Study Notes for
NISM Series IV: Interest Rate Derivatives Certification Examination

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Examination Details

Total Questions	100 X 1 Marks
Total Marks	100
Type	Multiple Choice
Pass Score	60% = 60 marks
Duration	2 Hours
Negative marks	-0.25

Chapter - Weightage

Chapter no	Chapter name	Marks
1	Introduction to Interest Rate, Interest Rate Instruments and Fixed Income Markets	10
2	Interest Rate Derivatives	5
3	Exchange Traded Interest Rate Futures	20
4	Exchange Traded Interest Rate Options	15
5	Strategies using Interest Rate Derivatives	15
6	Trading Mechanism in Exchange Traded IRD	10
7	Clearing, Settlement and Risk Management of IRD	10
8	Regulatory Environment for Exchange Traded IRD	5
9	Accounting and Taxation of IRD	5
10	Code of Conduct and Investor Protection Measures	5

NISM-Series-IV: Interest Rate Derivatives Certification Examination

Chapter 1: Introduction to Interest Rate, Interest Rate Instruments and Fixed Income Market

1. **Interest Rate Concept**: Interest rate is the charge for borrowing assets, expressed as a percentage of the principal.
2. **Debt vs. Loan**: Debt securities are tradable, unlike loans, allowing risk transfer through pricing.
3. **Factors Influencing Interest Rates**: Demand and supply of money, fiscal deficit, inflation, global interest rates, and central bank policies.
4. **Nominal vs. Real Interest Rate**: Nominal rate is the stated rate; real rate adjusts for inflation.
5. **Effective Interest Rate**: Accounts for compounding, differing from the nominal rate.
6. **Fixed Income Securities**: Pay fixed interest periodically and return principal at maturity.
7. **Bond Components**: Include issue price, face value, coupon, coupon frequency, and maturity date.
8. **Government Bonds**: Issued by governments, considered low-risk, often called sovereign or gilt-edged bonds.
9. **Municipal Bonds**: Issued by local authorities for infrastructure projects.
10. **Corporate Bonds**: Issued by companies, carry higher risk, and offer higher yields than government bonds.
11. **Securitized Debt**: Converts illiquid loans into tradable securities via a Special Purpose Vehicle (SPV).
12. **Bond Maturity Classifications**: Overnight, ultra-short-term, short-term (1-5 years), medium-term (5-12 years), long-term (>12 years).
13. **Staggered Maturities**: Bonds with varying maturity dates to manage issuer's cash flow.
14. **Plain Vanilla Bonds**: Fixed coupon, redeemed at face value, simplest bond type.
15. **Zero-Coupon Bonds (ZCBs)**: Issued at a discount, redeemed at face value, no periodic interest.
16. **Floating Rate Bonds (FRBs)**: Coupons linked to benchmark rates, reset periodically.
17. **Caps and Floors**: Limits on FRB coupon rates to protect issuers (caps) or investors (floors).
18. **Inverse Floater**: Coupon inversely related to benchmark rate, decreases as rates rise.
19. **Inflation Indexed Bonds**: Face value or coupons adjusted for inflation (e.g., WPI, CPI).
20. **Step Up/Down Bonds**: Coupons increase (step-up) or decrease (step-down) over time.
21. **Deferred Coupon Bonds**: No interest initially, high interest later, suitable for long gestation projects.
22. **Deep Discount Bonds**: ZCBs issued at a significant discount, typically for long-term projects.
23. **Embedded Options**: Call (issuer redeems early) or put (investor redeems early) options affect bond pricing.
24. **Straight Bonds**: Fixed coupon, no embedded options, also called plain vanilla bonds.
25. **Callable Bonds**: Issuer can redeem before maturity, often at a premium when rates fall.
26. **Puttable Bonds**: Investor can redeem early, often at a discount when rates rise.
27. **Secured Debt**: Backed by collateral, paid first in liquidation, higher recovery rate.
28. **Unsecured Debt**: No specific collateral, paid after secured debt in liquidation.
29. **Subordinated Debt**: Riskier, paid before equity in liquidation, used for bank Tier II capital.
30. **Credit Enhanced Bonds**: Improve creditworthiness via collateral, insurance, or guarantees.
31. **Perpetual Bonds**: No maturity, pay coupons indefinitely, issuer may have call options.
32. **Annuities**: Provide regular payments, non-tradable, used in loans.
33. **AT1 Bonds**: Perpetual, non-convertible, used for bank Tier 1 capital under Basel III.
34. **AT2 Bonds**: Subordinated, minimum 5-year term, used for bank Tier 2 capital.

