| | |
|---|---|
| **Semester: VII** | |
| **Course Title: SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT** | |
| **Course Code: C4BC230751T** | **Credits: 5** |
| **Category: MAJOR (CORE)** | |
| **Theory/Practical/Composite : Theory** | |

**Course Overview:** Security Analysis gives an overview of the financial market in which an investor shall invest in multiple securities. The subject makes the students aware of the various parameters that needs to be considered for an investment. The Portfolio Management part is an application of the concepts of security analysis, taking into account the real world risks and opportunities. This part deals with different types of investors and the various avenues of investment options that exist in the financial markets. The optimum balance between risk and return is not easy to achieve. However, the students will learn the theoretical backdrop and practical application of the same.

**Course Outcome:**

CO1: Students will be able to understand and recall the fundamental concepts, principles, and practices of investment decision-making.
*Cognitive Level:* **Remember (K1), Understand (K2)**
CO2: Students will be able to analyze and evaluate investment alternatives and securities using key financial concepts, valuation models, and data interpretation.
*Cognitive Level:* **Analyze (K4), Evaluate (K5)**
CO3: Students will be able to design and justify investment strategies through technical analysis and portfolio management techniques.
*Cognitive Level:* **Apply (K3), Create (K6)**
CO4: Students will be able to evaluate risk and return relationships, formulate solutions for bond valuation, and justify investment decisions based on the Efficient Market Hypothesis.
*Cognitive Level:* **Evaluate (K5), Create (K6)**
CO5: Students will be able to analyze and compare securities and portfolios using indices and models such as CML, SML, and CAPM to support investment decision-making.
*Cognitive Level:* **Analyze (K4), Evaluate (K5)**

**Prerequisites: (for example -** ***Basic knowledge about any prior course)***
1.Basic knowledge of Accounting and Financial Statements
2.Fundamentals of Economics
3. Introduction to Finance/Financial Management

**SYLLABUS**

| **Unit with topic name** | **Content** | **Number of Classes** | **CO Mapping** | **Cognitive Level** |
|---|---|---|---|---|
| **I. Introduction** | a.**Introduction:** Meaning of investment – speculation and Gambling<br>b. Investment avenues - Types of investors – Investment objectives 1.3 The investment process – Meaning of security – Types of securities – Meaning of security analysis-- sources of financial information. | **5** | **CO1 and CO2 (recall and recognise)** | **Remember (K1), Understand (K2), Analyze (K4), Evaluate (K5)** |
| **II. Fundamental Analysis** | **Fundamental analysis:** Economic analysis, industry analysis and company analysis. | **7** | **CO2 and CO4 (Organise and evaluate)** | **Analyze (K4), Evaluate** |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | **(K5), Evaluate (K5), Create (K6)** |
| **III.** | **Valuation of securities** | **3.1 Valuation of securities**: preference shares, equity shares —<br>3.1.1 Constant Growth model,<br>3.1.2 Two- Stage Growth model,<br>3.1.3 The Three-Phase Model,<br>3.1.4 Valuation through P/E ratio<br>3.2 Free Cash Flow Valuation | **8** | **CO2 and CO3 (processing and implementing** | **Analyze (K4), Evaluate (K5) Apply (K3), Create (K6)** |
| **IV.** | **Technical Analysis** | **Technical Analysis** - Meaning and Assumptions of technical analysis<br>4.1.1 Trend lines and their significance<br>4.1.2 Market indicators – The Dow theory, Market indices<br>4.1.3 Mutual fund activity<br>4.1.4 Confidence level<br>4.1.5 Price indicators<br>4.1.6 Support and Resistance levels<br>4.1.7 Gap analysis - New high-low – The most active list – Moving averages of stock prices – Volume indicators- Price-volume relationship – Short selling – Breadth of market (Advance/Decline) – Odd lot trading – Oscillators – Relative Strength Index (RSI) – Rate of Change (ROC) – Charting – Types of price charts – Price patterns. | **8** | **CO4 and CO3 (Developing and justifying)** | **Apply (K3), Create (K6), Evaluate (K5)** |
| **V.** | **Efficient Market Hypothesis** | **5.1 Efficient Market Hypothesis (EMH)** – Random Walk theory –<br>5.2 Forms of EMH: Weak, Semi-strong and Strong – EMH and empirical findings<br>5.3 Implication of EMH on fundamental and technical analysis – Market inefficiencies<br>5.4 Relevant tests of efficiency | **6** | **CO5 and CO2 (framing standards and advocating)** | **Analyse (K4), Evaluate (K5)** |
| **VI.** | **Valuation of Bonds** | **6.1 Valuation of Bonds** – Overview of fixed-income securities – Risk factors in fixed- | **7** | **CO1 and CO4** | **Remember (K1), Understand** |

