

# **B.Sc (Finance)**

## **Semester – III**

## **B.Sc (Finance)**

### **Business Analytics**

#### Course Outcome

CO 1	The Student will understand the concept of variables used in analytics
CO 2	The student will be able to calculate the central tendency of a variable.
CO 3	The student will be able to determine the level of dispersion in a Variable.
CO 4	The student will be able to illustrate its ability to calculate Central Tendency and Variance in R

#### **UNIT I:**

VARIABLES: Types of Variables: Determine the nature of variables in data analysis - Differentiate between numerical and categorical Variables - Distinguish between nominal and ordinal variables - Differentiate between interval and ratio - Distinguish between continuous and discrete

#### **UNIT II:**

MEASURES OF CENTRAL TENDENCY: Central Tendency: Identify the components of central tendency - Calculate mean/median/mode - Identify the steps in calculating weighted/geometric/harmonic means.

#### **UNIT III:**

DISPERSION: Variability: Determine core aspects of variability - Calculate range - Calculate quartiles - Calculate interquartile range - Calculate variance - Calculate standard deviation – Calculate skewness and Kurtosis.

#### **UNIT IV:**

An overview of R: Introduction to R expressions, variables, and functions-Vectors: Grouping values into vectors, then doing arithmetic and graphs with them- Matrices: Creating and graphing two-dimensional data sets- Calculating and plotting some basic statistics: mean, median, and standard deviation- Factors: Creating and plotting categorized data.

#### **Suggested Books:**

1. Fundamentals of Business Analytics, 2nd Edition; R N Prasad, Seema Acharya; Wiley
2. Business Analysis with Microsoft Excel and Power BI, 5th edition; Conrad G. Carlberg; Pearson
3. Data Analytics with R; Bharti Motwani; Wiley.

# Financial Institutions & Markets

## Course Outcome

CO 1	The students will be able to understand the role and importance of the Indian financial market.
CO 2	The students will be able to summarize the role of financial market institutions
CO 3	The students will be able to understand the function of Mutual fund
CO 4	The students will be able to evaluate the changing role of financial institutions in India

### Unit I

INTRODUCTORY: Nature and role of financial system - Financial System and financial markets. An economic analysis of financial system in India. Indian financial system - A critical analysis. FINANCIAL MARKETS: Money and capital markets. Money market Instruments: Call money, treasury bills, certificates of deposits, commercial bills, trade bills, etc. Capital market: Government securities market, Industrial security market, Role of SEBI - and overview; Recent developments National Depository Securities Ltd. (NDSL). Market- Makers.

### Unit II

MONEY MARKET INSTITUTIONS: Central bank: Functions and its role in money creation, Commercial banks; Present structure. Introduction to International and Multinational banking. NON- BANKING INSTITUTIONS: Concept, role of financial institutions, sources of funds, Functions and types of non-banking financial institutions.

### Unit III

MUTUAL FUNDS: The evaluation of mutual funds, regulation of mutual funds (with special reference to SEBI guidelines), Performance evaluation, Design and marketing of mutual funds scheme; Latest mutual fund schemes in India - An overview. Evaluating of mutual funds. MERCHANT BANKING: Concept, function, growth, government policy regarding Merchant banking business and Future of merchant banking in India.

### Unit IV

Changing Role of Financial Institutions: Role of banking, financial sector reforms, financial and promotional role of financial institutions, universal banking; concept and consequences.

## Reference Books:

1. Avadbani, V.A., Investment and Securities Market in India; Himalaya Publishing House; Bombay.
2. Khan, M.Y., Indian Financial System -Theory and Practice; Vikas Publishing House; New Delhi.
3. Vinod Kumar, Atul Gupta, Manmeet Kaur Bawa, Financial Markets & Institutions, Taxman Publication, Jan.2021
4. Management of Financial Services, C. Rama Gopal, Vikas Publishing

# Investment Analysis and Portfolio Management

## Course Outcome

CO 1	The students will be able to demonstrate the basic understanding of capital markets and its constituents
CO 2	The students will be able to exhibit the relationship between risk and returns on investment
CO 3	The students will be able to exhibit the basic analytical tools for portfolio evaluation
CO 4	The student will be able to demonstrate the elementary evaluation of a portfolio

## Unit I

Introduction to Investment Process, Criteria for Investment, Types of Investors, Investment Vs Speculation Vs Gambling, Investment Avenues, Factors influencing selection of Investment alternatives. Capital Markets in India – Introduction, Concepts of investment banks, its role and functions, Stock, Market Index. The NASDAQ, SDL, NSDL. Benefits of depository settlement, Online share Trading and its advantages, Concepts of Small Cap, Large Cap, Mid Cap and Penny Stocks.

## Unit – II

Risk and Return Relationship – Meaning, Types of Risk – Systematic and Unsystematic Risk, Measurement of Beta, Standard Deviation, Variance, Reduction of Risk through Diversification, Practical Problems on Calculation of Standard Deviation, Variance and Beta.