35. **Convertible Bonds**: Can be converted to equity at a pre-fixed price.
36. **REITs and InvITs**: Trusts investing in real estate or infrastructure, distributing dividends.
37. **Green Bonds**: Fund climate and environmental projects, linked to issuer's balance sheet.
38. **Tax-Free Bonds**: Interest exempt under Section 10 of the Income Tax Act, 1961.
39. **Tax-Saving Bonds**: Offer tax benefits with a lock-in period, interest taxable.
40. **Asset Linked Bonds**: Returns depend on underlying asset performance.
41. **Risk-Free Interest Rate**: Typically associated with government bonds in local currency.
42. **Term Structure of Interest Rates**: Relationship between interest rates and maturities.
43. **Accrued Interest**: Interest earned but not yet paid, calculated up to settlement date.
44. **Spot Rate**: Yield on a zero-coupon bond for a specific maturity.
45. **Holding Period Return**: Total return from holding a security over a period.
46. **Coupon Rate**: Annual interest payment as a percentage of face value.
47. **Current Yield**: Annual coupon divided by current bond price.
48. **Yield-To-Maturity (YTM)**: Total return if bond is held to maturity, factoring all cash flows.
49. **Bond Valuation**: Present value of future cash flows discounted at market yield.
50. **Debt Market Role**: Facilitates capital raising for issuers and investment opportunities for investors.

Chapter 2: Interest Rate Derivatives

1. **Derivatives Definition**: Financial contracts deriving value from underlying assets like interest rates.
2. **Economic Role**: Facilitate risk management, price discovery, and market efficiency.
3. **Interest Rate Derivatives**: Contracts based on interest rates or interest rate instruments.
4. **Derivative Products**: Include futures, options, swaps, and forward rate agreements (FRAs).
5. **Growth Drivers**: Increased volatility, regulatory reforms, and demand for hedging tools.
6. **Market Participants**: Hedgers, speculators, and arbitrageurs in the derivatives market.
7. **Hedgers**: Use derivatives to mitigate interest rate risk exposure.
8. **Speculators**: Take positions to profit from expected price movements.
9. **Arbitrageurs**: Exploit price discrepancies for risk-free profits.
10. **Underlying Assets**: Include government bonds, treasury bills, and interest rate benchmarks.
11. **OTC Derivatives**: Bilateral contracts, customizable but less transparent.
12. **Exchange-Traded Derivatives**: Standardized, traded on exchanges, highly transparent.
13. **OTC vs. Exchange-Traded**: OTC offers flexibility; exchange-traded ensures liquidity and standardization.
14. **Interest Rate Futures**: Contracts to buy/sell interest rate instruments at a future date.
15. **Interest Rate Options**: Rights to buy/sell interest rate instruments at a specified price.
16. **Forward Rate Agreements (FRAs)**: OTC contracts locking in future interest rates.
17. **Interest Rate Swaps**: Agreements to exchange fixed for floating interest payments.
18. **Market Liquidity**: Exchange-traded derivatives enhance market liquidity.
19. **Price Discovery**: Derivatives help establish fair market prices.
20. **Risk Transfer**: Derivatives allow shifting of interest rate risk to willing parties.
21. **Regulatory Oversight**: SEBI and RBI regulate interest rate derivatives in India.
22. **Market Growth**: Driven by globalization and financial market integration.
23. **Hedging Strategies**: Used to protect against adverse interest rate movements.
24. **Speculative Strategies**: Aim to profit from predicted rate changes.
25. **Arbitrage Opportunities**: Arise from mispricing between markets.
26. **Exchange Role**: Facilitates trades by matching buyers and sellers.
27. **Clearing Corporation Role**: Acts as a central counterparty to guarantee trades.
28. **Novation**: Clearing corporation becomes the counterparty to both buyer and seller.
29. **Transparency**: Exchange-traded derivatives offer higher transparency than OTC.
30. **Standardization**: Exchange-traded contracts have fixed terms, unlike OTC.
31. **Margin Requirements**: Ensure financial integrity in exchange-traded derivatives.
32. **Market Participants' Roles**: Vary based on risk appetite and objectives.
33. **Interest Rate Sensitivity**: Derivatives are highly sensitive to rate changes.
34. **Liquidity Risk**: OTC derivatives may face lower liquidity than exchange-traded.
35. **Counterparty Risk**: Higher in OTC due to lack of central clearing.
36. **Regulatory Reforms**: Post-2008 crisis, increased focus on exchange-traded derivatives.
37. **Volatility Impact**: Higher volatility drives demand for derivative instruments.
38. **Benchmark Rates**: MIBOR, Treasury bill rates used as underlyings.
39. **Contract Specifications**: Define terms like lot size, tick size, and expiry.
40. **Risk Management**: Derivatives reduce uncertainty in interest rate fluctuations.
41. **Global Integration**: Aligns domestic markets with international standards.
42. **Exchange Benefits**: Include price transparency and reduced counterparty risk.
43. **OTC Flexibility**: Allows tailored contracts for specific needs.
44. **Market Efficiency**: Derivatives enhance allocation of financial resources.
45. **Speculative Risks**: High leverage can lead to significant losses.
46. **Hedging Effectiveness**: Depends on alignment with underlying exposure.

