

INVESTMENT MANAGEMENT Theory & Practice

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Dr. R.P. Rustagi

Sultan Chand & Sons

Investment Management

THEORY AND PRACTICE

Dedicated to the ALMIGHTY

who bestowed on me the inspiration and strength to take up this work and to share my experience with the readers

Investment Management

THEORY AND PRACTICE

For B.Com. (H.), IV-Semester (UGCF 2022) University of Delhi and other Courses in Finance

Dr. R.P. RUSTAGI

M.Com., M.Phil., F.C.S., Ph.D. Formerly, Associate Professor Shri Ram College of Commerce University of Delhi

Twelfth Edition



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Preface

To the Twelfth Edition

The motivation for the Twelveth Edition of 'Investment Management' has been provided by the enthusiastic response of the readers and reviewers to the earlier editions which, together with reprints, were sold out within a few months of the Publication. The book has been presented as an introductory level text on the theory and practice of investment. It has been accepted by the students of finance preparing for a paper on investment management, particularly the B.Com. (H.) VIth Semester (CBCS) University of Delhi. The present Edition also confirms with the syllabus of B.Com. (H.), IVth Semester, UGCF-2022 based on National Education Policy (NEP) 2020.

The highlight of the Twelfth Edition is the presentation of 'Concept Checks' in the form of 'Test-Yourself' at various places in different chapters. This will give an opportunity to the students to apply the concepts which they have read so far. Additional working notes and explanations have been provided at various places through out the book. Comments and suggestions received from students as well as teachers have been duly incorporated. In an attempt to keep intact the basic structure of the book, the chapter plan has not been changed. Nevertheless, sufficient material has been added in Chapter 6, 'Fundamental and Technical Analysis' with a view to provide more insight into technical analysis. Several numerical illustrations have been added in different Chapters at appropriate places.

In view of the requirements of syllabus, investment decision making through EXCEL has been introduced in the Appendix-I. I am indebted to Sh. H.N. Tiwari, Asstt. Professor, Shri Ram College of Commerce for immensely helping in preparation of Appendix I "Investment Decision Making with Excel".

I am thankful to the students and faculty for the well acceptance of the book. Comments and suggestions about this new edition would be gratefully acknowledged. In am also thankful to the publishers for their cooperation in bringing this Twelfth Edition in time.

Dr. R.P. RUSTAGI

To the First Edition

Investment Management and Environment is becoming more and more complex over the years. Types of instruments and financial products, types and number of financial intermediaries and the overall investment process, all have seen a revolution. Financial engineering, Investors' Protection and Transparency have been the buzz words. On-line trading systems in the financial markets, holding and transfer of securities in the electronic mode, significant presence of mutual funds, more active role assumed by the regulatory authorities are some of the features of present day investment environment. More and more linkages and interdependence of different financial systems are giving way to global financial markets and systems.

The subject matter of the present text, **Investment Management** is to explain the investment decision making and investment process. It focuses on the investment analysis. In an effort to link the theory and practice, the entire investment process has been discussed in the context of Indian Financial System. Frequent references to the regulatory mechanism of Securities and Exchange Board of India (SEBI) and the practices prevailing in the Indian Capital Market, have been the focal point of the discussion. It presents the concepts, theories, techniques and practices of investment management in simple, lucid and easy to understand language.

Gradually, several specialized areas have branched out from the financial management, including Investment Management, Portfolio Management, Management of Derivatives, *etc.* The present text deals with the investment in general and limited coverage of the portfolio management and derivatives. The unifying philosophy of the book has been to present the investment decision process in terms of the risk-return perspective of the investor.

Investment management, as an academic discipline, is constantly changing and stimulating. There is always a quest to discuss the subject matter with reference to the practices prevailing. The book has emerged out of the experience of teaching financial management and investment management and other related subjects to a wide variety of students including that of professional courses. The motivation for the book has been provided by the interaction and responses in the classroom.

The book has been designed as a first book on Investment management. The subject matter has been presented in 11 Chapters grouped in 5 Parts each dealing with a particular area.

The book is meant for the students preparing for a course in investment management and other related subjects at the under-graduate/post-graduate level, or for management courses such as MBA, PGDBM, CFA, *etc*.

