Programme	**: M. Com**	
Course Code	**: COO 313**	Title of the Course: **Futures and Forward Derivatives.**
Number of Credits	**: 4**	
Effective from AY	**: 2018-19**	

Prerequisites:	Students have studied B. Com and basic understanding of Derivatives.
Need, Description, and Objectives	The "Derivatives" course is designed for students interested in a career in investment banking or corporate finance. The primary purpose of the course is to teach students how to interpret and value the wide variety of derivatives products available. As such, the course examines a broad array of derivative products that range from basic Futures contracts to the more specialized products developed for interest rate markets. The valuation tools considered begin with basic arbitrage relationships and from there students will develop the Black-Scholes model. The course will also introduce the Binomial Approach and use it as the primary valuation framework throughout the course. Students will also, through the use of assignments and problem sets, develop an intuitive understanding of why these products are used and the fundamental relationships that underlay all derivative products. This is a course on the analytics of Financial Derivatives and risk management and covers a range of topics in contemporary finance. Specifically, the course examines the pricing and use of financial derivatives, including Forwards, Futures, Currency Derivatives in Risk Management. The course will extensively focus on the theory and applications of risk managementtools. The objective of this course is to explore the use of basic types of derivative instruments and hybrids in the context of financial risk management by firms and financial institutions. Students are expected to develop competencies in pricing, hedging and tradingstrategies. The purpose of this course is to provide a **comprehensive analysis on the properties of Futures Derivatives includes Stock, Index and Currency Futures and to offer a theoretical framework within which all derivatives can be valued and hedged.**

Content:	**UNIT 1: Overview of DerivativeMarkets.**	12hours
	Meaning – Definition – Need – Features – Types of Derivative Products – Types of Functions – History and Growth in India– Participants – Players – Functions – Exchange Trade versus OTC – Regulatory frame work of Derivative Trading in India- LC Gupta Committee Recommendation on Derivatives.	
	UNIT 2: Stock Futures andForwardMarkets	12hours
	Meaning – Types of Futures –Features - Specifications of Future Contracts - Futures Vs Forwards –Margins and Marking to Market –Convergence of Spot and Futures – Value at Risk (VaR) – VaR Futures Trading in India – Liquidating Positions - Participants in Futures Contracts– Payoff's in Future Contracts –Futures Market Trading Mechanism in India –Pricing and Value of Futures Contract – Arbitrage - Cost of Carry Models – Reverse Cost of CarryModel-StrategiesinFutureContracts-Hedging–SellingHedge–BuyingHedge–PerfectHedge–BasisRisk–HedgeRatio–Speculation–	

	(Includes Practical Problems). **UNIT 3:IndexFutures** Features of Index Futures – Index Futures in India - Construction of Index – Types of Index Construction Methods – Price Weighted Indices – Value Weighted Indices – Equally Weighted Indices – Corporate Announcements and Index Construction - Stock Splits and Dividends - Construction of Portfolios on Index – Portfolio Rebalancing in all Indices – Pricing of Index Futures – Cash and Carry Arbitrage – Reverse Cash and Carry Arbitrage – Hedging with Index Futures – Market Timing with Index Futures –Index Futures and Change of Beta – Stock Picking an Hedging – Index Futures and Stock Market Volatility - **(Includes PracticalProblems).** **UNIT 4:CurrencyFutures.** Introduction – Purchase and Sale – Types of quotes in Spot Market – Spreads and Forward Quotes – Merchant Rates and Exchange Margins - – Forward Market – Premium and Discount Currencies – Arbitrage – One Point Arbitrage – Two Point Arbitrage – Triangular Arbitrage – Forward Quotes and Interest Rate Parity – Forward Quote and Purchasing Power Parity – Covered Interest Arbitrage – Hedging in Exports and Imports– Hedging in Borrowings and Investments **- (Includes Practical Problems).**	12hours 12hours
Pedagogy:	The methodology used in the class will combine lectures, applications and case discussions. Lectures will address the assigned reading materials. The required readings, lecture notes, and the assigned home works and cases are intended to support learning objectives and will prepare the students adequately for the examinations. In addition to the lectures, review sessions will be scheduled to address assignments, end of chapter questions and in some occasions assigned cases.	
Reference / Readings:	1. Hull C. John, "Options, Futures and Other Derivatives", Pearson Educations Publishers,2016 2. David Thomas. W & Dubofsky Miller. Jr., Derivatives Valuation and Risk Management, Oxford University, Indian Edition.2016 3. ND Vohra & BR Baghi, Futures and Options, Tata McGraw-Hill Publishing Company Ltd.2015 4. Sunil K.Parameswaran, "Futures Markets: Theory and Practice" Tata-McGraw-Hill Publishing Company Ltd.2016 5. D.C. Patwari, Financial Futures and Options, Jaico Publishing House.2014 6. T.V. Somanathan, Derivatives, Tata McGraw-Hill Publishing Company Ltd.2010 7. S.C. Gupta, Financial Derivatives: Theory, Concepts and Problems, Prentice Hall of India.2016 8. International Financial management by S.P Srinivasan and Dr B. Janakiram, Published by Biztantra, New Delhi.2016 9. Banking and Financial Markets in India by Niti Bhasin, New Century Publications 2014 10. D. C. Patwari, Options and Futures- An Indian Perspective, Jaico Publishing House. 2015	

Learning Outcomes:	After having followed the course activities, the student will be able to: 1. Understanding the concept of Financial Derivatives, types of various Derivative Products and the trading mechanism of Derivatives inIndia. 2. UnderstandingtheValuation,andPricingofdifferenttypesofDerivative

	products. 3. Understanding the different types of Stock Indices and using them for Derivative Products for RiskManagement. 4. Understanding the usage of Derivative Products in Risk Management through Arbitrage, Speculation and Hedgingtechniques. 5. Understanding the practical applications of Derivatives in Investment, Banking and Forex trade.