

## COC204 Security Analysis and Portfolio Management [4 Credits]

**Learning Objectives:** This course aims at providing the students a comprehensive introduction to the areas of security analysis and portfolio management and equipping them with advanced tools and techniques for making profitable investment decisions.

### UNIT 1: Investment – Risk and Return Analysis (12 Hours)

**Investment and Types Of Investments :** Meaning – Investment Objectives – Investment Process - Factors – Investment Avenues in India – Government Securities – Money Market Instruments – Equity – Bonds – Mutual Funds – Financial Derivatives – **Return Measurement:** Return – Meaning – Holding Period Return – Expected Value of Return – Measuring Returns from Historical Data – Measuring Average Returns Over Multiple Period – Arithmetic Average Returns – Geometric Average Return – Rupee Weighted Average Return **(Including Problems)** - **Risk Measurement:** Risk – Meaning – Source of Risk – Market Risk – Interest Risk – Purchasing Power Risk – Business Risk – Financial Risk – Types of Risk – Systematic Risk – Un-Systematic Risk – Measurement of Risk – Standard Deviation as a Measure of Risk –  $\beta$  As a Measure of Risk (Including Problems) – Measurement of Risk and Return of Securities **(Including Problems)**

### UNIT 2: Valuation of Securities (12 Hours)

**Fixed Income Securities:** Types of Fixed Income Securities – Risk and Return Analysis of Fixed Income Securities – Alternative Investments of Fixed Income Securities – **Bonds:** Types of Bonds – Valuation of Bonds – Types of Returns on Bonds – Pricing of Bonds - Yield Curve - Bond Duration and Convexity – Immunization of Bonds **(Including Problems)**

**Share Valuation:** Concept of Present Value – Share valuation Model – Dividend Discount Model - One Year Holding Period – Multiple Year Holding Period – Constant Growth Model – Multiple Growth Model – Multiplier Approach to Share Valuation **(Including Problems)**

### UNIT 3: Security Analysis (12 Hours)

**FUNDAMENTAL ANALYSIS:** Meaning – Objectives and Beliefs of Fundamental Analysis – Economy Analysis – Economic Forecasting – Forecasting Techniques – Industry Analysis – Industry Life Cycle – Industry Characteristics – Company Analysis – Source Information for **COMPANY ANALYSIS** – Operating Analysis – Management Analysis – Financial Analysis - Types of Financial Statements – Analysis Of Financial Statements – Earnings Quality Estimations - **TECHNICAL ANALYSIS:** Meaning – Assumption of Technical Analysis - Dow Theory – Trends and Trend Reversal – Oscillators – Relative Strength Index – Charting – Types of Price Charts – Price Patterns - **EFFICIENT MARKET THEORY:** Random Walk Theory – The Efficient Market Hypothesis – Forms of Market Efficiency – Test of Efficient Market Hypothesis.

### UNIT 4: Portfolio Selection Models (12 Hours)

**Markowitz's Modern Portfolio theory** – Assumptions – Construction of Portfolio with Two Securities – Diversification– **Sharpe Single Index Model** – Measuring Security Returns and Risk – Measuring Portfolio Return and Risk – **Capital Asset Pricing Model (CAPM)** – Riskless Lending and Borrowing Portfolios – Capital Market Line (CML) – Security Market Line (SML) – Pricing of Securities with CAPM – Limitations Of CAPM – **Arbitrage Pricing Theory** – Assumptions – Arbitrage Pricing for One Risk Factor – Two Factor Arbitrage Pricing – Multiple Arbitrage Pricing. **(Including Problems)**

### UNIT 5: Portfolio Performance Evaluation and Revision (12 Hours)

**Portfolio Performance Evaluation** – Need – Meaning – Risk Adjusted Returns – Performance Evaluation Ratios – Sharpe's Ratio – Treynor's Ratio – Jensen Ratio– **Portfolio Revision** – Need for Revision – Meaning – Constraints – Portfolio Revision strategies – Formula Plans – Constant Rupee Value Plan – Constant Ratio Plan – Dollar Cost Averaging **(Including Problems)**

### Suggested Readings:

1. Fischer & Jordan, Security Analysis and Portfolio Management, Prentice Hall India.
2. Punithavathy Pandian, Security Analysis and Portfolio Management, Vikas Publishing House Pvt. Ltd.

3. I. M. Pandey, Financial Management, Vikas Publishing House Pvt. Ltd.
4. Martin Pring, Technical Analysis Explained, McGraw Hill.
5. V. A. Avadhani, Investment and Securities Market in India, Himalaya Publishing House.
6. D. C. Patwari, Options and Futures: Indian Perspective, Jaico Publishing House.
7. Hull, Introduction to Futures and Options, Prentice Hall.
8. Richard Waldron, An Introduction to Commodity Trading, Quantum Publishing.
9. Nick Battley, Introduction to Commodity Futures and Options, Irwin
10. French, Don, Security and Portfolio Analysis, Merrill Publishing Co.
11. Preeti Singh, Investment Management, Himalaya Publishing.
12. Devin S., Portfolio Management, Prentice Hall.
13. Cheney, Muses, Fundamentals of Investments
14. V. K. Bhalla, Portfolio Analysis and Management, Sultan Chand & Sons
15. Agarwal, A Guide to Indian Capital Markets, New Delhi.
16. Jack Clark Francis and Richard W. Taylor, Investment, Schaum's outline series, Tata McGraw Hill.