**==========================================================================Title: Derivatives and Risk Management Code: FIN 547**

**Credit Hours: 3 Year /Semester: II/IV 48 Hours**

**Course Objectives:**

This course aims to provide the students with basic understandings of derivatives and risk management. This course enables the students to understand the conceptual framework and tools for the analysis of futures, options and swaps.

**Unit 1 Introduction 5 Hours**

Meaning of Derivatives, Derivatives Markets & Instruments, Underlying Assets, Objectives of Derivative Trading, Financial Derivative Market, Criticism of Derivatives

**Unit 2 Options 10 Hours**

Meaning of Options, Development of Options Market, Types of Options, Terms used in Options, Options Strategy, Put-Call Parity Relationship, Covered & Uncovered Options, Selling Short & Selling Long, Pay-off & Profit Diagrams

**Unit 3 Valuation of Options 12 Hours**

Value of Options at Expiration, Determination of Options Value, Intrinsic & Time Value, Restriction on Options Values, Binominal Options Pricing, Extended Binominal Model, Black- Scholes Options Valuation Model, Empirical Evidence on Options Pricing, Estimating the Volatility, Index Options

**Unit 4 Futures & Swaps 12 Hours**

Forward & Futures Contracts, Futures vs. Options, Terms used in Futures, Futures Market Strategies, Determination of Futures Price, Returns on Futures, The Spot-Futures Parity Theorem, Hedging, Hedge Ratio & Strategies, Spreads, Forward vs. Futures Price, Futures vs. Expected Spot Price, Interest Rate Futures, Foreign Exchange Futures, Stock Index Futures, Introduction to Swap, Types of Swap, Commodity Futures Pricing

**Unit 5 Derivatives Risk Management 9 Hours**

Impetus for Risk Management, Benefits of Risks Management, Managing Market & Credit Risks, Managing Other Type of Risks, Organizing the Risk Management Functions, Risk Management Accounting

#### **Reference Books:**

1. Chance, Don M., & Robert Brooks : ***Derivatives and Risks Management Basics,*** Cengage Learnings India Pvt. Ltd., New Delhi (2011, Fifth Edition)
2. Hull, John C.: ***Options, Futures & Other Derivatives*,** Prentice Hall of India Pvt. Ltd. , New Delhi
3. Zvi Bodie, Alex Kane, Alan J Marcus, Pitabas Mohanty: ***Investments****,* Tata McGraw Hill Education Pvt. Ltd. , New Delhi
4. Rene M Stulz: ***Risk Management and Derivatives*.**