Annexure 2: Test Objectives

NISM Series-XXI-B: Portfolio Managers Certification Examination

1. **Investments Landscape**
   - 1.1. Define Investment
   - 1.2. Distinction between Investment and Speculation
   - 1.3. Know the objectives of Investments
   - 1.4. Estimating the required rate of return
     - 1.4.1. Concept of Nominal rate of return, Real Risk free rate and Expected Inflation
     - 1.4.2. Concept of Risk Premium
     - 1.4.3. Understand the various types of risks
       - Business Risk
       - Financial Risk
       - Liquidity Risk
       - Exchange rate Risk
       - Political Risk
       - Geopolitical Risk
       - Regulatory Risk
     - 1.4.4. Understand the relationship between risk and return
   - 1.5. Know the types of Investments and their role and characteristics
     - 1.5.1. Equity
     - 1.5.2. Fixed Income Securities
     - 1.5.3. Commodities
     - 1.5.4. Real Estates
     - 1.5.5. Structured products
     - 1.5.6. Distressed Securities
     - 1.5.7. Other Investment Opportunities
   - 1.6. Know the channels for making investments
     - 1.6.1. Direct investments
       - Understanding the role of Registered Investment Advisers (RIAs)
     - 1.6.2. Investments through managed portfolios
       - Mutual Funds
       - Alternative Investment Funds
       - Portfolio Managers
       - Collective Investment Schemes
2. **Introduction to Securities Markets**
   - 2.1. Define the term Security and understand the basics of Securities Markets
   - 2.2. Understand the structure of securities markets with a discussion on primary and secondary markets
     - 2.2.1. Primary market: Explain various ways to issue Securities - Initial Public Offer, Follow on Public Offer, Private Placement, Qualified Institutional Placements, Preferential issue, Rights and Bonus issue, Onshore and offshore offerings, Offer for Sale, Employee Stock

Ownership Plan. FCCBs, ADR / GDR, Concept of Anchor Investors in IPO and Pre-IPO placement.

2.2.2. Secondary market: Over-the-counter Market and Exchange Traded Markets, Trading, Clearing and Settlement and Risk Management

2.3. Know the various market participants and their activities

2.3.1. Market Infrastructure Institutions and other Intermediaries: Stock Exchanges, Depositories, Depository Participant, Trading Member/Stock Brokers, Authorized Person, Custodians, Clearing Corporation, Clearing Banks, Merchant Bankers and Underwriters

2.3.2. Institutional participants: Foreign Portfolio Investors, P-Note Participants, Mutual Funds, Insurance Companies, Pension Funds, Venture Capital Funds, Private Equity Firms, Hedge Funds, Alternative Investment Funds, Investment Advisers, EPFO, NPS, Family Offices, Corporate Treasuries

2.3.3. Retail participants

3. Investing in Stocks

3.1. Understand the Equity as an investment

3.2. Know the Diversification of risk through equity instruments - Cross sectional versus time series

3.3. Discuss the types of Risks of equity investments

3.3.1. Market risk

3.3.2. Sector specific risk

3.3.3. Company specific risk

3.3.4. Liquidity risk

3.4. Understand the Overview of Equity Market

3.5. Know the Equity research and stock selection

3.5.1. Fundamental Analysis

- Top Down approach versus Bottom up Approach
- Buy side research versus Sell Side Research

3.5.2. Stock Analysis process

- Economy Analysis
- Industry/Sector Analysis
- Company Analysis

3.5.3. Fundamentals Driven model-Estimation of Intrinsic Value

- Discounted Cash Flow Model
- Other fundamental driven models

3.5.4. Market driven Model - Relative Valuation

- Price to Earnings (P/E) Ratio
- Price to Book value (P/B) Ratio
- Price to Sales (P/S) Ratio
- Price Earning to Growth (PEG) Ratio
- Economic Value Added (EVA) and Market Value Added (MVA)
- Earning Before Interest and Tax (EBIT)/EV and EV/EBITDA Ratio
- Enterprise Value (EV)/Sales (S) Ratio
- Industry/sector specific valuation metrices

