

BBA III Year	BBA-E506/606		Semester-V/VI		
	Financial Modelling And Derivatives				
Time Allotted for End Semester Examination	Marks Allotted for Internal Assessment	Marks Allotted for End Semester Examination (ESE)	Maximum Marks (MM)	Total Credits	Maximum Hours
3 Hrs.	30 (20+10)	70	100	06	60

OBJECTIVE: To equip students with principles and techniques of Financial modelling along with various Financial Derivatives including Greeks & Exotic Options.

- Introduction: Financial Time Series and Their Characteristics: Asset Returns; Distributional Properties of Returns; Review of Statistical Distributions and Their Moments, Distributions of Returns, Multivariate Returns, and Likelihood Function of Returns and Empirical Properties of Returns **(15 Hours)**
- Linear Time Series Analysis and Its Applications: Stationarity; Correlation and Autocorrelation Function; White Noise and Linear Time Series. **(15 Hours)**
- Financial Derivatives: Introduction, various underlying and strategies: Forwards and Futures, Interest rate futures and currency futures; Determination of forward and futures prices; Options and related terminology, Calculating the pay-off from options and diagrammatic representation. **(15 Hours)**
- Pricing of Options- Binomial model and Black-Scholes model; trading strategies involving options; Exotic Options; Introduction to Swaps, Interest rate swaps, currency swaps, cross currency swaps; Forward rate agreements (FRA). Interest rate caps, floors, collars. **(15 Hours)**

SUGGESTED READINGS:

1. Franke, J., Wolfgang H. & Christian, H. (2000). *Introduction to Statistics of Financial Markets. Germany: Springer.*
2. Hull, John, C. (2009). *Options, Futures and Other Derivatives (7th Ed.)*. New Delhi: Pearson Education.
3. Tsay, Ruey S. (2005). *Analysis of Financial Time Series (2nd Ed.)*. India: John Wiley.
4. Madhumathi, R. & Ranganatham, M. (2012). *Derivatives and risk management (1st Ed.)*. New Delhi: Pearson education.
5. Redhead, K. (1996). *Financial Derivatives- An introduction to futures, forwards, options, swaps*. New Delhi: Prentice Hall of India.

NOTE: The list of cases, specific references and books including recent articles will be announced in the class by concerned teachers from time to time.