



MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

COURSECONTENT

RISK MANAGEMENT & FINANCIAL DERIVATIVES								
IV Semester: MBA								
Course Code	Category	Hours/Week			Credits	Maximum Marks		
25MBO27F5	CORE	L	T	P	C	CIE	SEE	Total
		4	0	-	4	40	60	100
Contact Classes: 60	Tutorial Classes: Nil	Practical Classes:			Total Classes:60			
Nil								
Prerequisite: Basic Concepts of risk management & financial derivatives								

COURSE OVERVIEW

This course provides a comprehensive understanding of risk management and financial derivatives. It covers types of risks such as systematic, unsystematic, business, financial, market, credit, operational, and liquidity risks, along with risk measurement tools like Capital Adequacy Ratio and Basel III. Students learn concepts of Value at Risk (VaR) and Cash Flow at Risk (CaR). The syllabus introduces derivative markets including forwards, futures, options, and swaps, along with pricing models like Black–Scholes. It also explains option strategies, swap structures, and emerging instruments such as carbon credits and weather derivatives, emphasizing practical risk management techniques in financial markets.

COURSE OBJECTIVES:

- To orient on the concepts of Risk Management, measurements and risk management strategies using derivatives.
- To provide understanding of various risk measurement tools.
- To impart knowledge of various aspects in derivatives market.
- To elucidate various aspects in Risk Management.
- To provide understanding of various techniques in Risk Management.

COURSE OUTCOMES: After completion of the course, students should be able to

1. Understand risk management and derivatives.
2. Learn the relevance of Basel norms, types of risks.
3. Learn various aspects about Derivatives Market in India.
4. Understand the uses of options strategies.
5. Examine the importance of SWAP Market.

Unit – I: Introduction to Risk Management: Risk Management, Scope of Risk Management, Benefits of Risk Management, Classification of Risks: Systematic Risk and Unsystematic Risk, Business Risk, Financial Risk. Financial Markets, Market Risk: Price Risk, Currency Risk, Liquidity Risk, Interest Risk, Credit and Counterparty Risk, Operational Risk, Model Risk, Risk Management Process.

Unit – II: Risk Measurement Tools: Capital Adequacy Ratio, Basel Norm: Basel Accord I, II & III, Need and Scope of studying Basel Norms, Types of risk: Interest Rate Risk, Market Risk, Credit Risk, Operational Risk, Exchange Rate Risk, Liquidity Risk. Value at Risk (VaR), Cash Flow at Risk: Applications and Problems on VaR & CaR.

Unit – III: Introduction to Derivative Markets: Derivative Market, Types of Derivatives, Development and Growth of Derivative Markets, Factors influencing the Growth of Derivatives Market in India, Regulations of Derivative Market. Forward and Future Contracts: Forward Contract, Pricing Forward Contracts, Foreign Currency Forward Contract, Commodity Forward Contract, Counterparty Risk in the Forward Contract, Difference between Forward and Spot Market, Futures Contract: Future Contact Design, Physical Settlement, Delivery Options and Cash Settlement, Future Market, Global Futures Market size, Commodity Futures, Equity Futures, Stock Index Futures, Currency Futures, Futures on Government Bonds, Notes and Bills, Cost of Carry Model for Futures and Forwards.

Unit – IV: Risk Management Techniques – Options Contract: Options Contract and The Structure of Option Market, Types of Options, Option Strategies, Principles of Call Option Pricing, Put Option Pricing, Put - Call Parity Theorem: Option Pricing, Arbitrage Pricing. Binomial Pricing Model: The Black- Scholes Options Pricing Model, Uses of Options Strategies.

Unit – V: Risk Management Techniques – SWAPS Contract: SWAP Market and its Evolution, Interest Rate Swap: Structure of a Typical Interest Rate Swap, Pricing and Valuation of Interest Swaps, Interest Rate Swap Strategies, Interest Rate Swaps in India. Currency Swaps: Currency Swaps Stature, Currency Swaps Pricing and Valuing Currency Swap, Currency Swap in India, Equity Swap: Equity Swap Pricing and Valuing of Equity Swap, Equity Swap Strategies, Pricing and Valuing of Commodity Swap, Carbon Credit, Weather Derivatives.

TEXT BOOK:

- Sanjay Mehrotra, Durga Bhavani Jammula, Financial Management and Risk Management – Derivative Startegies, Pen and Paper Academy,2025
- Prakash B Yaragol, Financial Derivatives- Text and Cases, vikas Publishing, 2024
- John C Hull, Risk Management and Financial Institutions, Wiley, 5e,2018.
- Jayanth Rama Varma, Derivatives and Risk management, Tata McGraw Hill, 1e, 2011.
- Don M Chance, Robert Brooks, An Introduction to Derivatives and Risk Management, 9e, Cengage, 2013.
- Dhanesh K. Khatri, Derivatives and Risk Management, Macmillan, 1e,2012
- Rene M. Stulz, Risk Management & Derivatives, Cengage Learning, 1e,2003.

REFERENCE BOOKS:

1. Risk Management and Financial Institutions – John C. Hull
2. Options, Futures, and Other Derivatives – John C. Hull
3. Financial Risk Management – Steve L. Allen
4. Credit Risk Management – Joel Bessis
5. Derivatives and Risk Management – Rajiv Srivastava
6. Fundamentals of Financial Management – Brigham & Houston

ELECTRONIC RESOURCES:

1. <http://www.ebooksdirectory.com>
2. <http://Campusguides.lib.utah.edu>

MATERIAL RESOURCES:

1. Course template
2. Tutorial question bank
3. Tech talk and Concept Video topics
4. Open-ended experiments
5. Definitions and terminology
6. Assignments
7. Model question paper – I
8. Model question paper – II
9. Lecture notes
10. PowerPoint presentation
11. Drishya Siksha Sangrah (DSS) Videos

