

Capital Asset Pricing Model, Construction of optimal portfolio with Risky and riskless assets ,The separation Theorem, Capital Market Line and Security Market Line - Applications of Security Market Line, Empirical Evidence of Capital Asset Pricing Model, Beta of CAPM.

Arbitrage Pricing Theory, Building of Arbitrage Portfolio, Return Generating process, Factor Model for Security Return volatility.

MODULE 5: PERFORMANCE EVALUATION AND REVISION OF PORTFOLIOS 10 HOURS

Performance Evaluation- Sharpe's Performance Index, Treynor's Performance Index and Jensen's Measure to identify the predictive ability, Information Ratio, Sortino's Ratio, Challenges in Performance management .

Portfolio Revision Methods- Investment Timing, Formula Plans Constant Dollar Value Plan, Constant Ratio Plan, Variable Ratio Plan

MODULE 6: SECURITY ANALYSIS AND BEHAVIOURAL FINANCE 12 HOURS

Fundamental Analysis: E-I-C approach. Variables used in E-I-C analysis. Technical Analysis Vs Fundamental Analysis. Efficient Market Hypothesis; Concept and Forms of Market Efficiency.

Technical Analysis: Basic tenets and Premises of Technical Analysis; Dow Theory, Price and volume charts, Moving Averages, Relative Strength Index, Rate of change, Stochastic Oscillators .

Behavioural finance and Technical Analysis, Introduction to Behavioural finance and how it differs from the tenets of traditional finance, Assumptions, Biases, Errors and Irrationalities that can affect Investment Behaviour, Takeaway from Behaviourists arguments.

5. PEDAGOGY

- a) Lectures
- b) Demonstrations using Excel
- c) Practical Exercises – Individual and Group
- d) Case Studies

6. TEACHING/LEARNING RESOURCES

ESSENTIAL READINGS

1. Shalini Talwar "Security Analysis and Portfolio Management", CENGAGE
2. Punithavathy Pandian, "Security Analysis and Portfolio Management", Vikas Publishing House Private Limited, Fifth Reprint Edition.
3. Fischer, E Donald and Jordan, J Ronald (2005); "Security Analysis and Portfolio Management", Prentice Hall of India Private Ltd., 6th Edition.
4. Bodie, Kane, Marcus and Mohanty (2009); "Investments", McGraw Hill Education (India) Private Limited, 8th Edition.
5. Ranganatham and Madhumathi (2005); "Investment Analysis and Portfolio Management", Pearson Education, First Edition.
6. Chandra, Prasanna , "Investment Analysis and Portfolio Management", McGraw Hill Education (India) Private Limited, 4th Edition.

REFERENCES

1. Haugen Robert (2003); "Modern Investment Theory", Pearson Education, 5th Edition.
2. Bhalla, V.K. (2006); "Investment Management", S. Chand; 12th Edition.
3. Hirschey and Nofsinger (2008); "Investments – Analysis and Behaviour", Tata McGraw Hill Publishing Company Limited, Special Indian Edition.
4. Avadhani V.A (2006), "Securities Analysis and Portfolio Management", Himalaya Publishing House, Eighth Revised Edition.
5. Sharpe, Alexander and Bailey (1996); "Investments", Prentice Hall of India Private Limited, 5th Edition.
6. Kevin (2008); "Security Analysis and Portfolio Management", Prentice Hall of India Private Limited, First Reprint Edition.
7. Maheshwari, Yogesh (2008); "Investment Management", PHI Learning Private Limited, First Edition.
8. Indian Institute of Banking and Finance (2004); "Technical and Fundamental Analysis of Companies", Taxmann Publications, First Edition.
9. Stock Market Book" (2005); Dalal Street Journal.
10. "Survey of Indian Industry (2008); The Hindu.
11. "The Layman's Guide to Mutual Funds" (2004), Outlook Publishing (India) Private Limited, First Edition

3.2.2. CORPORATE TAXATION FOR MANAGERS

1. GENERAL INFORMATION

No. of Credits – 4
No. of hours per week – 4

2. PERSPECTIVE OF THE COURSE

External environment, especially political and legal environment, has a huge impact and influence on conducting business. One among the factors which has a big impact on both the business enterprise and economy is the element of taxation. Unless a finance manager can analyze and think from tax perspective, no decision is complete and accurate. It is highly essential to understand the various taxes that have an impact on business, procedures to be followed and adopted for meeting tax regulatory requirements, and the system that governs them. Hence, this Course is introduced to orient a prospective finance manager regarding the tax matters that influences business and train him on making decisions considering such influence.