## Unit – III -

Portfolio Management – Meaning, and Concept, Portfolio Management Process, Objectives, Basic Principles, Factors affecting investment decisions in Portfolio Management, Portfolio Strategy Mix. Security Analysis – Fundamental analysis, Economic Analysis, Industry Analysis, Company Analysis, Technical Analysis, - Basic Principles of Technical Analysis, Use of Charts – Line Chart, Bar Chart, Candle stick Chart, Mathematical Indicators; Moving Averages, Oscillators.

## Unit – IV –

CAPM & SML, Markowitz model: efficient frontier, portfolio diversification. Portfolio Management & Evaluation – portfolio review and revision/rebalancing, passive and active portfolio management. Portfolio Measurement – Meaning of Portfolio Evaluation, Sharpe's Ratio (Basic Problem), Treynor's Ratio (Basic Problems) Jensen's Differential Returns (Basic Problems)

## Reference Books:

1. Investment Analysis and Portfolio Management, 6th Edition, By Prasanna Chandra, 2021.
2. Security Analysis and Portfolio Management, Subrata Mukherjee, Vikas Publishing
3. V.A. Avadhani, (2011). Investment Analysis and Portfolio Management, HPH.
4. Preeti Singh,(2011) Investment Analysis & Portfolio Management, HPH

# Research Methodology

## Course Outcome

CO 1	The students will be able to understand the basic nuances of research approach
CO 2	The students will be able to identify the sample size and recognise various hypothesis testing techniques
CO 3	The students will be able to classify various scaling techniques for research
CO 4	The students will be able to identify the data collection methods for various types of research

### Unit I:

Introduction - Meaning, Objectives and Types of research, Research Approach, Research Process, Relevance & scope of research in management. Research Design - Features of good Design, Types of Research Design,

### Unit II:

Sampling Design - Steps in sample Design, Characteristics of a good sample Design, Probability & Non-Probability sampling. Hypothesis – Meaning, Types, Process, Formation of Hypothesis, Testing of Hypothesis

### Unit III:

Measurement & scaling techniques - Errors in measurement. Test of sound measurement, Scaling and scale construction technique. Attitude Measurement and Scales: Introduction to attitude - Various Methods to measure attitude.

### Unit IV:

Methods of data collection - Primary data – questionnaire and interviews; Collection of secondary data. Interpretation of data - Techniques of Interpretation, Report writing, Layout of a project report, preparing research reports.

### Reference Books:

1. Research Methodology – C.R. Kothari
2. Business Research Methods – Naval Bajpai
3. Business Research Methodology – J K. Sachdev

## **Semester - IV**

# Strategic Financial Management

## Course outcome

CO 1	The students will be able to recognise various financial strategies in business
CO 2	The students will be able to compare various capital budgeting techniques in business
CO 3	The students will be able to calculate value of firm under given situation
CO 4	The students will be able to relate international trade finance theories

### Unit – I

Introduction to Financial Strategy and Planning Meaning of Strategy and Planning, Definition of Strategic Financial Management, Financial Forecasting and their techniques. Financial Planning Process, Decision making and Problem solving Process

### Unit – II

Risk evaluation in Capital Budgeting Decision making in risk and uncertainty, Profitability Analysis, Value of Financial Information, Sensitivity Analysis, Risk Adjusted Discount rate, certainty Equivalent

### Unit – III

Valuation of Business Value of Share and Company, Asset based Valuation, Valuation relative to Industry Averages, DCF valuation Models, Valuation based on Company Fundamentals

### Unit – IV

International Trade Finance Forms of Export Finance, Documentary Credit, Export Credit and Insurance, Bilateral Credit, Special Economic Zones, Disinvestment and their strategies. Latest Development, Trends & Practices in strategic financial management - Fintech strategies, Management Buyouts.

## Reference Books

1. Strategic Financial Management, Girish P Jakhotiya, S.Chand Publishing
2. Strategic Financial Management, 2nd Edition, Prasanna Chandra, Tata MacGraw Hill, 2020
3. Strategic Financial Management, Ravi Kishor, Taxman Publication.
4. Jakhotiya G P Strategic Financial Management Vikas Publishing House, 2010

## BASIC ECONOMETRICS

### Course Outcome

<b>CO 1</b>	The student will develop adequate competency in the frontier areas of economic theory and methods.
<b>CO 2</b>	The will be able to illustrate his/her capability of formulation and estimation of a multiple regression model.
<b>CO 3</b>	The student will be able to draw conclusion about the statistical significance of individual explanatory variable and also over all models.
<b>CO 4</b>	Student will be able measure auto correlation and causality in variables.

#### Unit 1:

Nature of Econometrics and Economic Data Definition of Econometrics – Steps in Empirical Economic Analysis - Econometric Model – The Role of Measurement in Economics – The Structure of Economic Data: Cross-Sectional data, Time Series data, Pooled Cross Section data, Panel Data.

#### Unit 2:

Simple Regression Model Two Variable Linear Regression Model: Assumptions, Estimation of Parameters, Tests of Significance and Properties of Estimators – Functional forms of Regression models – Log-linear models, Semi log models and Reciprocal models – Choice of Functional Form.

