

Course Code	Course Title	L	T	P	C
BHUM223L	Options, Futures and other Derivatives	3	0	0	3
Pre-requisite	NIL	Syllabus version			
Course Objectives	1.0				
<p>1. To identify the basic principles of Derivatives Market</p> <p>2. To define the nature of risk and identify hedging strategies</p> <p>3. To describe the principles of risk management and the role of the risk manager</p>					
Course Outcomes					
<p>Upon successful completion of the course students will be able to</p> <p>1. Examine the role of Risk Manager in the Financial Planning Process.</p> <p>2. Analyze and evaluate various risk exposures.</p> <p>3. Compare and contrast the different types of derivatives.</p> <p>4. Identify the different types of options.</p> <p>5. Critically evaluate Option Pricing Mechanism.</p> <p>6. Explain the concept of commodity derivatives.</p>					
Module:1	Financial Risks – An Overview	7 hours			
Financial Risk - Types - Market Risk - Credit Risk - Liquidity Risks - Operational Risk - Commodity Price Risk - Trading Risk - Portfolio Risk. Global Financial Crises and RiskManagement – Hedging - Tools and Techniques.					
Module:2	Derivatives	6 hours			
Derivatives – definition - classification. Risk - risk management. Futures Vs. forwards, Over the Counter (OTC) Vs. exchange traded contracts. Futures and options on stocks, indices, commodities, exchange rates etc., understanding quotes.					
Module:3	Futures and Forwards	6 hours			
Futures: Specification-spot, forward and future relationship convergence – delivery and settlement. Margi-margin call. Hedging strategies using futures. Determination of forward and future prices.					
Module:4	Options	7 hours			
Options: Mechanics of option market - option properties – Put, Call, American and European options. Put - Call parity - underlying asset. Option pricing model: Black-Scholes option pricing model assumptions - theoretical Vs market price – volatility - historical and implied volatility- volatility estimation - volatility smile. Option Greeks: Delta - delta hedging – theta – Gamma - Vega-Rho - relationship between them.					
Module:5	Option Trading Strategies	5 hours			
Single option strategies - Multiple option strategies – Neutral and Volatility based strategies.					
Module:6	Credit Derivatives	5 hours			
Credit derivatives: Credit risk - credit default swap – Asset backed Securities – collateralized securities. Swaps: LIBOR – interest rate swaps - currency swaps- total return swaps – other types.					
Module:7	Commodity Derivatives	7 hours			
Commodity derivatives: Commodity market – commodity price risk – futures and options on commodities – hedging using commodity derivatives.					
Module:8	Contemporary Issues	2 hours			
Total Lecture Hours					45 hours
Text Book(s)					

1. Hull, John.C and Shankarshan Basu (2022), Options, Futures and other Derivatives, Pearson, 11 th Edition			
2. Don M Chance, Robert Brooks and Sanjay Dhamija (2019), An Introduction to Derivatives and Risk Management, Cengage India, 10 th Edition.			
Reference Books			
1. John Hull (2012), Risk Management and Financial Institutions, Wiley.			
2. Robert A. Strong (2016), Derivatives An Introduction Second Edition, South-Western.			
Mode of Evaluation: CAT, Quiz, Assignment and FAT			
Recommended by Board of Studies		23-02-2023	
Approved by Academic Council	No. 69	Date	16-03-2023