REFORMED CHURCH UNIVERSITY

FACULTY OF COMMERCE

BACHELOR OF COMMERCE HONOURS DEGREE IN BANKING & FINANCE

DERIVATIVE SECURITIES

HBAF 204

PART 2 SEMESTER 1 EXAMINATION

TOTAL MARKS [100]

DATE: JUNE 2024

Time: 3 Hours

INSTRUCTIONS

1. This paper has ***six (6)*** questions
2. Answer Question One ***(1)*** and any other ***three (3)***
3. Each question carries ***25 marks***
4. Start each question on a new page

1. a) Assess the difference between over-the-counter market and exchange-traded market. (10)

   b) Discuss the bid and offer quotes of a market maker in the over-the-counter market (OTC). (15)

   a) Evaluate the difference between a long forward position and a short forward position. (5)

   b) What is the difference between entering into a long forward contract when the forward price is $50 and taking a long position in a call option with a strike price of $50? (10)

   c) An investor enters into a short forward contract to sell 100,000 British pounds for US dollars at an exchange rate of 1.4000 US dollars per pound. How much does the investor gain or lose if the exchange rate at the end of the contract is (a) 1.3900 and (b) 1.4200? (10)

2. a) Explain carefully the difference between hedging, speculation, and arbitrage. (10)

   b) A company knows that it is due to receive a certain amount of foreign currency in 4 months. What type of option contract is appropriate for hedging? (15)

3. 'Speculation in futures markets is pure gambling. It is not in the public interest to allow speculators to trade on a futures exchange.' Discuss this viewpoint. (25)

4. You would like to speculate on a rise in the price of a certain stock. The current stock price is $29 and a 3-month call with a strike price of $30 costs $2.90. You have $5,800 to invest.

   a) Identify two alternative investment strategies, one in the stock and the other in an option on the stock. (10)

   b) What are the potential gains and losses from each? (15)

5. Trader A enters into a forward contract to buy gold for $1,000 an ounce in one year. Trader B buys a call option to buy gold for $1,000 an ounce in one year. The cost of the option is $100 an ounce.

a) What is the difference between the positions of the traders? (10)
b) Show the profit per ounce as a function of the price of gold in one year for the two traders. (15)

END OF PAPER