#### Unit 3:

The General Linear Model Review of Assumptions, Estimation and Properties of Estimators: Un-biasness, BLUEs and Tests of significance of estimates – Analysis of Variance - Dummy variables - Nature of Dummy variables – Use of Dummy Variables – Errors in Variables and its consequences.

#### Unit 4:

Auto-regressive and Distributed Lag Models Introduction – Types of Lag schemes - Koyck's lag model, Almon's Lag scheme, Partial Adjustment and Expectations models - Causality in Economics – The Granger Causality Test.

### Suggested Books:

- 1) Johnston,J: Econometric Methods, McGraw-Hill Book Co., New York.
- 2) Maddala, G.S: Econometrics, McGraw-Hill Book Co., New York, 3rd Rd.
- 3) Gujarathi, D.N: Basic Econometrics, Fourth Edition, Tata McGraw-Hill, New Delhi.
- 4) Tintner,G: Econometrics, John Wiley & Sons, New York.
- 5) Wooldridge, Jeffery M: Econometrics, Cengage Learning India Pvt. Ltd, New Delhi



## Corporate & Business Law

### Course Outcome

CO1	The Student will be able to understand Various legal provisions related to Contract Act
CO2	The students will be able to understand the provision for special contracts.
CO3	The students will be able to identify the legal provision of formations and management of the company
CO4	The students will be able to understand and identify the rights of consumers and the redressal mechanism
CO5	The students will be able to outline the scope of IT Act in business

### Unit – I

UNIT - I Contract Law – Meaning – Law of Contract – Definition – Classification of Contracts – Essential Elements of Valid Contract – Discharge of Contract – Remedies of Breach of Contract – Offer – and Acceptance – Legal Rules relating to Offer and Acceptance – Revocation of Offer and Acceptance.

### UNIT - II

Contract of Agency - Bailment and Pledge – Essentials of Bailment – Rights and Duties of Bailor and Bailee-Pledge-Essentials-Rights and Duties of Pawnee. Contract of Sale of Goods Act 1930 –Rules regarding Delivery of Goods – Rights and Duties of a Buyer and Seller.

### UNIT - III

Company – Definition-Characteristics – Kinds – Privileges of Private Company – Formation of a Company – Memorandum of Association – Meaning – Purpose – Alteration of Memorandum – Doctrine of Ultravires – Articles of Association - Meaning Forms – Contents – Alteration of Articles – Doctrine of Indoor management. Prospectus – Definition – Contents – Deemed Prospectus – Misstatement in Prospectus - Shares and Debentures – Meaning – Types – Director and Secretary – Qualification and Disqualification – Appointment – Removal – Remuneration – Powers, Duties and Liabilities. Meeting – Requisites of Valid Meeting – Types of Meeting – Winding up – Meaning – Modes of Winding Up.

### Unit IV –

Consumer Protection Act, 2019: Definitions, Consumer Protection in India; Rights of Consumers; Consumer Dispute Redressal Forums; Nature and Scope of Remedies. Information Technology Act 2000 – Scope and Objectives, E-Governance, Authorities, Offences and Penalties.

### Reference Books:

1. N.D.Kapoor, “Business Law”, Sultan Chand & Sons, New Delhi 2005.
2. R.S.N.Pillai & Bagavath, “Business Law” S.Chand, New Delhi 2005
3. Bagriyal A.K, “Company Law”, Vikas Publishing House, New Delhi
4. Rajiv Kapoor N. D. Kapoor, Rajni Abbi, Bharat Bhushan N.D. Kapoor, Elements of Mercantile Law

# Financial Derivatives & Risk Management

## Course Outcome

CO1	Students will understand the different types of derivative instruments their features & importance
CO2	Students will understand how to hedge a position, to increase leverage, or to speculate on an asset's movement by using future contracts, forward contracts, options
CO3	Students will understand the importance of options , options Greeks
CO4	Students should understand the trading and clearing mechanism

### Unit – I

Introduction to Derivatives - Definition – Types, Participants and Functions, Development of Exchange traded derivatives- Global derivatives markets, Exchange traded vs OTC derivatives markets, Derivatives trading in India

### Unit – II

Futures and options introduction; Futures: Introduction Future terminology- Key features of futures Contracts- Future vs. Forwards- Pay off for futures- Equity futures Equity futures in India, Index futures- Stock futures- Future trading strategies, Hedging, Speculation- Arbitrage, Spread trading. Options: Introduction- Option terminology- Types, Options pay off.

### Unit – III

Pricing – Futures & options. Option Trading Strategies. The cost of carry models for stock and index futures cash price and future price, arbitrage opportunity. Factors affecting options pricing- Option pricing models- Binominal pricing model- The black and Scholes model – Pricing of Index options. Introduction to option Greeks (Delta, Gamma, Lambda, Theta, Rho)

### Unit – IV

Trading Clearing and Settlement of Options and Futures - Futures and Options trading system- Trader Workstations- contract specification- specification for stock and index eligibility for trading charges. Clearing entities and their role- clearing mechanism – adjustment for corporate actions- open position calculation. Margining and settlement mechanism- Risk management- SPAN – Mechanics of SPAN- Overall portfolio margin requirements.