- 3.5.5. Combining relative valuation and discounted cash flow models
- 3.6. Understand the Technical Analysis
  - 3.6.1. Assumptions of technical analysis
  - 3.6.2. Technical versus Fundamental Analysis
  - 3.6.3. Advantages of technical Analysis
  - 3.6.4. Technical Rules and Indicators
  - 3.6.5. Fixed income securities and Technical analysis
- 3.7 Understanding corporate governance

4. Investing in Fixed Income Securities

- 4.1. Understand the Overview of Fixed Income Securities
- 4.2. Know the Bond Characteristics
  - 4.2.1. Bonds with Options
- 4.3. Discuss the Determinants of bond safety
- 4.4. Understand the Analysis and Valuation of Bonds
  - 4.4.1. Bond Pricing
  - 4.4.2. Bond Yield Measures
    - Couple Yield
    - Current Yield
    - Yield to Maturity
    - Yield to call/put
- 4.5. Know the Measuring price volatility for bonds
  - 4.5.1. Interest rate risk
- 4.6 Determining duration

5. Derivatives

- 5.1. Define Derivatives
- 5.2. Know the types of derivative products
  - 5.2.1 Forwards
  - 5.2.2 Futures
  - 5.2.3 Options
  - 5.2.4 Swaps
- 5.3. Discuss the Structure of derivative markets
  - 5.3.1. OTC
  - 5.3.2. Exchange Traded Markets
- 5.4. Know the Purpose of Derivatives
- 5.5. Understand the concept of commodity, currency future and options
- 5.6. Understand the underlying concepts in derivatives
  - Zero Sum Game
  - Settlement Mechanism
  - Arbitrage
  - Margining Process
  - Open Interest

6. **Mutual Funds**
    6.1. Understand the Concept and Role of Mutual Fund
    6.2. Know the Benefits of investing through mutual funds
    6.3. Discuss the Legal Structure of Mutual Fund in India
    6.4. Understand the Working of mutual funds
    6.5. Know the Types of Mutual fund products
    6.6. Understand the Processes of investing in mutual funds
        6.6.1. Systematic transaction
    6.7. Discuss the Legal and Regulatory Framework – Key SEBI Regulation
    6.8. Understand the Fact Sheet - Scheme Related Information
        6.8.1. Reading mutual fund information
    6.9. Understand the concept of Net Asset Value, Total Expense Ratio, Pricing of Units
    6.10. Understand the Mutual Fund Scheme Performance
    6.11. Know the Key performance measures
7. **Role of Portfolio Managers**
    7.1. Understand the Overview of portfolio managers in India
    7.2. Know the Types of portfolio management services
        7.2.1. Discretionary services
        7.2.2. Non-discretionary services
        7.2.3. Advisory services
    7.3. Discuss the Organisational structure of PMS in India
    7.4. Understand the Registration requirements of a Portfolio Manager
    7.5. Know the Responsibilities of a Portfolio Manager
    7.6. Discuss the Administration of investor's portfolio
        7.6.1. Defining the universe of securities for the purpose of investments
        7.6.2. Circumstances leading to pre-mature withdrawal of funds
        7.6.3. Do's and don'ts for the portfolio managers
        7.6.4. Appointment of custodian
        7.6.5. Maintenance of records
        7.6.6. Accounts and audit
        7.6.7. Appointment of compliance officer
8. **Operational Aspects of Portfolio Managers**
    8.1. Know the entities which can invest in PMS
    8.2. Discuss the Disclosures to the prospective clients
        8.2.1. Best Practices for the disclosures – Global Investment Performance Standards (GIPS)
    8.3. Know the process of on-boarding of clients
        8.3.1. Content of agreement between the portfolio manager and investor
    8.4. Know the Direct On-boarding in PMS
        8.4.1. Process Flow
        8.4.2. Joint Holder in PMS
    8.5. Know the Liability in case of Default
    8.6. Discuss the Redressal of Investors grievances
    8.7. Discuss the Disclosures to the regulator
        8.7.1. Disclosures to SEBI
        8.7.2. Disclosures to Financial Intelligence Unit - India

