



Even Semester End Term Examination, May / June 2026

Date: 27/05/2026

Time: 01.00 PM - 04.00 PM

Course Code: BFI3011

Course Name: Derivatives and Risk Management

Semester: Sixth Semester

Max. Marks: 100

Weightage: 50%

CO - Levels	CO1	CO2	CO3	CO4
Marks	38	36	70	36

Part A: Answer Following Questions. 20 M

Qn.No	Questions	M	CO	BT
1	Who are arbitrageurs in the derivatives market?	2	CO1	BT1
2	State any two features of derivatives.	2	CO1	BT1
3	Explain briefly a forward contract with one practical example.	2	CO2	BT2
4	What is meant by mark-to-market settlement?	2	CO2	BT1
5	Define a protective put strategy.	2	CO3	BT1
6	Distinguish between in-the-money and out-of-the-money options.	2	CO3	BT2
7	Who are central counterparties (CCPs)?	2	CO4	BT1
8	What is market risk?	2	CO4	BT1
9	Classify the following option based on moneyness: A call option with a strike price of ₹800 is trading when the underlying asset's market price is ₹850.	2	CO3	BT1
10	Explain briefly what is an exchange-traded derivative.	2	CO1	BT2

Part B: Answer Any 1 Following Questions. 16 M

Qn.No	Questions	M	CO	BT
11.a	Discuss the importance of derivatives in modern financial markets.	6	CO1	BT3
11.b	Explain how derivatives markets improve liquidity and efficiency in financial systems.	10	CO1	BT3
12.a	Explain the basic functioning of futures contracts.	6	CO1	BT2

12.b	Discuss the various types of derivatives—forwards, futures, options, and swaps—with suitable examples.	10	CO1	BT2
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Part C: Answer Any 1 Following Questions. 16 M

Qn.No	Questions	M	CO	BT
13.a	Explain the margin mechanism in futures trading (initial margin and maintenance margin).	6	CO2	BT3
13.b	Explain different hedging strategies using futures contracts with suitable examples.	10	CO2	BT3
14.a	Discuss the pricing of futures using the cost of carry model	6	CO2	BT3
14.b	A trader takes a long position in a futures contract. Explain how gains or losses arise under different price movements with a simple illustration.	10	CO2	BT3

Part D: Answer Any 1 Following Questions. 16 M

Qn.No	Questions	M	CO	BT
15.a	Explain the different types of option strategies, and explain in detail the Covered Call Strategy with an example.	6	CO3	BT3
15.b	An investor owns shares currently priced at ₹750 and sells a call option with a strike price of ₹800, receiving a premium of ₹25. 1. Explain the objective of this strategy. 2. Calculate the payoff if the stock price at expiry is ₹780 and ₹850.	10	CO3	BT4
16.a	Explain the concept of intrinsic value and time value of options with a suitable example.	6	CO3	BT3
16.b	An investor enters a long straddle by: 1. Buying a call option (Strike ₹1,000, Premium ₹50) 2. Buying a put option (Strike ₹1,000, Premium ₹40) Calculate the net payoff if the price at expiry is: (a) ₹900 (b) ₹1,000 (c) ₹1,150 Also comment on when this strategy is most profitable.	10	CO3	BT4

Part E: Answer Any 1 Following Questions. 16 M

Qn.No	Questions	M	CO	BT
17.a	Explain the importance of central counterparties in reducing systemic risk in financial markets.	6	CO4	BT3
17.b	Explain the structure and working of interest rate swaps and their use in risk management.	10	CO4	BT3
18.a	Explain the risk management practices followed by corporates and banks in managing financial risks.	6	CO4	BT3
18.b	Explain various types of financial risks with suitable examples.	10	CO4	BT3

Part F: Answer Any 1 Following Questions. 16 M

Qn.No	Questions	M	CO	BT
19.a	Explain in detail the two types of option strategies, the Call and put options.	6	CO3	BT3
19.b	AB Ltd.'s shares are trading at ₹90. Call and put options with a maturity of 3 months, strike price ₹97, and premiums of ₹3 (call) and ₹2 (put) are available. An investor takes a long position in both options. Determine the net payoff at expiration if the stock price becomes ₹90 or ₹105.	10	CO3	BT4
20.a	An investor buys a call option and another investor buys a put option on the same stock with the same strike price and expiry. Explain the difference in their expectations about the market.	6	CO3	BT3
20.b	X Ltd.'s shares are priced at ₹210. Call and put options with a 3-month maturity are available at premiums of ₹6 and ₹5 respectively, with a common strike price of ₹220. Determine the net payoff of both the call option holder and the put option holder when the market price at expiration is ₹200, ₹210, ₹220, ₹230, and ₹240.	10	CO3	BT4