Roll No…………

GL BAJAJ
Institute of Management & Research, PGDM Institute
Greater Noida
FIND YOUR SPARK

Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) –201306

POST GRADUATE DIPLOMA IN MANAGEMENT (2023-25)
END TERM EXAMINATION (TERM -IV)

Subject Name: **Financial Derivatives**	Time: **02.00 hrs**
Sub. Code: **PGF41**	Max Marks: **40**

Note:
All questions are compulsory. Section A carries 5 marks: 5 questions of 1 marks each, Section B carries 21 marks having 3 questions (with internal choice question in each) of 7 marks each and Section C carries 14 marks one Case Study having 2 questions of 7 marks each.

SECTION - A

Attempt all questions. All questions are compulsory. **1×5 = 5 Marks**

Questions	CO	Bloom's Level
Q. 1: (A). Given a scenario where the market price of an asset decreases, what happens to the value of a short position in a futures contract on that asset? **Q. 1: (B).** How would you calculate the profit or loss for a call option buyer when the option is exercised? **Q. 1: (C). How** buying a Call option is different from writing a Put option? **Q. 1: (D). How** does Open Interest data define the direction of the market? **Q.1: (E).** How can a business use a forward contract to manage currency exchange risk?	CO-1	L-3

SECTION – B

All questions are compulsory (Each question have an internal choice. Attempt any one (either A or B) from the internal choice) **7 x 3 = 21 Marks**

Questions	CO	Bloom's Level
Q. 2: (A). On January 1, the spot price of a commodity is \$80 and the June futures price is \$83. On May 1, the spot price is \$95 and the June futures price is \$97. A company entered into a futures contract on January 1 to hedge the sale of the commodity on May 1. The company closes out its position on May 1. What is the effective price received by the company for the commodity?	CO-2	L-3
Or		
Q. 2: (B). Explain how Forward contract can be used to hedge the portfolio against risk?	CO-2	L-4
Q. 3: (A). Suppose you purchase a July put option to sell a stock for Rs 80, and the option premium is Rs 4. Analyse the situations under which you will exercise the option and make a profit. Additionally, draw a payoff diagram that illustrates how the profit from a long position in the put option depends on the stock price at maturity.	CO-3	L-4
Or		
Q. 3: (B). List five factors that affect Call options prices, and explain how each one affects them?	CO-3	L-4

Q. 4: (A). Assume you're an options trader and you decide to initiate a short strangle strategy, anticipating a sideways move in the stock price of TCS. You buy one out-of-the-money call option and one out-of-the-money put option on TCS stock. Details of the options: Current stock price of TCS : Rs 4130 Call option strike price: Rs 4200 Premium paid for call: Rs 29 Put option strike price: RS 4000 Premium paid for put: Rs 10.20 Calculate: a) The total premium received for the strangle. b) The break-even points for the strategy. c) The profit or loss if TCS stock ends up at 4300 at expiration. d) The profit or loss if TCS stock ends up at 4100 at expiration.	CO-3	L-3
Or		
Q. 4: (B). Examine the fundamental distinctions between the Strangle and Straddle strategies in options trading. What are the implications of choosing one over the other in terms of market volatility and strike prices?	CO-3	L-4

SECTION – C

Read the case and answer the questions **7×02 = 14 Marks**

Questions	**CO**	**Bloom's Level**
Q. 5: Case Study:	CO-4	L-6

Tata Steel and NTPC have been offered the following rates per annum on a Rs 1000 Cr. loan for 3 Years:

	Fixed Rate (%)	Floating Rate (%)
Tata Steel	11.5	MIBOR+1.5
NTPC	14	MIBOR+3.0

Tata Steel requires a floating rate loan; NTPC requires a fixed rate loan.

Questions

Q 5: (A): Design a swap that will net a bank, acting as intermediary, 0.2% per annum and that will appear equally attractive to both companies.

Q 5: (B): Create net cash flow statement for companies.

Kindly fill the total marks allocated to each CO's in the table below:

COs	**Marks Allocated**
CO1	5 Marks
CO2	7 Marks
CO3	14 Marks
CO4	14 Marks