8.8. Know the Costs, expenses and fees of investing in PMS
   8.8.1. High watermark principle
   8.8.2. Hurdle Rate

9. Portfolio Management Process

9.1. Understand the Importance of Asset allocation decision
9.2. Understanding correlation across asset classes and securities
9.3. Know the Steps in Portfolio Management Process
   9.3.1. Investment Policy Statement, IPS
   9.3.2. Need for IPS
   9.3.3. Constituents of IPS
   9.3.4. Investment Objectives
   9.3.5. Investment Constraints
   - Liquidity constraint
   - Regulatory constraint
   - Tax Constraint
   - Exposures limits to different sectors, Entities and Asset Classes
   - Unique needs and preferences

   9.3.6. Assessments of needs and requirements of investor
   9.3.7. Analyzing the financial position of investor
   9.3.8. Psychographic analysis of investor
   9.3.9. Life cycle analysis of investor
   9.3.10. Forecasting risk and return of various asset classes
   9.3.11. Benchmarking the client’s portfolio
9.4. Know the Asset allocation decision
9.5. Discuss the Strategic versus Tactical Asset Allocation
   9.5.1. Importance of Asset Allocation decision – empirical support
9.6. Understand the Rebalancing of Portfolio
   9.6.1 Benefits and difficulties of rebalancing

10. Taxation

10.1. Discuss the Taxation of investors
   10.1.1. Residential status
   10.1.2. Place of Effective Management
   10.1.3. Scope of total income
   10.1.4. Characterization of Income
10.2. Know the Taxation of various streams of income
   10.2.1. Capital Gains
   10.2.2. Dividend income
   10.2.3. Interest income
   10.2.4. Business income
   10.2.5. Entitlement of benefit under Double Tax Avoidance Agreement (DTAA)
10.3. Understand the Section 9A of Income Tax Act

11. Regulatory, Governance and Ethical Aspects of Portfolio Managers

11.1. Understand the Prevention of Money Laundering Act, 2002
11.2. Understand the SEBI (Prohibition of Insider Trading) Regulation 2015

- 11.3. Understand the SEBI (Prohibition of Fraudulent and Unfair Trade Practices Relating to Securities Market) Regulations, 2003
- 11.4. Understand the Securities and Exchange Board of India (Portfolio Managers) Regulations, 2020
- 11.5. Know the best practices for portfolio managers
  - 11.5.1 Research objectivity
  - 11.5.2 Soft dollar practices

12. Introduction to Indices

- 12.1. Understand what is an Index
- 12.2. Know the Uses of Indices
- 12.3. Discuss the Factors differentiating the indices
  - 12.3.1 Price weighted index
  - 12.3.2 Value weighted index
  - 12.3.3 Equal weighted index
  - 12.3.4 Fundamental weighted and factor-based index
- 12.4. Know How indices are created – Index Methodologies
- 12.5. Discuss the Stock market indices
  - 12.5.1. Broad based indices
  - 12.5.2. Market capitalization-based indices
  - 12.5.3. Style indices
  - 12.5.4. Capitalization and style indices
  - 12.5.5. Sectoral index
  - 12.5.6. Total Return Index
  - 12.5.7. Dollar denominated index
  - 12.5.8. Global Equity Indices
  - 12.5.9. MSCI Indices for India
- 12.6. Discuss the Bond market indices
  - 12.6.1. Government Securities Index
  - 12.6.2. Corporate Bond Index
  - 12.6.3. High Yield Bond Index
  - 12.6.4. Global Bond Index
  - 12.6.5. Total Return Index
- 12.7. Discuss the Stock-Bond (Composite) Indices

13. Concept of Informational Efficiency

- 13.1. Distinction between Informational efficiency and Operational Efficiency
- 13.2. Understand Efficient Capital markets and random walk theory
  - 13.2.1. Weak-form of efficiency
  - 13.2.2. Semi-strong-form of efficiency
  - 13.2.3. Strong-form of efficiency
- 13.3. Know the Tests and Results of Efficient Market Hypotheses
- 13.4. Market Anomalies
  - 13.4.1. The Calendar (January) Anomaly
  - 13.4.2. The Size Anomaly
  - 13.4.3. The Value Anomaly
- 13.5. Discuss the Implication of market efficiency on Valuation and Portfolio Management

