## NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF COMMERCE DEPARTMENT OF FINANCE BACHELOR OF COMMERCE HONOURS DEGREE IN FINANCE PART IV 1<sup>ST</sup> SEMESTER FINAL EXAMINATION – NOV/DEC 2005 <u>INTERNATIONAL FINANCE I [CFI 4102]</u> TIME ALLOWED :3 HOURS

## **INSTRUCTIONS**

Answer All Questions.

### **QUESTION 1**

The following information is given:-

Dollar Spot - Forward Against the dollar

	CLOSING SPOT	ONE MONTH FORWARD	THREE MONTHS FORWARDS	ONE YEAR FORWARD
Germany (DM/\$)	1.7076-1.7083	1.7111	1.7154	1.7159
Japan (¥en /\$).	103.300-103.325	103.19	100.88	100.88

Use the information in the table, "Dollar spot – forward against the Dollar" to answer the following.

(a) Estimate the dollar cost or value to your company of:-

- (i) buying DM 140,000 spot.
- (ii) selling  $\frac{1}{2}$  sellin
- (iii) Selling DM 75,000 spot.
- (iv) Buying  $\frac{1}{2}$  en 500m spot. [8]
- (b) Calculate the cross rate for purchasing ¥en against DM`s spot.
- (c) If the ¥en/\$ exchange rate changes from ¥103.3 103.325/\$ to ¥100.15 100.175/\$, and the Japanese government wants to keep the exchange rate fixed, then how should the Bank of Japan operate in the foreign exchange market? [3]

- (d) What are the **major** differences between the following paired instruments?
  - (i) Spot and forward exchange.
  - (ii) Forward exchange and currency futures.
  - (iii) Currency futures and foreign exchange options. [9]

#### **QUESTION 2**

Where applicable use the information in the table, "Dollar spot – forward against the Dollar" to answer the following:-

- (a) Explain the following terms:-
  - (i) Covered interest parity.
  - (ii) Uncovered interest parity.
  - (iii) Risk premium.
  - (iv) Arbitrage

[12]

- (b) Using the average spot rate for each currency compute the premium or discount per annum for the forward contracts of three months maturity. [5]
- (c) Indicate whether you would expect three months interest rates to be:-
  - (i) higher or lower in Germany than the U.S.
  - (ii) higher or lower in Japan than the U.S
- (d) Given six month Euro-Mark and Euro-Dollar rates of

 $5\frac{9}{16} - 5\frac{7}{16}$ % and  $4\frac{3}{8} - 4\frac{1}{4}$ % respectively, obtain the six months forward rate quotation that would satisfy the covered interest parity condition.

#### **QUESTION 3**

- (a) Explain the following terms:-
  - (i) Law of One price,
  - (ii) Absolute Purchasing Power Parity (PPP),
  - (iii) Relative Purchasing Power Parity (PPP),
  - (iv) Big Mac Index

[12]

(b) Highlight some of the reasons for short term divergence from Absolute PPP [7]

(c) The expected yearly inflation rate is 2.3% in Germany and 0.6% in Japan. The current exchange rate is 60.5 ¥en per DM. Assuming that the relative form of PPP holds, what is the expected exchange rate in one year? [2]

# QUESTION 4

- (a) Why would anyone ever buy a forward contract given that a futures contract is like a forward contract that has an added benefit of being tradeable? [7]
- (b) Explain how speculation can have positive effects in foreign exchange markets? [5]
- (c) Explain why central banks would routinely intervene in the foreign exchange markets. Why is their policy referred to as <u>leaning against</u> the wind"? [15]