47. **Arbitrage Profit**: Requires simultaneous trades in mispriced markets.
48. **Clearing Mechanism**: Ensures trade settlement and reduces default risk.
49. **Market Access**: Open to various entities under regulatory guidelines.
50. **Derivative Evolution**: Driven by technological advancements and market needs.

Chapter 3: Exchange Traded Interest Rate Futures

1. **Interest Rate Futures (IRF)**: Contracts to buy/sell interest rate instruments at a future date.
2. **Payoff Structure**: Linear, with gains/losses based on price movements.
3. **Contract Specifications**: Include underlying, lot size, tick size, and expiry date.
4. **Rationale for IRFs**: Hedge interest rate risk and enhance market liquidity.
5. **Advantages Over FRAs**: Standardized, transparent, and lower counterparty risk.
6. **Limitations vs. FRAs**: Less flexibility due to standardization.
7. **IRF Pricing**: Based on the cost-of-carry model, adjusted for interest rates.
8. **Underlying Assets**: Typically government securities or notional bonds.
9. **Lot Size**: Fixed quantity of the underlying per contract.
10. **Tick Size**: Minimum price movement increment.
11. **Contract Value Change**: Tick size multiplied by lot size per tick movement.
12. **Exchange-Traded Benefit**: Ensures liquidity and price transparency.
13. **Hedging Use**: Protects against adverse interest rate movements.
14. **Speculative Use**: Allows betting on future rate changes.
15. **Arbitrage Use**: Exploits price differences between markets.
16. **Cash Settlement**: Most IRFs in India are cash-settled, not physically delivered.
17. **Notional Bonds**: Hypothetical bonds used as IRF underlyings.
18. **Contract Expiry**: Typically the last Thursday of the contract month.
19. **Margin Requirements**: Initial and variation margins ensure financial integrity.
20. **Price Computation**: Incorporates spot price, interest rates, and time to expiry.
21. **Market Participants**: Include banks, financial institutions, and corporates.
22. **Regulatory Oversight**: SEBI and RBI set guidelines for IRF trading.
23. **Liquidity Advantage**: High trading volumes ensure ease of entry/exit.
24. **Risk Management**: IRFs reduce exposure to interest rate volatility.
25. **Standardization**: Fixed terms enhance market efficiency.
26. **Counterparty Risk**: Mitigated by clearing corporation as central counterparty.
27. **Price Transparency**: Real-time pricing available on exchanges.
28. **Basis Risk**: Arises from mismatches in hedging instruments.
29. **Contract Design**: Balances liquidity and risk management needs.
30. **Exchange Role**: Matches buyers and sellers for efficient trading.
31. **Clearing Role**: Guarantees trade settlement, reducing default risk.
32. **Volatility Impact**: IRFs help manage rate fluctuation risks.
33. **Market Growth**: Driven by demand for risk management tools.
34. **Trading Strategies**: Include hedging, speculation, and arbitrage.
35. **IRF Introduction**: Aimed to deepen India's debt market.
36. **Notional Bond IRFs**: Based on 6-year, 10-year, or 13-year bonds.
37. **Cash Settlement Risk**: May lead to imperfect hedging.
38. **Margin Calls**: Required to cover potential losses.
39. **Contract Tenure**: Weekly or monthly expiries available.
40. **Price Discount**: IRF prices often trade below future prices due to borrowing costs.
41. **Regulatory Support**: RBI and SEBI promote IRF adoption.
42. **Market Access**: Open to eligible entities meeting prudential norms.
43. **Liquidity Risk**: Lower in exchange-traded IRFs than OTC.
44. **Hedging Effectiveness**: Depends on contract alignment with exposure.
45. **Speculative Leverage**: High leverage amplifies gains and losses.
46. **Arbitrage Opportunities**: Exploit mispricing in related markets.

47. **Exchange Benefits**: Include reduced transaction costs and high liquidity.
48. **Clearing Guarantee**: Ensures settlement even if a party defaults.
49. **Contract Specifications**: Critical for understanding trade obligations.
50. **Risk Management Tools**: IRFs are key for financial institutions' stability.