3. COURSE OBJECTIVES AND OUTCOMES

OBJECTIVE

To impart students with knowledge on tax, types of tax and their modalities.
To give insight on the taxes influencing a corporate entity – both direct and indirect.
To orient the students on the procedures and formalities to be adhered, with regard to tax matters.

OUTCOMES

By the end of this course, a student would learn
The taxonomy of taxation and GST in India.
Computation of income tax liability of a corporate entity and the strategies for legally reducing tax burden.

4. COURSE CONTENT AND STRUCTURE

MODULE 1: ASSESSMENT OF COMPANIES

12 HOURS

Introduction of Indian Tax Structure: Types of Companies, Residential Status and Incidence of Tax- Depreciation u/s 32- Computation of Tax liability of companies, Book Profits, Minimum Alternative Tax (Sec.115JB) – Deductions u/s 80 for companies, Carry forward and set-off of losses.

MODULE 2: TAX PLANNING

14HOURS

Tax planning, Tax avoidance and Tax evasion – Meaning and difference. Areas of tax planning- Tax planning with respect to Setting up New Business-Form of Organisation, Tax planning with respect to location and Nature of Business. Tax Planning with reference to Financial Managerial Decisions-Capital Structure Decision, Dividend Policy, Inter-Corporate Dividends and Bonus Shares, Specific Managerial Decisions- Purchase of asset, Lease, Instalment, Hire, Make or buy, Repair, replace, renewal or renovation, Tax planning for Distribution of Assets by Companies in liquidation, Amalgamation and Demerger.

MODULE 3: CUSTOMS DUTY

08 HOURS

Valuation rules for customs duty, Computation of assessable value and calculation of customs duty. Baggage, Postal articles and stores rules. Import and Export procedure.

MODULE 4: GOODS AND SERVICES TAX

06 HOURS

Introduction to Goods and Services Tax, Constitutional Framework, Orientation to CGST, SGST and IGST, Definitions – Supply, Inward Supply, Outward Supply, Continuous Supply, Time of Supply, Place of Supply, Goods, Services, Person, Taxable Person, Related Person, Business, Place of Business, Business Verticals, Consideration, Capital Goods, Input and Input Service, Input Tax, Output Tax, Aggregate Turnover, Deemed Exports, Recipient, Reverse Charge, Works Contract,

MODULE 5: VALUATION OF GST AND COMPUTATION OF GST LIABILITIES

08 HOURS

Taxable and Exempted Goods; Valuation of Taxable Supply of Goods, Computation of GST Liability on Supply of Goods, Set-off of Input Tax Credit; Taxable and Exempted Services; Valuation of Taxable Value of Services; Computation of GST Liability on Supply of Services, Set-off of Input Tax Credit; Reverse Charge Mechanism.

MODULE6: GST PROCEDURE

08 HOURS

Registration under GST, Tax Invoice, Levy and Collection of GST, Composition Scheme, Due dates for Payment of GST, GST Returns – Types of Returns, Monthly Returns, Annual Return and Final Return – Due dates for filing of returns. Final Assessment.

5. PEDAGOGY

- (i) Lectures.
- (ii) Demonstrations using template forms of tax
- (iii) Practical Exercises – Individual and Group
- (iv) Case Studies.

6. TEACHING AND LEARNING RESOURCES

- (a) www.finmin.ninc.in
- (b) www.incometaxindia.gov.in
- (c) www.cbec.gov.in
- (d) www.gstn.org

RECOMMENDED READINGS

Essential Readings

1. Singhania, Vinod, and Singhania, Kapil, “Direct Taxes – Law and Practice”, Taxmann.
2. H.C.Meharotra,” Direct tax law and practice including tax planning” Sahitya Bhavan Publications
3. Ahuja, Girish and Gupta, Ravi, “Direct Taxes – Law and Practice”, Bharat Publications.
4. Manoharan, T. N and Hari, G.R., “Direct Tax Laws”, Snow White Publications.
5. V.S.Datey, Indirect tax laws, Taxmann
6. Hiregange, Jain and Nayak, “Student’s Handbook on Goods and Services Tax”, Puliani and Puliani.