## Reference Books:

1. FINANCIAL DERIVATIVES THEORY, CONCEPTS AND PROBLEMS Gupta S.L., PHI, Delhi
2. FINANCIAL DERIVATIVES: S S S Kumar:
3. DERIVATIVES and Risk Management Basics, Cengage Learning, Delhi. Stulz M. Rene,
4. RISK MANAGEMENT & DERIVATIVES, Cengage Learning, New Delhi.
5. Fundamentals of Financial Derivatives : Prafulla Kumar Swain : Himalaya Publishing

## **Semester – V**

## **Financial Modelling Course Outcome**

<b>CO 1</b>	The student will be able to understand functions of excel required for financial modeling.
<b>CO 2</b>	The student will be able to build models for simulation.
<b>CO 3</b>	The student shall be able for prepare projected financial statements using Excel
<b>CO 4</b>	The student will be able to build advance financial models in Excel.

### **UNIT-I**

Introduction to modeling, understanding advanced features of excel, database functions in excel, creating charts using forms and control toolbox, understanding finance functions present in excel, creating dynamic models.

### **UNIT-II**

Scenario manager, other sensitivity analysis features, simulation using excel different statistical distributions used in simulation generating random numbers that follow a particular distribution, building models in finance using simulation.

### **UNIT-III**

Preparing common size statements directly from trial balance, forecasting financial statements using excel, analyzing financial statements by using spreadsheet model, excel for project appraisal, determining project viability.

Risk analysis in project appraisal, simulation in project appraisal, excel in valuation, determination of value drivers, discontinued cash flow valuation, risk analysis in valuation.

### **UNIT-IV**

Recording and editing macros, subroutines and functions, decision rules, message box and input box, debugging, designing advanced financial models using visual basic application user forms, other advanced features, actual model building.

### **Suggested Books:**

1. Financial Modeling (MIT Press)
2. Financial Analysis and Modeling Using Excel and VBA
3. Financial Modelling in Practice: A Concise Guide for Intermediate and Advanced Level
4. Financial Modeling and Valuation: A Practical Guide to Investment Banking and Private Equity
5. Building Financial Models (McGraw-Hill Finance & Investing)

# Environment Management & Corporate Governance

## Course Outcomes

CO1	The students will be able to understand the nuances of environment studies.
CO2	The student will be able to compare various natural resources and their environmental impact
CO3	The students will be able to describe the structure of management in corporate responsible to governance
CO4	The students will be able to relate various theories management to corporate governance

### Unit – I

Introduction – The multidisciplinary nature of environmental studies Definition, scope and importance, Need for public awareness. Environment Impact on Business: Social, Economic, Political, Cultural, Legal and constitutional sub-systems of environment and their impact on Business.

### Unit – II

Natural Resources – Renewable and non-renewable resources Natural resources and associated problems Forest resources: Use and over-exploitation, deforestation, timber extraction, mining, dams and their effects on forests and tribal people. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems. Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources. Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity, case studies. Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources. Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification. – Role of an individual in conservation of natural resources. – Equitable use of resources for sustainable lifestyles.

### Unit – III

Corporate Governance – Introduction, Need and Importance, Problems and issues, Best Practices for Corporate Governance. The board and Corporate Governance – Constitution, Responsibilities, Executive, non-Executive Directors, roles, Structure and makeup of the board of directors, role of auditor.

### Unit – IV

Corporate Governance- Theories & Models – Theory of Stakeholders, Stewardship Theory, Agency Theory, Separation of ownership and control, Corporate Governance Mechanism, German Model, Japanese Model, Indian Model, Code of Conduct for Corporates.

### Suggested Books:

1. Environmental Management, 1/e G N Pandey Vikas Publishing
2. A Textbook of Environmental Studies, D K Asthana & Meera Asthana, S Chand Publishing
3. Business Ethics and Corporate Governance (Principles and Practice), S S Khanka, S Chand Publishing
4. Corporate Governance Values & Ethics with Case Studies Neeru Vasishth, Namita Rajput, Taxmann Publisher.

## **Marketing of Financial Services**

### **Course Outcome**

<b>CO 1</b>	The students will be able to understand various categories of financial products.
<b>CO 2</b>	The students will be able to relate various marketing strategies related to financial products.
<b>CO 3</b>	The students will be able to relate product mix and pricing strategies
<b>CO 4</b>	The students will be able to correlate the promotional strategies with products.

#### **UNIT I**

Categories of financial products - Insurance, Banks, Stocks, Mutual Funds, Pension plans, other savings products - The financial services marketing environment- The distinctive aspects of services marketing; micro and macro environmental forces; new developments and trends.

#### **UNIT II**

Marketing strategy - Planning, organizing and implementing marketing operations; marketing as a management function, Market segmentation – Target marketing; market segmentation, targeting and positioning the financial services organization in the marketplace.

