

Subject Code:1MS2020431

Subject Title: Financial Derivatives

1. Course Objectives and Outline

Derivatives are known to be among the most powerful financial instruments. The Indian equity derivatives market has seen tremendous growth in last decade. This subject will provide insights into different types of financial derivatives instruments like Equity, Currency and Interest Rate and institutional structure of its. The course aims to develop an understanding of the importance of financial derivatives and the institutional structure of the markets on which they are traded as well as developing the analytical tools necessary to price such instruments.

2. Teaching Scheme (Hours per week)

Lecture (Hrs.)	Tutorial	Practical	Credit	Evaluation Scheme (Marks)		Total
				University Assessment	Internal Assessment	
4	-	-	4	60 Marks	40 Marks	100 Marks

3. Syllabus

Module No.	Contents	Total Hours	Weight
1	Introduction to Derivatives: Brief History of Derivatives and Evolution of Commodity, Currency, Stocks and Interest Rate Derivatives. Explaining Structure of Cash and Derivative Markets: Forwards, Futures, Options, Swaps, etc. Application of Derivative: Hedging, Speculation and Arbitrage	12	25%
2	Future and Forward: Futures Contract Specifications: Underlying Asset, Contract Size, and Delivery Specifications, Marking to Market using Margin Account, Familiarizing with Market Quotes, Trading Strategies involving Futures, Futures Pricing: Pricing by Arbitrage relationship between Futures and Spot Price (cost of carry and reverse cost of carry), Futures on Dividend-paying Assets	12	25%
3	Mechanics & Properties of Options: Options Type, Boundary Conditions and Moneyness for options, Put-call parity and its interpretation, Basic options strategies. Option Pricing: Black-Scholes Models and Binomial Model of options pricing, Options sensitivity	12	25%
4	Interest Rate Futures in India: Interest Rate Future and its rational, Contractual Specification, Floating and Fixed Rate, Participants of markets. Currency Markets: Exchange rate and fixed and floating exchange rate regime, Factors affecting exchange rate, Concepts of quotes, Growth of currency derivatives in India	12	25%

4. Course Pedagogy

The pedagogy of the subject involves Lectures and presentations. Students will be given group tasks and assignments and small project report on current topics.

5. Suggested Readings

a. Books

- 1 Options Futures & Other Derivatives, By Hull & Basu, Pearson Education
- 2 Fundamentals of Futures and Options Markets; By John C Hull; Pearson Education
- 3 Futures and Options, By Vohra & Bagri, Tata McGraw Hill
- 4 Derivatives & Risk Management, By Rajiv Srivastava, Oxford University
- 5 Derivatives and Risk Management, By Sundaram Janakiramanan, Pearson Education
- 6 Risk Management and Derivatives, By Rene M. Stulz, Cengage Publication

b. Journals/Websites/News Paper

- Business Dailies (Business Standard, Economic Times, Financial Express etc.)
- Stock exchange Websites: National Stock Exchange, Bombay stock Exchange
- NSE's Certification in Financial Market(NCFM) modules
- Websites: Moneycontrol, Economic times, Financial express, Other Securities companies website like. Kotak Securities, HDFC Securities, ICICI Direct
- Journals By NSE-NYU Stern School of Business Initiative for the Study of the Indian Capital Markets https://www.nseindia.com/research/content/research_NSE_NYU.htm

6. Evaluation Scheme

Sr. No.	Component	Weight
1	University Examination	60%
2	Internal Assessment -Depending on the need and objectives of the subject, internal assessment should include minimum three of the following sub-components; <i>Class Test, Quiz, Assignments, Case Presentation, Class Participation, Projects, Team/Individual Assignments.</i> -The weightage of a sub-component should not exceed 50% of internal assessment component weight. - The bifurcation of sub-components shall be communicated by the instructor before commencement of the academic sessions.	40%