Finally, I will like to acknowledge the contributions made to the literature by authors and researchers, and my teachers who have helped me a lot in understanding various issues and concepts in finance and related areas. I am thankful to my students who have provided the initiative and stimulus for writing this work. I also feel obliged to all my colleagues and teachers at different management institutes for their suggestions. Messers Sultan Chand and Sons, the Publishers, deserve a deep sense of gratitude to bring out the book well in time and in an elegant style.

Discussion in the present text is purely academic and neither attempt nor tantamount to expertise/professional service to the readers on the subject. Sufficient care has been taken to ensure the correctness of formulae, equations and calculations. Still, there might be some unintended errors. Further comments and suggestions for improving the quality of the book are welcome and will be gratefully acknowledged.

Dr. R.P. RUSTAGI

vi

Syllabus

B.Com. (H.), UGCF-2022

based on NEP-2020

Investment Management

Unit 1: Introduction to Investment

Concept of Investment, Investment Decision Process; Avenues for investment – Features and Classes; Difference between Investment, Speculation, and Gambling; Primary Market – IPO, Secondary Markets – Trading of Securities; Security Market Indices; Return and Risk: Concept, Calculation, Trade-off between Risk and Return; Impact of Taxes and Inflation on Investments.

Unit 2: Bond Analysis and Valuation

Bond Fundamentals; Estimating Bond Yields; Bond Valuation and Malkiel Theorems; Bond Risks and Credit Rating; Present Scenario of Indian Debt Market.

Unit 3: Equity Analysis and Valuation

Fundamental Analysis; Technical Analysis and Efficient Market Hypothesis; Valuation of Equity Shares using Dividend Discount Model and P/E Ratio Model.

Unit 4: Portfolio Management

Portfolio Management – Concept and Need, Measurement of Portfolio Return and Risk; Diversification – Markowitz Theory; Capital Asset Pricing Model.

Unit 5: Mutual Fund and Derivatives

Mutual Fund – Concept and Types; Performance Evaluation; Overview of Financial Derivatives – Forwards, Futures and Options.

Brief Contents

	1								
S. Chapters No.	Pages	Objective Type Questions	Self-Review Assignments	Examples	Graded Illustrations	Problems	Concept Check – Test Your-self	Tables	Figures
Part I: Investment Environment									
1. Understanding Investment	3–18	12	20	_	_	_	2	3	2
2. Financial Markets, Participants and Instruments	19–30	13	13	_	-	-	_	-	1
Part II: Risk-Return Relationship and Portfolio Management									
3. Risk and Return	33-60	14	11	4	13	10	1	1	1
4. Portfolio Selection and Management	61–116	17	19	6	37	9	4	-	6
Part III: Securities Analysis and Valuation									
5. Fixed Income Securities : Yield and Valuation	119–168	19	22	8	20	11	4	_	4
6. Equity Shares – Fundamental and Technical Analysis	169-204	23	22	2	_	_	2	_	13
7. Valuation of Equity Shares	205-240	14	16	4	23	10	2	2	1
Part IV: Mutual Funds and Financial Derivatives									
8. Mutual Funds	243-268	15	16	1	7	_	3	_	2
9. Financial Derivatives	269-306	22	15	4	22	9	3	_	6
Part V: Indian Capital Market									
 Indian Capital Market : Structure and Emerging Trends Investors' Protection, Unfair Trade Practices and 	309–348	20	18	-	-	-	_	1	3
Insider Trading	349–362	15	13	_	_	_	_	_	_
Appendices									
Appendix I	365-380								
Investment Decision Making with EXCEL	365								
Appendix II	381-412								
Solved Question Papers of <i>Fundamentals of Investment'</i> [B.Com. (H)., D.U.] for the years 2018, 2019, 2020, 2021 and 2022	381								
Appendix III	413-430								
Glossary	413								
Appendix IV	431–436								
Present Value of Future Amount <i>i.e.</i> , $PVF_{(r, n)}$	431								
Present Value of an Annuity <i>i.e.</i> , $PVAF_{(r, n)}^{(v, n)}$	434								

Part I : Investment Environment

1. Understanding Investment	3–18
Investment	4
Investment and Speculation	5
Real Assets and Financial Assets	
Factors of Sound Investment	7
Liquidity	8
Risk of an Investment	8
Capital Appreciation	9
Tax Aspects of Investments	9
Investment Horizon	9
Relevance of Investment Analysis	9
Investment Decision Process	10
Asset Allocation Decision	
Security Analysis	
Return	
Expected Return	
Realised Returns	
Required Return	
Risk	
Risk-Return Trade-off	
Direct and Indirect Investing	
Direct Investing	14
Indirect Investing	
Manoeuvring with Investments	15
Hedging	
Arbitrage	16
Diversification	
Points to Remember	
Objective Type Questions	
Self-Review Assignments	
2. Financial Markets, Participants and Instruments	19–30
Financial System	
Functions of Financial System	
Components of Financial System	
Financial Markets	
Types and Classification of Financial Markets	
Players and Participants in Financial Markets	22 مر
Financial Instruments	
Ownership Securities	
Debt Securities	

