

Annexure – II**NISM-Series-XVI: Commodity Derivatives Certification Examination****Test Objectives****1. Introduction to Commodity Markets**

- 1.1. History of commodity trading
 - Study the history of commodities trading both globally and in India
 - Understand the evolution of commodity exchanges
- 1.2. Spot and derivatives trading in commodities
 - Overview the Electronic spot and Physical spot markets for commodities
 - Know the key economic functions performed by derivatives markets
 - Define the derivative instruments such as Forwards, Futures, Options and Swaps
- 1.3. Major commodities traded in derivatives exchanges
 - List major commodities traded in Indian derivatives exchanges
- 1.4. Participants in commodity derivatives markets
 - Understand the broad classification of market participants and the roles performed by them in the commodity derivatives markets
- 1.5. Commodities trading vis-à-vis trading in other financial assets
 - Understand the peculiarities of Commodities when compared to other financial assets such as stocks and bonds
- 1.6. Commodity markets ecosystem
 - List the important entities in the commodity market ecosystem and understand the roles performed by these intermediaries
- 1.7. Commodity market indices
 - Know the important commodity market indices in Indian and International markets
- 1.8. Factors impacting the commodity prices
 - Understand the Demand-Supply Equation of Commodities
 - Know the crucial factors that have an impact on commodity prices such as seasonality, news, geo-political developments, macroeconomic conditions, currency movement, interest rates, etc.

2. Commodity Futures

- 2.1. Introduction to Futures
 - Understand the key characteristics of commodity futures
- 2.2. Distinction between forwards and futures
 - Know the differences between futures and forwards
 - Understand the advantages and limitations of futures over forwards
- 2.3. Cost-of-carry

Understand cost-of-carry model and how it explains the relationship between spot and futures prices

2.4. Convergence

Understand the “convergence” of cash and futures prices

2.5. Fair value of futures contract

Calculate fair value of futures with various compounding frequencies

2.6. Convenience yield

Understand the concept of “convenience yield” and its role in pricing of commodity futures

2.7. Commodity futures and commodity forwards

Understand the advantages of commodity futures over commodity forwards

2.8. Pay-off profile of Futures

Understand the linear pay-off profile of futures contracts

Illustrate the pay-off profile of long futures position

Illustrate the pay-off profile of short futures position

2.9. Spot price polling mechanism

Describe the spot price polling mechanism

3. Commodity Options

3.1. Introduction to Options

Understand the key characteristics of commodity options and the choices it provides to the buyer of the option

3.2. Option terminology

Know the key terminology of options: strike price, spot price, option premium, lot size, intrinsic value, time value, etc.

3.3. Pay-off profile of Options

Understand the non-linear pay-off profile of options contracts

Illustrate the pay-off profile of long call option position

Illustrate the pay-off profile of short call option position

Illustrate the pay-off profile of long put option position

Illustrate the pay-off profile of short put option position

3.4. Determinants of option premium

Understand the key determinants of option price and how these parameters influence the price of a call option and the price of a put option

Discuss the option greeks: delta, gamma, theta, vega, rho.

Explain the concept of “moneyness” of an option and how it is determined by the market price and strike price of an option contract (ITM, ATM, CTM and OTM)

Explain Put-call parity with the help of an example

3.5. Options on commodity futures

Understand the commodity options with commodity futures as their underlying (instead of the spot commodity like in the case of equity derivatives)

Know how the commodity options positions, on exercise, devolve into the underlying commodity futures

4. Uses of Commodity Derivatives

4.1. Hedging

Know the meaning of “Hedging”

Understand how to hedge using futures and options

4.2. Speculation

Illustrate long hedge and short hedge strategies using futures

Calculate Hedge Ratio

Know the benefits and limitations of hedging

4.3. Speculation

Understand the term “Speculation”

Understand speculation using long and short positions in futures and options

4.4. Arbitrage

Understand the term ‘Arbitrage”

Describe spot-versus-futures arbitrage, cash and carry arbitrage and reverse cash and carry arbitrage with suitable examples

4.5. Spread Trading

Know the meaning of Spread Trading and illustrate various strategies such as buying a spread, selling a spread, Inter-commodity spread and intra-commodity spread with examples

