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10MBAFM426/BF476/IB466

Fourth Semester MBA Degree Examination, December 2012

International Financial Management

Time: 3 hrs.

Max. Marks:100

**Note: 1. Answer any FOUR full questions from Q.No.1 to Q.No.7.
2. Question No. 8 is compulsory.**

- 1
 - a. Explain how the theory of comparative advantage relates to the need for international business. (03 Marks)
 - b. What is meant by economic exposure? Discuss the possible strategies to hedge economic exposure. (07 Marks)
 - c. Agile Baking Corporation can borrow \$5 million at 6 percent annualized. It can use the proceeds to invest in Canadian dollars at 9 percent annualized over a six-day period. The Canadian dollar is worth \$0.95 and is expected to be worth \$0.94 in six days. Based on this information, should Agile Banking Corporation borrow us dollars and invest in Canadian dollars? What would be the gain or loss in US dollars? (10 Marks)

- 2
 - a. Briefly explain how changes in various economic factors affect the Indian current account balance. (03 Marks)
 - b. Briefly describe how various economic factors can affect the equilibrium exchange rate of Japanese yen's value with that of the dollar (US \$). (07 Marks)
 - c. You are given the following quotes for spot exchange and 1 month, 2 month and 6 month forward exchange between the US dollar and the Malaysian Ringgit:

	Bid (M/\$)	Ask (M/\$)
Spot	4.0050	4.0160
1-month forward	3.9925	4.0090
3-month forward	3.9790	3.9880
6-month forward	3.9365	3.9584

- i) In New York, 3-month US treasury bills yield 6 percent per annum. What should be the annualized yield on 3-month Malaysian Government Bills? Use the US \$ ask quotes for simplicity.
- ii) Check your answer to part (i) above with an investment of \$5million for three months in each country. Ignore all other charges and taxes and use ask quotes for your calculations. (10 Marks)

- 3
 - a. What factors affect currency call option premium? (03 Marks)
 - b. Assume the following information:

Spot rate of £ = \$1.60

180 day forward rate of £ = \$1.56

180 day British interest rate = 4%

180 day US interest rate = 3%

Based on this information, is covered interest arbitrage by US investors feasible? Explain assuming an investment of \$1 million. (07 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

3 c. Set out below is a table of cross rates:

	Deutsch Mark	Dollar	French Franc	Pound Sterling
Frankfurt	-	2.2800	0.4810	4.0205
New York	0.4400	-	0.2100	2.8000
Paris	2.0900	4.8300	-	8.3400
London	4.0100	1.8700	7.4200	-

Note that for Frankfurt, New York and Paris, all quotes are direct; for London, all quotes are indirect.

If all the above quotes are available at the same instant in time and assuming no transaction costs, how might a trader take advantage of the situation? (10 Marks)

4 a. Briefly explain why the Reserve Bank of India may attempt to weaken the rupee (₹). (03 Marks)

b. Your company has to make a US \$1 million payment in three month's time. The dollars are available now. You decide to invest them for three months and you are given the following information.

The US deposit rate is 8% p.a.

The sterling deposit rate is 10% p.a.

The spot exchange rate is \$1.80/£

The three-month forward rate is \$1.78/£

- Where should your company invest for better returns?
- Assuming that the US interest rate and the spot and forward rates remain as in the original data, where would you invest if the sterling deposit rate were 14% p.a.?
- With the originally stated spot and forward rates and the same dollar deposit rate, what is the equilibrium sterling deposit rate? (07 Marks)

c. You are required to find out the overall balance, showing clearly the sub balances from the following data:

- Thompson Corporation, USA invests in India ₹3,00,000 to modernize its Indian subsidiary.
- A tourist from Egypt buys Souvenirs worth ₹3,000. He pay hotel and travel bills of ₹5,000.
- The Indian subsidiary of Thompson Corporation remits ₹5,000 as dividends to its parent company in the USA.
- This subsidiary of Thompson sells a part of its production in other Asian countries for ₹1,00,000.
- The subsidiary in India borrows a sum of ₹2,00,000 (to be repaid in one year) from German money market to resolve its liquidity problem.
- An Indian company buys a machine for ₹1,00,000 from Japan and 60 percent payment is made immediately; the remaining amount is to be paid after 3 years.
- An Indian subsidiary of a French company borrows ₹50,000 from the Indian public to invest in its modernization programme. (10 Marks)