Mutual Fund Units	26
Money Market Instruments	26
Financial Engineering and Financial Instruments	27
Financial Engineering and Derivatives	28
Points to Remember	28
Objective Type Questions	28
Self-Review Assignments	29

Part II : Risk-Return Relationship and Portfolio Management

3.	Risk and Return	33-60
	Concept of Return and Risk	34
	Return	34
	Expected Value of Return	
	Risk	
	Sources of Risk	
	Market Risk	
	Interest-Rate Risk	
	Purchasing Power or Inflation Risk	
	Business Risk	
	Financial Risk	
	Types of Risk	
	Systematic Risk	40
	Unsystematic Risk	40
	Measurement of Risk	42
	Range as a Measure of Risk	
	Standard Deviation as a Measure of Risk	
	Coefficient of Variation as a Measure of Risk	
	β as a measure of Risk	
	Taxes and Investment Strategy	
	After-tax Rate of Return	
	Taxable Equivalent Yield	
	Inflation and Investment Strategy	
	Points to Remember	47
	Graded Illustrations	
	Objective Type Questions	
	Self-Review Assignments	
	Problems	
4.	Portfolio Selection and Management	61-116
	Portfolio Management	62
	Security Analysis	62
	Analysis and Selection of Portfolio	63
	Revision of Portfolio	
	Evaluation of Portfolio	63
	Return and Risk in the Context of Portfolio	63
	Return of Two-Security Portfolio	
	Risk of Two-Security Protfolio	65
	Correlation Coefficient and Risk of a Portfolio	67
	Uncorrelated Returns	68
	Zero-Risk Portfolio of Perfectly Negatively Correlated Securities	68
	Portfolio Selection	70
	Portfolio Theory : The Harry Markowitz Model	71
	Setting the Risk-Return Opportunity Set	71

Determining the Efficient Set	72
Selecting the Optimal Portfolio	
Capital Market Line (CML)	
Limitations of the HM Model	
Capital Market Theory : CAPM	
Systematic or Market Risk	
Unsystematic Risk	
Systematic Risk and β Factor	
Capital Assets Pricing Model	
Assumptions of CAPM	
The Model	
Security Market Line	
Limitations of CAPM	
Portfolio Evaluation	
Measures of Portfolio Performance	
Return Per Unit of Risk	
Jensen's Alpha	
Points to Remember	
Graded Illustrations	
Objective Type Questions	
Self-Review Assignments	
Problems	
± 100101110	

Part III : Securities Analysis and Valuation

5. Fixed Income Securities : Yield and Valuation	119-168
Fixed Income Securities	120
Bonds and Debentures	120
Features of Debt Instruments	120
Types of Debt Instruments	
Regulation of Bonds in India	
Bond Indenture	
Bond Yield	125
Types of Yield	125
Current Yield or Basic Yield	126
Weighted Yield	
Annualised Equivalent Return	
Yield to Maturity (YTM)	
Approximate YTM	
YTM of Zero-Coupon Bond	
Yield to Call	
Holding Period Return	
Valuation Principle	
Required Rate of Return	
Basic Model of Valuation	
Bond Pricing and Valuation	
Valuation of Convertible Debentures	
Valuation of Compulsorily Convertible Debentures (CCD)	
Valuation of Optionally Convertible Debentures (OCD)	
Valuation of Deep Discount Bonds (DDB)	
Interaction Between Bond Value, Market Interest Rate and Coupon Rate	141
Bond Valuation and Required Rate of Return	
Bond Valuation and Time to Maturity	

