

5. Gupta, A. (2002). *Mutual Funds in India-A study of Investment Management*, Anmol Publication Pvt. Ltd. New Delhi.

**Additional Resources:**

1. Gupta, A. (2002). *Mutual Funds in India-A study of Investment Management*, Anmol Publication Pvt. Ltd. New Delhi.
2. Chandra, P. (2000). *Investment Analysis and Portfolio. Management*, Tata McGraw-Hill Publishing Company Ltd, New Delhi.
3. Fischer, D. E., & Jordan, R. J. (1996). *Security analysis and portfolio management*. Prentice Hall.

**Note: Latest edition of readings may be used**

**DISCIPLINE SPECIFIC ELECTIVE COURSE \_ 19: FINANCIAL AND  
COMMODITY  
DERIVATIVES**

**CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
<b>Financial and Commodity Derivatives DSE-19</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>0</b>	-	-

**Learning Objectives:**

To equip students with the principles and techniques of Derivatives and Risk Management through Stock Market.

**Learning outcomes:**

After completing the course, the student shall be able to:

- Understand the derivatives in detail such as forward, futures, options, trading strategies etc.
- Manage the Risk using forward, futures, options.
- Learn the option pricing models and payoffs.

### **Unit 1: Introduction to Derivatives**

**(12 Hours)**

Introduction - Definition of Risk, Managing Risk, Type of Risks; Introduction of Spot Market; Meaning, history and origin of derivatives in India; Convergence of Spot and Futures; Participants of Derivatives Market; Valuation of Forwards and Futures; Contango and Backwardation; Hedging: Long security-sell futures, Speculation: With and without derivative market, Arbitrage: Buy spot-sell futures & sell spot-buy futures.

### **Unit 2: Risk Management with Currency Market & Commodity Market**

**(12 hours)**

Currency futures - meaning and valuation, Quotations- direct, indirect; Calculation of bid & ask in cross currency pair; Hedging with futures: Concept of basis & impact of change in basis on payment/receivables; Hedging with forwards: Early delivery, early cancelation, early extension, maturity cancelation and maturity extension; Commodity futures: meaning and valuation; Valuation of commodity futures; Managing risk with commodity futures.

### **Unit 3: Options and Trading Strategies**

**(12 Hours)**

Options – Meaning, call and put of European options and their payoffs; Calculation of P/L in Option Trade; Factors affecting option prices; Upper bound as well as lower bound of call and put option with & without dividend; Put – call parity theorem; Spreads (Bull, Bear, Box, Butterfly, Calendar Spread), combinations (Straddle, Strangle, Strip, Straps).

### **Unit 4: Option Valuation & Managing Risk with Option**

**(9 Hours)**

Binomial model - One period, two period and multiple period; Black-Scholes option model (for stock and currency both) with and without dividend; Managing delta, Delta zero portfolio, Managing gamma, Delta zero & Gamma zero portfolio.

### **Essential Readings:**

1. Sundaram, R. K., & Das, S. R. (2011). *Derivatives: principles and practice*. New York, NY: McGraw-Hill Irwin.
2. Redhead, K. (1997). *Financial derivatives: an introduction to futures, forwards, options and swaps*. Prentice Hall.
3. Hull, J. C. (2003). *Options futures and other derivatives*. Pearson Education India.

**Additional Resources:**

1. Franke, J., Hardle, W. K., & Hafner, C. M. (2015). *Statistics of Financial Markets An Introduction*. Springer.
2. Ranganatham, M., & Madhumathi, R. (2011). *Derivatives and Risk Management*. Pearson India.

**Note: Latest edition of readings may be used**

**DISCIPLINE SPECIFIC ELECTIVE COURSE – 20: MICRO FINANCE  
AND RURAL BANKING**

**CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE**

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Prerequisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
<b>Micro Finance and Rural Banking DSE-20</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>0</b>	-	-

**Learning Objectives:**

The course aims at imparting basic knowledge about microfinance and rural banking sector in India. Through this paper, students would be acquainted with financing options available for the unbanked and rural sector.

**Learning Outcomes:**

After completing the course, the student shall be able to:

- Understand the rural sector in India and its need for financing.
- Learn about microfinance and rural banking system in India.
- Understand the basic functions and regulation of rural banks.
- Determine operational challenges faced by MFIs and rural banks.

**Unit1: Rural Economy and Development****(12 hours)**

Size and Structure of the Rural Economy, Characteristics of the Rural Sector - Agricultural and Allied Sectors, Non-Farm Sector - Rural Industrialization and Entrepreneurship. Rural