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BBA in TM, 8th Semester

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ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)
ORGANISATION OF ISLAMIC COOPERATION (OIC)

DEPARTMENT OF BUSINESS AND TECHNOLOGY MANAGEMENT

Final Examination	
Course No. : BTM 4829	Summer Semester, A. Y. 2022-2023
Course Title : International Finance	Time : 3 Hours
	Full Marks : 150

Answer all 6 (six) questions. All questions carry equal marks. Marks in the margin indicate full marks. Do not write on this question paper.

1. a) Decko Co. is a U.S. firm with a Chinese subsidiary that produces cell phones in China and sells them in Japan. This subsidiary pays its wages and its rent in Chinese yuan, which is stable relative to the dollar. The cell phones sold to Japan are denominated in Japanese yen. Assume that Decko Co. expects that the Chinese yuan will continue to stay stable against the dollar. The subsidiary's main goal is to generate profits for itself and reinvest the profits. It does not plan to remit any funds to the U.S. parent. 16 (CO2) (PO2)

    i) Assume that the Japanese yen strengthens against the U.S. dollar over time. How would this be expected to affect the profits earned by the Chinese subsidiary?
    ii) If Decko Co. had established its subsidiary in Tokyo, Japan, instead of China, would its subsidiary's profits be more exposed or less exposed to exchange rate risk?
    iii) Why do you think that Decko Co. established the subsidiary in China instead of Japan? Assume no major country risk barriers.
    iv) If the Chinese subsidiary needs to borrow money to finance its expansion and wants to reduce its exchange rate risk, should it borrow U.S. dollars, Chinese yuan, or Japanese yen?

   b) Why would foreign governments provide MNCs with incentives to undertake DFI there? Should Bangladesh follow same strategy? Why? Why not? 09 (CO1) (PO1)

2. a) Assume the following information:
   The spot rate of the Canadian dollar is \$.80, the 90-day forward rate of the Canadian dollar is \$.79, the 90-day Canadian interest rate is 4%, and the 90-day U.S. interest rate is 2.5%. Given this information, what would be the yield (percentage return) to a U.S. investor who used covered interest arbitrage? (Assume the investor invests \$1 million.) What market forces would occur to eliminate any further possibilities of covered interest arbitrage? 10 (CO3) (PO3)

   b) Compare and contrast forward and future contracts 07 (CO1) (PO1)

c) When should a speculator purchase a call option on Canadian dollars? When should a speculator purchase a put option on Canadian dollars? 08 (CO1) (PO1)

3. a) 10 (CO3) (PO3)

	Quoted Price
Value of Canadian dollar in U.S. dollars	$.90
Value of New Zealand dollar in U.S. dollars	$.30
Value of Canadian dollar in New Zealand dollars	NZ$3.02

Given this information, is triangular arbitrage possible? If so, explain the steps that would reflect triangular arbitrage, and compute the profit from this strategy if you had $1 million to use. What market forces would occur to eliminate any further possibilities of triangular arbitrage?

b) Explain the market-based technique for forecasting exchange rates. What is the rationale for using market-based forecasts? If the euro appreciates substantially against the dollar during a specific period, would market based forecasts have overestimated or underestimated the realized values over this period? Explain. 15 (CO2) (PO2)

4. a) Explain how governments can use direct and indirect intervention to influence exchange rates? 12 (CO2) (PO2)

b) Examine the differences between fixed, freely floating, and managed float exchange rate systems. Discuss the pros and cons of a freely floating exchange rate system in comparison to a fixed exchange rate system. 13 (CO1) (PO1)

5. a) Why do you think most crises in countries (such as the Bangladesh and Pakistan) cause the local currency to weaken abruptly? Is it because of trade or capital flows? 09 (CO2) (PO2)

b) Blue Demon Bank expects that the Mexican peso will depreciate against the dollar from its spot rate of $.15 to $.14 in 10 days. The following interbank lending and borrowing rates exist: 16 (CO3) (PO3)

Currency	Lending Rate	Borrowing Rate
U.S dollar	8.0%	8.3%
Mexican peso	8.5%	8.7%

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

i) How could Blue Demon Bank attempt to capitalize on its expectations without using deposited funds? Estimate the profits that could be generated from this strategy.

ii) Assume all the preceding information with this exception: Blue Demon Bank expects the peso to appreciate from its present spot rate of \$.15 to \$.17 in 30 days. How could it attempt to capitalize on its expectations without using deposited funds? Estimate the profits that could be generated from this strategy.

6. a) Describe in general terms how future appreciation of the euro will likely affect the value (from the parent's perspective) of a project established in Germany today by a U.S. based MNC. Will the sensitivity of the project value be affected by the percentage of earnings remitted to the parent each year? Repeat this question, but assume the future depreciation of the euro. 09 (CO2) (PO2)

b) Brower, Inc., just constructed a manufacturing plant in Ghana. The construction cost 9 billion Ghanian cedi. Brower intends to leave the plant open for 3 years. During the 3 years of operation, cedi cash flows are expected to be 3 billion cedi, 3 billion cedi, and 2 billion cedi, respectively. Operating cash flows will begin one year from today and are remitted back to the parent at the end of each year. At the end of the third year, Brower expects to sell the plant for 5 billion cedi. Brower has a required rate of return of 17 percent. It currently takes 8,700 cedi to buy one U.S. dollar, and the cedi is expected to depreciate by 5 percent per year. 16 (CO3) (PO3)

i) Determine the NPV for this project. Should Brower build the plant?

ii) How would your answer change if the value of the cedi was expected to remain unchanged from its current value of 8,700 cedi per U.S. dollar over the course of the 3 years? Should Brower construct the plant then?