**International Islamic University Chittagong (IIUC)**
**Department of Economics & Banking**
**Final Examination**
**Program: BSS (Honors)**

Course Code: BNKG-4706 Course Title: International Finance and Banking
Time: 2.5 Hours Full Marks: 50

***Answer any FIVE of the following questions. All parts of a question must be answered sequentially. Figures in the right margin indicate full marks.***

1. ABC Inc. (US Co.) is considering the development of a subsidiary in Singapore that could manufacture and sell Tennis Racket locally. An estimated 5 million Singapore dollars (S$), which includes funds to support working capital, would be needed for tile project. Given, the existing spot rate of $.55 per Singapore dollar, the U.S.-dollar amount of the parent's initial investment is $3.55 million. The project is expected to end in four years. The estimated price, demand schedules and other information during each of the next five years are shown here:

| Year | Price per Racket | Demand in Singapore | Variable Costs (VC) per Racket | Exchange Rate |
|---|---|---|---|---|
| 1 | S$50 | 650,000 units | S$ 21 | $0.50 |
| 2 | S$50 | 750,000 units | S$ 22 | $0.55 |
| 3 | S$51 | 1100,000 units | S$ 26 | $0.57 |
| 4 | S$52 | 1350,000 units | S$ 28 | $0.59 |
| | | | | |

The expense of leasing extra office space is S$ 1.10 million per year. Other annual overhead expenses are expected to be S$ 1.12 million per year. The Singapore government will impose a 20-percent tax rate on income. In addition, it will impose a 15percent withholding tax on any funds remitted by the subsidiary to the parent. The amount of depreciation is S$ 0.55 million per year. The Singapore government will send a payment of S$ 2.5 million to the parent to assume ownership of the subsidiary at the end of five years. ABC Inc. requires a 15 percent return on this project.Calculate NPV to evaluate the project. (10)

2. (a) Find out the basic differences between currency forward and futures.Compute the forward discount or premium for the Mexican peso whose 90-day forward rate is $.102 and spot rate is $.10. State whether your answer is a discount or premium. (06)
(b) What is the difference between absolute form of PPP and relative form of PPP? (04)

3. Write short notes on the followings: (10)
   i. Call options and put options
   ii. Transaction exposures
   iii. Economic exposures
   iv. Translation Exposures
   v. SWAP

4. (a) Sane Inc., is considering a project to establish a plant for producing and selling consumer goods in an undeveloped country. Assume that the host country's economy is very dependent on oil prices, the local currency of the country is very volatile, and the country risk is very high. Also assume that the country's economic conditions are unrelated to U.S. conditions. Should the required rate of return (and therefore the risk premium) on the project be higher or lower than that of alternative projects in the United States? (05)

(b) Thames, Inc., is an MNC located in the United States. Blues would like to estimate its cost of capital (WACC). On average, bonds issued by Blues yield 8.5 percent. Currently, Treasury security rates are 3.1 percent. Furthermore, Blues' stock has a beta of 1.6, and the return on the Wilshire 5000 stock index is expected to be 9.7 percent. Thames' target capital structure is 40 percent debt and 60 percent equity. If Blues is in the 40 percent tax bracket, what is its cost of capital? (05)

5. (a) Describe the key components of an MNC's capital. (04)
(b) You have been given the following information: (06)

| $r_\$$ | $r_£$ | S($/£) | $F_{1/4}$($/£) |
|---|---|---|---|
| 7% | 7.5% | 1.75 | 1.77 |

On the basis of the precise criteria:
i. In which currency would you invest?
ii. In which currency would you borrow?
iii. What is the profit from an investment of $1million?

6. (a) Japan has typically had lower inflation than the United States. How would one expect this to affect the Japanese yen's value? (05)

(b) Calculate Profit from the following information by using a triangular arbitrage: (05)

| | Bid | Ask |
|---|---|---|
| British pound (£) | $1.48 | $1.52 |
| Malaysian ringgit (MYR) | $.20 | $.24 |
| British pound (£) | MYR7.80 | MYR7.94 |

(Investment: $100000)

7. (a) Explain the theory of purchasing power parity (PPP). Based on this theory, what is a general forecast of the values of currencies in countries with high inflation? (03)

(b) What is Interest Rate Parity? Suppose 6-month $i_{peso}$ = 6%, $i_\$$ = 5%. From the U.S. investor's perspective, If S = $.10/peso, then what will be 6-month forward rate? (04)

(c) Explain the concept of locational arbitrage and covered interest arbitrage with examples. (03)