Chapter 4: Exchange Traded Interest Rate Options

1. **Options Definition**: Contracts giving the right, not obligation, to buy/sell at a strike price.
2. **Futures vs. Options**: Options offer choice; futures mandate obligation.
3. **Option Styles**: European (exercised at expiry) and American (exercised anytime).
4. **Moneyness**: In-the-money, at-the-money, or out-of-the-money based on strike vs. spot price.
5. **Option Pricing**: Influenced by spot price, strike price, volatility, time, and risk-free rate.
6. **Option Greeks**: Delta, Gamma, Vega, Theta, Rho measure price sensitivities.
7. **Delta**: Change in option price per unit change in underlying price.
8. **Gamma**: Rate of change in Delta per unit change in underlying price.
9. **Vega**: Sensitivity to changes in volatility.
10. **Theta**: Time decay effect on option price.
11. **Rho**: Sensitivity to changes in risk-free interest rate.
12. **Black-Scholes Model**: Used for option pricing, assumes European style.
13. **Implied Volatility (IV)**: Market's expectation of future volatility.
14. **Payoff Diagrams**: Visualize option gains/losses at expiry.
15. **Call Option Payoff**: Max(0, Spot Price - Strike Price) - Premium.
16. **Put Option Payoff**: Max(0, Strike Price - Spot Price) - Premium.
17. **Contract Specifications**: Define strike prices, expiry, and underlying.
18. **Exchange-Traded Options**: Standardized, transparent, and liquid.
19. **OTC vs. Exchange-Traded**: OTC options are customizable but less transparent.
20. **Hedging Use**: Options protect against adverse rate movements.
21. **Speculative Use**: Options allow betting on rate directions.
22. **Arbitrage Use**: Exploit pricing inefficiencies across markets.
23. **European Options**: Common in Indian exchange-traded markets.
24. **Premium Components**: Intrinsic value and time value.
25. **Intrinsic Value**: Immediate exercise value of the option.
26. **Time Value**: Value due to potential future price movements.
27. **Volatility Impact**: Higher volatility increases option premiums.
28. **Time Decay**: Options lose value as expiry approaches.
29. **Risk-Free Rate**: Affects option pricing via cost-of-carry.
30. **Liquidity Advantage**: Exchange-traded options ensure ease of trading.
31. **Counterparty Risk**: Reduced by clearing corporation guarantees.
32. **Margin Requirements**: Apply to option sellers, not buyers.
33. **Strike Price**: Predetermined price for exercising the option.
34. **Expiry Date**: Date when the option contract terminates.
35. **Market Participants**: Include hedgers, speculators, and arbitrageurs.
36. **Regulatory Oversight**: SEBI and RBI regulate option markets.
37. **Price Transparency**: Real-time pricing on exchange platforms.
38. **Hedging Effectiveness**: Depends on option alignment with exposure.
39. **Speculative Leverage**: Options amplify gains/losses due to low premiums.
40. **Arbitrage Opportunities**: From mispricing between spot and derivatives.
41. **Exchange Benefits**: Include liquidity and standardized terms.
42. **Clearing Role**: Ensures settlement and mitigates default risk.
43. **Option Strategies**: Combine calls/puts for specific risk-reward profiles.
44. **Volatility Risk**: Impacts option pricing significantly.
45. **Contract Standardization**: Enhances market efficiency and liquidity.
46. **Risk Management**: Options reduce interest rate fluctuation exposure.

47. **Market Growth**: Driven by demand for flexible hedging tools.
48. **Option Premium**: Cost paid to acquire the option contract.
49. **Payoff Asymmetry**: Options limit downside to premium paid.
50. **Trading Platforms**: Facilitate efficient option trading and pricing.

Important Formulas:

1. Call Option Payoff: Max(0, S - K) - Premium
2. Put Option Payoff: Max(0, K - S) - Premium

Chapter 5: Strategies Using Exchange Traded Interest Rate Derivatives

1. **Market Participants**: Hedgers, speculators, and arbitrageurs with distinct objectives.
2. **Hedging**: Reduces risk from adverse interest rate movements.
3. **Speculation**: Aims to profit from predicted rate changes.
4. **Arbitrage**: Exploits price discrepancies for risk-free gains.
5. **Hedging Strategies**: Use futures/options to offset rate risk exposure.
6. **Speculative Strategies**: Leverage derivatives for high returns.
7. **Arbitrage Strategies**: Simultaneous trades in mispriced markets.
8. **Option Strategies**: Include covered calls, protective puts, and spreads.
9. **Covered Call**: Sell call options against owned underlying assets.
10. **Protective Put**: Buy puts to hedge against price declines.
11. **Bull Spread**: Buy low strike call, sell high strike call.
12. **Bear Spread**: Buy high strike put, sell low strike put.
13. **Straddle**: Buy call and put with same strike and expiry.
14. **Strangle**: Buy call and put with different strikes, same expiry.
15. **Butterfly Spread**: Combine bull and bear spreads for limited risk/reward.
16. **Condor Spread**: Similar to butterfly, with wider strike range.
17. **Spread Trading**: Uses price differences between contracts.
18. **Calendar Spread**: Trades contracts with different expiry dates.
19. **Hedging Limitation**: Basis risk from imperfect hedge alignment.
20. **Basis Risk**: Arises from mismatches in amount, maturity, or underlying.
21. **Cash Settlement Limitation**: Leads to imperfect hedging outcomes.
22. **Leverage Risk**: High leverage amplifies potential losses.
23. **Liquidity Risk**: May affect ability to enter/exit positions.
24. **Hedging Effectiveness**: Depends on correlation with underlying exposure.
25. **Speculative Risk**: High leverage increases loss potential.
26. **Arbitrage Challenges**: Requires precise timing and low transaction costs.
27. **Option Payoffs**: Vary based on strategy and market conditions.
28. **Risk-Reward Profiles**: Strategies balance potential gains and losses.
29. **Market Volatility**: Impacts strategy selection and outcomes.
30. **Regulatory Constraints**: Limit certain speculative strategies.
31. **Margin Requirements**: Apply to futures and option sellers.
32. **Trading Costs**: Impact profitability of speculative strategies.
33. **Contract Standardization**: Limits flexibility in hedging strategies.
34. **Price Transparency**: Aids in identifying arbitrage opportunities.
35. **Counterparty Risk**: Mitigated by exchange clearing mechanisms.
36. **Market Access**: Available to eligible entities under regulations.
37. **Hedging Tools**: Futures and options are primary instruments.
38. **Speculative Leverage**: Options provide high leverage potential.
39. **Arbitrage Execution**: Requires simultaneous market access.
40. **Spread Benefits**: Reduce risk compared to outright positions.
41. **Strategy Complexity**: Varies from simple hedges to complex spreads.
42. **Market Efficiency**: Enhanced by derivative trading strategies.
43. **Risk Management**: Central to hedging strategy design.
44. **Volatility Impact**: Higher volatility favors option-based strategies.
45. **Time Decay**: Affects option strategy performance.
46. **Delta Hedging**: Adjusts positions to maintain neutrality.