Contents

	Malkiel's Properties of Bond Values	144
	Duration of a Bond	
	Valuation of Preference Shares	
	Assumptions	
	Redeemable Preference Shares	
	Irredeemable Preference Shares	147
	Credit Rating	148
	Credit Rating in India	
	Credit Rating Information Services of India Ltd. (CRISIL)	149
	Investment Information and Credit Rating Agency of India (ICRA)	
	Credit Analysis and Research Ltd. (CARE)	
	Fitch Ratings India Pvt. Ltd.	
	Regulatory Framework	
	Process of Credit Rating	
	I focess of Credit Dating	100
	Importance of Credit Rating	101
	Investors	
	Issuers	
	Intermediaries	
	Precautions of Credit Rating	
	Points to Remember	
	Graded Illustrations	
	Objective Type Questions	
	Self-Review Assignments	164
	Problems	165
c	Equity Shares: Fundamental and Technical Analysis	100 004
0.		169-204
	Security Analysis	
	Approaches to Equity Analysis	
	Fundamental Analysis	171
	Fundamental Analysis Economic Analysis	171 173
	Fundamental Analysis Economic Analysis Industry Analysis	171 173 174
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis	171 173 174 175
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis	171 173 174 175 176
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information	171 173 174 175 176 176
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings	171 173 174 175 176 176 176 177
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings	171 173 174 175 176 176 176 177
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis	171 173 174 175 176 176 176 177 181 181
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis	171 173 174 175 176 176 176 177 181 181 182
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis	171 173 174 175 176 176 176 177 181 181 182
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis	171 173 174 175 176 176 176 177 181 181 182 183
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis Prices and Price Charts	171 173 174 175 176 176 176 177 181 181 182 183 184
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis Prices and Price Charts Dow Theory	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis Prices and Price Charts Dow Theory Elliott Wave Theory	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis Prices and Price Charts Dow Theory Elliott Wave Theory Bar Chart	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis Prices and Price Charts Dow Theory Elliott Wave Theory Bar Chart	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis Prices and Price Charts Dow Theory Elliott Wave Theory Bar Chart Line Chart	$\begin{array}{c}171 \\173 \\173 \\173 \\175 \\176 \\176 \\176 \\176 \\181 \\181 \\181 \\182 \\183 \\184 \\184 \\185 \\186 \\187 \\188 \\188 \\188 \\188 \\188 \\188 \\188 \\188 \\188 \\$
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis Prices and Price Charts Dow Theory Elliott Wave Theory Bar Chart Line Chart Point-and-Figure Chart	$\begin{array}{c}171\\173\\174\\175\\176\\176\\176\\176\\176\\181\\181\\181\\182\\183\\184\\184\\185\\186\\186\\187\\188\\188\\189\\189\\189\\189\\$
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis Prices and Price Charts Dow Theory Elliott Wave Theory Bar Chart Line Chart Point-and-Figure Chart Candlestick Chart	$\begin{array}{c}171 \\173 \\173 \\173 \\173 \\174 \\175 \\176 \\176 \\176 \\176 \\176 \\181 \\181 \\181 \\181 \\181 \\181 \\182 \\183 \\183 \\184 \\184 \\185 \\186 \\187 \\188 \\188 \\188 \\189 \\190 \end{array}$
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis Prices and Price Charts Dow Theory Elliott Wave Theory Bar Chart Line Chart Point-and-Figure Charts Analysis of Price-Volume Charts Pattern Analysis	$\begin{array}{c}171 \\173 \\173 \\173 \\173 \\175 \\176 \\176 \\176 \\176 \\176 \\181$
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis Prices and Price Charts Dow Theory Elliott Wave Theory Bar Chart Line Chart Point-and-Figure Chart Candlestick Chart Analysis of Price-Volume Charts Pattern Analysis Support and Resistance Levels	$\begin{array}{c}171 \\173 \\174 \\175 \\176 \\176 \\176 \\176 \\181 \\181 \\181 \\182 \\183 \\184 \\184 \\184 \\185 \\186 \\186 \\187 \\188 \\188 \\188 \\189 \\190 \\190 \\190 \\192 \end{array}$
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis Prices and Price Charts Dow Theory Elliott Wave Theory Bar Chart Line Chart Point-and-Figure Chart Candlestick Chart Analysis of Price-Volume Charts Pattern Analysis Support and Resistance Levels Principles of Analysis of Price Patterns	$\begin{array}{c}171\\173\\174\\173\\174\\175\\176\\176\\176\\176\\176\\176\\181\\181\\181\\181\\181\\182\\183\\184\\184\\185\\186\\186\\186\\186\\188\\188\\188\\188\\188\\189\\190\\190\\192\\194\end{array}$
	Fundamental Analysis Economic Analysis Industry Analysis Key Factors in Industry Analysis Company Analysis Sources of Information Analysing Company's Earnings Economic Value Added Technical Analysis Fundamental Analysis and Technical Analysis Basic Tenets and Premises of Technical Analysis Charting : The Basic Tool of Technical Analysis Prices and Price Charts Dow Theory Elliott Wave Theory Bar Chart Line Chart Point-and-Figure Chart Candlestick Chart Analysis of Price-Volume Charts Pattern Analysis Support and Resistance Levels	$\begin{array}{c}171 \\173 \\174 \\175 \\176 \\176 \\176 \\176 \\181 \\181 \\181 \\182 \\183 \\184 \\183 \\184 \\184 \\185 \\186 \\187 \\188 \\188 \\188 \\188 \\189 \\190 \\190 \\192 \\194 \\195 \end{array}$

