GALGOTIAS UNIVERSITY

ADMISSION NUMBER

School of Business

Bachelor of Business Administration
Semester End Examination - Nov 2023

Duration : 180 Minutes
Max Marks : 100

Sem V - D1UA504T - Financial Derivatives

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1) How does derivative help in arbitrage process? K1 (2)

2) Interpret the concept of maximum loss for a call option buyer? K2 (4)

3) Compare forward market with the spot market? K2 (6)

4) "Trading a financial instrument involving high risk, in expectation of Higher returns". With reference to the given statement apply the stated concept in financial market. K3 (9)

5) A stock is currently trading at Rs. 80 per share. You have a European call option with a strike price of Rs. 85, and the option will expire in 4 months. The risk-free interest rate is 4%, and the volatility of the stock is 20%. Solve for the theoretical value of the call option using the Black-Scholes Model. K3 (9)

6) Conclude the significance of Eurodollar futures in interest rate hedging and speculation? How do market participants, such as banks, corporations, and traders, use Eurodollar futures to manage interest rate risk? K5 (10)

7) Examine the concept of a Long Position Hedge using options. How does it work, and what is the objective of implementing a Long Position Hedge? Provide an example of how a Long Position Hedge can be used to manage risk in a financial portfolio. K4 (12)

8) There is a forward contract on Company XYZ's stock. The current stock price is Rs 55 per share, and the forward contract has a delivery date in three months. The agreed-upon forward price is Rs.60 per share. Estimate the forward contract's payoff to the long (buying) party if the stock price at the delivery date is Rs. 65 per share? K5 (15)

9) Determine the limitations and challenges of using Delta as a sole risk management tool for options traders. What are the other Greeks and risk management techniques that traders should consider to build robust strategies? K5 (15)

10) A forward contract on Crude Oil has a delivery date in six months. The current spot price of Crude Oil is Rs.70 per barrel. The risk-free interest rate is 3% per annum. The cost of storing Crude Oil for six months is Rs.5 per barrel. Estimate the fair value of the forward contract? K6 (18)