

Annexure II: 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 metrics

- 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
 - Coupon 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

- Performance Benchmarking

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
- 11.6. Investor Charter for Portfolio Management Services

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. Behavioural Finance

- 14.1. Distinction between Behavioural 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. Understand the Valuation of Securities by Portfolio Managers
- 20.9. Discuss the Due Diligence and Portfolio Manager selection
- 20.10. Global Investment Performance Standards
- 20.11. 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