- 13.5.1. Market Efficiency and Technical Analysis
- 13.5.2. Market Efficiency and Fundamental Analysis
- 13.5.3. Internal contradiction in the concept of efficiency
- 13.5.4. Market Efficiency and the rise of index fund

14. Behavioral Finance

- 14.1. Distinction between Behavioral Finance and Standard Finance
- 14.2. Discuss how individuals make decision?
  - 14.2.1. Bounded Rationality
  - 14.2.2. Prospect Theory
- 14.3. Understand the Categorization of Biases
  - 14.3.1. Emotional Biases
    - Loss aversion Bias
    - Stereo Typing Bias
    - Overconfidence Bias
    - Endowment Bias
    - Status Quo Bias
  - 14.3.2. Cognitive errors
    - Mental accounting
    - Framing
    - Anchoring
- 14.4. Discuss Fusion Investing
- 14.5. Understand behavioural finance and market anomalies
  - 14.5.1. Market Anomalies
  - 14.5.2. Bubbles and crashes

15. Introduction to Modern Portfolio Theory

- 15.1. Discuss the Framework for constructing portfolios – Modern Portfolio Theory
- 15.2. Know the Assumptions of the theory
- 15.3. Definition of risk averse investors, Risk Seeking Investors and Risk Neutral Investors
- 15.4. Calculation of expected rate of return for individual security
- 15.5. Calculation of Variance of return for individual security
- 15.6. Calculation of expected rate of return for a portfolio
- 15.7. Calculation of Variance of return for a portfolio
  - Calculating risk for two securities Portfolio
  - Calculating risk for three securities Portfolio
- 15.8. Understand the graphical presentation of portfolio risk/return of two securities
- 15.9. Understand the concept of Efficiency Frontier
- 15.10. Know the Portfolio Optimization process
- 15.11. Discuss Estimation issues

16. Introduction to Capital Market Theory

- 16.1. Introduction to Capital Market Theory
- 16.2. Understand the Assumptions of Capital Market Theory and the implications of relaxing these assumptions
- 16.3. Discuss the Capital Market line
- 16.4. Know the Diversification of risk and market portfolio

16.5. Know the Types of risk – Market and Non-market risk
16.6. Understand the Capital Asset Pricing Model, CAPM
16.7. Discuss the Security Market Line
16.8. Understand the concept of Market Portfolio
16.8.1. Time variability of market risk
16.9. Know the Empirical test of CAPM
16.10. Understand the Multi factor models of risk and return

17. Risk

17.1. Definition of Risk
17.2. Understand the Process of risk management
17.3. Know the Different kinds of risk
17.3.1. Market Risk
17.3.2. Non-market risk
17.3.3. Liquidity Risk
17.3.4. Operational Risk
17.3.5. Regulatory Risk
17.3.6. Legal Risk
17.3.7. Geo-Political Risk
17.3.8. Currency risk
17.3.9. Country Risk
17.3.10. Concentration Risk
17.3.11. Pandemic Risk
17.4. Understand the Measuring Risk
17.4.1. Measuring market risk
17.4.2. VAR
17.4.3. Stress testing
17.4.4. Measuring liquidity risk
17.4.5. Measuring credit risk
17.5. Understand the Managing Risk
17.5.1. Managing market risk
17.5.2. Managing non-market risk
17.5.3. Managing Risk that cannot be managed

18. Equity Portfolio Management Strategies

18.1. Know the Passive management strategies
18.1.1. Buy and hold
18.1.2. Indexing
18.1.3. Distinguish between Buy and Hold and Indexing
18.1.4. Indexing portfolio construction techniques
- Full replication
- Sampling

18.2. Know the Active management strategies
18.2.1. Market timing
18.2.2. Sector rotation
18.3. Understand the fundamental law of active management
18.3.1. Information coefficient

