## 20 BA342: SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

| Course Code | 20BA342 | Course Delivery <br> Method | Class Room / Blended <br> Mode |
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| Credits | $\mathbf{4}$ | CIA Marks | 30 |
| No. of Lecture Hours / Week | 5 | Semester End Exam <br> Marks | 70 |
| Total Number of Lecture <br> Hours | 75 | Total Marks | 100 |
| Year of Introduction :2017 | Year of Offering:2017 | Year of Revision: -- | Percentage of <br> Revision: |

This course provides a broad overview of investment management. It is focusing on selection of securities for investment and creation of less risky portfolio and also provides conceptual foundation for Investment analysis of securities as well as portfolios.

## Course Objective:

1. To familiarize the students with different forms of securities available for investment
2. To Establishing appropriate investment objectives, developing optimal portfolio strategies,
3. To acquaint the students in respect to the risk in investments and valuation of securities.
4. To estimating risk-return tradeoffs, evaluating investment performance and portfolio revision technique

## Course Outcomes:

By the end of the course, students will be able to
CO-1 Understand the various forms of investment, security Markets and other concepts
CO-2 Understand risks associated with investment
CO-3 Measure risk and return of different security instruments and portfolio
CO-4 Analyse the fundamental strength of stocks and predict the price trends of securities using technical analysis and valuation of stocks and fixed income securities
CO-5 Evaluate the performance of portfolio
Course Content

## Unit I

Investment - Meaning, Characteristics, Objectives of Investment, Investment Vs. Speculation and Gambling, Types of Investors - Investment Avenues - Traditional and Modern - Risk Meaning, Elements of risk, Systematic and Unsystematic Risk - Capital Allocation Between Risky \& Risk Free Assets - Measurement of Risk - S.D, Variance, Correlation, Regression and Beta coefficients - Risk Returns Trade-off.
( 15 Hours)

## UNIT-II

Valuation of Shares and Bonds - Concept of Present Value - Share Valuation Model Constant Growth Model, Multiple Growth Model - Discount Rate - Multiplier Approach to Share Valuation - Regression Analysis - Bond Valuation - Bond Returns - Bond Prices - Bond Pricing Theorems - Bond Risks and Bond Duration.
(15 Hours)
Unit III
Fundamental Analysis \& Technical Analysis of Equity Stock - Economy, Industry and Company Analysis Framework - Economic Forecasting Techniques - Technical Analysis Basic Principles and Assumption of Technical Analysis - Chart Patterns, and Technical Indicators - Dow Theory - Elliot Wave theory - ROC - RSI - MACD - Moving Average Analysis, and Japanese Candlesticks
(15 Hours)

## Unit IV

Portfolio Management - Random walk Theory - Efficient Market Hypothesis, and Forms of Market Efficiency - Portfolio Management - Process of Portfolio Management - Portfolio Analysis - Portfolio Risk and Return Calculation -Diversification of Risk - Portfolio Selection Feasible Set of Portfolio - Efficient Frontier- Utility Analysis -- Selection of Optimal portfolio using Markowitz and Sharpe Single Index model.
(15 Hours) Unit V
Capital Market Theory - CAPM - Capital Market Line - Security Market Line - Arbitrage Pricing Theory - Methods of Portfolio Performance Evaluation - Sharpe, Traynor, and Jensen Measures Portfolio Revision - Need for Revision - Revision Strategies - Formula Plans. (15 Hours)
Practical Component:

- Developing a table representing the returns of each fixed income securities for the current year.
- Calculation of risk return of few securities based on market prices.
- Identify market / security price trends using technical analysis.
- Calculation of portfolio return and risk with two or more securities.


## Reference Books:

1. Reilley and Brown, Investment Analysis \& Portfolio Management 8e, Thomson Learning, (2011).
2. Fisher and Jordan, Security Analysis \& Portfolio Management 6e, Pearson, PHI, (2011).
3. S. Kevin, Security Analysis \& Portfolio Management, 2e Prentice Hall India, (2015).
4. Avadhani VA, Securities Analysis \& Portfolio Management, Himalaya Publishing House, (2017).
5. Prasanna Chandra, Investment Analysis and Portfolio Management 3e, Tata McGraw-Hill Education,(2011).
6. P. Pandian,Security Analysis and Portfolio Management, Vikas Publishing House Pvt Limited.(2014),
7. David G.Luenberger, Investment science, Oxford, (2015).
8. Barua, Verma and Raghunathan, Portfolio Management, TMH, (1995).