xii

Efficient Market Hypothesis	197
Weak Form of Market Efficiency	199
Semi-Strong Form of Market Efficiency	199
Strong Form of Market Efficiency	
Points to Remember	
Objective Type Questions	
Self-Review Assignments	
7. Valuation of Equity Shares	205-240
Valuation of Equity Shares	
Assumptions	
Valuation of Equity Shares based on Accounting Information	
Book Value or Balance Sheet Value (BV)	
Liquidation Value (LV)	
Valuation of Equity Shares based on Dividends	208
Assumptions	208
Zero Growth in Dividends or Constant Dividends	
Constant Growth in Dividends of Constant Dividends	
Variable Growth in Dividends	
Valuation of the Shares Currently Not Paying Dividends	
Valuation Based on Finite Holding Period	
valuation of Faulty Change under Specific Methods	
valuation of Equity Shares under Specific Methods The Gordon's Model	
Walter's Model	
Earnings Multiplier Approach or Price-Earnings Ratio (P/E Ratio)	220 001
Relative Valuation Methods Price to Book Value Ratio	
Price to Book Value Ratio	
Price to Sales Ratio	
Required Rate of Return, Risk and Equity Valuation	
Aggressive and Defensive Stock	
Points to Remember	
Graded Illustrations	
Objective Type Questions	
Self-Review Assignments	
Problems	239

Part IV : Mutual Funds and Financial Derivatives

8. Mutual Funds	243 - 268
Mutual Fund	244
Features and Characteristics of Mutual Fund	
Mechanism of Mutual Fund Operations	
Benefits of Mutual Funds	
Mutual Fund Schemes	
Open-ended and Close-ended Mutual Fund Schemes	
Income Fund and Growth Fund	
Domestic Funds and Off-shore Funds	
Tax-Saving Schemes	
Money Market Mutual Funds (MMMFs)	
Specialised Sector Funds	
Index Schemes	
Equity Funds Schemes	
Debt Funds Schemes	
Balanced Funds	249

