International Islamic University Chittagong (IIUC)

Department of Economics & Banking

Semester Ending Examination: Autumn 2024 **Program: B.S.S. (Honor's)**

Course Title: International Finance and Banking ; Course Code: BNKG-3604

Time: 2.5 Hours **Full Marks: 50**

Answer following questions. Question 1.b and 4.c have alternatives. All parts of a question must be answered sequentially.

	Questions	Marks	CLOs& PLOs	Cognitive learning
1.a	Define the following terms: (i) Option Contract (ii) Option Premium (iii) IRP (iv) Non-Deliverable Forward Contract (v) SWAP	05	PLO-4 CLO-3	Understandin
1.b	Distinguish between currency forward contract and currency future contract.	05		
	Or			
1.c	Distinguish between locational arbitrage, triangular arbitrage and cover interest arbitrage.	05		Understandin
2.a	Explain the implication of the Purchasing Power Parity theory.	02		Understandin
2.b	Haris Tull sold a put option on Canadian dollars for $.03 per unit. The strike price was $.75, and the spot rate at the time the option was exercised was $.72. Assume Brian immediately sold off the Canadian dollars received when the option was exercised. Also assume that there are 50,000 units in a Canadian dollar option. What was Haris' net profit on the put option?	03		Analyzing
2.c	Assume the following exchange rate information provided by a bank: The bank is willing to buy U.S. dollars (USD) for 1.1 Canadian dollars (CAD) per USD. The bank is willing to sell U.S. dollars (USD) for 1.12 Canadian dollars (CAD) per USD. The bank is willing to buy Canadian dollars (CAD) for 0.9 euros (EUR) per CAD. The bank is willing to sell Canadian dollars (CAD) for 0.92 euros (EUR) per CAD. The bank is willing to buy U.S. dollars (USD) for 0.85 euros (EUR) per USD. The bank is willing to sell U.S. dollars (USD) for 0.87 euros (EUR) per USD. You have $50,000. Calculate your profit or loss if you attempt triangular arbitrage by converting your U.S. dollars to Canadian dollars, then converting Canadian dollars to euros, and finally converting euros back to U.S. dollars.	05	PLO-4 CLO-3	Analyzing
3	Prime Ltd. is a multinational corporation (MNC) headquartered in the United States, with subsidiaries in both developed and emerging markets. The company is considering a new investment project in Country A, which is a developed economy, and Country B, which is an emerging market. The company is currently reviewing the cost of capital to finance the project in both countries. Financial information is given below:	10	PLO-4 CLO-3	Analyzing

Financial Information	Country A	Country B
Risk Free Rate(rf)	3%	6%
Market Return(rm)	9%	14%
Beta of Subsidiary	1.1	1.5
Debt Cost	4%	8%
Tax Rate	25%	30%
Country Risk Premium	N/A	5%

(i) Calculate cost of equity for both country A and country B.

(ii) Calculate WACC for both country A and country B, assuming $ 50 million equity capital and $30 million debt capital.

(iii) What is political risk premium(CRP).

(iv) How would the CRP affect the cost of equity for the subsidiary in country B.

(v) Based on your analysis, recommend the subsidiary that should be selected by Prime Ltd.

4.a	What is CAPM?	1	PLO-4	Understandi
4.b	Analyze the corporate characteristics to be considered while taking capital structure decision by MNC.	4	CLO-3	Analyzing

4.c Assume the following information: 5

- Spot rate of Indian Rupee (INR): \$0.012
- 180-day forward rate of Indian Rupee (INR): \$0.0118
- 180-day Indian interest rate: 4%
- 180-day U.S. interest rate: 3%

Given this information, is covered interest arbitrage worthwhile for Indian investors with rupees? Explain your answer.

Or

4.d TechGlobal Ltd. is evaluating a project in Brazil. The project requires an initial investment of 15 million Brazilian reals. The project is expected to generate operating cash flows of 6 million reals in the first year, 8 million reals in the second year, and 10 million reals in the third year. The project can be sold for 12 million reals at the end of the third year. 5 Analyzing

- The current exchange rate is 5 Brazilian reals per U.S. dollar, and the real is expected to depreciate by 4% per year relative to the U.S. dollar.
- The company's required rate of return is 14%.

a. Calculate the NPV of the project, considering the expected depreciation of the real.
b. How would the NPV change if the exchange rate remained constant at 5 reals per USD throughout the project's life?
c. Based on your calculations, should TechGlobal proceed with the project? Explain.

5 Lume Ltd. (UK Co.) is considering establishing a subsidiary in Canada to produce and sell sports equipment locally. The project requires an initial investment of 15 million Canadian dollars (C\$), including funds to support working capital, which will be borrowed from a UK bank at an annual interest rate of 8%. The spot rate is currently £0.60 per C\$, and it is expected to appreciate by 3% over the next four years. The project is expected to end in four years. The price, demand schedules, and other financial details for the four years are as follows: 10 PLO-4 CLO-3 Analyzing

Year	Price of each Equipment (C\$)	Demand in Canada (units)	Variable Costs (VC) per Unit (C\$)
1	C\$150	500,000	C\$60
2	C\$160	600,000	C\$65
3	C\$175	750,000	C\$70
4	C\$180	900,000	C\$75

Additional information:

- The cost of renting production facilities will be CAD 1.5 million annually.
- Other overhead expenses are estimated to be CAD 1.2 million annually.
- The Canadian corporate tax rate is 25%, and a 12% withholding tax will apply to funds remitted to the parent company.
- Annual depreciation expenses are CAD 0.8 million, and the project will have no salvage value.

Requirement: Based on the provided data, evaluate whether Lume Ltd. should establish the subsidiary.