#### **UNIT III**

The marketing Mix: Product strategy; new product development; product life cycle, pricing considerations and strategies, Distribution channels; the impact of technology; on-line marketing; multiple channel strategies.

#### **UNIT IV**

Promotion Strategies; advertising, sales promotion, public relations; sponsorship; the internet as a promotion tool, People in the marketing mix; personal selling and sales force management; the selling process, Physical evidence and processes customer care, The dimensions of customer care; service quality and service recovery; global marketing.

#### **REFERENCE BOOKS**

1. Marketing financial services-Hooman Estelami.
2. The Financial Services Handbook-Evelyn enrich & Duk Fanelli.
3. Marketing Financial Services – Elsevier.

**Specialization Subject:**

**Corporate Finance:**

**Paper – 1 – Project Finance**

Course Outcomes

CO 1	The students will be able to recognise the background of project finance
CO 2	The students will be able to interpret the cost element involved in a project
CO 3	The students will be able to correlate the project financing sources
CO 4	The students will be able to connect specific project financing nuances

**Unit – I**

Project Finance Background a) Evolution of project finance b) Project Types c) Critical steps in a project. Market Analysis - Background. Market Sizing - Demand function estimation, Rule of Thumb, Experts' Poll, Consumer, Customer and Influencer, Market Insight areas, Market Research Approaches.

**Unit – II**

Estimating Cost of Project - Project specifications, Estimating Fixed Capital Investment in Project, Estimating working capital investment in the project. Project Feasibility Analysis – Background, Net Present Value (NPV), Profit v/s Cash Flow, Discount Rate, Tax-Shield on Interest, Tax-Shield on depreciation, Internal Rate of Return (IRR), Payback Period, Discounted payback period.

**Unit – III**

Project Finance and their Sources - Prudence in Mix of Long Term and Short Term Finance, Forms of Long Term Project Finance, Forms of Short Term Project Finance, Lease, Role of Non-Banking Finance Companies (NBFC), Loan Documentation

**Unit – IV**

Infrastructure and Public Private Partnerships - Background, PPP Models, Parties to a PPP Model, PPP Process. Model Concession Agreements (MCA) - (i) Highways (ii) Greenfield Airports (iii) Transmission of Electricity.

**Suggested Books:**

1. Infrastructure as an Asset Class: Investment Strategy, Sustainability, Project Finance and PPP (2e) by Barbara Weber, Mirjam Staub-Bisang, Hans Wilhelm Alfen. John Wiley & Sons (2016).

## **Specialization Subject:**

## **Investment:**

## **Fundamentals of Equity Research**

### **Course Outcome**

<b>CO 1</b>	The student will be able to understand the importance of research in financial market.
<b>CO 2</b>	The Student will be able to prepare basic Equity Research Report based on secondary data.
<b>CO 3</b>	The Students will be able to do fundamental/SWOT analysis of business & analysis of stock.
<b>CO 4</b>	The student will be able to compare stocks based on quantitative and qualitative data.

### **UNIT I**

Research and Research Methodology Introduction and meaning of research, Objectives of research, Features and Importance of research in Financial Markets, Objectives and Types of research. Formulation of research problem. Meaning of Introduction, Need, and Good research design. Introduction to Data Collection and types of Data.

### **UNIT II**

A) Introduction – Meaning, Goals of equity research, Elements of equity research, Process of equity research, Types of equity research, Classification of stocks, Market participants, Role of equity research in capital market and Different approaches to equity research. B) Introduction to Research Analyst Profession – Role of research analyst, Responsibilities of research analyst, Basic principles of interaction with Clients/ Companies, Qualities of Research Analyst

### **UNIT III**

A) Fundamentals of Research – Key points considered before investing, Research on business and stocks, Overview of Fundamental analysis, Technical analysis and Behavioral finance. B) Economy Analysis – Principles of macro and micro economics, key economic variables for carrying fundamental analysis, sources of information/data for carrying economic analysis C) Industry Analysis – Theories for analysis for industry performance – Michael Porter's Five Force Model for Industry Analysis, PESTLE Analysis, BCG Analysis, SCP Analysis. Key industry drivers and sources of information for industry analysis.

### **UNIT IV**

Company Analysis A) Qualitative Dimensions – Understanding business and business models, Company's SWOT Analysis, Management Quality and its governance system, Pricing power and sustainability of power, Success factors of the company, Compliance orientation of company and sources of information. B) Quantitative Dimensions – History of Business V/s Future of Business, Reading of financial statements, Peer comparison, dividend and earning history of the company and Role of corporate actions of the company.

