

GUJARAT TECHNOLOGICAL UNIVERSITY

Integrated MBA

Year – IV (Semester – VIII) (W.E.F. January 2017)

Specialization: Finance Management

Subject Name: Risk Management (RM)

Subject Code: 4180507

1. Course Objective: The course intends to equip students with the ability to apply stock market basics to Indian Derivative market. Financial Derivatives are discussed in terms of their valuation, analysis and application for hedging, speculation and arbitrage. Students are apprised of the recent innovations in derivatives in India unlike other countries. At the end of the course, they are expected to have learnt the mechanics, valuation and trading strategies of derivative market. They are also required to frame their own trading strategies in the volatile market

2. Course Duration: The course duration is of 36 sessions of 75 minutes each, i.e. 45 hours.

3. Course Content:

Module No:	Module Content	No. of Sessions	Marks (70 External exam)
I	Introduction to Cash & Derivative Market- An Overview Basic Market Concepts & Mechanics of Cash Market, Various Indices of the world , Meaning & types of Derivative Instruments, Forward, future, Option & swaps, Spot v/s Future Market, Growth of Derivative Markets in India-History & Background, Types of Traders- Hedger, Arbitrageur & Speculation, Standardization of Derivative Contracts & other basic concepts, Regulation, Framework	5	15
II	Forward & Future Markets Introduction, Mechanics of Forward & Future Market, Stock Futures & Stock Index Futures in India, Pricing of Forward & Future Markets-how to read quotes, Margins, Open interest positions etc. Cost of Carry Models & Basis-Cash Price v/s Future price, Trading Strategies-Index Arbitrage, hedging using futures, options and combination of both. Speculation, spreads etc .	8	20

II I	Option Markets Types of option markets, ITM, ATM & OTM, Intrinsic Value & Time Value, Factors affecting option pricing, European & American, Arbitrage restriction on option prices, Put-call parity relationship, Put call ratio & Open Interest in relation to the price and volume, Option Trading Strategies-Naked and Hedge, Spreads and Combinations, Arbitrage, hedging & Speculation, Option Pricing Models-Black schools & Binomial Calculator, Greek Letters and VAR	8	20
I V	Innovations in Indian Derivative Market Introduction to Commodity and Currency Derivatives v/s OTC Derivatives-Foreign currency market & currency contracts in India, Introduction to Interest rate Derivatives in India, Bond Futures, T-bill market in India, Currency & Interest rate Swaps. Exotic Options and Credit Derivatives	7	15
V	Practical Module: <ul style="list-style-type: none"> • Analyzing 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 & analyzing 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 	8	(20 Marks of CEC Internal Evaluation)

4. Teaching Methods: The following pedagogical tools will be used to teach this course:

1. Lectures & Discussions
2. Assignments & Presentations
3. Case Analysis
4. Numerical Problems Solving

5. Evaluation:

A	Projects/ Assignments/ Quizzes/ Individual or group Presentation/ Class participation/ Case studies etc	Weightage 50 marks (Internal Assessment)
B	Mid-Semester Examination	Weightage 30 marks (Internal Assessment)

C	End –Semester Examination	Weightage 70 marks (External Assessment)
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6. Basic Text Books:

Sr. No.	Author	Name of the Book	Publisher	Edition
T1	Sundaram Janakiramanan	Derivatives and Risk Management	Pearson Education	Latest Edition
T2	Rajiv Srivastava	Derivatives & Risk Management	Oxford University	Latest Edition
T3	Varma	Derivatives & Risk Management	Tata McGraw hill	Latest Edition

7. Reference Books:

Sr. No.	Author	Name of the Book	Publisher	Edition
R1	John C. Hull	Futures and Option Markets	Pearson Education	Latest Edition
R2	Rene M. Stulz	Risk Management & Derivative	Cengage	Latest Edition
R3	David A. Dubofsky and Thomas W. Miler	Derivatives Valuation and Risk Management	Oxford University Press	Latest Edition
R4	O.P.Agrawal	Financial Derivatives and Risk Management	Himalaya	Latest Edition
R5	Vohra & Bagri	Futures and Options	Tata McGraw hill	Latest Edition
R6	Madhumati and Ranganatham	Derivatives & Risk Management	Pearson	Latest Edition

8. List of Journals / Periodicals / Magazines / Newspapers / Websites etc.:

The students will have to refer to past issues of the following journals and websites in order to get relevant topic/information pertaining to the subject.

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

9. Session Plan:

Session no.	Topic
1	Basic Market Concepts & Mechanics of Cash and Derivative Market, Meaning & types of Derivative, Evolution and growth of Derivative, Participants of Derivative Market
2	What is Risk? Types of Risk, Risk Management, Risk in Derivative trading
3	The Derivative Market in India: Trading, Clearing and Settlement System
4-5	The regulation of Derivative Trading in India: Role of SEBI, FMC and RBI, Visiting the websites of these regulatory bodies and explain their functions
6-7	Forward Contracts: Meaning, Purpose, Settlement, Limitations, Futures Contracts: Meaning, Specifications, Forwards Vs Futures,
8	Mechanics of Futures, Closing out positions, Margins and MTM, How to read Newspaper Quotes, Price, Volume and Open Interest, Types of Orders,
9	Pricing of Forward & Future Markets, Cost of Carry Models & Basis-Cash Price v/s Future price
10-11	Hedging Strategies using Futures (Ch-6-T1)
12-13	Stock Futures & Stock Index Futures (Ch-7-T1 and Ch-4-T2)
14	Fundamentals of Options (Ch-11-T1)

15	Call and Put Options(Ch-12-T1)
16-17	Option Trading Strategies-Arbitrage (Ch-13-T1)
18	Put-call parity relationship (Ch-14-T1)
19	Option Pricing Models-Binomial Model (Ch-15 -T1)
20	Option Pricing Models-Black scholes Model (Ch-16 -T1)
21	Greek Letters (Ch-18-T1), Concept of VAR (T3)
22	Introduction to Commodity Futures contracts in India (Ch-3-T2)
23-24	Introduction to Currency Derivatives contracts in India (Ch-5 T2 and Ch-9 T1)

25-26	Introduction to Interest rate Derivatives in India, Interest Rate and Interest Rate Futures (Ch-3 and Ch-8-T1 and Ch-6 T-2)
27	Currency & Interest rate Swaps (Ch-7-T-2)
28	Exotic Options and Credit Derivatives (Ch-13-14 – T2)
29-36	<p>Practical Module:</p> <ul style="list-style-type: none"> • Analyzing 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 & analyzing 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 • Understanding the Moneyless of Options with real time data from stock and commodities exchanges • Playing the stock market games with the real time data with the software of few financial websites