5 a. Assume that the Australian dollar's spot rate is \$0.90 and that the Australian and US one year interest rates are initially 6%. Then assume that the Australian one-year interest rate increases by 5 percentage points, while the US interest rate remains unchanged. Using this information and IFE theory, forecast the spot rate for one year ahead. (03 Marks)

- 5 b. Montclair Co., a US firm plans to use a money market hedge to hedge its payment of 30,00,000 Australian dollars for Australian goods in one year. The US interest rate is 7 percent, while the Australian interest rate is 12 percent. The spot rate of the Australian dollar is \$0.85 while the one-year-forward rate is \$0.81.
- i) Determine the amount of US dollars needed in one year if a money market hedge is used
 - ii) Would Montclair Co. be better off hedging the payables with a money market hedge or with a forward hedge? (07 Marks)
- c. What are the economic forecasts and financial characteristics normally considered by a MNC while evaluating a project? (10 Marks)

- 6 a. Hopkins Co. transported goods to Switzerland and will receive 20,00,000 Swiss Francs in three months. It believes the three-month forward rate will be an accurate forecast of the future spot rate. The three-month forward rate of Swiss Franc is \$0.68. A put option is available with an exercise price of \$0.69 and a premium of \$0.03. Would Hopkins prefer a put option hedge to no hedge? Explain. (03 Marks)
- b. Discuss the techniques for optimized cash inflows for an MNC. What are the complications in optimizing cash inflows? (07 Marks)
- c. Three companies x, y and z have come together to reduce their interest cost. Following are the requirements of the companies and interest rates offered to them in different markets:

Company	Requirements	Fixed \$	Floating \$	Fixed Euro
X	Fixed \$ funds	5.75%	L + 0.9%	6%
Y	Floating \$ funds	5.25%	L + 0.75%	6.5%
Z	Fixed Euro funds	6%	L + 0.60%	6.25%

The amounts required by the companies are equal and are for 3 years on bullet payment basis. You are required to arrange a swap between three parties in such a way that the benefit of swap is equally divided among the companies. (10 Marks)

- 7 a. In Frankfurt, a dealer quotes
 GBP/DM – 1.4144/58
 USD/DM – 1.2166/88
 GBP/USD – 1.1110/20
- Is there an arbitrage opportunity? Calculate the arbitrage profits. (03 Marks)
- b. What are the incentives and barriers to FDI? (07 Marks)
- c. The following information is available for the US and Europe:

Particular	US	Europe
Nominal interest rates	4%	6%
Expected inflation	2%	5%
Spot rate	-	\$1.13
One-year forward rate	-	\$1.10

- i) Does interest rate parity hold?
- ii) According to PPP, what is the expected spot rate of the Euro in one year?
- iii) According to IFE, what is the expected spot rate of the Euro in one year? (10 Marks)

8 **CASE STUDY :**

The Shriram Group is a MNC situated in India. Each company of the chain acts independently. However, investment and growth strategies are controlled by the Board of Directors. The Thailand branch of this group is working in chemical and textile sectors. Shriram Group decided to increase its capacity by putting up a new plant with a capacity of 2,500 tons in the worsted yarn division. This plant is to be located in Thailand in zone 3 which is eligible for tax concessions. This plant would be name “Krishna Worsted (Thailand) Textile Limited” and would employ modern technology and will cater to 100 percent export markets.

The investment for the plant would be \$45,00,000. The useful life of the plant is expected to be 8 years with a salvage value of \$25,00,000. The company follows straight line method of depreciation. The working capital requirement will be \$40,00,000.

Project Financing:

The project is for \$85,00,000, and it is financed

Equity : \$30,00,000

Debt : \$55,00,000

The average rate of interest for the loan is 7 percent. The cost of equity has been estimated to be 15 percent.

The tax concessions for zone 3:

- i) Corporate income tax exemption for 8 years
- ii) Reduction of corporate income tax by 50 percent for 5 years after the exemption period
- iii) Permission to carry forward losses and to deduct them as expenses up to 5 years.

The following data has been projected by the company:

(figures in \$000s)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Sales revenue	20000	20000	20000	20000	20000	20000	20000	20000
Cost of goods sold	17088	17110	17135	17160	17195	17235	17275	17318
Operating expenses	334	363	395	430	458	509	554	603
Selling expenses	396	396	396	396	396	396	396	396

Based on the data provided, you are required to advise Shriram Group about the financial viability of the proposal and also give recommendations.

Assume that the rupee-dollar exchange rate will be as follows:

Rs.35 = \$1 (year 1 to 4)

Rs.37 = \$1 (year 5 to 8)

(20 Marks)

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