47. **Gamma Impact**: Influences delta hedging adjustments.
48. **Vega Sensitivity**: Critical for volatility-based strategies.
49. **Theta Decay**: Impacts long-term option strategies.
50. **Regulatory Compliance**: Ensures fair and transparent trading.

Chapter 6: Trading Mechanism in Exchange Traded Interest Rate Derivatives

1. **Trading Entities**: Include exchanges, brokers, and clearing corporations.
2. **Exchange Role**: Matches buyers and sellers for trades.
3. **Clearing Corporation**: Acts as central counterparty, guaranteeing trades.
4. **Trading System**: Electronic platforms ensure efficient trading.
5. **Order Types**: Market, limit, stop-loss, and spread orders.
6. **Order Management**: Involves order entry, modification, and cancellation.
7. **Risk Management**: Includes margins and position limits.
8. **Order Routing**: Directs orders to exchange trading systems.
9. **Price Limit Circuit Filter**: Caps price movements to prevent volatility.
10. **Trading Costs**: Include brokerage, exchange fees, and taxes.
11. **Market Orders**: Execute immediately at best available price.
12. **Limit Orders**: Execute at specified or better price.
13. **Stop-Loss Orders**: Trigger at predefined price to limit losses.
14. **Spread Orders**: Trade price differences between contracts.
15. **Co-Location**: Allows faster access to exchange trading systems.
16. **Market Makers**: Provide liquidity by quoting bid/ask prices.
17. **Trading Platforms**: Support real-time price dissemination.
18. **Order Book**: Displays all active buy and sell orders.
19. **Trade Execution**: Occurs when buy and sell orders match.
20. **Margin Calls**: Required to cover potential losses.
21. **Position Limits**: Restrict exposure to manage risk.
22. **Liquidity Provision**: Ensured by exchange mechanisms and market makers.
23. **Transparency**: Real-time price and volume data available.
24. **Regulatory Oversight**: SEBI ensures fair trading practices.
25. **Broker Role**: Facilitates client trades and compliance.
26. **Clearing Member**: Ensures trade settlement via clearing corporation.
27. **Trading Hours**: Defined by exchange for IRF and options.
28. **Order Validation**: Ensures compliance with exchange rules.
29. **Risk Controls**: Include pre-trade and post-trade checks.
30. **Circuit Breakers**: Halt trading during extreme volatility.
31. **Transaction Costs**: Impact profitability of frequent trading.
32. **Electronic Trading**: Enhances speed and efficiency.
33. **Order Priority**: Based on price and time of entry.
34. **Market Depth**: Reflects liquidity in the order book.
35. **Trade Confirmation**: Issued post-execution to both parties.
36. **Margin Types**: Initial, variation, and maintenance margins.
37. **Liquidity Risk**: Managed by exchange liquidity provisions.
38. **Technology Risks**: Include system glitches and connectivity issues.
39. **Broker Compliance**: Adheres to SEBI and exchange regulations.
40. **Order Modification**: Allows changes to price or quantity.
41. **Order Cancellation**: Removes unexecuted orders from the book.
42. **Spread Trading**: Exploits price differences for profit.
43. **Market Surveillance**: Monitors for manipulative practices.
44. **Trading Software**: Supports order entry and risk management.
45. **Counterparty Risk**: Mitigated by clearing corporation guarantees.
46. **Price Discovery**: Achieved through active trading and order book.

47. **Regulatory Reporting**: Brokers report trades to exchanges.
48. **Client Orders**: Executed based on client instructions and preferences.
49. **Exchange Fees**: Part of trading costs, vary by contract.
50. **Risk Disclosure**: Brokers inform clients of trading risks.