References

Study material of the Institute of Chartered Accountants of India available at http://www.icai.org/post.html?post_id=10169 and http://www.icai.org/post.html?post_id=10172

3.2.3. CORPORATE VALUATION AND FINANCIAL MODELING

1. GENERAL INFORMATION

No. of Credits: 04

No. of Hours per Week: 04

2. PERSPECTIVE OF THE COURSE:

The course is facilitate to know what an asset is worth and what determines that value is a pre-requisite for intelligent decision making, in choosing investments for a portfolio, in deciding on the appropriate price to pay or receive in a takeover and in making investment, financing and dividend choices when running a business. The term valuation in finance is mainly associated with Mergers and Acquisitions, Stock valuation and Bond Valuation. The ultimate goal for the business enterprise is “wealth maximization or value maximization”. A business enterprise must manage itself in order to achieve that goal. For making students understand the essence of value based management, they must be oriented about valuation, value drivers and the strategies that can help in reaching the goal – both organic and inorganic.

3. COURSE OBJECTIVES AND OUTCOME

OBJECTIVES

- To facilitate understanding of corporate valuation techniques and restructuring activities in M&A
- To communicate to the students the role that M&A plays in the contemporary corporate world.
- To enable the students to use the financial modeling techniques by using advanced tools.

OUTCOME

At the successful completion of this course the students should be able;

- To develop analytical skills to compute different corporate valuation techniques
 - To compute and evaluate the value of business for M&A decision
 - To formulate the analytical skills to apply compute valuation methods as financial modelling
- To aims at orienting finance professionals about the essential components of value based management.

4. COURSE CONTENT AND STRUCTURE

MODULE 1: INTRODUCTION TO VALUATION AND METHODS 08 Hours

Introduction to Corporate Valuation, Approaches to valuation, Role of Valuation, Concepts of value, Features of valuation and its process. Methods: Adjusted Book Value Approach, Stock & Debt Approach and Direct Comparison Approach, Discounted Cash flow Approach and Analyzing historical performance, Estimating the Cost of Capital, Forecasting performance-Estimating the continuing value-Calculating and interpreting the results.

MODULE 2: BUSINESS VALUATION & FINANCIAL MODELLING 20 Hours

Valuation Models: Asset-Based Approach, Earnings Based Approach (Earnings-Capitalisation Method, P/E Ratio), Relative Valuation, DCF Approach of Two and Three stage model, Equity DCF Model: Dividend discount model, Free Cash Flow to Equity (FCFE) model, Adjusted Present Value (APV model, Economic Value Added method and Valuation of Bond, Valuation of Equity shares.

FINANCIAL MODELING

Preparation of spread sheet: Cash Flow and Free Cash Flow Computation, Cash Flow Estimation, Estimate Cost of Equity, debt and Capital, Stock Valuation using discounting of (a) Dividends (Dividend discount model - DDM) (b) Free Cash Flow to Firm (FCFF) and (c) Free Cash Flow to Equity (FCFE).

MODULE 3 INTELLECTUAL CAPITAL VALUATION 04 Hours

Components and Valuation of Intellectual capital: Market to book ratio. Tobin's Q Ratio (basic problems), Analytical Approaches: Balanced Score card, Human Resource Accounting.

MODULE 4: CORPORATE RESTRUCTURE 10 Hours

Mergers- types of merger, theories of mergers, reasons for merger, mechanism of a merger Cost and Benefit of a merger, **synergy:** operating, financial and managerial synergy of mergers, M & A impact on stakeholders and concept of Due diligence. **Corporate restructuring:** significance, Forms of restructuring: Divestiture, sell off, Spin-off, Equity Carve-outs, leveraged buy outs (LBO), management buy-outs, management buy-ins, Tracking stock and Going Private.

MODULE 5: FINANCIAL EVALUATION OF M&A 10 Hours

Merger as capital budgeting decision: DCF Approach, Adjusted Present Value Approach (APV, Exchange Ratio (Swap Ratio)- Methods of determining exchange rate and determining stakeholders gain or loss for M&A decisions.

MODULE 6: TAKEOVER & DEFENCE STRATEGIES 04 Hours

Meaning and types of takeovers and SEBI Regulation on takeover, Anti-takeover defense: strategies, Anti-takeover amendments: Legal aspect of M&A, Combination and Competition Act, 2002.

