

## **Annexure II – Test Objectives**

### **NISM-Series-IV: Interest Rate Derivatives Certification Examination**

#### **Unit 1: Introduction to Interest Rate, Interest Rate Instruments and Fixed Income Market**

- 1.1 Understand the concept of interest rate
- 1.2 Define Fixed Income Securities and their key components
- 1.3 Know the basic classification of bonds based on various criteria (cash flow pattern, tenor, etc.)
- 1.4 Differentiate between Equity and Debt securities
- 1.5 Explain the concept of risk-free interest rate
- 1.6 Understand term structure of interest rates (yield curve), its shape, shifts and their interpretation
- 1.7 Understand the conversion of interest rate into interest amount: effect of payment frequency, compounding frequency, day count basis and business day adjustment
- 1.8 Explain the concept of Accrued Interest
- 1.9 Define spot rate (or zero rate) and holding period return
- 1.10 Define and calculate various measures of return: coupon, current yield, yield-to-maturity
- 1.11 Determine cashflow, yield and price of bonds
- 1.12 Define and calculate various measures of risk: Macaulay Duration, Modified Duration, Rupee Duration, Price value of a basis point (PVBP) and Convexity
- 1.13 Explain the economic role of debt markets and discuss the importance of debt market for the economic development of a country
- 1.14 Know the primary and secondary markets for debt securities in India

#### **Unit 2: Interest Rate Derivatives**

- 2.1 Define derivatives and discuss economic role (key economic functions) of derivatives
- 2.2 Recognize various derivative products such as forwards, futures, options and swaps
- 2.3 Know the factors driving the growth of financial derivatives
- 2.4 List various market players in the Interest Rate Derivatives market
- 2.5 Understand interest rate derivatives and bond derivatives with specific reference to their underlying assets
- 2.6 Differentiate between features of Over-The-Counter (OTC) and Exchange Traded derivatives

#### **Unit 3: Exchange Traded Interest Rate Futures**

- 3.1 Define Interest rate futures (IRF) and understand the basic terms in IRF contracts
- 3.2 Draw a pay-off diagram of futures

3.3 Know the contract specification of Exchange Traded Interest Rate Futures including underlying assets, spot price, futures price, contract cycle, tick size, value date, expiry date, trading cycle (weekly/monthly), contract size, market timings, etc.

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

3.5 Know the rationale for introducing exchange traded Interest Rate derivatives in India

3.6 State the advantages and limitations of futures contracts in comparison to forward rate agreement (FRA)

3.7 Understand the computation of interest rate futures price

#### **Unit 4: Exchange Traded Interest Rate Options**

4.1 Define Options and basic terms used in options contracts

4.2 Differentiate between futures and options contracts in terms of rights and obligations of buyers and sellers

4.3 Distinguish between European and American options

4.4 Understand the concept of Moneyness of an option and define ITM, ATM and OTM

4.5 List the determinants of option price and the impact of these factors on the value of calls and puts and understand option greeks with suitable examples

4.6 Outline the commonly used models for options pricing

4.7 Understand the concept of Implied Volatility

4.8 Draw the payoff diagrams of put options and call options

4.9 Know the contract specifications for interest rate options contracts

4.10 State the advantages and limitations of Exchange Traded Options contracts in comparison to OTC Options Contracts

#### **Unit 5: Strategies Using Exchange Traded Interest Rate Futures and Options**

5.1 Understand the role of hedgers, speculators and arbitrageurs in Interest rate derivatives markets

5.2 Explain how interest rate derivatives can be used for hedging various kinds of interest rate exposures

5.3 Understand various option trading strategies and draw their payoff diagrams

5.4 Discuss how interest rate derivatives can be used for speculative transactions (trading)

5.5 Describe some of the trades that arbitrageurs execute using interest rate derivatives

5.6 Understand the concept of spread and spread trading using interest rate derivatives

5.7 Understand the limitations of interest rate derivatives for hedgers

## **Unit 6: Trading Mechanism in Exchange Traded Interest Rate Derivatives**

- 6.1 List the entities in the trading system and their roles
- 6.2 Know the salient features of Trading System, Trader Workstation, Placing of Order, Order Book, Order Matching Rule
- 6.3 Explain Order Management and Understand various types of orders that can be entered in the trading system and the conditions that can be attached to orders.
- 6.4 Understand the Risk Management and Order Routing
- 6.5 Understand applicability of price limit circuit filters
- 6.6 Trading costs: Brokerage, Exchange transaction charges, SEBI turnover fee, other costs like Stamp duty, GST, etc.

## **Unit 7: Clearing, Settlement and Risk Management in Exchange Traded Interest Rate Derivatives**

- 7.1 Define clearing and settlement mechanisms
- 7.2 Know various entities involved in clearing & settlement process and their roles
- 7.3 Understand the Interoperability among clearing corporations (with some examples)
- 7.4 Understand the clearing mechanism and calculate open positions and obligations of clearing members under various situations
- 7.5 Discuss the determination of settlement obligations
- 7.6 Know the regulatory guidelines on open position limits and monitoring of position limits
- 7.7 Understand settlement Mechanism, Daily Settlement Price and final settlement price
- 7.8 Understand the Settlement of funds
- 7.9 Discuss delivery under physical settlement
- 7.10 Know the salient features of the exchange risk management measures
- 7.11 Discuss margin collection processes of clearing corporations and how the margin is collected from the client
- 7.12 Know the Core Settlement Guarantee Fund

## **Unit 8: Regulatory Framework for Interest Rate Derivatives**

- 8.1 Know Securities Contracts (Regulation) Act, 1956 [SC(R)A] and the definition of securities and derivatives under this act
- 8.2 Know the role of RBI-SEBI standing technical committee on exchange traded currency and interest rate derivatives
- 8.3 Know the RBI guidelines on participation in Exchange Traded Interest Rate Derivatives
- 8.4 Know the salient features of SEBI regulations for interest rate derivatives exchanges and clearing corporations

8.5 Know the Regulatory guideline on participation of various entities in Exchange Traded Interest Rate Derivatives

8.6 Understand the role of FIMMDA in fixed income and interest rate derivatives markets in India

8.7 Know the entities eligible for membership of interest rate derivatives exchanges and the eligibility criteria applicable for various types of entities

### **Unit 9: Accounting and Taxation**

9.1 Understand accounting treatment for derivative contracts and know the disclosure requirements

9.2 Know the taxation of interest rate derivatives contracts

### **Unit 10: Codes of Conduct and Investor Protection Measures**

10.1 Discuss the salient points of SEBI's code of conduct for brokers and authorized Persons

10.2 Know the investor grievance redressal mechanism

10.3 Describe the Investor Protection Fund of the exchange

10.4 Explain the arbitration mechanism at exchanges

10.5 Understand the execution of Power of Attorney (PoA) by the Client in favour of the Stock Broker / Stock Broker and Depository Participant

10.6 Understand the importance of the Risk disclosure to client and KYC process

- Know the importance of risk disclosure at the time of client onboarding
- Describe the risks faced by investors trading in IRD markets
- Understand the importance of KYC process, KYC documents and UCC
- Know the Suspicious Transaction Reporting (STR) to Financial Intelligence Unit (FIU)

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