Chapter 7: Clearing, Settlement and Risk Management in Exchange Traded Interest Rate Derivatives

1. **Clearing Mechanism**: Ensures trade settlement via clearing corporation.
2. **Settlement Obligations**: Determined post-trade for funds and securities.
3. **Entities Involved**: Clearing corporations, members, and depositories.
4. **Interoperability**: Allows clearing through multiple corporations.
5. **Clearing Corporation Role**: Acts as central counterparty to mitigate risk.
6. **Position Limits**: Restrict exposure to manage systemic risk.
7. **Settlement Types**: Cash settlement predominant in Indian IRFs.
8. **Funds Settlement**: Involves transfer of cash obligations.
9. **Physical Settlement**: Not currently used in Indian ETIRDs.
10. **Risk Management**: Includes margins, position limits, and stress testing.
11. **Margin Types**: Initial, variation, and calendar spread margins.
12. **Core Settlement Guarantee Fund (SGF)**: Protects against member defaults.
13. **Margin Collection**: By clearing corporations to cover losses.
14. **Novation**: Clearing corporation becomes counterparty to both parties.
15. **Settlement Cycle**: Daily or on expiry, depending on contract.
16. **Default Management**: SGF covers losses from member defaults.
17. **Interoperability Benefits**: Enhances efficiency and competition.
18. **Position Monitoring**: Ensures compliance with regulatory limits.
19. **Risk Models**: SPAN model used for margin calculations.
20. **Stress Testing**: Assesses portfolio resilience under adverse scenarios.
21. **Margin Adjustments**: Variation margins reflect daily price changes.
22. **Funds Transfer**: Via designated banks for settlement obligations.
23. **Clearing Member Role**: Facilitates client trade clearing.
24. **Depository Role**: Manages securities for physical settlement (if applicable).
25. **Regulatory Oversight**: SEBI and RBI enforce clearing rules.
26. **Default Procedures**: Include use of SGF and member contributions.
27. **Margin Requirements**: Based on contract value and volatility.
28. **Settlement Guarantee**: Ensures completion of trades despite defaults.
29. **Risk Mitigation**: Through robust margin and position controls.
30. **Clearing Efficiency**: Enhanced by interoperability and technology.
31. **Daily Settlement**: Mark-to-market adjustments for futures.
32. **Final Settlement**: On expiry, based on contract terms.
33. **Calendar Spread Margin**: Lower margins for offsetting positions.
34. **SPAN Margin**: Scenario-based margin calculation method.
35. **Liquidity Risk**: Managed through clearing corporation guarantees.
36. **Counterparty Risk**: Eliminated via novation process.
37. **Regulatory Reporting**: Clearing members report to authorities.
38. **SGF Contributions**: Include exchange and member funds.
39. **Default Waterfall**: Sequence of resources to cover losses.
40. **Margin Calls**: Issued to cover shortfall in accounts.
41. **Settlement Delays**: Mitigated by strict timelines and penalties.
42. **Risk Exposure**: Monitored daily by clearing corporations.
43. **Interoperability Rules**: Defined by SEBI for clearing flexibility.
44. **Funds Availability**: Ensured for timely settlement obligations.
45. **Clearing Software**: Supports efficient trade processing.
46. **Position Limits Enforcement**: Prevents excessive risk concentration.

47. **SGF Adequacy**: Reviewed periodically to ensure sufficiency.
48. **Regulatory Compliance**: Critical for clearing and settlement integrity.
49. **Client Protection**: Ensured through SGF and margin systems.
50. **Cyber Security**: CSCRF framework protects trading infrastructure.