### **Suggested Books**

2. Equity Research and Valuation: Dun and Brad Street- Mc Graw Hills
3. Professional Valuation: Ashwath Damodaran- Wiley Best
4. Practices for Equity Research Analysts: James Valentine- Mc Graw Hill
5. Education Principles of Quantitative Equity Investing: Sugata RayPearso



## **Semester - VI**

## **International Financial System**

### **Course Outcomes**

CO 1	The student will be able to understand the International monetary systems and role of institutions
CO 2	The students will be able to analyse the flow of international funds through BOP
CO 3	The students will be able to compare the exchange rates of various currencies.
CO 4	The students will be able to illustrate the theories of exchange rate determination

#### **Unit – I**

International Monetary System: Evolution, Gold Standard, Bretton Woods system, the flexible exchange rate regime, the current exchange rate arrangements, the Economic and Monetary Union (EMU). Multilateral financial institution. International Financial Institutions: Introduction to IMF, Its Importance, Functions and Significance.

#### **Unit-II**

International flow of funds and International Monetary system:- International Flow of Funds: Balance of Payments (BoP), Fundamentals of BoP, Accounting components of BOP, Factors affecting International Trade and capital flows, Agencies that facilitate International flows. BOP, Equilibrium & Disequilibrium. Trade deficits. Capital account convertibility (problems on BOP)

#### **Unit-III**

Foreign Exchange Markets: Defining Foreign Exchange Market, Its Structure, Settlement System, Exchange Rate, Participants, Understanding SPOT and Forward Rates, Foreign Exchange Quotations, Premium and Discount In Forward Market, Cross Rates, Inverse Rates And Arbitrage. Instruments: ADR, GDR, Euro Currencies, International Commercial Papers.

#### **Unit-IV**

Exchange Rate Determination: Determination under Gold Standard and Paper Standard, Factors Affecting Exchange Rates, Purchasing Power Parity Theory, Demand and Supply Theory, Equilibrium Rate Of Exchange, Fluctuating V/S Fixed Exchange Rates, Exchange Control, Objectives of Exchange Control

#### **Suggested Books:**

International Financial Management - Jeff Madura, Cengage Learning 2008. International Finance Management - Eun & Resnick, 4/e, Tata McGraw Hill.

International Financial Management – Madhu Vij, Excel BOOKS, 2010.

International Financial Management – Apte P. G, 6/e, TMH, 2011

Multinational Business Finance – Eiteman, Moffett and Stonehill, 12/e, Pearson, 2011.

Specialization Subject:  
**Corporate Finance:**

**Paper – 2 – Merger & Acquisition**

**Course Outcomes**

CO 1	The students will be able to understand and compare the various types of mergers and acquisitions
CO 2	The students will be able to understand the regulatory norms governing M & A
CO 3	The students will be able to compare various types of takeovers.
CO 4	The students will be able to correlate the M & A Synergy and exchange ratio

**Unit – I**

Mergers and Acquisitions: Concept, Classification of Mergers, Motives behind M & A, Process of M & A, Reasons for failure, Reverse Merger, Concept of Acquisition and types of Acquisitions Due Diligence: Concept, Types of Due Diligence Cross Border Acquisition: Concept, Benefits of Cross Border Acquisitions, Difficulties in Cross Border Acquisition.

**Unit - II**

Legal issues in M & A, Provision for M & A under Companies Act, 2013, SEBI Buyback of Securities Regulations, SEBI (Substantial Acquisition of shares and Takeover Regulations), SEBI (Delisting of Securities) Guidelines, Provisions of Income Tax Act, Competition Act for M & A

**Unit - III**

Takeover: Concept, Takeover Defence tactics, Benefits and disadvantages of Takeover. Divestiture: Concept, benefits, Types of Divestiture, Reasons for Divestiture Going Private. Leverage Buyout: Concept, Types of Leverage Buyouts Concept of Employee Stock Ownership (Only Theory) Funding options for M & A.

**Unit - IV**

M & A Exchange Ratio and Synergy: Concept, ER based on EPS, MPS, PE, Combined EPS, Combined MPS, Combined PE, Minimum and Maximum Exchange Ratio based on MPS and EPS, Market value of merged firm, Cost and Benefits of a merger.

**Reference Books:**

- 1 Aurora, Shetty, Kala Mergers and Acquisitions Oxford Latest
- 2 M.Y. Khan, P.K. Jain Financial Management TMH Latest
- 3 Sudi Sudarsanam Creating Value from Mergers and Acquisitions PHI Latest
- 4 P. Rajesh Kumar Mergers & Acquisitions TMH Latest
- 5 Prasant Godbole Mergers, Acquisitions and Corporate Restructuring Vikas Publication 2009
- 6 Prasanna Chandra Financial Management: Theory and Practice TMH Latest
- 7 Bhagaban Das, Debdas Rakshit, Sathya Swaroop Debashish Corporate restructuring: Merger, acquisition and other forms Himalaya Latest
- 8 Pradip Kumar Sinha Mergers, Acquisitions and Corporate Restructuring Himalaya 2016

Specialization Subject:  
**Corporate Finance:**

**Paper – 3 - Venture Capital & Private Equity**

Course Outcome

CO 1	The students will be able to understand the basic nuances of ventures capital and private equity
CO 2	The students will be able to understand the structure and valuation of VC and PE
CO 3	The students will be able to illustrate the procedure of due diligence and its importance in PE
CO 4	The students will be able to connect the strategies of PE in Indian context.

