17MB218 Risk Management

Course Objective

The goal of this course is to engage students in active discovery of risk management principles. Students will be prepared to function in a business environment, developing an awareness of the challenges, the tools, and the process of designing and implementing a risk management program.

Course Outcomes

At the end of the course students should be able to understand

- To identify and priorities potential risk events
- Help develop risk management strategies and risk management plans
- Use established risk management methods, tools and techniques to assist in the analysis and reporting of identified risk events.
- Develop strategies and plans for lasting risk management strategies.

UNIT - I

Introduction to Risk Management: The concept of Risk, Nature, Need and scope of risk. Source, measurement, identification and evaluation of Risk. Types of risk–Product market risk and capital market risk. Possible Risk events, Risk Indicators, Risk Management Process–prerequisites and fundamentals.

UNIT - II

Measurement and Management of Risk: Value at risk (VaR): The concept, computation, stresses testing, back testing. - Cash flow at risk (CaR): VaR and CaR to make investment decisions- Managing risk when risk is measured by VaR or CaR - Non-Insurance methods of Risk Management-Risk Avoidance, Loss Control, Risk Retention and Risk Transfer.

UNIT – III

Techniques and Tools of Risk Management: The concept of Derivatives and types of Derivatives. The role of Derivative securities to manage risk and to exploit opportunities to enhance returns. Individuals, speculators, hedgers, arbitrageurs and other participants in Derivatives Market.

UNIT-IV

Forward contracts: Definition, Clearing house, margin requirements, marking to the market - Forward Contracts to manage Commodity price risk, Interest rate risk and exchange rate risk. Limitations of Forward contract- Futures contracts: Definition- Differences between forward contracts and futures contracts.

UNIT-V

Swaps: Definition, types of swaps. Interest rate swaps, Currency swaps. Interest rate Swaps: Mechanics of Interest rate swaps- Definition of an option. Types of options: call option, put option, American option and European option. Options in the money, at the money and out of the money.

Skill Development:

(These activities are only indicative, the Faculty member can innovate)

- 1. Work out on cross-currency valuations..
- 2. Project on foreign exchange
- 3. Project on risk management

Text book:

1. A. Smith, Financing and Risk Management, TMH, 2010

Readings:

- 1. The Essentials of Risk Management by Michel Crouhy, Dan Galai, and Robert Mark
- 2. <u>Value at Risk, 3rd Ed.: The New Benchmark for Managing Financial Risk</u> by Philippe Jorion
- 3. <u>Financial Risk Management: A Practitioner's Guide to Managing Market and Credit Risk</u> (with CD-ROM) by Steve L. Allen