Course Focus: Employability / Entrepreneurship / Skill Development.

MODEL QUESTION PAPER
M.B.A. (REGULAR) DEGREE EXAMINATION

Third Semester
20BA342 - SECURITY ANALYSIS \& PORTFOLIO MANAGEMENT
(2020-2021 Regulation Onwards)

## Duration: 3 hours

SECTION- A
Maximum Marks: 70
(CO1) (L2)
(CO1) (L2)
(CO3) (L2)
(CO2) (L2)
3. Industry life cycle
(CO4) (L2)
Or
MACD
(CO4) (L2)
Write short notes on:

1. Types of investors

Or
Risk free assets
2. $\mathrm{P} / \mathrm{E}, \mathrm{P} / \mathrm{B}$ ratio

Or
Bond risks
4. Random walk Theory

Or
Efficient frontier
5. Security Market Line

Or
Rupee cost Averaging
(CO1) (L2)
(CO5) (L2)
(CO5) (L2)
(CO1) (L2)

## SECTION - B

Answer All Questions
$5 \times 4=20$ Marks
6. Explain different investment avenues and their characteristics. (CO1) (L2)
(OR)
Calculate the expected return and the standard deviation of returns for a stock having the following probability distribution of returns. (CO3) (L4)

Possible returns (in per $\quad$ Probability of occurrence

| cent) |  |
| :---: | :---: |
| -25 | 0.05 |
| -10 | 0.05 |
| 0 | 0.15 |
| 15 | 0.25 |
| 20 | 0.30 |
| 30 | 0.15 |
| 35 | 0.05 |

7. Explain different types of bond risks and bond pricing theorems. (CO2) (L2)
(OR)
Joan wants to buy Morning Star Co., shares that have paid a dividend of Rs. 1.50 during the last financial year. Joan traditionally requires 18 per cent return from his investment. Analyst suggests that earnings and dividends on the stock will grow at a rate of 15 per cent for the next five years and thereafter at a rate of 10 per cent. What is the fair price expected by Joan? (CO4) (L4)
8. Explain the fundamental analysis of stocks.(CO1) (L2)
(OR)
Explain the basic principles of technical analysis and explain about Dowtheory.(CO4) (L2)
9. Explain different forms of EMH and provide at least one empirical evidence to support each form of EMH. (CO1) (L2)
(OR)
The variance-covariance matrix for three securities is given below:

| Security | P | Q | R |
| :---: | :---: | :---: | :---: |
| P | 108 | -56 | 94 |
| Q | -56 | 214 | 137 |
| R | 94 | 137 | 180 |

Calculate the standard deviation of a portfolio constructed with these three securities, the proportion of investment in each being $\mathrm{P}(0.20): \mathrm{Q}(0.50): \mathrm{R}(0.30)$. (CO3) (L4)
10. Explain different portfolio revision strategies and constraints in revision. (CO1) (L2, L4) (OR)
Given below are the historical performance of different mutual funds. The market return is $12 \%$ having a standard deviation of $9 \%$ and risk free return is $7 \%$.

| Year | Mutual fund <br> return (percent) | Mutual <br> fund beta | Standard <br> deviation |
| :---: | :---: | :---: | :---: |
| 1 | 13.85 | 1.25 | 10.00 |
| 2 | 28.00 | 1.20 | 21.00 |
| 3 | 35.00 | 1.18 | 11.05 |
| 4 | 11.25 | 1.20 | 7.50 |
| 5 | 20.0 | 1.02 | 12.00 |

Calculate the following risk adjusted return measures for the mutual fund and rank them using: (CO5) (L5)
a) Sharpe ratio
b) Treynor ratio
c) Jensen differential return

## SECTION C - ( $\mathbf{1 \times 1 0 = 1 0}$ marks) <br> Case study (Compulsory)

11. An investor wants to build a portfolio with following four stocks. With the given details, find out his portfolio return and portfolio variance. The investment is spread equally over the stocks. (CO3) (L4)

| Company | $\alpha$ | $\beta$ | Residual Variance |
| :---: | :---: | :---: | :---: |
| Sneha | 0.17 | 0.93 | 45.15 |
| Neha | 2.48 | 1.37 | 132.25 |
| Asha | 1.47 | 1.73 | 196.28 |
| Priya | 2.52 | 1.17 | 51.98 |

Market return $\left(\mathrm{R}_{\mathrm{m}}\right)=11$
Market return variance $=26$