Chapter 8: Regulatory Framework for Exchange Traded Interest Rate Derivatives

1. **Securities Contracts (Regulation) Act, 1956**: Governs securities and derivatives trading.
2. **RBI-SEBI Standing Technical Committee**: Oversees currency and interest rate derivatives.
3. **RBI Guidelines**: Regulate bank participation in ETIRDs.
4. **SEBI Regulations**: Ensure fair and transparent derivative markets.
5. **FIMMDA Role**: Sets standards for fixed income and derivatives markets.
6. **Eligibility Criteria**: Defines membership requirements for ETIRD trading.
7. **Market Participants**: Include banks, financial institutions, and corporates.
8. **RBI Prudential Norms**: Ensure financial stability for bank members.
9. **SEBI Oversight**: Enforces compliance with trading regulations.
10. **FIMMDA Standards**: Promote best practices in derivatives markets.
11. **Membership Requirements**: Include capital adequacy and regulatory compliance.
12. **Bank Participation**: Allowed in currency derivatives with prudential norms.
13. **Regulatory Reporting**: Mandatory for brokers and clearing members.
14. **Market Integrity**: Ensured through SEBI and RBI guidelines.
15. **FIMMDA Guidelines**: Support transparent pricing and trading.
16. **Trading Restrictions**: Apply to certain entities and securities.
17. **Compliance Monitoring**: Conducted by exchanges and regulators.
18. **Capital Requirements**: Mandatory for ETIRD market participants.
19. **Regulatory Updates**: Reflected in March 2025 workbook revisions.
20. **Market Access**: Restricted to eligible, compliant entities.
21. **SEBI Circulars**: Provide detailed operational guidelines.
22. **RBI Directions**: Align ETIRDs with monetary policy objectives.
23. **FIMMDA's Role**: Enhances market efficiency and standardization.
24. **Membership Process**: Involves application and regulatory approval.
25. **Regulatory Penalties**: Imposed for non-compliance with rules.
26. **Market Surveillance**: Prevents manipulative trading practices.
27. **Bank Membership**: Subject to RBI's minimum prudential requirements.
28. **SEBI's Role**: Protects investors and ensures market fairness.
29. **FIMMDA's Influence**: Shapes fixed income market practices.
30. **Regulatory Framework**: Balances innovation and market stability.
31. **Compliance Audits**: Conducted to ensure adherence to rules.
32. **Membership Criteria**: Include financial and operational standards.
33. **Market Transparency**: Enhanced by regulatory reporting requirements.
34. **RBI-SEBI Coordination**: Ensures cohesive derivative market oversight.
35. **FIMMDA Membership**: Open to banks and financial institutions.
36. **Regulatory Updates**: Highlighted in yellow in March 2025 workbook.
37. **Trading Permissions**: Granted based on regulatory compliance.
38. **Market Conduct**: Governed by SEBI's code of conduct.
39. **Bank Regulations**: Align with Basel III capital norms.
40. **FIMMDA Standards**: Adopted by market participants for consistency.
41. **Regulatory Reporting**: Includes trade and position data.
42. **Membership Obligations**: Include timely reporting and compliance.
43. **Market Stability**: Supported by robust regulatory framework.
44. **SEBI Guidelines**: Cover trading, clearing, and settlement.
45. **RBI Oversight**: Ensures alignment with monetary policies.
46. **FIMMDA's Role**: Includes benchmark administration via FBIL.

47. **Compliance Enforcement**: Through penalties and suspensions.
48. **Market Access Rules**: Define eligible participants and activities.
49. **Regulatory Objectives**: Promote investor protection and market integrity.
50. **Membership Standards**: Ensure financial and operational robustness.

Chapter 9: Accounting and Taxation

1. **Accounting Guidelines**: Define treatment of ETIRD transactions.
2. **Disclosure Requirements**: Ensure transparency in financial statements.
3. **Taxation of ETIRDs**: Governed by Income Tax Act provisions.
4. **Derivative Accounting**: Records gains/losses based on contract type.
5. **Fair Value Accounting**: Applies to derivative instruments.
6. **Hedge Accounting**: Used for effective hedging relationships.
7. **Disclosure Norms**: Include risk exposure and accounting policies.
8. **Taxable Income**: Includes gains from ETIRD transactions.
9. **Mark-to-Market**: Reflects current market value in accounts.
10. **Hedge Effectiveness**: Assessed for hedge accounting eligibility.
11. **Tax Treatment**: Varies for speculative vs. hedging transactions.
12. **Financial Reporting**: Complies with Indian Accounting Standards.
13. **Derivative Gains**: Taxed as business or capital gains.
14. **Disclosure of Risks**: Includes market and credit risk details.
15. **Tax Deductions**: Available for losses in certain cases.
16. **Accounting Standards**: Align with Ind AS for derivatives.
17. **Speculative Transactions**: Taxed differently from hedging.
18. **Fair Value Gains**: Recognized in profit and loss statements.
19. **Hedge Documentation**: Required for hedge accounting compliance.
20. **Tax Reporting**: Mandatory for ETIRD transactions.
21. **Derivative Valuation**: Based on market prices or models.
22. **Tax Authorities**: Income Tax Department oversees compliance.
23. **Accounting Records**: Maintained for audit and regulatory purposes.
24. **Disclosure of Positions**: Includes open derivative contracts.
25. **Taxable Events**: Include settlement and exercise of contracts.
26. **Hedge Accounting Rules**: Specify criteria for qualification.
27. **Fair Value Changes**: Recorded in financial statements periodically.
28. **Tax Compliance**: Ensured through timely filings.
29. **Derivative Losses**: May offset other taxable income.
30. **Accounting Policies**: Disclosed in financial statement notes.
31. **Tax Rates**: Vary based on transaction type and entity.
32. **Hedge Effectiveness Testing**: Conducted periodically for compliance.
33. **Derivative Classification**: As trading or hedging instruments.
34. **Tax Implications**: Differ for residents and non-residents.
35. **Accounting Adjustments**: Reflect mark-to-market changes.
36. **Disclosure of Gains/Losses**: Enhances financial transparency.
37. **Tax Audits**: Verify compliance with tax regulations.
38. **Hedge Accounting Benefits**: Align income with hedged item.
39. **Derivative Reporting**: Includes notional and fair values.
40. **Tax Planning**: Considers ETIRD tax implications.
41. **Accounting Framework**: Aligns with SEBI and RBI guidelines.
42. **Disclosure of Risks**: Includes interest rate and counterparty risks.
43. **Taxable Gains**: Reported in annual tax returns.
44. **Hedge Documentation**: Includes risk management objectives.
45. **Fair Value Models**: Used when market prices are unavailable.
46. **Tax Exemptions**: Limited for ETIRD transactions.