5. PEDAGOGY

1. Lectures.
2. Demonstrations using Excel
3. Practical Exercises – Individual and Group
4. Case Studies.

6. TEACHING/LEARNING RESOURCES

ESSENTIAL READINGS

1. Prasanna Chandra “Corporate Valuation and Value Creation” 2011, Tata McGraw Hill
2. Aswath Damodaran “Damodaran on Valuation” 2/e, 2006 John Wiley and Sons
3. Prasanna Chandra “Financial Management Theory and Practice” 9/e 2016, Tata McGraw Hill
4. A N Sridhar “Strategic Financial Management” 4/e Shroff Publishers

REFERENCES

1. Rabi Narayan Kar and Minakshi “Mergers Acquisitions & Corporate Restructuring - Strategies & Practices” 3/e, 2017 Taxmann’s publication
2. Sheeba Kapil and Kanwal N. Kapil “Mergers and Acquisitions” 2/e, 2017, Wiley publication
3. H R Machiraju “Mergers, Acquisitions and Takeovers” 1/e, 2010, New Age International Publishers
4. Ramanujam S. “Mergers et.al.-Issues, Implications, and Case Law in Corporate Restructuring” 2000 Tata McGraw Hill Publishing House
5. Weston Mitchell and Mulherin “Takeovers, Restructuring and Corporate Governance” 4/e , 2003 Pearson Education
6. Philip R Daves, Michael C. Ehrhardt, and Ron E. Shrieves “Corporate Valuation: A Guide for Managers and Investors” 2003 Cengage Learning
7. David Frykman, Jakob Tolleryd “Corporate Valuation” 2003, Prentice Hall

4.2	FINANCE 4.2.1.PROJECT MANAGEMENT & ANALYSIS 4.2.2.INTERNATIONAL FINANCIAL MANAGEMENT 4.2.3.DERIVATIVES AND RISK MANAGEMENT
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4.2.1 PROJECT ANALYSIS AND MANAGEMENT

1. GENERAL INFORMATION

No. of Credits per week 4

No. of Hours per week 4

2. PERSPECTIVE OF THE COURSE

This course develops the competencies and skills for planning and controlling projects and understanding interpersonal issues that drive successful project outcomes. A finance professional needs knowledge of Project management practices within the organization which influences the profitability of the organization. A thorough understanding of all the components of project planning and management will equip a project manager to make better and informed decisions while investing on projects. Hence, the course on “Project Analysis and Management” which orients the learner all factors influencing financial and strategic decisions of project management in a business enterprise is introduced.

3. COURSE OBJECTIVES AND OUTCOMES

OBJECTIVES

To know the project manager’s roles and responsibilities and financial projections.

To understand project selection and criteria and feasibility analysis

To understand UNIDO approach for Social Cost Benefit analysis

OUTCOMES

At the end of the course, student will learn project management design, development, and deployment by using project management tools, techniques, and skills, to understand the implications, challenges, and opportunities of organizational dynamics in project management.

4. COURSE CONTENT AND STRUCTURE

MODULE 1: INTRODUCTION 12 HOURS

Project: Meaning, ten subsystems of project, generation and screening of project ideas, types of projects, Feasibility of a project; Market feasibility, Technical feasibility, Financial feasibility – Projected Cash flow Statement and Projected Balance Sheet; relate capital budgeting concepts to investments on projects, role of a project manager.

MODULE 2: EVALUATION OF PROJECTS 8 HOURS

Project Organization, Project Planning, Project Control, Pre-requisites for successful Project Implementation – Network techniques: Development of Project Network, Time Estimation, scheduling, PERT, CPM, Network Cost System.

MODULE 3: RISK ANALYSIS IN PROJECT MANAGEMENT 18 HOURS

Types and measure of project risk – simple estimation of risk – sensitivity analysis – scenario analysis – Monte Carlo simulation – Decision tree analysis – Managing risk – selection of projects under risk – risk analysis in practice. Social cost benefit analysis: UNIDO Approach, Little Mirrlees Approach. (Theory and Problems)-Special Decision Situations : Choice between mutually exclusive projects, Adjusted NPV, Optimal Timing, Uniform Annual Equivalent (replacement period), and Adjusted Cost of Capital.

