

**Annexure - II**  
**NISM-Series-XIII: Common Derivatives Certification Examination**

**Test Objectives**

**1. Basics of Derivatives**

- 1.1 Explain the term “derivatives”
- 1.2 Study the history and evolution of derivatives market and explain the factors influencing the growth of derivatives market globally
- 1.3 Know the history of Indian derivatives Market and understand the available derivative products in India
- 1.4 List various stakeholders (market participants) and their roles in the derivatives markets
- 1.5 Differentiate between OTC and Exchange Traded Market
- 1.6 Explain the significance and economic purpose of derivatives
- 1.7 List various risks faced by the participants in derivatives

**2. Introduction to the Underlying Markets**

**2.1 Introduction to Equity Markets and Indices**

- Provide a brief introduction to equity markets
- Understand the significance and economic purpose of Index
- List important attributes for construction of an Index
- Understand how index is constructed, maintained and revised
- List various indices in India
- Understand various direct and indirect applications of indices
- Explain the term impact cost

**2.2 Introduction to Currency Markets**

- Know the history of foreign exchange markets
- Know the most popular and highly traded currency pairs in the world
- Provide an overview of international currency markets
- Understand the peculiarities of currency markets in India
- Understand the meaning of settlement or value date
- Differentiate between features of Over-The-Counter (OTC) and Exchange-traded derivatives
- Know the calculations involved in Exchange rate arithmetic (cross rate calculation)
- Understand the impact of market economics on currency prices
- List the important economic indicators for the markets
- List various market players in the foreign exchange market

**2.3 Introduction to Fixed-income Securities**

- Overview of financial markets and grouping of markets based on asset type

Overview of fixed-income securities and economic role of debt markets

Know the classification of fixed-income securities based on cash flow pattern, tenor, etc.

Understand the difference between fixed-income security and fixed-return security

Compare Debt securities versus equity securities

Understand debt market and equity market as components of capital market

Explain the importance of debt market for the economic development of a country and know the relative size of debt and equity markets globally and in India

#### 2.4 Introduction to “Interest Rate”

Understand the concept of interest rate and interest rate as rent on money

Explain the importance of risk-free interest rate as the basis and benchmark for all valuations and differentiate between risk-free interest rate and risky interest rate

Understand the difference between nominal rate of interest and real rate of interest

Understand term structure (yield curve), its shape, shifts and interpretation

Understand the conversion of interest rate into interest amount: effect of payment frequency, compounding frequency, day count basis and business day adjustment

Explain the concept of accrued interest

#### 2.5 Return and Risk Measures for Debt Securities

Define spot rate (or zero rate) and holding period return

Define and calculate various measures of return: coupon, current yield, yield-to-maturity

Describe the relation between spot rate, bond price and yield-to-maturity

Define and calculate various measures of risk: Macaulay Duration, Modified Duration, Rupee Duration, Price value of a basis point (PVBP) and Convexity

### 3. Introduction to Forwards and Futures

#### 3.1 Introduction to Forwards and futures contracts

Explain the term Forward contract

List essential features of forward contract

Illustrate major drawbacks in Forward contracts

Explain the term Futures contract

List salient features of Futures contract

List and explain terminologies used in Futures contract

Illustrate various limitations in Futures

Compare the advantages and disadvantages of forwards and futures

#### 3.2 Forwards and Futures on Equities

##### 3.2.1 Payoff Charts for Futures contract

Illustrate payoffs for Futures

Draw payoff charts for Long and Short Futures

### 3.2.2 Futures pricing

Explain the basics of cash and carry / Non-arbitrage model for futures pricing

Describe the expectancy model of futures pricing

Understand concept of convergence of cash and futures prices

### 3.2.3 Basic differences in Commodity, Equity and Index Futures

## 3.3 Exchange Traded Currency Futures

3.3.1 Terminology: Currency futures, Spot price, Futures price, Contract cycle, Value date/Final settlement date, Expiry date, Contract size, etc.

3.3.2 Know the concepts of Initial margin and Marking-to-market

3.3.3 Understand the rationale behind currency futures

3.3.4 Introduction of currency futures in India

3.3.5 Explain the concept of Interest rate parity and pricing of currency futures

## 3.4 Interest Rate Futures

3.4.1 Know the underlying assets of permissible interest rate derivative contracts in India

3.4.2 Know the market lot / contract amount, contract months, expiry dates of exchange traded derivatives contracts

3.4.3 Understand tick size and its relation to the minimum change in the contract value

3.4.4 Describe the procedure for determining the daily settlement price and final settlement price

3.4.5 Discuss the delivery aspects of interest rate derivatives contracts including conversion factor, invoice amount, cheapest-to-deliver bond

## 4. Strategies Using Futures

### 4.1 Strategies using Equity Futures

Analyze the role of different players in futures market

Outline the use of futures contract as an effective instrument for managing risk

Explain different strategies for hedging, speculation and arbitrage in futures market

### 4.2 Strategies Using Currency Futures

Construct long position in Currency futures

Construct short position in Currency futures

Know how hedging can be done using Currency futures

Understand how one can trade the spreads using Currency futures

Know arbitrage opportunities under various conditions

### 4.3 Strategies Using Interest Rate Futures

Explain speculative / trading strategies with suitable examples

Explain Hedging strategies for managing interest rate risk in loans and bond investments like by adjusting the Duration with futures

