this team, what suggestion you wouldgive to Intex for reducing losses due to steel price fluctuations and movement of US Dollar, Euro & YEN.

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PG Even Semester Examination, May 2025

BUSINESS ADMINISTRATION

(4th Semester)

Course No.: FM-06

(Financial and Commodity Derivaties)

Full Marks: 70

Pass Marks: 28

Time: 3 hours

The figures in the right margin indicate full marks for the question.

UNIT-I

1. Distinguish Forward, Future & Options. Briefly discuss the role of derivative market. 6+8=14

OR

2. Explain Bonds, swaps and other derivative instruments with example. Briefly discuss the pricing of Options. 7+7=14

UNIT-II

3. What is Exotic option.Explain various Hedging strategies using Options. 2+12=14

OR

4. Explain with example- Optimal Hedge Ratio, Forward-spot parity, put-call parity and cross hedging of portfolio 14

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UNIT-III

5. Elaborately discuss the Sensitivity analysis techniques using the greeks. 14

OR

6. What is the difference between Compound Options & binary options. Explain Black-Scholes pricing model. 4+10=14

UNIT-IV

7. Read the following case and answer the given questions 14

Options can be used to hedge against potential losses in existing stock holdings. Options trading, a world of calculated risks and potential rewards, isn't for the people with weak heart. But for those willing to venture beyond traditional stock purchases, it offers a vast landscape of possibilities. Options allow investors to profit from market movements, even if they're unsure of the direction. The emotional rollercoaster of options trading can lead to impulsive decisions and costly mistakes. Discipline, patience, and a clear understanding of risk tolerance are essential for navigating the options market successfully.It is said that the loss to an option buyer is limited, whereas the loss to an option seller is not manageable. To avoid such huge risk exposure, options traders use different strategies.

Mr. Antaliois a portfolio manager at the option trading division of Sharekhan Brokerage ltd. He is basically from Africa who has got good exposure to US market. He is struggling to decide appropriate option strategies forIndian derivative market. Strategies like straddles and strangles involve buying options at different strike prices, capitalizing on significant price swings in either direction. In light of this case, you are required to suggest suitable option strategies for him.

UNIT-V

8. Read the following case and answer the given questions 14

Intex Manufacturing, a mid-sized industrial equipment producer, faced significant financial risks in 2023 due to volatile raw material prices and fluctuating foreign exchange rates. With 40% of its revenue from international markets, the company needed a robust financial risk management strategy to stabilize cash flows and protect profit margins.Intex identified two primary risks: (i) Market Risk: Steel prices fluctuated by 25% within six months, impacting production costs. (ii) Currency Risk: A strengthening U.S. dollar against the Euro and Yen threatened export profitability, as 30% of sales were in these currencies.Without intervention, Intex projected a potential 15% decline in net income.Intex diversified its supplier base to include local vendors, reducing reliance on volatile international steel markets. It also expanded sales in domestic markets to balance currency exposure.Intex established a risk management team to monitor market trends and adjust hedging positions monthly. The team use real-time data analytics to forecast price movements and currency fluctuations. Assume that you are a part of

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