	Gilt Funds	
	Schemes Based on Market Capitalisation	
	Fund of Funds	
	Load and No-load Funds	250
	Exchange Traded Funds	251
	Gold ETF	252
	Systematic Investment Plan (SIP)	252
	Systematic Withdrawal Plan (SWP)	
	Net Assets Value (NAV) and Corpus of a Mutual Fund	
	Costs and Loads in Mutual Fund Investments	255
	Operating Expenses	255
	Loads	
	Return from a Mutual Fund	256
	Structure of a Mutual Fund	
	Mutual Funds in Indian Capital Market	
	Regulation of Mutual Funds in India	
	Conversion of Close-ended Scheme to Open-ended Scheme	
	Mutual Fund Investment and Investors' Protection in India	261
	Points to Remember	
	Graded Illustrations	
	Objective Type Questions	
	Self-Review Assignments	
	6	
9.		269-306
	Derivatives	
	Characteristics of Derivatives	271
	Types of Derivatives	271
	Commodity Derivatives and Financial Derivatives	271
	Basic Derivatives and Complex Derivatives	272
	Exchange Traded and OTC Derivatives	272
	Exchange Traded and OTC Derivatives Participants in Derivatives Market	272 273
	Exchange Traded and OTC Derivatives	272 273 273
	Exchange Traded and OTC Derivatives Participants in Derivatives Market Types of Financial Derivatives Forwards Futures	272 273 273 273 274
	Exchange Traded and OTC Derivatives Participants in Derivatives Market Types of Financial Derivatives Forwards Futures	272 273 273 273 274
	Exchange Traded and OTC Derivatives Participants in Derivatives Market Types of Financial Derivatives Forwards Futures Differences between Forwards and Futures	272 273 273 273 274 275
	Exchange Traded and OTC Derivatives Participants in Derivatives Market Types of Financial Derivatives Forwards Futures Differences between Forwards and Futures Pricing of Futures	272 273 273 273 274 275 276
	Exchange Traded and OTC Derivatives Participants in Derivatives Market Types of Financial Derivatives Forwards Futures Differences between Forwards and Futures Pricing of Futures Options	272 273 273 273 273 273 274 275 276 278
	Exchange Traded and OTC Derivatives Participants in Derivatives Market Types of Financial Derivatives Forwards Futures Differences between Forwards and Futures Pricing of Futures Options Difference between Futures and Options	272 273 273 273 273 274 274 275 276 278 278 279
	Exchange Traded and OTC Derivatives Participants in Derivatives Market Types of Financial Derivatives Forwards Futures Differences between Forwards and Futures Pricing of Futures Options Difference between Futures and Options Types of Options	272 273 273 273 274 274 275 276 278 278 279 279
	Exchange Traded and OTC Derivatives Participants in Derivatives Market Types of Financial Derivatives Forwards Futures Differences between Forwards and Futures Pricing of Futures Options Difference between Futures and Options Types of Options Working of an Option	272 273 273 273 274 275 276 278 278 279 279 280
	Exchange Traded and OTC Derivatives Participants in Derivatives Market Types of Financial Derivatives Forwards Futures Differences between Forwards and Futures Pricing of Futures Options Difference between Futures and Options Types of Options Working of an Option Terminology of Options	272 273 273 273 274 275 276 276 278 279 279 280 281
	Exchange Traded and OTC Derivatives	$\begin{array}{c}272 \\273 \\273 \\273 \\274 \\275 \\276 \\276 \\278 \\279 \\280 \\281 \\281 \end{array}$
	Exchange Traded and OTC Derivatives	$\begin{array}{c}272 \\273 \\273 \\273 \\274 \\275 \\276 \\276 \\278 \\279 \\279 \\280 \\281 \\281 \\281 \end{array}$
	Exchange Traded and OTC Derivatives Participants in Derivatives Market Types of Financial Derivatives Forwards Forwards Futures Differences between Forwards and Futures Pricing of Futures. Options Difference between Futures and Options Types of Options Working of an Option Terminology of Options Option Premium Expiration Date Strike Price	$\begin{array}{c}272 \\273 \\273 \\273 \\274 \\275 \\276 \\276 \\278 \\279 \\280 \\281 \\281 \\281 \\281 \end{array}$
	Exchange Traded and OTC Derivatives	$\begin{array}{c}272 \\273 \\273 \\273 \\273 \\274 \\275 \\276 \\276 \\276 \\279 \\279 \\280 \\281 \\281 \\281 \\281 \\282 \end{array}$
	Exchange Traded and OTC Derivatives	$\begin{array}{c}272 \\273 \\273 \\273 \\273 \\274 \\275 \\276 \\276 \\278 \\279 \\280 \\281 \\281 \\281 \\281 \\281 \\282 \\282 \\282 \end{array}$
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	Exchange Traded and OTC Derivatives	$\begin{array}{c}272 \\273 \\273 \\273 \\273 \\273 \\273 \\273 \\273 \\274 \\275 \\276 \\276 \\276 \\276 \\278 \\279 \\281 \\282 \\282 \\282 \\282 \\282 \\282 \\283 \\284$
	Exchange Traded and OTC Derivatives	$\begin{array}{c}272 \\273 \\273 \\273 \\273 \\273 \\273 \\273 \\273 \\274 \\275 \\276 \\276 \\276 \\276 \\278 \\279 \\279 \\280 \\281 \\282 \\282 \\282 \\282 \\282 \\282 \\282 \\282 \\283 \\284 \\285 $
	Exchange Traded and OTC Derivatives	$\begin{array}{c}272 \\273 \\273 \\273 \\273 \\273 \\274 \\275 \\276 \\276 \\278 \\279 \\281 \\282 \\282 \\282 \\282 \\283 \\285 \\$
	Exchange Traded and OTC Derivatives	$\begin{array}{c}272 \\273 \\273 \\273 \\273 \\273 \\273 \\273 \\273 \\275 \\276 $
	Exchange Traded and OTC Derivatives	$\begin{array}{c}272 \\273 \\273 \\273 \\273 \\273 \\273 \\273 \\273 \\273 \\275 \\276 $