**Unit – I**

Conceptual understanding of Venture Capital and Private Equity, Venture Capital –Over View of Venture Capital- Definition- Features- Types –Roles Concept of PE and its characteristics- Definition- Difference between PE,VC and Hedge Funds- Nature of PE Firm- Players in the PE market– Benefit of PE Finance, PE Fund –Legal structure and terms- Private Equity, Investments and Financing- Private Equity Multiples and Prices- Private Equity Funds and Private Equity Firms- Investment Feature and Consideration.

**Unit - II**

Structure and Valuation approaches, Structure and Regulation of Venture Capital and Private Equity- Business Cycle of PE – Structure of VC/PE firms- Limited Liability Partnerships- Routes of VC/PE investments in India- Regulatory Aspects of VC/PE investments – AIF regulations, Valuation approaches- Risk and Returns- Analysis of Funds- Conventional Method- Revenue Multiplier Method.

**Unit - III**

Strategies of Private Equity Leverage Buyout- Growth Capital, Mezzanine Capital, Distressed Debt, Other Strategies. Due Diligence- Procedure and Challenges- Due Diligence in Emerging PE Market-Investing in Developing Market- Past Performance and Strategy.

**Unit- IV**

Exit strategies for Private Equity - Modes of exits in Indian Context and Challenges involved- IPO, Promoter Buyback ,Sale to Other PE funds, Sale to other strategic Investors, Stake Swap, M & A's, Open Market-, Secondary Market.

**Suggested Books:**

Bhole, L.M. Financial Institutions and Markets, 4th ed. 2004, Tata McGraw Hill Publishing Co. Ltd.

Khan, M.Y. Financial Services, 3rd ed. 2004, Tata McGraw Hill Publishing Co. Ltd.

Rustagi, R.P. Financial Analysis and Financial Management, 2005 ed., Sultan Chand & Sons.

Varshney, P.N. and Mittal, O.K. Indian Financial System, 6th ed. 2005, Sultan Chand & Sons.

Guide to Private Equity : CA Neha Bhuvania: Taxmann

Venture Capital Financing in India: J C Verma :Response Books

Specialization Subject:  
**Investments:**

**Paper – 2 - Technical Analysis**

Course Outcome

CO 1	Students will understand the concept of Technical Analysis, calculate the support and resistance using candlestick charts
CO 2	Students will be able to use various chart patterns, indicators for actual trading
CO 3	Students will understand the concept of Dow theory, Elliot wave theory
CO 4	Students will be able to utilize stop loss mechanism to minimize risk while trading and investing

**UNIT I**

Introduction to Technical Analysis Technical analysis, Basic assumptions, Strengths and Weakness, Charts, Candlestick charts analysis with one two and three candles like hammer, hanging man, shooting star, bearish and bullish harami; Pattern Study - Support and resistance, Head and shoulders, Double top and double bottom and Gap theory

**UNIT II**

Major Indicators and Oscillators Stochastic, RSI, Williams %R, MFI, Bollinger bands, Moving Averages, MACD.

**UNIT III**

Major Theories in Technical Analysis Dow Theory and Eliot Wave Theory

**UNIT IV**

Risk Management, Trading Psychology and Trading Strategies Risk Management – Need, techniques, uses of stop loss, qualities of successful traders, golden rules of traders, do's and don'ts in trading, Rules to stop losing money, Choosing the right market to trade, Importance of discipline in trading; Day trading, Advantages of day trading, Risks associated with trading, Strategies for day trading, Momentum trading strategies.

**Suggested Books**

1. Technical Analysis of Stock Trend; Robert D Edwards, Visiosn Book
2. Technical Analysis Explained; Martin J Pring; McGraw Hill
3. Handbook of Technical Analysis, Darell R Jobman; Probus
4. Technical Analysis of Stocks , options; William Eng, Probus
5. Technical Analysis, Jack D Schwager, John Wiley & Sons The candlestick course by Steve Nielsen

Specialization Subject:  
**Investments:**  
**Paper – 3- Investment Advisory and Wealth Management**

Course Outcomes

CO 1	The students will be able to Analyse the function of insurance in wealth management
CO 2	The students will be able to compare various insurance policies and its suitability for individuals
CO 3	Successfully do retirement planning for oneself & others (family members & clients)
CO 4	The students will be able to Examine and tackle the issues related to taxation in wealth management.