18.3.2. Breadth of analysis

18.4. Discuss the Active versus passive management

18.4.1. Role of indices in driving passive flows

18.4.2. Choices of index

18.4.3. Rebalancing of indices and fund flow implication

18.5. Understand the Smart Beta management strategies

18.5.1. Enhanced indexing

18.6. Know the Factor-based portfolios

18.6.1. Macro-economic factor driven portfolio

18.6.2. Fundamental factor driven portfolio

18.6.3. Model driven portfolio

18.7. Discuss the Momentum Investing

18.8. Discuss the Investment Management Styles

18.8.1. Growth Investment Style

- Screens for identifying growth stocks

18.8.2. Value Investment Style

- Screens for identifying value stocks

18.8.3. Blended Investment Style

18.9. Understand the Socially responsible investing/ethical investing

18.10. Discuss Core and satellite investment management approach

18.11. Understand the concept of Alpha beta Separation

18.12. Discuss the Constructing Equity portfolios with derivative securities

18.13. Know the Protecting portfolios with Put options

18.14. Discuss the Global Active Strategy

18.14.1. Global market for equities

- Benefits and costs of globally diversified portfolios

18.14.2. Emerging markets equities versus developed market equities

18.14.3. Market capitalization versus GDP

18.14.4. Home (Familiarity) Bias

18.14.5. Implications of rise of Index Funds on cost of portfolio management, investor returns and implications for Active Management

19. Fixed Income Portfolio Management Strategies

19.1. Introduction to Fixed Income Instruments

19.2. Know the Passive management strategies

19.2.1. Buy and hold strategy

19.2.2. Bond index funds

19.2.3. Immunization

19.3. Know the Active Management Strategies

19.3.1. Interest Rate driven Strategy

19.3.2. Credit Analysis

19.4. Discuss Global Fixed Income Strategy

19.4.1 Risks in Global Investment

19.5. Understand the Constructing bond portfolios with derivative securities

19.6. Discuss the Protecting portfolios with derivatives

20. Performance measurement and evaluation of Portfolio Managers

20.1. Discuss Parameters to define performance – risk and return
20.2. Know the Rate of return measures
- 20.2.1. Holding Period Return
- 20.2.2. Time-weighted versus Money weighted rate of return
- 20.2.3. Arithmetic mean return versus geometric mean return
- 20.2.4. Gross return versus net return
- 20.2.5. Pre-tax versus post tax return
- 20.2.6. CAGR
- 20.2.7. Annualizing return
- 20.2.8. Cash drag adjusted return
- 20.2.9. Alpha and Beta return
- 20.2.10. Portfolio Return

20.3. Understand the Risk measures
- 20.3.1. Total risk and downside risk
- 20.3.2. Portfolio risk versus individual risk
- 20.3.3. Systematic risk and unsystematic risk
- 20.3.4. Tracking error

20.4. Understand the Risk adjusted return measures
- 20.4.1. Sharpe Ratio
- 20.4.2. Treynor Ratio
- 20.4.3. Sortino Ratio
- 20.4.4. Information Ratio
- 20.4.5. Modigliani and Modigliani Ratio (M2)

20.5. Understand the Performance Evaluation: Benchmarking and peer group analysis
- 20.5.1. Characteristics of Indices for benchmarking
- 20.5.2. Customized benchmark
- 20.5.3. Managers' universe analysis

20.6. Understand the Performance attribution analysis
- 20.6.1. Assets and Sector Allocation
- 20.6.2. Selection
- 20.6.3. Local currency versus foreign currency denominated investment return

20.7. Understand the Performance reporting to the Investor
20.8. Discuss the Due Diligence and Portfolio Manager selection
20.9. Global Investment Performance Standards
20.10. GIPS Advertisement Guidelines

21. Portfolio Rebalancing

21.1 Understand the Need for rebalancing
21.2 Know the Cost and difficulties of rebalancing
21.3 Discuss the Periodicity of rebalancing
- 21.3.1 Time versus threshold-based rebalancing

21.4 Understand the Buy and Hold Strategy
21.5 Discuss Constant Mix Strategy
21.6 Understand Constant Proportion Portfolio Insurance