47. **Accounting Audits**: Ensure compliance with standards.
48. **Derivative Taxation**: Complex due to varied transaction types.
49. **Disclosure Requirements**: Enhance investor confidence.
50. **Tax Compliance Deadlines**: Adhere to statutory timelines.

Chapter 10: Code of Conduct and Investor Protection Measure

1. **SEBI Code of Conduct**: Governs broker behavior and ethics.
2. **Investor Grievance Redressal**: Mechanisms to resolve client disputes.
3. **Online Dispute Resolution (ODR)**: Facilitates conciliation and arbitration.
4. **Investor Protection Fund (IPF)**: Compensates legitimate client claims.
5. **Power of Attorney (PoA)**: Optional, used for specific purposes.
6. **Demat Debit and Pledge Instruction (DDPI)**: Replaces PoA for settlement and pledging.
7. **KYC Requirements**: Mandatory for client onboarding and compliance.
8. **Broker Responsibilities**: Include fair dealing and transparency.
9. **Grievance Redressal**: Via SCOREs and ODR portals.
10. **Arbitration Process**: Quasi-judicial, resolves disputes online.
11. **IPF Contributions**: Include listing fees and penalties.
12. **PoA Usage**: Limited to settlement and margin obligations.
13. **DDPI Purpose**: Authorizes securities transfer for settlement.
14. **KYC Documents**: Include PAN, address, and financial details.
15. **Risk Disclosure**: Informs clients of trading risks.
16. **ODR Portal**: Facilitates online conciliation and arbitration.
17. **IPF Eligibility**: Covers legitimate, non-speculative claims.
18. **Broker Code**: Ensures ethical and transparent practices.
19. **Grievance Reporting**: Via SEBI's SCOREs platform.
20. **Arbitration Fees**: Vary based on claim value.
21. **PoA Restrictions**: Cannot be mandatory for account opening.
22. **DDPI Benefits**: Mitigates misuse of PoA.
23. **KYC Compliance**: Aligns with SEBI and AML regulations.
24. **Risk Disclosure Document**: Details market, liquidity, and leverage risks.
25. **ODR Process**: Includes conciliation before arbitration.
26. **IPF Trust**: Administers funds for client compensation.
27. **Broker Training**: Ensures staff handle grievances effectively.
28. **Arbitration Awards**: Enforceable with regulatory oversight.
29. **PoA Misuse**: Prevented through SEBI guidelines.
30. **DDPI Usage**: Limited to settlement and pledging purposes.
31. **KYC Verification**: Includes e-KYC via UIDAI.
32. **Risk Categories**: Low, medium, high based on client profile.
33. **Suspicious Transaction Reporting (STR)**: To Financial Intelligence Unit (FIU).
34. **IPF Funding**: From exchange contributions and penalties.
35. **ODR Venue**: Based on investor's residence or registration.
36. **Broker Compliance**: Adheres to SEBI and exchange rules.
37. **Arbitration Challenges**: Require deposit of award amount.
38. **KYC Documents**: Include ITR, bank statements, and net-worth certificates.
39. **Risk Disclosure Types**: Include market, liquidity, and basis risks.
40. **STR Reporting**: Within 7 days of identifying suspicious transactions.
41. **IPF Compensation**: Limited to set per-investor caps.
42. **ODR Fees**: Non-refundable, vary by claim size.
43. **PoA Limitations**: Exclude off-market securities transfers.
44. **DDPI Implementation**: Enhances transparency in settlements.
45. **KYC Norms**: Include anti-money laundering compliance.
46. **Risk Disclosure Importance**: Ensures informed client decisions.

47. **IPF Review**: Conducted half-yearly for adequacy.
48. **Arbitration Timelines**: Strict deadlines for fee deposits.
49. **Broker Obligations**: Include timely grievance redressal.
50. **Investor Protection**: Central to SEBI's regulatory framework.

Formulas

1. **Effective Interest Rate**: [(1 + annual interest rate / n)^n – 1]
2. **Real Interest Rate (Approximation)**: r = R - i
3. **Real Interest Rate (Exact)**: (1 + r) × (1 + i) = (1 + R)
4. **Interest Rate Futures Price**: Spot Price + (Cost of Carry - Coupon/Accrued Interest)
5. **Call Option Payoff**: Max(0, S - K) - Premium
6. **Put Option Payoff**: Max(0, K - S) - Premium

IMPORTANT NOTE :

1. Attend **ALL** Questions.
2. For the questions you don't know the right answer – Try to eliminate the wrong answers and take a guess on the remaining answers.
3. DO NOT MEMORISE the questions & answers. It's not the right to way to prepare for any NISM exam. Good understanding of Concepts is essential.

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All the Best ☺

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