GUJARAT TECHNOLOGICAL UNIVERSITY

MASTER OF BUSINESS ADMINISTRATION (Part-Time)

Year III (Semester: –VI) (W.E.F. Academic Year 2017-18)

Specialization: Financial Management
Subject Name: Risk Management (RiM)
Subject Code: 3569922 Subject Credits: 3 Total Marks: 150

1. **Learning Outcomes:**
   - Demonstrate knowledge of the range of financial and financial related risks facing organisations.
   - Understand the approach to risk management through risk identification, risk measurement and risk management (or mitigation).
   - Demonstrate critical thinking, analytical and problem solving skills in the context of derivatives pricing and hedging practice.
   - Demonstrate an understanding of pricing forwards, futures and options contracts.

2. **Course Duration:** The course duration is of **36 sessions of 75 minutes each.**

3. **Course Content:**

Module No:	Module Content	No. of Sessions	70 Marks (External Evaluation)
I	**Introduction to risk management:** • Defining and managing risk • Upside and downside risks • Commodity price risk • Interest rate risk • Approaches to risk management **Introduction to derivatives:** • Defining derivatives and derivative markets • Spot v/s Derivatives markets • Forward, Futures, Options, Swaps • Uses of derivatives **Derivatives Market:** • International and Indian derivatives market • Derivative exchanges • Trading system and types of traders • Trading process, online trading • Clearing and settlement system • Regulatory framework of derivatives market in India.	9	17

II	**Forward Contracts:** • Meaning, purpose, advantages and problems • Pricing of commodity forward contracts • Interest rate forwards **Future Contracts:** • Meaning, difference between forward and future contracts • Specifications of future contracts • Closing the position • Margins and marking-to-market • Cost of Carry Models • Price quotes, settlement price, open interest • Types of orders **Hedging, Speculation and Arbitrage using Futures:** • Basis risk. Factors affecting basis risk • Single stock futures and Stock Index Futures. • Commodity futures	9	18
III	**Fundamentals of Options:** • Options issued by corporations (introduction) • Meaning of options contract, options terminologies • Moneyness in options (ITM, ATM, OTM) • Factors affecting Options premium • Exchange traded options **Call and Put options.** **Options Trading Strategies:** • Uncovered • Covered • Spread • Combination **Put-Call Parity:** • Risk free security • Put-call relationship **Binomial Options Pricing Model:** • Binomial Options Pricing model for call and put options • Single period and two-period binomial options pricing model	9	18
IV	**Black-Scholes Options Pricing model:** • Stock price behavior • Assumptions in Black-Scholes model	9	17

	• Black-Scholes model for pricing call and put options **Greeks in Options (only theory):** • Risks in options trading • Characteristics of options hedging • Greeks in options hedging: delta, gamma, theta, vega, rho. **SWAPS (Only theory):** • Swaps: meaning, types, terminologies • Forward swaps • Swaptions • Equity swaps • Commodity swaps		
V	**Practical Module:** • Analysing Various Derivative Contract Specifications from Exchanges • Mark to Market Margin Calculation on Real time data from Exchanges • Understanding the trading and settlement process and other documentary requirements at Brokers' office to open the trading account • Calculating the futures and options price with cost of carry, binomial and BS Models on real time data from Exchange & analysing them with current market price • Forming of different futures and options trading strategies with the real time data from Exchange • Forming of Hedging with real time data from commodities and currency Exchanges • Effect of international markets on Indian markets.	---	(30 marks CEC)

4. Teaching Methods:

The course will use the following pedagogical tools:

- Lectures
- Case Discussions and Role Playing
- Audio-visual Material (Using CDs/Clippings/ online videos)
- Assignments and Presentations

5. Evaluation:

The evaluation of participants will be on continuous basis comprising of the following elements:

A	Continuous Evaluation Component comprising of Projects / Assignments / Quiz / Class Participation / Class test / Presentation on specific topic etc.	(Internal Assessment- 50 Marks)

B	Mid-Semester examination	(Internal Assessment-30 Marks)
C	End –Semester Examination	(External Assessment-70 Marks)

6. Reference Books:

Sr. No.	Author	Name of the Book	Publisher	Year of Publication
1	Sundaram Janakiramanan	Derivatives and Risk Management	Pearson Education	Latest Edition
2	Rajiv Srivastava	Derivatives & Risk Management	Oxford University	Latest Edition
3	Varma	Derivatives & Risk Management	Tata McGraw hill	Latest Edition
4	John C. Hull	Futures and Option Markets	Futures and Option Markets Pearson Education	Latest Edition
5	O.P.Agrawal	Financial Derivatives and Risk Management	Himalaya	Latest Edition
6	Vohra & Bagri	Futures and Options	Tata McGraw Hill	Latest Edition
7	David A. Dubofsky and Thomas W. Miler	Derivatives Valuation and Risk Management	Oxford University Press	Latest Edition
8	Rene M. Stulz	Risk Management & Derivative	Cengage	Latest Edition

Note: Wherever the standard books are not available for the topic appropriate print and online resources, journals and books published by different authors may be prescribed.

7. List of Journals / Periodicals / Magazines / Newspapers etc.:

1. Business Standard
2. The Economic Times
3. Financial Express
4. NSE & BSE, SEBI, FMC, RBI Websites
5. ICFAI journal of Derivative Market
6. Business Today
7. Business India
8. Business World
9. Finance India
10. Treasury Management
11. Financial Risk Management