xiv

Contents	XV
Time Value of Option	
Valuation Models	
Derivatives Market in India	
Points to Remember	291
Graded Illustrations	
Objective Type Questions	
Self-Review Assignments	
Problems	
Part V : Indian Capital Market	
10. Indian Capital Market : Structure and Emerging Trends	309-348
Indian Capital Market : An Overview	
Primary Market or New Issue Market	
Secondary Market	312
Securities and Exchange Board of India	
Capital Market Reforms by the SEBI	
Primary Market Reforms	
Secondary Market Reforms	
Types of Issue of Securities in Indian Capital Market	
Public Issue through Prospectus	
Offer for Sale	017

Indian Capital Market : An Overview)
Primary Market or New Issue Market	1
Secondary Market	
Securities and Exchange Board of India	
Capital Market Reforms by the SEBI	
Primary Market Reforms	
Secondary Market Reforms	
Types of Issue of Securities in Indian Capital Market	
Public Issue through Prospectus	a
Offer for Sale	
Issue through Private Placement of Securities	7
Offer through Book-building Process	
Public Offer through Stock Exchange On-line System	7
Structure and Trading System in Secondary Market	2
The Stock Exchange, Mumbai	ີ້
National Stock Exchange	a
Market Segments of NSE	
Over The Counter Exchange of India	
Inter-connected Stock Exchange (ICSE) Ltd	
Listing of Securities at the Stock Exchanges	
Trading Procedure at the Stock Exchanges	
Salient Features of Trading System at NSE	1
Trading System and Investors	
Participants in Indian Capital Market	2
Indices in the Indian Capital Markets	2
S&P Sensex : The Barometer of Indian Capital Market	ā
Other Indices	
Emerging Trends in Indian Capital Market	
Depositories and Scripless Trading	
Constituents of Depository System	
The Working and Operations of Depository System	
Benefits of Depository System to Investors	7
Benefits to the Issuing Companies	
Costs to the Companies	
Depository System in India	
Other Aspects of Depository System	9
Book Building	9
Types of Book Building in India	9
Evaluation of Book Building Process	0
Buy-back of Shares	
Čompanies Act, 2013 and Buy-back of Shares	
SEBI Regulations and Buy-back of Shares	

Stock Lending Scheme	
Rolling Settlement	
Green Shoe Option	
Stabilisation Process (SP)	
Merchant Banker	
Lead Manager	
Code of Conduct for the Merchant Bankers	
Portfolio Manager	
Merchant Banker and Portfolio Manager	
Portfolio Manager and the Client	
General Responsibilities of a Portfolio Manager	
Code of Conduct for Portfolio Manager	
Terms Commonly used in Capital Market	
Points to Remember	
Objective Type Questions	
Self-Review Assignments	
11. Investors' Protection, Unfair Trade Practices and Insider Tradi	
Investors' Protection.	
Investor Protection Fund/Consumer Protection Fund (IPF/CPF)	
Investor i rotection Fund Consumer Protection Fund (II F/OFF)	
Securities Ombudsman	
Investors' Education	
Rights of an Investor	
Responsibilities of an Investor	
Unfair Trade Practices	
Insider trading	
Insider	
Price Sensitive Information	
Dealing in Securities	
Unpublished Information	
Prohibition on Insider Trading	
Investigation into Insider Trading	
Disclosure of Interest	359
Model Code of Conduct for Listed Companies	359
Insider Trading and Corporate Disclosure Policy	360
Arbitration Facility at NSE	
Points to Remember	
Objective Type Questions	
Self-Review Assignments	

Appendices

Appendix I	365-380
Investment Decision Making with EXCEL	365
Appendix II	381-412
Solved Question Papers of <i>Fundamentals of Investment</i> '	381
[B.Com. (H.)., D.U.] for the years 2018, 2019, 2020, 2021 and 2022	
Appendix III	413-430
Glossary	413
Appendix IV	431-436
Present Value of Future Amount <i>i.e.</i> , $PVF_{(r, n)}$	431
Present Value of Future Annuity <i>i.e.</i> , $PVAF_{(r, n)}$	434