**UNIT I**

Introduction To Wealth Management: Meaning of WM, Scope of WM, Components of WM, Process of WM, WM Needs & Expectation of Clients, Code of Ethics for Wealth Manager. Personal Financial Statement Analysis: Financial Literacy, Financial Goals and Planning, Cash Flow Analysis, Building Financial Plans, Life Cycle Management. Economic Environment Analysis: Interest Rate, Yield Curves, Real Return, Key Indicators-Leading, Lagging, Concurrent

**UNIT II**

Insurance Planning: Meaning, Basic Principles of Insurance, Functions and Characteristics of Insurance, Rights and Responsibilities of Insurer and Insured, Types of life Insurance Policies, Types of General Insurance Policies, Health Insurance – Mediclaim – Calculation of Human Life Value - Belth Method/CPT

**UNIT III**

Investment Planning: Types of Investment Risk, Risk Profiling of Investors & Asset Allocation (Life Cycle Model), Asset Allocation Strategies (Strategic, Tactical, Life Cycle based), Goal-based Financial Planning, Active & Passive Investment Strategies

**UNIT IV**

Retirement Planning: Understanding of different Salary Components, Introduction to Retirement Planning, Purpose & Need, Life Cycle Planning, Financial Objectives in Retirement Planning, Wealth Creation (Factors and Principles), Retirement (Evaluation & Planning), Pre & Post-Retirement Strategies - Tax Treatment. Income Streams & Tax Savings Schemes: Pension Schemes, Annuities- Types of Annuities, Various Income Tax Savings Schemes

**Suggested Books**

- Harold Evensky, Wealth Management, McGraw Hill Publication
- NCFM, CFP, IIBF, etc, Wealth Management modules
- Harold Evensky, The new wealth Management, CFA Institute Investment Series Publication

## **Practical and Classification of Marks on Practical**

1. Practical exam shall be of 4 hours duration.
2. The Practical Record of every student shall carry a certificate as shown below, duly signed by the teacher-in-charge and the Head of the Department.
3. If the student fails to submit his / her certified Practical Record duly signed by the Teacher-In-Charge and the Head of the Department, he / she shall not be allowed to appear for the Practical Examination or 50% Marks should be deducted from total marks.
4. After Viva-Voice and evaluation of practical records of a student by the Internal & External Examiner, both examiners should sign on the certificate of practical records.
5. The certificate template shall be as follows:

Name of the college / Institution

Name of the Department:

### **CERTIFICATE**

This is to certify that Mr./Mrs./Ms. \_\_\_\_\_  
of class BSc(Finance) Semester \_\_\_\_\_ has satisfactorily completed the practical experiments  
prescribed by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur for the subject  
\_\_\_\_\_ during the academic year \_\_\_\_\_.

Signature

Practical In-charge

Signature

Head of the Department

Signature

Internal Examiner

Signature

External Examiner

Date: \_\_\_\_\_

## # Classification of Practical Marks :-

### B.Sc. Finance Part II Semester III

Practical – I (3P1) :

#### Component 1: Portfolio Analysis Using “R”

1. Download last two year's daily prices of 5 companies from NIFTY 50 index. **5 Marks**
2. Calculate annualized return and standard deviation of 5 companies based on data downloaded. **5 Marks**
3. Calculate the beta of each company based on historical data. 10 marks
4. Make a minimum variance portfolio of *any two* companies from 5 companies used earlier **20 marks**
5. Calculate the beta, Sharpe ratio and Treynor ratio of the portfolio and comment on performance of portfolio. **20 Marks**

#### Component 2: Research methodology using “R”

1. Load dataset from the available data sets in R. **5 Marks**
2. Calculate the descriptive statistics of any five variables in the data sets. **10 marks**
3. Calculate the significance of association between two variables using Chi-Square/t-test **10 Marks**
4. Calculate correlation and regression between two variables and comment on the relationship between two variables. **25 Marks**



## **B.Sc. Finance Part II Semester IV**

### **# Classification of Practical Marks :-**

Practical – I (4P1):

#### **Component 1: Econometrics using “R”**

1. The Wooldridge data set in CEOSAL2 contains information on chief executive officers for U.S. corporations. The variable salary is annual compensation, in thousands of dollars, and “ceoten” is the prior number of years as company CEO.

- (i) Find the average salary and the average tenure in the sample.
- (ii) How many CEOs are in their first year as CEO (that is, ceoten = 0)? What is the longest tenure as a CEO?
- (iii) Estimate the simple regression model

$$\log(\text{salary}) = \beta_0 + \beta_1 \text{ceoten} + u,$$

and report your results in the usual form. What is the (approximate) predicted percentage increase in salary given one more year as a CEO?

**25 Marks**

2. Use the data in WAGE2 to estimate a simple regression explaining monthly salary (wage) in terms of IQ score (IQ).

- (i) Find the average salary and average IQ in the sample. What is the sample standard deviation of IQ? (IQ scores are standardized so that the average in the population is 100 with a standard deviation equal to 15.)
- (ii) Estimate a simple regression model where a one-point increase in IQ changes wage by a constant dollar amount. Use this model to find the predicted increase in wage for an increase in IQ of 15 points. Does IQ explain most of the variation in wage?
- (iii) Now, estimate a model where each one-point increase in IQ has the same percentage effect on wage. If IQ increases by 15 points, what is the approximate percentage increase in predicted wage?

**25 Marks**

#### **Component 2: Derivative Computation using Spreadsheets/R”**

1. Download option chain of NIFTY Index options one day. **10 marks**
2. Calculate the option Greeks of call and put options of the ATM strike price. **20 marks**
3. Calculate the payoff using any two option trading strategies and prepare a pay-off chart of the strategy. **20 Mark**