4.6. Basis

Understand the concept of “Basis”, strengthening and weakening of basis, basis risk and the basis in contango and backwardation markets

4.7. Option trading strategies

Describe the covered option positions: covered short call and covered short put

Know the spread trading strategies: vertical, horizontal and diagonal spreads

Explain the execution of straddle and strangle strategies with combination of call and put options

5. Trading Mechanism

5.1. Membership on commodity derivatives exchange

Classify exchange members based on their trading and clearing functions

5.2. Trading system in commodity derivatives exchanges

Know the fully automated screen-based trading system (SBTS) of exchanges

Know the trading hours, trading parameters, delivery process, etc.

- Briefly introduce the algorithmic trading
- 5.3. Selection criteria of Commodities for trading on derivatives exchanges
 - Know the regulatory guidelines for selecting a commodity for derivatives trading on the exchanges
- 5.4. Contract Specifications for various commodity derivatives contracts
 - List various elements of a contract specification and understand these terms
 - Sample a few contract specifications to understand the contents of the contract specification
- 5.5. Profit/loss per contract for a change of one tick
 - Compute the impact of one tick change on the value of a derivative contract
- 5.6. Order types and conditions
 - Understand orders with price conditions and time conditions
- 5.7. Tracking commodity futures and options prices
 - Know various sources to track the prices of commodity derivatives

6. Clearing, Settlement and Risk Management of Commodity Derivatives

- 6.1. Clearing and settlement
 - Explain the clearing and settlement process of commodity derivatives contracts
- 6.2. Delivery process
 - Understand the delivery process and the available delivery options
- 6.3. Entities involved in the clearing and settlement process
 - Know the entities involved in the clearing and settlement process and the roles performed by these entities
- 6.4. Premium / Discount
 - Understand the quality variations and how these variations are handled with the help of discounts and premiums
- 6.5. Penalty for delivery default by the seller
 - Know the penalties for delivery default by the seller
- 6.6. Deliveries in case of physical delivery
 - Understand the staggered delivery mechanism
- 6.7. Risk management for exchange traded commodity derivatives markets
 - Understand various risks that exist in commodity derivatives markets
- 6.8. Position limits and computation of open position
 - Understand the position limits and its computation at the client and member level
- 6.9. Salient features of risk containment measures
 - Know the importance of capital adequacy, online monitoring, offline surveillance, margin requirements, position limits, settlement guarantee fund, etc. as risk containment measures in commodity derivatives markets
- 6.10. Margining mechanism

Know different margins such as SPAN margin, initial margin, MTM margin, special margin and delivery period margin.

7. Accounting and Taxation

- 7.1. Important Accounting aspects related to trading in commodity derivatives
 - Understand the accounting treatment for commodity derivatives
 - Know hedge accounting, fair value hedges, cash flow hedges and hedge effectiveness
- 7.2. Guidance note issued by ICAI on accounting treatment of derivatives transactions
 - Know the key elements of the guidance note issued by ICAI on accounting treatment of derivatives transactions
- 7.3. Important Tax aspects related to trading in commodity derivatives
 - Briefly introduce Commodity Transaction Tax and Goods and Services Tax

8. Legal and Regulatory Environment of Commodity Derivatives in India

- 8.1. Regulatory structure of commodity markets
 - Know the regulatory framework governing the commodity markets in India
- 8.2. Securities Contracts (Regulation) Act, 1956
 - Know the key aspects of SCRA and the definitions of 'securities' and 'derivatives' under this act
- 8.3. Securities and Exchange Board of India Act, 1992
 - Know the powers granted to SEBI under the SEBI Act
- 8.4. SEBI's code of conduct for brokers
 - Understand the key aspects of SEBI's code of conduct for brokers
- 8.5. Risk disclosure to client and KYC
 - Know the importance of risk disclosure at the time of client onboarding
 - Describe the risks faced by investors trading in commodity derivatives markets
 - Understand the importance of KYC process and KYC documents
- 8.6. Investors Grievance Redressal Mechanism
 - Know the investor grievance redressal mechanism
 - List various types of complaints accepted by the derivatives exchanges
 - Know the guidelines for filing complaints and introduction to arbitration