xvi

Abbreviations and Notations

Ь	Retention Ratio (1 – DP ratio)	GP	Gross Profit
B_0	Bond Value at present	HM Model	Harry Markowitz Model
*	Beta factor (CAPM)	HPR	Holding Period Return
β BSE	Mumbai Stock Exchange	In R I or Int.	Interest
BV	Book Value (Also Balance		Risk-Free Rate of Interest
DV	Sheet Value)	I _{RF} IRR	Internal Rate of Interest
C_0	Cost at Present (Initial Cost)	k	Rate of Discount/Required
CĂ	Current Assets		Rate of Return
CAPM	Capital Assets Pricing Model	k_{d}	Cost of Debt
\mathbf{CF}	Cash Flows	$k_{\rm e}^{\rm u}$	Cost of Equity Capital
CML	Capital Market Line	k_o^{e}	Overall Cost of Capital
COV.	Co-Variance	0	(also WACC)
CRISIL	Credit Rating Information Services India Ltd.	$k_{ m p}$	Cost of Preference Share Capital
CVAF	Cumulative Value Annuity	$k_{ m r}$	Cost of Retained Earnings
	Factor	\dot{K}	Strike Price (in Derivatives)
\mathbf{CVF}	Cumulative Value Factor	MCX	Multi Commodity Exchange
CV	Coefficient of Variation	MP	Market Price
D	Debt	n, N	Number of Years
D^*	Modified Duration of a Bond	NAV	Net Assets Value
Div.	Dividend on Equity Shares	NEAT	National Stock Exchange
D_0	Dividend for Current Year		Automated Trading
D_1°	Dividend Receivable after	NP	Net Profit (also PAT)
	One Year	NPV	Net Present Value
DDB	Deep Discount Bonds	NSE	National Stock Exchange
DDM	Dividend Discount Model	NW	Net Worth
DP Ratio	Dividend Payout Ratio	OC	Operating Cycle
DPS	Dividend Per Share	OI	Open Interest (in Derivatives)
e	Base of Natural Logarithms	$P_0^{}$	Current Market Price of Share
E	Equity or Value of Equity	P_1	Market Price after 1 year
EBIT	Earnings Before Interest & Taxes (also NOP)	P_{n}	Market Price after n years
EPS	Earnings Per Share	PD	Preference Dividend
ETF	Exchange Traded Fund	PE Ratio	Price Earnings Ratio
EIF F	Futures Value	PV	Present Value
F FV	Futures Value	PVAF	Present Value Annuity Factor
	Growth Rate	PVF	Present Value Factor
g	Growin Rate	ρ	Correlation Coefficient

xviii			Abbreviations and Notations
\overline{r}	Expected Rate of Return	SIP	Systematic Investment Plan
R_{M}	Rate of Return on Market	STP	Systematic Transfer Plan
	Portfolio	SWP	Systematic Withdrawal Plan
$R_S^{}$	Required Rate of Return of a	t	Tax Rate
	Security	TR	Total Return
RV	Redemption Value	W, w	Weight
σ	Standard Deviation	WACC	Weighted Average Cost of
σ^2	Variance		Capital, k_0
σ_p	Standard Deviation of	YTC	Yield to Call
_	Portfolio	YTM	Yield To Maturity
SENSEX Sensitivity Index of BSE		Zero Interest Fully Convertible Debenture	

About the Book

'Investment Management' has been written to meet the need of the students taking B.Com. (H.) and other Undergraduate Courses in Finance in the light of NEP 2020. The scope of investment decision-making has substantially widened with new concepts appearing on the horizon. Appropriately, the syllabi of different courses have been modified and updated. Consistent with the objective, this book presents analytical framework of the related subject matter in the light of SEBI Rules, Regulations and Guidelines. Numerical examples and illustrations have been used extensively to explain the applications of different concepts.

Salient Features

- Comprehensive and systematic coverage and analytical presentation of the subject matter.
- Reader-friendly and frequent references to Indian environment to enhance the understanding of the subject.
- Detailed exposition of Stock Exchange operations and latest developments and emerging trends in Indian capital market given in a capsulated form.
- Frequent references to SEBI Guidelines, Rules and Regulations.
- 'Chapter Theme' and 'Chapter Plan' given in the beginning of each chapter to present the bird's eye view of the contents of the chapter.
- More than 90 examples, nearly 250 solved illustrations, more than 280 assignments and around 120 problems given at the appropriate places.
- Important points, concepts and definitions given in the Side Boxes.
- Extensive use of charts, graphs and diagrams.
- About 200 Objective Type Questions (True/False) with answers given at the end of different Chapters.

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