

GUJARAT TECHNOLOGICAL UNIVERSITY

MASTER OF BUSINESS ADMINISTRATION

Year – 2 (Semester – IV) (W.E.F. Academic Year 2018-19)

Specialization: Financial Management

Subject Name: Risk Management (RiM)

Subject Code: 3549222

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: <ul style="list-style-type: none">• Defining and managing risk• Upside and downside risks• Commodity price risk• Interest rate risk• Approaches to risk management Introduction to derivatives: <ul style="list-style-type: none">• Defining derivatives and derivative markets• Spot v/s Derivatives markets• Forward, Futures, Options, Swaps• Uses of derivatives Derivatives Market: <ul style="list-style-type: none">• International and Indian derivatives market• Derivative exchanges• Trading system and types of traders• Trading process, online trading• Clearing and settlement system	9	17

	<ul style="list-style-type: none"> Regulatory framework of derivatives market in India. 		
II	<p>Forward Contracts:</p> <ul style="list-style-type: none"> Meaning, purpose, advantages and problems Pricing of commodity forward contracts Interest rate forwards <p>Future Contracts:</p> <ul style="list-style-type: none"> 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 <p>Hedging, Speculation and Arbitrage using Futures:</p> <ul style="list-style-type: none"> Basis risk. Factors affecting basis risk Single stock futures and Stock Index Futures. Commodity futures 	9	18
III	<p>Fundamentals of Options:</p> <ul style="list-style-type: none"> Options issued by corporations (introduction) Meaning of options contract, options terminologies Moneyness in options (ITM, ATM, OTM) Factors affecting Options premium Exchange traded options <p>Call and Put options.</p> <p>Options Trading Strategies:</p> <ul style="list-style-type: none"> Uncovered Covered Spread Combination <p>Put-Call Parity:</p> <ul style="list-style-type: none"> Risk free security Put-call relationship <p>Binomial Options Pricing Model:</p> <ul style="list-style-type: none"> Binomial Options Pricing model for call and put options Single period and two-period binomial options pricing model 	9	18
IV	<p>Black-Scholes Options Pricing model:</p> <ul style="list-style-type: none"> Stock price behavior 	9	17

	<ul style="list-style-type: none"> Assumptions in Black-Scholes model Black-Scholes model for pricing call and put options <p>Greeks in Options (only theory):</p> <ul style="list-style-type: none"> Risks in options trading Characteristics of options hedging Greeks in options hedging: delta, gamma, theta, vega, rho. <p>SWAPS (Only theory):</p> <ul style="list-style-type: none"> Swaps: meaning, types, terminologies Forward swaps Swaptions Equity swaps Commodity swaps 		
V	<p>Practical Module:</p> <ul style="list-style-type: none"> 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 /	(Internal Assessment- 50 Marks)
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	Quiz / Class Participation / Class test / Presentation on specific topic etc.	
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