MODULE 4: VENTURE CAPITAL PROJECTS 06 HOURS

Venture Capital and Private Equity – Meaning, Stages in venture capital financing, Venture capital investment appraisal process, Valuation of venture capital, Venture capital financing in India, Private equity funding trends

MODULE 5: PUBLIC-PRIVATE PARTNERSHIP PROJECTS 06 HOURS

Infrastructure Projects and PPP – Characteristics of infrastructure projects, Risks in infrastructure projects and managing such risks, Typical structures, Financial evaluation of infrastructure projects, PPP – Meaning, Structures of PPP, Financing sources for PPP projects.

MODULE 6: PROJECT NEGOTIATIONS

06 HOURS

Conflict and Negotiation, The Nature and Type of Negotiation, Project Review and Administrative Aspects, Post Completion Audits, Abandonment Analysis.

5. PEDAGOGY

- a) Lectures.
- b) Demonstrations using Excel
- c) Practical Exercises – Individual and Group
- d) Case Studies.
- e) Business Planning

6. TEACHING/LEARNING RESOURCES

ESSENTIAL READINGS

1. Prasanna Chandra, Projects: Planning, Analysis, Selection, Implementation & Review, Tata McGraw Hill.
2. Bhavesh M. Patel, Project Management, Vikas Publishing House, New Delhi.
3. Vasant Desai, Project Management, Second Revised Edition, Himalaya Publishing House

REFERENCES

1. P.C.K. Rao, Project Management and Control, Sultan Chand & Sons
2. Clifford F. Gray and Erik W. Larson, Project Management, Tata McGraw Hill
3. K. Nagarajan, Project Management, Third Edition, New Age International
4. Project Management: The Managerial Process – Gray & Larson
5. UNIDO SERIES on Project Management.
6. B.B. Goel, Project Management – Principles and Techniques, Deep and Deep
7. Gopalakrishnan P and Ramamoorthy, V.E., Project Management, Macmillan

4.2.2. INTERNATIONAL FINANCIAL MANAGEMENT

1. GENERAL INFORMATION

No. of Credits 4

No. of Hours per week 4

2. PERSPECTIVE OF THE COURSE

All Countries, companies and people on the globe are increasingly integrated in their economic activities. Globalization offers several opportunities but also pose risks.

The course emphasizes on the practical implications of finance theory and its application in international financial management. This subject will help students to understand various analytical tools and techniques for financial decision making in a international setting and prepare them for careers in international finance.

3. COURSE OBJECTIVES AND OUTCOMES

OBJECTIVES

To understand exchange rates, and their relationship with Economic variables.

To study the impact of exchange risk Hedging tools and techniques.

OUTCOMES

After completing this course, students should be able to- Analyse the global financial environment, currency system, relationship between economies and its impact on international transactions and understand functioning of international financial markets.

4. COURSE CONTENT AND STRUCTURE

MODULE 1: GLOBAL MONETARY SYSTEM

5 HOURS

Introduction and Scope of International finance, Evolution of International Monetary System. The current Exchange Rate Agreements, European Monetary System, Fixed vs. Flexible Exchange Rate Regime, Exchange rate policy and Monetary policy, International liquidity and International reserves.

MODULE 2: BALANCE OF PAYMENTS (BOP)

5 HOURS

Introduction, Functions and Principles of BOP, BOP accounting, Components of the BOP, 'Surplus' and 'Deficit' in BOP, Importance and limitations of BOP Statistics, Relationship of BOP with other economic variables. Capital account convertibility.

Module 3: FOREIGN EXCHANGE MARKETS

14 HOURS

Introduction, Structure of Foreign Exchange Market, Mechanics of Currency Trading, Types of Transactions and Settlement Dates, Exchange Rate Quotations and Arbitrage, Exchange Rate Determination and Forecasting, Introduction to Currency Futures, Currency Options, Forwards and Swaps.

MODULE 4: FOREIGN EXCHANGE RATE DETERMINATION 8 HOURS

Introduction, Purchasing Power Parity Theory, Interest Rate Parity Theory, International Fischer's Effect, Pure Expectations Theory

MODULE 5: MANAGEMENT OF FOREIGN EXCHANGE RISK 12 HOURS

Exchange Risk, Types of Exposure, Tools and Techniques of Foreign exchange risk management, Management of Translation Risk Management of Transaction Risk, Management of Economic Risk (including simple problems),

Risk Hedging Strategies: Internal –Netting, Lead and Lags. External – Forwards, Futures, Options, Money-market Hedging, Currency Swaps.