List and describe risks associated with futures: basis risk, yield curve spread risk and market liquidity risk

**5. Introduction to Options – Options on Equities and Currencies**

- 5.1 Know the basics of options
- 5.2 Understand the concept of option premium
- 5.3 Understand Call and Put option
- 5.4 Know Bought and Sold option
- 5.5 Distinguish between European vs. American option
- 5.6 Understand “Moneyness” of an option
- 5.7 Explain option pricing (Binomial and Black-Scholes) and option Greeks
- 5.8 Illustrate payoff charts for options
- 5.9 Understand the uses of Options

**6. Option Trading Strategies – Strategies using Equity Options and Currency options**

- 6.1 Option spreads and their payoff charts
  - Explain the term option spread
  - Illustrate various option spreads
  - Draw payoff charts for various option spread strategies
- 6.2 Straddle: market view and payoff charts
  - Explain what straddle position is
  - Elaborate what should be the market view when Straddle is to be used (Long/ Short)
  - Draw Net Payoff Chart for Straddle
- 6.3 Strangle: market view and payoff charts
  - Explain what is strangle position
  - Elaborate what should be the market view when Strangle is to be used (Long/ Short)
  - Draw Net Payoff Chart for Strangle
- 6.4 Covered Call: market view and payoff charts
  - Explain what Covered Call position is
  - Elaborate what should be the market view when Covered Call is to be used
  - Draw Net Payoff Chart for Covered Call
- 6.5 Protective Put: market view and payoff charts
  - Explain what Protective Put position is
  - Elaborate what should be the market view when Protective Put is to be used
  - Draw Net Payoff Chart for Protective Put
- 6.6 Collar: market view and payoff charts
  - Explain what Collar position is
  - Elaborate what should be the market view when Collar is to be used
  - Draw Net Payoff Chart for Collar

### 6.7 Butterfly spread: market view and payoff charts

Explain what Butterfly spread position is

Elaborate what should be the market view when Butterfly spread is to be used

Draw Net Payoff Chart for Butterfly spread

## **7. Introduction to Trading, Clearing, Settlement & Risk Management**

### 7.1 Introduction to Trading Systems

Understand the trading systems, corporate hierarchy, order types and conditions

Discuss the Selection criteria of Stocks and Indices for trading

Know the contract specification, trading parameters and position limits

Understand how an adjustment is made in position value and contract specification for various corporate actions

Know the operational guidelines of Exchanges

Know the surveillance systems and procedures of exchanges

### 7.2 Clearing, Settlement and Risk Management in Currency Futures

Describe clearing members, their role and eligibility norms

Understand the Clearing Mechanism and computation of open positions

Understand the Settlement Mechanism for futures and options contracts

Understand margining and mark to market (MTM) under SPAN

Know the Risk Management features, position limits and net worth requirements

Know the margin collection process of Clearing Corporations and delivery procedure

## **8. Legal and Regulatory Environment**

8.1 Explain provisions of Securities Contract (Regulation) Act, 1956 and how SC(R)A aims at preventing undesirable transactions in securities

8.2 Define the role of SEBI in regulating Derivatives market and know the features of Securities and Exchange Board of India Act, 1992

8.3 List important rules and regulations on trading in Derivatives market

8.4 Know the regulations in clearing & settlement and risk management

8.5 Outline major recommendations of the L C Gupta Committee

8.6 Outline major recommendations of the J R Verma Committee

8.7 Outline the recommendations of the RBI-SEBI Standing Technical Committee on Exchange Traded Currency and Interest Rate Derivatives

8.8 Know the provisions of Foreign Exchange Management Act, 1999

8.9 Understand the salient features of RBI notification 'Currency Futures (Reserve Bank) Directions, 2008

8.10 Understand the salient features of RBI Circular 'Guidelines on trading of Currency Futures in Recognized Stock / New Exchanges'

- 8.11 Understand the salient features of SEBI Regulations for Currency Derivatives Exchanges
- 8.12 Know the eligibility criteria for membership of currency derivatives exchanges
- 8.13 Explain the role of various regulators in Bond and Interest Rate Derivatives Market
- 8.14 Know the restrictions and limits applicable to Resident and Non-resident Investors in Interest Rate Derivatives Markets
- 8.15 List the regulatory reporting requirements for Interest Rate Derivatives Markets
- 8.16 Define the role of FIMMDA in fixed income and derivatives markets in India

### **9. Accounting and Taxation**

- 9.1 Explain accounting treatment for derivative contracts
- 9.2 Understand the taxation of derivative transaction in securities
- 9.3 Explain the tax treatment of profit/loss on derivative transaction in securities

### **10. Sales Practices, Code of Conduct and Investor Protection Measures**

- 10.1 Understand the basic features of SEBI Codes of Conduct for Brokers and Sub-Brokers
- 10.2 Understand the importance of risk profiling of clients in sales process
- 10.3 Understand the importance of KYC and know the documents required by the investors to trade in Derivatives contract
- 10.4 Know the best practices in derivatives sales
- 10.5 Understand the Grievance redressal mechanism available to the investors
- 10.6 Understand the nature of complaints considered by exchanges
- 10.7 Explain the Arbitration mechanism at exchanges