MCM5402 FINANCIAL DERIVATIVES AND RISK MANAGEMENT

Course Code	MCM5402	Semester	IV
Course Title	*FINANCIAL DERIVATIVES AND RISK MANAGEMENT*		
Credits	4	Type	CORE

This course shall have 3 lecture hours, 2 practicals, 1 tutorial.

This is a Skill based, employability based, and entrepreneurship skill based course.

Course Objective
To provide understanding on design, pricing and valuation of financial derivatives and applications of derivative instruments for pricing and risk management by corporations.

Learning Objectives

- To understand the concept of risk management and different types of risks.
- To discuss and explain in detail financial derivatives such as options, futures, swaps.
- To identify the relationship between derivatives and risk management.
- To explain the application of financial derivatives in managing investment risk.

Course Structure

UNIT I:

Risk Management: Meaning of Risk management, Importance, types of risks to be managed, credit risk, market risk and operational risk – relationship between derivative and Risk management.

UNIT II:

Introduction to derivatives: meaning and purpose of derivate; forward contracts Future contracts-options-swaps and other derivatives; Type of trader; Trading future contracts; Specification of the future contracts; Operation of margins, Settlement and regulations. - Derivatives Market in India: – regulation, working and trading activity

UNIT III:

Futures: Hedgers and speculators; Future contracts; Future market –clearing house margins, trading future positions and taxation; Future prices and spot prices; Forward prices vs. future prices.

UNIT IV:

Options: Types of options; Options trading; Margins; Valuation of options; Binomial Option; Pricing Modal; Black -Scholes model, for Call Option; Valuation of put Options; Index options; option market exchange traded options, over- the counter options, quotes trading, margins, clearing, regulation and taxations; Warrants and convertibles.

UNIT V:

SWAPS: Origin of SWAP Contracts – Forms of Swap Contracts – Interest rate swaps- pricing of Interest Rate Swaps –Asset Swaps – Forward Swaps – Swaptions – Currency Swaps – Commodity

Swaps – Over the Counter Interest Rate Derivatives.

Practicals

- Derivative pricing and valuation
- Application of the Black-Scholes model in the determination of derivative prices.
- Application of forwards, future and options in different trading activities.

Skills

- Develop awareness of the derivatives markets.
- Acquire understanding of how futures and options markets work.
- Understand the operation of clearing houses and regulatory environment

Learning/Course Outcomes

- Get familiar with the basic types of derivatives.
- Provides introductory theory and working knowledge of financial derivatives.
- Understand the basic risk management and trading strategies using derivatives.
- Able to develop and employ theoretical valuation methods to price the financial derivatives.

Books for Reference:

1. David A & Thomas W. Miller, Derivatives valuation and Risk Management, Oxford University Press2003.
2. Dhanesh Khatri, Derivatives and Risk management, Macmillan Publishers India Ltd, 2012.
3. Don M.Chance & Robert Brook, Derivatives &Risk Management, South Western Cengage Learning,2008
4. John C. Hull, Sankarshan Basu, Options, Futures and other Derivatives, Pearson Education, Noida2010.
5. Kolb Robert W and Overdhal James A - Futures , Options and Swaps-Wiley.
6. Mandura Jeff, Financial Markets and Institutions, West Publishing Company, NewYork.
7. Rajiv Srivastava: Derivatives and Risk Management: Oxford.
8. Rene M. Stuly, Risk Management & Derivatives, Thomson south Western, 2007.
9. Robert A Strong, Derivatives: An Introduction, Thomson South-Western,2002
10. S L Gupta: Financial Derivatives Theory ,concepts and Problems: PHI.
11. Stafford Johnson, Introduction to Derivatives, Oxford University Press,2009
12. Sundaram Janakiramanan: Derivatives and Risk Management: Pearson.

Theory and Problem: - 40:60