MODULE 6: MANAGING FOREIGN OPERATIONS

12 HOURS

Foreign Direct Investment, Multinational Capital Budgeting (including problems). Control and Performance Evaluation of Multinational Companies.

International Taxations (Double Taxation Avoidance , Relief Provision in India, Special Prov. Relating avoidance of tax), International Banking (International Debt Crisis, Banker's Plan), Financial Depressions -Effects on International Banking. Crypto currency, ADR and GDR.

5. PEDAGOGY

a) Lectures.

- b) Demonstrations using Excel
- c) Practical Exercises – Individual and Group
- d) Case Studies.

6. TEACHING/LEARNING RESOURCES

ESSENTIAL READINGS

1. Alan Shapiro: Multinational Financial Management , Prentice Hall, New Delhi.
2. Apte, Prakash, “International Finance – A Business Perspective”, Tata McGraw Hill.
3. David B. Zenoff& Jack Zwick: International Financial Management.
4. Rita M. Rodriguez L. Bigame Carter: International Financial Management.
5. V. A. Avadhani: International Finance- Theory and Practice, Himalaya Publishing House.

REFERENCES

1. Madura, Jeff, “International Corporate Finance”, Thomson South-Western.
2. Vyuptakesh Sharan,, “International Financial Management”, Prentice Hall of India.
3. Jain, Peyrard, and Yadav’ “International Financial Management”, MacMillan
4. J. Fred Weston, Bart: Guide to International Financial Management.
5. Robery O. Edmister: Financial Institutions - markets and Management.
6. A.V. Rajwade: Foreign Exchange International Finance and Risk Management, Prentice Hall.
7. Apte P.G., International Financial Management, Tata McGraw Hill,
8. Eun and Resnik, International Financial Management, Tata Mcgraw Hill
9. Bekaert, Greet and Hodrick, Robert J., ‘International Financial Management’, Prentice Hall.
10. Shapiro, Alan C., ‘Multinational Financial Management’, John Wiley.
11. Adrian Buckley, Multinational finance, Third Edition, Prentice-Hall of India Pvt. Ltd.,
12. Madhu Vij, International Financial Management, Excel Books
13. H.R. Machiraju, International Financial Management, Himalaya Publishing House
14. Thummuluri Siddaiah, International Financial Management, Pearson

Note: Latest edition of the readings may be used.

4.2.3.DERIVATIVES AND RISK MANAGEMENT

1.GENERAL INFORMATION

No of Credits 4

No of hours per week: 4

2.PERSPECTIVE OF THE COURSE

The primary purpose behind this course is to make student to understand the dynamics of risk management by using derivatives as a tool and to understand the transfer of risk without the need to trade the underlying. This allows for more effective risk management within companies and the broader economy. In addition, the derivatives market plays a role in information discovery and market efficiency. Despite the benefits, there are criticisms that derivatives are misused and add to market volatility. They are complex financial instruments that are used for various purposes, including hedging and getting access to additional assets or markets.

3.COURSE OBJECTIVES AND OUTCOME

OBJECTIVES

To provide the concepts and foundations of managing financial risk in business enterprises

To provide the concept of Derivatives, its types and how to minimise risk by using derivatives as a tool and acquaint the knowledge of Options and Futures using F&O for Hedging and the development position of Derivatives in India.

OUTCOME

By the end of this course, a student is expected to understand Risks associated stocks and commodities and how to minimise it by using derivatives as a risk management tool.

4.COURSE CONTENT AND STRUCTURE

MODULE 1: DERIVATIVES – AN INTRODUCTION

6 HOURS

Concept of Risk -Types of Risks of a Business Enterprise. Financial Risk and Its Types (Market Risk, Credit Risk, Liquidity Risk and Operational Risk). Risk Analysis in Capital Budgeting (only theory)– Measuring and Managing Capital Budgeting Risks – Sensitivity Analysis, Scenario Analysis, Simulation, Standard Deviation and Co-efficient of Variation, Risk Adjusted Discount Rate Method, Certainty Equivalent Co-efficient Method, Decision Tree Analysis and Probability Distribution Method.