| | | | | |
|---|---|---|---|---|
| | income securities (Systematic and unsystematic)<br>6.2 Bond analysis – Types of bonds – Major factors in bond rating process – Bond returns – Holding period return<br>6.2.1 Bond Valuation -- Concept of yield – Current yield – Yield-to-Maturity – Price-yield relationship – Bond Pricing Theorems– Duration – Immunization— 6.2.2 Term structure of interest rates and yield curve | | **(reviewing and making distinctions)** | **(K2), Evaluate (K5), Create (K6)** |
| **VII. Risk and Return** | **7.1 Risk and Return** – Computation of return – Meaning and definition of risk<br>7.2 Types: (Systematic risk- Market risk, Purchasing power risk, Interest rate risk, Unsystematic risk- Business risk (Internal, External), Financial risk)<br>7.3 Minimising risk exposure<br>**7.4** Risk measurement - Standard deviation – Meaning of Beta – Computation and interpretation – Use of beta in estimating returns. | **4** | **CO3 and CO2 (Describing and sorting)** | **Analyze (K4), Evaluate (K5), Apply (K3), Create (K6)** |
| **VIII. Portfolio Analysis** | **8.1 Portfolio Analysis** – Selection and Evaluation – Meaning of portfolio – Reasons to hold portfolio – Diversification analysis<br>8.2 Computation of Portfolio Return and Risk –<br>8.2.1 Markowitz's Model – Assumptions – Specific model – Risk and return optimization Feasible set --Efficient portfolios – Efficient frontier –Leveraged portfolios – Corner portfolios – indifference maps of investors –optimum portfolio of investors– Sharpe's Single Index model – Portfolio evaluation measures – Sharpe's Performance Index –Treynor's | **7** | **CO2 and CO3 (demonstrating and justifying)** | **Analyze (K4), Evaluate (K5), Apply (K3), Create (K6)** |

| | | | | |
|---|---|---|---|---|
| | Performance Index – Jensen's Performance Index. | | | |
| **IX. Capital Market Theory** | **9.1 Capital Market Theory** – 9.1.1 CAPM theory: Assumptions – CAPM Model – Capital Market Line (CML) – Optimal portfolios of investors 9.1.2 Security Market Line (SML) – Evaluation of securities – Present validity of CAPM 9.1.3 Arbitrage Pricing Theory (APT) – Assumptions – APT model – two factor and multi factor models; Principle of arbitrage, arbitrage portfolios. | **5** | **CO1 And CO2 (examining and contrasting)** | **Remember (K1), Understand (K2), Analyze (K4), Evaluate (K5)** |
| **X. Equity and Bond Portfolio Management Strategy** | **10.1 Equity and Bond Portfolio Management Strategy**: Passive vs. Active Management-- Passive Equity Portfolio Management Strategy-Index Portfolio Construction Techniques- - Tracking Error, Methods of Index Portfolio Investment-- Fundamental Active Strategies; Technical Strategies. Market Anomalies; Value vs. Growth Investments-- Investor Behaviour and Stock Returns. Bond Portfolio Management Strategies: Passive and Active Bond Portfolio Management Strategies. | **8** | **CO4 and CO5 (analysing and creating)** | **Evaluate (K5), Create (K6), Analyze (K4)** |

**Text Books**


1. Prasanna Chandra, Investment Analysis and Portfolio Management, Tata McGraw Hill.
2. Punithavathy Pandian, Security Analysis and Portfolio Management, Vikas Publishing House Pvt. Ltd.
3. Fischer & Jordan, Security Analysis and Portfolio Management, Prentice Hall India.


**Suggested readings**


1. Railley and Brown, Investment Analysis and Portfolio Management, Cengage Learning.
2. V. A. Avadhani, Investment and Securities Market in India, Himalaya Publishing House
3. William Sharpe, Portfolio Theory and Capital Market, McGraw-Hill Education, New York.
4. Elton Edwin J, Gumber; Martin J, Modern Portfolio Theory and Investment Analysis, Wiley, New York
5. Martin Pring, Technical Analysis Explained, McGraw Hill.
6. Frank J. Fabozzi, —Investments‖.
7. Sharpe, Alexander and Baily, Investments, PHI


**Web Resources**

1. NPTEL – "Security Analysis & Portfolio Management" by Prof. J. P. Singh (IIT Roorkee, via SWAYAM / NPTEL)
2. YouTube – "Security Analysis & Portfolio Management"
3. UGC-NET / Finance Classes – Prof. Abhishek Pandey
4. YouTube – "Securities | Meaning | Types | Security Analysis & Portfolio Management | BBA | B.Com | MBA | SAPM"

## Course outcomes (COs) and Cognitive Level Mapping

| COs | CO Description | Cognitive levels |
|---|---|---|
| **CO1** | Students will be able to understand and recall the fundamental concepts, principles, and practices of investment decision-making. | **Remember (K1), Understand (K2)** |
| **CO2** | Students will be able to analyze and evaluate investment alternatives and securities using key financial concepts, valuation models, and data interpretation. | **Analyze (K4), Evaluate (K5)** |
| **CO3** | Students will be able to design and justify investment strategies through technical analysis and portfolio management techniques. | **Apply (K3), Create (K6)** |
| **CO4** | Students will be able to evaluate risk and return relationships, formulate solutions for bond valuation, and justify investment decisions based on the Efficient Market Hypothesis. | **Evaluate (K5), Create (K6)** |
| **CO5** | Students will be able to analyze and compare securities and portfolios using indices and models such as CML, SML, and CAPM to support investment decision-making. | **Analyse (K4), Evaluate (K5)** |