

COO4A1 Derivatives Market [4 Credits]

Learning Objectives: This course aims at providing an in-depth understanding of derivatives markets in terms of concepts, structure, instruments and trading strategies for profit and risk management.

UNIT 1: Overview of Derivative Market**(12 Hours)**

Meaning – Definition – Need – Features – Types of Products – Types of Functions – History and Growth in India – Participants – Players – Functions – Exchange Trade versus OTC – **Regulatory Mechanism of Indian Derivatives Markets:** The Role of SEBI – The role of Forward Commission – The Role of Derivative Exchanges in India – LC Gupta Committee Recommendation on Derivatives.

UNIT 2: Futures and Forward Markets**(12 Hours)**

Meaning – Types of Futures – Features – Specifications of Future Contracts - Futures Vs Forwards - Participants in Futures Contracts – Payoff's in Future Contracts – Futures Market Trading Mechanism in India – Types of Margins and computation of Margins – Computation of Positions in Futures **(Including Problems)** - **Pricing and Value of Futures Contract** - Cost of Carry Models – Reverse Cost of Carry Model - Strategies in Future Contracts - Hedging – Arbitrage – Speculation — Index Futures – Features of Index Futures – Techniques for Estimating Variability of Stock Price - Construction of Index – Types of Index Construction Methods – Hedging with Index Futures. **(Including Problems)**

UNIT 3: Options Derivatives**(12 Hours)**

Meaning – Types of Options – Features of Options - Call Options – Put Options - Payoffs in Options – Moneyness in Options - Option Vs Futures - Option Positions – Option Margins — Trading Mechanism of Option Markets in NSE and BSE - **OPTIONS STRATEGIES:** Factors affecting the Pricing of Options- Covered Puts- Protective Puts – Put-Call Parity - Valuation of Options – Option Trading Strategies - Spreads – Straddles – Strangles – Strips **(Including Problems)**

UNIT 4: Volatility of Risk Measurement Options**(12 Hours)**

Greek letters for Risk Measurement – Pricing of Options – Binomial Option Pricing Model (BSOP) - One Way Model – Two Way Model – Limitations of BSOP- Black – Scholes Option Pricing Model – Significance – Limitations **(Including Problems)**

UNIT 5: Currency and Commodity Derivatives**(12 Hours)**

:Currency Forwards – Currency Futures – Currency Options – Pricing – Trading Strategies – Interest rate Derivatives – Interest Rate Futures – Forward Rate Agreements (FRA) – Swaps – Options – Swaptions – Trading Strategies - **Commodity Derivative Markets :** Introduction – Products – Functions – Trading Mechanism in INDIA – Commodity Futures and Options – Pricing of Commodity Futures and Options – Strategies for Hedging Speculation and Arbitrage in Commodities Derivatives.

Suggested Readings:

1. Hull C. John, "Options, Futures and Other Derivatives", Pearson Educations Publishers,
2. David Thomas. W & Dubofsky Miller. Jr., Derivatives Valuation and Risk Management, Oxford University, Indian Edition.
3. ND Vohra & BR Baghi, Futures and Options, Tata McGraw-Hill Publishing Company Ltd.
4. Sunil K. Parameswaran, "Futures Markets: Theory and Practice" Tata-McGraw-Hill Publishing Company Ltd.
5. D.C. Patwari, Financial Futures and Options, Jaico Publishing House.
6. T.V. Somanathan, Derivatives, Tata McGraw-Hill Publishing Company Ltd.
7. S.C. Gupta, Financial Derivatives: Theory, Concepts and Problems, Prentice Hall of India.
8. S.P Srinivasan and Dr B. Janakiram , International Financial management, Biztantra, New Delhi.
9. Niti Bhasin, Banking and Financial Markets in India , New Century Publications
10. D. C. Patwari, Options and Futures- An Indian Perspective, Jaico Publishing House.
11. John Hull, Introduction to Futures and Options Markets, Prentice Hall.
12. Punithavati Pandian, Security Analysis and Portfolio Management, Vikas Publishing House.
13. Prasanna Chandra, Security Analysis and Portfolio Management, Tata McGraw Hill.
14. Nick Battley, Introduction to Commodity Futures and Options, Irwin
15. Richard Waldron, An Introduction to Commodity Trading, Quantum Publishing Company.
16. Russell Wasendorf, All About Commodities From the Inside Out, Probus Publishing.
17. J. D. Hamon, Advanced Commodity Trading Techniques, Windsor Books.
18. Sanjeev Aggarwal, A Guide to Indian Capital Markets, Bharat Publishing.