## SEMESTER – V

## PAPER- 5.4

## INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT

## Full Marks:100

**Objective**: The aim of this course is to provide a conceptual framework for analysis froman investor's perspective of maximizing return on investment – a sound theoretical basewith examples and references related to the Indian financial system.

**Course Contents:**

**Unit I**

**Basics of Risk and Return**: concept of returns, application of standard deviation, coefficientof variation, beta, alpha.
**(5L)**

**Bonds** : present value of a bond, yield to maturity, yield to call, yield to put, systematic risk, price risk, interest rate risk, default risk. Yield curve and theories regarding shape of yield curve. Unsystematic risk and non-risk factors that influence yields.Duration and modified duration, immunization of a bond portfolio. **(8L)**

**Fundamental Analysis**: EIC framework; Economic analysis: Leading lagging & coincidentmacro-economic indicators, Expected direction of movement of stock prices withmacroeconomic variables in the Indian context; Industry analysis: stages of life cycle,Porter's five forces model, SWOT analysis, financial analysis of an industry; Companyanalysis. **(5L)**

**Unit II**

**Share Valuation**: Dividend discount models- no growth, constant growth, two stagegrowth model, multiple stages; Relative valuation models using P/E ratio, book value tomarket value.

**(5L)**

**Technical Analysis**: meaning, assumptions, difference between technical and fundamental analysis; Price indicators- Dow theory, advances and declines, new highs and lows- circuit filters. Volume indicators- Dow Theory, small investor volumes. Other indicators- futures, institutional activity, Trends: resistance, support, consolidation, momentum- Charts: line chart, bar chart, candle chart, point & figure chart. Patterns: head & shoulders, triangle, rectangle, flag, cup & saucer, double topped, double bottomed, Indicators: moving averages.**(10L)**

**Efficient Market Hypothesis**; Concept of efficiency:Random walk, Three forms of EMH and implications for investment decisions. (Nonumerical in EMH and technical analysis)

**(5L)**

**Unit III**

**Portfolio Analysis**: portfolio risk and return, Markowitz portfolio model: risk and returnfor 2 and 3 asset portfolios, concept of efficient frontier & optimum portfolio. MarketModel: concept of beta systematic and unsystematic risk. Investor risk and returnpreferences: Indifference curves and the efficient frontier, Traditional portfoliomanagement for individuals: Objectives, constraints, time horizon, current wealth, taxconsiderations, liquidity requirements, and anticipated inflation, Asset allocation: Assetallocation pyramid, investor life cycle approach, Portfolio management services: Passive– Index funds, systematic investment plans. Active – market timing, style investing. **(10L)**

**Unit IV**

**Capital Asset Pricing Model (CAPM)**: Efficient frontier with a combination of risky andrisk free assets. Assumptions of single period classical CAPM model, Sharpe Index model,Characteristicline,Capital Market Line, Security market Line. Expected return, required return, overvalued and undervalued assets.
**(7L)**

**Mutual Funds** :I ntroduction, calculation of Net Asset Value(NAV) of a Fund, classification of mutual fund schemes by structure and objective,advantages and disadvantages of investing through mutual funds. Performance Evaluationusing Sharpe's Treynor's and Jensen's measures. **(5L)**

**Unit V:**

**Derivatives** – Concept of forwards, futures, valuation of futures, Options – Types of options, problems on call and put options with different strategies, Black Scholes Option Pricing Model. **(10L)**

**References:**

1. Fischer, D.E. & Jordan, R.J.: Security Analysis & Portfolio Management, PearsonEducation.

2. Sharpe, W.F., Alexander, G.J. & Bailey, J.: Investments, Prentice Hall of India.

3. Singh,R: Security Analysis & Portfolio Management . Excel Books.

4. Frank K Reilly & Keith C Brown: Investment Analysis and Portfolio Management,Cenage India Pvt. Ltd.