An Introduction to derivatives, Elements of a Derivative Contract, Factors Driving Growth of Derivatives Market, Types of Derivatives, Types of Underlying Assets, Participants in Derivatives Market, Advantages and Disadvantages of Trading in Derivatives Market, Derivative Trade in India – A current scenario.

MODULE 2: FORWARD AND FUTURES

12 HOURS

Forward Contract, settlement of Forward Contract, Futures contract, Futures Contract Specification and Terminologies, difference, Pricing, Arbitrage, Concept of Convergence Relationship between Futures Price and Expected Spot Price, Basis and Basis Risk, Pricing of Futures Contract, Cost of Carry Model. Speculation and Arbitrage using Futures, Long Hedge – Short Hedge, Cash and Carry Arbitrage, Reverse Cash and Carry Arbitrage, Payoff Charts and Diagrams for Futures Contract, Perfect and Imperfect Hedge.

Stocks and Index Futures: Stock & Index Futures Index Futures, forward contracts & stocks, Future contract on indices & individual stocks, Features, specifications, pricing, Hedging, Speculation & arbitrage with stock index futures

MODULE 3: COMMODITY FUTURES

8 HOURS

History and Origin, Types of Commodities Traded, Structures of Commodities Market in India, Participants in Commodities Market, Trading in Commodities in India (Cash and Derivative Segment), Commodity Exchange in India and Abroad, Reasons for Investing in Commodities. Commodity Derivatives, Commodity Exchanges and Commodity Contracts. Pricing Commodity Forward, Futures & Options. Crude oil, Gold, Base Metal Derivatives. Pricing, hedging, Perfect & imperfect hedge, Basis Risk, Optimal Hedge Ratio. Trading, Clearing and Settlement in Derivatives Market.

MODULE 4 : OPTIONS

12 HOURS

Options Contract Specifications, Terminologies, Call Option, Put Option, American, & European Options. Difference between Futures and Options, Pay-off and Pay-off Diagrams. Understanding Options Quotations, Trading & settlement. Option Pricing: Boundary conditions for option pricing. Factors Affecting Option Premium. Moneyness in case of options, intrinsic value & time value, arbitrage-based relationship of option pricing.

Module 5 OPTIONS VALUATIONS AND STRATEGIES

12 HOURS

Price Difference Approach; Expected Gains Approach; Binomial Model; Risk Neutral Method and Black- Scholes Model – Assumption, Interpretation. Factors affecting option price. Option strategies: Put call parity, Protective Put, Covered Call. Trading Strategies with Options – Straddle, Strip, Strap, Strangle, Spreads- butterfly spread. Options-Sensitivities Delta & Delta Hedging, Theta, Gamma & Neutrality, Greek Letters

Module 6 TRADING, CLEARING AND SETTLEMENT IN DERIVATIVES MARKET

6 HOURS

Meaning and Concept, SEBI Guidelines, Trading Mechanism – Types of Orders, Clearing Mechanism – NSCCL – its Objectives and Functions, Settlement Mechanism – Types of Settlement. (b) Types of Risk: Value at Risk, Methods of Calculating VaR, Risk Management Measures, Types of Margins, SPAN Margin (only theory).

5. PEDAGOGY

- **Spreadsheets**
- **Live case studies connecting with capital markets**
- **Mock trading with derivatives**

6. TEACHING/LEARNING RESOURCES

ESSENTIAL READINGS

1. FUTURES AND OPTIONS: N D Vohra and B Bagri. McGraw Hill
2. Fundamentals of Financial Derivatives. N. R. Parasuraman. Wiley.

REFERENCES

1. Fundamentals of Financial Derivatives. S S S Kumar. PHI.
2. Options, Future & Other Derivatives - John C. Hull and Sankarshan Basu. Tenth Edition – Pearson
3. Fundamentals of Futures and Options Markets - John C. Hull. Pearson.
4. Introduction to Derivatives and Risk Management (Book Only) 8th Edition by Don M. Chance & Roberts Brooks
5. Derivatives & Risk Management, Rajiv Srivastava, 4th Edition, Oxford Publication House Reference Books:
6. Financial derivatives: theory, concepts and problems – S L Gupta. PHI
7. Derivatives and Risk Management Kindle Edition. Sundaram Janakiraman. Pearson.