paper contains **FOUR (4)** printed pages, including cover page.
4. The businesses and persons in this question paper are intended to be fictitious.

QUESTION ONE

a) Describe the three accounts of the Balance of Payments (BOP) of a country as outlined in the World Bank (2009) definition. [9 marks]

b) Using the Gross National Product (GNP) and the Gross National Income (GNI) equations, explain how the international flows of funds are linked to the domestic flows of funds.

To substantiate your discussion, deduce the equation that relates GNP to foreign trade. [16 marks]

[TOTAL 25 MARKS]

QUESTION TWO

a) Purchasing Power Parity (PPP) is one of the fundamental methods that can be used to forecast the exchange rate in the long-run.

   i. Explain the concept of PPP as it relates to the foreign exchange market. [5 marks]

   ii. Show that:

$$e_f = \frac{(1+I_h)}{(1+I_f)} - 1$$

Where, e_f = expected percentage change in foreign exchange.

I_h = rate of inflation in the home country.

I_f = rate of inflation in the foreign country

[4 marks]

b) Green Bank, an international financial institution expects that its local Chinese currency, the Yen (¥) will depreciate against the US dollar ($) from its spot rate of $0.15 to $0.14 in 10 days. The following interbank lending and borrowing rates exist:

	Lending rates	Borrowing Rates
US Dollar Market	8.0%	8.3%
Chinese Yen Market	8.5%	8.7%

Assume that Green Bank has a borrowing capacity of either $10 million or ¥70 million in the interbank market, depending on which currency it wants to borrow.

i) Using the uncovered interest rate parity, how would Green Bank attempt to capitalize on its expectations without using its depositors' funds? Estimate the profits that could be generated from this strategy. [8 marks]

ii) Given that all the preceding information remains unchanged except that Green expects the Yen to appreciate from $0.15 to $0.17 in 30 days. How would Green Bank capitalize on its expectations without using its depositors' funds? Estimate the profits that could be generated from this strategy. [8 marks]

[TOTAL 25 MARKS]

QUESTION THREE

a) Discuss any three factors that marked the origin and the development of the Eurocurrency markets in the international financial markets. [9 marks]

b) Explain what accounts for the differences between domestic market interest rates and the Eurocurrency market interest rates? [16 marks]

[TOTAL 25 MARKS]

QUESTION FOUR

On 1 January 2015 a Zimbabwean manufacturing company; Electrical Engineering is awarded a contract to supply 100 electrical motors to Bvelaphanda, a South African automobile firm. Electrical Engineering will receive 150 million Rand on 31 December 2015 for this transaction. The current spot rate for the Rand against the Dollar is ZAR1=$0.1400 and the one-year forward rate is ZAR1=$0.1300.

a) What is the value of this transaction if Electrical Engineering uses a straight forward contract hedge? [2 marks]

Electrical Engineering and Bvelaphanda agree on a currency risk sharing agreement with a neutral zone between ZAR1=$0.1290 and ZAR1= $0.1310, while the forward rate of ZAR1=$0.1300 is used as the base rate.

b) How much will Electrical Engineering receive and Bvelaphanda pay:

i. If the actual exchange rate turns out to be ZAR1=$0.1150 on 31 December 2015 on a currency risk sharing basis? [8 marks]

ii. What are the costs or savings of each party when compared to a straight forward contract and the implications of this strategy? [3 marks]

How much will Electrical Engineering receive and Bvelaphanda pay:

iii. If the actual exchange rate turns out to be ZAR1=$0.1450 on 31 December 2015 on a currency risk sharing basis? [8 marks]

iv. What are the costs or savings of each party when compared to a straight forward contract and the implications of this strategy? [3 marks]

[TOTAL 25 MARKS]

QUESTION FIVE

Silva International Bank has a portfolio of loans and securities expected to generate the following interest cash inflows for the bank:

Expected Cash Receipts	**Period in which Receipts are expected**
$1,385,421	Current year
$746,872	Two years from today
$341,555	Three years from today
$62,482	Four years from today
$9,871	Five years from today

Deposits and money market borrowings were acquired from different foreign markets and are expected to require the following interest cash outflows:

Expected Cash Payments	Period in which Payments will be made
ZAR19,998,403	Current year
£530,772	Two years from today
C$125,784	Three years from today
¥100,500	Four years from today
-----	Five years from today

The discount rate applicable to all the above cash flows is 8% p.a., while total assets and liabilities of the bank are $125 million and $110 million respectively. The exchange rate for the liabilities at the time of payment are expected to be ZAR1 = US$0.0714; £1 = US$1.6556; C$1 = US$0.9850 and ¥1 = US$0.01.

NB: All figures to be rounded to the nearest US$1.

a) Calculate the duration of the Assets of the Bank in US$. [4 marks]

b) Calculate the duration of the Liabilities of the Bank in US$. [4 marks]

c) Calculate the Duration Gap of the Bank and explain what happens to the net worth of the Bank should the interest rate rise or fall? [8 marks]

d) If the interest rate falls from the current rate of 8% p.a. to 7% p.a., what would be the amount of change that will be reflected on the bank's net worth. [3 marks]

e) Based on the Duration Gap calculated in (c) above, identify and explain any two possible strategies that the Bank may adopt to minimise the impact of interest rate change on the net worth of the Bank. [6 marks]

[TOTAL 25 MARKS]

QUESTION SIX

a) Explain any two theories of foreign direct investment. [6 marks]

b) Using one of the theories identified in (a) above, evaluate the link between the concepts of the theory and the trends in the flow of foreign direct investment in any economy of your choice. [8 marks]

c) Based on literature on trends in global investment promotion, discuss the key policy changes in investment promotion that had been adopted by most national investment promotion agencies in recent years. [11 marks]

[TOTAL 25 MARKS]

END OF EXAMINATION PAPER